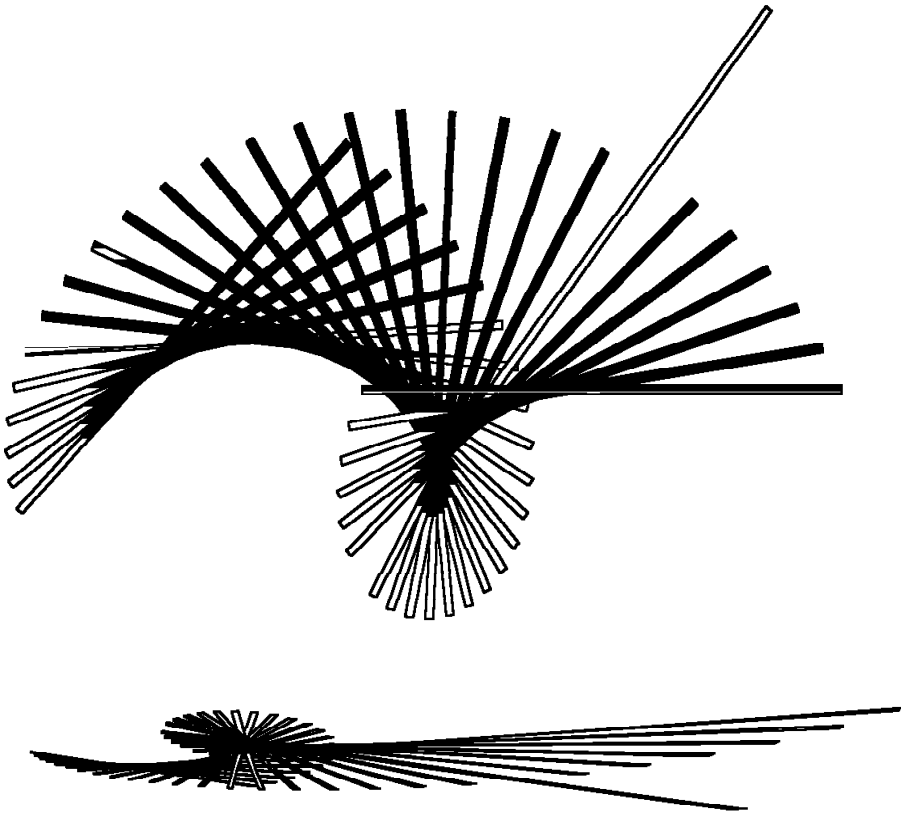
IBM 3745 Communication Controller
All Models

Problem Determination Guide



SA33-0096-06

IBM 3745 Communication Controller
All Models

Problem Determination Guide

SA33-0096-06

Note!

Before using this information and the product it supports, be sure to read the general information under “Notices” on page v.

Seventh Edition (April 1992)

The information contained in this manual is subject to change from time to time. Any such changes will be reported in subsequent revisions.

Changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

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Notices

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Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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IBM	LPDA	NetView
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Safety

This product meets IBM Safety standards.

For more information, see the *IBM Telecommunication Products Safety Handbook,* GA33-0126.

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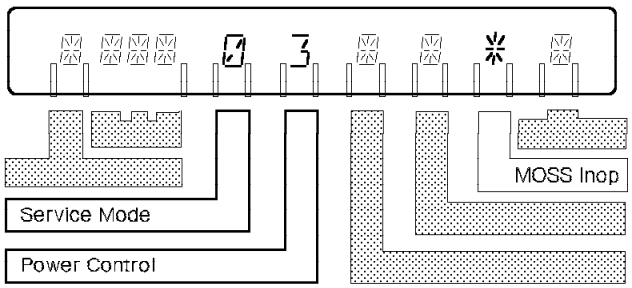
Conventions Used in This Book

Call appropriate IBM representative.
Write the telephone numbers hereunder:

IBM hardware service

IBM software service



This drawing represents the control panel display. The control panel is fully illustrated and explained in the *3745 Basic Operations Guide* and on the *3745 Control Panel Reference Card*. (See Appendix A, “Control Panel.”)

The highlighted name (for example: Service Mode) identifies the display position or the indicator to look at.

The drawing of a key means that you have to press that key.

Ignore this position (display or indicator).

Option 3 is selected.

Indicator is on.

The figure below represents the screens that you can see when performing a 3745 function on the operator console. The top part, referred to as the *machine status area (MSA)* is used to display the status of the 3745 and its different components. In all the screens, 3745-xxx denotes the machine and model numbers. For a thorough description of this area, refer to *3745 Advanced Operations Guide*. That area will no longer be displayed in this document.
Only the bottom part of the screens will be shown and used in following chapters.

```
CUSTOMER ID:                      3745-xxx                SERIAL NUMBER: xxxxxxx

                          MACHINE STATUS AREA (MSA)

------------------------------------------------------------------------  MM/DD/YY hh:mm
FUNCTION ON SCREEN: TIME SERVICES
                    SCHEDULED POWER-ON DATA
- FILL IN, MODIFY, OR BLANK APPROPRIATE FIELDS, THEN PRESS SEND

      SUNDAY        (HH:MM)   ==>
      MONDAY        (HH:MM)   ==>
      TUESDAY       (HH:MM)   ==>
      WEDNESDAY     (HH:MM)   ==>
      THURSDAY      (HH:MM)   ==>
      FRIDAY        (HH:MM)   ==>
      SATURDAY      (HH:MM)   ==>

      SCHEDULING ACTIVE (Y=YES, N=NO)  ==>

===>

F1:END               F3:ALARM                          F6:QUIT
```

Problem Determination Start Page

If this is the first time you use this book, read “About This Book,” especially “Conventions Used in This Book” on page viii.

After logging on, select the most appropriate entry.

Entry	Page	Tab
Alarms and Alerts	1-1	
“List of Alarms”	1-4	
“List of NetView* Alerts”	1-52	**1-2**
Host Messages	2-1	
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LIC and Line Problems	9-1	
“Line Configuration Problems”	9-1	
“Problems on Multiple Lines Having Common Parameters”	9-1	
“Problems on All Lines of a LIC Type 1, 2, 3, or 4”	9-2	
“Problems on Several Lines of a LIC Type 1, 2, 3, or 4”	9-7	
“Problems on One Line Only of a LIC Type 1, 2, 3, or 4”	9-8	
“CCITT V.24/V.35 Nonswitched - Modem Attachment”		
“CCITT V.24/V.35 Nonswitched - Direct Attachment”		
“CCITT V.24 Switched - Modem Attachment”		**9-11**
“CCITT V.25”		
“CCITT V.25bis Switched - Modem Attachment”		
“CCITT X.21 Nonswitched - Modem Attachment”		
“CCITT X.21 Nonswitched - Direct Attachment”		
“CCITT X.21 Switched - Modem Attachment”		
“Problems on Both Lines of a LIC5”	9-32	
“Problems on One Line of a LIC5”	9-37	
“Problems on the Line of a LIC6”	9-45	

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Entry	Page	Tab
Line Problem (HSS) “CCITT V.35 Nonswitched - Modem Attachment” “CCITT V.35 Nonswitched - Direct Attachment” “CCITT X.21 Nonswitched - Modem Attachment” “CCITT X.21 Nonswitched - Direct Attachment”	10-1 10-4 10-6 10-8 10-10	**9-11**
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MOSS Inop is On	14-1	
Control Panel Problems	15-1	
Wrap Test	16-1	**16-18**
Console Link Test “Hex Display Codes are 1B2, 1B4, or 1B6” “Hex Display Codes are 1A1, 1A4, or 1A7” “Hex Display Codes are 1A0, 1A3, or 1A6”	17-1 17-5 17-6 17-8	
Unexpected Problems with Console Functions	18-1	

About This Book

This book applies to the IBM 3745 Communication Controller Models 130, 150, 170, 210, 310, 410, and 610, and the IBM 3746 Expansion Unit Models A11, A12, L13, L14, and L15.

Who Should Use This Book

This book is intended for experienced 3745 operators and teleprocessing specialists supporting the 3745.

It helps determining whether a problem is in the IBM 3745 Communication Controller or in another component of the network. It gives procedures for solving the problem, and tells the specialist when to contact the service representative. The guide contains:

- Alarms and hexadecimal codes
- NetView* alerts and Systems Network Architecture (SNA) code points
- Problem determination procedures
- Some 3745 functions that you may need in order to identify the problems.

How to Use This Book

Before starting your problem determination:

1. If this is the first time you use this book, read carefully “Conventions Used in This Book” on page viii.
2. Select from “Problem Determination Start Page” the most appropriate entry to help you solving your problem.

   There is a reduced table of contents to force the reader to enter the book at the “Start” page.
3. Select the additional publication that could help you for your problem determination from:
   - “Where to Find More Information”
   - “Customer Publications for 3745 (Models 130, 150, 160, and 170)” on page xiii
   - “Customer Publications for 3745 (Models 210, 310, 410, and 610)” on page xv.

What Is New in This Book

This edition reflects the following enhancements:

- Addition in chapter 1 of timed IPL Alarms and Alert
- Addition in chapter 11 to check for possible faulty connections on Ethernet-type lines.

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Where to Find More Information

This book should be used in conjunction with the publications shown on page xiii.

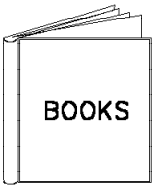
- Abend codes are explained in the *NCP, SSP, and EP Messages and Codes* SC30-3169.
- Transferring a dump to the host is described in:
  - *IBM Advanced Communications Function for Network Control Program Versions 3, 4, and 5; Advanced Communications Function for System Support Programs, Version 3; Emulation Program for IBM Communication Controllers Release 5: Diagnosis Guide,* LY30-5591.

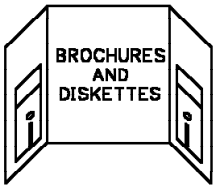
    This manual will be referred to as the *NCP, SSP, and EP Diagnosis Guide.*
- Problem determination for the IBM token-ring network is described in:
  - *IBM Token-Ring Network Problem Determination Guide* SX27-3710.
- Transferring the BER file to the host, and printing it, are described in:
  - *IBM Advanced Communication Function for Network Control Program, System Support Programs and Emulation Program: Diagnosis Guide,* LY30-5591.

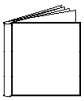
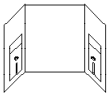
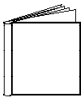
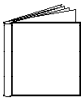
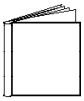
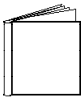
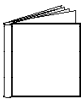
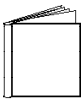
    This manual will be referred to as the *NCP, SSP and EP Diagnosis Guide.*
- The console and keyboard of the 3101-like terminal are fully described in:
  - *IBM 3101 Display Terminal Description*, GA18-2033.
- You may also refer to the following manuals for more detailed information on:
  - The code point values defined by SNA:
    - *SNA Formats,* GA27-3136.
  - The use of code points by the NetView program:
    - *NetView Command Lists,* SC30-3423
    - *Automated Operations Planning Guide,* SC30-3474
    - *Automated Operations Using NetView Command Lists,* SC30-3477
  - The code points relation with the NMVT architecture:
    - *NCP and EP Reference Summary and Data Areas,* LY30-5603 (NCP Version 5).

Customer Publications for 3745 (Models 130, 150, 160, and 170)

The product library is presented in two formats:





Evaluating and Configuring		
	GA33-0138	*Introduction* To evaluate and learn about the 3745 capabilities
	GA33-0093	*Configuration Program* To configure a 3745
Preparing Your Site		
	GC22-7064	*S/370 I/O Installation Manual Physical Planning* To plan the physical site
	GA33-0140	*Preparing for Connection* To prepare cable installation and LIC5 or LIC6 configuration
Preparing for Operation		
	GA33-0126 [1]	*Telecommunication Products Safety Handbook* To recall safety principles
	SA33-0141 [1]	*Connection and Integration Guide* To install and test LICs and customize your 3745 after installation
	SA33-0158 [1]	*Console Setup Guide* To install local, alternate, or remote consoles
Customizing Your Control Program		
	SA33-0102	*Principles of Operation* To understand the 3745 instruction set in order to write or modify a control program

Note: [1] Documentation shipped with the 3745.

Customer Documentation - Continued

Operating and Testing

SA33-0098 [1]	*Basic Operations Guide* To carry out routine daily operations
SA33-0097 [1]	*Advanced Operations Guide* To carry out advanced operations and testing from the 3745 operator console
SA33-0161	*Remote Loading/Activation Guide* To customize VTAM, NCP, and NPSI generations to support a remote controller
SA33-0178	*Guide to Timed IPL and Rename Load Module* VTAM procedures: • To schedule an automatic reload of 3745 communication controllers • To keep 3745 load module changes transparent to the operations staff.

Managing Problems

SA33-0096 [1]	*Problem Determination Guide* To perform problem determination

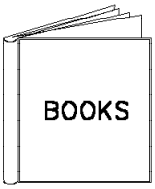
Finding Information

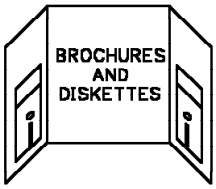
SA33-0142 [1]	*Master Index* To find information in the customer library

Note: [1] Documentation shipped with the 3745.

Customer Publications for 3745 (Models 210, 310, 410, and 610)

The product library is presented in two formats:





Evaluating and Configuring

GA33-0092	*Introduction* To evaluate and learn about the 3745 capabilities
GA33-0093	*Configuration Program* To configure a 3745

Preparing Your Site

GC22-7064	*S/370 I/O Installation Manual Physical Planning* To plan the physical site
GA33-0127	*Preparing for Connection* To prepare cable installation and LIC5 or LIC6 configuration

Preparing for Operation

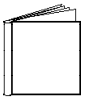
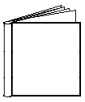
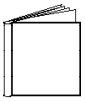
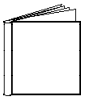
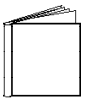
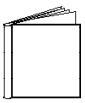
GA33-0126 [1]	*Telecommunication Products Safety Handbook* To recall safety principles
SA33-0129 [1]	*Connection and Integration Guide* To install and test LICs and customize your 3745 after installation
SA33-0158 [1]	*Console Setup Guide* To install local, alternate, or remote consoles

Customizing Your Control Program

SA33-0102	*Principles of Operation* To understand the 3745 instruction set in order to write or modify a control program

Note: [1] Documentation shipped with the 3745.

Customer Documentation - Continued

Operating and Testing		
	SA33-0098 [1]	*Basic Operations Guide* To carry out routine daily operations
	SA33-0097 [1]	*Advanced Operations Guide* To carry out advanced operations and testing from the 3745 operator console
	SA33-0161	*Remote Loading/Activation Guide* To customize VTAM, NCP, and NPSI generations to support a remote controller
	SA33-0178	*Guide to Timed IPL and Rename Load Module* VTAM procedures: • To schedule an automatic reload of 3745 communication controllers • To keep 3745 load module changes transparent to the operations staff.
Managing Problems		
	SA33-0096 [1]	*Problem Determination Guide* To perform problem determination
Finding Information		
	SA33-0172 [1]	*Master Index* To find information in the customer library

Note: [1] Documentation shipped with the 3745.

Chapters 1 and 2

Replace this page by the separator:

1 - Alarms and NetView Alerts

Chapter 1. Alarms and Alerts 1-1
List of Alarms 1-4
List of NetView* Alerts 1-52

Chapter 2. Host Messages 2-1
Usage Tier Problems 2-4

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Replace this page by the separator:

1 - Alarms and NetView Alerts

Chapter 1. Alarms and Alerts 1-1
List of Alarms 1-4
List of NetView* Alerts 1-52

Chapter 2. Host Messages 2-1
Usage Tier Problems 2-4

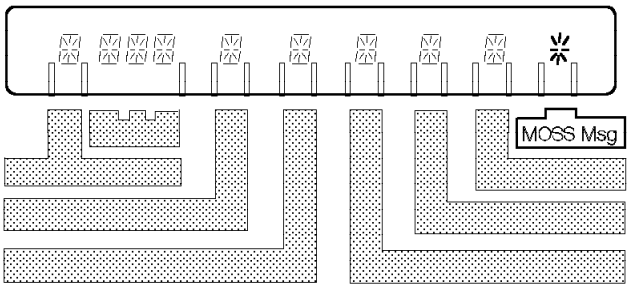
Chapter 1. Alarms and Alerts

Alarms

Alarms provide an automatic first level of problem determination. Most alarms have a reference code which appears at the right-most position of the alarm. This reference code helps service personnel identify your problem.

Note this reference code before contacting service personnel.

When an alarm is generated, the MOSS Msg indicator is lit on the control panel.



- If the console operator is logged on, the alarm is displayed and an audible signal is emitted.
- If the console operator is not logged on, log it on (refer to the *3745 Advanced Operations Guide*, SA33-0097).

  The alarm **A** and the reference code **B** are automatically displayed, as shown on the following screen.

Note: The reference code **B** (8 digits) is preceded by the time (hhmmss).

```
                              FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
  A ALARM 06: MOSS DISKETTE FAILURE                  095617 B412D455  B
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

If an alarm is displayed and another one is waiting for display, the word “ALARM” blinks. Up to 10 alarms may be waiting for display. If another alarm is generated, it is stacked and the oldest of the waiting alarms is erased.

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When an alarm is displayed, note the alarm number and reference code.

Then press F3 to

- Display the next alarm, if any, or
- Clear the displayed alarm, if there is no other alarm pending.

Look up the cause and action on pages 1-4 through 1-47.

Alerts

Most alarms have a corresponding alert issued by the NetView* program. The first NetView* screen is the NetView* Alert Dynamic screen. It displays the alert description with the first probable cause.

For example: "Disk failure: Adapter" is displayed for the alert of the alarm 04.

The NetView* recommended action appears as shown on the following screen (which is the second NetView* screen). A recommended action is given for each possible cause (user cause, install cause, and failure cause), on pages 1-52 through 1-168.

```
NETVIEW                                                  mm/dd/yy hh:mm
NPDA-45A  * RECOMMENDED ACTION FOR SELECTED EVENTS * PAGE 1 OF 1
  I61ZO   IFDNCP5
         +--------+
  DOMAIN |  COMC  |
         +--------+

 USER      CAUSED - NONE

 INSTALLED CAUSED - INCORRECT CUSTOMIZATION PARAMETERS
          ACTIONS - I082 - CORRECT GENERATION PROBLEM
                    I000 - PERFORM PROBLEM DETERMINATION PROCEDURES
                    I085 - APPLY CORRECT SOFTWARE LEVEL
                    I163 - RESUME OPERATION

 FAILURE   CAUSED - COMMUNICATION CONTROLLER CONTROL PROGRAM
                    PROCESSOR
                    MAIN STORAGE
                    ADAPTER
          ACTIONS - I000 - PERFORM PROBLEM DETERMINATION PROCEDURES
                    I163 - RESUME OPERATION
                    I142 - REPORT THE FOLLOWING
                         IBM 3745 REFERENCE CODE xxxxxxxx A .
                         IBM 3745 PRODUCT ALERT REFERENCE CODE xx B

===>
```

Most alerts have a reference code, which appears on the screen as indicated by **A** above. This reference code helps service personnel identify your problem.

Note this reference code before contacting service personnel.

The product alert reference code given for each alert, corresponds to the alarm number. Its position on the screen is indicated by **B** above.

NetView* alerts plus the associated Systems Network Architecture (SNA) code points are described from page 1-50 through page 1-168.

NetView* Alert and MOSS Alarm Actions

For the same NetView* alert and MOSS alarm number, the recommended action can be slightly different. This is because the actions are performed at different places. The NetView* alert action is performed at the host console while the MOSS alarm action is performed at the 3745.

List of Alarms

ALARM 01: MOSS TRANSIENT ERROR.	hhmmss ref code

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: MOSS hardware

Action:

- Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- If the problem recurs: ☎ and give reference code.

ALARM 02: MOSS TRANSIENT ERROR. DUMP	hhmmss ref code

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: MOSS hardware
MOSS microcode

Action:

- Transfer the MOSS dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- If the problem recurs: ☎ and give reference code.

ALARM 04: MOSS DISK ADAPTER ERROR	hhmmss ref code

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Disk adapter
Disk drive
Internal power unit

Action:

- Re-IML MOSS from disk at the control panel.
  - If unsuccessful: ☎ and give reference code and control panel hex code.
- Perform disk file error recovery procedures:
  - Re-IML in diskette mode (the next IPL will be performed from the diskette).
  - If the problem persists: ☎ and give reference code and control panel hex code.

Notes:

1. Even if you clear this alarm successfully, record the number, time, and reference code. (This is needed to track any transient errors on the disk).
2. If this alarm recurs, ☎ and give the particulars that you have recorded concerning this alarm.

ALARM 05: MOSS DISK FAILURE	**hhmmss ref code**

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Disk adapter
Disk drive
Internal power unit

Action:

- Re-IML MOSS from disk at the control panel.
  - If unsuccessful: ☎ and give reference code and control panel hex code.
- Perform disk file error recovery procedures:
  - Re-IML in diskette mode (the next IPL will be performed from the diskette).
  - If the problem persists: ☎ and give reference code and control panel hex code.

Notes:

1. Even if you clear this alarm successfully, record the number, time, and reference code. (This is needed to track any transient errors on the disk).
2. If this alarm recurs: ☎ and give the particulars that you have recorded concerning this alarm.

ALARM 06: MOSS DISKETTE FAILURE	**hhmmss ref code**

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Diskette
Diskette drive
Diskette adapter
Internal power unit

Action:

- Check that the diskette is the correct one.
- Check that the diskette is correctly mounted.
- Check that the diskette latch is correctly set.
- If all the above are correct, re-IML MOSS in diskette mode.

If unsuccessful: ☎ and give reference code and control panel hex code.

- Re-IML in diskette mode from the backup diskette.

  If the problem persists: ☎ and give reference code and control panel hex code.

Notes:

1. Even if you clear this alarm successfully, record the number, time, and reference code. (This is needed to track any transient errors on the disk).
2. If this alarm recurs, ☎ and give the particulars that you have recorded concerning this alarm.

ALARM 07: MOSS DISKETTE ADAPTER ERROR	**hhmmss ref code**

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Diskette adapter
Diskette drive
Diskette

Action: Re-IML MOSS in diskette mode. If unsuccessful:

- ☎ and give reference code and control panel hex code.
- Re-IML in diskette mode from back-up diskette.

Notes:

1. Even if you clear this alarm successfully, record the number, time, and reference code. (This is needed to track any transient errors on the disk).
2. If this alarm recurs, ☎ and give the particulars that you have recorded concerning this alarm.

ALARM 08: MOSS CONTROL PANEL ERROR	**hhmmss ref code**

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Control panel
Internal power control unit

Action: ☎ and give reference code.

ALARM 09: MOSS IML COMPLETE **hhmmss ref code**

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: MOSS hardware
MOSS microcode

Action:

- Perform the action required by the hex code.
- If the problem recurs:  and give reference code and control panel hex code.

ALARM 0A: MOSS-TO-LOCAL CONSOLE TRANSMISSION ERROR **hhmmss ref code**

Cause: Console adapter
Console cable
Console

Action: Perform a console link test (see Chapter 17):

- If unsuccessful,  and provide reference code.
- If successful, go to Chapter 6, “Local or Alternate Operator Console Problems.”

ALARM 0B: LOCAL CONSOLE ERROR **hhmmss ref code**

Cause: Local console
Console cable
Console adapter

Action: Perform a console link test (see Chapter 17):

- If unsuccessful,  and provide reference code.
- If successful, go to Chapter 6, “Local or Alternate Operator Console Problems.”

ALARM 0C: MOSS-TO-REMOTE CONSOLE TRANSMISSION ERROR **hhmmss ref code**

Cause: Console adapter
Local DCE interface cable
Communication line
Console or modem
Incorrect hardware configuration

Action: Perform a console link test (see Chapter 17):

- If unsuccessful,  and provide reference code.
- If successful, go to Chapter 7, “Remote Operator Console Problems.”

– Check if modem is powered on and operational.
– Check cable. Reconnect correctly, if necessary.
– If both the above are correct, perform modem tests. These tests are described in the modem documentation.

ALARM 0D: REMOTE CONSOLE ERROR **hhmmss ref code**

Cause: Remote modem
Remote console
Cable loose or defective
Remote DCE interface cable
Local DCE interface cable
Local modem
Console adapter

Action: Perform a console link test (see Chapter 17):

- If unsuccessful, ☎ and provide reference code.
- If successful, go to Chapter 7, “Remote Operator Console Problems.”
  – Check if modem is powered on and operational.
  – Check cable. Reconnect correctly, if necessary.
  – If both the above are correct, perform modem tests. These tests are described in the modem

ALARM 0E: MOSS-TO-RSF CONSOLE TRANSMISSION ERROR **hhmmss ref code**

Cause: A local or a remote console has been logged on after a normal log off of the RSF console.
Communications error
Console adapter
Local DCE interface cable
Cable loose or defective
Local modem

Action:

- Do not consider this alarm if it happened on the local or the remote console after a normal RSF console log off.
- Check if modem is powered on and operational.
- Check cable. Reconnect correctly, if necessary.
- If above statements are correct:
  – Perform modem tests. These tests are described in the modem documentation.
  – Perform console link test (see Chapter 17).

ALARM 0F: MOSS IML COMPLETE WITH NON-BLOCKING ERRORS hhmmss ref code

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Non-disruptive errors occurred during the MOSS IML.
MOSS hardware
MOSS microcode

Action: If the problem continues to occur repeatedly: ☎ and give reference code.

ALARM 10: REMOTE CONSOLE PASSWORD VIOLATION hhmmss ref code

Cause: Too many unsuccessful attempts to log on at remote console.

Action: Reset the logon attempts counter using the PSW function. Refer to the *3745 Advanced Operations Guide.*

ALARM 20: TRANSIENT HARD ERROR: CCU-x RE-IPLED. NO DUMP hhmmss ref code

Cause: CCU
Main storage

Action: Resume operations and perform problem determination procedures. If the problem occurs repeatedly, ☎ and give the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 21: HARDWARE ERROR: FALLBACK AND IPL COMPLETE ON CCU-x hhmmss ref code

Models 410, 610

Cause: CCU
Main storage
Processor switch

Action: A problem occurred on one CCU in a twin-standby configuration. Fallback was successful on the other CCU.

- Resume operations on backup physical unit (PU) and perform problem determination procedures.
- ☎ and give the reference code and the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 22: HARDWARE ERROR: CCU-x FALLBACK OR IPL FAILED hhmmss ref code

Models 410, 610

Cause: CCU
Processor switches
Main storage

Action: ☎ and give the reference code and the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 23: HARDWARE ERROR: FALLBACK COMPLETE ON CCU-x hhmmss ref code

Models 410, 610

Cause: CCU
Main storage

Action: A problem occurred on one CCU in a twin-backup configuration. Fallback was successful on the other CCU.

- Resume operations on backup physical unit (PU) and perform problem determination procedures.
- ☎ and give the reference code and the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 24: HARDWARE ERROR: CCU-x RE-IPL IN PROGRESS hhmmss ref code

Cause: CCU
Main storage

Action: If the problem persists or occurs repeatedly, ☎ and give reference code.

ALARM 25: HARDWARE ERROR: CCU-x RE-IPL FAILED hhmmss ref code

Cause: CCU
Main storage

Action: ☎ and give reference code along with the reference code of the previous related alarm.

ALARM 26: HARD ERROR: CCU-x FBK OR IPL COMPLETE WITH ERROR(S) hhmmss ref code

Models 410, 610

Cause: CCU
Main storage
Non-disruptive errors occurred during the fallback or during the IPL following the fallback. The 3745 is running, but with some restrictions.

Action:

- Resume operation on back-up physical unit (PU).
- ☎ and give the reference code and the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 27: HARDWARE ERROR: CCU-x RE-IPL COMPLETE. DUMP hhmmss ref code

Cause: CCU
Control program
Main storage

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly, ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 28: HARDWARE ERROR: CCU-x STANDBY RE-IPL COMPLETE. DUMP hhmmss ref code

Models 410, 610

Cause: CCU
Control program
Main storage
Processor switch

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly, ☎ and give the reference code of the preceding alarms related to this one.

To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 29: CP ERROR: xxxx CCU-x STANDBY RE-IPL COMPLETE. DUMP hhmmss ref code

Models 410, 610

Cause: CCU
Control program
Line adapter microcode
Main storage
Processor switch

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly:
  - Look for the control program abend code displayed in the previous BER (Event Log Display function in the *3745 Advanced Operations Guide.*).
  - Refer to the appropriate control program documentation (NCP or else) for the abend code xxxx description.
  - Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.
  -  and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 2F: HARDWARE ERROR: ELAyy (PORT 1-2) IML FAILED

Cause: Local CSMA/CD adapter (hardware)
Mismatch between hardware and microcode levels
Internal power unit

Action:

- Use the Event Log Display (ELD) function to display the previous alarm D1. Refer to the *3745 Advanced Operations Guide*.
-  the hardware support and give reference code of the alarm D1 and of the previous BER's 0105 (type=01, ID=05).

| **ALARM 30: CCU-x ERROR: ELAyy NOT ATTACHED** **hhmmss ref code**

Cause: Control program
(Adapter addressing error)

Action: True impacted resource is not identified yet.

If the problem reoccurs, take a dump of the control program. ☎ the software support and give the reference code.

ALARM 31: CP COMMAND REJECTED: PORTx ELAyy DOWN **hhmmss ref code**

Cause: Control program
Local CSMA/CD adapter (microcode)

Action:

- Check if NCP is at the right level.
- Check for correct software fix.
- Reactivate the resources attached to the ELA.
- If the problem persists:
  - Take a communication line trace.
  - Take a NCP dump.
  - ☎ the software support and give the reference code.

ALARM 32: CP ERROR: ELAyy (PORT 1-2) RE-IML IN PROGRESS **hhmmss ref code**

Cause: Control program
Local CSMA/CD adapter (microcode)

Action: Wait for additional message before taking action.

- If the problem reoccurs:
  - Check if NCP is at the right level.
  - Check for correct software fix.
- If the problem persists:
  - Take a communication line trace.
  - Take a NCP dump.
  - ☎ the software support and give the reference code.

ALARM 33: CP ERROR: ELAyy (PORT 1-2) RE-IML COMPLETE hhmmss ref code

Cause: Control program
Local CSMA/CD adapter (microcode)

Action: Reactivate resources attached to the adapter.

- If the problem reoccurs:
  - Check if NCP is at the right level.
  - Check for correct software fix.
- If the problem persists:
  - Take a communication line trace.
  - Take a NCP dump.
  -  the software support and give the reference code of the previous alarm 32.

ALARM 34: HARDWARE ERROR: ELAyy (PORT 1-2) RE-IML IN PROGRESS hhmmss ref code

Cause: Local CSMA/CD adapter (hardware)

Action: Wait for additional message before taking action.

If the problem persists or occurs repeatedly,  the hardware support and give the reference code.

ALARM 35: TRANSIENT HDW ERROR: ELAyy (PORT 1-2) RE-IML COMPLETE hhmmss ref code

Cause: Local CSMA/CD adapter (hardware)

Action:

- Reactivate the resources attached to the ELA.
- If the problem reoccurs,  the hardware support and give the reference code of the previous alarm 34.

ALARM 36: PERMANENT HDW ERROR: ELAyy (PORT 1-2) RE-IML FAILED hhmmss ref code

Cause: Local CSMA/CD adapter (hardware)

Action:

-  the hardware support and give the reference code of the previous alarm 34.

ALARM 37: CP OR SYSGEN ERROR: PORTx ELAyy DOWN hhmmss refcode

Cause: Control program
System programmer error
Local CSMA/CD adapter (microcode)

Action:

- If the problem occurs at installation time:
  - Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation (usage tier key).
- If the problem occurs during current operations:
  - Check if NCP is at the right level.
  - Check for correct software fix.
  - Reactivate the resources attached to the ELA.
  - If the problem persists:
    - Take a communication line trace.
    - Take a NCP dump.
    -  the software support and give the reference code.

ALARM 38: MICROCODE ERROR: ELAyy (PORT 1-2) RE-IML IN PROGRESS hhmmss ref code

Cause: Local CSMA/CD adapter (microcode)

Action:

- Wait for additional message before taking action.
- Check for an associated alarm 3B (dump taken).
- If the problem persists or occurs repeatedly,  the hardware support and give the reference code.

ALARM 39: MICROCODE ERROR: ELAyy (PORT 1-2) RE-IML COMPLETE hhmmss ref code

Cause: Local CSMA/CD adapter (microcode)

Action:

- Reactivate the resources attached to the ELA.
- If the problem reoccurs,  the hardware support and give the reference code of the previous alarm 38.

ALARM 3A: AFTER CODE ERROR: ELAyy (PORT 1-2) RE-IML FAILED hhmmss ref code

Cause: Local CSMA/CD adapter (hardware)

Action: the hardware support and give the reference code.

ALARM 3B: MICROCODE ERROR: ELAyy DUMP TAKEN hhmmss ref code

Cause: Local CSMA/CD adapter (microcode)

Action:

- Transfer the line adapter dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- If the problem persists or occurs repeatedly, the hardware support and give the reference code of the previous alarm 38.

ALARM 3C: HARDWARE ERROR: PORTx ELAyy DOWN hhmmss ref code

Cause: Local CSMA/CD adapter (hardware)

Action:

- Reactivate the resource.
- If the problem persists, the hardware support and give the reference code.

ALARM 3D: ELAyy DISCONNECTED ON OPERATOR'S REQUEST hhmmss ref code

Cause: Disconnected by the local system operator
Disconnected by the remote system operator

Action: No action required.

ALARM 3E: MICROCODE ERROR: PORTx ELAyy DOWN hhmmss ref code

Cause: Local CSMA/CD adapter (microcode)

Action:

- Reactivate the resource.
- If the problem persists, the hardware support and give the reference code.

ALARM 3F: CSMA/CD BUS ERROR: PORTx ELAyy INOPERATIVE **hhmmss ref code**

Cause: CSMA/CD adapter cable
CSMA/CD LAN component
CSMA/CD LAN interface
Local CSMA/CD adapter cable
SQE test function disabled on a MAU (transceiver).

Action:

- Contact the administration responsible for this LAN.
- Check and correct CSMA/CD installation or cable connections.
- Check that the SQE test switch on MAUs (transceivers) is enabled.
- Reactivate the resource.
- If the problem persists, the hardware support and give the reference code.

ALARM 40: SOFTWARE ERROR: CCU-x RE-IPL IN PROGRESS **hhmmss ref code**

Cause: Control program abend. The problem may be caused by hardware, software or a mistake in specifying parameters. The abend code will appear on the ELD screen.

Abend codes are explained in the *NCP, SSP, and EP Messages and Codes*.

Action: Take action as appropriate for the detailed explanations of the abend code in the *NCP, SSP, and EP Messages and Codes* manual.

If the problem persists or occurs repeatedly, the software support and give reference code and abend code.

ALARM 41: CP ERROR: xxxx RE-IPL COMPLETE CCU-x. DUMP **hhmmss ref code**

Cause: CCU
Control program
Line adapter microcode
Main storage

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly:
  - Look for the control program abend code displayed in the previous BER (Event Log Display function in the *3745 Advanced Operations Guide*).
  - Refer to the appropriate control program documentation (NCP or else) for the abend code xxxx description.
  - Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.

– ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 42: SYSGEN ERROR: xxxx RE-IPL COMPLETE CCU-x. DUMP hhmmss ref code

Cause: Communication controller control program
Processor
Main storage
Adapter

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly:
  – Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.
  – Refer to the appropriate control program documentation (NCP or else) for the abend code xxxx description.

ALARM 43: CONTROL PROGRAM REPORTED ERROR: LINE xxxx DOWN hhmmss ref code

Cause: LIC or line adapter hardware
Adapter microcode
Control program
Mismatch between hardware and software.

Action:

1. If it is a HPTSS line, ☎ and give reference code.
2. If it is a low or medium speed TSS, check whether the LIC or its lines have just been installed or modified.
   - **If yes:** Verify if the NCP and CDF are matching the LIC configuration. (For a LIC5 or a LIC6 check the configuration sheet values with a PKD.)
     – If no, correct them. Reload the scanner if other lines are down. Restart the lines.
     – If yes, replace the LIC (refer to the *3745 Connection and Integration Guide*) and if the problem persists, ☎
   - **If no:** verify if any other lines driven by this scanner are down.
     – If no, replace the LIC.
     Refer to the *3745 Connection and Integration Guide*.
     – If yes and all the down lines are on the same LIC, then replace the LIC.
     Refer to the *3745 Connection and Integration Guide*.

– If yes and all the down lines are not on the same LIC, then reload the scanner (Refer to the *3745 Advanced Operations Guide*).

  Restart the lines individually, checking if the alarm recurs. If it does, ☎

ALARM 44: CP ERROR: xxxx RE-IPL FAILED CCU-x. DUMP hhmmss ref code

Cause: Control program
CCU
Main storage

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly:
  – Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.
  – Refer to the appropriate control program documentation (NCP or else) for the abend code description.
  – ☎ and give reference code.

ALARM 46: CP ERROR: xxxx RE-IPL COMPLETE CCU-x. NO DUMP hhmmss ref code

Cause: Communication controller control program
Processor
Main storage
Adapter
Mismatch between hardware and software or microcode.

Action:

- Resume operations and perform problem determination procedures. If the problem occurs repeatedly:
  – Look for the control program abend code displayed in the previous BER (Event Log Display function in the *3745 Advanced Operations Guide*).
  – Refer to the appropriate control program documentation (NCP or else) for the abend code xxxx description.
  – Check and, if necessary, correct control program generation parameters and software generation parameters.
  – ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 47: CP ERROR: xxxx RE-IPL COMPLETE CCU-x. DUMP hhmmss ref code

Cause: Control program abend
Line adapter

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Resume operations and perform problem determination procedures. If the problem occurs repeatedly:
  - Look for the control program abend code displayed in the previous BER (Event Log Display function in the *3745 Advanced Operations Guide*).
  - Refer to the appropriate control program documentation (NCP or else) for the abend code xxxx description.
  - Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.
  -  and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 48: RE-IPL COMPLETE CCU-x. FORCED DUMP TAKEN hhmmss ref code

Cause: A VTAM* command from the host forced a control program abend X'7FFF'. The abend caused a static dump to disk and a reloading of the NCP load module to the communication controller.

Action:

- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Reactivate lines from the host.

ALARM 49: CP ERROR: RE-IPL FAILED CCU-x. NO DUMP hhmmss ref code

Cause: Main storage
CCU

Action:  and give reference code.

ALARM 4A: CONTROL PROGRAM ERROR: FALLBACK COMPLETE ON CCU-x hhmmss ref code

Models 410, 610

Cause: Control program
Line adapter

Action: Resume operations on backup physical unit (PU).

- When the IPL of the failing CCU completes (the hex code FF4 appears at the 3745 control panel) and before loading the control program, transfer and print the control program dump at host level. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- ☎ and give the reference code and the references codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 4B: CP ERROR: FALLBACK COMPLETE WITH ERRORS ON CCU-x hhmmss ref code

Models 410, 610

Cause: Control program
Line adapter

Action: Resume operations on backup physical unit (PU).

- When the IPL of the failing CCU completes (the hex code FF4 appears at the 3745 control panel) and before loading the control program, transfer and print the control program dump at host level. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- ☎ and give the reference code and the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 4C: CP ERROR: CCU-x FALLBACK FAILED hhmmss ref code

Models 410, 610

Cause: Control program
Processor switches
Main storage

Action: ☎ and give the reference code and the reference codes of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 50: HARDWARE ERROR: CHANNEL ADAPTER xx DOWN **hhmmss ref code**

Cause: Channel adapter hardware
Channel interface cable
Invalid ESC address

Action:

- Check and, if necessary, correct generation parameters or CDF customized data.
- If the problem persists: ☎ and give reference code.

ALARM 51: MICROCODE ERROR: CHANNEL ADAPTER xx DOWN **hhmmss ref code**

Cause: Adapter microcode
Channel adapter hardware

Action:

- Check and, if necessary, correct generation parameters and CDF parameters.
- If the problem persists:
  - ☎ and give reference code.
  - Dump channel adapter microcode.

ALARM 52: CHANNEL ADAPTER xx ERROR. DUMP **hhmmss ref code**

Cause: Channel adapter microcode

Action:

- Transfer the channel adapter dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- If the problem persists: ☎ and give reference code.

ALARM 53: CHANNEL ADAPTER xx ERROR. NO DUMP **hhmmss ref code**

Cause: Channel adapter
MOSS microcode

Action: ☎ and give reference code.

ALARM 60: LA nn (LINES xxxx-yyyy) RE-IML IN PROGRESS	hhmmss ref code

Cause: Line adapter microcode
Control program

Action: If the problem recurs:  and give reference code.

ALARM 61: LA nn (LINES xxxx-yyyy) RE-IML COMPLETE. DUMP	hhmmss ref code

Cause: Line adapter microcode
Control program
Line adapter

Action:

- Transfer the line adapter dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Transfer and print control program dump.
- Reactivate lines from the host and retry.
- If the problem persists:  and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 62: LA nn (LINES xxxx-yyyy) DOWN. DUMP	hhmmss ref code

Cause: Control program
Line adapter
MOSS microcode

Action:

- Transfer the line adapter dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Re-IML the line adapter using the IMS function. Refer to the *3745 Basic Operations Guide,* SA33-0098. If the IML is successful, re-activate the lines from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 63: LA nn (LINES xxxx-yyyy) RE-IML IN PROGRESS	**hhmmss ref code**

Cause: Line adapter hardware
Line adapter microcode

Action: If the problem recurs: ☎ and give reference code.

ALARM 65: LA nn (LINES xxxx-yyyy) RE-IML COMPLETE. NO DUMP	**hhmmss ref code**

Cause: Control program
Line adapter hardware
Line adapter microcode

Action:

- Reactivate lines from the host and retry.
- If the problem recurs: ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 66: LA nn (LINES xxxx-yyyy) RE-IML FAILED. NO DUMP	**hhmmss ref code**

Cause: Line adapter hardware

Action: ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 67: LA nn (LINES xxxx-yyyy) RE-IML COMPLETE. DUMP	**hhmmss ref code**

Cause: Line adapter microcode
Control program

Action:

- Transfer the line adapter dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Reactivate lines from the host and retry.
- If the problem recurs: ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 68: LA nn (LINES xxxx-yyyy) RE-IML COMPLETE. NO DUMP hhmmss ref code

Cause: Line adapter hardware

Action:

- Reactivate lines from the host and retry.
- If the problem recurs: ☎ and give the reference code of the preceding alarms related to this one. To display the alarms, use the Event Log Display (ELD) function. Refer to the *3745 Advanced Operations Guide.*

ALARM 6A: LA nn (LINES xxxx-yyyy) IML FAILED. NO DUMP hhmmss ref code

Cause: Line Adapter

Action: ☎ and give reference code along with the reference code of the related alarm D1.

ALARM 6B: LA nn (LINES xxxx-yyyy) RE-IML FAILED. DUMP hhmmss ref code

Cause: Line adapter microcode
MOSS microcode

Action:

- Transfer the line adapter dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Re-IML the line adapter using the IMS function. Refer to the *3745 Basic Operations Guide*. If the re-IML is successful, re-activate the lines from the host and retry.
- If the problem persists: ☎ and give reference code along with the reference code of the related alarm 68.

ALARM 72: HPTSS (HSS xx) HARDWARE FAILURE hhmmss ref code

Cause: HPTSS adapter
Storage control

Action: ☎ and give reference code.

ALARM 73: HPTSS-TO-STORAGE CONTROL COMMUNICATION ERROR hhmmss ref code

Cause: HPTSS adapter
Control program

Action: ☎ and give reference code.

ALARM 80: TRSS HARDWARE INITIALIZATION ERROR ON TRA xx hhmmss ref code

Cause: Local token-ring adapter (TRA)
Local token-ring adapter interface

Action: ☎ and give reference code.

ALARM 81: TIME-OUT ERROR: TRA xx DOWN hhmmss ref code

Cause: Local token-ring adapter (TRA)
Control program

Action:

- Dump the control program. Transfer it to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Reactivate the link from the host and retry.
- If the problem recurs: ☎ and give reference code.

ALARM 82: TRSS HARDWARE ERROR: TRA xx DISCONNECTED hhmmss ref code

Cause: Token-ring adapter interface

Action:

- Reactivate the link from the host and retry.
- If the problem recurs: ☎ and give reference code.

ALARM 83: TRSS HARDWARE ERROR: TRA xx DOWN (TIC 1-2) **hhmmss ref code**

Cause: Local token-ring adapter (TRA)
Local token-ring adapter interface

Action:

- Reactivate the link from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 84: TIC INITIALIZATION ERROR: TIC x DOWN (TRA yy) **hhmmss ref code**

Cause: Token-ring adapter interface

Action:

- Reactivate the link from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 85: OPEN-TIME ERROR: TIC x DOWN (TRA yy) **hhmmss ref code**

Cause: Token-ring adapter interface

Action:

- Reactivate the link from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 86: TIC x (TRA yy) DUMP COMPLETE **hhmmss ref code**

Cause: Token-ring adapter interface

Action:

- Transfer the dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Reactivate the link from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 87: TIME-OUT ERROR: TIC x DOWN (TRA yy) **hhmmss ref code**

Cause: Token-ring adapter interface
Control program

Action:

- Reactivate the link from the host and retry.
- If the problem recurs: ☎ and give reference code.

ALARM 88: TIC x (TRA yy) DUMP FAILED **hhmmss ref code**

Cause: Token-ring adapter interface

Action: Reactivate the physical link and retry. If unsuccessful: ☎ and give reference code.

ALARM 89: TOKEN-RING ADAPTER NOT INSTALLED **hhmmss ref code**

Cause: Control program
CDF data parameters

Action:

- Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.
- Reactivate the link from the host and retry.
- If the problem persists: ☎ and give reference code.

ALARM 8B: TOKEN-RING TIME-OUT **hhmmss ref code**

Cause: Control program
Token-ring adapter interface

Action:

- Reactivate the link from the host and retry.
- If the problem recurs: ☎ and give reference code.

ALARM 8C: TOKEN-RING FRAME TIME-OUT **hhmmss ref code**

Cause: Token-ring adapter interface
Control program
Incorrect software generation

Action:

- Check and, if necessary, correct generation parameters. There may be a mismatch between hardware configuration and software generation parameters.
- Reactivate the link from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 8D: TRSS HARDWARE INITIALIZATION ERROR ON TRA xx **hhmmss ref code**

Cause: Local token-ring adapter (TRA)

Action:

- Re-activate the link from the host and retry.
- If the problem recurs:  and give reference code.

ALARM 8E: TIC x (TRA yy) EXTERNAL ERROR zz. REFER TO PD GUIDE **hhmmss**

Cause: External error to the 3745.

Action: Refer to the following table which describes the actions to perform according to the external error codes (zz).

Table 1-1 (Page 1 of 5). Token-Ring External Error Codes

External Error Codes	Error Description	Probable Cause	User Action
02	Physical link activation failure The parameters that NTRI passed to the TIC at TIC initialization time are invalid.	User or NTRI	First verify that there is not a TIC type 1 in the 3745 with a TIC Type 2 definition statement for it in the NCP SYSGEN. If this is not the case, then it is likely that a NTRI internal problem exists, so contact an IBM* software service representative.
07	Physical link activation failure The TIC detected another device on the ring it is attached to with the same token ring MAC address as the TIC.	User	Determine the MAC addresses of the devices in the token ring network, and ensure that no two devices with the same address are on the same ring. Two devices may have the same MAC address as long as they are on separate rings.

Table 1-1 (Page 2 of 5). Token-Ring External Error Codes

External Error Codes	Error Description	Probable Cause	User Action
08	Physical link activation failure The parameters that NTRI passed to the TIC at TIC open time are invalid.	NTRI	Try to re-activate the physical link and if the problem persists, contact an IBM* software service representative
09	Physical link activation failure When the TIC attempted to insert onto the ring during TIC open time, it detected a non-specific ring failure.	Token Ring LAN or TIC	Try to re-activate the physical link and if the problem persists, contact an IBM service representative.
0A	Physical link activation failure When the TIC attempted to insert onto the ring during TIC open time, it detected a loss of signal from the ring which is known as a lobe media error. This indicates a loose or disconnected cable between the TIC and the Multistation Access Unit (MAU). It may also be a defective cable or a defective MAU.	Loose cable connection	Check all connections. Try to re-activate the physical link after checking the connections. If it still fails, connect the cable to another plug on the MAU. If that does not work, replace the cable. If the problem persists, contact the local token ring LAN administrator.
0B	Physical link activation failure When the TIC attempted to insert onto the ring during TIC open time, it detected a token ring failure, such as a loss of signal or frame time out.	Token ring LAN	This may not be a persistent problem, so try to re-activate the physical link and if the problem persists, contact the local token ring LAN administrator.
0C	Physical link activation failure When the TIC attempted to insert onto the ring during TIC open time, it received a signal to remove itself from the ring from a device on the ring. This device is known as the parameters server.	Parameters server error	This may not be a persistent problem, so try to re-activate the physical link and if the problem persists, contact the local token ring LAN administrator.
0D	Physical link activation failure When the TIC attempted to insert onto the ring during TIC open time, it detected an abnormal signal on the ring. This may be due to ring beaconing or that the adapter is attempting to insert onto the ring at a different ring speed.	Token Ring LAN or user	Ring beaconing may be a temporary condition, so try to re-activate the physical link after waiting 30 seconds. If the problem persists, verify that the speed of the ring matches the speed specified by the TRSPEED keyword on the physical link definition statement. If the problem continues to persist, contact your local token ring LAN administrator.
0E	Physical link INOP due to receiving a remove command A device on the token ring sent a Remove command to this TIC, which causes the TIC to disconnect from the ring. The physical link as well as all of its associated logical links are INOPed.	Other Token Ring LAN device	Contact the token ring operator or administrator to determine what device sent the REMOVE command and why it was sent.

Table 1-1 (Page 3 of 5). Token-Ring External Error Codes

External Error Codes	Error Description	Probable Cause	User Action
0F	Physical link INOP due to permanent beaconing There is a hard error on the token ring which has not been recovered by the beaconing process. Data transmission to the token ring has been suspended and all logical links associated with this physical link have been INOPed. The physical link will remain active and inserted in the ring and report beaconing recovery when that occurs	Token ring LAN	Contact the token ring operator or administrator to determine the cause of the permanent beaconing condition.
10	Physical link INOP due to loss of connection When the TIC attempted to insert onto the ring during TIC open time, the TIC detected a loss of signal from the ring known as a lobe media error. The physical link as well as all of its associated logical links are INOPed. This indicates a loose or disconnected cable between the TIC and the Multistation Access Unit (MAU). It may also be a defective cable or a defective MAU.	Loose cable connection	Check all connections. Try to re-activate the physical link after checking the connections. If it still fails, connect the cable to another plug on the MAU. If that does not work, replace the cable. If the problem persists, contact the local token ring LAN administrator.
11	Physical link INOP due to auto-removal process The TIC removed itself from the ring after it detected an error during a self-test. The self-test was performed as part of the beaconing process. The physical link as well as all of its associated logical links are INOPed.	TIC	This may not be a persistent problem, so try to re-activate the physical link and if the problem persists, contact an IBM service representative.
12	First station inserted on the ring (ring status: 'SINGLE STATION'). There are no other stations connected on the ring.	None	If other station are known to be on the ring, see the *Token-Ring Network Problem Determination Guide*. Otherwise, no action.
13	Physical link recovery - beacon process ended The token ring has recovered after a beacon process.	None	None
14	Unused		
15	Unused		

Table 1-1 (Page 4 of 5). Token-Ring External Error Codes

External Error Codes	Error Description	Probable Cause	User Action
1A	Physical link INOP due to unknown cause Something caused a physical link INOP, but the cause could not be reported by NTRI due to a buffer depletion condition in the CCU. The physical link as well as all of its associated logical links are INOPed.	Unknown	This should not be a persistent problem, so try to re-activate the physical link. If the problem persists, contact an IBM service representative.
1B	Logical link activation failure - time out NTRI timed out trying to establish a connection with another device on the ring. The problem may be that the other device is powered off or uninitialized. Or the dial digits on the PATH macro of the VTAM definition statement are incorrect. Or there may be a failure in NTRI or the other device.	User error, other device, NTRI	Investigate and correct any of the previously mentioned suspected causes and then attempt to re-activate the logical link. If the problem persists, run a line trace and contact an appropriate IBM service representative.
1C	Logical link INOP due to physical link failure A physical link failure caused this logical link to be INOPed.	Physical link	Investigate the cause of the physical link failure.
1D	Logical link activation failure - invalid dial digits NTRI received invalid dial digits in the connect-out command from VTAM. The problem is probably due either to the VTAM definition statement for DIALNO on the PATH statement being incorrect or that the NTRI is not processing valid digits correctly.	User or NTRI	Check the VTAM generation statements and make sure that they are coded correctly, then attempt to re-activate the logical link. If the problem persists, contact an IBM service representative.
1E	Logical link activation failure - physical link not active NTRI receives on logical link outgoing call request via a connect-out from VTAM and then detects that physical link is not operational.	User or NTRI	Check if the physical link is active and activate it if necessary, then attempt to re-activate the logical link. If the problem persists, contact an IBM service representative.

Table 1-1 (Page 5 of 5). Token-Ring External Error Codes

External Error Codes	Error Description	Probable Cause	User Action
1F	Logical link activation failure - incoming call refused NTRI receives an incoming call from another device, but cannot accept it because no logical links are available to accept an incoming call. The problem may be that no logical links associated with the physical line are active or that too many logical connections are requested on the same physical link. The problem may also be that the logical links are not defined with CALL=IN or CALL=INOUT on the line macro.	User	Investigate the possible causes mentioned above and correct if necessary, then attempt to re-activate the logical link. If the problem persists, contact an IBM service representative.
20	Outgoing call refused, the link is specified as incoming.	User	
21	Logical link activation failure - contention While NTRI is attempting an outgoing call, the device it is calling is attempting to call in. This alert indicates that NTRI has chosen to cancel its outgoing call and process the incoming call.	None	This situation should not be a problem, but if the problem persists and the connections fail, contact an IBM service representative.
23	Physical link activation failure following TIC dump The user is attempting to activate the physical link while MOSS is in the process of dumping the TIC.	User	Wait 30 seconds and re-activate the physical link. If the problem persists, use the MOSS operator function to reset the Activate Link Inhibit bit and try to re-activate the link again. If the problem persists, contact an IBM service representative.
24	Unused		

ALARM 90: CCU-x POWER SUPPLY DOWN **hhmmss ref code**

Models 210, 310, 410, 610

Cause: Power supply

Action:

- Restore power supplies using the Power Services function (POS). Refer to the *3745 Advanced Operations Guide.*
- If the problem persists,  and give reference code.

ALARM 95: FIRST TEMPERATURE THRESHOLD REACHED ON CCU-x **hhmmss ref code**

Models 210, 310, 410, 610

Cause: Air filter
Thermal detector
Cooling fan
Power supply
Power control

Action:

- Check that air vents are not obstructed and that the room temperature is correct.
- Check for dirty filter.
- If the problem persists,  and give reference code.

ALARM 96: POWER SUBSYSTEM: CCU POWER SUPPLY OVERHEATING **hhmmss ref code**

Models 210, 310, 410, 610

Cause: Power supply
Power control

Action:  and give reference code.

ALARM 98: TEMPERATURE RETURNED TO NORMAL ON CCU-x hhmmss ref code

Models 210, 310, 410, 610

Cause: The CCU temperature returned to normal: The cause of alarm 95 disappeared.

Action: No action required.

ALARM 99: POWER SUBSYSTEM: PERMANENT OVERHEATING ON CCU-x hhmmss ref code

Models 210, 310, 410, 610

Cause: Air filter
Cooling fan
Power supply
Power control

Action:

- Check that air vents are not obstructed and that the room temperature is correct.
-  and give reference code.

ALARM 9B: THERMAL DETECTOR REPORTING ERROR ON CCU-x hhmmss ref code

Models 210, 310, 410, 610

Cause: Thermal detector
Power control

Action:

-  and give reference code.

ALARM 9C: POWER SUPPLY DOWN **(For models 130, 150, and 170.)**	**hhmmss ref code**
ALARM 9C: UNDEFINED ADAPTER POWER SUPPLY DOWN **(For models 210, 310, 410, and 610.)**	**hhmmss ref code**

Models 130, 150, 170

Cause: Power supply
Power on was performed less than 10 seconds after power off.

Action:

- Power off
- Wait 10 seconds
- Select function 1 (MOSS IML)
- Power on
- If the problem persists: ☎ and give reference code.

Models 210, 310, 410, 610

Cause: Power supply
Power control cable
Power unit

Action:

- Restore power supplies using the Power Services function (POS). Refer to the *3745 Advanced Operations Guide.*
- If the problem persists, ☎ and give reference code.

ALARM 9D: CHANNEL ADAPTER xx POWER SUPPLY DOWN	**hhmmss ref code**

Models 210, 310, 410, 610

Cause: Power supply
Power control cable
Power unit
MOSS POS function was used to power down a particular power supply.

Action:

- Restore power supplies using the Power Services function (POS). Refer to the *3745 Advanced Operations Guide.*
- If the problem persists, ☎ and give reference code.

ALARM 9F: LINE ADAPTER xx POWER SUPPLY DOWN **hhmmss ref code**

Models 210, 310, 410, 610

Cause: Power supply
Power control cable
Power unit

Action:

- Restore power supplies using the Power Services function (POS). Refer to the *3745 Advanced Operations Guide.*
- If the problem persists, ☎ and give reference code.

ALARM A1: POWER SUBSYSTEM: LIC UNIT xx POWER SUPPLY DOWN **hhmmss ref code**

Models 210, 310, 410, 610

Cause: Power supply
Power control cable
Power unit

Action:

- Restore power supplies using the Power Services function (POS). Refer to the *3745 Advanced Operations Guide.*
- If the problem persists, ☎ and give reference code.

ALARM A2: POWER SUPPLY-TO-POWER CONTROL ERROR **hhmmss ref code**

Models 210, 310, 410, 610

Cause: Power supply
Power control cable
Power unit

Action: ☎ and give reference code.

ALARM A3: POWER SUBSYSTEM: TEMPORARY AC FAILURE **hhmmss ref code**

Note: The corresponding alert is not displayed on the NetView* console if the control program is not loaded.

Cause: Disturbance in ac power supply
Power control
Power cord
A circuit breaker has been set OFF then ON

Action:

- Do not take into account this alarm if it occurred after you set OFF and ON a circuit breaker.
- Failure in ac input. Check the main ac power source.
- If the problem occurs:  and give reference code.

ALARM A4: POWER SUBSYSTEM: AC CONTROL REPORTING ERROR **hhmmss ref code**

Cause: Power control

Action: If the problem recurs:  and give reference code.

ALARM A5: ASK SERVICE PERSONNEL TO REPLACE BATTERY **hhmmss ref code**

Cause: Battery
Power control

Action:  and give reference code.

ALARM A6: POWER SUBSYSTEM: INTERNAL CLOCK DOWN **hhmmss ref code**

Cause: Internal clock
Power control

Action: If it is the first installation, set the time and the date with the TIM function of the MOSS.

Otherwise,  and give reference code.

ALARM A7: COOLING PROBLEM **hhmmss ref code**

Cause: Blower
Airflow detector
Power control

Action:

- Check that air vents are not obstructed.
- Check for dirty filter (on models 210, 310, 410, and 610).
- If alarm AD (COOLING PROBLEM CORRECTED) is not generated, ☎ and give reference code.

Note: If this problem is not corrected, the whole machine is automatically powered off.

ALARM A8: MOSS POWER SUPPLY DOWN OR MOSS COOLING PROBLEM hhmmss ref code

Cause: Blower
Airflow detector
Power control
Power supply

Action:

- Check that air vents are not obstructed.
- Re-IML MOSS.
- If the problem persists: ☎ and give reference code.

ALARM AA: PLAN AIR FILTERS CLEANNING WITH SERVICE PERSONNEL hhmmss ref code

Models 210, 310, 410, 610

Cause: Air filters must be replaced.
Normal maintenance includes replacement of air filters every year.

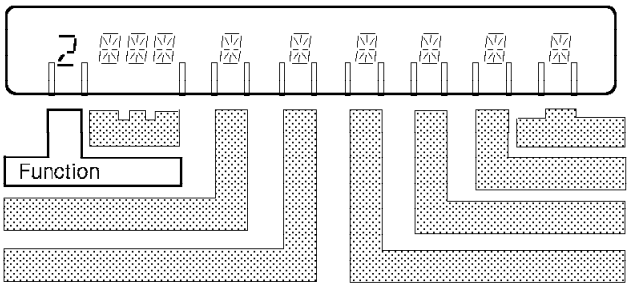
Action: ☎ and give reference code.

ALARM AB: POWER SUBSYSTEM: POWER INTERNAL ERROR	hhmmss ref code

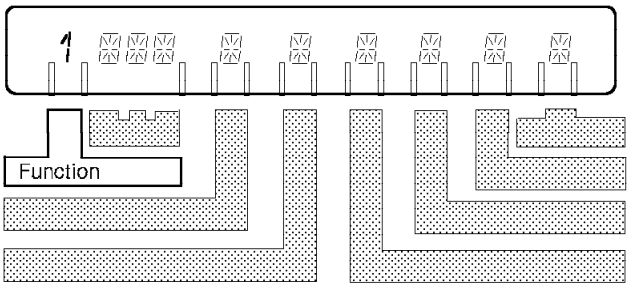
Cause: Power control
MOSS microcode
MOSS hardware

Action:

- Dump MOSS from the control panel. Press **Function** repeatedly until **2** is displayed; then press **Validate:**



- Re-IML MOSS from the control panel. Press **Function** repeatedly until **1** is displayed; then press **Validate:**



- Transfer the MOSS dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- If the problem persists: ☎ and give reference code.

ALARM AC: POWER SUBSYSTEM: INTERNAL ERROR	**hhmmss ref code**

Cause: Power control
MOSS microcode

Action: ☎ and give reference code.

ALARM AD: COOLING PROBLEM CORRECTED	**hhmmss ref code**

Cause: Airflow returned to normal. The cause of alarm A7 or A8 disappeared.

Action: If the problem occurs repeatedly, ☎ and give reference codes of previous alarm A7 or A8.

ALARM B0: HOST OPERATOR NOTIFIED: FALLBACK TO BE PERFORMED	**hhmmss ref code**

Models 410, 610

Cause: The host operator has been notified that a fallback is to be performed by the operator on a twin-standby 3745.

Action: No local action required.

ALARM B1: MANUAL FALLBACK OR IPL COMPLETE CCU-x hhmmss ref code

Models 410, 610

Cause: Manual fallback on a twin-standby 3745 or resulting IPL has been completed successfully.

Action: No action required.

ALARM B3: MANUAL FALLBACK OR IPL FAILED CCU-x hhmmss ref code

Models 410, 610

Cause: Manual fallback or resulting IPL failed because of a hardware error.
CCU
Main storage
Processor switch

Action:  and give reference code.

ALARM B4: HOST OPERATOR NOTIFIED: SWITCHBACK TO BE PERFORMED hhmmss ref code

Models 410, 610

Cause: The host operator has been notified that a switchback is to be performed by the operator.

Action: No local action required.

ALARM B5: SWITCHBACK AND IPL COMPLETE CCU-x hhmmss ref code

Models 410, 610

Cause: Switchback has been completed successfully.

Action: No local action required.

ALARM B7: MOSS OFFLINE ON OPERATOR'S REQUEST hhmmss ref code

Cause: The operator set MOSS offline.
This alarm may also be displayed when the operator started to set MOSS offline and cancelled the operation by pressing the break key. Actual MOSS status is shown in the MSA.

Action: No action required.

ALARM B8: LA xx DISCONNECTED ON OPERATOR'S REQUEST hhmmss ref code

Cause: Service personnel disconnected line adapter (scanner) xx.

Action: No local action required.

ALARM B9: TRA xx DISCONNECTED ON OPERATOR'S REQUEST hhmmss ref code

Cause: Service personnel disconnected a token-ring adapter.

Action: No local action required.

ALARM BA: HSS xx DISCONNECTED ON OPERATOR'S REQUEST hhmmss ref code

Cause: Service personnel disconnected a high-speed scanner.

Action: No local action required.

ALARM BB: MANUAL FALLBACK OR IPL COMPLETE WITH ERROR(S) CCU-x hhmmss ref code

Models 410, 610

Cause: CCU
Main storage
Non-disruptive errors occurred during the fallback or during the IPL following the fallback. The 3745 is running, but with some restrictions.

Action:  and give reference code.

ALARM BC: SWITCHBACK OR IPL COMPLETE WITH ERRORS CCU-x hhmmss ref code

Models 410, 610

Cause: CCU
Main storage
Non-disruptive errors occurred during the switchback or during the IPL following the switchback. The 3745 is running, but with some restrictions.

Action: ☎ and give reference code.

ALARM BD: SWITCHBACK OR IPL FAILED CCU-x hhmmss ref code

Models 410, 610

Cause: CCU
Main storage
Processor switch

Action:

- ☎ and give reference code.
- Re-IPL the other CCU.

ALARM C0: CONCURRENT MAINTENANCE ON CA xx: IN PROGRESS hhmmss ref code

Cause: Service personnel entered concurrent maintenance.

Action: No action required.

ALARM C1: CONCURRENT MAINTENANCE ON CA xx: COMPLETE hhmmss ref code

Cause: Concurrent maintenance on channel adapter xx successfully completed.

Action: No action required.

ALARM C2: CONCURRENT MAINTENANCE ON CA xx: CANCELED hhmmss ref code

Cause: Concurrent maintenance on channel adapter xx is canceled. (Refer to alarm C7.)

Action: No action required.

ALARM C3: CONCURRENT MAINTENANCE ON CA xx: REJECTED hhmmss ref code

Cause: The control program rejected the concurrent maintenance request because of traffic.

Action: Ask the host operator to vary off line the CA.

ALARM C4: CONCURRENT MAINTENANCE: CA xx IS DELETED hhmmss ref code

Models 210, 310, 410, 610

Cause: Channel adapter is deleted.

Action: No action required.

ALARM C5: CONCURRENT MAINTENANCE: CA xx IS INSTALLED hhmmss ref code

Models 210, 310, 410, 610

Cause: Channel adapter is now installed.

Action: No action required.

ALARM C6: CONCURRENT MAINTENANCE: CA xx IS REPLACED hhmmss ref code

Models 210, 310, 410, 610

Cause: Channel adapter is replaced.

Cause: No action required.

ALARM C7: CA xx I/O ERROR ALERT: STOP CONCURRENT MAINTENANCE hhmmss ref code

Models 210, 310, 410, 610

Action: Service representative is requested to cancel concurrent maintenance.

ALARM D0: 3745 IPL COMPLETE CCU-x hhmmss ref code

Action: Reactivate resources if necessary.

ALARM D1: 3745 IPL COMPLETE WITH NON-BLOCKING ERRORS CCU-x hhmmss ref code

Cause: Non-disruptive errors occurred during the 3745 IPL. The 3745 is running with some restrictions on the channel adapters, the line adapters, the consoles, or the disk.

Action:

Models 130, 150, 170

- A port swap may have been done, use the MOSS PSF function to verify that the addressed lines and ports are still valid.
- Check the cables and modems.
- If not corrected,  and give reference code of this alarm and of companion alarms if any.

Models 210, 310, 410, 610

- Check the resources attached to the CCU. A change of those resources may happened for any reason and causes this type of error.
- A port swap followed by a CCU mode change may have been done, use the MOSS PSF function to verify that the addressed lines and ports are still valid.
- Check the cables and modems.
- Look at the power block status (CA, LA, LIC), using the Power Services function (POS). Refer to the *3745 Advanced Operations Guide.*
  - If you set a power block down *intentionally*, do not 
  - If a power block is not in "up" status (or is not down intentionally),  and give the reference code of the related alarm (9D, 9F, or A1) or the reference code of alarm D1 if there is no related alarm.
- If all power blocks are in "up" status,  and give reference code.
- If it recurs, 

ALARM D2: 3745 IPL FAILED CCU-x	hhmmss ref code

Cause:

- Main storage
- CCU
- MOSS hardware
- Channel adapter
- Controller load/dump program errors.
- A link IPL port was not defined properly. Refer to the MOSS LKP function in the *3745 Advanced Operations Guide*.
- A cable may not be attached to the port you defined as link IPL port.
- An IPL performed on a remote controller linked to a local controller by a switched X.21 link, an X.25 (SVC/PVC) link, or a token-ring (a link IPL port is only valid for SDLC or nonswitched X.21 links).

Action:

- In case of a loading problem on channel attached controller:
  - Perform IPL again.
  - If the problem persists; ☎ and give reference code.
- In case of a loading problem on link attached controller:
  1. Through a switched/nonswitched SDLC or a nonswitched X.21 link:
     - Check the link IPL port definition. Refer to the MOSS LKP function in the *3745 Advanced Operations Guide*.
     - ☎ and give reference code if not corrected.
  2. Through a switched X.21 link, an X.25 (SVC/PVC) link, or a token-ring:
     - An initial loading of the remote controller is required. Refer to *3720/3745 Remote Loading/Activation Guide* SA33-0161 for the procedure.
     - ☎ and give reference code if not corrected.

ALARM D3: ERROR DETECTED ON STANDBY CCU-x	hhmmss ref code

Models 410, 610

Cause: During the 3745 IPL, a blocking error has been detected on the standby CCU. The current IPL is not affected.

Action: ☎ and give reference code.

ALARM D4: IPL OF STANDBY CCU-x COMPLETE WITH ERRORS hhmmss ref code

Models 410, 610

Cause: Non-disruptive errors occurred during the IPL of the standby CCU. The 3745 is running but if a fallback occurs, there will be some restrictions on the console or disk.

Action: ☎ and give reference code.

ALARM E1: CP ERROR: CCU-x CP ABEND xxxx RE-IPL REQUEST hhmmss ref code

Cause: Control program

Action:

- Refer to the appropriate control program documentation (NCP or else) for the abend code xxxx description.
- Transfer the control program dump to the host and print it. Refer to the *NCP, SSP, and EP Diagnosis Guide.*
- Apply the correct software level.
- Check for the correct software fix.
- If unsuccessful, ☎ the software support for NCP and report the CP abend code and the reference code.

ALARM E2: MICROCODE ERROR: CCU-x CP ABEND xxxx RE-IPL REQUEST hhmmss ref code

Cause: Adapter microcode

Action:

- If the problem reoccurs, apply the last microcode and MCF's levels.
- If the problem persists, ☎ the hardware support for the 3745 and report the alarm number and the reference code.

ALARM E3: HARDWARE ERROR: CCU-x CP ABEND xxxx RE-IPL REQUEST hhmmss ref code

Cause: Adapter hardware
Communications control unit (CCU)

Action:

- If the problem reoccurs,  the hardware support for the 3745 and report the alarm number and the reference code.

NetView* Alerts and Systems Network Architecture (SNA) Code Points

This section will help you to understand alert descriptions and recommended actions that apply to the 3745.

Code Points

The description of the code points listed in this section applies to NetView* Release 2 (at the latest service level) or later releases.

If the actual code points are not in the latest service level, some of the code points defined in this section are replaced by default values with a different text. The code point default values used can be determined by referring to the *SNA Formats* manual.

Alert Dynamic - Messages

The alert dynamic information is made up of the alert description and first (or most) probable cause issued via the NMVT.

The alert dynamic message given in this section corresponds to the code points available in NetView* Release 2 (at the latest service level) or later release.

Recommended Actions

Resources Require Activation: A situation has occurred where an adapter has re-IMLed or a controller has re-IPLed (due to backup or recovery) and the attached resources must be re-activated.

Perform Problem Determination Procedure at reporting location for product alert reference code nn: Perform additional actions given under the corresponding alarm number nn, refer to “List of Alarms” on page 1-4

Review Supporting Data at Alert Sender: Use the MOSS ELD function (refer to the *3745 Advanced Operations Guide*) to display the different alarms related to a given problem and to report the associated reference code to service representative, when necessary.

Correct Configuration: A mismatch may exist between the hardware and the microcode. This mismatch would be reflected in the configuration data file (CDF). Before new resources are put in operation, a CDF upgrade or update must be done (refer to the *3745 Advanced Operations Guide*).

Subvectors

The subvectors and their code points are hexadecimal values:

- Subvectors X'10', product set ID and X'11', product identifier. Contain:
  - Machine type (always 3745).
  - Machine model (130, 150, 170, 210, 310, 410, or 610).
  - Plant number (two characters).
  - Serial number (seven characters).

- Subvector key X'91', basic alert. Contains the alert type code. This code has three possible values:
  - X'FC', a permanent loss of availability
  - X'FD', an impending loss of availability
  - X'FE', a temporary loss of availability.
- Subvector key X'92', alert description.

  Contains the alert ID number. This is a composite code computed from certain of the code point values. It does **not** provides a value by which the entire NMVT can be recognized.

  Notes:

  1. Any change, addition, or deletion of the applicable code point values alters the alert identification number.
  2. Each NMVT can be uniquely identified only by the product alert reference code (alarm number).
- Subvector key X'93', probable causes.
- Subvector key X'94', user causes. Contains:
  - The cause code points, subfield X'01'.
  - The action code points, subfield X'81'
- Subvector key X'95', installation causes. Contains:
  - The cause code points, subfield X'01'
  - The action code points, subfield X'81'
- Subvector key X'96', failure causes. Contains:
  - The cause code points, subfield X'01'
  - The action code points, subfield X'81'

Each NMVT has at least one subfield X'82' that contains the product alert reference code (alarm number). **Each NMVT can only be uniquely identified by this code.**

Other X'82' subfields contain values, such as reference code, adapter number, and line address range.

These subvectors are listed, by product alert reference code sequence (also known as alarm ID number) on the following pages.

Related NCP and NetView* Publications

You may refer to the manuals listed on page xii for more detailed information.

List of NetView* Alerts

3745 Alert Reference Code 01

Alert Condition: 3745 MOSS has detected a transient error and has recovered.

MOSS Console Alarm Message

ALARM 01 : MOSS TRANSIENT ERROR

NetView* Alert - Dynamic

Service Subsystem Failure: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'8F193FC2'
Alert Type SV X'92'	X'02'	Temporary
Alert Description SV X'92'	X'1608'	Service Subsystem Failure
Probable Causes SV X'93'	X'0001'	MOSS
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0001'	MOSS Hardware
Actions SV X'96' SF X'81'	X'2203' X'3302' X'3000' X'32C0' X'82' SF X'82' SF	Review Supporting data at Alert Sender If problem continues to occur repeatedly then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 02

Alert Condition: MOSS has detected a transient error and has recovered. A MOSS dump is available on the disk.

MOSS Console Alarm Message

ALARM 02 : MOSS TRANSIENT ERROR - DUMP

NetView* Alert - Dynamic

Service Subsystem Failure: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'97F1BD73'
Alert Type SV X'92'	X'02'	Temporary
Alert Description SV X'92'	X'1608'	Service Subsystem Failure
Probable Causes SV X'93'	X'0001'	MOSS
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0002' X'0001'	MOSS Microcode MOSS Hardware
Actions SV X'96' SF X'81'	X'0601' X'3302' X'3000' X'32C0' X'82' SF X'82' SF	Transfer and Print MOSS Dump If problem continues to occur repeatedly then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 04

Alert Condition: An unrecoverable error has been detected when using the disk drive. The disk adapter is suspected as the cause of the problem.

MOSS Console Alarm Message

ALARM 04 : MOSS DISK ADAPTER ERROR

NetView* Alert - Dynamic

Disk Failure: Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'C0267A27'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1311'	Disk Failure
Probable Causes SV X'93'	X'3300'	Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3303' X'6310' X'0201'	DASD Adapter Disk Drive Internal Power Unit
Actions SV X'96' SF X'81'	X'F050' X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'1000'	IPL capabilities limited Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) Perform Problem Determination Procedures at reporting location for (Product Alert Reference Code (x'F0')) Perform Problem Recovery Procedures

3745 Alert Reference Code 05

Alert Condition: An unrecoverable error has been detected when using the disk drive.

MOSS Console Alarm Message

ALARM 05 : MOSS DISK FAILURE

NetView* Alert - Dynamic

Disk Failure: DASD Device

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'A853A927'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1311'	Disk Failure
Probable Causes SV X'93'	X'6310'	DASD Device
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'6310' X'3303' X'0201'	Disk Drive DASD Adapter Internal Power Unit
Actions SV X'96' SF X'81'	X'F050' X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'1000'	IPL capabilities limited Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) Perform Problem Determination Procedures at reporting location for (Product Alert Reference Code (x'F0')) Perform Problem Recovery Procedures

3745 Alert Reference Code 06

Alert Condition: An unrecoverable error has been detected when using the diskette drive.

MOSS Console Alarm Message

ALARM 06 : MOSS DISKETTE FAILURE

NetView* Alert - Dynamic

Diskette Device Failure: Diskette

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'BDAD5681'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1321'	Diskette Device Failure
Probable Causes SV X'93'	X'5002' X'6311'	Diskette Diskette Device
User Causes SV X'94' SF X'01'	X'5102' X'5101'	No Diskette or Defective Diskette Inserted Improper Diskette Inserted
Actions SV X'94' SF X'81'	X'1603' X'1602' X'1001'	Change Diskette and Retry Place Backup Diskette in Drive Refer to Operator's Guide for corrective action
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'5002' X'6311' X'0201' X'3306'	Diskette Diskette Drive Internal Power Unit Diskette Adapter
Actions SV X'96' SF X'81'	X'F051' X'3000' X'32C0' X'82' SF X'82' SF	No IPL capabilities Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 07

Alert Condition: An unrecoverable error has been detected when using the diskette drive. The diskette drive adapter is suspected as the cause of the problem.

MOSS Console Alarm Message

ALARM 07 : MOSS DISKETTE ADAPTER ERROR

NetView* Alert - Dynamic

Diskette Device Failure: Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7334D285'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1321'	Diskette Device Failure
Probable Causes SV X'93'	X'3300'	Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3306' X'6311' X'5002'	Diskette Adapter Diskette Drive Diskette
Actions SV X'96' SF X'81'	X'F051' X'1602' X'1001' X'3301' X'3000' X'32C0' X'82' SF X'82' SF	No IPL capabilities Place Backup Diskette in Drive Refer to Operator's Guide for corrective action If problem persists then do the following : Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 08

Alert Condition: A permanent error has been detected by the power subsystem during operation with the 3745 control panel.

MOSS Console Alarm Message

ALARM 08 : MOSS CONTROL PANEL ERROR

NetView* Alert - Dynamic

Device Error: Control Panel

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'BDD88DEA'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'0004'	Control Panel
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0004' X'0202' X'3451'	Control Panel Internal Power Control Unit Device Cable
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 09

Alert Condition: A MOSS IML has been completed successfully. The IML may have been initiated manually or as the result of an automatic error recovery. During this IML, the NCP may have determined that the MOSS was inoperative and sent an alert to the network operator.

MOSS Console Alarm Message

ALARM 09 : MOSS IML COMPLETE

NetView* Alert - Dynamic

Problem Resolved: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'68A3D7C4'
Alert Type SV X'92'	X'02'	Temporary
Alert Description SV X'92'	X'A000'	Problem Resolved
Probable Causes SV X'93'	X'0001'	MOSS
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700'	No Action Necessary
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0001' X'0002'	MOSS Hardware MOSS Microcode
Actions SV X'96' SF X'81'	X'3302' X'00B1' X'82' SF	If problem continues to occur repeatedly then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 0A

Alert Condition: An unrecoverable error was detected by MOSS microcode when in use with the local console. The MOSS is suspected as the cause of the problem.

MOSS Console Alarm Message

ALARM 0A : MOSS-TO-LOCAL CONSOLE TRANSMISSION ERROR

NetView* Alert - Dynamic

Local Console Error: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'BD7C213F'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1301'	Local Console Error
Probable Causes SV X'93'	X'0001' X'6315'	MOSS Console
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'330E' X'3400' X'6350'	Console Adapter Cable Loose or Defective Local Console
Actions SV X'96' SF X'81'	X'0301' X'0401' X'0402' X'3303' X'3000' X'32C0' X'82' SF X'82' SF	Check Cable and its connections Run Console Test Run Console Link Test If unsuccessful then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 0B

Alert Condition: An unrecoverable error was detected by MOSS microcode when in use with the local console. The console is suspected as the cause of the problem.

MOSS Console Alarm Message

ALARM 0B : LOCAL CONSOLE ERROR

NetView* Alert - Dynamic

Local Console Error: Console

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'CB7B9688'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1301'	Local Console Error
Probable Causes SV X'93'	X'6315' X'0001'	Console MOSS
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'6350' X'3400' X'330E'	Local Console Cable Loose or Defective Console Adapter
Actions SV X'96' SF X'81'	X'0301' X'0401' X'0402' X'3303' X'3000' X'32C0' X'82' SF X'82' SF	Check Cable and its connections Run Console Test Run Console Link Test If unsuccessful then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 0C

Alert Condition: An unrecoverable error was detected by MOSS microcode when in use with the remote console. The cause of the problem is probably the 3745 transmission, but may be the remote console, modem, or line.

MOSS Console Alarm Message

ALARM 0C : MOSS-TO-REMOTE CONSOLE TRANSMISSION ERROR

NetView* Alert - Dynamic

Remote Console Error: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'FAF7B218'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1302'	Remote Console Error
Probable Causes SV X'93'	X'0001' X'3601'	MOSS Local Modem
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1202' X'3401' X'1200'	Local Modem Local DCE Interface Cable Installed Incorrectly Incorrect Hardware Configuration
Actions SV X'95' SF X'81'	X'0301' X'3100' X'1503'	Check Cable and its Connections Contact Administrative Personnel Correct Configuration
Failure Causes SV X'96' SF X'01'	X'330E' X'3401' X'3601'	Console Adapter Local DCE interface Cable Local Modem
Actions SV X'96' SF X'81'	X'0301' X'0403' X'0402' X'3303' X'3000' X'32C0' X'82' SF X'82' SF	Check Cable and its connections Run Modem Tests Run Console Link Test If unsuccessful then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 0D

Alert Condition: An unrecoverable error was detected by MOSS microcode when in use with the remote console. The line, remote modem, and console are suspected as the cause of the problem.

MOSS Console Alarm Message

ALARM 0D : REMOTE CONSOLE ERROR

NetView* Alert - Dynamic

Remote Console Error: Communications Interface

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'32B2CB83'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1302'	Remote Console Error
Probable Causes SV X'93'	X'3200'	Communications Interface
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1203' X'3403' X'1202' X'3401' X'1200'	Remote Modem Remote DCE Interface Cable Installed Incorrectly Local Modem Local DCE Interface Cable Installed Incorrectly Incorrect Hardware Configuration
Actions SV X'95' SF X'81'	X'0302' X'3100' X'1503'	Check Cables and their Connections Contact Administrative Personnel Correct Configuration
Failure Causes SV X'96' SF X'01'	X'3603' X'6351' X'3403' X'3401' X'3601' X'330E'	Remote Modem Remote Console Remote DCE interface Cable Local DCE interface Cable Local Modem Console Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Actions SV X'96' SF X'81'	X'0302' X'0401' X'0403' X'0402' X'3303' X'3000' X'32C0' X'82' SF X'82' SF	Check Cables and their connections Run Console Tests Run Modem Tests Run Console Link Test If unsuccessful then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 0E

Alert Condition: An unrecoverable error was detected by MOSS microcode when in use with the remote support facility (RSF). Do not consider this alert if it is detected after a normal RSF console log off.

MOSS Console Alarm Message

ALARM 0E : MOSS-TO-RSF CONSOLE TRANSMISSION ERROR

NetView* Alert - Dynamic

Rem Support Facility Link Error: Communications Intf

(Remote Support Facility Link Error: Communications Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'DB50005C'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3301'	Remote Support Facility Link Error
Probable Causes SV X'93'	X'3200'	Communications Interface
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1202' X'3401' X'1200'	Local Modem Local DCE Interface Cable Installed Incorrectly Incorrect Hardware Configuration
Actions SV X'95' SF X'81'	X'0301' X'3100' X'1503'	Check Cable and its Connections Contact Administrative Personnel Correct Configuration
Failure Causes SV X'96' SF X'01'	X'2000' X'330E' X'3401' X'3601'	Communications Error Console Adapter Local DCE interface Cable Local Modem
Actions SV X'96' SF X'81'	X'0301' X'0403' X'0402' X'3303' X'3000' X'32C0' X'82' SF X'82' SF	Check Cable and its connections Run Modem Tests Run Console Link Test If unsuccessful then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 0F

Alert Condition: A MOSS IML has been completed, and minor errors were detected during the IML. The errors detected do not disrupt the operation of the 3745. During this IML, the NCP may have determined that the MOSS was inoperative and sent an alert to the network operator.

MOSS Console Alarm Message

ALARM 0F : MOSS IML COMPLETE WITH NON-BLOCKING ERRORS

NetView* Alert - Dynamic

Problem Resolved: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'68A3D7C4'
Alert Type SV X'92'	X'02'	Temporary
Alert Description SV X'92'	X'A000'	Problem Resolved
Probable Causes SV X'93'	X'0001'	MOSS
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700'	No Action Necessary
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0001' X'0002'	MOSS Hardware MOSS Microcode
Actions SV X'96' SF X'81'	X'3302' X'3000' X'32C0' X'82' SF X'82' SF	If problem continues to occur repeatedly then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 10

Alert Condition: MOSS microcode has detected too many unsuccessful attempts to log on at the remote console. New attempts to access the MOSS through the remote console port are ignored until the counter for logon attempts from the remote console is reset from the local console.

MOSS Console Alarm Message

ALARM 10 : REMOTE CONSOLE PASSWORD VIOLATION

NetView* Alert - Dynamic

Invalid Password: Remote System Operator

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'6F59C966'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'C006'	Invalid Password
Probable Causes SV X'93'	X'7002'	Remote System Operator
User Causes SV X'94' SF X'01'	X'7108'	Operator entered incorrect password
Actions SV X'94' SF X'81'	X'3100' X'00B1' X'82' SF X'1001'	Contact Administrative Personnel Perform Problem Determination Procedures at reporting location for : (Product Alert Reference Code (x'F0')) Refer to *3745 Advanced Operations Guide* for Corrective Action
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code 20

Alert Condition: The CCU was automatically re-IPLed after the detection of a transient CCU hardware error. The IPL was successful and the related resources can be re-activated. No dump of the failure is available on the disk.

MOSS Console Alarm Message

ALARM 20 : TRANSIENT HARD ERROR: CCU-x RE-IPLED - NO DUMP

NetView* Alert - Dynamic

Resources Req Activation: Communication Ctrl

(Resources Require Activation: Communication Controller)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'562B3A60'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3111'	Communication Controller
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0000' X'0101'	Processor Main Storage
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert sender

3745 Product Alert Reference Code 21

Alert Condition: A CCU failure occurred in twin-standby mode. All resources of the failed CCU have been switched to the standby CCU. Fallback to the standby CCU and IPL of the standby CCU have been completed successfully. The resources are ready for activation.

MOSS Console Alarm message

ALARM 21 : HARDWARE ERROR : FALLBACK AND IPL COMPLETE ON CCU-x

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'23D786C9'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3110'	Communication Controller Back-Up
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code 22

Alert Condition: A CCU failure resulted in an attempted fallback. In twin-backup mode, the fallback operation failed.

MOSS Console Alarm message

ALARM 22 : HARDWARE ERROR : CCU-x FALLBACK OR IPL FAILED

Models 410, 610

NetView* Alert - Dynamic

Device Error: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7E55493A'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'3110' X'0003'	Communication Controller Back-up Processor Switch
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0003' X'3300'	Processor Switch Adapter
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF X'00B1' X'82' SF X'2203'	Contact appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code 23

Alert Condition: A CCU failure occurred in twin-backup mode. All resources of the failed CCU have been switched to the backup CCU. Fallback to the backup CCU has been completed successfully. The resources are ready for activation.

MOSS Console Alarm message

ALARM 23 : HARDWARE ERROR : FALLBACK COMPLETE ON CCU-x

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'23D786C9'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3110'	Communication Controller Back-Up
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code 26

Alert Condition: After a CCU failure, all resources of the failed CCU have been switched to the second CCU. During the fallback operation, either a minor error was detected in the bus switch or a line or channel adapter could not be put into operational mode.

MOSS Console Alarm message

ALARM 26 : HARD ERROR: CCU-x FBK OR IPL COMPLETE WITH ERROR(S)

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'68F03B79'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3110' X'0003' X'3300'	Communication Controller Back-Up Processor Switch Adapter
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Contact appropriate Service Representative Report the following: (Reference Code (x'30')) Perform Problem Determination Procedure at the reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 27

Alert Condition: A CCU hardware error was detected, causing an automatic control program dump and re-IPL of the failing CCU. The CCU re-IPL has been successful and the related resources can be re-activated. The control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 27 : HARDWARE ERROR : CCU-x RE-IPL COMPLETE - DUMP

NetView* Alert - Dynamic

Resources Req Activation: Communication Ctrl

(Resources Require Activation: Communication Controller)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'D7DB2CFD'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3111'	Communication Controller
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0000' X'0101' X'1021'	Processor Main Storage Communication Controller Control Program
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0602' X'3300' X'00B1' X'82' SF X'2203' X'3000'	Reactivate resources attached to (Communication Control Unit (x'34')) Transfer and Print Control Program Dump If problem re-occurs then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 28

Alert Condition: A CCU hardware error was detected, causing an automatic control program dump and re-IPL of the standby CCU. The CCU re-IPL has been successful and the related resources can be re-activated. The control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 28 : HARDWARE ERROR : CCU-x STANDBY RE-IPL COMPLETE - DUMP

Models 410, 610

NetView* Alert - Dynamic

Resources Req Activation: Communication Ctrl

(Resources Require Activation: Communication Controller)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'06AC0B95'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B000'	Operator Notification
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3111' X'1021'	Communication Controller Communication Controller Control Program
Actions SV X'96' SF X'81'	X'0602' X'3302' X'3000' X'F0A0' X'82' SF X'00B1' X'82' SF X'2203'	Transfer and Print Control Program Dump If problem continues to occur repeatedly then do the following Contact Appropriate Service Representative For: (Communication Control Unit (x'34')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) '28' Review supporting data at Alert Sender

3745 Alert Reference Code 29

Alert Condition: An error was detected by the control program, causing an automatic control program dump and re-IPL of the standby CCU. The CCU re-IPL has been successful and the related resources can be re-activated. The control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 29 : CP ERROR xxxx CCU-x STANDBY RE-IPL COMPLETE - DUMP

Models 410, 610

NetView* Alert - Dynamic

Resources Req Activation: Communication Ctrl

(Resources Require Activation: Communication Controller)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'74F7147C'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B000'	Operator Notification
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'1021' X'3111' X'3300'	Communication Control Program Communication Controller Adapter
Actions SV X'96' SF X'81'	X'0602' X'3302' X'3000' X'32C0' X'82' SF X'82' SF X'00B1' X'82' SF X'2203'	Transfer and Print Control Program Dump If problem continues to occur repeatedly then do the following Contact Appropriate Service Representative Report the following: (Abend Code (x'01')) (Communication Control Unit (x'34')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) '29' Review supporting data at Alert Sender

3745 Alert Reference Code 2F

Alert Condition: An error was detected at IPL time which prevented the adapter from being operational after IPL completion.

MOSS Console Alarm Message

ALARM 2F : HARDWARE ERROR: ELAyy (PORT 1-2) IML FAILED

NetView* Alert - Dynamic

Adapter Error: Local CSMA/CD Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'FDA9DED9'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter error
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1500'	Mismatch between hardware and microcode
Actions SV X'95' SF X'81'	X'1503'	Correct configuration
Failure Causes SV X'96' SF X'01'	X'3322' X'0201'	Local CSMA/CD adapter Internal power unit
Actions SV X'96' SF X'81'	X'0200' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF X'00B1' X'82' SF X'2203'	Check power Contact Appropriate Service Representative for (Controller ID (x'69')) '3745' Report the following: (Adapter number (x'61')) 'yy' (Reference Code (x'30')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) '2F' Review supporting data at Alert Sender

3745 Alert Reference Code 30

Alert Condition: The control program tried to address an adapter which is not attached or connected through the I/O swich mechanism based on the current CCU operating mode (for example: dual or fallback mode).

MOSS Console Alarm Message

| ALARM 30 : CCU-x CP ERROR: ELAyy NOT ATTACHED

NetView* Alert - Dynamic

Prog parameter is invalid: Comm ctrl cntl pgm

(Program parameter is incorrect: Communication controller control program)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'72C201B3'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'2105'	Program parameter is incorrect
Probable Causes SV X'93'	X'1021'	Communication controller control program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'1021'	Communication controller control program
Actions SV X'96' SF X'81'	X'3302' X'0610' X'F0A0' X'82' SF X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	If problem continues to occur repeatedly then do the following: Dump control program For: (Communication Control Unit (x'34')) Contact appropriate service representative For: (Control program (X'AF')) 'NCP' Report the following: (Reference code (X'30')) (Product alert reference code (X'F0')) '30'

3745 Alert Reference Code 31

Alert Condition: The control program has sent a command which violates the defined exchanged protocol with adapter microcode.

The affected line/port is put in down state but can be reactivated to try to recover.

MOSS Console Alarm Message

ALARM 31 : CP COMMAND REJECTED: PORTx ELAyy DOWN

NetView* Alert - Dynamic

Program procedure is invalid: Local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'42E13F06'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'2101'	Program procedure is incorrect
Probable Causes SV X'93'	X'3322' X'1021'	Local CSMA/CD adapter Communication controller control program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'1021'	Communication controller control program
Actions SV X'96' SF X'81'	X'1504' X'14A2' X'82' SF X'F0A0' X'82' SF X'3300' X'0501' X'0610' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	Apply correct software level Activate (Port number (x'60')) For (Adapter number (x'61')) If problem reoccurs then do the following: Run communication line data trace Dump control program Contact appropriate service representative For: (Control program (x'AF')) 'NCP' Report the following: (Reference code (x'30')) (Product alert reference code (x'F0')) '31'

3745 Alert Reference Code 32

Alert Condition: The control program sent to the adapter either an invalid I/O instruction or a new command when previous one was still in progress.

The control program was not fast enough to service adapter interrupt requests (overrun).

Automatic adapter re-IML and restart is attempted.

MOSS Console Alarm Message

ALARM 32 : CP ERROR: ELAyy (PORT 1-2) RE-IML IN PROGRESS

NetView* Alert - Dynamic

Software program error: Local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'AA456903'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'2100'	Software program error
Probable Causes SV X'93'	X'3322' X'1021'	Local CSMA/CD adapter Communication controller control program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'1021'	Communication controller control program
Actions SV X'96' SF X'81'	X'3400' X'3300' X'1504' X'3301' X'F0A0' X'82' SF X'0501' X'0610' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	Wait for additional message before taking action If problem reoccurs then do the following: Apply correct software level If problem persists then do the following: For: (Adapter number (x'61')) 'yy' Run communication line data trace Dump control program Contact appropriate service representative For: (Control program (x'AF')) 'NCP' Report the following: (Reference code (x'30')) (Product alert reference code (x'F0')) '32'

3745 Alert Reference Code 33

Alert Condition: The adapter re-IML is successfully completed after a detected control program error requiring complete adapter resource re-initialization

Resources associated to the adapter can be re-activated.

MOSS Console Alarm Message

ALARM 33 : CP ERROR: ELAyy (PORT 1-2) RE-IML COMPLETE

NetView* Alert - Dynamic

Resources req activation: Local CSMA/CD adapter

(Resources require activation: Local CSMA/CD adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'409FB37A'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources require activation
Probable Causes SV X'93'	X'3322' X'1021'	Local CSMA/CD adapter Communication controller control program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'1021'	Communication controller control program
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'1504' X'3301' X'0501' X'0610' X'3000' X'F0A0' X'82' SF X'00B1' X'82' SF	Activate resources attached to: (Adapter number (x'61')) 'yy' If problem reoccurs then do the following: Apply correct software level If problem persists then do the following: Run communication line data trace Dump control program Contact appropriate service representative For: (Control program (x'AF')) 'NCP' Perform problem determination procedure at the reporting location for: (Product alert reference code (x'F0')) '33'

3745 Alert Reference Code 34

Alert Condition: An automatic adapter re-IML is attempted after a detected hardware malfunction requiring complete adapter re-initialization to try to recover.

MOSS Console Alarm Message

ALARM 34 : HARDWARE ERROR: ELAyy (PORT 1-2) RE-IML IN PROGRESS

NetView* Alert - Dynamic

Adapter error: Local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'D2E24978'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter error
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'3400' X'3301' X'3000' X'F0A0' X'82' SF X'32D0' X'82' SF X'82' SF X'82' SF	Wait for additional message before taking action If problem persists then do the following: Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Adapter number (x'61')) 'yy' (Reference code (x'30')) (Product alert reference code (x'F0')) '34'

3745 Alert Reference Code 35

Alert Condition: The adapter re-IML is successfully completed after a detected hardware malfunction requiring complete adapter re-initialization as an attempt to recover.

The hardware error was intermittent and resources associated to the adapter can be re-activated.

MOSS Console Alarm Message

ALARM 35 : TRANSIENT HDW ERROR: ELAyy (PORT 1-2) RE-IML COMPLETE

NetView* Alert - Dynamic

Resources req activation: Local CSMA/CD adapter

(Resources require activation: Local CSMA/CD adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'937A765D'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources require activation
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3302' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	Activate resources attached to: (Adapter number (x'61')) 'yy' If problem continues to occur repeatedly then do the following: Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Reference code (X'30')) 'B1058505' (Product alert reference code (x'F0')) '35'

3745 Alert Reference Code 36

Alert Condition: The adapter re-IML is successful after a detected hardware malfunction requiring complete adapter re-initialization as an attempt to recover.

The hardware error is permanent and resources associated to the adapter cannot be re-activated.

MOSS Console Alarm Message

ALARM 36 : PERMANENT HDW ERROR: ELAyy (PORT 1-2) RE-IML FAILED

NetView* Alert - Dynamic

Adapter error: Local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'81CB1CD5'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter error
Probable Causes SV X'93'	X'3322' X'3330'	Local CSMA/CD adapter Adapter hardware
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'3000' X'F0A0' X'82' SF X'32D0' X'82' SF X'82' SF X'82' SF	Contact appropriate service representative for: (Controller ID (x'69')) '3745' Report the following: (Adapter number (x'61')) 'yy' (Reference code (X'30')) 'B1058506' (Product alert reference code (x'F0')) '36'

3745 Alert Reference Code 37

Alert Condition: A storage protect or an address exception error occurred during a direct memory access (DMA) operation with the CCU.

The control program is highly suspected to have provided an incorrect address to the adapter at the initialization time. It can be due to either a CP design error or a bad CP SYSDEF/SYSGEN (for example: a bad usage tier key).

The affected port/line is put in down state.

MOSS Console Alarm Message

ALARM 37 : CP OR SYSGEN ERROR: PORTx ELAyy DOWN

NetView* Alert - Dynamic

Software program error: Local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'47649CDD'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'2100'	Software program error
Probable Causes SV X'93'	X'3322' X'1021' X'7005'	Local CSMA/CD adapter Communication controller control program System programmer
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1300' X'8000'	Incorrect software generation Configuration error
Actions SV X'95' SF X'81'	X'3110' X'1501'	Contact communications systems programmer Correct generation problem
Failure Causes SV X'96' SF X'01'	X'1021'	Communication controller control program

Subvector and Subfield Keys	Code Points	Causes and Actions
Actions SV X'96' SF X'81'	X'1504' X'14A2' X'82' SF X'F0A0' X'82' SF X'3300' X'0501' X'0610' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	Apply correct software level Activate (Port number (x'60')) 'x' For: (Adapter number (x'61')) 'yy' If problem reoccurs then do the following: Run communication line data trace Dump control program Contact appropriate service representative For: (Control program (X'AF')) 'NCP' Report the following: (Reference code (X'30')) (Product alert reference code (x'F0')) '37'

3745 Alert Reference Code 38

Alert Condition: An unrecoverable error, potentially due to its microcode has been encountered by the adapter.

Due to a low probability of error re-occurrence, an automatic adapter re-IML and restart recovery is attempted.

MOSS Console Alarm Message

ALARM 38 : MICROCODE ERROR: ELAyy (PORT 1-2) RE-IML IN PROGRESS

NetView* Alert - Dynamic

Microcode pgr abnorm term: Local CSMA/CD adapter

(Microcode program abnormally terminated: Local CSMA/CD adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'08AE06B2'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'6000'	Microcode program abnormally terminated
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'3400' X'3301' X'3000' X'F0A0' X'82' SF X'32D0' X'82' SF X'82' SF X'82' SF	Wait for additional message before taking action If problem persists then do the following: Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Adapter number (x'61')) 'yy' (Reference code (X'30')) (Product alert reference code (x'F0')) '38'

3745 Alert Reference Code 39

Alert Condition: Following a microcode program error which required a complete adapter re-initialization for recovery, the adapter re-IML is successful.

Resources associated to the adapter can be re-activated.

MOSS Console Alarm Message

ALARM 39 : MICROCODE ERROR: ELAyy (PORT 1-2) RE-IML COMPLETE

NetView* Alert - Dynamic

Resources req activation: Local CSMA/CD adapter

(Resources require activation: Local CSMA/CD adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'937A765D'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources require activation
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3302' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	Activate resources attached to: (Adapter number (x'61')) 'yy' If problem continues to occur repeatedly then do the following: Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Reference code (X'30')) 'B1058509' (Product alert reference code (x'F0')) '39'

3745 Alert Reference Code 3A

Alert Condition: The adapter re-IML is unsuccessful after a detected program or microcode error requiring complete adapter re-initialization to try to recover.

Resources associated to the adapter cannot be re-activated.

MOSS Console Alarm Message

ALARM 3A : AFTER CODE ERROR: ELAyy (PORT 1-2) RE-IML FAILED

NetView* Alert - Dynamic

Adapter error: Local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'81CB1CD5'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter error
Probable Causes SV X'93'	X'3322' X'3330'	Local CSMA/CD adapter Adapter hardware
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'3000' X'F0A0' X'82' SF X'32D0' X'82' SF X'82' SF X'82' SF	Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Adapter number (x'61')) 'yy' (Reference code (X'30')) 'B105850A' (Product alert reference code (x'F0')) '3A'

3745 Alert Reference Code 3B

Alert Condition: The adapter microcode dump has been successfully completed before a re-IML due to a detected microcode error (or provisionally after a CP protocol error with the adapter).

The dump file on MOSS disk needs to be transferred and printed at host, on the same way as for line adapter/scanner at VTAM console.

MOSS Console Alarm Message

ALARM 3B : MICROCODE ERROR: ELAyy DUMP TAKEN

NetView* Alert - Dynamic

Microcode pgr abnorm term: Local CSMA/CD adapter

(Microcode program abnormally terminated: Local CSMA/CD adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'C4AAAF3A'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'6000'	Microcode program abnormally terminated
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322' X'3331'	Local CSMA/CD adapter Adapter microcode
Actions SV X'96' SF X'81'	X'0603' X'F0A0' X'82' SF X'F0A0' X'82' SF	Transfer and print line adapter dump For: (Adapter number (x'61')) 'yy' For: (Product alert reference code (x'F0')) '3B'

3745 Alert Reference Code 3C

Alert Condition: On one of its lines/ports the adapter has experienced an unrecoverable hardware error, either on the CCU interface at initialization time or in the adapter attachment during operations.

The affected line/port is put in down state but reactivation can be attempted to try to recover.

MOSS Console Alarm Message

ALARM 3C : HARDWARE ERROR: PORTx ELAyy DOWN

NetView* Alert - Dynamic

Adapter error: CSMA/CD adapter interface

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'E7B03127'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter error
Probable Causes SV X'93'	X'3221' X'3322'	CSMA/CD adapter interface Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3221' X'3322'	CSMA/CD adapter interface Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'F060' X'14A2' X'82' SF X'F0A0' X'82' SF X'3301' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	To recover lost resource Activate (Port number (x'60')) 'x' For: (Adapter number (x'61')) 'yy' If problem persists then do the following: Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Reference code (X'30')) (Product alert reference code (x'F0')) '3C'

3745 Alert Reference Code 3D

Alert Condition: The operator put the adapter in disconnect state for the control program. It has been done either from the local or from the remote console.

MOSS Console Alarm Message

ALARM 3D : ELAyy DISCONNECTED ON OPERATOR'S REQUEST

NetView* Alert - Dynamic

CSMA/CD adapter interface disconnected: Local system operator

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'88929091'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B00B'	CSMA/CD adapter interface disconnected
Probable Causes SV X'93'	X'7001' X'7002'	Local system operator Remote system operator
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'96' SF X'81'	X'0700' X'F0A0' X'82' SF X'F0A0' X'82' SF	No action necessary For: (Adapter number (x'61')) 'yy' For: (Product alert reference code (x'F0')) '3D'
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code 3E

Alert Condition: The adapter microcode does not respond any more to the control program. The microcode problem may only be intermittent so resource re-activation can be attempted to recover.

MOSS Console Alarm Message

ALARM 3E : MICROCODE ERROR: PORTx ELAyy DOWN

NetView* Alert - Dynamic

Microcode program error: local CSMA/CD adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'0F58E5B4'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'6100'	Microcode program error
Probable Causes SV X'93'	X'3322'	Local CSMA/CD adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3322'	Local CSMA/CD adapter
Actions SV X'96' SF X'81'	X'F060' X'14A2' X'82' SF X'F0A0' X'82' SF X'3300' X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	To recover lost resource Activate (Port number (x'60')) 'x' For: (Adapter number (x'61')) 'yy' If problem reoccurs then do the following: Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Reference code (X'30')) (Product alert reference code (x'F0')) '3E'

3745 Alert Reference Code 3F

Alert Condition: Most of the time the main cause of the error is due to a bad connection of the adapter to the CSMA/CD bus. This connection must be checked before attempting to get this resource operative.

MOSS Console Alarm Message

ALARM 3F : CSMA/CD BUS ERROR: PORTx ELAyy INOPERATIVE

NetView* Alert - Dynamic

CSMA/CD bus inoperative: CSMA/CD lan component

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'C6A25E9F'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3220'	CSMA/CD bus inoperative
Probable Causes SV X'93'	X'3721' X'3426' X'3436' X'3221'	CSMA/CD lan component CSMA/CD lan cables Local CSMA/CD adapter cable CSMA/CD adapter interface
User Causes SV X'94' SF X'01'	X'3401' X'3451'	Cabling installed incorrectly Device cable not connected
Actions SV X'96' SF X'81'	X'14A2' X'82' SF X'F0A0' X'82' SF X'3300' X'3102' X'0302' X'1300'	Activate (Port number (x'60')) 'x' For: (Adapter number (x'61')) 'yy' If problem reoccurs then do the following: Contact CSMA/CD administrator responsible for this LAN Check cables and their connections Correct then retry
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3436' X'3221'	Local CSMA/CD adapter cable CSMA/CD adapter interface
Actions SV X'96' SF X'81'	X'3000' X'F0A0' X'82' SF X'32C0' X'82' SF X'82' SF	Contact appropriate service representative For: (Controller ID (x'69')) '3745' Report the following: (Reference code (X'30')) (Product alert reference code (x'F0')) '3F'

3745 Alert Reference Code 41

Alert Condition: An error was detected by the control program, causing an automatic dump and re-IPL of the failing CCU. The CCU re-IPL has been successful and the related resources can be re-activated. The control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 41 : CP ERROR : xxxx RE-IPL COMPLETE - CCU-x DUMP

NetView* Alert - Dynamic

Resources Req Activation: Comm Ctrl Cntl Pgm

(Resources Require Activation: Communication Controller Control Program)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'9B6C23D7'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'1021'	Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1300' X'1501' X'1400' X'1600'	Incorrect Software Generation Incorrect Customization Parameters Mismatch between Hardware and Software Mismatch between Software and Microcode
Actions SV X'95' SF X'81'	X'0602' X'00B1' X'82' SF X'2203' X'1501' X'1504' X'3303' X'3000'	Transfer and Print Control Program Dump Perform Problem Determination Procedure at reporting location for (Abend Code (x'01')) Review supporting data at Alert Sender Correct Generation Problem Apply correct Software Level If unsuccessful then do the following Contact Appropriate Service Representative
Failure Causes SV X'96' SF X'01'	X'1021' X'0000' X'0101' X'3300'	Communication Controller Control Program Processor Main Storage Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0602' X'2203' X'3300' X'00B1' X'82' SF X'3000'	Reactivate resources attached to (Communication Control Unit (x'34')) Transfer and Print Control Program Dump Review supporting data at Alert Sender If problem re-occurs then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Contact Appropriate Service Representative

3745 Alert Reference Code 42

Alert Condition: An error was detected by the control program, causing an automatic dump and re-IPL of the failing CCU. The CCU re-IPL has been successful and the related resources can be re-activated. The control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 42 : SYSGEN ERROR : xxxx RE-IPL COMPLETE - CCU-x DUMP

NetView* Alert - Dynamic

Resources Req Activation: Comm Ctrl Cntl Pgm

(Resources Require Activation: Communication Controller Control Program)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7F7BF84D'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'1021'	Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1501' X'1401'	Incorrect Customization Parameters Mismatch between Hardware Configuration and Software Generation
Actions SV X'95' SF X'81'	X'0602' X'00B1' X'82' SF X'2203' X'1501' X'1504' X'3303' X'3000'	Transfer and Print Control Program Dump Perform Problem Determination Procedure at reporting location for (Abend Code (x'01')) Review supporting data at Alert Sender Correct Generation Problem Apply correct Software Level If unsuccessful then do the following Contact Appropriate Service Representative
Failure Causes SV X'96' SF X'01'	X'1021' X'0000' X'0101' X'3300'	Communication Controller Control Program Processor Main Storage Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0602' X'2203' X'3300' X'00B1' X'82' SF X'3000'	Reactivate resources attached to (Communication Control Unit (x'34')) Transfer and Print Control Program Dump Review supporting data at Alert Sender If problem re-occurs then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Contact Appropriate Service Representative

3745 Alert Reference Code 43

Alert Condition: A scanner has detected a permanent error on a line and has reported the error to the control program. The control program has notified MOSS of the error via a BER, and MOSS has generated the corresponding alarm and alert.

MOSS Console Alarm Message

ALARM 43 : CONTROL PROGRAM REPORTED ERROR : LINE xxxx DOWN

NetView* Alert - Dynamic

Link Connection Error: Line Intf Coupler

(Link Connection Error: Line Interface Coupler)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'4179B9D4'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3600'	Link Connection Error
Probable Causes SV X'93'	X'33C3' X'3309'	Line Interface Coupler Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'3401' X'1400' X'1500'	Local DCE Interface Cable Installed Incorrectly Mismatch between Hardware and Software Mismatch between Hardware and Microcode
Actions SV X'95' SF X'81'	X'1320' X'1503' X'1501' X'3303' X'3000'	Check Cable Connection and Retry Correct Configuration Correct Generation Problem If unsuccessful then do the following Contact Appropriate Service Representative
Failure Causes SV X'96' SF X'01'	X'33C3' X'82' SF X'82' SF	Line Interface Coupler (LIC) (Line Address (x'52')) (Empty)
Actions SV X'96' SF X'81'	X'1332' X'3301' X'1906' X'3000' X'32C0' X'82' SF X'82' SF	Reactivate line If problem persists then do the following Use alternate port or line Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 46

Alert Condition: An error was detected by the control program, causing an automatic re-IPL of the failing CCU. The CCU re-IPL has been successful and the related resources can be re-activated. No control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 46 : CP ERROR: xxxx RE-IPL COMPLETE - CCU-x NO DUMP

NetView* Alert - Dynamic

Resources Req Activation: Comm Ctrl Cntl Pgm

(Resources Require Activation: Communication Controller Control Program)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'9B6C23D7'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'1021'	Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1300' X'1501' X'1400' X'1600'	Incorrect Software Generation Incorrect Customization Parameters Mismatch between Hardware and Software Mismatch between Software and Microcode
Actions SV X'95' SF X'81'	X'00B1' X'82' SF X'2203' X'1501' X'1504' X'3303' X'3000'	Perform Problem Determination Procedure at reporting location for (Abend Code (x'01')) Review supporting data at Alert Sender Correct Generation Problem Apply correct Software Level If unsuccessful then do the following Contact Appropriate Service Representative
Failure Causes SV X'96' SF X'01'	X'1021' X'0000' X'0101' X'3300'	Communication Controller Control Program Processor Main Storage Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'2203' X'3300' X'00B1' X'82' SF X'3000'	Reactivate resources attached to (Communication Control Unit (x'34')) Review supporting data at Alert Sender If problem re-occurs then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Contact Appropriate Service Representative

3745 Alert Reference Code 47

Alert Condition: An error was detected by the control program, causing an automatic dump and re-IPL of the failing CCU. The CCU re-IPL has been successful and the related resources can be re-activated.

The control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 47 : CP ERROR: xxxx RE-IPL COMPLETE - CCU-x DUMP

NetView* Alert - Dynamic

Resources Req Activation: Comm Ctrl Cntl Pgm

(Resources Require Activation: Communication Controller Control Program)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'9B6C23D7'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'1021'	Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1300' X'1501' X'1400' X'1600'	Incorrect Software Generation Incorrect Customization Parameters Mismatch between Hardware and Software Mismatch between Software and Microcode
Actions SV X'96' SF X'81'	X'0602' X'00B1' X'82' SF X'2203' X'1501' X'1504' X'3303' X'3000'	Transfer and Print Control Program Dump Perform problem determination procedure at reporting location for (Product alert reference code (x'F0')) '47' Review supporting data at Alert Sender Correct Generation Problem Apply correct software level If unsuccessful then do the following Contact appropriate service representative
Failure Causes SV X'96' SF X'01'	X'1021' X'0000' X'0101' X'3309'	Communication Controller Control Program Processor Main Storage Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0602' X'2203' X'3300' X'00B1' X'82' SF X'3000'	Reactivate resources attached to (Communication Control Unit (x'34')) Transfer and Print Control Program Dump Review supporting data at Alert Sender If problem re-occurs then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Contact Appropriate Service Representative

3745 Alert Reference Code 48

Alert Condition: The CCU re-IPL has been successful and the related resources can be re-activated.

The forced control program dump is available on the disk.

MOSS Console Alarm Message

ALARM 48 : RE-IPL COMPLETE CCU-x. FORCED DUMP TAKEN

NetView* Alert - Dynamic

Resources Req Activation: Comm Ctrl Cntl Pgm

(Resources Require Activation: Communication Controller Control Program)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7A8FF1F3'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'1021'	Communication Controller Control Program
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0602' X'F0A0' X'82' SF	Reactivate resources attached to (Communication Control Unit (x'34')) Transfer and Print Control Program Dump For (Product Alert Reference Code (x'F0')) '48'

3745 Product Alert Reference Code 4A

Alert Condition: A CCU failure occurred in twin-standby mode. All resources of the failed CCU have been switched to the backup CCU. The fallback operation is completed successfully. The resources are ready for activation.

MOSS Console Alarm message

ALARM 4A : CONTROL PROGRAM ERROR : FALLBACK COMPLETE

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'23D786C9'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3110'	Communication Controller Back-Up
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'00B1' X'82' SF X'2203' X'3300' X'3000'	Reactivate resources attached to (Communication Control Unit (x'34')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender If problem reoccurs then do the following Contact Appropriate Service Representative

3745 Product Alert Reference Code 4B

Alert Condition: A CCU failure occurred in twin-standby mode. All resources of the failed CCU have been switched to the backup CCU. The fallback operation has been completed with minor errors. The resources are ready for activation.

MOSS Console Alarm message

ALARM 4B : CONTROL PROGRAM ERROR : FALLBACK COMPLETE WITH ERRORS

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'660C1B7D'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3110' X'3300'	Communication Controller Back-Up Adapter
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 50

Alert Condition: A permanent and unrecoverable error occurred on a channel adapter, for example:

- An error on channel adapter selection through the IOC bus
- An internal logic error in a channel adapter
- A parity error on the host channel bus
- An invalid ESC address.

MOSS Console Alarm Message

ALARM 50 : HARDWARE ERROR : CHANNEL ADAPTER xx DOWN

NetView* Alert - Dynamic

Adapter Error: Channel Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'E07DEFA4'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3301'	Channel Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1501'	Incorrect Customization Parameters
Actions SV X'95' SF X'81'	X'1502'	Correct Customization Parameters
Failure Causes SV X'96' SF X'01'	X'3301' X'3411'	Channel Adapter Channel Interface Cable
Actions SV X'96' SF X'81'	X'3000' X'32D0' X'82' SF X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Channel Adapter Number (x'62')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 51

Alert Condition: A permanent and unrecoverable error was detected by the channel adapter microcode. The error prevents it from continuing normal operations.

MOSS Console Alarm Message

ALARM 51 : MICROCODE ERROR : CHANNEL ADAPTER xx DOWN

NetView* Alert - Dynamic

Adapter Error: Channel Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'F5DB52D3'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3301' X'3331' X'3330'	Channel Adapter Adapter Microcode Adapter Hardware
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1501' X'1502'	Incorrect Customization Parameters Incorrect Microcode Fix
Actions SV X'95' SF X'81'	X'1502' X'0104'	Correct Customization Parameters Check for correct Microcode Fix
Failure Causes SV X'96' SF X'01'	X'3301'	Channel Adapter
Actions SV X'96' SF X'81'	X'3000' X'32D0' X'82' SF X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Channel Adapter Number (x'62')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 60

Alert Condition: The line adapter microcode has detected a protocol error in the high-level exchange of commands with the control program, thus causing the line adapter to be disconnected from the control program. A line adapter dump can be taken by MOSS for problem investigation, if necessary. Then, the MOSS will re-IML the line adapter.

MOSS Console Alarm Message

ALARM 60 : LA nn (LINES xxxx-yyyy) RE-IML IN PROGRESS

NetView* Alert - Dynamic

Communication Protocol Error: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'F9DC070E'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3000'	Communication Protocol Error
Probable Causes SV X'93'	X'3309' X'1021'	Line Adapter Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'1021' X'33C2' X'82' SF X'82' SF	Communication Controller Control Program Line Adapter Microcode (Line Adapter Number (x'63')) (Line Address Range (x'53'))
Actions SV X'96' SF X'81'	X'3400' X'3302' X'3000' X'32C0' X'82' SF X'82' SF	Wait for additional message before taking action If problem continues to occur repeatedly then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 61

Alert Condition: This alert follows the alert 60 when the line adapter re-IML has been successful.

MOSS Console Alarm Message

ALARM 61 : LA nn (LINES xxxx-yyyy) RE-IML COMPLETE - DUMP

NetView* Alert - Dynamic

Resources Require Activation: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'FADB87B6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C2' X'82' SF X'82' SF	Line Adapter Microcode (Line Adapter Number (x'63')) (Empty)
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0603' X'3302' X'00B1' X'82' SF X'2203' X'3000'	Reactivate resources attached to (Line Address Range (x'53')) Transfer and Print Line Adapter Dump If problem continues to occur repeatedly then do the following Perform Problem Determination Procedures at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 62

Alert Condition: This alert follows the alert 60 when the line adapter re-IML has been unsuccessful.

MOSS Console Alarm Message

ALARM 62 : LA nn (LINES xxxx-yyyy) DOWN - DUMP

NetView* Alert - Dynamic

Adapter Error: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'3EF0C660'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF X'0002'	Line Adapter (Line Adapter Number (x'63')) (Line Address Range (x'53')) MOSS Microcode
Actions SV X'96' SF X'81'	X'0603' X'00B1' X'82' SF X'2203' X'3000'	Transfer and Print Line Adapter Dump Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 63

Alert Condition: An IOC bus error or an internal error has been detected for a line adapter which requires a re-IML.

MOSS Console Alarm Message

ALARM 63 : LA nn (LINES xxxx-yyyy) RE-IML IN PROGRESS

NetView* Alert - Dynamic

Adapter Error: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'B2C183FD'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF	Line Adapter (Line Adapter Number (x'63')) (Line Address Range (x'53'))
Actions SV X'96' SF X'81'	X'3400' X'3301' X'3000' X'32C0' X'82' SF X'82' SF	Wait for additional message before taking action If problem persists then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 65

Alert Condition: This alert follows the alert 63 when the line adapter re-IML has been successful.

MOSS Console Alarm Message

ALARM 65 : LA nn (LINES xxxx-yyyy) RE-IML COMPLETE - NO DUMP

NetView* Alert - Dynamic

Resources Require Activation: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'F359BCD8'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF	Line Adapter (Line Adapter Number (x'63')) (Empty)
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3302' X'00B1' X'82' SF X'2203' X'3000'	Reactivate resources attached to (Line Address Range (x'53')) If problem continues to occur repeatedly then do the following Perform Problem Determination Procedures at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 66

Alert Condition: This alert follows the alert 63 when the line adapter re-IML has been unsuccessful.

MOSS Console Alarm Message

ALARM 66 : LA nn (LINES xxxx-yyyy) RE-IML FAILED - NO DUMP

NetView* Alert - Dynamic

Adapter Error: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'B2C183FD'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF	Line Adapter (Line Adapter Number (x'63')) (Line Address Range (x'53'))
Actions SV X'96' SF X'81'	X'00B1' X'82' SF X'2203' X'3000'	Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 67

Alert Condition: After an error was detected on a low-speed scanner (LSS) or high-speed scanner (HSS). A dump was taken for further problem investigation and the scanner re-IML was successful.

MOSS Console Alarm Message

ALARM 67 : LA nn (LINES xxxx-yyyy) RE-IML COMPLETE - DUMP

NetView* Alert - Dynamic

Resources Require Activation: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'14AEB6FC'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF X'1021'	Line Adapter (Line Adapter Number (x'63')) (Empty) Communication Controller Control Program
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0603' X'3300' X'00B1' X'82' SF X'2203' X'3000'	Reactivate resources attached to (Line Address Range (x'53')) Transfer and Print Line Adapter Dump If problem re-occurs then do the following Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 68

Alert Condition: This alert follows the alert 63 when the line adapter re-IML has been successful.

MOSS Console Alarm Message

ALARM 68 : LA nn (LINES xxxx-yyyy) RE-IML COMPLETE - NO DUMP

NetView* Alert - Dynamic

Resources Require Activation: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'F359BCD8'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF	Line Adapter (Line Adapter Number (x'63')) (Empty)
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3302' X'00B1' X'82' SF X'2203' X'3000'	Reactivate resources attached to (Line Address Range (x'53')) If problem continues to occur repeatedly then do the following Perform Problem Determination Procedures at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 6A

Alert Condition: An error was detected on a line adapter during the IPL process. The error prevents the line adapter from becoming operational. The error could be due to mismatch between the configuration data file (CDF) and the hardware (LSS multiplex cable connection). This alarm 6A and its associated alert are presented with the alarm D1 and its alert, together with the message: IPL COMPLETE WITH NON-BLOCKING ERROR(S).

MOSS Console Alarm Message

ALARM 6A : LA nn (LINES xxxx-yyyy) IML FAILED - NO DUMP

NetView* Alert - Dynamic

Adapter Error: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'066B9DB8'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1500' X'3402'	Mismatch between Hardware and Microcode Line Adapter Multiplexer Cable installed incorrectly
Actions SV X'95' SF X'81'	X'1503' X'3000' X'2203'	Correct Configuration Contact Appropriate Service Representative Review supporting data at Alert Sender
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF X'0201'	Line Adapter (Line Adapter Number (x'63')) (Line Address Range (x'53')) Internal Power Unit
Actions SV X'96' SF X'81'	X'0200' X'3000' X'32C0' X'82' SF X'82' SF	Check power Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 6B

Alert Condition: An unsuccessful re-IML occurred for a line adapter.

MOSS Console Alarm Message

ALARM 6B : LA nn (LINES xxxx-yyyy) RE-IML FAILED - DUMP

NetView* Alert - Dynamic

Adapter Error: Line Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'3EF0C660'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3309'	Line Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33C0' X'82' SF X'82' SF X'0002'	Line Adapter (Line Adapter Number (x'63')) (Line Address Range (x'53')) MOSS Microcode
Actions SV X'96' SF X'81'	X'0603' X'00B1' X'82' SF X'2203' X'3000'	Transfer and Print Line Adapter Dump Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting Data at Alert Sender Contact Appropriate Service Representative

3745 Alert Reference Code 72

Alert Condition: A permanent HSS hardware error was detected by the control program.

MOSS Console Alarm Message

ALARM 72 : HPTSS (HSS xx) HARDWARE FAILURE

NetView* Alert - Dynamic

Adapter Error: HPTSS Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'BB2367E1'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'330F'	HPTSS Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'330F' X'0110' X'0003'	HPTSS Adapter Storage Control Processor Switch (**Models 210, 310, 410, and 610**)
Actions SV X'96' SF X'81'	X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'2203'	Contact Appropriate Service Representative Report the following: (Line Adapter Number (x'63')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 73

Alert Condition: A permanent error related to the direct memory access (DMA) function was detected by the HPTSS and reported to the control program.

MOSS Console Alarm Message

ALARM 73 : HPTSS-TO-STORAGE CONTROL COMMUNICATION ERROR

NetView* Alert - Dynamic

Adapter Error: HPTSS Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'0584ACAE'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'330F'	HPTSS Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'330F' X'0110' X'0003' X'1021'	HPTSS Adapter Storage Control Processor Switch (**Models 210, 310, 410, and 610**) Communication Controller Control Program
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 80

Alert Condition: An input/output error occurred at the local token-ring-adapter level at initialization time. All TICs connected to this adapter are affected.

MOSS Console Alarm Message

ALARM 80 : TRSS HARDWARE INITIALIZATION ERROR TRA xx

NetView* Alert - Dynamic

Initialization Failure: Loc Token Ring Adpt

(Initialization Failure: Local Token Ring Adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'A26651F8'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3210'	Initialization Failure
Probable Causes SV X'93'	X'3320'	Local Token-Ring Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3320' X'3220'	Local Token Ring Adapter Local Token Ring Adapter Interface
Actions SV X'96' SF X'81'	X'3000' X'32D0' X'82' SF X'82' SF X'82' SF X'2203'	Contact Appropriate Service Representative Report the following: (Line Adapter Number (x'63')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 81

Alert Condition The last TIC backup time out occurred and a 'not completed' level-2 interrupt has been received. All TICs connected to this adapter are affected.

MOSS Console Alarm Message

ALARM 81 : TIME-OUT ERROR : TRA xx DOWN

NetView* Alert - Dynamic

Adapter Error: Local Token Ring Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'32AE00B0'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3320' X'1021'	Local Token-Ring Adapter Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3320' X'1021'	Local Token Ring Adapter Communication Controller Control Program
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'0610' X'0602' X'3000' X'32C0' X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Dump Control Program Transfer and Print Control Program Dump Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 82

Alert Condition: A permanent token-ring input/output error (CCU I/O bus) has been detected by the CCU/control program or there has been an adapter error.

MOSS Console Alarm Message

ALARM 82 : TRSS HARDWARE ERROR : TRA xx DISCONNECTED

NetView* Alert - Dynamic

Adapter Error: Local Token Ring Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'34AB3171'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3320'	Local Token-Ring Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3320' X'3220' X'0003'	Local Token Ring Adapter Local Token Ring Adapter Interface Processor Switch (**Models 210, 310, 410, and 610**)
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'3000' X'32C0' X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 83

Alert Condition: The token-ring multiplex card caused an error at the direct-memory-access level or interrrupt level.

MOSS Console Alarm Message

ALARM 83 : TRSS HARDWARE ERROR : TRA xx DOWN (TIC 1-2)

NetView* Alert - Dynamic

Adapter Error: Local Token Ring Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'34AB3171'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3320'	Local Token-Ring Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3320' X'3220' X'0003'	Local Token Ring Adapter Local Token Ring Adapter Interface Processor Switch (**Models 210, 310, 410, and 610**)
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'3000' X'32C0' X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 84

Alert Condition: There has been an input/output error at the local token-ring-adapter level at initialization time. Only this TIC is affected.

MOSS Console Alarm Message

ALARM 84 : TIC INITIALIZATION ERROR : TIC x DOWN (TRA yy)

NetView* Alert - Dynamic

Initialization Failure: Token Ring Adpt Intf

(Initialization Failure: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'9818FC1A'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3210'	Initialization Failure
Probable Causes SV X'93'	X'3220'	Token-Ring Adapter Interface
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220'	Local Token Ring Adapter Interface
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'3000' X'32D0' X'82' SF X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Token Ring Interface Coupler Number (x'66')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 85

Alert Condition: The TIC failed at open time.

MOSS Console Alarm Message

ALARM 85 : OPEN-TIME ERROR : TIC x DOWN (TRA yy)

NetView* Alert - Dynamic

Open Failure: Token Ring Adpt Intf

(Open Failure: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'61B47BF4'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3211'	Open Failure
Probable Causes SV X'93'	X'3220'	Token-Ring Adapter Interface
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220'	Local Token Ring Adapter Interface
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'3000' X'32D0' X'82' SF X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Token Ring Interface Coupler Number (x'66')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 86

Alert Condition: MOSS microcode has performed a TIC dump and saved it on the controller disk for further problem investigation. The TIC can resume normal operation.

MOSS Console Alarm Message

ALARM 86 : TIC x (TRA yy) DUMP COMPLETE

NetView* Alert - Dynamic

Resources Req Activation: Token Ring Adpt Intf

(Resources Require Activation: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'28B165F3'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3220'	Token-Ring Adapter Interface
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220'	Local Token Ring Adapter Interface
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'0605' X'3300' X'3000' X'32D0' X'82' SF X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) Transfer and Print Token Ring Coupler Dump If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Token Ring Interface Coupler Number (x'66')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 87

Alert Condition: The last TIC backup time out occurred and a 'not completed' level-2 interrupt has been received. Only this TIC is affected. No backup time out.

MOSS Console Alarm Message

ALARM 87 : TIME-OUT ERROR : TIC x DOWN (TRA yy)

NetView* Alert - Dynamic

Adapter Error: Token Ring Adpt Intf

(Adapter Error: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'A93454C6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3220' X'1021'	Token-Ring Adapter Interface Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220' X'1021'	Local Token Ring Adapter Interface Communication Controller Control Program
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'0610' X'0602' X'3000' X'32D0' X'82' SF X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Dump Control Program Transfer and Print Control Program Dump Contact Appropriate Service Representative Report the following: (Token Ring Interface Coupler Number (x'66')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 88

Alert Condition: MOSS microcode failed when trying to take a TIC dump.

MOSS Console Alarm Message

ALARM 88 : TIC x (TRA yy) DUMP FAILED

NetView* Alert - Dynamic

Adapter Error: Token Ring Adpt Intf

(Adapter Error: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'69295AD6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3220'	Token-Ring Adapter Interface
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220'	Local Token Ring Adapter Interface
Actions SV X'96' SF X'81'	X'3000' X'F0A0' X'82' SF X'32D0' X'82' SF X'82' SF X'82' SF X'2203'	Contact Appropriate Service Representative For (Line Adapter Number (x'63')) Report the following: (Token Ring Interface Coupler Number (x'66')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 89

Alert Condition: The control program sent an input/output command to a token-ring adapter that is not installed.

MOSS Console Alarm Message

ALARM 89 : TOKEN RING ADAPTER NOT INSTALLED

NetView* Alert - Dynamic

Software Program Error: Loc Token Ring Adpt

(Software Program Error: Local Token Ring Adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'172FA558'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'2100'	Software Program Error
Probable Causes SV X'93'	X'3320'	Local Token-Ring Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	X'1200' X'1500'	Incorrect hardware configuration Mismatch between hardware and microcode
Actions SV X'95' SF X'81'	X'1503' X'1500' X'3301' X'3000' X'32A0' X'82' SF	Correct Configuration Correct Installation Problem If problem persists then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30'))
Failure Causes SV X'96' SF X'01'	X'1021'	Communication Controller Control Program
Actions SV X'95' SF X'81'	X'3000' X'F0A0' X'82' SF	Contact Appropriate Service Representative For (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code 8B

Alert Condition: No reply from the component.

MOSS Console Alarm Message

ALARM 8B : TOKEN RING TIME OUT

NetView* Alert - Dynamic

Adapter Error: Token Ring Adpt Intf

(Adapter Error: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'A93454C6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3220' X'1021'	Token-Ring Adapter Interface Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220' X'1021'	Local Token Ring Adapter Interface Communication Controller Control Program
Actions SV X'96' SF X'81'	X'3300' X'0610' X'0602' X'3000' X'32C0' X'82' SF X'82' SF X'2203'	If problem re-occurs then do the following Dump Control Program Transfer and Print Control Program Dump Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 8C

Alert Condition: There has been an incomplete frame time out. No interrupt has been received during the incomplete frame timer period.

MOSS Console Alarm Message

ALARM 8C : TOKEN RING FRAME TIME OUT

NetView* Alert - Dynamic

Adapter Error: Token Ring Adpt Intf

(Adapter Error: Local Token Ring Adapter Interface)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'4FB9512E'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'3220' X'1021'	Token-Ring Adapter Interface Communication Controller Control Program
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3220' X'1021'	Local Token Ring Adapter Interface Communication Controller Control Program
Actions SV X'96' SF X'81'	X'3301' X'0610' X'0602' X'3000' X'32C0' X'82' SF X'82' SF X'2203'	If problem persists then do the following Dump Control Program Transfer and Print Control Program Dump Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code 8D

Alert Condition: There has been an input/output error at the local token-ring-adapter level at initialization time. All TICs connected to this adapter are affected.

MOSS Console Alarm Message

ALARM 8D : TRSS HARDWARE INITIALIZATION ERROR ON TRA xx

NetView* Alert - Dynamic

Initialization Failure: Loc Token Ring Adpt

(Initialization Failure: Local Token Ring Adapter)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'CA919DA1'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'3210'	Initialization Failure
Probable Causes SV X'93'	X'3320'	Local Token-Ring Adapter
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3320'	Local Token Ring Adapter
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3300' X'3000' X'32C0' X'82' SF X'82' SF X'2203'	Reactivate resources attached to (Line Adapter Number (x'63')) If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code 95

Alert Condition: This is a warning that the cooling is inadequate or the room temperature is too high. When the second threshold is reached, the CCU power supply is automatically shut down.

Alarm 98 and its associated alert indicated when the temperature returns to normal.

MOSS Console Alarm message

ALARM 95 : FIRST TEMPERATURE THRESHOLD REACHED ON CCU-X

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Loss of Equipment Cooling: Cool/Heat Subsystem

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'99366924'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'1501'	Loss of Equipment Cooling
Probable Causes SV X'93'	X'0300'	Cooling or Heating Subsystem
User Causes SV X'94' SF X'01'	X'74A1'	Blocked Air Filter
Actions SV X'94' SF X'81'	X'1310' X'1311'	Verify that Air Vents are not covered Check for dirty Filter
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0301' X'0311' X'0201' X'0205'	Cooling Fan Thermal Detector Internal Power Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'3301' X'3000' X'32D0' X'82' SF X'82' SF X'82' SF	If problem persists then do the following Contact Appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code 98

Alert Condition: The cause for alarm 95 and its associated alert has disappeared.

CCU temperature has returned to normal.

MOSS Console Alarm message

ALARM 98 : TEMPERATURE RETURNED TO NORMAL ON CCU-x

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Cooling Problem Resolved: Cool/Heat Subsystem

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'C37A7D28'
Alert Type SV X'92'	X'02'	Temporary
Alert Description SV X'92'	X'A001'	Cooling Problem Resolved
Probable Causes SV X'93'	X'0300'	Cooling or Heating Subsystem
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0300'	Cooling or Heating Subsystem
Actions SV X'96' SF X'81'	X'0700' X'F0A0' X'82'SF	No Action Necessary For (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code 9B

Alert Condition: The thermal detector on the CCU and TCM or related hardware logic has failed and there is no further TCM temperature checking. A failure is about to occur.

MOSS Console Alarm message

ALARM 9B : THERMAL DETECTOR REPORTING ERROR ON CCU-x

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Device Error: Cooling or Heating Subsystem

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'D86D6F48'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'0300'	Cooling or Heating Subsystem
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0311' X'0201' X'0205'	Thermal Detector Internal Power Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'3000' X'32D0' X'82' SF X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code 9D

Alert Condition: The related power supply is malfunctioning, for example: the current is too high or the voltage too low.

MOSS Console Alarm message

ALARM 9D : CHANNEL ADAPTER xx POWER SUPPLY DOWN

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Loss of CHAN ADPT Power: Internal Power Unit

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'582974A6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1401'	Loss of Channel Adapter Electrical Power
Probable Causes SV X'93'	X'0201'	Internal Power Unit
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'02C0' X'82' SF X'82' SF X'0203' X'0202' X'0205'	Internal Power Unit for (Channel Adapter Number (x'62')) (Empty) Power Cable Internal Power Control Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'1001' X'3301' X'3000' X'32C0' X'82' SF X'82' SF	Refer to the Operator's Guide for corrective action If problem persists then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code 9F

Alert Condition: The related power supply is malfunctioning, for example: the current is too high or the voltage too low.

MOSS Console Alarm message

ALARM 9F : LINE ADAPTER xx POWER SUPPLY DOWN

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Loss of Line ADPT Power: Internal Power Unit

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'605C2741'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1402'	Loss of Line Adapter Electrical Power
Probable Causes SV X'93'	X'0201'	Internal Power Unit
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'02C0' X'82' SF X'82' SF X'0203' X'0202' X'0205'	Internal Power Unit for (Line Adapter Number (x'63')) (Empty) Power Cable Internal Power Control Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'1001' X'3301' X'3000' X'32C0' X'82' SF X'82' SF	Refer to the Operator's Guide for corrective action If problem persists then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code A1

Alert Condition: The related power supply is malfunctioning, for example: the current is too high or the voltage too low.

MOSS Console Alarm message

ALARM A1 : POWER SUBSYSTEM : LIC UNIT xx POWER SUPPLY DOWN

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Loss of LIC Unit Power: Internal Power Unit

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'778F161C'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1403'	Loss of LIC Unit Electrical Power
Probable Causes SV X'93'	X'0201'	Internal Power Unit
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'02C0' X'82' SF X'82' SF X'0203' X'0202' X'0205'	Internal Power Unit for (1st LIC Position (x'64')) (Empty) Power Cable Internal Power Control Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'1001' X'3301' X'3000' X'32C0' X'82' SF X'82' SF	Refer to the Operator's Guide for corrective action If problem persists then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code A2

Alert Condition: The power control unit can no longer monitor the power supplies on a power bus.

MOSS Console Alarm message

ALARM A2 : POWER SUPPLY-TO-POWER CONTROL ERROR

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Device Error: Internal Power Control Unit

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'2A0F49FD'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'0202'	Internal Power Control Unit
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0202' X'0203' X'0201' X'0205'	Internal Power Control Unit Power Cable Internal Power Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code A3

Alert Condition: The power control unit has detected a disturbance in the ac main power source. The fact that the alert has been received means that the ac disturbance was not long enough to drop power on MOSS and CCU. Some power supplies may, however, have dropped. In this case, they have to be put up again by using the MOSS Power Services (POS) function from the operator console. Refer to the *3745 Advanced Operations Guide*.

MOSS Console Alarm Message

ALARM A3 : POWER SUBSYSTEM : TEMPORARY ac FAILURE

NetView* Alert - Dynamic

Loss of External Power: Main ac Power Supply

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7CDF9453'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1410'	Loss of External Power
Probable Causes SV X'93'	X'0220' X'0204'	Main ac Power Supply Power Cord
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0220' X'0204' X'0202' X'0205'	Main ac Power Supply Power Cord Internal Power Control Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'0200' X'1001' X'3300' X'3000' X'32C0' X'82' SF X'82' SF	Check Power Refer to Operator's Guide for corrective action If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code A4

Alert Condition: The power control unit has detected a false disturbance in the ac main power source (invalid ac failure).

MOSS Console Alarm Message

ALARM A4 : POWER SUBSYSTEM : AC CONTROL REPORTING ERROR

NetView* Alert - Dynamic

Device Error: Internal Power Control Unit

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'83D9C451'
Alert Type SV X'92'	X'02'	Temporary
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'0202'	Internal Power Control Unit
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0202' X'0205'	Internal Power Control Unit Power SubSystem Processor
Actions SV X'96' SF X'81'	X'3300' X'3000' X'32C0' X'82' SF X'82' SF	If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code A5

Alert Condition: The power control unit has detected that the battery voltage (feeding the time-of-day logic) was below a defined threshold.

MOSS Console Alarm Message

ALARM A5 : ASK SERVICE PERSONNEL TO REPLACE BATTERY

NetView* Alert - Dynamic

Loss of Electrical Power: MOSS Battery

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'62BBC7A9'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'1400'	Loss of Electrical Power
Probable Causes SV X'93'	X'0211'	MOSS Battery
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0211' X'0202'	MOSS Battery Internal Power Control Unit
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code A6

Alert Condition: An error has occurred in the hardware logic (in the power control) which gives the date and time to the MOSS.

MOSS Console Alarm Message

ALARM A6 : POWER SUBSYSTEM : INTERNAL CLOCK DOWN

NetView* Alert - Dynamic

Time of Day Clock Failure: Internal Clock

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'26337D84'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1004'	Time of Day Clock Failure
Probable Causes SV X'93'	X'0240'	Internal Clock
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0240' X'0202' X'0205'	Internal Clock Internal Power Control Unit Power Subsystem Processor
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code A7

Alert Condition: An airflow detector is experiencing a fault condition with a cooling fan of a 3745 power supply (line adapter, channel adapter, LIB1 or LIB2, but not MOSS). A return to normal will be indicated by alert AD.

MOSS Console Alarm Message

ALARM A7 : COOLING PROBLEM

NetView* Alert - Dynamic

Loss of Equipment Cooling: Cooling Fan

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'E93DBDA9'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1501'	Loss of Equipment Cooling
Probable Causes SV X'93'	X'0301'	Cooling Fan
User Causes SV X'94' SF X'01'	X'74A1'	Blocked Air Filter
Actions SV X'94' SF X'81'	X'1310' X'1311'	Verify that Air Vents are not covered Check for dirty Filter
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0301' X'0310' X'0202'	Cooling Fan Air Flow Detector Internal Power Control Unit
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code A8

Alert Condition: The power control shut the MOSS power off due to a fault detection of the MOSS power supply or related fan(s). If a manual attempt to power on the MOSS is successful (intermittent error), then at the end of MOSS IML, a BER is logged and an alarm A8 and its associated alert are generated.

MOSS Console Alarm Message

ALARM A8 : MOSS POWER SUPPLY DOWN OR MOSS COOLING PROBLEM

NetView* Alert - Dynamic

MOSS Equipment Cool Loos: Cool/Heat Subsystem

(Loss of MOSS Equipment Cooling: Cooling or Heating Subsystem)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'519B7E68'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1502'	MOSS Equipment Cooling Loss
Probable Causes SV X'93'	X'0300' X'0200'	Cooling or Heating Subsystem Power Subsystem
User Causes SV X'94' SF X'01'	X'74A1'	Blocked Air Filter
Actions SV X'94' SF X'81'	X'1310' X'1311'	Verify that Air Vents are not covered Check for dirty Filter
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0301' X'0310' X'0201' X'0202'	Cooling Fan Air Flow Detector Internal Power Unit Internal Power Control Unit
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code AA

Alert Condition: The pre-defined period for replacing the air filters has expired. Hardware failure due to overheating may occur.

MOSS Console Alarm message

ALARM AA : PLAN AIR FILTERS CLEANING WITH SERVICE PERSONNEL

Models 210, 310, 410, 610

NetView* Alert - Dynamic

Operator Notification: Air Filter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'271C9F51'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'B000'	Operator Notification
Probable Causes SV X'93'	X'0302'	Air Filter
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0302'	Air Filter
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code AB

Alert Condition: An error has been detected during data exchange between MOSS and the power services microcode.

MOSS Console Alarm Message

ALARM AB : POWER SUBSYSTEM : POWER INTERNAL ERROR

NetView* Alert - Dynamic

Microcode Program Error: Power Subsyst Procsr

(Microcode Program Error: Power Subsystem Processor)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'81BF14F6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'6100'	Microcode Program Error
Probable Causes SV X'93'	X'0205' X'0001'	Power Subsystem Processor MOSS
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0002' X'0205' X'0001'	MOSS Microcode Power Subsystem Processor MOSS Hardware
Actions SV X'96' SF X'81'	X'0613' X'1401' X'0601' X'3300' X'3000' X'32C0' X'82' SF X'82' SF	Dump MOSS Microcode Re-IML MOSS Transfer and Print MOSS Dump If problem re-occurs then do the following Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code AC

Alert Condition: An unrecoverable error has been detected by the power subsystem microcode.

MOSS Console Alarm Message

ALARM AC : POWER SUBSYSTEM INTERNAL ERROR

NetView* Alert - Dynamic

Subsystem Failure: Power Subsystem

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'56E8E297'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1600'	Subsystem Failure
Probable Causes SV X'93'	X'0200'	Power Subsystem
User Causes SV X'94' SF X'01'	(none).	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0202' X'0205'	Internal Power Control Unit Power Subsystem Processor
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code AD

Alert Condition: The cause of alert A7 or A8 has disappeared.

MOSS Console Alarm Message

ALARM AD : COOLING PROBLEM CORRECTED

NetView* Alert - Dynamic

Cooling Problem Resolved: Cool/Heat Subsystem

(Impending Cooling Problem Resolved: Cooling or Heating Subsystem)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'FE579A90'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'A001'	Cooling Problem resolved
Probable Causes SV X'93'	X'0300'	Cooling or Heating Subsystem
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0300'	Cooling or Heating Subsystem
Actions SV X'96' SF X'81'	X'0700'	No Action Necessary

3745 Product Alert Reference Code B0

Alert Condition: A manual fallback is to be initiated from the 3745 MOSS console. The network operator is notified before switching all resources from one CCU to the other.

MOSS Console Alarm message

ALARM B0 : HOST OPERATOR NOTIFIED : FALLBACK TO BE PERFORMED

Models 410, 610

NetView* Alert - Dynamic

Operator Notification: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'23EFF93E'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'B000'	Operator Notification
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A2' X'82' SF X'F0A0' X'82' SF	Deactivate resources attached to (Communication Control Unit (x'34')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Product Alert Reference Code B1

Alert Condition: A manual fallback on a twin-CCU 3745 has been performed and completed successfully.

MOSS Console Alarm message

ALARM B1 : MANUAL FALLBACK OR IPL COMPLETE CCU-x

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7ED50005'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A1' X'82' SF X'F0A0' X'82' SF	Reactivate resources attached to (Communication Control Unit (x'34')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Product Alert Reference Code B3

Alert Condition: A manual fallback has been initiated in twin-backup or standby mode. The fallback operation failed in twin-backup mode.

MOSS Console Alarm message

ALARM B3 : MANUAL FALLBACK OR IPL FAILED CCU-x

Models 410, 610

NetView* Alert - Dynamic

Device Error: Communication Controller Back-up

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'633CF68C'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0003' X'3300' X'0001'	Processor Switch Adapter MOSS Hardware
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF X'00B1' X'82' SF X'2203'	Contact Appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code B4

Alert Condition: A switchback is going to be initiated from the 3745 MOSS console. The network operator is notified before switching resources from one CCU to the other.

MOSS Console Alarm message

ALARM B4 : HOST OPERATOR NOTIFIED : SWITCHBACK TO BE PERFORMED

Models 410, 610

NetView* Alert - Dynamic

Operator Notification: COMM CTRL Recovery

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'62698D8A'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'B000'	Operator Notification
Probable Causes SV X'93'	X'310F'	Communication Controller recovery
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A2' X'82' SF X'F0A0' X'82' SF	Deactivate resources attached to (Communication Control Unit (x'34')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Product Alert Reference Code B5

Alert Condition: A switchback has been performed and completed successfully.

MOSS Console Alarm message

ALARM B5 : SWITCHBACK AND IPL COMPLETE CCU-x

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM CTRL Recovery

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'3F5374B1'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'310F'	Communication Controller Recovery
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A1' X'82' SF X'F0A0' X'82' SF	Reactivate resources attached to (Communication Control Unit (x'34')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code B7

Alert Condition: Use of some MOSS functions requires that MOSS be set offline via the MOSS Offline (MOF) function.
This alert may also be displayed when the operator started to set MOSS offline and cancelled the operation by pressing the break key. Actual MOSS status is shown in the MSA. Refer to the *3745 Advanced Operations Guide*.

MOSS Console Alarm Message

ALARM B7 : MOSS OFFLINE ON OPERATOR'S REQUEST

NetView* Alert - Dynamic

Service Subsys Off-Line: Local System Operator

(Service Subsystem Taken Off-Line: Local System Operator)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'A9ACBFCC'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B005'	Service Subsystem OFF-Line
Probable Causes SV X'93'	X'7001' X'7002'	Local System Operator Remote System Operator
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700' X'F0A0' X'82' SF	No Action Necessary For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code B8

Alert Condition: Using the MOSS services, the operator has selected a line adapter (in this case a low-speed scanner) and put it in a disconnected state for the control program.

MOSS Console Alarm Message

ALARM B8 : LA nn DISCONNECTED ON OPERATOR'S REQUEST

NetView* Alert - Dynamic

Line Adapter Disconnected: Loc System Operator

(Line Adapter Disconnected: Local System Operator)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'AE3EA011'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B006'	Line Adapter Disconnected
Probable Causes SV X'93'	X'7001' X'7002'	Local System Operator Remote System Operator
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700'	No Action Necessary
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33A0' X'82' SF	Line Adapter Multiplexer (Line Adapter Number (x'63'))
Actions SV X'96' SF X'81'	X'1406' X'3300' X'0612' X'0603' X'3000' X'32A0' X'82' SF	Follow Alert Senders Procedures for Resource Activation If problem re-occurs, then do the following Dump Line Adapter Microcode Transfer and Print Line Adapter Dump Contact Appropriate Service Representative Report the following: (Product Alert Reference Code (x'F0'))

3745 Alert Reference Code B9

Alert Condition: Using the MOSS services, the operator has selected a token-ring adapter and put it in a disconnected state for the control program.

MOSS Console Alarm Message

ALARM B9 : TRA xx DISCONNECTED ON OPERATOR'S REQUEST

NetView* Alert - Dynamic

Token Ring Adapt Disconn: Local System Operator

(Token Ring Adapter Disconnected: Local System Operator)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'7C250E71'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B007'	Token-Ring Adapter Disconnected
Probable Causes SV X'93'	X'7001' X'7002'	Local System Operator Remote System Operator
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700' X'F0A0' X'82' SF X'F0A0' X'82' SF	No Action Necessary For (Line Adapter Number (x'63')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code BA

Alert Condition: Using the MOSS services, the operator has selected a line adapter (in this case a high-speed scanner) and put it in a disconnected state for the control program.

MOSS Console Alarm Message

ALARM BA : HSS x DISCONNECTED ON OPERATOR'S REQUEST

NetView* Alert - Dynamic

Hgh Speed Line Adapt Disc: Loc System Operator

(High Speed Line Adapter Disconnected: Local System Operator)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'9B659A71'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B008'	High Speed Line Adapter Disconnected
Probable Causes SV X'93'	X'7001' X'7002'	Local System Operator Remote System Operator
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700'	No Action Necessary
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'33A0' X'82' SF	Line Adapter Multiplexer (Line Adapter Number (x'63'))
Actions SV X'96' SF X'81'	X'1406' X'3300' X'0612' X'0603' X'3000' X'32A0' X'82' SF	Follow Alert Senders Procedures for Resource Activation If problem re-occurs, then do the following Dump Line Adapter Microcode Transfer and Print Line Adapter Dump Contact Appropriate Service Representative Report the following: (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code BB

Alert Condition: A manual fallback was initiated in twin-backup or standby mode. During this fallback operation, either a minor error was detected in the switch or a line, or channel adapters could not be put in operational mode.

MOSS Console Alarm message

ALARM BB : MANUAL FALLBACK OR IPL COMPLETE WITH ERROR(S) CCU-x

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM Controller BKUP

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'E4F71B03'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3110'	Communication Controller Back-up
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3309' X'3301' X'0003'	Line Adapter Channel Adapter Processor Switch
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) Perform Problem Determination Procedure at the reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code BC

Alert Condition: A switchback was initiated by the operator from the 3745 MOSS console when in twin-backup or standby mode. During this switchback operation, either a minor error was detected in the switch or a line, or channel adapters could not be put in operational mode.

MOSS Console Alarm message

ALARM BC : SWITCHBACK OR IPL COMPLETE WITH ERROR(S) CCU-x

Models 410, 610

NetView* Alert - Dynamic

Resources REQ Activation: COMM CTRL Recovery

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'9BA6A201'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'310F'	Communication Controller Recovery
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3309' X'3301' X'0003'	Line Adapter Channel Adapter Processor Switch
Actions SV X'96' SF X'81'	X'13A1' X'82' SF X'3000' X'32A0' X'82' SF X'00B1' X'82' SF X'2203'	Reactivate resources attached to (Communication Control Unit (x'34')) Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) Perform Problem Determination Procedure at the reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Product Alert Reference Code BD

Alert Condition: A switchback was initiated in twin-backup or standby mode. The switchback operation failed in twin-backup mode.

MOSS Console Alarm message

ALARM BD : SWITCHBACK OR IPL FAILED CCU-x

Models 410, 610

NetView* Alert - Dynamic

Device Error: Communication Controller Recovery

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'1C6D4F8E'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1002'	Device Error
Probable Causes SV X'93'	X'310F'	Communication Controller Recovery
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0003' X'3300' X'0001'	Processor Switch Adapter MOSS Hardware
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82' SF X'82' SF X'00B1' X'82' SF X'2203'	Contact Appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) Perform Problem Determination Procedure at reporting location for (Product Alert Reference Code (x'F0')) Review supporting data at Alert Sender

3745 Alert Reference Code C0

Alert Condition: The service personnel have requested to have a channel adapter (CPU subchannel address) varied off-line by the network operator and have put the channel adapter in a disconnect state for the control program.

MOSS Console Alarm Message

ALARM C0 : CONCURRENT MAINTENANCE ON CA xx : IN PROGRESS

NetView* Alert - Dynamic

Chan Adapt Maint Procedur: Service Rep

(Channel Adapter Maintenance Procedure: Service Representative)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'4CF4A939'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B009'	Channel Adapter Maintenance Procedure
Probable Causes SV X'93'	X'7007'	Service Representative
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'0700' X'F0A0' X'82' SF X'F0A0' X'82' SF	No Action Necessary For (Channel Adapter Number (x'62')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code C1

Alert Condition: After a previous alert C0, the service personnel have performed concurrent maintenance on the channel adapter (Diagnostics and Repair), and put the channel adapter in a connect state for the control program using the MOSS Channel Adapter Services (CAS) service function.

MOSS Console Alarm Message

ALARM C1 : CONCURRENT MAINTENANCE ON CA xx : COMPLETED

NetView* Alert - Dynamic

Problem Resolved: Channel Adapter

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'05EFE5C6'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'A000'	Problem Resolved
Probable Causes SV X'93'	X'3301'	Channel Adapter
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A1' X'82' SF X'F0A0' X'82' SF	Reactivate resources attached to (Channel Adapter Number (x'62')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code D0

Alert Condition: A 3745 IPL has been successfully completed on the CCU specified as a result of a general power-on, or an IPL initiated from the 3745 control panel, MOSS console, or host console.

MOSS Console Alarm Message

ALARM D0 : 3745 IPL COMPLETE CCU-x

NetView* Alert - Dynamic

Resources Req Activation: Communication Ctrl

(Resources Require Activation: Communication Controller)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'8CD5AA63'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3111'	Communication Controller
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A1' X'82' SF X'F0A0' X'82' SF	Reactivate resources attached to (Communication Control Unit (x'34')) For (Product Alert Reference Code (x'F0'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

3745 Alert Reference Code D1

Alert Condition: A 3745 IPL has been successfully completed with minor or non-disruptive errors on the CCU specified as a result of a general power-on, or an IPL initiated from the 3745 control panel, MOSS console, or from the host access method.

MOSS Console Alarm Message

ALARM D1 : 3745 IPL COMPLETE WITH NON-BLOCKING ERRORS CCU-x

NetView* Alert - Dynamic

Resources Req Activation: Communication Ctrl

(Resources Require Activation: Communication Controller)

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'5C8CF385'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'B004'	Resources Require Activation
Probable Causes SV X'93'	X'3111'	Communication Controller
User Causes SV X'94' SF X'01'	X'7000'	Operator
Actions SV X'94' SF X'81'	X'13A1' X'82'SF	Reactivate resources attached to (Communication Control Unit (x'34'))
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'3300'	Adapter
Actions SV X'96' SF X'81'	X'3000' X'32C0' X'82'SF X'82'SF	Contact Appropriate Service Representative Report the following: (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code D3

Alert Condition: During the IPL of the twin-CCU 3745 configured in standby mode, the standby CCU was tested and a blocking error has been encountered.

MOSS Console Alarm message

ALARM D3 : ERROR DETECTED ON STANDBY CCU-x

Models 410, 610

NetView* Alert - Dynamic

Back-Up Resource Failure: Communication CTRL

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'E39F414C'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1005'	Back-Up Resource Failure
Probable Causes SV X'93'	X'3111'	Communication Controller
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0000' X'0101' X'0003'	Processor Main Storage Processor Switch
Actions SV X'96' SF X'81'	X'3000' X'32D0' X'82' SF X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

3745 Product Alert Reference Code D4

Alert Condition: In twin-standby mode, following the IPL of the running CCU, the standby CCU was tested and IPLed ready for immediate fallback. A minor or non-disruptive error related to the MOSS adapter has been encountered.

MOSS Console Alarm message

ALARM D4 : IPL OF STANDBY CCU-x COMPLETE WITH ERRORS

Models 410, 610

NetView* Alert - Dynamic

Adapter Error: MOSS

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'D3A63E46'
Alert Type SV X'92'	X'01'	Permanent
Alert Description SV X'92'	X'1010'	Adapter Error
Probable Causes SV X'93'	X'0001'	MOSS
User Causes SV X'94' SF X'01'	(none)	
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	X'0001'	MOSS Hardware
Actions SV X'96' SF X'81'	X'3000' X'32D0' X'82' SF X'82' SF X'82' SF	Contact Appropriate Service Representative Report the following: (Communication Control Unit (x'34')) (Reference Code (x'30')) (Product Alert Reference Code (x'F0'))

Timed IPL Alarms and Alert

ALARM D8: CCU-x LM=xxxxxxx: TIMED IPL CANCELLED hhmmss ref code

Cause:

- The battery is down.
- The scheduled IPL date and time is passed for this load module (or for one of the load modules in the case of 'multiple load module')
- At the scheduled IPL time the MOSS status did not allow for an automatic IPL, **MOSS must be online.**

Action:

- Check if there is also the associated alarm:
  A5: ASK SERVICE PERSONNEL TO REPLACE BATTERY

  In this case, ☎ to have the MOSS battery replaced.
- Check the status of the MOSS and use the DII function to check the timed IPL information. Refer to *Guide to Timed IPL and Rename Load Module*, SA33-0178.
  Use the appropriate VTAM command to restart the operations.

Note: The alarm D8 is not generated on receipt of the following VTAM commands from the host:

- IPL (with the option SAVE) which replaces a load module for which timed IPL was set.
- Modify Load Module command (MLM) for cancelling a timed IPL.
- Modify Load Module command (MLM) for replacing or purging a load module for which timed IPL was set.

ALARM D9: CCU-x TIMED IPL TO OCCUR IN hh:mm CHECK VALIDITY hhmmss ref code

Cause: Network operator

Action: No action if the IPL time, mentioned with the alarm, corresponds to the scheduled IPL time; otherwise, if the time does not correspond, contact the network operator for investigation.

3745 Alert Reference Code D9

Alert Condition: An IPL of the control program is going to occur soon.

The elapsed time between the receipt of this alert and the IPL has been specified in the NOTIFY keyword of the VTAM 'MODIFY LOAD' command.

To obtain the full benefit of NetView alerts, Network Problem Determination Application (NPDA), also referred to as NetView Hardware Monitor Facility, can be used to monitor all alerts displayed. The NetView Automation Table can be updated to recognize the Timed IPL Alert and generate an appropriate message. (No alert is displayed if the The NetView Automation Table is not updated.)

MOSS Console Alarm Message

ALARM D9 : CCU-x TIMED IPL TO OCCUR IN hh:mm CHECK VALIDITY

NetView Alert - Dynamic

TIMED IPL TO OCCUR SOON: NETWORK OPERATOR

Subvector and Subfield Keys	Code Points	Causes and Actions
Alert ID Number SV X'92'		X'C8C275DF'
Alert Type SV X'92'	X'11'	Impending
Alert Description SV X'92'	X'B00A'	Timed IPL to occur soon
Probable Causes SV X'93'	X'7003'	Network operator
User Causes SV X'94' SF X'01'	X'7006'	Network operator
Actions SV X'94' SF X'81'	X'3110' X'F0A0' X'82' SF X'0170' X'01A1' X'82' SF X'32A0' X'82' SF	Contact Communications Systems Programmer For: (Communication Control Unit (X'34')) Verify impending event should occur Verify: (Time hh:mm (X'91')) Report the following: (Product alert reference code (X'F0')) 'D9'
Install Causes SV X'95' SF X'01'	(none)	
Failure Causes SV X'96' SF X'01'	(none)	

Chapter 2. Host Messages

Looking at the host console:

If	Do
There is a NetView alert	Go to Chapter 1, “Alarms and Alerts.” Look for the alarm corresponding to the NetView alert.
There is a message related to a channel such as: • CHANNEL DETECTED ERROR ON... • ROUTE INOPERATIVE or • MIH CONDITION	Identify, in the message, the control unit address: 1. If the control unit is a 3745: • The value of the NCP USGTIER keyword may have been wrongly set at NCP generation time. See “Usage Tier Problems” on page 2-4. • If the usage tier was correctly defined then  2. If the control unit is not a 3745, refer to the control unit documentation.
There is no message related to a channel, but you suspect the channel.	Perform a 'route test' if available in the operating system. If not available: 
There is a message related to a line adapter (scanner).	

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Go to:

1. LIC and Line Problems on page 9-1 for LSS (Low Speed Scanner).
2. Line Problem (HSS) on page 10-1 for HSS (High Speed Scanner).
3. "Usage Tier Problems" on page 2-4. The value of the NCP USGTIER keyword may have been wrongly set at NCP generation time.
4. If not available: 

Looking at the host console:

If	Do
There is a message related to several lines of the same line adapter (scanner)	Go to: 1. Page 9-7 for LICs 1-4. 2. Page 9-32 for LIC5. 3. "Usage Tier Problems" on page 2-4. The value of the NCP USGTIER keyword may have been wrongly set at NCP generation time. 4. If not available: ☎
There is a message related to one line only of a LIC.	Go to page: • 9-8 for LICs 1-4 • 9-37 for LIC5 • 9-45 for LIC6
There is a message related to the token-ring network.	Go to: 1. Chapter 12, "Token-Ring Interconnection (TRI) Problems." 2. Check the value of the NCP USGTIER keyword which may have been wrongly set at NCP generation time for this 3745. See "Usage Tier Problems" on page 2-4. 3. If not available: ☎

Usage Tier Problems

Beginning with NCP Version 5, usage tiers are available to give you more flexibility in selecting the option that best suits your needs. This flexibility allows you to select the optimal NCP adapted to the 3745 configuration.

The usage tier is defined at NCP generation in the USGTIER keyword belonging to the BUILD macro.

Throughout the next tables the following terms are used:

LSS Low-speed scanner

HSS High-speed scanner

TRA Token-ring adapter

ELA Ethernet LAN adapter

CA Channel adapter

You may be concerned by a usage tier problem:

If	Do
1. For 3745 models 130, 150, or 170 you use NCP V5R2.1 or later. 2. For 3745 models 210, 310, 410, or 610 you use NCP V5R1 or later.	Go to: 1. Table 2-1 on page 2-6. 2. Table 2-2 on page 2-7. to determine which adapter positions are allowed by a particular usage tier.
An NCP command (ACTLINK) to activate a link is rejected with an NCP exception response. (sense code X'0801 0006') This may be due to a line that is associated with a line adapter not valid for the usage tier generated in the NCP.	Check if you meet the following usage tier rules: • The tiers are based only on the physical positions of the adapters. Refer to Table 2-1 on page 2-6 and Table 2-2 on page 2-7 to determine adapter positions allowed by a particular usage tier. • An upgrade of the 3745 hardware must be followed by a change of the usage tier level. When upgrading both hardware and software on models 130, 150, or 170, the software must be upgraded first. • If not available: ☎

Usage Tier Problems for Models 130, 150, and 170

The following table indicates the **maximum** configurations for each usage tier.

Table 2-1. Usage Tiers for 3745 Models 130, 150, and 170

3745 Model 130

Tiers	LSS/HSS	TRA/ELA	CA
Tier 1	1 HSS	1 TRA or 1 ELA	2 CAs
Tier 2	2 HSSs	1 TRA	2 CAs
Tier 2.5	2 HSSs	2 TRAs	4 CAs
	1 HSS	1 TRA and 1 ELA	4 CAs
		2 ELAs	4 CAs
Tier 3	1 HSS	2 TRAs and 1 ELA	4 CAS
		2 TRAs and 2 ELAs	4 CAs

3745 Model 150

Tiers	LSS/HSS	TRA/ELA	CA
Tier 1	1 LSS	1 TRA or 1 ELA	
Tier 2	1 LSS and 1HSS	1 TRA	
Tier 2.5	1 LSS	1 TRA and 1 ELA	

3745 Model 170

Tiers	LSS/HSS	TRA/ELA	CA
Tier 1	1 LSS or 1 HSS	1 TRA or 1 ELA	2 CAs
Tier 2	2 LSSs	1 TRA or 1 ELA	2 CAs
	1 LSS and 1 HSS	1 TRA or 1 ELA	2 CAs
	2 HSSs	1 TRA	2 CAs
Tier 2.5	4 LSSs and 2 HSSs		4 CAs
	2 LSSs	1 TRA and 1 ELA	4 CAs
	2 LSSs	2 ELAs	4 CAs
	1 LSS and 1 HSS	1 TRA and 1 ELA	4 CAs
Tier 3	4 LSSs and 2 HSSs		4 CAs
	4 LSSs	1 TRA and 2 ELAs	4 CAs
	3 LSSs and 1 HSS	1 TRA and 1 ELA	4 CAs
	2 LSSs and 2 HSSs	1 TRA	4 CAs
Tier 4	4 LSSs and 1 HSS	1 TRA and 1 ELA	4 CAs
	4 LSSs and 2 HSSs	1 TRA	4 CAs

Usage Tier Problems for Models 210, 310, 410, and 610

The following table indicates the **maximum** configurations for each usage tier.

Table 2-2. Usage Tiers for 3745 Models 210, 310, 410, and 610

	3745			3746 A-11		3746 A-12
Usage Tiers	**LSS/HSS**	**TRA/ELA**	**CA**	**LSS**	**CA**	**LSS**
Tier 1	1 LSS or HSS	1 TRA or ELA	2 CAs			
Tier 2	2 LSSs or HSSs	1 TRA or ELA	2 CAs			
Tier 2.5	6 LSSs or HSSs		4 CAs			
	2 LSSs or HSSs	2 TRAs or ELAs	4 CAs			
Tier 3	8 LSSs or HSSs		8 CAs			
	4 LSSs or HSSs	4 TRAs or ELAs	8 CAs			
Tier 4	8 LSSs or HSSs		8 CAs	16 LSSs	8 CAs	
	4 LSSs or HSSs	4 TRAs and 4 ELAs	8 CAs	16 LSSs	8 CAs	
		8 ELAs	8 CAs	16 LSSs	8 CAs	
Tier 5	8 LSSs or HSSs		8 CAs	16 LSSs	8 CAs	8 LSSs
	4 LSSs or HSSs	4 TRAs and 4 ELAs	8 CAs	16 LSSs	8 CAs	8 LSSs
		8 ELAs	8 CAs	16 LSSs	8 CAs	8 LSSs

Note:

LSS/HSS For two or more, the total can be any combination of HSSs or LSSs up to the maximum number indicated.

TRA/ELA For two or four, the total can be any combination of TRAs or ELAs up to the maximum number indicated.

Tier 3 Fits the configuration of 3745 models 210, 310, 410, and 610 base frame.

Tier 4 Is required when using any adapter on a 3746-A11 expansion frame.

Tier 5 Is required when using any adapter on a 3746-A12 expansion frame.

Chapters 3, 4, 5, 6, and 7

Replace this page by the separator:

3 Hex Codes

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Power Control Display = 1 4-2
Power Control Display = 2 4-3

Chapter 5. Unable to Power Off 5-1

Chapter 6. Local or Alternate Operator Console Problems 6-1

Chapter 7. Remote Operator Console Problems 7-1

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Replace this page by the separator:

3 Hex Codes

Chapter 3. Hexadecimal Codes on the Control Panel 3-1

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Power Control Display = 1 4-2
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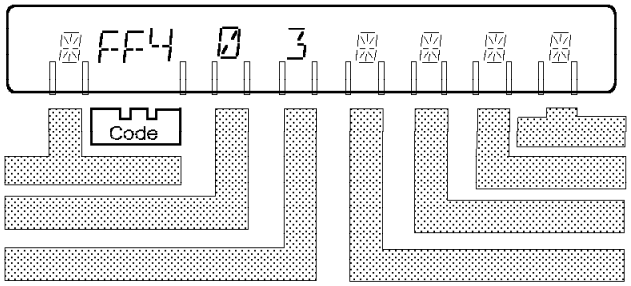
Chapter 3. Hexadecimal Codes on the Control Panel

Hexadecimal codes are displayed on the control panel to indicate:

- The progression of a function (for example, IPL).
- The status of the components.
- An error. In this case, the code blinks.

Check the list below for any action.



Code	Explanation and Action
0 0 0	3745 IPL has been successfully completed. The control program is loaded and MOSS is online.
0 0 1 or 0 0 2	☎
0 0 3	MOSS re-IML started. If this code remains more than 2 minutes: ☎
0 0 4 or 0 0 5	☎
0 0 6	• A circuit breaker has been set OFF then ON. Do not take into account this panel code if it occurred after you set OFF and ON a circuit breaker. • Failure in AC input. Check the main AC power source, then power on the 3745 using the control panel. Refer to the *3745 Basic Operations Guide*. • If the problem persists: ☎
0 0 7 or 0 0 8	☎
0 0 9 to 0 0 A	Power problem. Do not power off the 3745, but do the following: 1. Re-IML MOSS from the control panel. Refer to the *3745 Basic Operations Guide.* 2. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 3. Check the alarms and take appropriate actions (see Chapter 1). 4. If the problem persists ☎

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Code	Explanation and Action
0 0 B or 0 0 C	**Models 130, 150, 170** Power problem. This problem may happen when the 3745 is powered on less than 10 seconds after a power off. Do the following: 1. From the control panel, select the function 1 (MOSS IML). 2. Press power on. (Wait 10 seconds to power on after a power off action.) 3. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 4. Check the alarms and take appropriate actions (See Chapter 1, “Alarms and Alerts”) 5. If the problem persists: ☎
	Models 210, 310, 410, 610 Power problem. Do not power off the 3745, but do the following: 1. Re-IML MOSS from the control panel. Refer to the *3745 Basic Operations Guide.* 2. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 3. Check the alarms and take appropriate actions (see Chapter 1). 4. If the problem persists ☎
0 0 D to 0 0 F	**Models 130, 150, 170** Power problem. This problem may happen when the 3745 is powered on less than 10 seconds after a power off. Do the following: 1. From the control panel, select the function 1 (MOSS IML). 2. Press power on. (Wait 10 seconds to power on after a power off action.) 3. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 4. Check the alarms and take appropriate actions (See Chapter 1, “Alarms and Alerts”) 5. If the problem persists: ☎
	Models 210, 310, 410, 610 Power problem. Do not power off the 3745, but do the following: 1. Re-IML MOSS from the control panel. Refer to the *3745 Basic Operations Guide.* 2. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 3. Check the alarms and take appropriate actions (see Chapter 1). 4. If the problem persists ☎

Code	Explanation and Action
0 1 0 to 0 4 4	**Models 130, 150, 170** Power problem. This problem may happen when the 3745 is powered on less than 10 seconds after a power off. Do the following: 1. From the control panel, select the function 1 (MOSS IML). 2. Press power on. (Wait 10 seconds to power on after a power off action.) 3. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 4. Check the alarms and take appropriate actions (See Chapter 1, “Alarms and Alerts”) 5. If the problem persists: ☎
	Models 210, 310, 410, 610 Power problem. Do not power off the 3745, but do the following: 1. Re-IML MOSS from the control panel. Refer to the *3745 Basic Operations Guide.* 2. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 3. Check the alarms and take appropriate actions (see Chapter 1). 4. If the problem persists ☎
0 4 5	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 CCU-A power off due to overheating. ☎
0 4 6	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 CCU-B power off due to overheating. ☎

Code	Explanation and Action
0 4 7 to 0 4 F	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Power problem. Do not power off the 3745, but do the following: 1. Re-IML MOSS from the control panel. Refer to the *3745 Basic Operations Guide.* 2. When MOSS is IMLed, log on the operator console. Refer to the *3745 Basic Operations Guide.* 3. Check the alarms and take appropriate actions (see Chapter 1). 4. If the problem persists ☎
0 5 0 to 0 E 3	☎
0 E 4	The diskette is wrongly inserted (upside down). Insert it correctly.
0 E 5 to 1 4 9	☎
1 4 A	The diskette is missing. Insert it correctly.
1 4 B to 1 9 F	☎
1 A 0	Wrap plug not plugged or incorrectly plugged on the local console cable, or problem on the console cable. Go to Chapter 17, “Console Link Test”
1 A 1	Problem on the local console cable. Go to Chapter 17, “Console Link Test.”
1 A 2	Problem in the 3745 for the local console link. ☎
1 A 3	Wrap plug not plugged or incorrectly plugged on the remote or alternate console cable, or problem on the console cable. Go to Chapter 17, “Console Link Test.”
1 A 4	Problem on the remote or alternate console cable. Go to Chapter 17, “Console Link Test.”
1 A 5	Problem in the 3745 for the remote or alternate console link. ☎
1 A 6	Wrap plug not plugged or incorrectly plugged on the RSF console cable, or problem on the console cable. Go to Chapter 17, “Console Link Test.”
1 A 7	Problem on the RSF console cable. Go to Chapter 17, “Console Link Test.”
1 A 8	Problem in the 3745 for the RSF console link. ☎
1 A 9 to 1 B 0	☎
1 B 1	Start of the local console link test.
1 B 2	Completion of the local console link test.
1 B 3	Start of the remote or alternate console link test.
1 B 4	Completion of the remote or alternate console link test.
1 B 5	Start of the RSF console link test.
1 B 6	Completion of the RSF console link test.

Code	Explanation and Action
1 B 7 to D 0 0	
D 0 1 or D 0 2	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 0 3 or D 0 4	
D 0 5 or D 0 6	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 0 7	
D 0 8 to D 0 E	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 0 F or D 1 0	
D 1 1 to D 1 3	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 1 4 to D 1 F	
D 2 0	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 2 1	
D 2 2	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 2 3 to D 2 7	
D 2 8	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 2 9 to D 2 F	
D 3 0	The disk or diskette is not ready. In diskette mode: • Check that the diskette is correctly mounted. • Check that the diskette latch is correctly set. • If the problem persists: 
D 3 1 to D 3 4	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 3 5	The diskette is a read-only diskette (notch is covered). Mount another diskette of the same type (primary or secondary) on which you can write.
D 3 6	• Disk error. Restore the disk from the diskette. Refer to the Disk functions described in the *3745 Advanced Operations Guide.* • If the problem persists: 
D 3 7 or D 3 8	
D 3 9 to D 3 C	IPL the 3745 in diskette mode. Refer to the *3745 Operations Guide* and 

Code	Explanation and Action
D 3 D	• In disk mode: Restore the disk from the diskette. Refer to the Disk functions described in the *3745 Advanced Operations Guide.* • In diskette mode: 
D 3 E or D 3 F	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 4 0 to D 4 4	• In disk mode: Restore the disk from the diskette. Refer to the Disk functions described in the *3745 Advanced Operations Guide.* • In diskette mode: 
D 4 5	Diskette formatting error. Remove the diskette. Insert the diskette and make sure that: • The diskette is not damaged. • The diskette is correctly inserted. • The drive latch is correctly closed. Repeat the format procedure. If the diskette is not successfully formatted. • You cannot use this diskette to save your disk. • This diskette must be discarded (or returned to your supplier). • Get a new diskette. • Repeat this initialization procedure. If the problem persists: 
D 4 6 to D 4 F	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 
D 5 0	• Check that the diskette is correctly mounted. • Check that the diskette latch is correctly set. • If the problem persists: 
D 5 1 to D F 7	
D F 8	Wrong diskette. Mount the correct diskette.
D F 9 or D F A	• In disk mode: Restore the disk from the diskette. Refer to the Disk functions described in the *3745 Advanced Operations Guide.* • In diskette mode: 
D F B to D F D	• In disk mode: Restore the disk from the diskette. Refer to the Disk functions described in the *3745 Advanced Operations Guide.* If the problem persists:  • In diskette mode: (Function 9 on the control panel) Check the type of the diskette. If correct, mount the backup diskette. If the problem persists: 
D F E or D F F	IPL the 3745 in diskette mode. Refer to the *3745 Basic Operations Guide* and 

Code	Explanation and Action
E 0 0 to E F F	
F 0 0	Start of the MOSS dump. If this code remains more than 2 minutes: 
F 0 1	Completion of the MOSS dump.
F 0 2	Start of the MOSS IML. If this code remains more than 2 minutes: 
F 0 3 to F 0 5	Normal progression of the MOSS IML. If this code remains more than 2 minutes: 
F 0 6 or F 0 7	
F 0 8 to F 0 C	Normal progression of the MOSS IML. If this code remains more than 2 minutes: 
F 0 D	
F 0 E	Successful completion of the MOSS IML. MOSS is alone.
F 0 F	IPL complete in diskette mode. Successful completion of the MOSS IML. CCU is running. MOSS is offline. If this state is not due to a MOSS Offline function and seems to be an abnormal situation, re-IML the MOSS. If the error persists: 
F 1 0 to F 1 4	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists:  and give the reference code of the related alarms 24, 25 or D2.
	Models 210, 310, 410, 610 If this code applies to: • The active CCU (an IPL message is displayed in the MSA), re-IPL the 3745. If the problem persists,  • The standby CCU (TEST CHECK Fxx is displayed in the MSA), the active CCU is initialized. **Do not re-IPL the 3745.** If a problem occurs on the active CCU, the fallback to the standby CCU will not be possible: 
F 1 5	 and give the reference code of the related alarm 25 or D2.

Code	Explanation and Action
F 1 6 to F 2 7	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 If this code applies to: • The active CCU (an IPL message is displayed in the MSA), re-IPL the 3745. If the problem persists, ☎ • The standby CCU (TEST CHECK Fxx is displayed in the MSA), the active CCU is initialized. **Do not re-IPL the 3745.** If a problem occurs on the active CCU, the fallback to the standby CCU will not be possible: ☎
F 2 8	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 In IPL diskette mode, the failed diskette mounted in the disk drive. Refer to the *3745 Basic Operations Guide*.
F 2 9 to F 2 E	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 If this code applies to: • The active CCU (an IPL message is displayed in the MSA), re-IPL the 3745. If the problem persists, ☎ • The standby CCU (TEST CHECK Fxx is displayed in the MSA), the active CCU is initialized. **Do not re-IPL the 3745.** If a problem occurs on the active CCU, the fallback to the standby CCU will not be possible: ☎

Code	Explanation and Action
F 2 F	On channel attached controller, this error code may be due to: • A channel adapter problem. – Check the alarms and take appropriate actions (see Chapter 1). – If the problem persists ☎ On link attached controller, this error code may be due to: • A link IPL port not defined properly. Refer to the MOSS LKP function in the *3745 Advanced Operation Guide*. • A cable that may not be attached to the port you defined as link IPL port. • An IPL performed on a remote controller linked to a local controller by a switched X.21 link, an X.25 (SVC/PVC) link, or a token-ring. In this case, an initial loading of the remote controller is recommended, the link IPL port being valid only for a SDLC link. Refer to the procedure described in *3720/3745 Remote Loading/Acivation Guide* (SA33-0161) or to the MOSS DII function of the *3745 Advanced Operations Guide*. • If the problem persists ☎
F 3 0 to F 3 3	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 If this code applies to: • The active CCU (an IPL message is displayed in the MSA), re-IPL the 3745. If the problem persists, ☎ • The standby CCU (TEST CHECK Fxx is displayed in the MSA), the active CCU is initialized. **Do not re-IPL the 3745.** If a problem occurs on the active CCU, the fallback to the standby CCU will not be possible: ☎
F 3 4 to F 4 7	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 ☎

Code	Explanation and Action
F 4 8	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists:  and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 If this code applies to: • The active CCU (an IPL message is displayed in the MSA), re-IPL the 3745. If the problem persists,  • The standby CCU (TEST CHECK Fxx is displayed in the MSA), the active CCU is initialized. **Do not re-IPL the 3745.** If a problem occurs on the active CCU, the fallback to the standby CCU will not be possible: 
F 4 9	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists:  and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 
F 4 A or F 4 B	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists:  and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 If this code applies to: • The active CCU (an IPL message is displayed in the MSA), re-IPL the 3745. If the problem persists,  • The standby CCU (TEST CHECK Fxx is displayed in the MSA), the active CCU is initialized. **Do not re-IPL the 3745.** If a problem occurs on the active CCU, the fallback to the standby CCU will not be possible: 

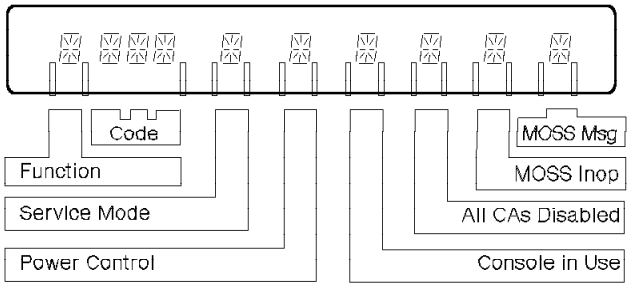
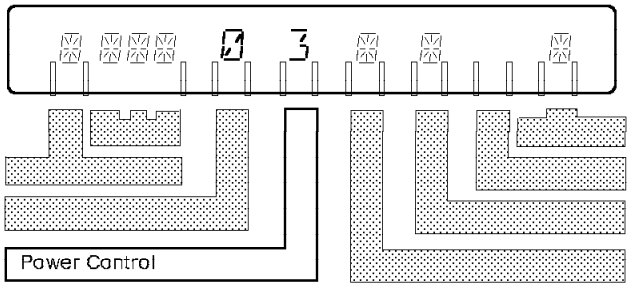
Code	Explanation and Action
F 4 C	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 ☎
F 4 D to F 5 8	**Models 130, 150, 170** Re-IPL the 3745. If the problem persists: ☎ and give the reference code of the related alarm 25 or D2.
	Models 210, 310, 410, 610 If an automatic re-IPL at the failing CCU does not occur, re-IPL the 3745. If the problem persists, ☎
F 5 9	**Models 130, 150, 170** Error detected during MOSS IML. The IPL is not possible on the CCU. ☎
	Models 210, 310, 410, 610 Error detected during MOSS IML. The IPL is not possible on one of the CCUs. ☎
F 5 A to F 5 F	☎
F 6 0	**Models 130, 150, 170** Error detected during MOSS IML. The IPL is not possible on the CCU. ☎
	Models 210, 310, 410, 610 Error detected during MOSS IML. The IPL is not possible on either CCU. ☎
F 6 1	Re-IPL. If the problem persists: ☎ and give reference code of the related alarm D2
F 6 2 to F C F	☎ and give the reference code of the related alarm 25 or D2.

Code	Explanation and Action
F D 0	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Completion of fallback.
F D 1	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Completion of fallback with errors.
F D 2	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Completion of switchback.
F D 3	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Completion of switchback with errors.
F D 4	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Fallback in progress. If this code remains more than 2 minutes: ☎

Code	Explanation and Action
F D 5	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Switchback in progress. If this code remains more than 2 minutes: ☎
F D 6	Control program load from disk in progress. If this code remains more than 2 minutes: ☎
F D 7	Control program dump to disk in progress. If this code remains more than 2 minutes: ☎
F D 8	Control program save on disk in progress. If this code remains more than 2 minutes: ☎
F D 9	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Standy CCU test in progress
F D A	**Models 130, 150, 170** Normal progression of the microprogram, if this code remains more than 2 minutes: ☎
	Models 210, 310, 410, 610 Standby CCU test canceled on operator's request.
F D B to F E F	☎
F F 0	Start of 3745 IPL. Depending on the configuration, this code may stay displayed up to 8 minutes. If it remains more than 8 minutes: ☎
F F 1	3745 IPL phase one. Depending on the configuration, this code may stay displayed up to 8 minutes. If it remains more than 8 minutes: ☎
F F 2	3745 IPL phase two. Depending on the configuration, this code may stay displayed up to 8 minutes. If it remains more than 8 minutes: ☎
F F 3	3745 IPL phase three. Depending on the configuration, this code may stay displayed up to 8 minutes. If it remains more than 8 minutes: ☎

Code	Explanation and Action
F F 4	3745 IPL phase four. The control program is to be loaded from the host. If the 3745 is link-attached, the time necessary to IPL the 3745 depends on the size of the load module and line speed on the link. If this code remains more than 5 minutes, after load is started at the host, go to Chapter 8, “IPL Problems (From Host or Disk).”
F F 5	Control program(s) being loaded (channel-attached 3745 only). Depending on the configuration, this code may stay displayed up to 8 minutes. If it remains more than 8 minutes: 
F F 6	Control program(s) being loaded (link-attached 3745 only).
F F 7	The control program is loaded.
F F 8	
F F 9	Models 130, 150, 170 Normal progression of the microprogram. If this code remains more than 2 minutes: 
	Models 210, 310, 410, 610 Switchback canceled on operator's request.
F F A	An error has been detected on the local console adapter during the IPL. Perform a console link test (Chapter 17, “Console Link Test”).
F F B	IPL canceled on operator's request.
F F C	Models 130, 150, 170 Normal progression of the microprogram, if this code remains more than 2 minutes: 
	Models 210, 310, 410, 610 Fallback canceled on operator's request.
F F D	IPL complete in diskette mode.
F F E	IPL complete with non-disruptive errors. 
F F F	MOSS is offline following operator's request (refer to the MOF function in the *3745 Advanced Operations Guide*).

Chapter 4. Unable to Power On

If	Do
The **Unit Emergency Power Off** switch on the control panel is powered off.	☎
Nothing appears on the control panel display:  	• Check your installation (for example, ac circuit breakers). • If there is no problem in the installation: ☎
Power control on the control panel display is: **1, 2, or 3**  	• If **1** Go to page 4-2 • If **2** Go to page 4-3 • If **3** – Power off – Wait 10 seconds – Select the function 1 (MOSS IML) – Power on – If the problem persists: ☎

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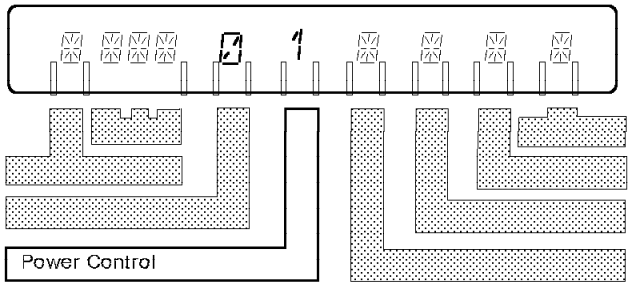
Power Control Display = 1

If



At least one connected host is powered on.

No connected hosts are powered on.

Do

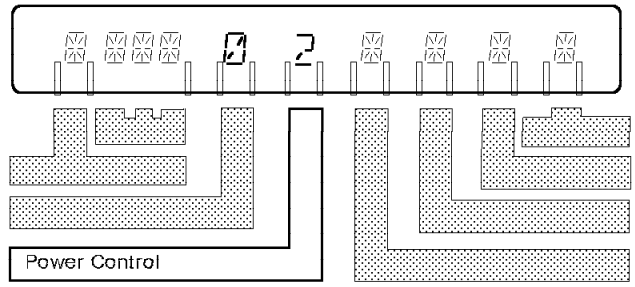
The 3745 power on and power off are controlled from the host. Ask the operator if at least one connected host is powered on.

- ☎
- Power on and IPL the 3745 in **local mode:**
  - Press **Power Control** repeatedly until 3 is displayed.
  - Press **Validate.**

Normal condition. The 3745 will be powered on as soon as one host is powered on.

Power Control Display = 2

If



Do

Follow the procedure below to find out whether or not the 3745 is scheduled to be powered on.

1 Power on and IPL the 3745 in **local mode**

- Press **Power Control** repeatedly until 3 is displayed.
- Press **Validate.**

2 Power on and log on the operator console. Refer to the *3745 Basic Operations Guide.* The following screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
  ALARM                                                  Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

3 Select the Time Service function: T I M SEND
The following screen is displayed:

```
------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: TIME SERVICES

- SELECT ONE OPTION (1 OR 2), THEN PRESS SEND  ==>

    1 = SET/MODIFY DATE AND/OR TIME

    2 = DISPLAY/UPDATE 'SCHEDULED POWER-ON' DATA




===>

F1:END               F3:ALARM
```

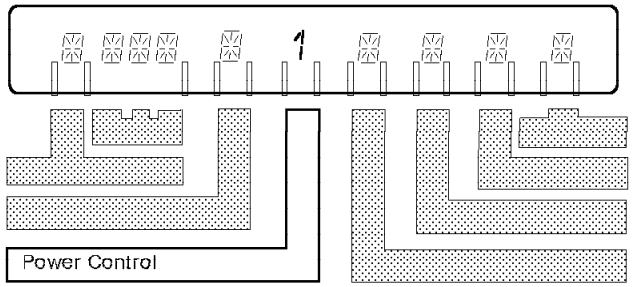
4 Press 2 SEND
The following screen is displayed:

```
------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: TIME SERVICES
                  SCHEDULED POWER-ON DATA
- FILL IN, MODIFY, OR BLANK APPROPRIATE FIELDS, THEN PRESS SEND
      SUNDAY        (HH:MM)   ==>
      MONDAY        (HH:MM)   ==>
      TUESDAY       (HH:MM)   ==>
      WEDNESDAY     (HH:MM)   ==>
      THURSDAY      (HH:MM)   ==>
      FRIDAY        (HH:MM)   ==>
      SATURDAY      (HH:MM)   ==>

      SCHEDULING ACTIVE (Y=YES, N=NO)  ==>
===>

F1:END               F3:ALARM                          F6:QUIT
```

5 Check on the screen that the 3745 is scheduled to be powered on.
Check the day and time and that there is a **Y** next to **SCHEDULING ACTIVE.**

- If the 3745 power on is scheduled for today, but at a time already passed: ☎
- If the 3745 power on is scheduled for today, but at a time not yet passed: **Normal condition.**

Chapter 5. Unable to Power Off

If	Do
Emergency situation	Switch off the **Unit Emergency Power Off** (UEPO) switch.
Power off is necessary but you are not in case of emergency.	• Power off the 3745 from the control panel as follows: – Press **Power Control** until 3 is displayed. – Press **Validate**. – Press **Power Off**. • If the 3745 did not power off, you may power off by tripping the customer circuit breaker for 3745.
Power Control Display = 1 	Ask the host operator if one connected host is powered on. • If it is (normal condition): the 3745 will be powered off as soon as all hosts are powered off. • If no connected host is powered on: ☎

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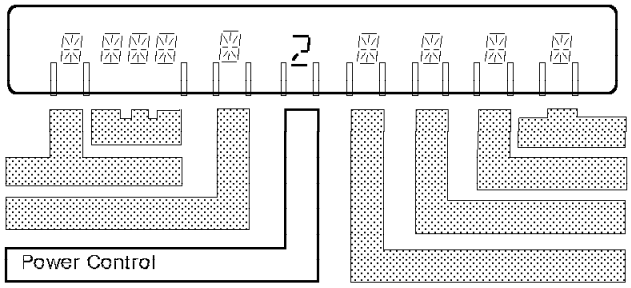
If

Do

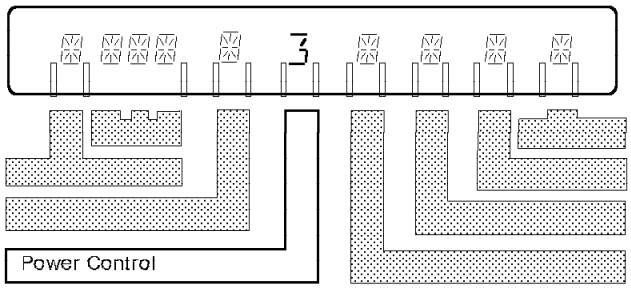
Power Control Display = 2



Ask the network host operator if a Remote Power Off (RPO) command has been sent.

- RPO not sent (normal condition):
  the 3745 will be powered off as soon as the RPO command is received.
- RPO sent: ☎

Power Control Display = 3



Make sure that you pressed **Power Off** correctly.

- If you have to power off the 3745 just after a power on, wait 10 seconds before pressing Power Off.
- ☎

Chapter 6. Local or Alternate Operator Console Problems

- Be sure that console setup and console switching are well done. Refer to the following documents:
  - *3745 Console Setup Guide*.
  - *3745 MOSS Console Switching* card.
    If this card is no longer available at your console, the information is now included in the *3745 Basic Operations Guide*.
- Select the most appropriate entry and take the required action.

Looking at the console:

If

The following Channel Adapter State screen is not displayed after console power on.

Do

Check if the contrast and brightness control knob of the screen is well adjusted. If the adjustment is normal, go to page 6-7

```
------------------------------------------------------------ mm/dd/yy hh:mm
                                  CA INTERFACE DISPLAY
INTERFACE  CHANGE      E/D    INTERFACE     HOST OR    CHANNEL    NSC
 NUMBER    E/D REQ   REQUEST   STATUS     SWITCH UNIT  ADDRESS  ADDRESS

   1A                  -      -
   2A                  -      -
   3A                  -      -
   4A                  -      -
   5A       ==>          E    ENABLED                              40
   5B       ==>       D       DISABLED                             41
   7A       ==>       D       DISABLED                             42
   8A                   -      -

- TYPE E OR D TO CHANGE THE ENABLE/DISABLE REQUEST, THEN PRESS SEND


               F4:MOSS FUNCTIONS    F5:UPDATE
```

No answer after correct password, or no answer during console session.

Go to page 6-12

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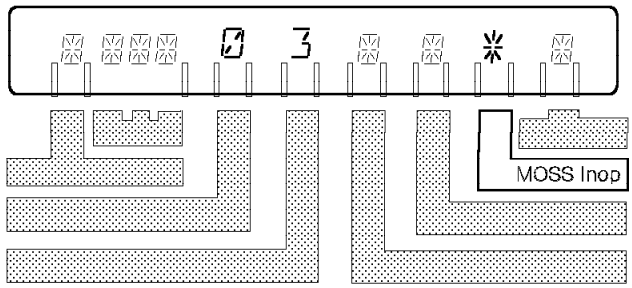
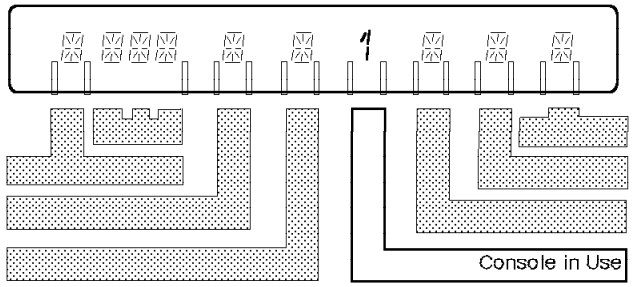
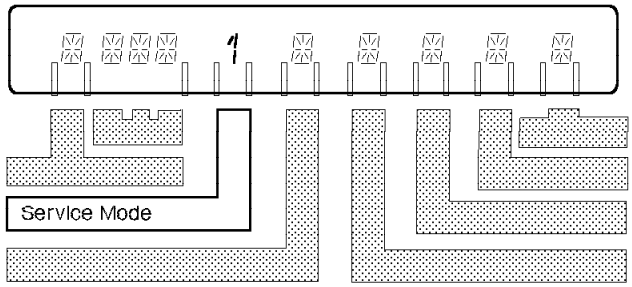
UNAUTHORIZED ACCESS - TERMINAL DISCONNECTED is displayed.	Ask the person who has the management password to reset the logon attempt counters.

Looking at the console:

If	Do
Incomprehensible information or unexpected characters appear on the screen.	If the console is in refresh mode, 1. BREAK then F1 2. SEND 3. Wait 5 seconds. 4. SEND 5. If the problem persists: • Be sure that the console setup is well done, refer to the *3745 Console Setup Guide* • Perform console tests described in the console documentation. 6. If there is no problem on the console: Perform a console link test (see Chapter 17).
One of the following messages is displayed: • TERMINAL DISCONNECTED FOR LOCAL CONSOLE or • TERMINAL DISCONNECTED FOR ALTERNATE CONSOLE or • TERMINAL DISCONNECTED FOR REMOTE CONSOLE or • TERMINAL DISCONNECTED FOR RSF CONSOLE	Go to page 6-13 to get control of the local console.

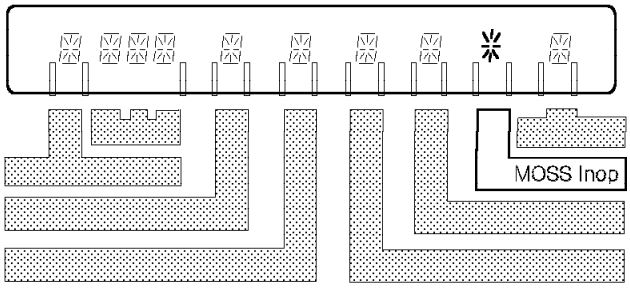
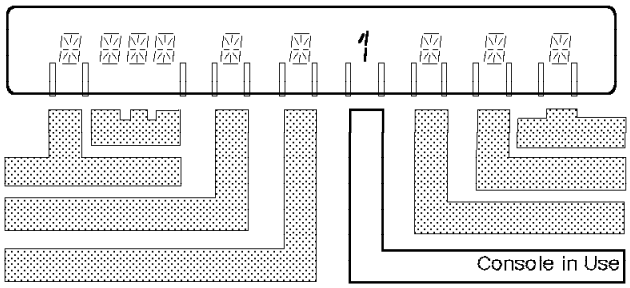
Looking at the console:

If	Do
One of the following messages is displayed: • COMM NOT READY 2 (on a 3151/3161) • LINE CHECK 2 (on a 3727) • SENDING (blinking on an IBM PC or PS/2*).	Go to page 6-9.

If	Do
MOSS Inop on the control panel is on. 	Go to Chapter 14, "MOSS Inop is On."
Console in use displays 1 or 2. 	Go to page 6-13 to get control of the local console.
Service mode displays 1, 2, or 3, or the console displays the message: PASSWORD REJECTED: PANEL SERVICE MODE IS NOT 0. 	Press **Service Mode** repeatedly until a value of 0 is displayed (customer mode). Press **Validate.** Then, IML the MOSS.
The clear key is pressed by accident or a typing error is entered, several things can happen. The screen could clear, or the information could be partially displayed and the message not readable.	SEND twice to refresh the screen.
None of the preceding cases applies.	

Be sure that the console setup is well done, refer to the *3745 Console Setup Guide* otherwise,

Channel Adapter State Screen Not Displayed

If	Do
MOSS Inop on the control panel is on. 	Go to Chapter 14, "MOSS Inop is On."
Console in use displays 1 or 2. 	Go to page 6-13.
The console cable is not connected, or is incorrectly connected.	Refer to the *3745 Console Setup Guide*. Connect or reconnect correctly.
The console operating characteristics have been modified (for example, speed, interface, or operating mode).	Reset operating characteristics to correct values. Refer to the *3745 Console Setup Guide* or to the *3745 Connection and Integration Guide*.

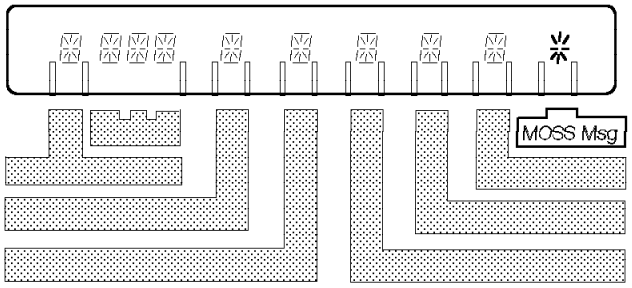
If	Do
None of the preceding cases applies.	• Be sure that the console setup is well done, refer to the *3745 Console Setup Guide*. • Perform a console link test (see Chapter 17). If there is no problem on the console link, perform the console problem determination described in the console documentation. • If the problem persists: 

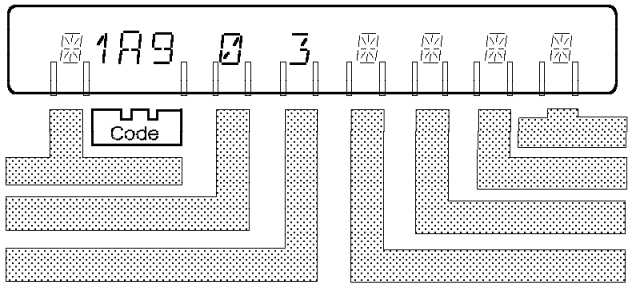
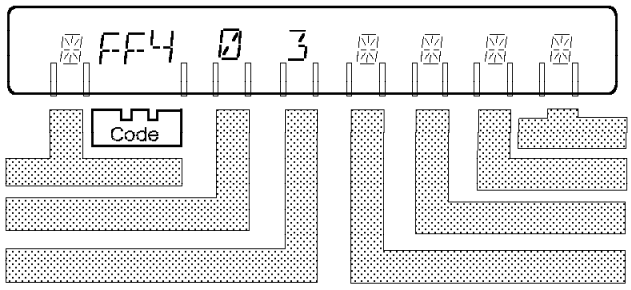
COMM NOT READY 2, LINE CHECK 2, or SENDING Messages

COMM NOT READY 2 is displayed either on the IBM* 3151, or on the 3161 Display Station.

LINE CHECK 2 is displayed on the IBM* 3727 Display Station.

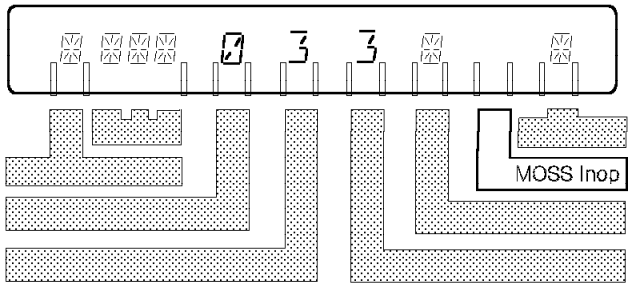
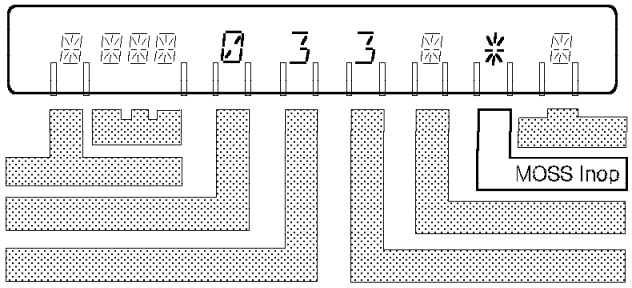
SENDING is displayed on the IBM PC or PS/2*.

If	Do
The 3745 is powered off.	Power on the 3745.
The remote console modem interface is not CCITT V.24 or EIA 232D.	Use a remote console modem with a CCITT V.24 or an EIA 232D interface.
MOSS Inop on the control panel is on. 	Go to Chapter 14, "MOSS Inop is On."

If	Do
The hex code on the control panel is an error code. Refer to: Hexadecimal Codes on the Control Panel on page 3-1 	Perform the action required for that code then ☎ if recommended.
The hex code on the control panel is **not** an error code. Refer to: Chapter 3, “Hexadecimal Codes on the Control Panel” on page 3-1. 	IML MOSS: Refer to the *3745 Basic Operation Guide*. If the problem persists after IML of the MOSS: • Check that the console operating characteristics have not been modified. Refer to the *3745 Connection and Integration Guide* and to the *3745 Console Setup Guide*. Make sure that the console cable is correctly plugged in. If not, plug it in correctly and IML the MOSS from the control panel. • If you cannot solve the problem, perform a console link test (see Chapter 17).
The clear key is pressed by accident or a typing error is entered, several things can happen. The screen could clear, or the information could be partially displayed and the message not readable.	SEND twice to refresh the screen.

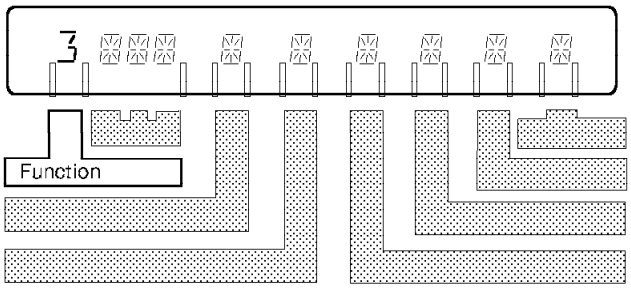
None of the preceding cases applies.

No Answer After Correct Password or During Console Session

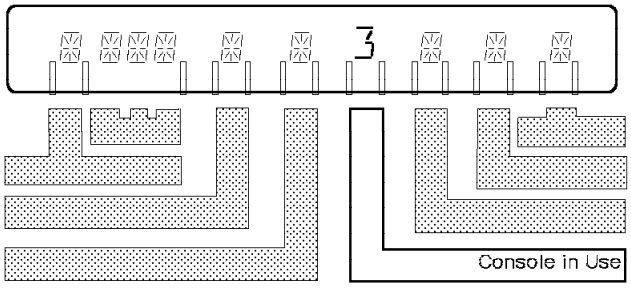
If	Do
MOSS Inop on the control panel is off. 	Go to Chapter 14, "MOSS Inop is On." IML MOSS. If the problem persists: • Be sure that the console setup is well done, refer to the *3745 Console Setup Guide* • Then perform the problem determination of the console. Refer to the console documentation.
MOSS Inop on the control panel is on. 	Go to Chapter 14, "MOSS Inop is On."

Getting Control of the Local Console When the Remote or RSF Console Is Logged On

1 Press **Function** repeatedly until 3 is displayed, then press **Validate**. This informs the remote or RSF operator that you want to log on.

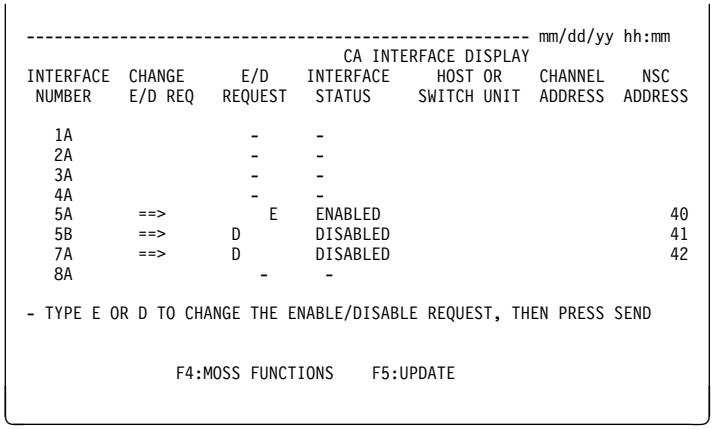


2 When **Console in Use** displays 3, the remote or RSF console is disconnected. You may log on at the local console.
If **3** does not appear, go to next step.



3 Press **Function** repeatedly until 4 is displayed, then press **Validate**.
The remote or RSF console is immediately disconnected.
Console in Use displays 3.
If the local console is powered on, the following screen is displayed.
You may log on at the local console.
If the following screen is not displayed:

- Be sure that the console setup is well done, refer to the *3745 Console Setup Guide*.
- Otherwise, ☎



```
------------------------------------------------------- mm/dd/yy hh:mm
                                CA INTERFACE DISPLAY
INTERFACE  CHANGE      E/D    INTERFACE     HOST OR    CHANNEL    NSC
 NUMBER    E/D REQ   REQUEST   STATUS     SWITCH UNIT  ADDRESS  ADDRESS

   1A                  -      -
   2A                  -      -
   3A                  -      -
   4A                  -      -
   5A       ==>          E    ENABLED                              40
   5B       ==>       D       DISABLED                             41
   7A       ==>       D       DISABLED                             42
   8A                  -      -

- TYPE E OR D TO CHANGE THE ENABLE/DISABLE REQUEST, THEN PRESS SEND


               F4:MOSS FUNCTIONS    F5:UPDATE
```

Chapter 7. Remote Operator Console Problems

- If the remote console is an IBM PC, check that it is in emulation mode (3101 emulation program is loaded).
- Check that the console modem is powered on.
- Be sure that console setup and console switching are well done. Refer to the following documents:
  - *3745 Console Setup Guide*.
  - *3745 MOSS Console Switching* card.
    If this card is no longer available at your console, the information is now included in the *3745 Basic Operations Guide*
- Select the most appropriate entry and take the required action.

Looking at the remote console:

If	Do
No tone before dialing	• Check if the console modem is in voice mode. If not, set it to voice mode. • Check telephone line connections.
Busy tone after dialing	• Try later. • Ask the local operator if the telephone set of the modem at the 3745 end is on-hook.
Permanent ringing	Go to page 7-8. If the problem persists, suspect the 3745 modem. Using the corresponding modem documentation, perform the modem tests.

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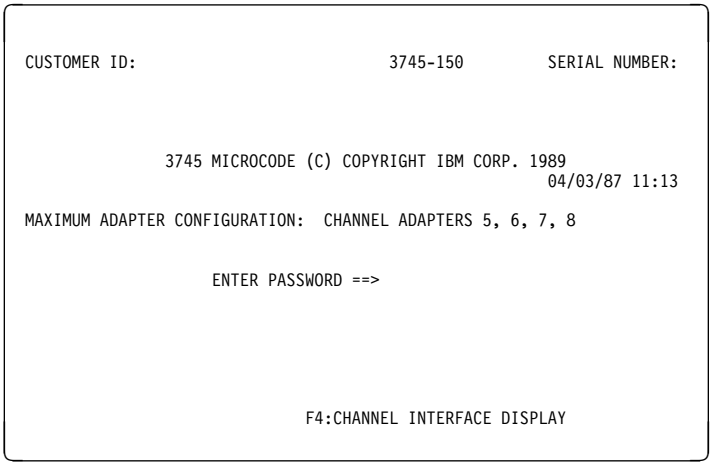
No modem answer tone after ringing	Suspect the 3745 modem. Using the corresponding modem documentation, perform the modem tests.



Looking at the remote console:

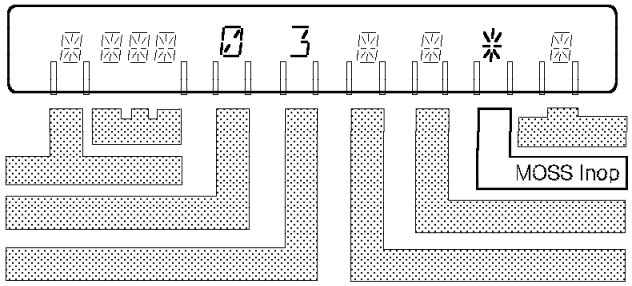
If	Do
From the preceding screen: • No answer after correct password or • No answer during console session.	• Check if the line connection is still established. • Ask the local operator the status of **MOSS Inop** on the control panel: – If on, ask the local operator to IML the MOSS. – If off: - Be sure that the console setup is well done, refer to the *3745 Console Setup Guide*. - Perform the console problem determination. Refer to the console documentation. • If the problem persists: ☎
Incorrect password	• Try again with the correct password. or • Contact the person in charge of passwords for assistance.

Looking at the remote console:

If	Do
UNAUTHORIZED ACCESS - TERMINAL DISCONNECTED is displayed.	The authorized number of logon attempts has been exceeded. The console is disconnected. Ask the person who has the management password to reset the logon attempts counters.
Incomprehensible information or unexpected characters appear on the screen.	If the console is in refresh mode, 1. BREAK then F1 2. SEND 3. Wait 5 seconds. 4. SEND 5. If the problem persists: • Be sure that the console setup is well done, refer to the *3745 Console Setup Guide*. • Perform console tests described in the console documentation. 6. If there is no problem on the console, perform a console link test (see Chapter 17, “Console Link Test”).
The password screen (shown on page 7-3) is not displayed once the console is connected to the 3745 when passing from voice to data mode on console modem during answer tone.	Go to page 7-10.

The 3745 is powered off.	Ask the local operator to power it on.

Looking at the control panel or the remote console:

If	Do
After asking the local operator, **MOSS Inop** on the control panel is on. 	Ask the local operator to IML the MOSS.
The following message is displayed: TERMINAL DISCONNECTED	Reestablish the phone connection and try to log on at the remote console, if you cannot log on, contact the local console operator.
The following message is displayed: TIMEOUT OCCURRED - TERMINAL DISCONNECTED This occurs because the console has not been in used for 30 minutes.	Reestablish the phone connection and try to log on at the remote console again, if you cannot log on, contact the local console operator.

```
FUNCTION ON SCREEN:                    FUNCTION PENDING:




          TIMEOUT OCCURRED - TERMINAL DISCONNECTED




===>
F1:END  F2:MENU1  F3:ALARM
```

Looking at the remote console:

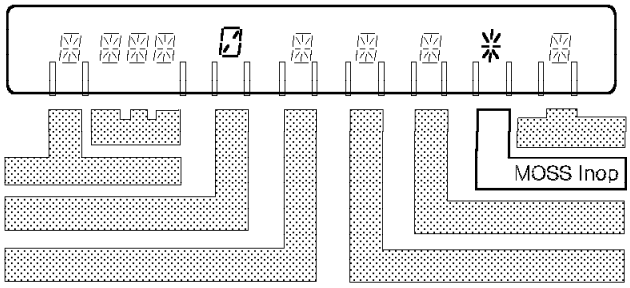
If	Do
One of the following messages is displayed: COMM NOT READY 2 (on a 3153/3161) LINE CHECK 2 (on a 3727) SENDING (blinking on an) (IBM PC or PS/2*)	Reestablish the phone connection and log on at the remote console, if you cannot log on or if the problem persists, contact the local operator.
The clear key is pressed by accident or a typing error is entered, several things can happen. The screen could clear, or the information could be partially displayed and the message not readable.	SEND twice to refresh the screen.
None of the above applies.	• Be sure that the console setup is well done, refer to the *3745 Console Setup Guide*. • Perform the problem determination described in the operator console documentation. • If the problem persists: 

Permanent Ringing

Ask the local operator to check

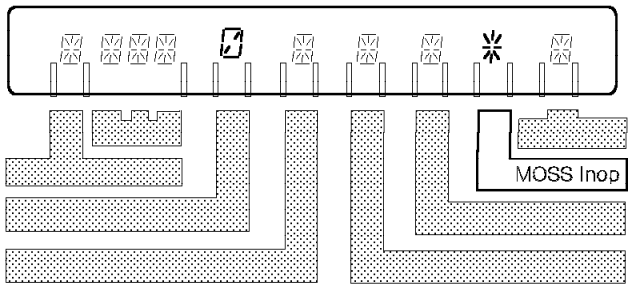
If	Do
Associated telephone set is not ringing and on-hook.	• Verify the telephone number. • If there is no tone when off-hook, check the telephone line connections at the 3745 end.
Local or RSF console is active. At control panel, console mode is 3 (and local console is logged on) or 1.	Try later.
Local modem for remote console is not powered on, operational, and in auto-answer status.	Ask the local operator to power on the modem, make it operational, and in auto-answer status.
3745 modem cable is not correctly plugged in.	Ask the local operator to plug it in correctly.
3745 is power off.	Ask the local operator to power it on at the control panel and to IML the MOSS from the control panel with Function=1.

**Ask the local operator
to check at the control panel:**

If	Do
MOSS Inop on the control panel is on. 	Ask the local operator to IML the MOSS from the control panel with Function=1.

No Password Screen Displayed

Looking at the remote console:

If	Do
Remote console modem is powered off, not operational, or not in data mode.	Power it on, make it operational, or set it to data mode.
Remote console operating characteristics have been modified (for example, speed, interface, or operating mode).	Reset operating characteristics to correct values. Refer to the *3745 Console Setup Guide* or to the integration procedure in *3745 Connection and Integration Guide*.
Console cable is not connected or incorrectly connected to the modem.	Connect it correctly.
The remote console modem interface is not CCITT V.24 or EIA 232D.	Use a remote console modem interface with a CCITT V.24 or an EIA 232D interface.
Checking at the control panel, **MOSS Inop** is on. 	Ask the local operator to IML the MOSS from the control panel with Function=1.

Looking at the remote console:

If	Do
None of the preceding cases applies.	Perform a console link test (see Chapter 17). • If there is no problem on the console link, run modem tests. Refer to your modem documentation. • If there is a problem on the console link, perform actions required in the console link test procedure.

IPL Problems (From Host or Disk)

Replace this page by the separator:

8 - IPL Problems

Chapter 8. IPL Problems (From Host or Disk) 8-1
Channel-Attached 3745 Load Problems 8-1
Link-Attached 3745 Load Problems 8-7
Remote Loading/Activation Overview 8-13
Remote Loading/Activation Problems and Messages 8-14
MSA Fields Definition (IPL Information) 8-18

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Replace this page by the separator:

8 - IPL Problems

Chapter 8. IPL Problems (From Host or Disk) 8-1
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Remote Loading/Activation Problems and Messages 8-14
MSA Fields Definition (IPL Information) 8-18

Chapter 8. IPL Problems (From Host or Disk)

Channel-Attached 3745 Load Problems

Looking at the host console:

If	Do
A message at the host console indicates: • No physical path is available, or • The channel adapter cannot be successfully attached, or • The channel adapter cannot be 'varied-online'.	• Look at the control panel hex code. Go to page 8-5. • A discrepancy may exist between the CA address displayed in the CDF and the one defined in the NCP 'PCCU' macro. Remember that channel adapter characteristic changes (NSC address for instance) are effective only: – Either at the next power OFF/power ON of the 3745. – Or after a general IPL from the control panel of the 3745. If the 3745 is a model 410 or 610, **take care**, if it is running in twin-dual mode, a general IPL from the control panel would also take down the other CCU/network. Refer to MOSS CDF functions in the *3745 Advanced Operations Guide*).
The host detected one of the following on the channel adapter: • Condition code 3. • Interface control check. • Channel data check.	

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- If possible, use another channel adapter and retry the loading operation.
- Verify additional channel adapter information by displaying the CDF.
- If the problem persists:

   and report the type of the failing channel adapter (type 6 = CADS and 7 = BCCA).

Looking at the host console:

If	Do
A message at the host console indicates an unsuccessful load (load from the host).	1. On the 3745, note the hex code on the control panel and the alarm (with the reference code, if any) on the console. 2. Re-IPL the 3745. When the control panel displays the hex code FF4, do not load the control program. 3. Take a control program dump from the host and check the control program generation parameters. 4. ☎ with the reference code.
The control program activation fails.	Check the control program node address and the control program name.
Any other messages at the host console.	Ask the host operator to perform appropriate action.

Looking at the MOSS console:

If	Do

Following a load from the host, the control program initialization fails with an abend code of X'7000'.

Use the MOSS ELD function to display the alarms and to check the abend codes.

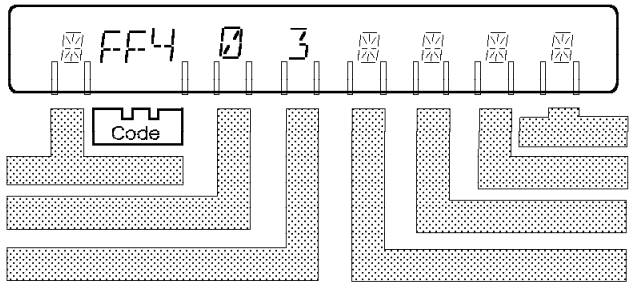
The abend code is displayed in the MSA field of the MOSS screen but may be displayed for a short period of time and not being noticed.

Check the value of the NCP USGTIER keyword which may have been wrongly set at NCP generation time for this 3745.
See “Usage Tier Problems” on page 2-4.
If the usage tier was correctly defined, then 

Looking at the control panel:

If

Hex code is **either FF4 or 000**



Do

1. Log on at the local console.
2. Look at the machine status area for:
   ENABLED CA ----xxxx-------- L xxxxxxxx
   x may be **Y ,U, N, or --.**
   The position of each of these characters gives the channel adapter (CA) number.
   (Refer to "MSA Fields Definition (IPL Information)" on page 8-18.)

If the CA you used is flagged with:

U Unusable

- Either use another CA flagged with Y, or attempt re-IPL.
- If the problem persists: ☎ and report the type of the failing channel adapter (type 6 = CADS and 7 = BCCA).

-- The CA is not present.
Use another CA flagged with Y. Check if the configuration data file (CDF) has been upgraded.

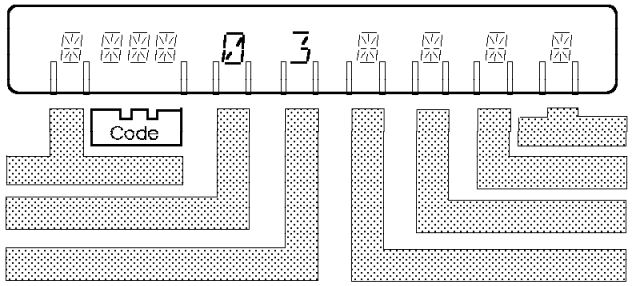
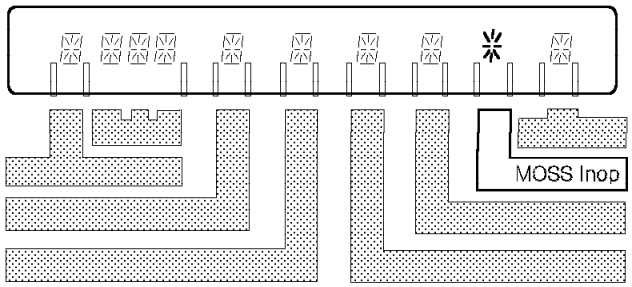
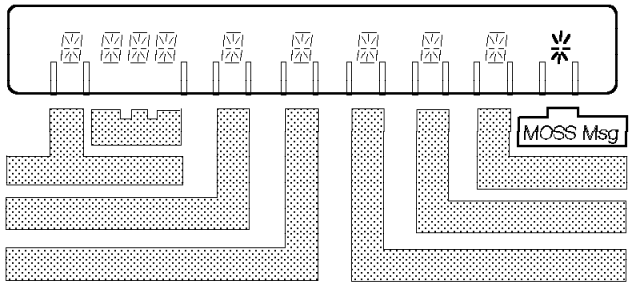
N Not enabled (Disabled)
Check the CA status. Use the Channel Interface Display function described in the *3745 Advanced Operations Guide*.

- If disabled, enable it.
- If enable, check the physical path (channel switching, unit initialization, channel cables).
- If the problem persists: ☎ and report the type of the failing channel adapter (type 6 = CADS and 7 = BCCA).

Y Enabled
Check that the 3745 channel address as defined in the host operating system corresponds to the NSC address defined in NCP, and also to the address defined in the 3745 CDF function. The CDF function may be used to verify that the CDF was correctly defined at installation time. If CDF changes have been done, make sure that a power OFF/power ON of the 3745 has been performed afterwards.

If the problem persists: ☎ and report the type of the failing channel adapter (type 6 = CADS and 7 = BCCA).

Looking at the control panel:

If	Do
Hex code is **neither FF4 nor 000** 	If the hex code is neither FF4 nor 000, perform the action required for that code. Go to Chapter 3, “Hexadecimal Codes on the Control Panel.”
	Go to Chapter 14, “MOSS Inop is On.”
	Power on at the operator console. An alarm is displayed. Perform the action required for the alarm (see Chapter 1).

Link-Attached 3745 Load Problems

Looking at the host console:

If	Do
The IPL link cannot be activated at the host.	• Check if there is an alarm on the local 3745 related to the problem. If there is, perform the action required for the alarm (see Chapter 1). • Check if the local modem is powered on and operational. For example, not in test mode. • Check the modem cable to the LIC. (Correct cable group or part number, and plugged in at both ends.)
During the remote loading/activation procedure, the following VTAM* message is displayed at the host console: IST5481 SOFT INOP FAILED	Refer to: "Program Abend on a Remote Controller" on page 8-15 and to the *3720/3745 Remote Loading/Activation Guide*, SA33-0161 for detailed information.

Looking at the host console:

If

A message at the host console indicates an unsuccessful loading or activation of the remote control program (load/activation from the host).

Do

1. **On the local 3745**
   - **An alarm is displayed at the MOSS console.**

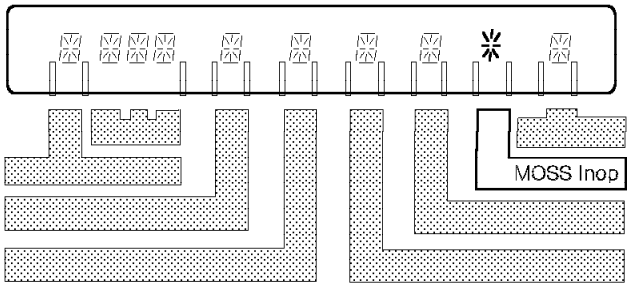
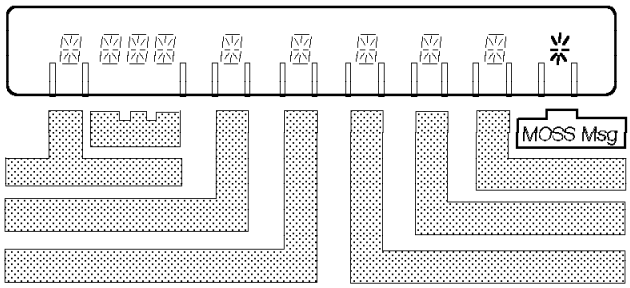
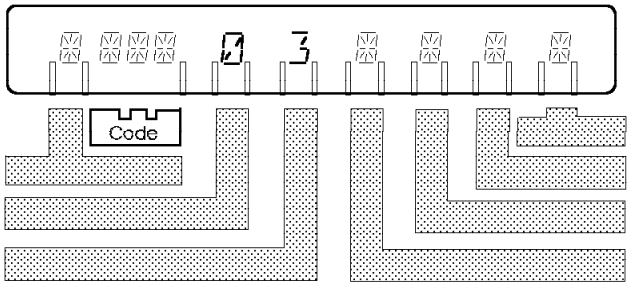
     If the alarm is related to the problem, perform the action required for that alarm (see Chapter 1).

2. **On the remote 3745**
   - **An alarm is displayed at the MOSS console.**
     - If the alarm is related to the problem, perform the action required for that alarm (see Chapter 1).
     - Note the hex code on the control panel, go to Chapter 3 and perform the action required for that code.
     - Check the IPL port configuration on the 3745. Refer to the MOSS LKP function of the *3745 Advanced Operations Guide*.
     - Re-IPL the remote 3745. When the control panel displays the hex code FF4, do not load the control program.
     - From the host, Using a VTAM command, get a dump of the remote control program.
     - If the parameters are incorrect, correct them, otherwise  with the reference code.
   - **No alarm is displayed at the MOSS console.**
     - If you are performing a remote loading/activation (RLA) procedure, to help you in solving your problem, you can refer to:
       - **"**Remote Loading/Activation Overview**"** on page 8-13.
       - **"**Remote Loading/Activation Problems and Messages**"** on page 8-14.
       - *3720/3745 Remote Loading/Activation Guide*, SA33-0161 for detailed information.
     - Use the VTAM 'MODIFY LL2' command or the NetView 'LL2' command (on a nonswitched SDLC link) to test the link between the two NCPs. Refer to *VTAM Operation* or *NetView Operation* documentations for detailed information.
     - Check at both ends of the link that:
       - The link modem is powered on and operational (for example, not in test mode).
       - The modem cable to the LIC has correct cable group, or part number, and is plugged in at both ends.

Looking at the remote MOSS console:

If	Do
Following a load from host, the control program initialization fails with an abend code of X'7000'. Use the MOSS ELD function to display the alarms and to check the abend codes. The abend code is displayed in the MSA field of the MOSS screen but may be displayed for a short period of time and not being noticed.	Check the value of the NCP USGTIER keyword which may have been wrongly set at NCP generation time for this 3745. See “Usage Tier Problems” on page 2-4. If the usage tier was correctly defined then ☎
The loading or activation of the control program fails while you are performing a remote loading/activation procedure.	Refer to: • “Remote Loading/Activation Overview” on page 8-13. • “Remote Loading/Activation Problems and Messages” on page 8-14. • *3720/3745 Remote Loading/Activation Guide* SA33-0161 for detailed information.

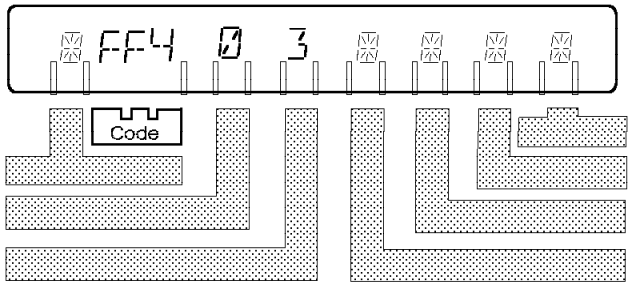
Looking at the remote 3745 side:

If	Do
	Go to Chapter 14, "MOSS Inop is On."
	Power on the operator console. An alarm is displayed. Perform the action required for the alarm (see Chapter 1).
Hex code is **neither FF4 nor 000** 	Perform the action required for that code. Go to Chapter 3, "Hexadecimal Codes on the Control Panel."

Looking at the remote 3745 side:

If

Hex code is **either FF4 or 000**



Do

- If the control program is to be loaded from the host:
  - Check the IPL port configuration on the 3745. Refer to the *3745 Advanced Operations Guide*.
- If the configuration is correct, perform one of the following:
  - Modem self-test on both ends and end-to-end modem test for LIC1 to LIC4 and LIC5 or LIC6
    Refer to page 9-31 for LIC1 to LIC4.
    Refer to page 9-32 or 9-37 for LIC5.
    Refer to page 9-45 for LIC6.
    Refer to your modem documentation.
  - The LIC and line problem procedure (see Chapter 9).
  - Stand alone link test on the link-attached 3745 (see the MOSS SAT function on the *3745 Advanced Operations Guide*). The channel attached controller, loaded with the control program, acts as a responder.
  - If the problem is not solved, start a link IPL port trace. Select this option on the screen used to define the link IPL port (see the MOSS LKP function on the *3745 Advanced Operations Guide*).

    Traced data will be analyzed by the service representative.

Remote Loading/Activation Overview

Through Switched/Nonswitched SDLC and Nonswitched X.21

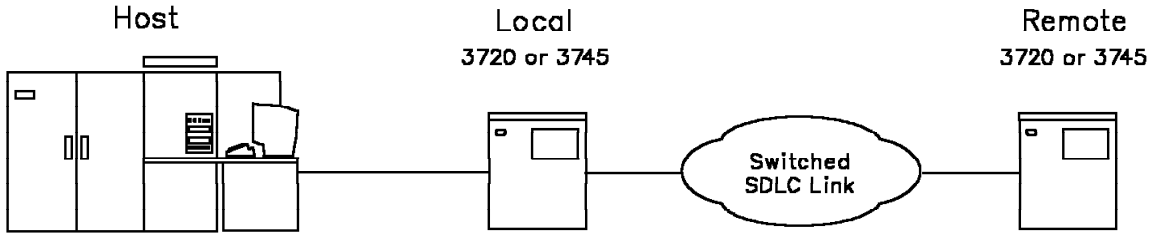


Figure 8-1. Initial Loading on Switched/Nonswitched SDLC and Nonswitched X.21 Links

- The remote initial loading can be performed by using VTAM* commands from the host.
- A link IPL port (LKP) must be defined in the remote controller.

Through Switched X.21, X.25 (SVC/PVC), and Token-Ring

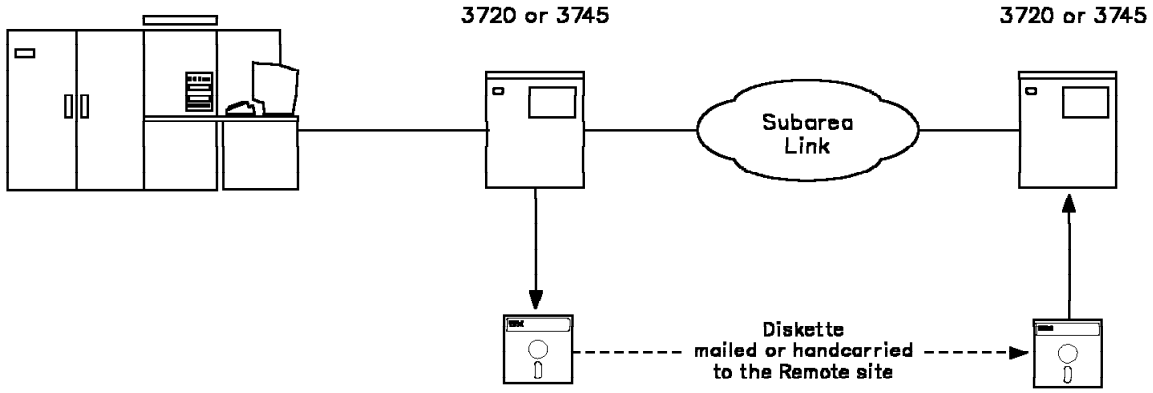


Figure 8-2. Initial Loading on Switched X.21, X.25 (SVC/PVC), and Token-Ring Links

- The remote initial loading can be performed only by using the diskette management procedure. Refer to the *3720/3745 Remote Loading/Activation Guide* or to the MOSS DII function described in the *3745 Advanced Operations Guide*.
- Those links do not require a link IPL port (LKP) definition in the remote controller.

Remote Loading/Activation Problems and Messages

Below is a list of messages that can be displayed at the MOSS console when using the remote loading/activation procedure (diskette management option of the MOSS DII function).

Refer to “Remote Loading/Activation Overview” on page 8-13 for an overview of the procedure.

DISKETTE BADLY INITIALIZED

Cause: Depending on the microcode level, this message may be replaced by the following one: DISKETTE UNFORMATTED.

Action: See DISKETTE UNFORMATTED.

DISKETTE UNFORMATTED

Cause: The diskette is not formatted.

Action: Select the DIF function to format the diskette.

FILE NOT AVAILABLE ON DISK

Cause:

- The file is already opened, a disk operation is going on.
- You specified a wrong load module name.

Action: Restart the operation later.

FILE NOT AVAILABLE ON DISKETTE

Cause: There is no load module on the diskette.

Action: Replace, or generate another diskette.

LOAD IN PROGRESS, FUNCTION NOT AVAILABLE

Cause:

- A load module is being transferred onto the disk (issued by an MLM command from the host).

Action: Wait for the end of the current operation and restart the function. Refer to the DII function in the *3745 Advanced Operations Guide*.

LOAD MODULE TOO BIG, CANNOT BE COPIED TO DISKETTE

Cause: The load module is greater than 1 Megabyte.

Action: Generate a smaller load module.

Program Abend on a Remote Controller

When using RLA over **token-ring, switched X.21 or X.25 (PVC/SVC)** links, the following three abends may occur.

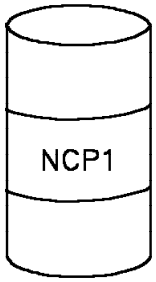
1. Abend with no dump yet recorded on the hard disk **Event A**
2. Abend with a dump on the hard disk **Event B**
3. Abend happening after a load from the host **Event C**

Remote initial loading

When the initial loading (RLA procedure) is performed on a remote controller which is link-attached to a host over a token-ring, an X.21 switched, or an X.25 (SVC/PVC) link, the NCP/PEP load module (NCP1) is copied from the diskette to the remote controller hard disk.

The remote controller disk contains only NCP1.

Before NCP1 abend



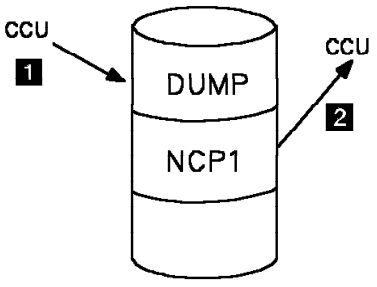
1 - Abend with no dump yet recorded on the hard disk:

Event A

It is assumed that AUTO DUMP/LOAD=YES and ACTIVE LOAD MODULE=NCP1 are displayed on the MOSS DII screen.

If the NCP1 fails or a hardcheck occurs:

- **1** The controller dumps NCP1 (which failed) onto the hard disk.
- **2** The controller reloads NCP1 from the hard disk, and you do not have to reload NCP using a diskette or an SDLC link.

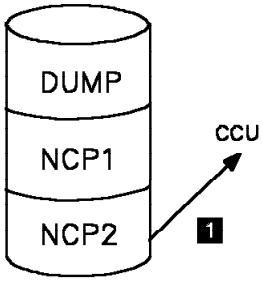


After NCP1 abend

2 - Abend with a dump on the hard disk:

It is assumed that:

- You have an alternate NCP (NCP2) on the remote controller hard disk.
- AUTO DUMP/LOAD=YES and ACTIVE LOAD MODULE=NCP1 are displayed on the MOSS DII screen and that NCP2 has been loaded from the host onto the remote hard disk using a VTAM* MODIFY LOAD command.

Event B	**After NCP1 abend**
If NCP1 fails a second time before a previous dump is cleared from the hard disk: • **1** The controller does not overlay the dump on the disk but, instead, loads the alternate NCP2. Thus, if you were performing the RLA procedure, you do not have to reload the remote CCU with NCP1 using a diskette, or from the host through an SDLC link. • **2** The alternate NCP2 fails during automatic activation (because it is a different NCP from NCP1 previously active under VTAM*). You must reactivate the alternate NCP2 using the correct load module and PU names. A message is sent to the VTAM* console and two cases may happen. See the following explanations.	 **2** A message is sent to the host.

The message sent to the host (**2**) is:
IST548I SOFT INOP FAILED - Linkstation subarea1, (name1) subarea2, (name2)
where (name1) is NCP2.

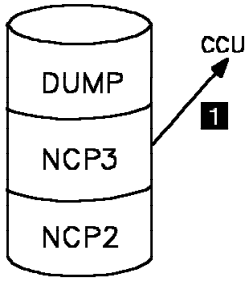
Two cases must be considered:

1. The VTAM* operator sees the message on the console.
   In this case, he must:
   a. Deactivate NCP1.
   b. Activate NCP2.
2. The VTAM* operator does not see the message on the console and activates NCP1.
   In this case the following message is sent from the remote controller to the VTAM* console:
   Found loaded with NCP1, reply YES to reload or NO to cancel activation.
   To this question, the VTAM* operator must answer NO.
   Then, he must activate NCP2 to allow load module and dump management.

3 - Abend happening after a load from the host

It is assumed that for any reason:

1. NCP2 has been deactivated.
2. Using a VTAM* command:
   'V NET,ACT,..... LOAD=YES,LOADFROM=HOST,.....',
   NCP3 has been loaded from the host to the remote CCU and saved on the remote hard disk through a switched/nonswitched SDLC, or a nonswitched X.21 link.

Event C If the NCP3 fails or a hardcheck occurs: The controller reloads the NCP3 from the hard disk **1** . In this case the alternate NCP2 is not reloaded as was the case in **Event B** ,	**After NCP3 abend** 

MSA Fields Definition (IPL Information)

Refer to the *3745 Advanced Operations Guide* for further details on other MSA fields.

```
CUSTOMER ID:                            3745-210           SERIAL NUMBER:
CCU-A SELECTED PROCESS MOSS OFFLINE BT      X71:008000
RUN      BYP-IOC-CHK  STOP-CCU-CHK AC
IPL CCU-A  PHASE 4     ENABLED CA xxxxxxxxxxxxxxx L xxxxxxxx


-------------------------------------------------  mm/dd/yy hh:mm
FUNCTION ON SCREEN:                      FUNCTION PENDING:
```

Figure 8-3. MSA Example with IPL Information

CCU/scanner IPL information is displayed on line 4 for CCU-A, and on line 7 for CCU-B.

A short time after successful completion of the IPL, these lines are cleared and line 7 is filled by dashes plus the date and time.

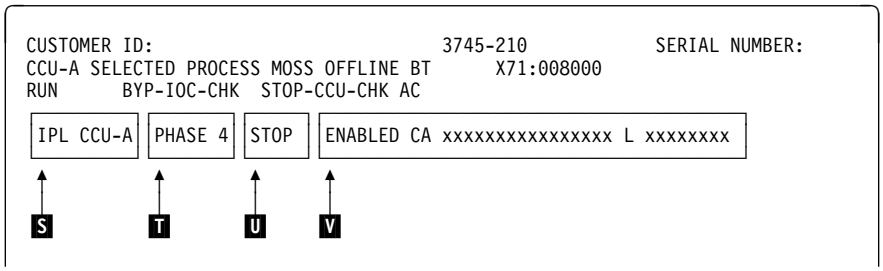


Figure 8-4. Fields of the IPL Information in the MSA

This picture shows the breakdown of the IPL information fields in line 4 (CCU A IPL) or 7 (CCU B IPL).

Field S IPL CCU-x (x can be A or B):
A CCU IPL is started.

Field T

PHASE 1	Start of phase 1 (CCU test and initialization).
PHASE 2	Start of phase 2 (load from the disk and start the control program dump loader known as CLDP).
PHASE 3	Start of phase 3 (load and initialize the scanners).
PHASE 4	Start of phase 4 (load/dump from the host or disk, and initialize the control program).
SUSPEND	An automatic IPL has been requested on a CCU, while IPL was not yet completed on the other one. From a MOSS standpoint, the latter CCU is frozen, until the other reaches phase 3 or 4, depending on the moment the request was received. All fields except 'F' and 'L' are frozen.

Field U

STOP The IPL stopped at the beginning of the phase indicated in field 'T' (step-by-step IPL), or on operator's request (F4=STOP) during that same phase.

Field V Displays one of the following:

CA IPL DETECTED ON CA xx: The control program loading/dumping is started on a channel-attached 3745. xx is the channel adapter number.

CONTROL PROGRAM LOADED: The control program is loaded.

CP SAVE ON DISK IN PROGRESS: The control program save on disk is in progress.

DUMP IN PROGRESS ON CA xx: A control program dump is being taken on a channel-attached 3745. The progression of the dump is indicated in MSA field F which displays the control program storage addresses. xx is the channel adapter number. Refer to the *3745 Advanced Operations Guide* for further details on MSA fields.

DUMP IN PROGRESS ON L xxxx: A control program dump is being taken on a link-attached 3745. The progression of the dump is indicated in MSA field F which displays the control program storage addresses. xxxx is the decimal telecommunication line address. Refer to the *3745 Advanced Operations Guide* for further details on MSA fields.

DUMP ON MOSS DISK IN PROGRESS: A control program dump is being taken on the MOSS disk. The progression of the dump is indicated in MSA field F which displays the control program storage addresses. Refer to the *3745 Advanced Operations Guide* for further details on MSA fields.

ENABLED CA xxxxxxxxxxxxxxxx L xxxxxxxx: Indicates which channel adapters or link IPL ports are enabled. x can be Y, N, or U for channel adapters (CA). x can be Y or N for link IPL ports (L).

- In the CA field, Ys indicate which channel adapters are enabled, Ns which channel adapters are not enabled, and Us which channel adapters are unusable. The positions of the Ys, Ns, and Us give the channel adapter number.
- In the L field, Ys indicate which link IPL ports are enabled, and Ns which link IPL ports are not enabled. The positions of the Ys and Ns give the position of the Link IPL port in the link IPL port table.

FALLBACK CANCELLED: The 3745 fallback is cancelled by:

- The operator (immediate terminate function).
- Operator console power-OFF when the FBK was requested from the console.
- The operator console switching from normal mode to test mode.

FALLBACK CHECK Fxx: The fallback ends abnormally. The check code (Fxx) is also displayed on the hex display of the control panel.

FALLBACK COMPLETE: The fallback is successfully completed.

FALLBACK COMPLETE + ERRORS: The fallback is complete although an error has been encountered. The 3745 should run normally.

FALLBACK IN PROGRESS: The fallback operation is in progress.

IPL CANCELLED: The 3745 initialization is cancelled by:

- The operator (immediate terminate function).
- Operator console power-OFF when the IPL was requested from the console.
- The operator console switching from normal mode to test mode.
- Automatic MOSS re-IML during a CCU/scanner step-by-step IPL, or
- Two automatic MOSS re-IMLs during a CCU/scanner IPL.

IPL CHECK Fxx: The IPL ends abnormally. The check code (Fxx) is also displayed on the hex display of the control panel.

IPL CHECK F1B CLDP ABEND xxxx: The IPL ends abnormally. xxxx is the hexadecimal CLDP abend code. 

IPL COMPLETE: The IPL is successfully completed.

IPL COMPLETE + ERRORS: The IPL is complete, although an error has been encountered. Alarm D1 is displayed. The 3745 runs with some restrictions.

IPL FROM MOSS DISK IN PROGRESS: The IPL from the MOSS disk is in progress.

IPL IN PROGRESS: The IPL operation is in progress. The progression of the IPL is indicated in MSA field F which displays the control program storage addresses. Refer to the *3745 Advanced Operations Guide* for further details on MSA fields.

LINK IPL DETECTED ON L xxxx: The control program loading/dumping is started on a link-attached 3745.

LINK TEST PROGRAM ABEND: A hardware error occurred at phase 3, while loading the stand-alone link test.

LINK TEST PROGRAM LOADED: The link test program is loaded.

LOAD IN PROGRESS ON CA xx: The control program is being loaded on a channel-attached 3745. The progression of the load is indicated in MSA field F where the CCU storage addresses are displayed. x is the channel adapter number. Refer to the *3745 Advanced Operations Guide* for further details on MSA fields.

LOAD IN PROGRESS ON L xxxx: The control program is being loaded on a link-attached 3745. The progression of the load is indicated in MSA field F where the CCU storage addresses are displayed. xxxx is the decimal telecommunication line address. Refer to the *3745 Advanced Operations Guide* for further details on MSA fields.

RPO DETECTED ON L xxxx: The remote power OFF (RPO) command is detected on telecommunication line xxxx. xxxx is the decimal telecommunication line address.

SCANNER(S) NOT IMLED: xxxxxxxx: Indicates that one or more scanners are not IMLed. xxxxxxxx consists of eight hexadecimal digits (32 bits). Each bit corresponds to a scanner (CS) number.

SWITCHBACK CANCELLED: The switchback operation is cancelled by:

- The operator (immediate terminate function).
- Operator console power-OFF when the IPL was requested from the console.
- The operator console switching from normal mode to test mode.

SWITCHBACK CHECK Fxx: The switchback ends abnormally. The check code (Fxx) is also displayed on the hexadecimal display of the control panel.

SWITCHBACK COMPLETE: The switchback is successfully completed.

SWITCHBACK COMPLETE + ERRORS: The switchback is complete, although an error has been encountered. The 3745 should run normally.

SWITCHBACK IN PROGRESS: The switchback operation is in progress.

TEST CANCELLED: During IPL of the active CCU, and at IPL completion, the test of the standby CCU has been cancelled by pressing F1.

TEST CHECK Fxx: During IPL of the active CCU, and at IPL completion, the test of the standby CCU ends abnormally. The check code (Fxx) is also displayed on the hexadecimal display of the control panel.

TEST COMPLETE: During IPL of the active CCU, and at IPL completion, the test of the standby CCU has been successfully completed.

TEST IN PROGRESS: During IPL of the active CCU, and at IPL completion, the test of the standby CCU is in progress.

Chapters 9, 10, and 11

Replace this page by the separator:

9 - LIC and Line Problems

Chapter 9. LIC and Line Problems (LSS) 9-1
Problems on All Lines of a LIC Type 1, 2, 3, or 4 9-2
Problems on Several Lines of a LIC Type 1, 2, 3, or 4 9-7
Problems on One Line Only of a LIC Type 1, 2, 3, or 4 9-8
Modem and Link Tests 9-31
Problems on Both Lines of a LIC5 9-32
Problems on One Line of a LIC5 9-37
Problems on the Line of a LIC6 9-45

Chapter 10. Line Problem (HSS) 10-1

Chapter 11. Ethernet-Type Line Problems (ESS) 11-1

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Replace this page by the separator:

9 - LIC and Line Problems

Chapter 9. LIC and Line Problems (LSS) 9-1
Problems on All Lines of a LIC Type 1, 2, 3, or 4 9-2
Problems on Several Lines of a LIC Type 1, 2, 3, or 4 9-7
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Chapter 9. LIC and Line Problems (LSS)

Line Configuration Problems

Selective scanning allows a low-speed scanner to run different line configurations at different times, such as at night and during the day. However, this flexibility makes it possible for you to create a condition in which the lines exceed the capacity of the scanner.

If your operational practice is to change among different line configurations, each of which is within the capacity of the scanner, make sure that you deactivate all lines which do not apply to the configuration you are changing to.

Problems on Multiple Lines Having Common Parameters

1 When multiple lines are failing, they may have common parameters such as, direct attach, line speed, etc, and one of these parameters may be the cause of the problem.

1. Use the MOSS LID function to display the line parameters. Refer to the *3745 Advanced Operations Guide*.
2. Look at NCP generation to make sure that parameters match the installed hardware.
3. Check the line weights on the active lines to see if the capacity of the scanner is exceeded (sum of line weights greater than 100).

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Problems on All Lines of a LIC Type 1, 2, 3, or 4

Check that you do not have a line configuration problem, see LIC and Line Problems on page 9-1.

1 Power on and log on at the operator console. Refer to the *3745 Basic Operations Guide.* This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
  ALARM                                                  Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 Check if there is an alarm related to your problem.

- If there is, perform the action required for that alarm, (see Chapter 1).
- If there is neither alarm nor reference code:
  - Does the traffic slow down on all lines linked to a scanner?
    1. **Yes,** ☎ and report the problem.
    2. **No,** perform an automatic LIC wrap test. Go to step 3.

The reference code **Ref Code** is always displayed at the right-most position of the alarm.

3 Ask the host operator to deactivate all the lines connected to the LIC.

Press the following keys: W T T SEND
The next screen is displayed:

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST INITIAL SELECTION


- SELECT ONE OPTION (1,2) ==>

           1 = AUTOMATIC WRAP TEST ON A LIC

           2 = WRAP TEST AT ANY LEVEL



THEN PRESS SEND
===>

F1:END  F2:MENU2  F3:ALARM
```

4 Press the following keys to select the automatic wrap test at LIC level.

1 SEND
The next screen is displayed:

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
             AUTOMATIC WRAP TEST ON LIC

- ENTER A LINE ADDRESS OF THE LIC (0-511 ) ==>


WARNING : ALL LINES OF THE LIC MUST BE DISABLED/DEACTIVATED









===>

F1:END  F2:MENU2  F3:ALARM F4:WRAP TEST INITIAL SELECTION
```

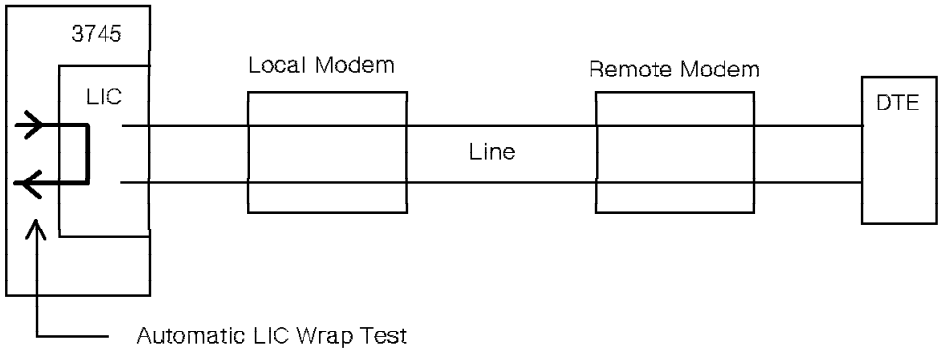


Figure 9-1. Automatic LIC Wrap Test (For LIC Types 1 to 4)

5 Enter the address of one of the lines of the suspected LIC, SEND
This screen is displayed:

The following message is then displayed on line **A**

WRAP TEST STARTED, PLEASE WAIT 30 SECONDS

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
             AUTOMATIC WRAP TEST ON LIC

     LINE RANGE ADDRESS: 0004 - 0007 LIC TYPE: 1









===> WRAP TEST STARTED, PLEASE WAIT 30 SECONDS A

F1:END  F2:MENU2  F3:ALARM F4:WRAP TEST INITIAL SELECTION
```

6 Wait approximately 30 seconds. One of following messages is displayed on line **A**

- WRAP TEST COMPLETED: THE LIC IS FAULTY
  Action:
  - F1
  - Go to step 7.
- WRAP TEST COMPLETED: THE LIC IS OK
  Action:
  - Check if the line weights on the scanner exceeds 100.
  - If the sum is greater than 100, you must disable some of the lines.
  - If the problem persists, ☎ (hardware service).
- WRAP TEST CANCELED, UNABLE TO SET LINE TO WRAP MODE

  Action: ☎ (hardware service).

Note: Other wrap test messages are documented in the *3745 advanced Operations Guide.*

7 Do one of the following:

- If there is a spare LIC, go to step 8.
- If there is no spare LIC, but there are spare port(s) defined for failing lines:
  - Perform a port swap as described in the *3745 Advanced Operations Guide.*
- If the problem persists: ☎

8 Do the following:

Replace the faulty LIC.
Refer to the *3745 Connection and Integration Guide*.

Once the LIC is replaced, repeat the LIC wrap test, steps 3, 4, and 5. Do not go to step 6, but return here.
One of the following messages is displayed on line **A** of the preceding screen.

- WRAP TEST COMPLETED: THE LIC IS FAULTY

  Action: ☎

- WRAP TEST COMPLETED: THE LIC IS OK
  Actions:

  - F1
  - Restart traffic.
  - Order a new LIC.
  - If after, replacing the LIC, you have a problem on one line of this LIC, perform a tailgate wrap test on this line.

    - W T T SEND ■ 2 SEND
      and go to Chapter 16 to initialize a wrap test (page 16-3).
    - If the test is not successful, replace the LIC again by a new one or: ☎

Problems on Several Lines of a LIC Type 1, 2, 3, or 4

Be sure that you do not have a line configuration problem, see LIC and Line Problems on page 9-1.

1 Power on and log on at the operator console. Refer to the *3745 Basic Operations Guide.* This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 When multiple lines are failing, they may have common parameters such as, direct attach, line speed, etc, and one of those parameters may be the cause of the problem.

1. Use the MOSS LID function to display the line parameters. Refer to the *3745 Advanced Operations Guide*.
2. Look at NCP generation to make sure that parameters match the installed hardware.
3. Check the line weights of the active lines to see if the capacity of the scanner is exceeded (sum of line weights greater than 100).

3 Check if there is an alarm related to your problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is no alarm related to your problem: ☎

Problems on One Line Only of a LIC Type 1, 2, 3, or 4

Check that you do not have a line problem, see LIC and Line Problems on page 9-1.

1 Power on and log on at the operator console. Refer to the *3745 Basic Operations Guide.*

This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 Check if there is an alarm related to your Problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is no alarm related to your problem, go to next step.

3 Make sure that the **Local and remote modems** are:

- Powered ON.
- Operational (not in test mode).
- Correctly connected to the port.
  For a LIC3 or LIC4B, see the *3745 Connection and Integration Guide*.

If correct, go to next step.

4 Make sure that the **remote control unit** is operational.

Go to next step.

5 Perform self-tests on the **local and remote modems**. Refer to the modem documentation.

If correct, perform modem-to-modem tests (end-to-end). Refer to the modem documentation. If correct, go to next step.

6 L I D SEND to select the Line Interface Display function. A complete description of this function, including messages, is given in the *3745 Advanced Operations Guide.*

7 Enter the decimal address of the line, then SEND

8 The following message may be displayed on the next screen:
CABLE ID: CABLE NOT INSTALLED

- If yes, restart from the step 3, if the problem persists:
- If no, go to next step.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
         - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

         LINE 16  16 IN SCANNER 11


          CONTROL PROGRAM:
          LINE TYPE:
          PROTOCOL:
          TRANSMISSION MODE:
          CABLE ID:          CABLE NOT INSTALLED
          CLOCK:



===>

F1:END F2:MENU2 F3:ALARM  F5:REFRESH F6:LINE PARAMETERS F7:LEADS
```

9 F5 the following screen is displayed. Check the line definition parameters.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
         - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

         LINE 80  11 IN SCANNER 3  CCITT V24 OR EIA RS232C  A

          CONTROL PROGRAM:   NCP
          LINE TYPE:         NON SWITCHED B
          PROTOCOL:          SDLC - NRZI = NO
          TRANSMISSION MODE: HALF DUPLEX
          CABLE ID:          DIRECT ATTACHMENT C
          CLOCK:             BUSINESS MACHINE - LOCAL ATTACHMENT
          SPEED:             9600 BPS


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

10 According to the information displayed in **A**, **B** and **C**, go to the appropriate page.

A	B	C	Go to page
CCITT V.24	Nonswitched	Modem attachment	9-12
CCITT V.24	Nonswitched	Direct attachment	9-15
CCITT V.24	Switched	Modem attachment	9-17
CCITT V.25			9-18
CCITT V.25bis	Switched	Modem attachment	9-21
CCITT V.35	Nonswitched	Modem attachment	9-12
CCITT V.35	Nonswitched	Direct attachment	9-15
CCITT X.21	Nonswitched	Modem attachment	9-26
CCITT X.21	Nonswitched	Direct attachment	9-28
CCITT X.21	Switched	Modem attachment	9-30

If INTF STANDARD NOT ACCESSED is displayed in **A** and CABLE ID NOT ACCESSED in **C**, the line is not activated. More information on the modem interface is given in the *3745 Advanced Operations Guide* under the Line Interface Display function.

11 Perform this step only after successful wrap tests.

Compare the information displayed in **C** of the preceding screen with the cable type installed on the machine. (Refer to the plugging diagrams or cable labels to determine the cable type.)

1. If there is a mismatch, suspect the cable.
   a. Swap the cable with another one of the same type.
   b. F5 to perform a refresh of the LID screen.
   c. If displayed parameters are now correct, the cable was faulty, replace it.
2. If the cable is correct, suspect the LIC.
   a. Replace the LIC by another one of the same type.
   b. F5 to perform a refresh of the LID screen.
   c. If displayed parameters are now correct, the LIC was faulty, replace it.
3. If the problem persists: ☎

CCITT V.24/V.35 Nonswitched - Modem Attachment

12 F7 To display the Control Lead screen.

13 F5 to start the refresh.

If you wish to stop the refresh: BREAK or, depending on the keyboard, a combination of keys that perform a break.

14 Locate **DTR** and **DSR** on the screen.

15 Ask the host operator to reactivate the line.

16 The status of **DTR** and **DSR** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT V24 OR EIA RS232C

          XMIT CMD: SDLC XMIT DATA         RCV CMD: SDLC RCV DATA
               STATUS: IN-PROGRESS              STATUS: IN-PROGRESS

          MODEM-OUT DTR  ON              MODEM-IN DSR  ON
                    RTS ON                         RFS ON
                    NS                             RI
                    DRS                            CD
                    MT                             TI

===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

DTR is OFF

- Activate the line (host side).
- Check the DTE-to-DCE cable connection.
- Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful: Check with the network operator the compatibility of line parameters at both ends of the line.
  If they are correct, suspect the host software, otherwise, go to step 11 on page 9-11.

DTR is ON and DSR is OFF

- Check that the modems are ready and operational.
- Check that the cables are correctly plugged in.
- Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - Modem (modem tests are listed on page 9-31)
  - If the problem is not fixed, go to step 11 on page 9-11.

DTR and DSR are ON: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful: Perform a **data** wrap test at the 3745 modem level (see Modem and Link Tests on page 9-31 and Chapter 16). Then return below to analyze the results.

Modem Data Wrap Test Results

- Test not successful: Suspect the modem or the cable.
- Test successful, check:
  - The remote control unit. Perform appropriate remote control unit tests.
  - The line parameters with the network operator.
  - The network.
  - If the problem is not fixed, go to step 11 on page 9-11.

CCITT V.24/V.35 Nonswitched - Modem Attachment (Continued)

In addition to the analysis of DTR and DSR statuses, the following table may help you continue problem determination.

If on the screen, the STATUS of the data set lead is:	Perform the following ACTIONS:
Duplex lines: **RTS OFF** and **RFS OFF**	If RTS is permanently OFF: - *Activate the line.* - *If not, check the scanner and system generation parameters.*
Duplex lines: **RTS ON** and **RFS OFF**	- Check the DTE-to-DCE cable connection. - Check if the DCE is powered ON and correctly connected.
Half-duplex lines: **RTS** and **RFS** do not flash	Because of synchronization between the refresh rate and the transmission rate, data may never appear. To verify if data is being transmitted, press F8. If no data: - Check if the DCE is powered ON and correctly connected. - Check the DTE-to-DCE cable connection.
Half-duplex lines: **RTS ON** and **RFS OFF**	- Check the DTE-to-DCE cable connection. - Check if the DCE is powered ON and correctly connected or configured.
Point-to-point: **CD OFF**	Check data transmission. Press F8. *If no data in receive buffer,* suspect network problem.
Multipoint: **CD ON** steady	Check the local DCE, the link, or the remote site (network problem).
TI ON	Reset the DCE test switch to normal operating position.
MT ON	Reset test condition at the host side.
NS	Not significant
RI ON	Not significant
All data set leads are OK but there is traffic on the transmit side only.	Check terminal configuration at the remote site and the control program generation parameters (for example, the remote terminal address, NRZ-I, or non-NRZ-I).

CCITT V.24/V.35 Nonswitched - Direct Attachment

12 F7 To display the Control Lead screen.

13 F5 To start the refresh.

If you wish to stop the refresh: BREAK or, depending on the keyboard, a combination of keys that perform a break.

14 Locate on the screen **DTR, RTS, DSR,** and **RFS.**

15 Ask the host operator to reactivate the line.

16 The status of **DTR, RTS,** and **RFS** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT V24 OR EIA RS232C


          XMIT CMD: SDLC XMIT DATA         RCV CMD: SDLC RCV DATA
               STATUS: IN-PROGRESS              STATUS: IN-PROGRESS

          MODEM-OUT DTR  ON                 MODEM-IN DSR  ON
          MODEM-OUT RTS  ON                 MODEM-IN RFS  ON
                    NS                              RI
                    DRS                             CD
                    MT                              TI


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

DTR or RTS is OFF and DSR or RFS is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful: Check with the network operator the compatibility of line parameters at both ends of the line.
  If they are correct, suspect the host software, otherwise, go to step 11 on page 9-11.

DTR, RTS, DSR, RFS are all ON: Check that the cable is correctly plugged in and that the remote control unit is ready and operational. If they are both correct, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - Remote control unit. Perform appropriate remote control unit tests.
  - With the network operator the compatibility of line parameters at both ends of the line.
  - The programmable line speed definition.
  - If the problem is not fixed, go to step 11 on page 9-11.

DTR or RTS is ON and DSR or RFS is OFF: Check that the cable is correctly plugged in. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC.
- Test successful: Go to step 11 on page 9-11.

CCITT V.24 Switched - Modem Attachment

Note: Call-in and call-out operations are different, a call-out operation uses the autocall unit and a call-in does not.

Check that the remote control unit and the modems (local and remote) are ready and operational. If they are, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - Modem (modem tests are listed on page 9-31).
  - Appropriate V.25 autocall unit.
  - Remote control unit. Perform appropriate remote control unit tests.
  - With the network operator the compatibility of line parameters at both ends of the line.
  - If the problem is not fixed, go to step 11 on page 9-11.

The following table may help you to continue the problem determination on call-in operations. For call-out problems, refer to: "V.25 Call-out Analysis" on page 9-20.

If on the screen, the STATUS of the data set lead is:	**Perform the following ACTIONS:**
108/1 (Connect Data Set to Line) **DTR ON**	Check the system generation and line parameters (Press F6). If parameters OK, and RI=ON, check the DCE.
108/2 (Data Terminal Ready) **DTR OFF**	Activate the line (host side).
Auto-answer line 108/1 (Connect Data Set to Line) or 108/2 (Data Terminal Ready) **RI OFF** and **DSR OFF**	Incoming call: - Check the transmission line. - Check the DCE. - Check the DTE-to-DCE cable connection.
RTS and **RFS** do not flash	Check data transmission (press F8). If no data: - Check if the DCE is powered ON and correctly connected. - Check the DTE-to-DCE cable connection.
CD OFF	- Check the DCE. - Check the DTE-to-DCE cable connection. - Check the remote site or the system generation parameters.
TI ON	Significant only if DSR is ON. In this case, reset the DCE test switch to the normal operating position.
MT ON	Reset test condition at the host side.
NS	Not significant

CCITT V.25

12 F7 To display the Control Lead screen.

13 F5 To start the refresh.

If you wish to stop the refresh: BREAK or, depending on the keyboard, a combination of keys that perform a break.

14 Locate **PWI**. and **CRQ** on the screen.

15 Ask the host operator to reactivate the line.

16 The status of **PWI** and **CRQ** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT V25 OR EIA RS232C


          XMIT CMD: SDLC XMIT DATA         RCV CMD: SDLC RCV DATA
               STATUS: IN-PROGRESS              STATUS: IN-PROGRESS

          MODEM-OUT PWI  ON              MODEM-IN CRQ  ON
                    PND  ON                        DPR  ON
                    ACR  ON                        RSE  ON


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

PWI and CRQ are both ON

- Check that the remote control unit, the modems (local and remote), and the autocall unit (ACU) are ready and operational.
- Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.
- See the note on the next page.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - Modem (modem tests are listed on page 9-31).
  - Remote control unit. Perform appropriate remote control unit tests.
  - Autocall unit. Perform appropriate ACU tests.
  - With the network operator, the compatibility of line parameters at both ends of the line.
  - Network.
  - If the problem is not fixed, go to step 11 on page 9-11.

PWI is ON and CRQ is OFF

- Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.
- See the note on the next page.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful: Check with the network operator the compatibility of line parameters at both ends of the line.
  If they are correct, suspect the host software, otherwise, go to step 11 on page 9-11.

PWI and CRQ are both OFF

- Check that the autocall unit (ACU) is ready and operational.
- Check if the line is activated.
- Check if the cables are correctly plugged in.
- Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.
- See the note on the next page.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - The autocall initialization
  - If the problem is not fixed, go to step 11 on page 9-11.

Note: When using an autocall unit:

- Under NCP, tailgate wrap tests are not supported on dialing lines.
- Under EP, you must use the wrap type 'control leads'.

V.25 Call-out Analysis

The following table may help you continue the problem determination on call-out operations. For call-in problems, refer to the table on page 9-17, in this case, CCITT V.25 is similar to CCITT V.24.

If on the screen, the STATUS of the data set lead is:	Perform the following ACTIONS:
PWI OFF	- Check if the automatic calling unit (ACU) is powered ON. - Check the ACU-to-DTE cable connection.
CRQ OFF	Activate the ACU line (host side).
DLO OFF	- Check the ACU. - Suspect the ACU-to-DCE cable.
PND does not flash	- Check the ACU. - Suspect the ACU-to-DCE cable. - If the cable is OK, suspect the network.
DPR does not flash	- Check the ACU-to-DCE cable. - If OK, contact the appropriate service representative.
ACR ON	- Check the ACU line. - If OK, suspect the network.
RSE OFF (DSC)	- Check the ACU line. If OK, suspect the network. - Press F6 to display the Line Parameter screen. - Enter the address of the data transmission line, then press SEND. - Check the line parameters. - Press F7 to display the data set leads according to the V.24 - Switched DCE Attachment list, on page 9-17.

CCITT V.25bis Switched - Modem Attachment

The V.25bis is a protocol which allows to combine on one physical interface (DTE - DCE) the call establishment and the data transmission. This eliminates the need for a second physical port previously required by the V.25 protocol.

- The connection process can only be done in SDLC or S/S mode.
- The data transfer can be done in SDLC, S/S, or BSC mode.

Commands sent by NCP to the modem

- **Call request commands (X'0D')**
  The V.25bis Call Request command is used to make an outgoing call. This command supports two modes of addressed call:

  CRN Call Request with Number
  The dial digits are sent to the modem with the command.

  CRI Call Request with number and Identification number
  The dial digits are sent to the modem with the command and an identification number of the caller.

Commands sent by NCP to the scanner

- **Monitor incoming call commands (X'0E')**
  The V.25bis Monitor Incoming Call command is sent by NCP to the scanner to allow incoming call on the line.
- **Clear request commands (X'0F')**
  The V.25bis Clear Request command is used by NCP to inform the scanner to clear the line.

A summary of NCP commands and modem status answers is shown on Table 9-1 on page 9-22.

Conditions of Command Retry

NCP will perform a retry if the following statuses are received from the modem.

- X'80' Time out.
- X'FC' Call failure indication (except for the ELCS code X'07') Forbidden call.
- X'EC' Call collision

Note: For X'80' and X'FC' the NCP waiting duration depends on the value defined in the keyword REDIAL of the NCP LINE statement.

Delayed call indication X'EA'

The modem return the status X'EA' after several unsuccessful calls. It also returns 3 bytes that contain the number of minutes that NCP should wait before trying another call. This information is passed to NetView to be included in a generic alert.

NCP Commands and Modem Statuses

Table 9-1. Call Request commands and Line Communication Status Summary

Local 3745 (NCP commands)	**Modem status answers (LCS and ELCS codes generation)**
Call Requests X'0D' **CRN** Call request with number **CRI** Call request with number plus identification **On receipt of call collision**, the 3745 rejects the 'call request' command and sends a 'clear request' command to the interface. The DTE will wait one minute before retrying a call request. **On receipt of time out**, the 3745 rejects the 'call request' command and sends a 'clear request' command to the interface. The duration the DTE will wait before retrying a call request depends: • On the value assigned to the REDIAL keyword in the PATH statement of the VTAM* switched major node definition. • On the value assigned to the REDIAL keyword in the LINE statement of the NCP generation.	**X'9E'** Correct completion **X'9C'** Disconnected **X'D2'** Command rejected **X'E8' INV** Invalid call request **X'EA' DLC** Delayed call with the parameter of time duration **X'FC' CFI** Call failure indication **An ELCS code is added to X'FC'** X'01' Engaged tone X'03' Local DCE busy X'04' Ring tone X'05' Abort call X'06' Answer tone not detected X'07' Forbidden call X'FF' Unknown cause **X'EC' INC** Incoming call (Call collision) **X'80'** Time out
Monitor incoming call X'0E'	**X'9E'** Correct completion **X'80'** Time out **X'D2'** Command rejected
Clear request X'0F'	**X'9C'** Disconnected **X'80'** Time out **X'D2'** Command rejected

Problems on call request command

Table 9-2. Call request problems analysis

If on the screen, the STATUS of the data set lead is:	Perform the following ACTIONS:
108/2 (Data Terminal Ready) **DTR OFF (BNN)**	**At the host** Activate the line. Activate the switched major node. Perform a V NET,LOGON command if the keyword LOGAPPL is not coded in the switched major node.
108/2 (Data Terminal Ready) **DTR OFF (INN)**	**At the host** Activate the line. Activate the switched major node. Perform a DIAL command.
RFS (or CTS) **OFF**	- Check the DCE. - Check the DCE configuration. - Check the DTE-to-DCE cable connection.
DSR OFF	**At the host** Check the NetView generic alerts: **X'FC' CFI** **Call failure indication** Check the line. **X'E8' INV** **Invalid call** • Check the keyword DIALNO in the PATH statement of the VTAM* switched major node definition. Refer to *VTAM* Installation and Resource Definitions* (SC23-0111). **X'EA' DLC** **Delayed call** Check the line. **X'EC' INC** **Invalid call** Retry. **X'80'** **Time out** • Check the line. • Check the DIALTO= keyword definition in the BUILD statement of NCP. • Check the CLOCKNG= keyword definition in the LINE statement of NCP. • Check the SPEED= keyword definition in the LINE statement of NCP. Refer to *NCP, and EP Reference* (LY30-5605). • Within Start-Stop protocol, check that the modem configuration is properly defined. (7 data bits plus one even parity bit.) BSC format is not supported for the connection phase. • Check in NCP generation that the keyword V25BIS in the GROUP and LINE statements has one of the three following specifications: V25BIS=(YES,DLSS), or V25BIS=(YES,DLSDLC) or V25BIS=NO. Refer to *NCP, SSP. and EP Resource Definitions Reference* (SC30-3448).

NetView Error Notification (Generic Alert)

Generic Alerts are information units that are sent to NetView to describe failures.

The following NetView screen lists some possible failure causes.

```
NETVIEW                 SESSION DOMAIN: CNM03   OPER1   mm/dd/yy hh:mm:ss
NPDA-45A         * RECOMMENDED ACTION FOR SELECTED EVENT *   PAGE 1 OF 1
 CNM03        D2B        K23C133      S23C133
          +---------+                +---------+
 DOMAIN   |  COMC  |------ LINE -----|  CTRL  |
          +---------+                +---------+
USER      CAUSED  -  NONE

INSTALL   CAUSED  -  NONE

FAILURE CAUSED    - CONNECTION NOT ESTABLISHED  A
        ACTIONS   - 1015 - VERIFY TELEPHONE  B
                    1061 - ATTEMPT TO REESTABLISH THE CONNECTION  C
                    1025 - RUN MODEM TESTS  D
                    1141 - REPORT THE FOLLOWING:       E
                           STATUS CODE  069CFC0600


 ENTER ST (MOST RECENT STATISTICS), DM (DETAIL MENU, OR D (EVENT DETAIL)


CMD===>
```

- The failure cause is displayed on line **A**.
- The recommended actions are displayed on line **B**, **C**, **D**, and **E**.
- The reported status code **069CFC0600** can be analyzed as following:
  - The format is: **SSSSLLXXYZ**.
  - **SSSS** (**069C** in our example) is the field name of NCP control blocks. For SDLC lines, it is LXBSTAT/LXBSTATC, for pre-SNA lines, it is IOBSTAT. Refer to *NCP and EP Reference Summary and Data Areas* LY30-5603 for explanations.
  - **LL** (**FC** in our example) is the LCS code (Line Communication Status) which is always followed by an ELCS code (Extended Line Communication Status).
  - **XX** (**06** in our example) is the ELCS code which means 'answer tone not detected'.
  - **Y** (**0** in our example) may be either 0 or any value from 0 to 9 when the LCS code is 'EA' which means delayed call.
  - **Z** is always 0.

Delayed call examples
The last two bytes **XXYZ** are used to provide the time that NCP must wait before retrying a call when the LCS code is X'EA' (delayed call).

For instance, with the following status codes:
069CEA0040, **EA** means 'delayed call' and **0040** means that NCP must wait 4 minutes before retrying a call.

With the status code:
069CEA0120 (**EA** and **0120**), NCP must wait 12 minutes before retrying a call.

The right-most digit **0** is never used.

CCITT X.21 Nonswitched - Modem Attachment

12 F7 To display the Control Lead screen.

13 F5 To start the refresh.

If you wish to stop the refresh: BREAK or, depending on the keyboard, a combination of keys that perform a break.

14 Locate **C** and **I** on the screen.

15 Ask the host operator to reactivate the line.

16 The status of **C** and **I** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT X21  LOW SPEED

          XMIT CMD: ENABLE                RCV CMD: LINE NOT ACTIVE
               STATUS: IN-PROGRESS            STATUS:

          MODEM-OUT C   ON                MODEM-IN I

                    T    ON                        R


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

C is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful: Check with the network operator the compatibility of line parameters at both ends of the line.
  If they are correct, suspect the host software, otherwise, go to step 11 on page 9-11.

C is ON and I is OFF: Check that the remote control unit and the modems are ready and operational. If they are, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - Modem (modem tests are listed on page 9-31).
  - If the problem is not fixed, go to step 11 on page 9-11.

C and I are both ON: Check that the remote control unit is ready and operational. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - Modem (modem tests are listed on page 9-31).
  - Remote control unit. Perform appropriate remote control unit tests.
  - With the network operator, the compatibility of line parameters at both ends of the line.
  - Network.
  - If the problem is not fixed, go to step 11 on page 9-11.

CCITT X.21 Nonswitched - Direct Attachment

12 F7 To display the Control Lead screen.

13 F5 To start the refresh.

If you wish to stop the refresh: BREAK or, depending on the keyboard, a combination of keys that perform a break.

14 Locate **C** and **I** on the screen.

15 Ask the host operator to reactivate the line.

16 The status of **C** and **I** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT X21  LOW SPEED


          XMIT CMD: ENABLE                RCV CMD: LINE NOT ACTIVE
               STATUS: IN-PROGRESS            STATUS:

          MODEM-OUT C   ON                MODEM-IN I

                    T    ON                        R


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

C is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful: Check with the network operator the compatibility of line parameters at both ends of the line.
  If they are correct, suspect the host software, otherwise, go to step 11 on page 9-11.

C is ON and I is OFF: Check that the remote control unit is ready and operational. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful:
  - Go to step 11 on page 9-11.

C and I are both ON: Check that the remote control unit is ready and operational. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: Replace the LIC. Follow the procedure "Problems on All Lines of a LIC" from step 7 on page 9-5.
- Test successful, check:
  - Remote control unit. Perform appropriate remote control unit tests.
  - With the network operator, the compatibility of line parameters at both ends of the line.
  - Network.
  - If the problem is not fixed, go to step 11 on page 9-11.

If on the screen, the STATUS of the data set lead is:	Perform the following ACTIONS:
T OFF **C OFF**	DTE not ready: - Check the line parameters (Press F6). - If the problem persists, contact the appropriate service representative.
R OFF **I OFF**	Remote 3745 attachment not ready: - Check cable installation. - Check remote 3745 to ensure line is ACTIVE.

CCITT X.21 Switched - Modem Attachment

Note: Call-in and call-out operations are different.

Check that the remote control unit and the modems (local and remote) are ready and operational. If they are, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - Modem (modem tests are listed on page 9-31).
  - Remote control unit. Perform appropriate remote control unit tests.
  - With the network operator:
    The compatibility of line parameters at both ends of the line.
    Whether the network is operational.
    Whether network information is available, such as: Call progress signal (CPS) or interface states.
  - If the problem is not fixed, go to step 11 on page 9-11.

If on the screen, the STATUS of the data set lead is:	Perform the following ACTIONS:
T OFF **C OFF**	DTE not ready: - Check the line parameters (Press F6). - If the problem persists, contact the appropriate 3745 service representative.
R ON **I OFF**	DCE not ready: - Check if DCE is powered ON and correctly connected. - If the problem persists, contact the public switched network service representative.

Modem and Link Tests

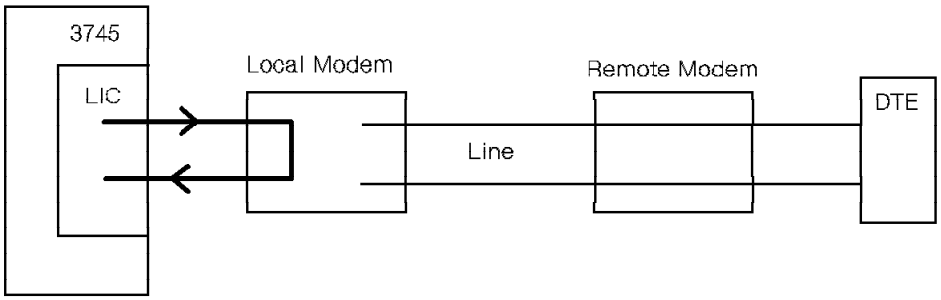
Check that you do not have a line configuration problem, see page 9-1.

If available, perform the following tests:

1. Stand-alone modem tests, described in the modem documentation:
   - Local modem self-test
   - Remote modem self-test
   - Modem line test (end-to-end).
2. Link level 2 test from the host

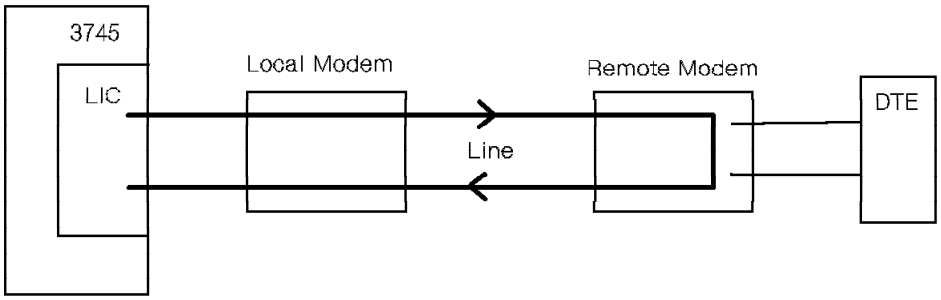
   Use the VTAM 'MODIFY LL2' command or the NetView 'LL2' command (on a nonswitched SDLC link) to test the link between the two NCPs.
   Refer to *VTAM Operation* or *NetView Operation* documentations for detailed information.
3. Local modem loopback test (loop 3)

   Refer to the MOSS WTT function in the *3745 Advanced Operations Guide*.



4. Remote modem loopback test (loop 2):

   Refer to the MOSS WTT function in the *3745 Advanced Operations Guide*.



5. If a test result leads you to replace a LIC, refer to the *3745 Connection and Integration Guide*.

Problems on Both Lines of a LIC5

1 Power on and log on at the operator console. Refer to the *3745 Basic Operations Guide.* This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 Check if there is an alarm related to your problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is neither alarm nor reference code related to your problem:
  - Does the traffic slow down on all lines linked to a scanner?
    1. **Yes,** ☎ and report the problem.
    2. **No,** go to next step.

3 Check visually that:

- The LIC and Line cables are correctly connected.
- The LIC is operational (not in use with a PKD). The green light should be on. If not, ask the host operator to activate the line if possible.
  - When the green light is on, DTR is on.
  - When the yellow light is on, the LIC is faulty.
  - When green and yellow lights are blinking, the LIC has been plugged into the wrong slot.
  - To check the lights, plug in the PKD (refer to Figure 9-3 on page 9-39 for connection); press the **Go** or **Stop** key; then the green and yellow lights should be on.
  - When the PKD is connected, if a LIC5 or LIC6 is misplugged, the message 'WRONG SLOT' is displayed on the PKD.
- The LIC is correctly configured, see the *3745 Connection and Integration Guide*.

4 Ask the operator to deactivate both the lines connected to the LIC.

Press the following keys: W T T SEND

This screen is displayed:

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST INITIAL SELECTION


- SELECT ONE OPTION (1,2) ==>

           1 = AUTOMATIC WRAP TEST ON A LIC

           2 = WRAP TEST AT ANY LEVEL



THEN PRESS SEND
===>

F1:END  F2:MENU2  F3:ALARM
```

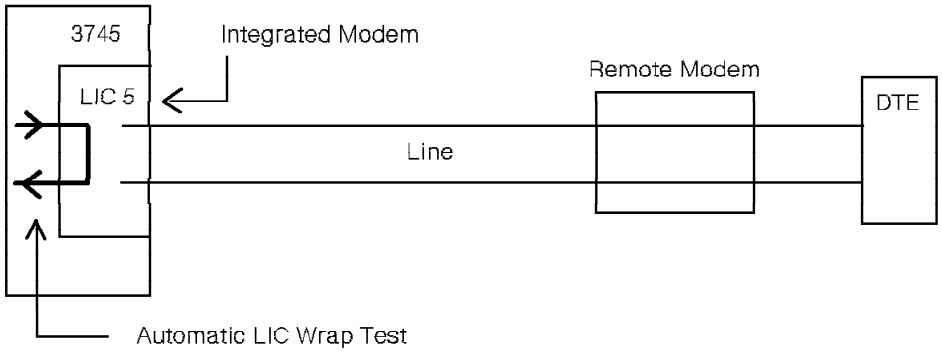


Figure 9-2. Automatic LIC Wrap Test on LIC5

5 Press the following keys to select the automatic wrap test at LIC level:

1 SEND

This screen is displayed:

```
---------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
             AUTOMATIC WRAP TEST ON LIC

- ENTER A LINE ADDRESS OF THE LIC (0-511 ) ==>


WARNING : ALL LINES OF THE LIC MUST BE DISABLED/DEACTIVATED









===>

F1:END  F2:MENU2  F3:ALARM F4:WRAP TEST INITIAL SELECTION
```

6 Enter the address of one of the lines of the suspected LIC. SEND
The next screen is displayed.

The following message is then displayed on line **A** .

WRAP TEST STARTED, PLEASE WAIT 30 SECONDS

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
             AUTOMATIC WRAP TEST ON LIC

     LINE RANGE ADDRESS: 0004 - 0007 LIC TYPE: 1









===> WRAP TEST STARTED, PLEASE WAIT 30 SECONDS A

F1:END  F2:MENU2  F3:ALARM F4:WRAP TEST INITIAL SELECTION
```

7 Wait approximately 30 seconds. One of the following messages is displayed on line **A** .

WRAP TEST COMPLETED: THE LIC IS FAULTY

Action:

– F1

– Go to step 8.

WRAP TEST COMPLETED: THE LIC IS OK

Action:

- Check the control program generation parameters with the LID Function (both lines). See the *3745 Advanced Operations Guide.*
- Check (and correct if necessary) the LIC5 configuration. See the *3745 Connection and Integration Guide*.

Note: Other wrap test messages are documented in the *3745 Advanced Operations Guide*.

8 Do one of the following:

- If there is a spare LIC, go to step 9.
- If there is no spare LIC, but spare port(s) are defined for failing lines:
  - Perform a port swap.
  - Refer to the *3745 Advanced Operations Guide*.
- If the problem persists: ☎

9 Do the following:

- Replace the faulty LIC. Refer to the *3745 Connection and Integration Guide*.
- Configure the new LIC, as described in the *3745 Connection and Integration Guide.*
- Follow steps 4, 5, 6, and 7.
  - If the test is not successful, the LIC is still faulty, ☎
  - If the test is successful, reactivate the lines.

Problems on One Line of a LIC5

1 Power on and log on at the operator console. Refer to the *3745 Basic Operations Guide.* This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 Check if there is an alarm related to your problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is no alarm related to your problem, go to next step.

3 Check visually that:

- The LIC is operational (not in use with a PKD). The green lamp should be on. If not, ask the host operator to activate the line if possible.
  - When the green light is on, DTR is on.
  - When the yellow light is on, the LIC is faulty.
  - When green and yellow lights are blinking, the LIC has been plugged into the wrong slot.
  - To check the lights, plug in the PKD (refer to Figure 9-3 on page 9-39 for connection); press the **Go** or **Stop** key; then the green and yellow lights should be on.
  - When the PKD is connected, if a LIC5 or LIC6 is misplugged, the message 'WRONG SLOT' is displayed on the PKD.
- The LIC is correctly configured. See the *3745 Connection and Integration Guide*.

4 Make sure that the remote control unit and modem are operational.

5 Perform LIC tailgate data wrap test, using the wrap plug. For a complete description of this test, see Chapter 16.
If the test fails, go to step 6.
If correct, reactivate the line, restart the application, and go to step 8.
If the application is still failing, go to next step.

6 Do one of the following:

- If there is spare LIC, go to step 7.
- If there is no spare LIC, but spare port(s) are defined for failing lines:
  - Perform a port swap. Refer to the *3745 Advanced Operations Guide.*
  - If the problem persists: 

7

- Deactivate the second line (if connected).
- Replace and configure the LIC, as described in the *3745 Connection and Integration Guide.*
- Follow steps 4, 5, and 6 beginning on page 9-38. If the test is successful, reactivate the line.

8 Locate the LIC to be tested and plug in the IBM 5869 Portable Keypad Display (PKD) as described in the *3745 Connection and Integration Guide*.

Various messages can be displayed on the PKD before performing the LIC line analysis procedure (LLAP). These are described under "LIC Messages (LIC5)" on page 9-42.

If the mode is CCITT (and you checked the configuration in step 3), and the problem persists, suspect your common carrier or the other modem.

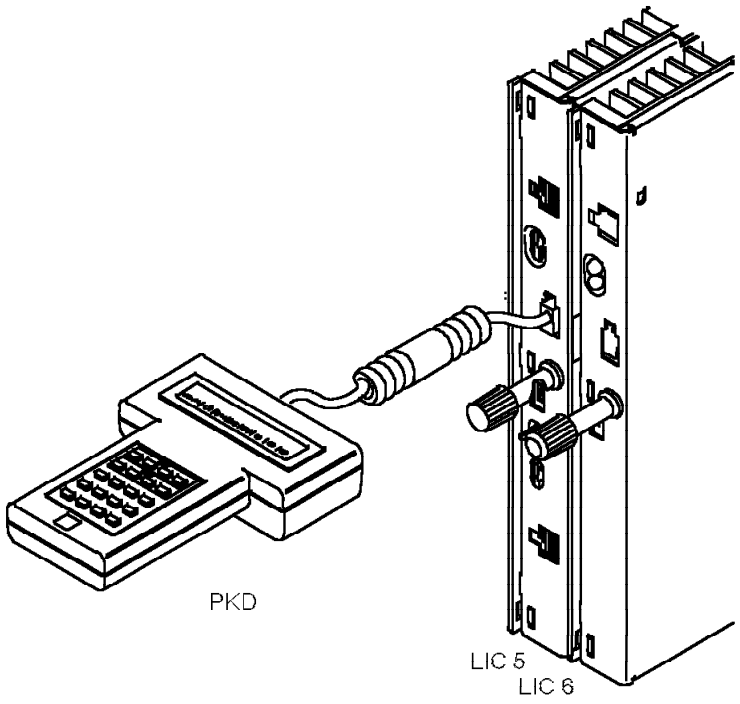


Figure 9-3. IBM 5869 Portable Keypad Display (PKD) plugged to a LIC5 or a LIC6.

Warning: This test is disruptive for the whole link (point-to-point or multipoint) even if only one station of a multipoint link is failing.

Notes:

1. LLAP cannot be performed on a tributary LIC5 of a multipoint link, or on a secondary LIC5 of a point-to-point link.
2. If you have just installed or reconfigured the LIC, check the configuration with the PKD before performing automatic problem determination.
3. The mode option must be 'NATIVE' (which is country-dependent).

9 Ask the host operator to reactivate the link (if not done on step 5). The green lamp should be on.

The link must be active for correct LLAP testing and have attempted data transmission within the previous 15 minutes.

10 Press the **C** key on the PKD. The message PROBLEM DETERMIN should be displayed.

- If it is, press Go to continue.
- If any other message is displayed, find the message under **"**LIC Messages (LIC5)**"** on page 9-42 and take the action required.
- If you are testing a point-to-point link:
  - If the remote modem is a multi-port modem, the message REMOTE PORT is displayed. Enter the remote address then press **Go** to continue.
  - Go to step 12.
- If you are testing a multipoint link, go to step 11.

11 The message REM ADDRESS is displayed. Enter the remote modem address, then press Go to continue.

If the remote modem is a multi-port modem, the message REMOTE PORT is displayed. Enter the remote port address, then press Go to continue.

Notes:

1. Each modem on a multipoint link must be tested separately.

   If the remote test of a modem on a multipoint link is unsuccessful, suspect the entire link and test each modem **locally**.

12 The test runs.

During the test, the message RUNNING nn is displayed, where nn increments, showing the progression of the test.

To stop the test at any point, press **EXIT**.

If the message PLUG TEL WRAP is displayed, plug the line plug into the telecommunication wrap at the cable end (telephone company end). Then press **Go** to continue.

13 If the message NO ERROR FOUND is displayed, press **EXIT**. Then, go to step 15.

Otherwise go to step 14.

14 Perform the action corresponding to the message displayed.

If a wrap plug is connected, the message REMOVE TEL WRAP THEN PRESS EXIT is displayed. Perform this action.

15 If a wrap plug is connected, the message REMOVE TEL WRAP THEN PRESS EXIT is displayed. Perform this action.

At this point, you have performed the LLAP.

- For the first time, return to step 10 and perform the LLAP a second time.
- For the second time, the test is completed.
  If the problem persists when operation is resumed, ask the host operator to check the line and the control program.

LIC Messages (LIC5)

The following LIC messages are displayed on the PKD. The cause and the recommended corrective action are given. Perform the corrective actions step by step until the error is cleared.

CONFIG MISMATCH

Cause:
Local LIC and remote modem configuration

Action:

- Check the local configuration.
- Ask the remote operator to check the remote configuration.
- Reconfigure if necessary, see the *3745 Connection and Integration Guide*.
- Press the EXIT key to return to the background display.

LOC MODEM ERROR

Cause:
Local LIC error.

Action:

- Verify that the telecommunication wrap is correctly plugged.
- Replace the LIC, then go back to step 6 on page 9-35.
- Press the EXIT key to return to the background display.

LOC DTE ERROR

Cause:

- There has been no data transmission within the past 15 minutes.
- System fault.

Action:

- Try automatic problem determination again during normal data transmission.
- Contact the host operator to check that the line is activated.
- Press the EXIT key to return to the background display.

MASTER ONLY

Cause:
You are attempting to run the test from a remote secondary or tributary LIC5.

Action:

- If, at the remote side, the control (or primary) point is:
  - A LIC5, ask the remote operator to run LLAP.
  - Another equipment, ask the remote operator to execute a similar problem determination procedure or check the remote equipment.
- Press the EXIT key to return to the background display.

PLUG TEL WRAP THEN PRESS GO

Cause:
The test requires the wrap plug.

Action:

- Plug the line plug into the telecommunication wrap at the cable end (telephone company end).
- Press **Go** to continue the test.

REM DTE OR REMOTE MODEM ERROR

Cause:
Faulty remote DTE or remote modem.

Action:

- Ask the remote operator to perform the remote modem wrap test:
  - With a telecommunication wrap plug at the telephone company end if the remote equipment is a LIC5.
  - With a modem wrap plug if any other remote equipment.
- Press the EXIT key to return to the background display.

REM MODEM ERROR

Cause:
Faulty remote modem.

Action:

- Ask the remote operator to perform the remote modem self-test.
- Press the EXIT key to return to the background display.

TEL LINE OR REM MODEM ERROR

Cause:
Faulty line, remote modem, or DTE.

Action:

- Ask the remote operator to perform the remote modem wrap test with a telecommunication wrap plug at the telephone company end.
- Contact your telecommunication line service.
- Press the EXIT key to return to the background display.

TEL LINE ERROR

Cause:
Faulty telecommunication line.

Action:

- Contact your telecommunication line service.
- Press the EXIT key to return to the background display.

WRONG SLOT

Cause:

- A LIC5 or LIC6 has been plugged into a wrong position. (Refer to the *Connection and Integration Guide*.)

Action:

- Plug the LIC in the right position.

  Note: A 56 Kbps LIC6 must always be plugged in the odd position and be alone in a pair of slots.

Problems on the Line of a LIC6

1 Power on and log on at the operator console. Refer to the *3745 Basic Operations Guide.* This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

The reference code is always displayed at the right-most position of the alarm.

2 Check if there is an alarm related to your problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is neither alarm nor reference code related to your problem:
  - If it seems the traffic slows down on all lines linked to a scanner, ☎ and report the problem.
  - Otherwise, go to next step.

3 Check visually that:

- The LIC and line cables are correctly connected.
- The LIC is operational (not in use with a PKD). The green lamp should be on. If not, ask the host operator to activate the line if possible.
  - When the green light is on, DTR is on.
  - When the yellow light is on, the LIC is faulty.
  - When green and yellow lights are blinking, the LIC has been plugged into the wrong slot.
  - If it concerns a 56 kbps LIC6, two cases may happen:
    1. The LIC is alone on the pair of slots and plugged into the even position. The leds are not blinking but a message displayed on the console advise you to plug the 56 kbps LIC6 into the odd position.
    2. A LIC5 or LIC6 (low speed) is plugged into one slot, and a 56 kbps LIC6 is plugged into the other one of the pair of slots. The leds are blinking and a message is displayed on the console saying: THE LIC IS NOT PRESENT. Plug the 56 kbps LIC6 into the odd position and remove the other LIC. When a 56 kbps LIC6 is plugged (in the odd position of a pair of slot), no other LIC must be plugged in the even position.
  - To check the lights, plug the PKD in (refer to Figure 9-4 on page 9-48 for connection); press the **Go** or **Stop** key; then the green and yellow lights should be on.
  - When the PKD is connected, if a LIC5 or a LIC6 is misplugged, the message 'WRONG SLOT' is displayed on the PKD.
- The LIC is correctly configured. See the *3745 Connection and Integration Guide*.

4 Make sure that the remote control unit and modem are operational.

5 Perform LIC tailgate data wrap test, using the wrap plug. For a complete description of this test, see Chapter 16.

If the test fails, go to step 6.

If correct, reactivate the line, restart the application, and go to step 8.

If the application still fails, go to next step.

6 Do one of the following:

- If there is spare LIC, go to step 7.
- If there is no spare LIC, but spare port(s) are defined for failing lines:
  - Perform a port swap. Refer to the *3745 Advanced Operations Guide.*
  - If the problem persists: ☎

7

- Replace and configure the LIC, as described in the *3745 Connection and Integration Guide*.
- Follow steps 4, 5, and 6 beginning page 9-46. If the test is successful, reactivate the line.

8 Locate the LIC to be tested and plug in the IBM 5869 Portable Keypad Display (PKD) as described in the *3745 Connection and Integration Guide*.

Various messages can be displayed on the PKD before you perform the LIC line analysis procedure (LLAP). These are described under “LIC Messages (LIC6)” on page 9-51.

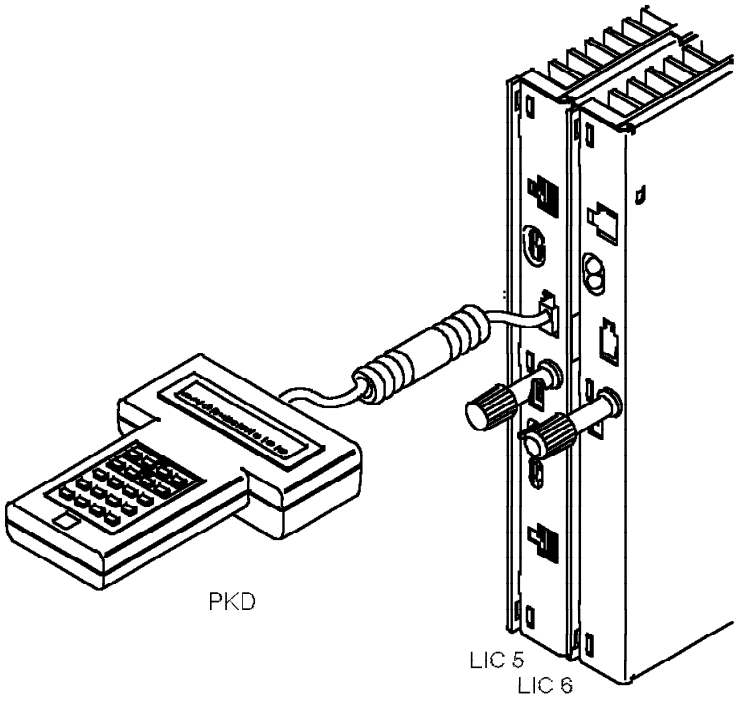


Figure 9-4. IBM 5869 Portable Keypad Display (PKD) plugged to a LIC5 or a LIC6.

Warning: This test is disruptive for the whole link (point-to-point or multipoint) even if only one station of a multipoint link is failing.

Notes:

1. LLAP cannot be performed on a tributary LIC6 of a multipoint link, or on a secondary LIC6 of a point-to-point link.
2. LLAP performs problem determination only on the first telephone link. It does not help with problem determination on a secondary link in, for example, a tailing configuration.
3. LLAP is not supported when a LIC 6 is connected to an IBM Modem 5821 Model 10.
4. If you have just installed or reconfigured the LIC, check the configuration with the PKD *before* performing automatic problem determination.
5. NETW SERVICE must be ON for the local LIC (refer to the configuration setting procedure for the LIC6 in the *3745 Connection and Integration Guide*) and for the remote modem.

9 Ask the host operator to reactivate the link (if not done on step 5).
The green lamp should be on.
The link must be active for correct LLAP testing and have attempted data transmission within the previous 15 minutes.

10 Press the **C** key on the PKD. The message PROBLEM DETERMIN should be displayed.
If it is, press Go to continue.

If any other message is displayed, find the message under "LIC Messages (LIC6)" on page 9-51 and take the action required.

If no action is possible from the PKD, suspect the LIC and go back to step 3.

If you are testing a point-to-point link, go to step 12.

If you are testing a multipoint link, go to step 11.

11 The message REM ADDRESS is displayed. Enter the remote modem address, then press **Go** to continue.

Notes:

1. Each modem on a multipoint link must be tested separately.
2. If the remote test of a modem on a multipoint link is unsuccessful, suspect the entire link and test each modem **locally**.

12 To stop the test at any point, press **EXIT** and hold it down until the message WAIT is displayed.

During the test, the message RUNNING nn is displayed, where nn increments, showing the progression of the test.

If the message PLUG TEL WRAP is displayed, unplug the cable from the telecommunication socket and plug it into the telecommunication wrap plug. Then press **Go** to continue.

13 If the message NO ERROR FOUND is displayed, press **EXIT**. The test is completed. Go to step 15.

Otherwise go to step 14.

14 Perform the action corresponding to the message displayed.
Then, the message REMOVE TEL WRAP THEN PRESS EXIT is displayed.
Remove the telecommunication wrap plug.

15 The message REMOVE TEL WRAP THEN PRESS EXIT is displayed.
Remove the telecommunication wrap plug.

If the problem persists when operation is resumed, ask the host operator to check the line and the control program.

LIC Messages (LIC6)

The following LIC messages are displayed on the PKD. The cause and the recommended corrective action are given. The corrective actions should be performed step by step until the error is cleared.

CHECK CONFIG

Cause: Local LIC error.

Action:

- Check the local configuration.
- Reconfigure if necessary, see the *3745 Connection and Integration Guide*.
- Press the EXIT key to return to the background display.

CONFIG MISMATCH

Cause: Local LIC and remote modem configuration error.

Action:

- Check the local configuration (in particular, that the correct DDS or LDM mode has been selected) see the *3745 Connection and Integration Guide*.
- Reconfigure if necessary.
- Ask the remote operator to check the remote configuration.
- If the problem persists, check if the remote modems are displaying warning messages.
- Press the EXIT key to return to the background display.

DDS OOS OOF

Cause: The network is not operational, or there is a remote modem or line fault.

Action:

- Call the network manager and ask if the network is operational.
- If the network is operational, ask the remote host operator to perform the remote modem self-test.

LOC MODEM ERROR

Cause: Faulty local LIC.

Action:

- Verify that the telecommunication wrap plug is correctly plugged in.
- Replace the local LIC.
- Perform steps 6 and 7 on page 9-47.
- Press the EXIT key to return to the background display.

MASTER ONLY

Cause: The LLAP is being attempted from local secondary or tributary LIC6.

Action:

- If at the remote side, the control (or primary) point is:
  - A LIC6, ask the remote operator to run LLAP.
  - Another equipment, ask the remote operator to execute a similar problem determination procedure or to check the remote equipment.

NETW SERVICE OFF

Cause: Network services option not ON.

Action:

- Enable network services in local modem configuration.
- Press the EXIT key to return to the background display.

NO LOC DTE ACTIV

Cause:
There has been no data transmission during the last 15 minutes.

Action:

- Try automatic problem determination again during normal data transmission.
- Contact the host operator to check that the line is activated.
- Press the EXIT key to return to the background display.

REM MODEM ERROR

Cause: Faulty remote modem

Action:

- Ask the remote operator to perform the remote modem wrap test with a telecommunication wrap plug at the telephone company end.
- Replace the remote modem if necessary.
- Press the EXIT key to return to the background display.

REMOTE PROBLEM

Cause: Faulty remote modem or remote DTE.

Action:

- Ask the remote operator to perform the remote modem wrap test with a telecommunication wrap plug at the telephone company end.
- Press the EXIT key to return to the background display.

TEL LINE OR REMOTE PROBLEM

Cause: Faulty line, remote modem, or DTE.

Action:

- Ask the remote operator to perform the remote modem wrap test with a telecommunication wrap plug at the telephone company end.
- If the remote modem(s) are not faulty, call your telecommunication line service to check the line.
- Press the EXIT key to return to the background display.

TEL LINE ERROR

Cause: Faulty telecommunication line.

Action:

- Contact your telecommunication line service.
- Press the EXIT key to return to the background display.

TEST FAILED WRAP

Cause:

- Telecommunication wrap plug missing or incorrectly plugged.
- Faulty local LIC.

Action:

1. Verify that the telecommunication wrap plug is correctly plugged.
2. Replace the LIC then go back to step 3 on page 9-46.
3. Press the EXIT key to return to the background display.

WAIT.

Cause:

- The test is being terminated.
- Press the EXIT key to return to the LIC status display.

Action: Wait

WRONG SLOT

Cause:

- A LIC5 or a LIC6 has been plugged into a wrong position. (Refer to the *Connection and Integration Guide*.)

Action:

- Plug the LIC in the right position.

  Note: A 56 Kbps LIC6 must always be plugged in the odd position and be alone in a pair of slots.

Chapter 10. Line Problem (HSS)

1 Power on and log on the operator console. Refer to the *3745 Basic Operations Guide*. This screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 Check if there is an alarm related to your problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is no alarm related to your problem, go to next step.

3 If a second port has been defined in NCP, connect the cable to the second port and reactivate the line.

If the problem is corrected, suspect the HSS card interface. Continue normal operation and ☎ to have the card replaced.

If the problem persists, perform an internal HSS wrap test for the first interface (see the *3745 Advanced Operations Guide*).

If the test is unsuccessful, suspect HSS card failure.

If the test is successful, go to the next step.

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4 Make sure that the **local and remote modems** are:

- Powered on.
- Operational (not in test mode).
- Correctly connected to the port (see the *3745 Connection and Integration Guide*).

5 Make sure that the **remote control unit** is operational.

6 Perform self-tests on the DCE.
Refer to the DCE documentation.

If correct, perform DCE-to-DCE tests (end-to-end). Refer to the DCE documentation.
If correct, go to next step.

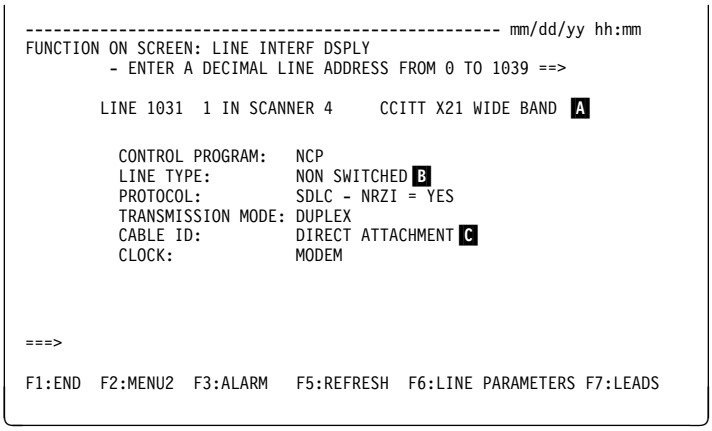
7 L I D SEND to select the Line Interface Display function.
A complete description of this function, including messages, is given in the *3745 Advanced Operations Guide*.

8 Enter the decimal address of the line, then

SEND

9 F6

The following screen is displayed. Check the line definition parameters.



10 According to the information displayed in **A**, **B** and **C**, go to the appropriate page.

A	B	C	Go to page
CCITT V.35	Nonswitched	Modem attachment	10-4
CCITT V.35	Nonswitched	Direct attachment	10-6
CCITT X.21	Nonswitched	Modem attachment	10-8
CCITT X.21	Nonswitched	Direct attachment	10-10
INTF STANDARD NOT ACCESSED	Nonswitched	CABLE ID NOT ACCESSED	See below

If INTF STANDARD NOT ACCESSED is displayed in **A** and CABLE ID NOT ACCESSED in **C**: The line is not activated. More information on the interface is given in the *3745 Advanced Operations Guide* under the Line Interface Display function.

CCITT V.35 Nonswitched - Modem Attachment

11 F7 To display the Control Lead screen.

12 F5 To start the refresh.

If you wish to stop the refresh: BREAK

13 Locate **DTR** and **DSR** on the screen.

14 Ask the host operator to reactivate the line.

15 The status of **DTR** and **DSR** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 1028   0  IN SCANNER 3    CCITT V35


          XMIT CMD: SDLC XMIT DATA         RCV CMD: SDLC RCV DATA
               STATUS: IN-PROGRESS             STATUS: IN-PROGRESS

          MODEM-OUT DTR  ON               MODEM-IN DSR  ON
                    RTS ON                          RFS ON
                                                    CD




===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

DTR is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: ☎
- Test successful: Check the network status with the network operator. If it is operational, suspect the host software.

DTR is ON and DSR is OFF

- Check that the DCE is ready and operational.
- Check that the cables are correctly plugged in.
- Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: ☎
- Test successful, check:
  - DCE
  - DCE cable.

DTR and DSR are ON Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: ☎
- Test successful: Perform a data wrap test at the 3745 modem level (see Chapter 16). Then return here to analyze the results.

Modem Data Wrap Test Results

- Test not successful: Suspect the modem or the cable.
- Test successful, check:
  - The remote control unit. Perform appropriate remote control unit tests.
  - The network status with the network operator.
  - The network.

CCITT V.35 Nonswitched - Direct Attachment

11 F7 To display the Control Lead screen.

12 F5 To start the refresh.

If you wish to stop the refresh: BREAK

13 Locate **DTR**, **RTS**, **DSR**, and **RFS** on the screen.

14 Ask the host operator to reactivate the line.

15 The status of **DTR**, **RTS**, **DSR**, and **RFS** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
-------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 1028   0  IN SCANNER 3    CCITT V35

          XMIT CMD: SDLC XMIT DATA         RCV CMD: SDLC RCV DATA
               STATUS: IN-PROGRESS             STATUS: IN-PROGRESS

          MODEM-OUT DTR  ON                 MODEM-IN DSR  ON
          MODEM-OUT RTS  ON                 MODEM-IN RFS  ON
                                                    CD



===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

DTR or RTS is OFF and DSR or RFS is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful: Check the direct attachment cable connection. If it is correct, suspect the host software.

DTR, RTS, DSR, RFS are all ON: Check that the cable is correctly plugged in and that the remote control unit is ready and operational. If they are both correct, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - DCE cable.
  - Remote control unit. Perform appropriate remote control unit tests.
  - The direct attachment cable connection.
  - The programmable line speed definition.

DTR or RTS is ON and DSR or RFS is OFF: Check that the cable is correctly plugged in. If it is, perform a tailgate wrap test
(see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful: Check the DCE cable.

CCITT X.21 Nonswitched - Modem Attachment

11 F7 To display the Control Lead screen.

12 F5 To start the refresh.

If you wish to stop the refresh: BREAK

13 Locate **C** and **I** on the screen.

14 Ask the host operator to reactivate the line.

15 The status of **C** and **I** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT X21  LOW SPEED


          XMIT CMD: ENABLE                RCV CMD: LINE NOT ACTIVE
               STATUS: IN-PROGRESS            STATUS:

          MODEM-OUT C   ON                MODEM-IN I

                    T    ON                        R


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

C is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful: Check the network status with the network operator. If it is operational, suspect the host software.

C is ON and I is OFF: Check that the remote control unit and the modems are ready and operational. If they are, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - DCE (modem and link tests are described on page 9-31).
  - DCE cable.

C and I are both ON: Check that the remote control unit is ready and operational. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - DCE.
  - Remote control unit. Perform appropriate remote control unit tests.
  - The network status with the network operator.
  - Network.

CCITT X.21 Nonswitched - Direct Attachment

11 F7 To display the Control Lead screen.

12 F5 To start the refresh.

If you wish to stop the refresh: BREAK

13 Locate **C** and **I** on the screen.

14 Ask the host operator to reactivate the line.

15 The status of **C** and **I** should be updated when the line is reactivated. Note each status and perform the action requested on the following page.

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: LINE INTERF DSPLY
          - ENTER A DECIMAL LINE ADDRESS FROM 0 TO 1039 ==>

          LINE 80  11 IN SCANNER 3  CCITT X21  LOW SPEED


          XMIT CMD: ENABLE                RCV CMD: LINE NOT ACTIVE
               STATUS: IN-PROGRESS            STATUS:

          MODEM-OUT C   ON                MODEM-IN I

                    T    ON                        R


===>

F1:END  F2:MENU2  F3:ALARM   F5:REFRESH  F6:LINE PARAMETERS F7:LEADS
```

C is OFF: Perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful: Check the direct attachment cable connection. If it is correct, suspect the host software.

C is ON and I is OFF: Check that the remote control unit is ready and operational. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - The direct attachment cable.

C and I are both ON: Check that the remote control unit is ready and operational. If it is, perform a tailgate wrap test (see Chapter 16). Then return here to analyze the results.

Tailgate Wrap Test Results

- Test not successful: 
- Test successful, check:
  - Remote control unit. Perform appropriate remote control unit tests.
  - The direct attachment cable connection.
  - Network.

Chapter 11. Ethernet-Type Line Problems (ESS)

1 Check the SQE switch (enabled or disabled), and the following connections:

- IBM 3745
- MAU (transceiver)
- Terminators (check that the terminator is plugged in correctly and there is no short circuit or open circuit).

  This checking is essential because in certain cases there will be no message to indicate a faulty connection.

Note: Another problem cause may be the addressing scheme. Refer to the EID function in the *3745 Advanced Operations Guide*.

2 Power on and log on the operator console (refer to the *3745 Basic Operations Guide*). The following screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

3 Check if there is an alarm related to your problem.

- If there is an alarm related to your problem, perform the action required for that alarm (see Chapter 1).
- If there is no alarm related to your problem, go to next step.

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4 Check if the green power light on the tailgate is on.

If the light is on, go to next step.

If the light is off, take the appropriate action.

- Models 130, 150, 170 
- Models 210, 310, 410, 610

  Use the MOSS POS function to check the status of the Ethernet line adapter power. If it is down, power it up.  if you are not successful.

5 Make sure:

- The MAU is operational.
  (MAU which is the media access unit is also known as the transceiver.)
- At installation time, you checked:
  - The MAU (or transceiver) meets Ethernet V2 or IEEE 802.3 standard requirements.
    (Some MAU's are more sensitive than others to electromagnetic environment and may degrade the 3745 performances.)
  - **The SQE-TEST function is enabled.** The MAU must have this function (also known as HEARTBEAT function) when it is attached to a 3745. The 3745 needs it to check proper operations of collision signal paths.

After checking and correction, if the problem persists, go to the next step.

6 E L D SEND to select the MOSS ELD function.
A complete description of this function, including messages, is given in the *3745 Advanced Operations Guide*.

Within the ELD function, perform the following:

- Select ESS or 11 and SEND to obtain a list of ESS events.
- Enter the SEL# corresponding to the type '08' and ID 'B7' which corresponds to the BER of type 08B7.
- Based on the reference code displayed on the ELD detail screen, take the appropriate action. This reference code is situated on the right side of the BER detail information.

B8B786F0 Suspect a control program error.

B8B786F1 Excessive collisions.
Suspect the cable, the transceiver or a media problem.

B8B786F2 Late collisions.
Suspect a too long media length or an open/short media.

B8B786F3 Adapter buffer full.
Suspect a NCP congestion or a hardware failure.

B8B786F4 Frame CRC error.
Suspect line hits, media or transceiver problems.

B8B786F5 No byte boundary.
Suspect line hits, media or transceiver problems.

B8B786F6 Frame > 1518 bytes.
Suspect another terminal, transceiver or Ethernet adapter card.

If you are not successful, go to the next step.

7 E I D SEND to select the ESS Interface Display function.
A complete description of this function, including messages, is given in the *3745 Advanced Operations Guide*.

8 Enter the decimal address of the line, SEND then the following screen is displayed.

```
------------------------------------------------------ mm/dd/yy hh:mm
 FUNCTION ON SCREEN: ESS INTERF DSPLY

 - ENTER A DECIMAL LINE ADDRESS FROM 1056 TO 1071 ==> ....

 LINE xxxx  xx IN ADAPTER x      YYYYYYYYYYYYYYYYYYYYYYYY

 ADAPTER TYPE                          : ESS
 ESS UNIVERSALLY ADMINISTERED ADDRESS : xxxxxxxxxxxx
 ESS LOCALLY ADMINISTERED ADDRESS     : xxxxxxxxxxxx
 ESS CURRENT ADDRESS                  : xxxxxxxxxxxx

 COUNTER LIMIT FOR ALL OPERATIONS          (HEX VALUE) : xxxxxxxx
 COUNTER LIMIT FOR UNSUCESSFUL OPERATIONS  (HEX VALUE) : xxxxxxxx


 ==>
 F1:END  F2:MENU2  F3:ALARM       F5:REFRESH      F7:COUNTERS
```

9 Check if displayed information agrees with the ones defined in the CDF, NCP, or VTAM.

10 F7 for displaying counters data. The following screen is displayed.

```
------------------------------------------------------ mm/dd/yy hh:mm
 FUNCTION ON SCREEN: ESS INTERF DSPLY

          - ENTER A DECIMAL LINE ADDRESS FROM 1056 TO 1071 ==> ....

            LINE xxxx  xx IN ADAPTER x      LINE ACTIVATED
                                          EXCESS COLLISION (XMIT)     : xxxxxxxx
 CURRENT COUNTERS :                       TIME DOMAIN REFLECT. (XMIT) : xxxxxxxx
 ----------------                         LATE COLLISION (XMIT)       : xxxxxxxx
 TOTAL XMIT FRAMES LOST : xxxxxxxx        NO BUFFER AVAILABLE (RCV)   : xxxxxxxx
 TOTAL RCVD FRAMES LOST : xxxxxxxx        CRC ERROR (RCV)             : xxxxxxxx
 TOTAL XMIT FRAMES      : xxxxxxxx        FRAMING ERROR (RCV)         : xxxxxxxx
 TOTAL RCVD FRAMES      : xxxxxxxx        FRAME > 1518 BYTES (RCV)    : xxxxxxxx
                                          DEFERRED (XMIT)             : xxxxxxxx
                                          ONE RETRY (XMIT)            : xxxxxxxx
                                          MORE THAN ONE RETRY (XMIT)  : xxxxxxxx
 ==>
 F1:END  F2:MENU2  F3:ALARM       F5:REFRESH      F6:LINE PARAMETERS
```

11 F5 To start the refresh.

BREAK To stop the refresh.

- EID takes a snapshot of the current condition of all the ESS active counters. If the counters overflow their defined (sysgen) limits, the counters will be reset to zero. Therefore, EID cannot be used to determine any grand totals of counter conditions.

  The following explanations of current counters are given for information.

  TOTAL XMIT FRAMES LOST Is the total of:
  EXCESS COLLISION counter, plus
  LATE COLLISION counter.

  TOTAL RCVD FRAMES LOST Is the total of:
  NO BUFFER AVAILABLE counter, plus
  CRC ERROR counter, plus
  FRAMING ERROR counter, plus
  FRAME > 1518 BYTES counter.

  TOTAL XMIT FRAMES Is the total transmitted frames, including the TOTAL XMIT FRAMES LOST.

  TOTAL RCVD FRAMES Is the total received frames, including the TOTAL RCVD FRAMES LOST.

- Continue with the next step.

12 Based on the information displayed on the screen, take the appropriate action.

EXCESS COLLISION (XMIT)
Is incremented when a frame cannot be transmitted after 16 tries because of collisions on the medium. Associated with the EXCESS COLLISION is a TIME DOMAIN REFLECT counter value. This value is related to the last EXCESS COLLISION lost transmit frame.

Suspect the cable, the transceiver or a media problem.

LATE COLLISION (XMIT)
A late collision error occurs when a transmit frame is lost because of a collision takes place after the maximum time required to detect a collision.

Suspect a too long media length or an open/short media.

NO BUFFER AVAILABLE (RCV)
This error occurs when the adapter is unable to receive a frame because its buffers are filled.

Suspect a NCP congestion or a hardware failure.

CRC ERROR (RCV)
A CRC error occurs when a receive frame is discarded because of a problem detected with the cyclic redundancy check.

Suspect line hits, media or transceiver problems.

FRAMING ERROR (RCV)
A framing error occurs when a received frame does not end on a byte boundary.

Suspect line hits, media or transceiver problems.

FRAME > 1518 BYTES (RCV)
This error occurs when a receive frame is longer than the maximum allowed frame size for the media.

Suspect any other terminal, transceiver or Ethernet adapter card.

If you are not successful, go to the next step.

13 If another port or another ESS line adapter is available, perform a MOSS PSF function (port swap file function). Refer to the *3745 Advanced Operations Guide*.

- If the problem is corrected, suspect the original connector or the original Ethernet adapter card.

  Continue normal operation and  to have the failing component changed or repaired.
- If you are not successful, call Ethernet support.

Chapters 12, 13, 14, and 15

Replace this page by the separator:

12 - Token-Ring Problems

Chapter 12. Token-Ring Interconnection (TRI) Problems 12-1
MSA Fields Definition (Token-Ring/TIC Information) 12-10

Chapter 13. Disk or Diskette Problems 13-1

Chapter 14. MOSS Inop is On 14-1

Chapter 15. Control Panel Problems 15-1

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Replace this page by the separator:

12 - Token-Ring Problems

Chapter 12. Token-Ring Interconnection (TRI) Problems 12-1
MSA Fields Definition (Token-Ring/TIC Information) 12-10

Chapter 13. Disk or Diskette Problems 13-1

Chapter 14. MOSS Inop is On 14-1

Chapter 15. Control Panel Problems 15-1

Chapter 12. Token-Ring Interconnection (TRI) Problems

1 Power on and log on the operator console. Refer to the *3745 Basic Operations Guide.* The next screen is displayed:

```
                                FUNCTION SELECTION RULES
TO SELECT ONE OF THE MENUS, PRESS THE APPROPRIATE F KEY

TO SELECT A FUNCTION, ENTER ITS 3-CHARACTER NAME THEN PRESS SEND

ONCE YOU HAVE SELECTED A FUNCTION FROM ONE MENU, YOU MAY SELECT
A FUNCTION FROM THE OTHER

TO END THE FUNCTION ON SCREEN, PRESS F1

TO RETURN TO THE PENDING FUNCTION, PRESS F2

TO LOG OFF, ENTER OFF THEN PRESS SEND
===>
 ALARM                                                    Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

2 Check if there is an alarm on the MOSS console or a NetView* alert if the NetView console is close to you.

- If alarm or alert: Perform the action requested for the alarm or the alert.
  (See Chapter 1 .)
- If no alarm: Go to next step.

3 [T] [I] [D] [SEND] to select the TRSS Interface Display function. The next screen is displayed:

```
------------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: TRSS INTERF DSPLY
                                      TRA/TIC SELECT

 - ENTER A DECIMAL LINE ADDRESS (1088 TO 1095) ==>

                                        TRA#   LINE ADDRESS  TIC  CCU
                                         1      1088  1089    YY   A

 - TYPE "A" TO ALLOW "ACTIVATE LINK" COMMAND ==>  A .
 PRESS SEND TO CONFIRM


===>

F1:END  F2:MENU2  F3:ALARM
```

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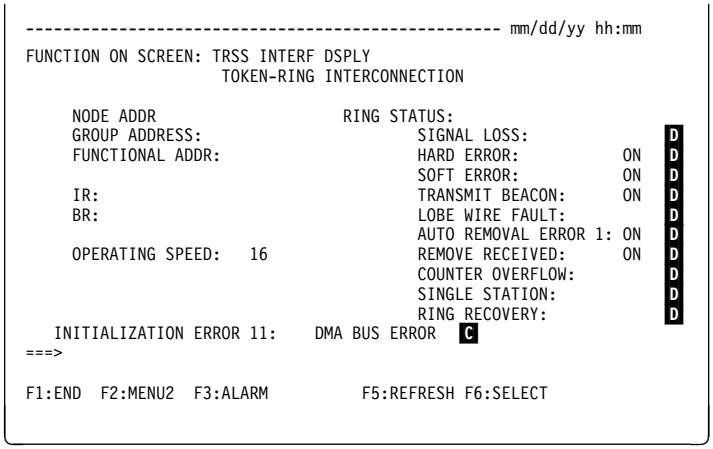
4

- Enter the decimal address of the line.
- A (on line **A** of the preceding screen) to allow 'ACTIVATE LINK'.
- SEND

The next screen is displayed.

Note: The **ALLOW ACTIVATE LINK** function allows the host operator to activate the token-ring network and is needed if:

- An automatic TIC dump is requested by NTRI which causes the Activate Link (from the host) to be inhibited.
- Before the automatic dump is completed, the MOSS goes down or is unable to complete the dump and does not re-enable the activate link.
- Any repair action has been performed.



The 4th line of the screen (not shown on the screen on the left) contains the following information:

- TRA number
- TRA mode (connect, disconnect or unknown)
- TIC ID (1-2)
- TIC mode (idle, reset, initialized, open, closed, frozen or disabled).

Refer to “MSA Fields Definition (Token-Ring/TIC Information)” on page 12-10.

F5 to activate a periodic refresh of the display.

BREAK to cancel the refresh mode.

F6 to return to the TRA/TIC SELECT screen.

5 Look at fields **C** and **D**, and perform appropriate action:

For field **C**: Go to page 12-3.

For field **D**: Go to page 12-7.

Interpreting Field C

```
------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: TRSS INTERF DSPLY
                    TOKEN-RING INTERCONNECTION

     NODE ADDR                    RING STATUS:
     GROUP ADDRESS:                       SIGNAL LOSS:                D
     FUNCTIONAL ADDR:                     HARD ERROR:           ON    D
                                          SOFT ERROR:           ON    D
     IR:                                  TRANSMIT BEACON:      ON    D
     BR:                                  LOBE WIRE FAULT:            D
                                          AUTO REMOVAL ERROR 1: ON    D
     OPERATING SPEED:   16                REMOVE RECEIVED:      ON    D
                                          COUNTER OVERFLOW:           D
                                          SINGLE STATION:             D
                                          RING RECOVERY:              D
   INITIALIZATION ERROR 11:    DMA BUS ERROR  C
===>

F1:END  F2:MENU2  F3:ALARM          F5:REFRESH F6:SELECT
```

BRING-UP ERROR x

- Ask the host operator to activate the link for this TIC.
- If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not fixed then ☎ and give BER information.

ERROR DETERMINING TRID MESSAGE

- The selected TIC is not yet activated by NCP.
  It is possible to access a TIC **only** after it has been activated once by NCP/VTAM*.
- Activate the TIC with NCP.

MOSS/TIC ERROR: FUNCTION CANCELLED

- Ask the host operator to reactivate the link for this TIC if it has been deactivated for any reason.
- Check information displayed in the MSA field of the TID screen.
  Refer to “MSA Fields Definition (Token-Ring/TIC Information)” on page 12-10.
- If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not fixed then ☎ and give BER information.

RECEIVE AND TRANSMIT ERRORS

- Ask the host operator to activate the link for this TIC.
- If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not fixed then ☎ and give BER information.

INITIALIZATION ERROR xx

Table 12-1. Token-Ring - Initialization Error Description and Action	
Initialization Error	**Error Description and Action**
01 to 07	The specified initialization parameter (**C** on previous screens), was found to be invalid by the TIC microcode. • Use the CDF function (LA and port display) to see the valid options for the TIC and compare them to the generation parameters and correct if necessary. Then ask the host operator to activate the link for this TIC. • If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. • If not yet fixed then ☎ and give BER information.
08 to 13	The specified hardware problem (**C** on previous screens), has been detected by the TIC. • Ask the host operator to activate the link for this TIC. • If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not yet fixed then ☎ and give BER information.

OPEN ERROR xx: The meaning of each open error and actions to perform is given below.

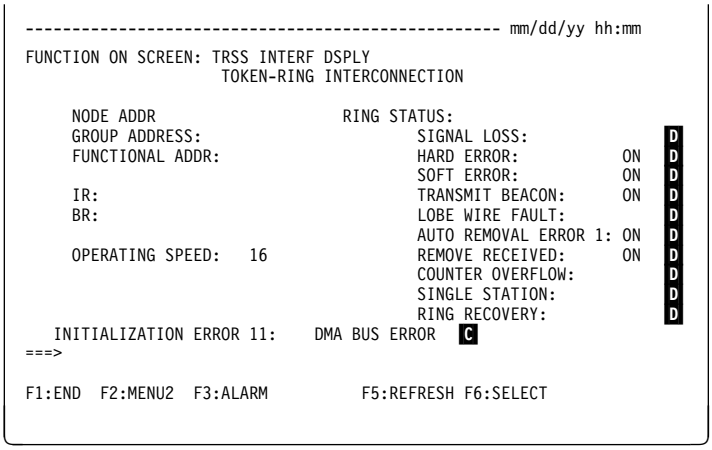
Table 12-2 (Page 1 of 2). Token-Ring - Open Error Description and Action	
Open Errors	**Open Error Description and Action**
INVALID PARAMETER	An open parameter was found to be invalid by the TIC microcode. • Check the installation and generation parameters, and correct them if necessary. Then ask the host operator to activate the link for this TIC. • If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not yet fixed then ☎ and give BER information.
FUNCTION FAILURE (01)	The lobe media test has failed, or another MAC frame was seen on the ring during the lobe media test (Phase 0). • Unplug the lobe cable from the IBM 8228. • Ask the host operator to activate the link for this TIC. • If the problem persists, unplug the TRA cable for this TIC and ask the host operator to reactivate the link, then look at RING STATUS, (field **D** on the screen): – LOBE WIRE FAULT is ON (without any other status ON): Change the TRA cable. – Another ring status (field **D**) is ON: Perform appropriate action.

Table 12-2 (Page 2 of 2). Token-Ring - Open Error Description and Action

Open Errors	Open Error Description and Action
SIGNAL LOSS (02)	The TIC is detecting no signal on the ring at the receiver side. • Ask the host operator to activate the link for this TIC. • If the problem persists, refer to the *Token-Ring Network Problem Determination Guide* in conjunction with page 12-12 of this guide.
WIRE FAULT (03)	There was a fault on the TIC line.
FREQUENCY ERROR (04)	A frequency error occurred on the TIC line.
TIME OUT (05)	The TIC has not been able to complete the specified phase in the time allowed. • Ask the host operator to activate the link for this TIC. • If the problem persists, refer to the *Token-Ring Network Problem Determination Guide* in conjunction with page 12-12 of this guide.
RING FAILURE (06)	The TIC is the active monitor and cannot complete the ring purge process in the time allowed. • Ask the host operator to activate the link for this TIC. • If the problem persists, refer to the *Token-Ring Network Problem Determination Guide* in conjunction with page 12-12 of this guide.
RING BEACONING (07)	The monitor contention process was not completed in the time allowed, or a beacon frame was received. • Unplug the lobe cable from the IBM 8228 Multistation Access Unit. • Ask the host operator to activate the link for this TIC. • Look at RING STATUS, (field **D** on the screen): – LOBE WIRE FAULT is ON (without any other status ON): Refer to the *Token-Ring Network Problem Determination Guide,* in conjunction with page 12-12 of this guide. – Another ring status (field **D**) is ON: Perform the appropriate action.
DUPL NODE ADDRESS (08)	Some other adapter on the ring has the same specific address as this TIC. • Check the installation and generation parameters, and correct them if necessary. Then ask the host operator to activate the link for this TIC. • If the problem persists, refer to the *Token-Ring Network Problem Determination Guide* in conjunction with page 12-12 of this guide.
REQUEST PARAMETER (09)	The parameter server was not able to provide the requested parameters in the time allowed. • Ask the host operator to activate the link for this TIC. • If the problem persists, refer to the *Token-Ring Network Problem Determination Guide* in conjunction with page 12-12 of this guide.
REMOVE RECEIVED (10)	A remove force MAC frame was received by this TIC during the open process. • Contact the token-ring operator, who should help you solve this problem. • When the problem is corrected, ask the host operator to activate the link for this TIC.
IMPL FORCE RECEIVED (11)	An IMPL force MAC frame was received by the TIC and the adapter has been closed. The adapter is in the same state as after initialization and will have to be opened again.

For any other message in field **C** refer to the *3745 Advanced Operations Guide.*

Interpreting Fields D



The meaning of each ring status indicator and the actions to perform are given below.

Table 12-3 (Page 1 of 3). Token-Ring - Ring Status Indicator Description and Action

Ring Status Indicator D	Description and Action
SIGNAL LOSS	A receiver exception currently exists in the TIC. The TIC is not receiving signals from the ring. This is a temporary condition and will either be recovered by the ring protocol or will go into a beacon condition (see HARD ERROR).
HARD ERROR	The TIC is transmitting or repeating beacon MAC frames. (See also TRANSMIT BEACON.)
SOFT ERROR	The TIC has transmitted a soft error report frame. This is ring-recoverable. • No action if SOFT ERROR is ON from time to time. • If SOFT ERROR is permanently ON: – General traffic degradation over all the Ring Stations including this adapter station: If no: no action If yes: Refer to the *Token Ring Network Problem Determination Guide*, SX27-3710 for Soft Errors investigation and resolution. – Traffic degradation over this adapter station only: Check the correct connections of the lobe cable between the Adapter and the MAU. If the problem persists: ☎
TRANSMIT BEACON	Used in conjunction with HARD ERROR. If both indicators are ON, this TIC is generating beacon frames. Same as HARD ERROR.

Table 12-3 (Page 2 of 3). Token-Ring - Ring Status Indicator Description and Action

Ring Status Indicator D	Description and Action
SIGNAL LOSS ON and HARD ERROR ON and TRANSMIT BEACON ON	• Unplug the TIC cable from the IBM 8228. • Ask the host operator to activate the link for this TIC. • Press F5 to start refresh. – If an OPEN ERROR message is displayed in field C of the screen, perform the action required for that message. – If LOBE WIRE FAULT is ON (field D) with no message on line C, plug the TIC cable in again and refer to the *Token-Ring Network Problem Determination Guide,* in conjunction with page 12-12 of this guide. – If LOBE WIRE FAULT is OFF (field D) with no message on line C, plug the TIC cable in again. Use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not yet fixed then  and give BER information.
SIGNAL LOSS OFF and HARD ERROR ON and TRANSMIT BEACON OFF	• Ask the host operator to activate the link for this TIC. • Press F5 to start refresh. • Analyze the information displayed on the screen using the *Token-Ring Network Problem Determination Guide,* in conjunction with page 12-12 of this guide.
LOBE WIRE FAULT	The TIC has detected an open or a short circuit in the lobe data path. With no OPEN ERROR message in field C • Check the cable connected to the IBM 8228. Reconnect if necessary. • Ask the host operator to activate the link for this TIC. • Press F5 to start refresh. – If LOBE WIRE FAULT remains ON, use another IBM 8228 socket. – Ask the host operator to activate the link for this TIC. – If LOBE WIRE FAULT remains ON, change the cable to the IBM 8228. – Ask the host operator to activate the link for this TIC. – If LOBE WIRE FAULT remains ON, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not yet fixed then  and give BER information.

Table 12-3 (Page 3 of 3). Token-Ring - Ring Status Indicator Description and Action

Ring Status Indicator D	Description and Action
AUTO REMOVAL ERROR 1	The TIC detected an internal hardware error during the beacon auto-removal process and removed itself from the ring. • Ask the host operator to activate the link for this TIC. • Press F5 to start refresh. • If the problem persists, use the MOSS ELD function to analyze the TRSS BERs type 15 related to the last encountered token-ring problems. By using the ELD detail screen, you may find additional information which can help you fix the problem. If not yet fixed then ☎ and give BER information.
REMOVE RECEIVED	The TIC received a remove MAC frame from the network manager and has removed itself from the ring. • Contact the token-ring operator, who should help you solve this problem. • When the problem is corrected, ask the host operator to activate the link for this TIC.
COUNTER OVERFLOW	An error counter in the TIC has exceeded its maximum value of 255.
SINGLE STATION	There are no other stations connected to this ring. • If other stations are on the ring, use another IBM 8228 socket. • If the problem persists, refer to the *Token-Ring Network Problem Determination Guide,* in conjunction with page 12-12 of this guide.
RING RECOVERY	The monitor contention process is in progress on the ring. No action required. If the ring does not recover, another ring status indicator should appear within 30 seconds.

MSA Fields Definition (Token-Ring/TIC Information)

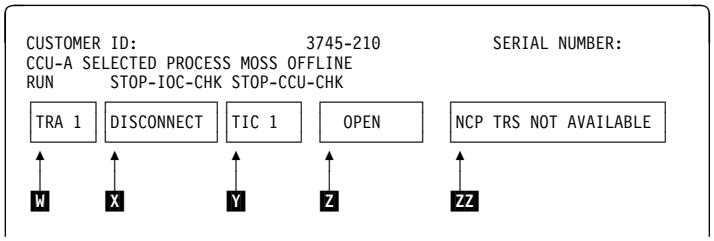


Figure 12-1. MSA Fields definition (Token-ring Information)

Token-Ring information is displayed on line 4 for CCU-A, and on line 7 for CCU-B.

Field W TRA number (1, 2, 5 or 6). Indicates that the TRA has been selected (TRS or TID function).

Field X TRA mode, updated after TRA selection

Note: If field F indicates CCU INTERRUPTS DISABLED, the TRA mode has no meaning. Refer to CCU information in MSA field descriptions of the *3745 Advanced Operations Guide*.

The possible modes are:

CONNECT: The TRA is operational and is under NCP control. The control program handles all interrupts (except in the case of an MIOH error).

The PIO disable and the disconnect bits in the TRM level 1 error status are OFF.

DISCONNECT: The TRA does not run under the control of the control program but under the control of the MOSS microcode. MOSS handles all interrupts and PIOs to/from the TIC.

The PIO disable and the disconnect bits in the TRM level 1 error status are OFF.

UNKNOWN: A non-recoverable error occurred during the connection/disconnection process, or an MIOC/IOC error occurred while getting level 1 error status during TRA selection. Connect/disconnect may be re-tried.

Field Y TIC1 or TIC2

TIC n: Selected TIC number (1 or 2), updated after a TIC selection.

Field Z Current mode of the selected TIC, updated after a TIC selection or a refresh of the screen display

The TIC must be in one of the seven following modes (as reported by NCP):

IDLE: The TIC has not yet been reset by NCP.

RESET: The TIC has been reset by NCP but has not yet been initialized.

INITIALIZED: The TIC has been initialized but has not yet been open or disabled. Initialization parameters have been passed to the TIC by NCP.

OPEN: The TIC has been inserted into the token-ring and is in normal operation. Open parameters have been passed, and receive and transmit operations have been started.

CLOSED: The TIC has been opened since initialization, but has since been closed (by the host).

FROZEN: An error was detected by NCP and the following actions were taken by NCP:

- Interrupts from this TIC are disabled.
- DMA from this TIC is disabled.
- The TIC is reset.

DISABLED: The associated TRA has been disconnected by MOSS. NCP will send no PIO to this TIC.

(blank): There is no TIC mode if NCP is not online.

The TIC mode is derived from NCP MAC layer status obtained from NCP. The following table gives the correspondence:

Table 12-4. TIC Mode and MAC Status

Medium Access Control (MAC) Status	TIC Mode
Idle	Idle
TIC resetting hard	Idle
TIC resetting soft	Idle
Initialization list transfer	Reset
Initialized	Initialized
Open started	Initialized
Receive initialization	Initialized
Transmit initialization	Initialized
Started	Open
Transmit in progress	Open
Close in progress	Open
Closed	Closed
Frozen	Frozen
Disconnected	Disabled

Field ZZ NCP TRS NOT AVAILABLE

Indicates that:

- At the IPL of NCP, the TRSS was not available and did not pass necessary TRSS information to MOSS, or
- An error has occurred when trying to access NCP control blocks needed by the TRSS services.

Several functions which depend upon NCP will not be available.

Otherwise, the ZZ field is blank.

Use this page to adapt the instructions given in the *Token-Ring Network Problem Determination Guide*.

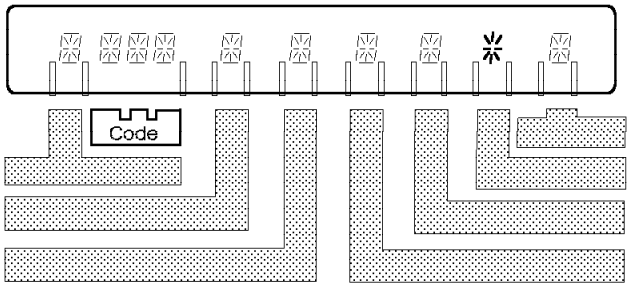
If	Do
The IBM* Token-Ring Network Problem Determination Guide tells you to:	
Record the address of the beaconing device and its nearest active upstream neighbor (NAUN) or Record the address of device 2 and device 1.	Refer to the NetView detail screen for the alert corresponding to the ring beaconing condition. If you are not using NetView, use the problem determination procedures for some other device on the ring to determine these addresses.
Remove the defective device from the ring by resetting it or powering it off.	• Deactivate the link for this TIC at the host. • Unplug the cable from the IBM 8228.
Remove the device with the highest error count.	This information must be obtained from the ring-error monitor. Contact the token-ring operator.
Restart the network application program on the removed device.	Activate the link for this TIC at the host.
Run the adapter diagnostic.	

- Ask the host operator to activate the link for this TIC.
- Select and perform the TRSS Interface Display (TID) function from the 3745 console (12-1)
  - If there is an alarm, perform the action described in Chapter 1, "Alarms and Alerts."
  - If there is a BRING-UP error or an INITIALIZATION error (field C), take appropriate action.

Chapter 13. Disk or Diskette Problems

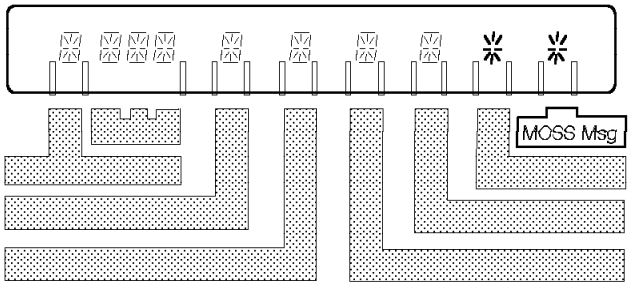
If → **Do**

A hex code is displayed:



Go to Chapter 3 to perform appropriate actions.

An alarm is waiting.



Go to Chapter 1 to perform appropriate actions.

A message is displayed in the message area of the MOSS console. See **Message Area** on the next screen.

Go to the *3745 Advanced Operations Guide* for a description of all function messages.

```
FUNCTION ON SCREEN:                    FUNCTION PENDING:




===>                    Message Area
  ALARM                                          Ref Code
F1:END  F2:MENU2  F3:ALARM   F4:MENU1
```

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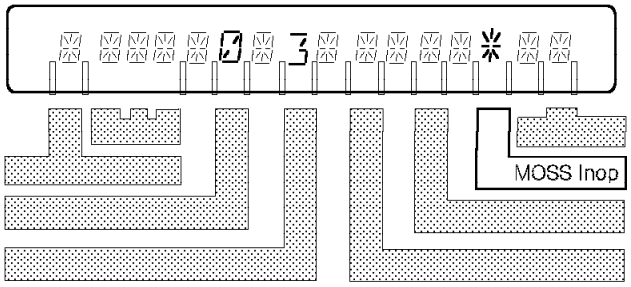
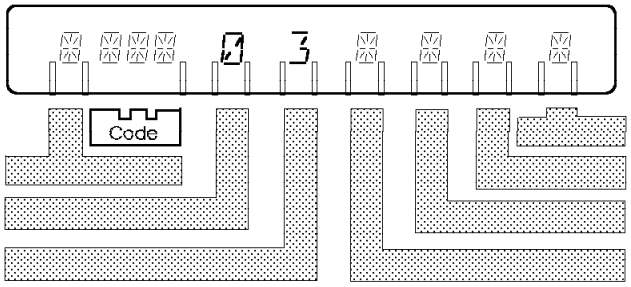
Chapter 14. MOSS Inop is On





1 Note the hex code on the control panel, if:

- **000** or **blank**, go to the next step.
- Not **000** or **blank**, perform action required for that code. (See Chapter 3, "Hexadecimal Codes on the Control Panel.")

2 Try to take a MOSS dump from the control panel:
Refer to the *3745 Basic Operations Guide*.

- Press **Function** repeatedly until **2** is displayed.
- Press Validate.
- When the hex code is **F01** (MOSS dump complete), go to step 3.
- If the hex code is not F01 after 2 minutes, go to Chapter 3, "Hexadecimal Codes on the Control Panel" and follow directions for the appropriate code.

3 Try to IML the MOSS from the control panel.
Refer to the *3745 Basic Operations Guide.*

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4 Transfer the MOSS dump to the host so it can be printed for later use by the 3745 service representative. Refer to the *NCP, SSP, and EP Diagnosis Guide.*

5 If the problem persists:

- Note the hex code.
- 

Chapter 15. Control Panel Problems

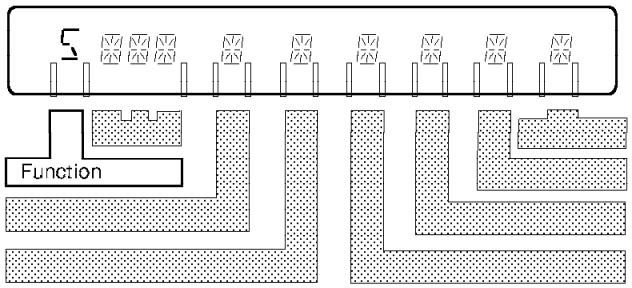
Perform the following control panel test if you suspect there is a problem on the control panel, or if at least one segment of a display or indicator is not lit.

For example:  instead of 

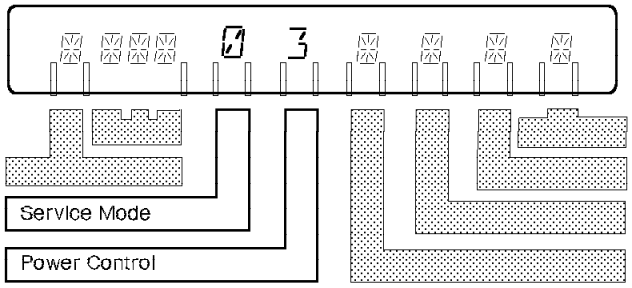
The control panel test does not disturb your applications.

To interrupt the test, press **Exit**. (Refer to Appendix A, “Control Panel” if needed.)

Note:
At any time during the panel test, if **5 remains steady** on the Function display, press **Exit** and 

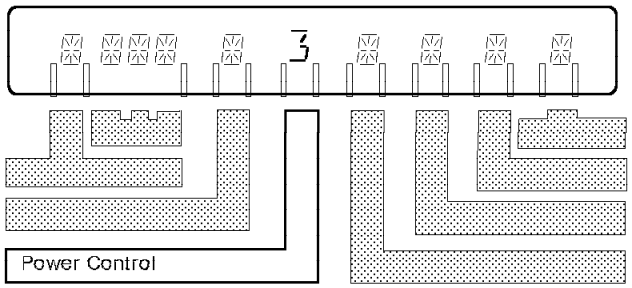


1 Before you start the test, note the Power Control and Service Mode displays for later use in step 15.



2 Press **Power Control** repeatedly until **3** blinks.

- If **3** does not blink or is incorrectly displayed, press **Exit** and 
- If **3** blinks or is correctly displayed, press **Validate**, then go to next step.



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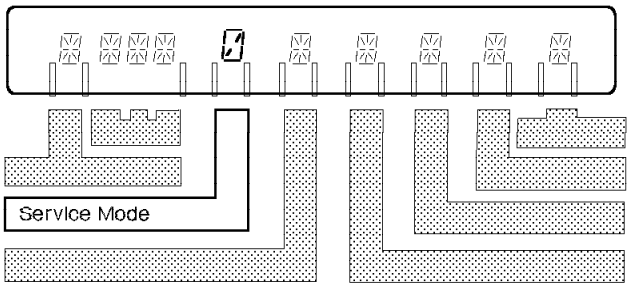
3 Press **Service Mode** repeatedly until **0** blinks.

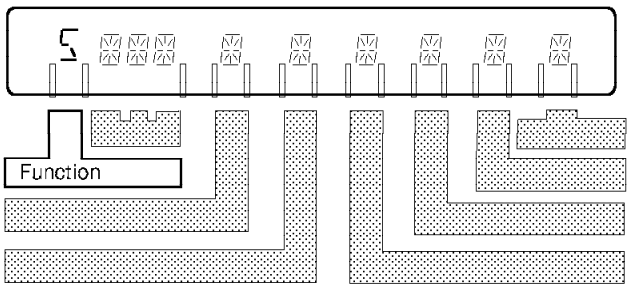
- If **0** does not blink or is incorrectly displayed, press **Exit** and ☎
- If **0** blinks or is correctly displayed, press **Validate**, then go to next step.

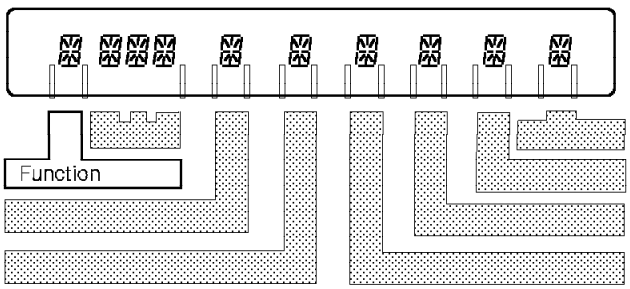


4 Press **Function** repeatedly until **5** blinks.

- If **5** does not blink or is incorrectly displayed, press **Exit** and ☎
- If **5** blinks and is correctly displayed, press **Validate**.

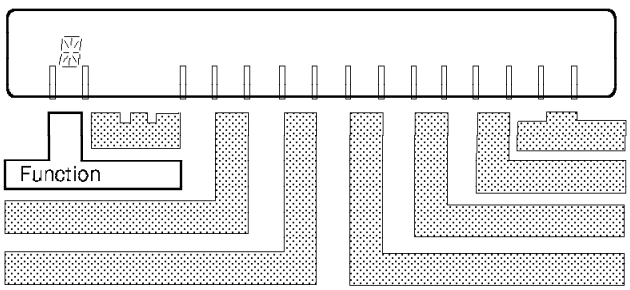
  All segments of all the displays and indicators of the control panel should be lit, as illustrated.
  - If all segments are lit, go to next step.
  - If at least one segment is not lit, press **Exit** and ☎





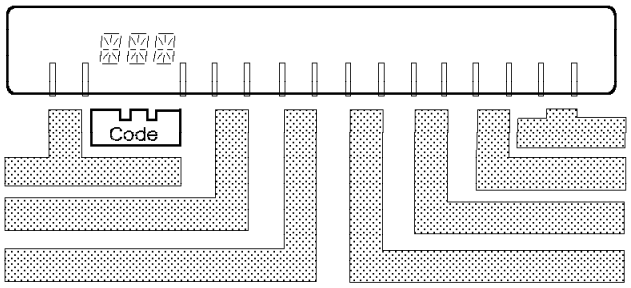
5 Press **Function** once.

- If all segments of the Function display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎



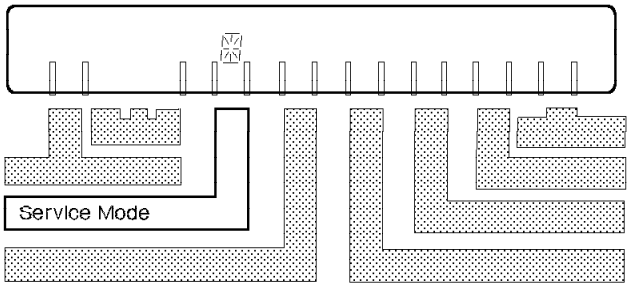
6 Press **Function** a second time.
The three digits of the Code display are tested one after each other.
Press **Function** again to test the next digits.

- If all segments of the Code display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎



7 Press **Service Mode** once.

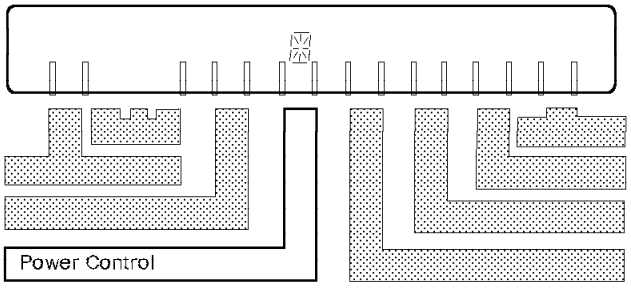
- If all segments of the Service display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎



8 Press **Service Mode** a second time.

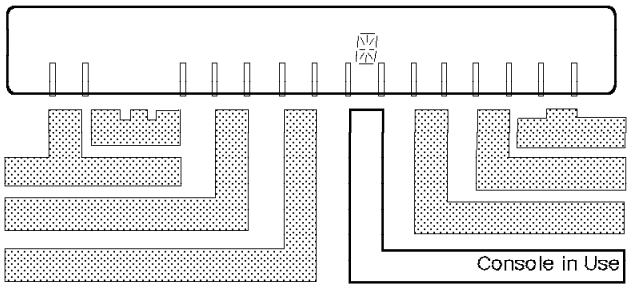
- If all segments of the Power Control display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎

(If you press Service Mode again, you return to step 7.)



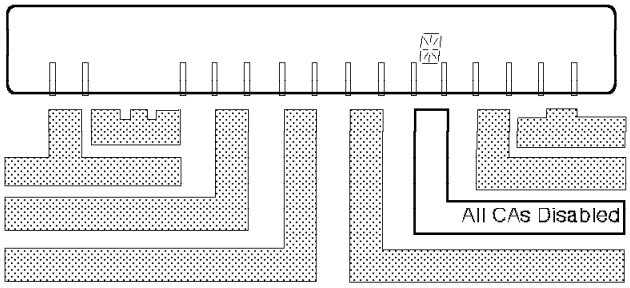
9 Press **Power Control** once.

- If all segments of the Console display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎



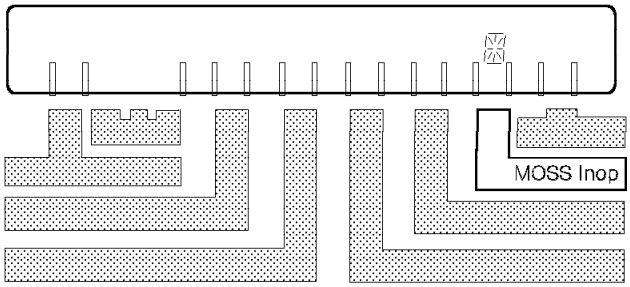
10 Press **Power Control** a second time.

- If all segments of the All CAs Disabled display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎



11 Press **Power Control** a third time.

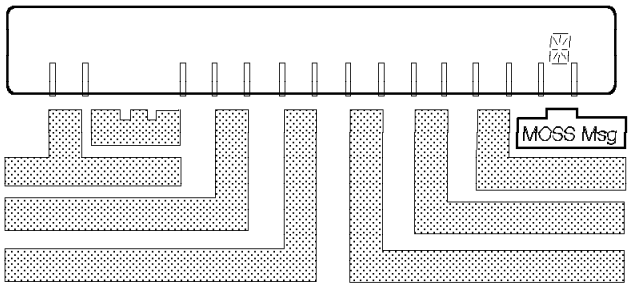
- If all segments of the MOSS Inop display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and ☎



12 Press **Power Control** a fourth time.

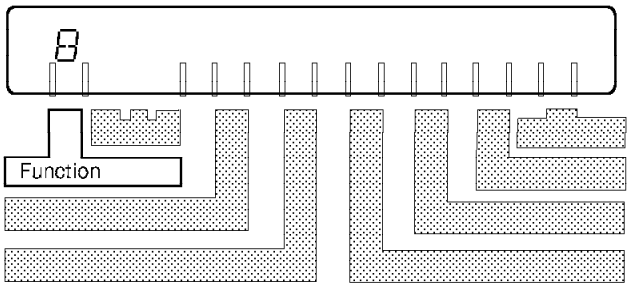
- If all segments of the MOSS Msg display are lit, go to next step.
- If at least one segment is not lit, press **Exit** and 

  (If you press Power Control another time, you return to step 9.)



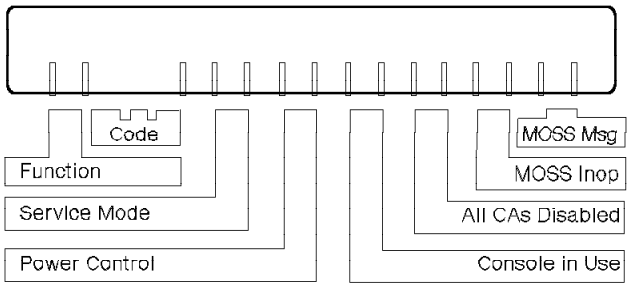
13 Press **Power On Reset** once.

- If **8** does not blink in the Function display go to next step.
- If **8** blinks in the Function display, press **Exit** and ☎



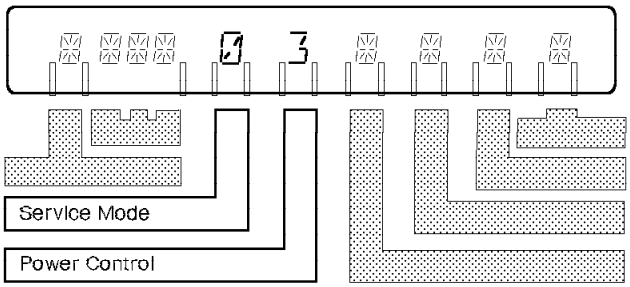
14 Press **Power Off** Once.

- If control panel displays and indicators are completely blank, go to next step.
- If control panel displays and indicators are not completely blank, press **Exit** and ☎



15 Press **Exit** once.

- If **Power Control** and **Service Mode** displays are set as before the test: The test is successfully completed, and no errors have been detected. The control panel returns to normal operational mode.
- If **Power Control** and **Service Mode** displays are not set as before the test, press **Exit** and ☎



Chapters 16, 17, and 18

Replace this page by the separator:

16 - Wrap Test

Chapter 16. Wrap Test 16-1

Chapter 17. Console Link Test 17-1

Chapter 18. Unexpected Problems with Console Functions 18-1

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Replace this page by the separator:

16 - Wrap Test

Chapter 16. Wrap Test 16-1

Chapter 17. Console Link Test 17-1

Chapter 18. Unexpected Problems with Console Functions 18-1

Chapter 16. Wrap Test

A complete description of the wrap test function, including messages, is given in the *3745 Advanced Operations Guide.*

Before you initialize a wrap test:

- NCP must be loaded and running.
- MOSS must be online (MOSS-ONLINE is displayed in the machine status area). The machine status area (MSA) is described in the *3745 Advanced Operations Guide*.
- The CCU control program must be running (PROCESS and RUN are displayed in the machine status area).
- The scanner involved with the wrap test must be loaded. (To IML the scanner, refer to MOSS IMS function in the *3745 Advanced Operations Guide*.)
- The configuration data file must have been updated after any hardware configuration change, for example, a cable change. Refer to MOSS CDF function in the *3745 Advanced Operations Guide*.
- The line must have been defined at control program generation time.

  Ask the host operator to deactivate the line that you want to test.

Warning

1. When an automatic LIC wrap test is performed, all lines of the LIC must be deactivated.
2. Considering the load of a scanner, **a wrap test cannot be run on one line if the total weight of the other activated lines of this scanner is already 100%.** Refer to the *3745 Connection and Integration Guide* for the line weight calculation. (For instance, on a low speed scanner, if only one line is activated for a 256 kbps transmission speed, the wrap test will not work on any other line of this scanner.)
3. You cannot initialize the wrap test function on a line that is being traced (line trace function) or tested (line test function).
4. Before you start a tailgate wrap test, get the wrap plug from the installation coordinator.
   For the identification of LICs and wrap plugs, refer to C-1.

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1 Power on and log on the operator console. Logon procedures are documented in the *3745 Basic Operations Guide.*

2 Press the following keys:

[W] [T] [T] [| SEND]

To select the wrap test function.

The next screen is displayed:

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST INITIAL SELECTION


- SELECT ONE OPTION (1,2) ==>

           1 = AUTOMATIC WRAP TEST ON A LIC

           2 = WRAP TEST AT ANY LEVEL



THEN PRESS SEND
===>

F1:END  F2:MENU2  F3:ALARM
```

3 Only option 2 can be selected to perform the wrap test on HSS lines.

- [1] [| SEND] (Automatic wrap test)
  1. Have all the lines of the LIC deactivated from the host.
  2. Enter the address of the line you want to test.
  3. Press SEND to start the wrap test.
  4. After about 30 seconds, the wrap test ends, and one of the following messages is displayed:

     WRAP TEST COMPLETED, THE LIC IS FAULTY.
     Replace the faulty LIC. You can refer to the 3745 *Connection and Integration Guide* to locate the LIC.

     WRAP TEST COMPLETED, THE LIC IS OK.

- [2] [| SEND] (Wrap test at any level)
  The next screen is displayed:

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                 WRAP TEST INITIALIZATION

- ENTER LINE ADDRESS (TSS: 0-895  HPTSS: 1024-1039) ==> 1

- ENTER WRAP TYPE (1 TO 3)    ==> 1
    1 = DATA
    2 = CONTROL LEADS

- ENTER WRAP LEVEL (1 TO 6) ==>
1 = LOCAL MODEM                4 = TAILGATE
2 = NTT CABLE (TSS ONLY)       5 = REMOTE MODEM (HPTSS/DATA WRAP ONLY)
3 = LIC (TSS & DATA WRAP ONLY) 6 = INTERNAL (HPTSS ONLY)
         LINE(S) TO BE TESTED MUST BE DISABLED/DEACTIVATED
===>

F1:END  F2:MENU2  F3:ALARM     F4:INITIAL SELECTION
```

4 Ask the host operator to deactivate the line. When the line is deactivated, go to next step.

5 Enter the line address.

Press 

6 [1] to select DATA or [2] to select CONTROL LEADS

Test the CONTROL LEADS first.

- CONTROL LEADS wrap type is not valid for LIC3.
- The control leads default pattern applies only to IBM 386x modems.

Press 

7 [1] to select MODEM, or [4] to select TAILGATE.

Refer to the *3745 Advanced Operations Guide* for the function and description of the test.

8 [SEND] A screen similar to the next one is displayed:

```
------------------------------------------------------ mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                 WRAP PATTERN SELECTION

LINE ADDRESS: 2        TYPE: DATA        LEVEL: LIC
LCD C: BSC EBCDIC     CNTRL PGM: NCP      LIC TYPE: 3

- TEST IN TRANSPARENT MODE (Y,N) ==>  A
- EIB OR ITB MODE (Y,N)          ==>  B

- SELECT ONE OPTION (1 TO 3)     ==>  C
    1 = USE DEFAULT PATTERN
    2 = DISPLAY DEFAULT PATTERN
    3 = CREATE PERSONAL PATTERN
  THEN PRESS SEND

===>

F1:END  F2:MENU2  F3:ALARM       F5:CANCEL
```

9

- Type [Y] or [N] if lines **A** and **B** are displayed:

  A According to the LCD value, one of the following may be displayed:

  TEST IN TRANSPARENT MODE (Y,N) = = >
  (In transparent mode, control characters are considered as data.)

  TRANSPARENT MODE IS NOT SUPPORTED
  When you defined the line in emulation mode or in NCP-ASCII.

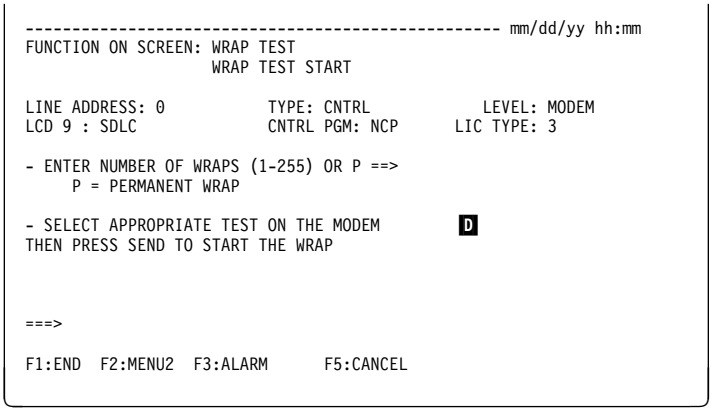
  ONLY TRANSPARENT MODE IS SUPPORTED
  When you defined the line in EP-ASCII (LCD=E).
  LCD has been defined at control program generation and LCD=E means BSC ASCII TRSP.

  B In BSC only, the following is displayed:

  EIB or ITB MODE (Y,N) = = >

  - In NCP, if you enter Y, ITBs will be taken as control characters and not as data in your personal pattern (there is no ITB in default patterns).
  - In EP, if the line has been defined in ITB mode at generation, enter Y.

- On line **C**: [1] [SEND] to select default pattern.
- The next screen is displayed.



10 Press the following keys:

1 0 to perform 10 wraps.

Field **D** indicates what to do according to the wrap level selected on the screen of the page 16-3.

Modem level:

- Take appropriate actions on the modem to put it in loop back.
- SEND to start the test.
- Go to step 11.

Tailgate level:

1. **FIRST,** remove the corresponding LIC cable at the wall socket.
2. Remove the corresponding LIC cable from the tailgate.
3. Plug the wrap plug into the tailgate.

   Refer to Appendix C of this book for identification of LICs and wrap plugs.

   To locate the LIC on the machine, refer to the *3745 Connection and Integration Guide.*
4. SEND to start the test.
5. Go to step 11.

Note: In order to test the **LIC3** card, it is necessary to reverse the LIC3 wrap cable after the first test pass, then run the test again.

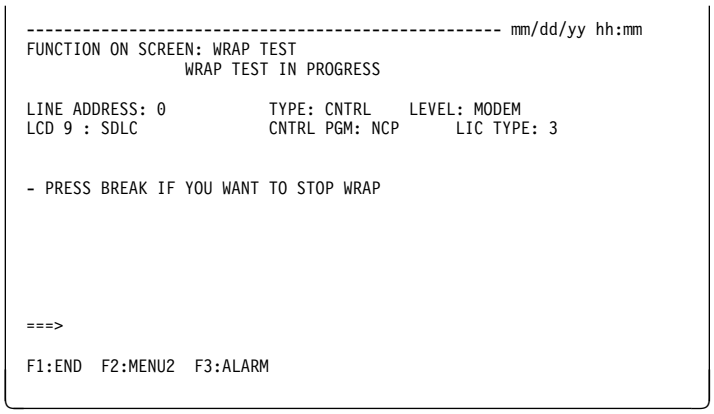
11 While the wrap test is in progress, the next screen is displayed.

Wait until the test is complete then go to steps 12, 13, and 14 for results analysis.

Do not press BREAK

Note: Refer to your console documentation to identify the BREAK key. For instance, the BREAK key may be:

- A combination of **SEL.FUNCT** and **PAUSE** (on 316x consoles).
- The ATTN key.



12 **WRAP TEST SUCCESSFUL** is displayed on next screen **1** .

- **The test is successful** if:
  All transmitted wraps have been correctly received.
  - NBR OF WRAPS TRANSMITTED: 010
  - NBR OF WRAPS RECEIVED: 010
  - NBR OF WRAPS INCORRECT: 000
- **Actions:**
  1. If you have not run both data and lead options (as shown on step 6):
     - F4 and re-run this step using the option you have not yet tried.
     - Go back to step 5.
  2. If you are wrapping a LIC3, reverse the wrap cable then:
     - F4 and re-run both data and lead options.
     - Go back to step 5.
  3. If you have run both data and control lead options then:
     - F1 to end the function.
     - Return to the problem determination procedure you come from (Chapter 9 or 10) to perform the specific action.

       If you started wrap tests without performing any other tests, for a better problem determination, we advise you to go to:
       - Chapter 9, “LIC and Line Problems (LSS)” on page 9-1.
       - Chapter 10, “Line Problem (HSS)” on page 10-1.
- Remove the wrap plug and reconnect the LIC cable(s), **first** at the 3745 end, then at the wall socket.

Screen **1**

```
---------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST RESULTS

LINE ADDRESS: 0           TYPE: CNTRL    LEVEL: MODEM
LCD 9 : SDLC              CNTRL PGM: NCP      LIC TYPE: 3

NBR OF WRAPS        NBR OF WRAPS     NBR OF WRAPS
TRANSMITTED: 010    RECEIVED: 010    INCORRECT: 000




===> WRAP TEST SUCCESSFUL

F1:END  F2:MENU2  F3:ALARM F4:TEST INITIALIZATION
```

13 **WRAP TEST UNSUCCESSFUL, ERRONEOUS PATTERN RECEIVED**
is displayed on next screens **2** and **3** .

- **The test is not successful** if:
  - All transmitted wraps have been incorrectly received (screen **2**).
    - NBR OF WRAPS TRANSMITTED: 010
    - NBR OF WRAPS RECEIVED: 010
    - NBR OF WRAPS INCORRECT: 010
  - Not all transmitted wraps have been received and the received ones are incorrect (screen **3**).
    - NBR OF WRAPS TRANSMITTED: 010
    - NBR OF WRAPS RECEIVED: 008
    - NBR OF WRAPS INCORRECT: 005
  - The following message is displayed:
    PRESS SEND TO DISPLAY FIRST INCORRECT PATTERN
    (Field **X** on the screen).
- **Actions:**
  - F1 to end the function.
  - Return to the problem determination procedure you come from (Chapter 9 or 10) to perform the specific action.

    If you started wrap tests without performing any other tests, for a better problem determination, we advise you to go to:
    - Chapter 9, “LIC and Line Problems (LSS)” on page 9-1.
    - Chapter 10, “Line Problem (HSS)” on page 10-1.
  - This problem may be due to an overload of the scanner. Refer to the *3745 Connection and Integration Guide* for the line weight calculation.
- Remove the wrap plug and reconnect the LIC cable(s), **first** at the 3745 end, then at the wall socket.

Screen **2**

```
---------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST RESULTS

LINE ADDRESS: 0           TYPE: CNTRL    LEVEL: MODEM
LCD 9 : SDLC              CNTRL PGM: NCP      LIC TYPE: 3

NBR OF WRAPS        NBR OF WRAPS     NBR OF WRAPS
TRANSMITTED: 010    RECEIVED: 010    INCORRECT: 010  .



- PRESS SEND TO DISPLAY FIRST INCORRECT PATTERN     X

===> WRAP TEST UNSUCCESSFUL, ERRONEOUS PATTERN RECEIVED

F1:END  F2:MENU2  F3:ALARM F4:TEST INITIALIZATION
```

Screen **3**

```
---------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST RESULTS

LINE ADDRESS: 0           TYPE: CNTRL    LEVEL: MODEM
LCD 9 : SDLC              CNTRL PGM: NCP      LIC TYPE: 3

NBR OF WRAPS        NBR OF WRAPS     NBR OF WRAPS
TRANSMITTED: 010    RECEIVED: 008    INCORRECT: 005  .



- PRESS SEND TO DISPLAY FIRST INCORRECT PATTERN     X

===> WRAP TEST UNSUCCESSFUL, ERRONEOUS PATTERN RECEIVED

F1:END  F2:MENU2  F3:ALARM F4:TEST INITIALIZATION
```

14 **WRAP TEST UNSUCCESSFUL, SOME DATA NOT RECEIVED**
is displayed on next screen **4** .

- **The test is not successful** if:
  - NBR OF WRAPS TRANSMITTED: 010
  - NBR OF WRAPS RECEIVED: 008
  - NBR OF WRAPS INCORRECT: 000
  - Only the message 'WRAP TEST UNSUCCESSFUL, SOME DATA NOT RECEIVED' is displayed.
- **Actions:**

  Note: The wrap plug or the wrap cable may not be plugged on the LIC.

  - F1 to end the function.
  - Return to the problem determination procedure you come from (Chapter 9 or 10) to perform the specific action.

    If you started wrap tests without performing any other tests, for a better problem determination, we advise you to go to:

    - Chapter 9, “LIC and Line Problems (LSS)” on page 9-1.
    - Chapter 10, “Line Problem (HSS)” on page 10-1.
- Remove the wrap plug and reconnect the LIC cable(s), **first** at the 3745 end, then at the wall socket.

Screen **4**

```
---------------------------------------------------- mm/dd/yy hh:mm
FUNCTION ON SCREEN: WRAP TEST
                    WRAP TEST RESULTS

LINE ADDRESS: 0           TYPE: CNTRL    LEVEL: MODEM
LCD 9 : SDLC              CNTRL PGM: NCP      LIC TYPE: 3

NBR OF WRAPS        NBR OF WRAPS     NBR OF WRAPS
TRANSMITTED: 010    RECEIVED: 008    INCORRECT: 000




===> WRAP TEST UNSUCCESSFUL, SOME DATA NOT RECEIVED

F1:END  F2:MENU2  F3:ALARM F4:TEST INITIALIZATION
```

Chapter 17. Console Link Test

Performing the Test

Perform a console link test to check the cable from the 3745 to one of the following:

- Local console
- Alternate console
- Local modem (at the 3745 end) for a remote console
- Local modem (at the 3745 end) for an RSF connection.

The console link test can be run without stopping your applications. Only one console can be active at a time.

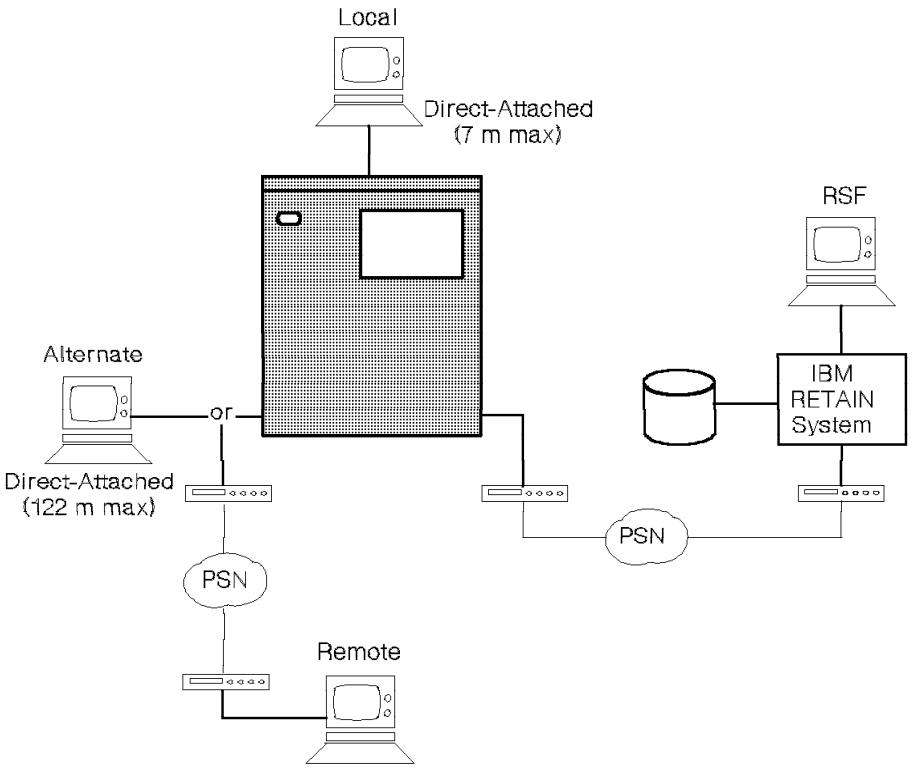


Figure 17-1. IBM 3745 with its Four Different Types of Consoles

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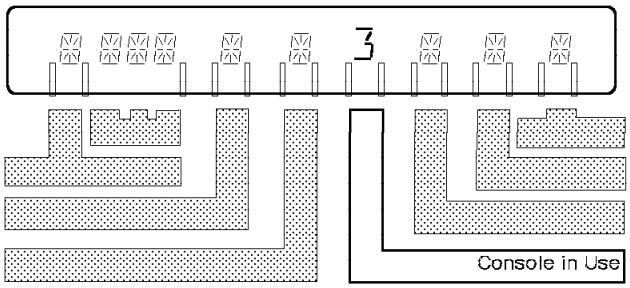
1 Before you start a console link test:

Get the female wrap plug (PN 6398697) from the installation coordinator, (see Figure C-6 on page C-3).

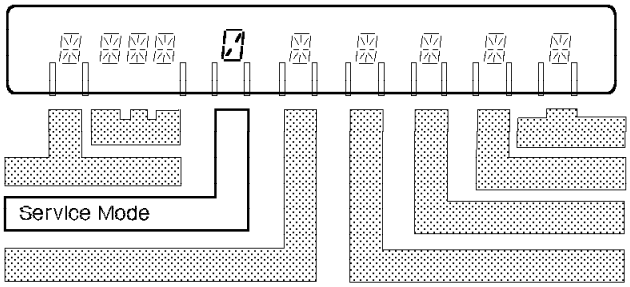
If a console is in operation (look at Console In Use on the control panel), ask the operator to log off.

1 means remote or alternate console.
2 means RSF console.
3 means local console.



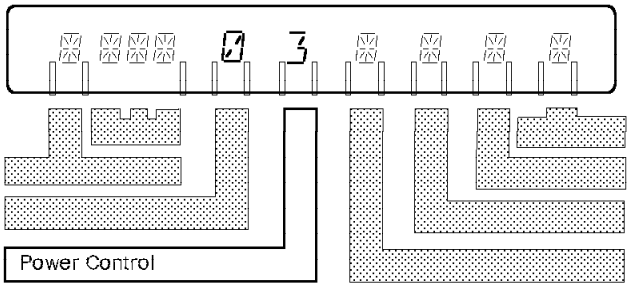
2 Press **Service Mode** repeatedly until **0** is displayed, then press **Validate.**

If 0 is already displayed, go to next step.



3 Note the digit value on the Power Control display.

If 3 is already displayed, go to next step. Otherwise press **Power Control** repeatedly until **3** is displayed; then press **Validate.**



4 For the local or alternate console: Disconnect the cable **1** from the local or alternate console.

For the remote console or the RSF connection: Disconnect the cable **2** or **3** from the local modem at the 3745 end.

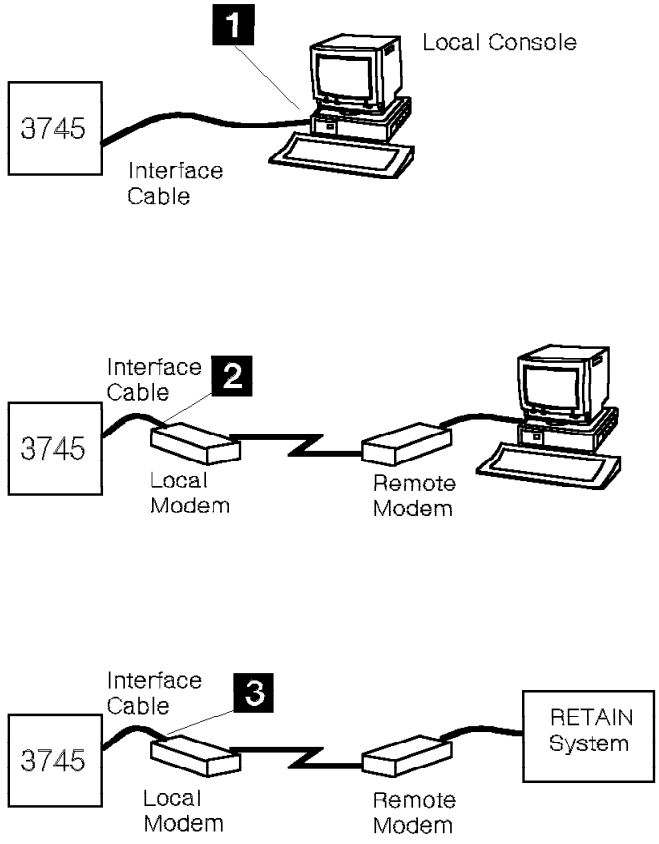


Figure 17-2. Local, Remote, and RSF Console Links

5 Plug the wrap plug into the end of the disconnected cable.

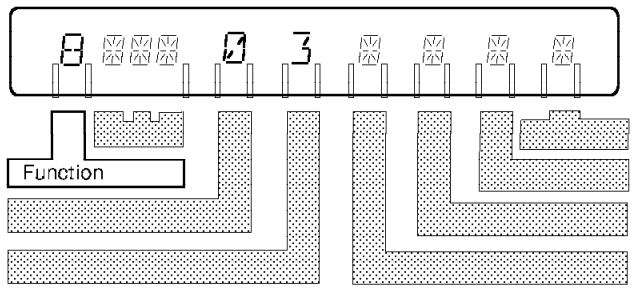
6 Press **Function** repeatedly until one of the following is displayed:

6 (remote or alternate console)
7 (RSF console)
8 (local console).

Press **Validate.**

If the 3745 is already powered on, the console link test starts.

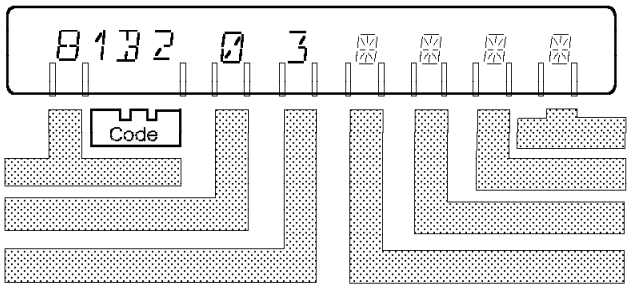
If the 3745 is not powered on, press **Power On Reset.**



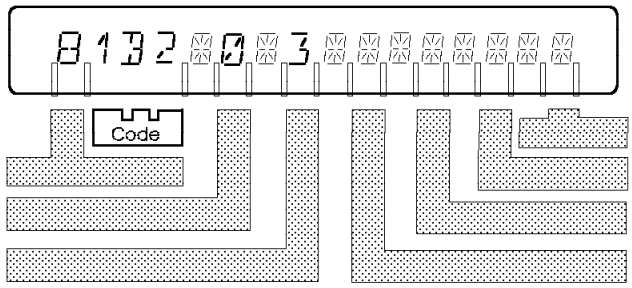
7 Read the progression of the console link test on the hex display. Wait until one of the following codes is displayed.

If it is:

1. **1B2, 1B4, or 1B6:**
   Go to page 17-5.
2. **1A1, 1A4, or 1A7:**
   Go to page 17-6.
3. **1A0, 1A3, or 1A6:**
   Go to page 17-8.
4. **1A2, 1A5, or 1A8:**
   There is a problem in the 3745.
   - ☎
   - Unplug the wrap plug from the end of the disconnected cable.
   - Reconnect the console cable to the console.
   - IML MOSS from the control panel.
5. **Any other codes:** Go to Chapter 3, "Hexadecimal Codes on the Control Panel."



Hex Display Codes are 1B2, 1B4, or 1B6



There is no problem on the console link. Wait approximately 2 minutes to ensure that there is no transient problem.

1B2= no problem on local console link
1B4= no problem on remote or alternate console link
1B6= no problem on RSF console link.

Follow the procedure below to set the operator console and the 3745 as they were before the test.

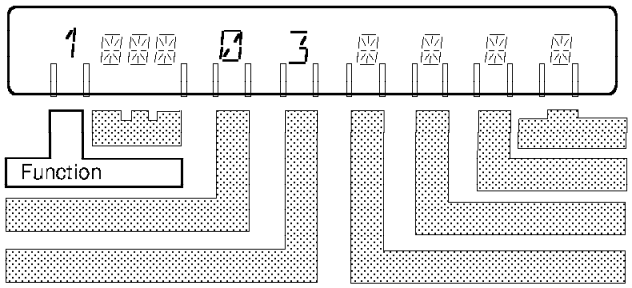
1 Unplug the wrap plug from the cable. Ignore the hex codes that may be displayed when unplugging the wrap plug.

2 Reconnect the console cable to the console.

3 IML the MOSS from the control panel:

- Press **Function** repeatedly until 1 is displayed, then
- Press **Validate.**

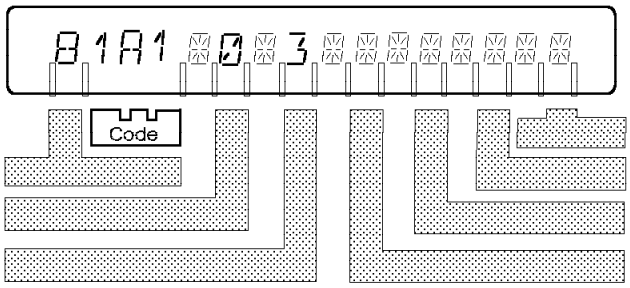
A complete description of the MOSS IML is given in the *3745 Basic Operations Guide.*



4 Set the Power Control display as it was before step 3 on page 17-2, then press **Validate.**

Hex Display Codes are 1A1, 1A4, or 1A7

There is a problem on the console link being tested. Follow the procedure below.



1 Unplug the wrap plug from the cable.

2 Locate the console cable sockets on the 3745.

3 Disconnect the cable from the socket.

4 Plug the wrap plug into the appropriate socket. Go to next step.

5 Do one of the following:

- If **1A1, 1A4, or 1A7** remains on the hex display, there is a problem on the wrap plug or on the socket at the tailgate for:

  1A1 = The local console

  1A4 = The alternate or remote console

  1A7 = The RSF console.
- If **1B2, 1B4, or 1B6** is displayed on the hex display, there is a problem on the console cable or on the console cable connector at the console end, for:

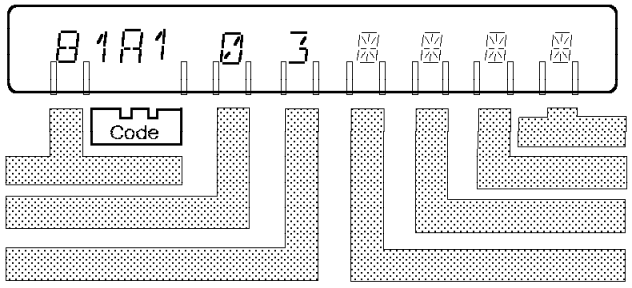
  1B2 = The local console

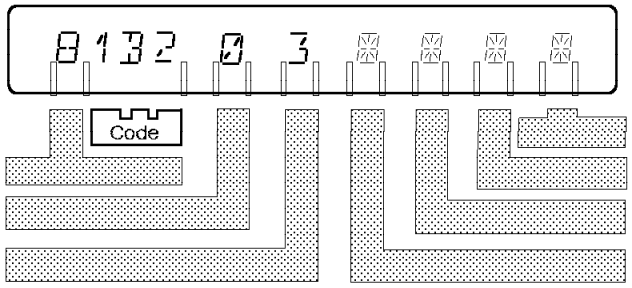
  1B4 = The alternate or remote console

  1B6 = The RSF console.

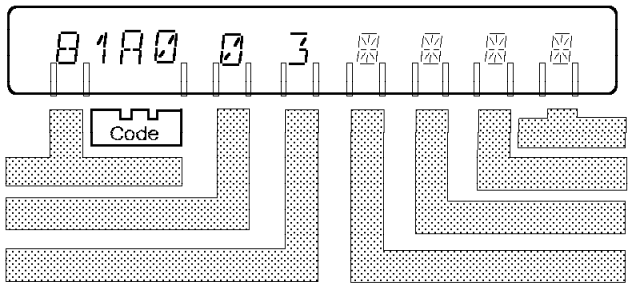
  If you suspect the cable and you have a spare one, use it.

  Otherwise:
  - Order a console cable.
  - Unplug the wrap plug from the console socket.
  - Reconnect the console cable to the console.
  - IML MOSS from the control panel.





Hex Display Codes are 1A0, 1A3, or 1A6



1 **1A0** = Problem on local console cable or cable connector.

1A3 = Problem on remote or alternate console cable or cable connector.

1A6 = Problem on RSF console cable or cable connector.

Perform appropriate actions to correct the problem, which is one of the following:

- Console cable missing
- Console cable incorrectly plugged
- Wrong console cable
- Console cable connector damaged.

2 When the situation is corrected, the procedure continues automatically.

If **1A0, 1A3, or 1A6** remains on the hex display, go to step 3.

Otherwise, go to step 7 on page 17-4.

3 Unplug the wrap plug from the cable.

4 Locate the console cable sockets on the 3745.

5 Disconnect the cable from the socket.

6 Plug the wrap plug into the appropriate socket. The procedure continues automatically. Go to next step.

7 Do one of the following:

- If **1A0, 1A3, or 1A6** remains, or **1A1, 1A4, or 1A7** is displayed, there is a problem on the wrap plug or in the 3745:

  1A0 or 1A1 = The local console

  1A3 or 1A4 = The alternate or remote console

  1A6 or 1A7 = The RSF console.

- If **1B2, 1B4, or 1B6** is displayed on the hex display, there is a problem on the console cable or on the console cable connector at the console end, for:

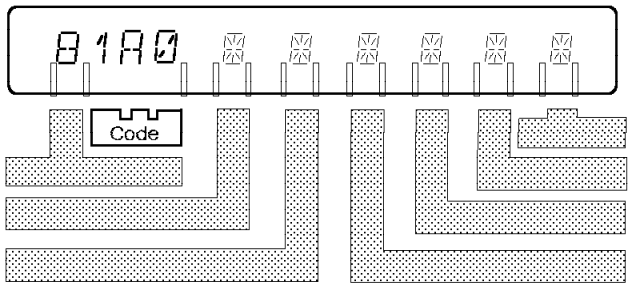
  1B2 = The local console

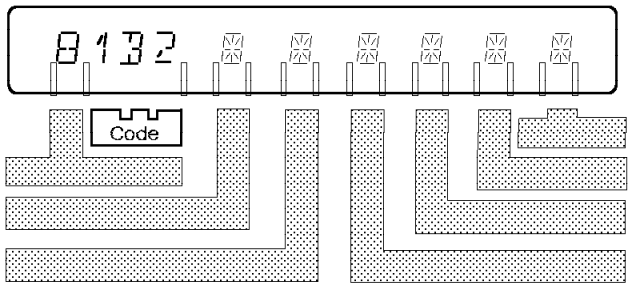
  1B4 = The alternate or remote console

  1B6 = The RSF console.

  If you suspect the cable and you have a spare one, use it. Otherwise:

  - Order a console cable.
  - IML MOSS from the control panel.

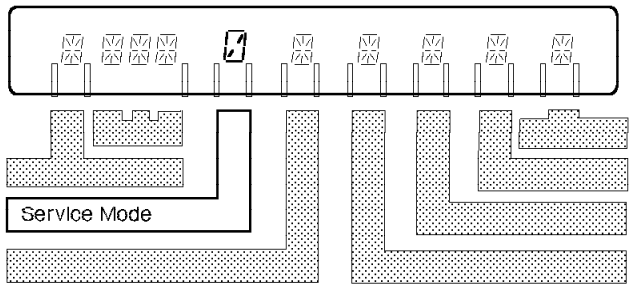




Chapter 18. Unexpected Problems with Console Functions

Problems can occur if a controller is unintentionally in maintenance mode. Functions that are intended only for the service representative are not described in this guide.

Note: The console may not indicate that maintenance mode is in effect. Misuse of this mode can cause unpredictable or disruptive results. If service mode on the control panel was set since the last MOSS IML, the log-on with the customer password will be blocked. It is the user's responsibility to maintain all passwords consistent with site standards and good business practice.

If	Do
A function does not work as expected and is not described in the *3745 Basic Operations Guide* or *3745 Advanced Operations Guide*.	1. Press F1 to exit the function. 2. Enter OFF to log off. 3. Log on with the customer password. 4. Deactivate the maintenance password (see the *3745 Advanced Operations Guide*). 5. Keep the maintenance password separately from the other passwords so as to avoid future problems.
The service mode is not 0 (zero) on the control panel. 	Refer to the logon procedure in the *3745 Basic Operations Guide* to set the service mode to zero.
The problem persists.	Be sure that the console setup is well done, refer to the *3745 Console Setup Guide*, otherwise, ☎

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Appendixes A, B, and C

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Appendix A. Control Panel

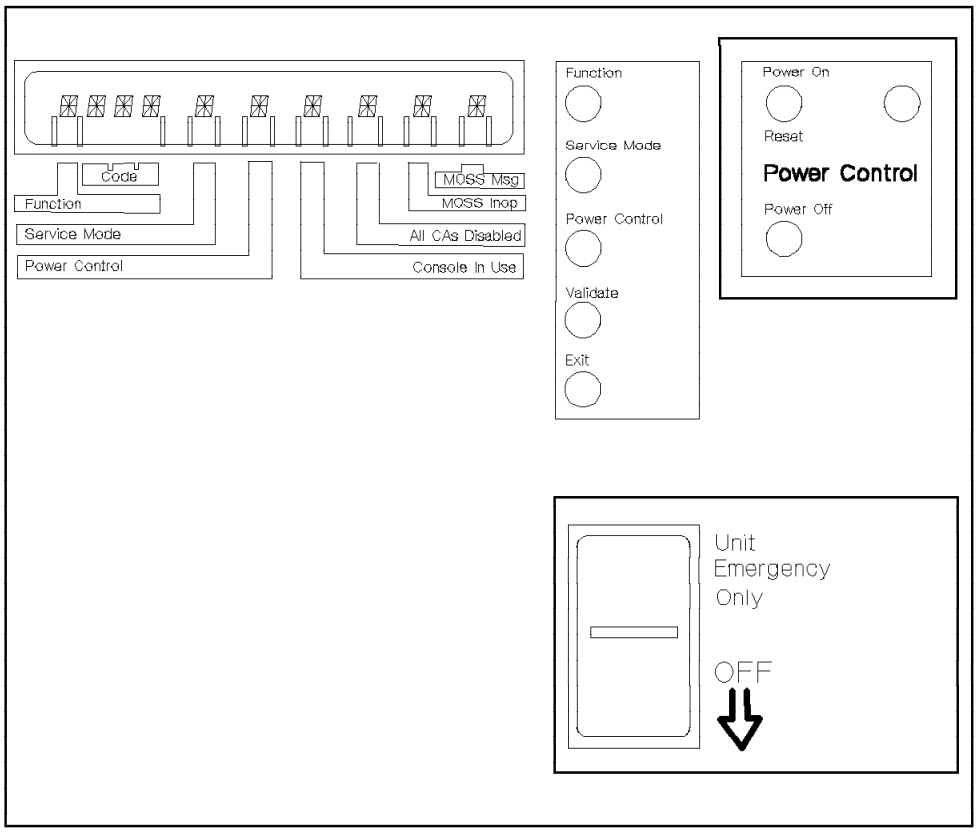

Figure A-1. IBM 3745 Control Panel

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Appendix B. Control Panel Reference Card

The following control panel reference card (PN 65X8930) is attached to the diskette housing of the 3745 front panel and can be slid out for reading.

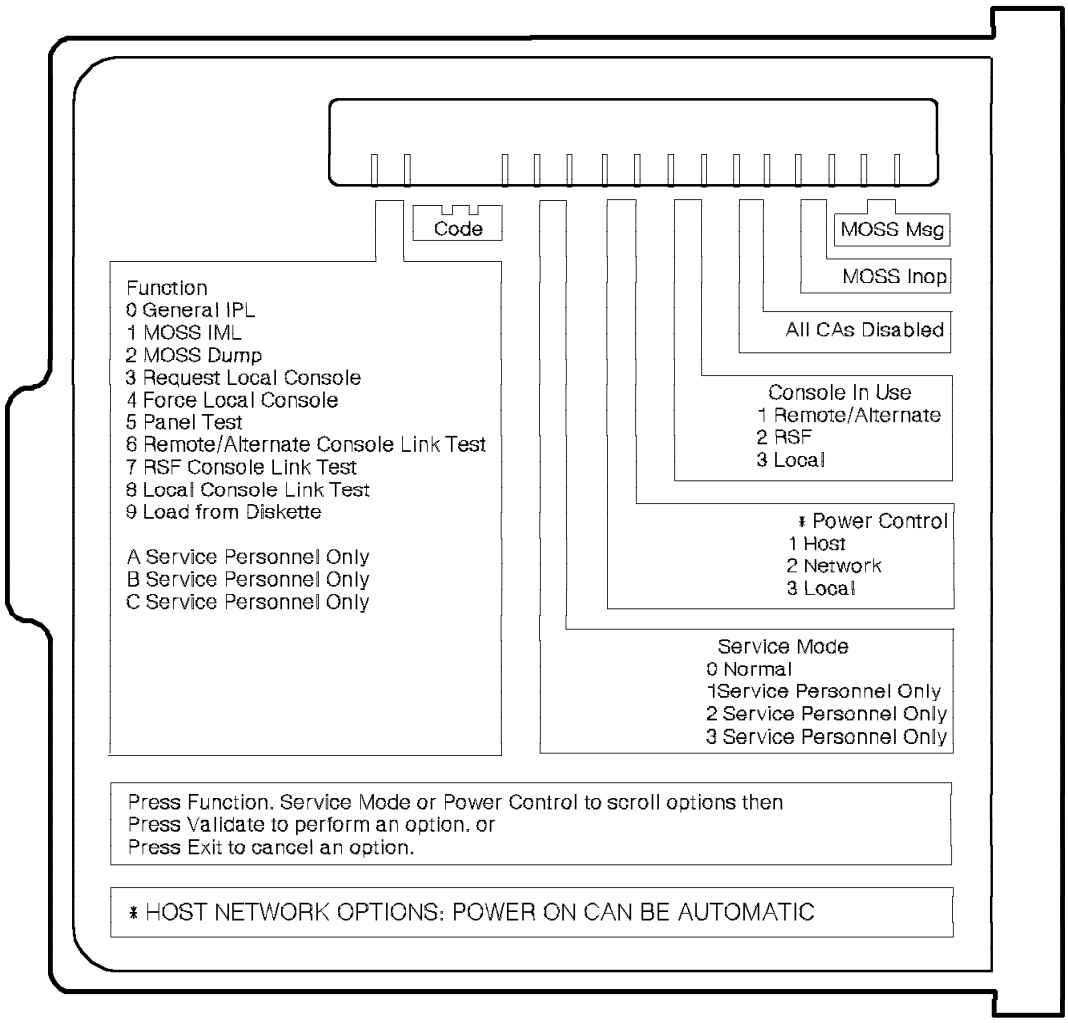

Figure B-1. IBM 3745 Control Panel Reference Card

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Appendix C. LICs and Wrap Test Plugs

Identify the LIC

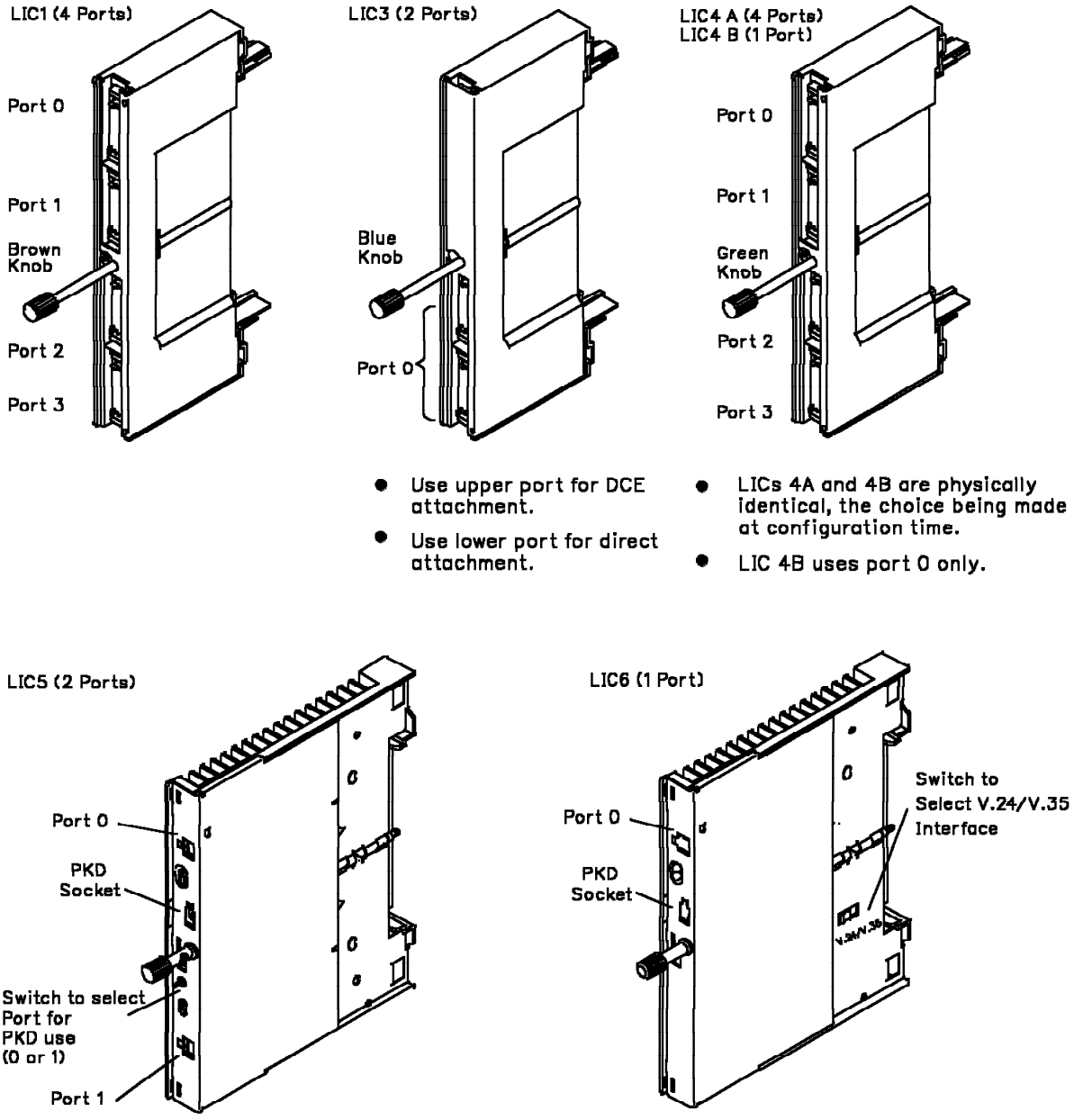

Figure C-1. LIC Types

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Identify the Wrap Plug

Wrap Plug Part Numbers

In addition to wrap plug pictures, part numbers are also provided to help wrap plug identification. An engineering change may be applied to a wrap plug and the part number may be changed. If you are in doubt, please contact your service representative.

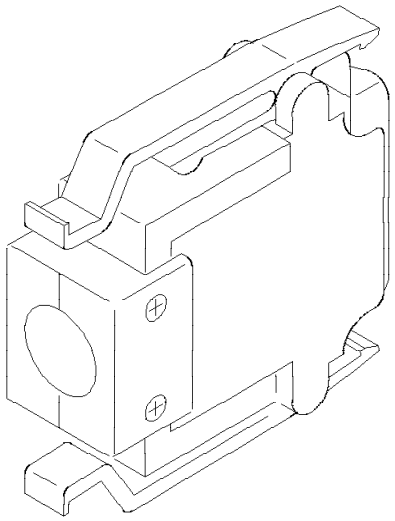

Figure C-2. LIC Type 1 and 4 Wrap Plug (P/N 65X8927)

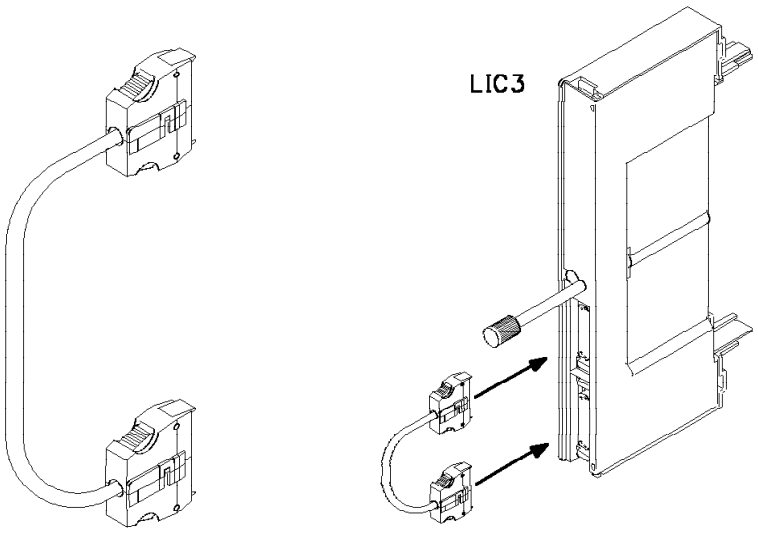

Figure C-3. LIC Type 3 Wrap Cable (P/N 65X8928)

Note: In order to test a **LIC3** card, it is necessary to reverse the LIC3 wrap cable after the first test pass, then run the test again.

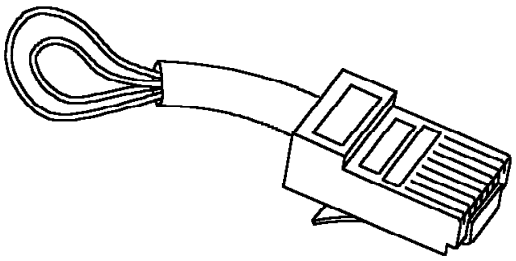

Figure C-4. LIC Type 5 and 6 Tail Gate Wrap Plug (P/N 11F4815)

Note: In addition to the tail gate wrap plug, a wrap block is also shipped with the machine. This wrap block may be plugged at the end of the cable (at the customer wall frame side) to test the line up to the customer wall frame. The part number of this wrap block is obviously country-dependent.

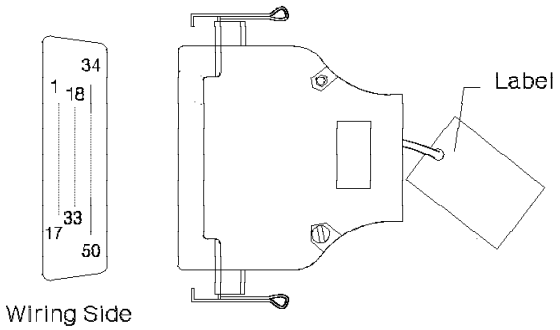

Figure C-5. HSS Lines Wrap Test Plug

HSS wrap plug for V.35 lines, P/N 58X9349
HSS wrap plug for X.21 lines, P/N 58X9354

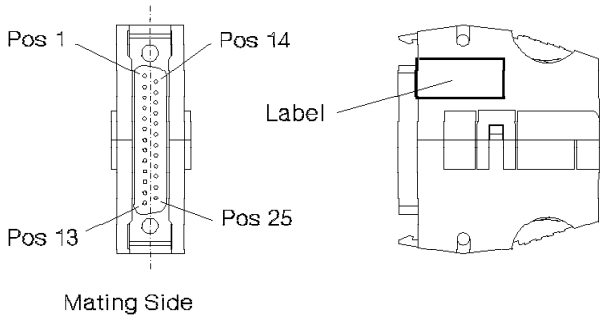

Figure C-6. Console Wrap Plug

Wrap plug for the 31xx console, P/N 6398697
Wrap plug for the 3727 console, P/N 2667737
Wrap plug for the PC/PS2* consoles, P/N 26F0320

List of Abbreviations

abend	abnormal end of task
AC	alternating current
ACF	Advanced Communications Function
ACU	automatic calling unit
AFD	airflow detector
AGC	automatic gain control
AMD	air moving device
ASCII	American National Standard Code for Information Interchange
AUI	access unit interface
BCD	binary-coded decimal
BER	box event record
bps	bits per second
BR	bus request
BSC	binary synchronous communication
C	control (signal)
CA	channel adapter
CAB	channel adapter board
CATPS	channel adapter with two processor switch
CB	circuit breaker
CCITT	Comite Consultatif International Telegraphique et Telephonique The International Telegraph and Telephone Consultative Committee
CCU	central control unit
CD	carrier detector (signal)
CDF	configuration data file
CDS	configuration data set
CI	calling indicator (signal)
CLDP	controller load/dump program
CNM	communication network management
CNSL	console
CP	control program
CPS	call progress signal
CPU	central processing unit
CR	call request (signal)
CRQ	call request
CS	communication scanner
CSMA/CD	carrier sense multiple access/colision detect
CSP	communication scanner processor
CSS	control subsystem
CTS	clear to send (signal)
CW	control word
DASD	direct access storage device
DB	data byte
DC	direct current
DCE	data circuit-terminating equipment
DDS	digital data service
DLO	data line occupied (signal)
DMA	direct memory access
DP	digit present (signal)
DSR	data set ready (signal)
DSRS	data signaling rate selection (signal)
DTE	data terminal equipment
DTR	data terminal ready (signal)
DX	duplex
EBCDIC	extended binary-coded decimal interchange code
EAC	Ethernet** adapter card
EC	engineering change
EIA	electronic industries association
EIB	error information block
ELA	Ethernet LAN adapter (feature)
ELD	event log display
EOT	end of transmission
EP	emulation program
ESC	emulation subchannel
ESS	Ethernet-type LAN subsystem
ETB	end-of-transmission block character
ETG	Ethernet tail gate
ETX	end-of-text character
EXP	expected
FCPS	final call progress signals (X.21)
FE	field engineering
ft	foot
HCS	hardware central service

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HDX half-duplex

HPTSS high-performance transmission subsystem

HSS high-speed scanner

HW hardware

I indication (signal)

IAR instruction address register

ID identifier

IEEE Institute of Electrical and Electronics Engineers

IML initial microcode load

IMPL initial microprogram load (Replaced by IML)

in. inch

INOP inoperative (line, modem, or terminal)

IO input/output

I/O input/output

IOC input/output control

IOCS input/output control system

IPL initial program load

IR interrupt request

ITB intermediate text block

KB kilobyte; 1024 bytes

KBD keyboard

kbps kilobits per second

LA line adapter

LCB line control block (storage)

LCD line control definer (storage)

LDM limited distance modem

LIB1 LIC board type 1 (for LIC1, LIC3, or LIC4)

LIB2 LIC board type 2 (for LIC5 or LIC6)

LIC line interface coupler card

LIC1 LIC type 1

LIC3 LIC type 3

LIC4 LIC type 4

LIC5 LIC type 5

LIC6 LIC type 6

LID line interface display

LL2 link level 2 test

LLAP LIC line analysis procedure

LPDA* Link Problem Determination Aid

LSS low speed scanner

m meter

mA milliampere

MAU media access unit

MB megabyte; 1 048 576 bytes

MCF microcode fix

MES miscellaneous equipment specification

min minute

MLT machine load table

mm millimeter

MOSS maintenance and operator subsystem

MOF MOSS Offline function

ms millisecond

MSA machine status area

mV millivolt

NCP Advanced Communication Function for the Network Control Program

NMVT network management vector transport

NO-OP no-operation instruction

NPDA Network Problem Determination Application, NetView Hardware Monitor Facility

ns nanosecond

NSC native subchannel

NTRI network token-ring interconnection

NTT Nippon Telegraph and Telephone

oc overcurrent

OEM original equipment manufacturer

OLT online test

OLTEP online test executive program

OS operating system

ov overvoltage

PC personal computer

PEP partitioned emulation programming

PN part number

POR power-on reset

PKD portable keypad display

PS power supply

PTT Post Telephone and Telegraph Administration

PU physical unit

PWI power indication

R	receive
RCV	receive
RD	receive data (signal)
RFS	ready for sending (signal)
RI	ring indicator (signal same as CI)
RLA	remote loading/activation
rpm	revolutions per minute
RPO	remote power-off
RSF	remote support facility
RTC	retry count
RTM	retry timer
RTS	request to send (signal)
RU	request/response unit
RVI	reverse interrupt
s	second
SCF	secondary control field
SCP	signal converter product
SCR	serial clock receive (signal)
SCT	serial clock transmit (signal)
SCTL	storage control card
SD	send data (signal)
SDF	serial data field
SDLC	Synchronous Data Link Control
SE	system engineer
SES	secondary status
SET	signal element timing (signal)
SG	signal ground
SIT	scanner internal trace
SNA	Systems Network Architecture
SS	start-stop
SSP	(Advanced Communication Function for the) System Support Program
STX	start of text (BSC)
SYN	synchronous idle (BSC)
SYSGEN	system generation
T	transmit (signal)
TD	transmitted data (signal)
TI	test indicator (signal)
TID	TRSS interface display
TIC	token-ring interface coupler
TOD	time of day
TPS	two-processor switch
TRA	token-ring adapter
TRID	token-ring interconnection
TRM	token-ring multiplexer card
TRSS	token-ring subsystem
TSS	transmission subsystem
UEPO	unit emergency power-off
VB	valid byte (signal)
VH	valid halfword (signal)
VTAM	(Advanced Communication Function for the) Virtual Telecommunications Access Method
V.24	CCITT Recommendation V.24
V.25	CCITT Recommendation V.25
V.28	CCITT Recommendation V.28
V.35	CCITT Recommendation V.35
WB	wrapback (signal)
XI	X.25 SNA Interconnection
X.21	CCITT Recommendation X.21
X.25	CCITT Recommendation X.25
802.3	IEEE recommendation

Glossary

This glossary defines all new terms used in this manual. It also includes terms and definitions from the *IBM Dictionary of Computing,* SC20-1699.

addressing. A technique where the control station selects, among the DTEs that share a transmission line, the DTE to which it is going to send a message.

alarm. A message sent to the MOSS console. In case of an error a reference code identifies the nature of the error.

alert. A message sent to the host console. In case of an error a reference code identifies the nature of the error.

asynchronous transmission. Transmission in which each character is individually synchronized, usually by the use of start and stop elements. The start-stop link protocol, for example, uses asynchronous transmission. Contrast with *synchronous transmission*.

auto-answer. A machine feature that allows a DCE to respond automatically to a call that it receives over a switched line.

auto-call. A machine feature that allows a DCE to initiate a call automatically over a switched line.

autoBER. A program to automatically analyse a BER file.

binary synchronous communication (BSC). A uniform procedure, using standardized set of control characters and character sequences, for synchronous transmission of binary-coded data between stations.

box event record (BER). Information about an event detected by the controller. It is recorded on the disk/diskette and can be displayed on the operator console for event analysis.

block multiplexer channel. A multiplexer channel that interleaves blocks of data. See also byte multiplexer channel. Contrast with *selector channel*.

byte multiplexer channel. A multiplexer channel that interleaves bytes of data. See also block multiplexer channel. Contrast with selector channel.

central control unit (CCU). In the 3745, the controller hardware unit that contains the circuits and data flow paths needed to execute instructions and to control its storage and the attached adapters.

channel adapter (CA). A communication controller hardware unit used to attach the controller to a host processor.

channel interface. The interface between the controller and the host processors.

communication common carrier. In the USA and Canada, a public data transmission service that provides the general public with transmission service facilities. For example, a telephone or telegraph company (see also *post telephone and telegraph* for countries outside the USA and Canada).

communication controller. A communication control unit that is controlled by one or more programs stored and executed in the unit. Examples are the IBM 3705, IBM 3725/3726, IBM 3720, and IBM 3745.

communication network management (CNM) application program. An ACF/VTAM application program authorized to issue formatted management services request units containing physical-unit-related requests and to receive formatted management services request units containing information from physical units.

communication scanner. See *scanner*.

communication scanner processor (CSP). The processor of a scanner.

communication subsystem. The part of the controller that controls the data transfers over the transmission interface.

configuration data file (CDF). A MOSS file that contains a description of all the hardware features (presence, type, address, and characteristics).

control panel. A panel that contains switches and indicators for the use of the customer's operator and service personnel.

control program. A computer program designed to schedule and to supervise the execution of programs of the controller.

control subsystem (CSS). The part of the controller that stores and executes the control program, and monitors the data transfers over the channel and transmission interfaces.

data circuit-terminating equipment (DCE). The equipment installed at the user's premises that provides all the functions required to establish, maintain, and terminate a connection, and the signal conversion and coding between the data terminal equipment (DTE) and

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the line. For example, a modem is a DCE (see *modem*.)

Note: The DCE may be separate equipment or an integral part of other equipment.

data terminal equipment (DTE). That part of a data station that serves as a data source, data link, or both, and provides for the data communication control function according to protocols.

direct attachment. The attachment of a DTE to another DTE without a DCE.

diskette. A thin, flexible magnetic disk, and its protective jacket, that records diagnostics, microcode, and 3745 files.

diskette drive. A mechanism that reads and writes diskettes.

DOS/VS. Disk Operating System/Virtual Storage.

duplex transmission. Data transmission in both directions at the same time. Contrast with *half duplex*.

Emulation Program (EP). An IBM licensed program that allows a channel-attached communication controller to emulate the functions of an IBM 2701 Data Adapter Unit, an IBM 2702 Transmission Control, or an IBM 2703 Transmission Control.

Ethernet LAN adapter (ELA). Line adapter for Ethernet-type network, composed of one communication scanner processor card (CSP), and one Ethernet adapter card (EAC).

Ethernet-type subsystem (ESS). The part of the controller that controls the data transfers over an Ethernet V2 or IEEE 802.3 local area network.

front-end scanner (FES). A circuit that scans the transmission lines, serializes and deserializes the transmitted characters, and manages the line services. It is part of the scanner.

half-duplex transmission. Data transmission in either direction, one direction at a time. Contrast with *duplex*.

high-performance transmission subsystem (HPTSS). The part of the controller that controls the data transfers over the high-speed transmission interface (speed up to 2 million bps).

The HPTSS consists of up to eight high-speed scanners (HSSs).

high-speed scanner. Line adapter for lines up to 2 million bps, composed of a communication scanner processor (CSP) and a front-end high-speed scanner (FESH).

host processor. (1) A processor that controls all or part of a user application network. (2) In a network, the processing unit in which the access method for the network resides. (3) In an SNA network, the processing unit that contains a system services control point (SSCP). (4) A processing unit that executes the access method for attached communication controllers. Also called *host*

IBM service representative. An individual in IBM who performs maintenance services for IBM products or systems.

initial microcode load (IML). The process of loading the microcode into a scanner or into MOSS.

initial program load (IPL). The initialization procedure that causes 3745 control program to commence operation.

LIB. A line interface base which houses:

- One multiplexer
- Up to eight LICs.

line. See *transmission line*.

line adapter (LA). The part of the TSS, HPTSS, or TRSS that scans and controls the transmission lines. Also called *scanner*.

For the TSS the line adapters are low-speed scanners (LSSs).

For the HPTSS the line adapters are high-speed scanners (HSSs).

For the TRSS the line adapters are token-ring adapters (TRAs).

line interface coupler (LIC). A circuit that attaches up to four transmission cables to the controller.

Link Problem Determination Aid (LPDA*). A set of test facilities resident in the IBM 386X/586X modems and activated from the control program in the controller and from host.

low-speed scanner. Line adapter for lines up to 256 kbps, composed of a communication scanner processor (CSP) and a front-end low-speed scanner (FESL).

maintenance and operator subsystem (MOSS). The part of the controller that provides operating and servicing facilities to the customer's operator and the IBM service representative.

microcode. A program, that is loaded in a processor (for example, the MOSS processor) to replace a hardware function. The microcode is not accessible to the customer.

modem (modulator-demodulator). A functional unit that transforms logical signals from a DTE into analog signals suitable for transmission over telecommunication lines (modulation), and conversely (demodulation). A modem is a DCE. It may be integrated in the DTE.

NetView. An IBM licensed program used to monitor a network, manage it, and diagnose its problems.

network. See *user application network*.

Network Control Program (NCP). An IBM licensed program that provides communication controller support for single-domain, multiple-domain, and interconnected network capability.

nonswitched line. A connection between systems or devices that does not have to be made by dialing. The connection can be point-to-point or multipoint. The line can be leased or private. Contrast with *switched line.*

operator console. The IBM Operator Console that is used to operate and service the 3745 through the MOSS. A local console must be located within 7 m of the 3745. Optionally an alternate console may be installed up to 120 m from the 3745, or a remote console may be connected to the 3745 through the switched network.

partitioned emulation programming (PEP) extension. A function of a network control program that enables a communication controller to operate some telecommunication lines in network control mode while simultaneously operating others in emulation mode.

Post Telephone and Telegraph (PTT). A generic term for the government-operated common carriers in countries other than the USA and Canada.

start-stop. A data transmission system in which each character is preceded by a start signal and is followed by a stop signal.

switched line. A transmission line with which the connections are established by dialing, only when data transmission is needed. The connection is point-to-point and uses a different transmission line each time it is established. Contrast with *nonswitched line*.

Synchronous Data Link Control (SDLC). A discipline for managing synchronous, code-transparent, serial-by-bit information transfer over a link connection. Transmission exchanges may be duplex or half-duplex over switched or nonswitched links. The configuration of the link connection may be point-to-point, multipoint, or loop. SLDC conforms to subsets of the Advanced Data Communication Control Procedures of the American National Standards Institute and High-level Data Link Control (HDLC) of the International Standards Organization.

synchronous transmission. Data transmission in which the sending and receiving instruments are operating continuously at substantially the same frequency and are maintained, by means of correction, in a desired phase relationship. Contrast with *asynchronous transmission*.

systems network architecture (SNA). The description of the logical structure, formats, protocols, and operational sequences for transmitting information through a user application network. The structure of SNA allows the users to be independent of specific telecommunication facilities.

time out. The time interval allotted for certain operations to occur.

token-ring subsystem (TRSS). The part of the controller that controls the data transfers over an IBM Token-Ring Network.

The TRSS consists of up to four token-ring adapters (TRAs).

token-ring adapter (TRA). Line adapter for IBM Token-Ring Network, composed of one token-ring multiplexor card (TRM), and two token-ring interface couplers (TICs).

The TRSS consists of up to four token-ring adapters (TRAs).

transmission interface. The interface between the controller and the user application network.

transmission line. The physical means for connecting two or more DTEs (via DCEs). It can be nonswitched or switched. Also called a *line*.

transmission subsystem (TSS). The part of the controller that controls the data transfers over low- and medium-speed, switched and non switched transmission interfaces.

The TSS consists of:

- Low-speed scanners (LSSs) associated with
- LIBs
- Serial links (SLs).

two-processor switch (TPS). A feature of the channel adapter that connects a second channel to the same adapter.

user application network. A configuration of data processing products, such as processors, controllers, and terminals, for the purpose of data processing and information exchange. This configuration may use circuit-switched, packet-switched, and leased-circuit

services provided by carriers or PTT. Also called a *user network*.

V.24, V.25, V.25 bis, V.35. EIA/CCITT recommendations on transmission interfaces

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Readers' Comments — We'd Like to Hear from You

IBM 3745 Communication Controller
All Models
Problem Determination Guide

Publication No. SA33-0096-06

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