

NO.5 CROSSBAR TROUBLE REFERENCE GUIDE — PART 8 FOR CALL DATA TRANSMITTER

1. GENERAL

- 1.01 This section is one of a series of sections comprising the information necessary to guide the central office maintenance force to an understanding of the nature of troubles reported by either trouble indicator display records or ATA exception reports.
- 1.02. Whenever this section is reissued, the reason for reissue will be covered in this paragraph. This issue does not affect Equipment Test Lists.
- 1.03 Refer to Section 218-404-500 for an explanation of a typical bin listing, along with a complete listing of all bins, and the Trouble Reference Guide Part number in which they appear.
- 1.04 The method of trouble duplication using the office test frame is provided in Part 11, 218-404-510.

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

Printed in U.S.A.

AMA - 1TR/2TR

LAMP INFORMATION

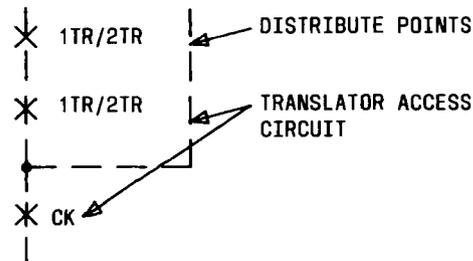
Lamp - CDC_
 No Lamp - 1TR, 2TR, CK

DESCRIPTION OF CIRCUIT OPERATION

The CDT controller operates pertinent distribute points to transfer the call record data to the translator access circuit.

DESCRIPTION OF FAILURE

Relay CK operated indicates satisfactory call record data received from the CDT controller. Relay CK failed to operate because neither relay 1TR or 2TR, or possibly the associated distribute points operated.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Test A

REFERENCE DOCUMENTS

SD-28131-01 FS2
 SD-28130-01 FS1 BOARD PINS 143, 144 (1TR, 2TR) ON BOARD PAIR 05:
 UNIT 06 MISC 0
 UNIT 16 MISC 1

AMA-CK1

LAMP INFORMATION

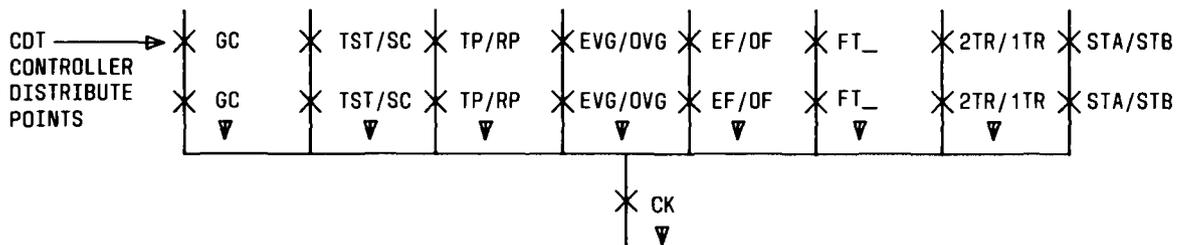
Lamp - CDC_
 No Lamp - CK

DESCRIPTION OF CIRCUIT OPERATION

The CDT controller scans the completing marker for the call record data, and operates pertinent distribute points for the translator access circuit to register this data prior to translation to the billing telephone number by the translator. Relay CK operates when the call record data is in the correct format.

DESCRIPTION OF FAILURE

The call record data distributed from the CDT controller was in the correct format but relay CK failed to operate (error code 26), or the grounded CK scan point cannot be read by the CDT controller (error code 28) due to a possible false ground on translator access circuit scan points (progress marks).

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Test B

REFERENCE DOCUMENTS

SD-28131-01 FS2

AMA-CK1

AMA-DNK

PUNCH INFORMATION

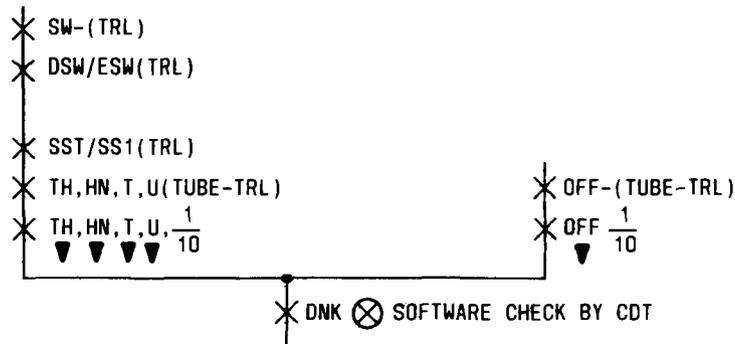
Lamp - CDC_, ECT2, ECU6, 8, 9, TH_, HN_, T_, U_, OFF_ OFT_ (if provided)
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

The CDT is checking for a correct translation of the billing telephone number. When one out of ten of the following relays operate (TH_, HN_, T_, U_, OFF_, OFT_) in the translator access circuit to indicate a valid registration, the CDT scans the associated scan points to determine a valid registration.

DESCRIPTION OF FAILURE

Presence of the CK lamp indicates that the translator access circuit is satisfied with the line equipment number (LEN). Failure results from an invalid OFF_, TH_, HN_, T_ or U_ data check (error code 26), a faulty scan point associated with the translator access circuit (error code 28), or an invalid marker data field (error code 29). The DR_ lamp identifies the translator access circuit associated with the call.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Test B

REFERENCE DOCUMENTS

SD-28131-01 FS5
 SD-28130-01 FS1 UNIT 06 MISC 0 BOARD PAIRS 03,04
 UNIT 16 MISC 1 BOARD PAIRS 03,04

AMA-DNK

AMA-GC

LAMP INFORMATION

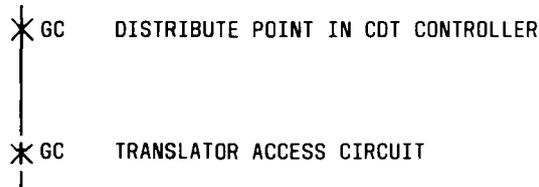
LAMP - CDC_, ECT2, ECU6
 No LAMP - GC, CK

DESCRIPTION OF CIRCUIT OPERATION

The CDT controller collects call record data from the completing marker and checks the data for validity. The controller then seizes an idle translator access circuit for the line equipment number translation by operating the GC distribute point for that translator access circuit.

DESCRIPTION OF FAILURE

Either the GC distribute point or the GC relay failed to operate. If the CDT system is equipped with the dedicated and shared translator access circuits the call should complete on second trial. The DR_ lamp identifies the translator access circuit.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Test A

REFERENCE DOCUMENTS

SD-28131-01	FS2	
SD-28130-01	FS1	BOARD PIN 156 ON BOARD PAIR 05 FOR:
		UNIT 06 MISC 0
		UNIT 16 MISC 1

AMA-GC

AMA--MISS.LN.NO

PUNCH INFORMATION

Lamp - TNK
 No Lamp - OFF-, TH-, HN-, T-, U-

DESCRIPTION OF CIRCUIT OPERATION

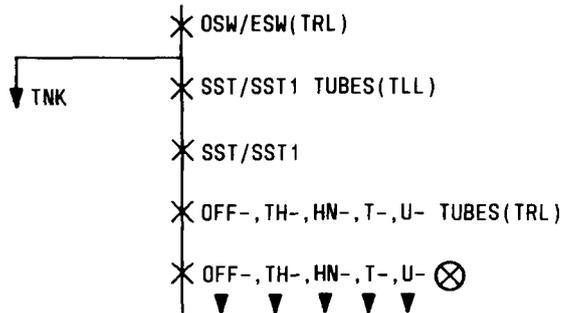
The translator is converting the line link location into the directory number. The electron tube is fired by a current pulse thru the associated diamond ring. When the tube turns on, the associated relay operates indicating the directory number.

DESCRIPTION OF FAILURE

Presence of the CK lamp indicates that the translator access circuit received all the information correctly from the CDT controller. If the (OFF-, TH-, HN-, T-, U-) relays do not operate, the translator access circuit takes a trouble record and an AMA-MISS.LN.NO trouble is registered.

Probably will not complete on second trial.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Test B

REFERENCE DOCUMENTS

SD-28131-01 FS2

AMA - MUT. 1TR/2TR

LAMP INFORMATION

Lamp - 1TR,2TR,CDC_, ECT2,ECU6
 No Lamp - CK

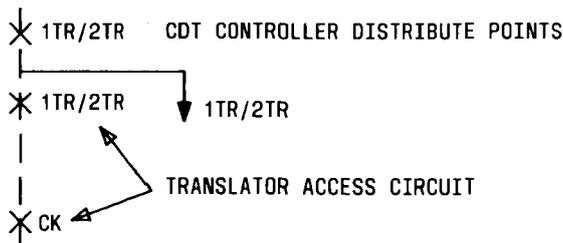
DESCRIPTION OF CIRCUIT OPERATION

Call record data is passed from the CDT controller to the translator access circuit via operated distribute points.

DESCRIPTION OF FAILURE

Relay CK in the translator access circuit failed to operate because both 1TR and 2TR relays (or possibly the associated distribute points) operated. It may complete on second trial.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Test A

REFERENCE DOCUMENTS

SD-28131-01 FS2
 SD-28130-01 FS1 BOARD PINS 143,144 (1TR/2TR) ON:
 UNIT 06 MISCO BOARD PAIR 05
 " 16 " 1 " " 05

AMA--MUT.DIG

LAMP INFORMATION

Lamp - A- thru --- (at least one lamp for each digit), CDC_, ECT2, ECU9
No Lamp - A - thru --- (in two-out-of-five)

DESCRIPTION OF CIRCUIT OPERATION

Information in the completing marker is scanned by the CDT controller.
All digits must be in two-out-of-five format, except the last digit which
must have a lone seven lighted.

DESCRIPTION OF FAILURE

One or more of the digits were not received by the CDT controller on a
two-out-of-five basis, or a single seven lamp was not present on the last
digit.

Probably will not complete on second trial.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test DR

REFERENCE DOCUMENTS

SD-26002-01 FS71
SD-28130-01 FS1

AMA--MUT.DIG

AMA - MUT.LN.LOC

LAMP INFORMATION

Lamp - CDC_, ECT2, ECU6

No Lamp - FU"2/5, SW2/5, VF"1/5, VG"2/6 (not in proper pattern)

DESCRIPTION OF CIRCUIT OPERATION

The CDT scans the call record data from the completing marker and determines the validity of the data.

DESCRIPTION OF FAILURE

The CDT controller determined that the call record data was not of the proper format. Possible discontinuity between marker and scan point of CDT scanner (DAS) or bridged scan point due to foreign material.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

SD-26002-01 FS1

SD-28130-01 FS1 BOARD 02 ON:
UNIT 06 MISCO
" 16 MISC1
" 07,08 MKS

AMA - MUT.LN.LOC

AMA --- MUT . LN . NO

LAMP INFORMATION

Lamp - CDC_, ECT2, ECU6
 No Lamp - OFF-, TH-, HN-, T-, U- (in one-out-of-ten or two-out-of-five)

DESCRIPTION OF CIRCUIT OPERATION

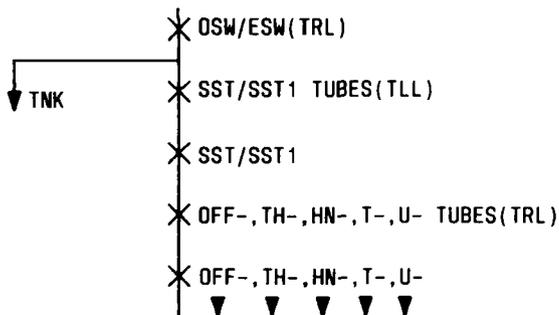
The translator access circuit is converting the line link location into the billing telephone number. The electron tube is fired by a current pulse thru the associated diamond ring. When the tube turns on, the associated relay operates indicating the directory number.

DESCRIPTION OF FAILURE

The CDT controller scans the translated billing telephone number registered in the translator access circuit. If the (OFF-, TH-, HN-, T-, U-) relays do not operate in a one-out-of-ten format, the CDT controller registers an AMA-MUT.LN.NO trouble.

Probably will not complete on second trial.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Test B

REFERENCE DOCUMENTS

SD-28131-01 FS5
 SD-28130-01 FS1

AMA --- MUT . LN . NO

AMA - MUT . RPT / TPT**LAMP INFORMATION**

Lamp - RPT, TPT, CDC_, ECT2, ECU6 or 9
No Lamp - CK

DESCRIPTION OF CIRCUIT OPERATION

The CDT controller scans the completing marker for call record data and subsequently distributes pertinent data to the translator access circuit. Either a tip party or a ring party translator is selected.

DESCRIPTION OF FAILURE

Both ring and tip party translator preference occurred. If the error code is 26, the error occurred with either the RP and TP distribute points or relays. If the error code is 29, the error resulted from invalid call record data between the completing marker and the CDT scanner (DAS).

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 281-423-514 Test BF
Section 218-779-503 Test A

REFERENCE DOCUMENTS

SD-28131-01	FS2
SD-28130-01	FS1

AMA - MUT . RPT / TPT

AMA - MUT . TLR

LAMP INFORMATION

Lamp - CDC_, ECT2, ECU6
No Lamp - TLR (in correct format)

DESCRIPTION OF CIRCUIT OPERATION

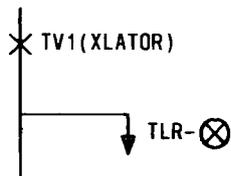
The translator access circuit is in the process of seizing the translator. When the connector multicontact relays operate, the translator seized should be identified by the (TLR) indication.

DESCRIPTION OF FAILURE

(TLR) lighted in the wrong format indicates that the translator was seized but could not be identified.

May complete on second trial.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 281-779-513 Test G

REFERENCE DOCUMENTS

SD-25754-01 FS-Fig. 3 SC-(None) CD-25754-01 Para - 6.2

AMA - MUT . TLR

AMA-MUT.TVT/SC**LAMP INFORMATION**

Lamp - SC, TVT, CDC_
 No Lamp - CK

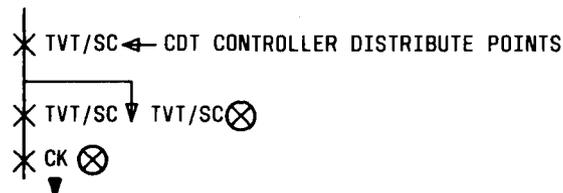
DESCRIPTION OF CIRCUIT OPERATION

The CDT controller operates either the SC or TST distribute points to operate the associated relay in the translator access circuit. Also, the results for diagnostic test 5 performed at the diagnostic test panel may be read depending upon the accuracy of the lamp assignments at the trouble indicator display. The CDT-TST5 bin provides additional information.

DESCRIPTION OF FAILURE

Relay CK in the translator access circuit failed to operate because both relays or associated distribute points (SC and TVT) operated.

It may complete on second trial.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 281-779-513 Test G

REFERENCE DOCUMENTS

SD-28131-01	FS2			
SD-28130-01	FS1	BOARD PINS	141,142 (SC/TVT)	ON:
	UNIT	06	MISCO	BOARD PAIR 05
	UNIT	16	MISC1	BOARD PAIR 05

AMA-MUT.TVT/SC

AMA--PART.LN.NO

LAMP INFORMATION

Lamp - TK, CDC_, ECT2, ECU6
 No Lamp - OFF-/TH-/HN-/T-/U-)

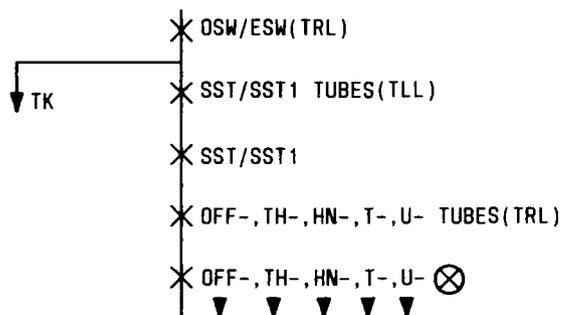
DESCRIPTION OF CIRCUIT OPERATION

The translator access circuit is converting the calling line equipment location into the billing telephone number. The electron tube is fired by a current pulse thru the associated diamond ring. When the tube turns on, the associated relay operates indicating the directory number.

DESCRIPTION OF FAILURE

Presence of the TK lamp indicates that the translator receives all the information correctly from the CDT controller. If one of the (OFF_, TH_, HN_, T_, U_) relays do not operate, the CDT controller registers an AMA-PART.LN.NO trouble.

Probably will not complete on second trial.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-503 Test G

REFERENCE DOCUMENTS

SD-28131-01 FS5

AMA--PART.LN.NO

AMA - - RPT/TPT

PUNCH INFORMATION

Lamp - CDC_, ECT2, ECU6 or 9
 No Lamp - TPT, RTPy

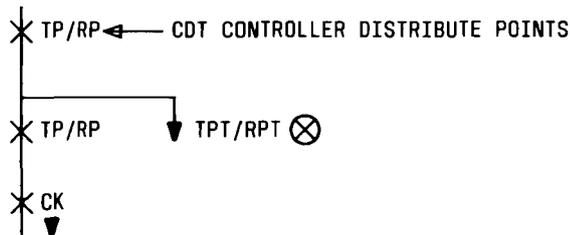
DESCRIPTION OF CIRCUIT OPERATION

The CDT controller operates a distribute point to in turn operate either the TP or RP relay in the translator access circuit.

DESCRIPTION OF FAILURE

Relay CK failed to operate in the translator access circuit because neither relay RP or TP operated (error code 26), or the call data from the marker was not completed (error code 29).

It may complete on second trial.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Test A
 Section 218-423-514 Test BF

REFERENCE DOCUMENTS

SD-28131-01 FS2
 SD-28131-01 FS1

AMA - - RPT/TPT

AMA-TLR BUSY

PUNCH INFORMATION

Lamp - TBY, CDC_, DR_
No Lamp - (None)

DESCRIPTION OF CIRCUIT OPERATION

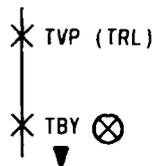
The translator access circuit is in the process of seizing the translator in order to get a number translation.

DESCRIPTION OF FAILURE

The presence of the TBY lamp indicates that the requested translator is plugged busy.

No second trial is attempted.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Not necessary

REFERENCE DOCUMENTS

None

AMA-TRL BUSY

AMA-TEST

LAMP INFORMATION

Lamp - Does not apply
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

The translator access circuit was engaged in a test call that resulted in a trouble, or a trouble record was forced.

DESCRIPTION OF FAILURE

Does not apply

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Does not apply

REFERENCE DOCUMENTS

Does not apply

AMA-TEST

AMA - - TGR

LAMP INFORMATION

Lamp - CDC-
No lamp - TGR

DESCRIPTION OF CIRCUIT OPERATION

The translator access circuit is verifying that the (GA_/GB_) relays are functional in the translator.

DESCRIPTION OF FAILURE

(TGR) not lighted indicates that the (GA_/GB_) relays failed to operate.
May complete on second trial.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Test A

REFERENCE DOCUMENTS

SD-28131-01 FS4

AMA -- TLR**LAMP INFORMATION**

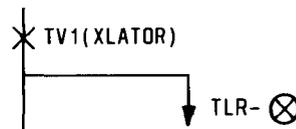
Lamp - CDC_, ECT2, ECU6
 No lamp - TLR

DESCRIPTION OF CIRCUIT OPERATION

The translator circuit is in the process of seizing the translator. When the connector multicontact relays operate, the translator seized should be identified by the (TLR) indication.

DESCRIPTION OF FAILURE

Presence of the CK and TK lamps indicates that the translator access circuit successfully received the call record data distributed by the CDT controller and also that the seizure of the translator was initiated. (TLR) not lighted indicates that the translator was not seized or not identified. MAY complete on second trial.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 281-779-513 Test G

REFERENCE DOCUMENTS

SD-25754-01 FS-Fig. 3 SC-(None) CD-25754-01 Para - 6.2

AMA -- TLR

AMA - TNK

LAMP INFORMATION

Lamp - CDC_, ECT2, ECU6
No Lamp - TNK

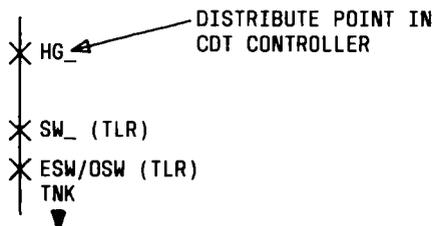
DESCRIPTION OF CIRCUIT OPERATION

The CDT controller operates pertinent HG_ distribute points to operate corresponding SW_ relays in the translator or PBX_AIOD translator along with other data to derive the billing telephone number or PBX station number.

DESCRIPTION OF FAILURE

Lamp TNK was not grounded to the translator access circuit when the horizontal group (HG_) information was distributed from the CDT controller to the translator.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Test A

REFERENCE DOCUMENTS

SD-26019-01 FS5
SD-28131-01 FS6

AMA - TRL

LAMP INFORMATION

Lamp - TRL, CDC_, AIOD
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

For AIOD the PBX-AIOD translator registers the equipment location information and translates it into an arbitrary trunk number which the PBX equipment uses to direct it to the memory store containing the PBX station number originating the call. The PBX equipment passes the originating station number to the PBX-AIOD translator when an identifying office index is added to the number. The composite number is then passed on to the translator access circuit to be registered and scanned by the CDT controller.

DESCRIPTION OF FAILURE

The PBX equipment did not identify the station number originating the call. The station number 1111 is passed to the PBX-AIOD translator where the trouble is identified by grounding the TRL lead to the translator access circuit (error code 26).

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Tests B and G

REFERENCE DOCUMENTS

SD-28131-01 FS6

AMA - TRL

AMA -- XET

LAMP INFORMATION

Lamp - XET, CDC_
No Lamp - (Does not apply)

DESCRIPTION OF CIRCUIT OPERATION

The (XET) relay makes a test on various relays in the translator.

DESCRIPTION OF FAILURE

The translator access circuit detected a false ground on, or a cross between, two or more equipment terminals in the translator.

May complete on second trial.

NORMAL SEQUENCE OF OPERATION

(Does not apply)

TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Test C

REFERENCE DOCUMENTS

SD-28131-01 FS6

AMA -- XET

AMA - XTL

LAMP INFORMATION

Lamp - XTL, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

The translator access circuit provides a cross-detection test during the selection of an AMA translator.

DESCRIPTION OF FAILURE

The XTL lamp indicates that more than one of the 60 (thirty TF_ and thirty RF_) line link frame relays operated.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-513 Tests C

REFERENCE DOCUMENTS

SD-28131-01 FS3

AMA - XTL

AMA--XVF

LAMP INFORMATION

Lamp - XVF, CDC_
 No Lamp - Does not apply

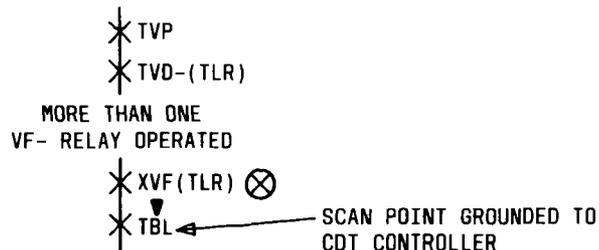
DESCRIPTION OF CIRCUIT OPERATION

The translator access circuit is signaled by the translator if more than one (VF-) relay operates.

DESCRIPTION OF FAILURE

The translator detected more than one (VF-) relay operated. Lead XVF is then grounded to operate XTL and cause a trouble record.

Probably will not complete on second trial.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Tests C

REFERENCE DOCUMENTS

SD-28131-01 FS6

AMA--XVF

AMA--XVG

PUNCH INFORMATION

Lamp - XVG, CDC_
 No Lamp - (Does not apply.)

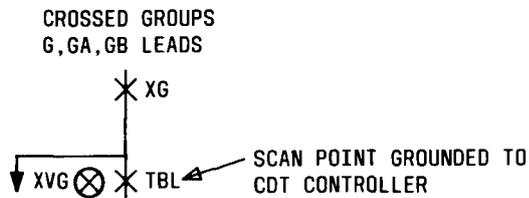
DESCRIPTION OF CIRCUIT OPERATION

The translator access circuit is signaled if more than one group relay operates in the translator.

DESCRIPTION OF FAILURE

More than one group relay in the translator operated causing relay (XG) and (XGA) to operate in the translator access circuit to initiate a trouble record via the CDT controller.

Probably will not complete on second trial.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-779-513 Test C

REFERENCE DOCUMENTS

SD-28131-01 FS6

AMA--XVG

CDT - AUD

LAMP INFORMATION

Lamp - ECT1, ECU9, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the hard wired office data base and compares this data to data read at initialization.

DESCRIPTION OF FAILURE

Trouble detected during wired data base audit. Refer to Section 218-779-106 Table C for error code 19.

NORMAL SEQUENCE OF OPERATION

When audit trouble is detected, initialization occurs.

TROUBLE DUPLICATION INFORMATION

Does not apply

REFERENCE DOCUMENTS

Section 218-779-306
Section 218-779-307

CDT - AUD

CDT - CPU

LAMP INFORMATION

Lamp - ECTO, ECU1, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

During System initialization various diagnostic tests are initiated on the CDT controller.

DESCRIPTION OF FAILURE

The CPU, SL-86 failed to complete the required checks during the diagnostic phase of initialization.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-104

REFERENCE DOCUMENTS

Section 218-779-104
Section 218-776-106 Table A

CDT - CPU

CDT-CT

LAMP INFORMATION

Lamp - CDC_, ECT2, ECU9
 No Lamp - CT_

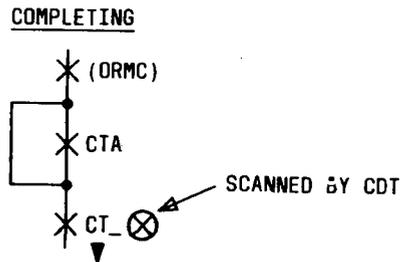
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error was detected in the class of service tens marker data at the translator access circuit. The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

SD-26002-01 FS10
 SD-28130-01 FS1 BOARD PINS 125-129 ON:
 UNIT 06 MISC 0 BOARD PAIR 02
 UNIT 16 MISC 1 BOARD PAIR 02
 UNIT 07,08 MKS BOARD PAIR 02,05,08,11

CDT-CU

LAMP INFORMATION

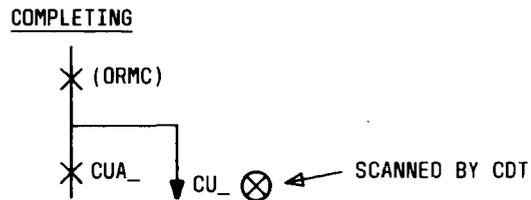
Lamp - ECT2, ECU9, CDC_
 No Lamp - CU_

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error was detected in the class of service units marker data at the translator access circuit. The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

SD-26002-01	FS10		
SD-28130-01	FS1	BOARD PINS	130-134 ON:
	UNIT 06	MISC 0	BOARD PAIR 02
	UNIT 16	MISC 1	BOARD PAIR 02
	UNIT 07,08	MKS	BOARD PAIR 02,05,08,11

CDT-CU

CDT-CT/CU

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_
No Lamp - CT_ and CU_

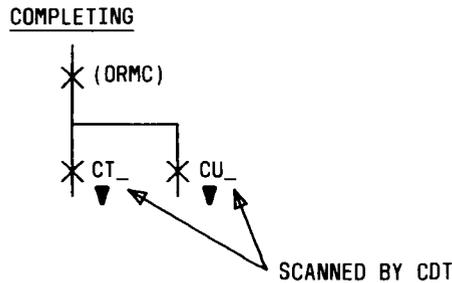
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the translator access circuit. The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

- SD-26002-01 FS10
- SD-28130-01 FS1 BOARD PINS 125-129(CT_), 130,-134(CU_) ON:
- UNIT 06 MISC 0 BOARD PAIR 02
- UNIT 16 MISC 1 BOARD PAIR 02
- UNIT 07,08 MKS BOARD PAIR 02,05,08,11

CDT-DAS

LAMP INFORMATION

Lamp - ECT2, ECU4, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT executes background diagnostic routine, on all DAS unit boards. The location of a defective DAS board is identified by the CDT bay number (A7, A4 = Bay 0; A0, A1 = Bay 1), and by unit position (B0-8). The trunk number contains board pair position of the defective board.

DESCRIPTION OF FAILURE

A DAS unit board(s) does not complete controller diagnostic tests. Replace the defective DAS unit board.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

At the diagnostic test panel, run DAS unit diagnostic to recheck the board. (Section 218-779-101)

REFERENCE DOCUMENTS

Section 218-779-101
Section 218-779-106 Table A

CDT-DAS

CDT-DATLK

LAMP INFORMATION

Lamp - ECT2, ECU1, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT executes SIO background diagnostic routines on the primary (dedicated and optional) and dialup data channels (PORTS). A data channel consists of an SIO board and a data set (end office equipment only).

DESCRIPTION OF FAILURE

The A and B digits denote the data channel and the D digit the probable cause of error. (See Section 218-779-106, Table A, for list of causes)

NORMAL SEQUENCE OF OPERATION

Does not apply.

TROUBLE DUPLICATION INFORMATION

Section 218-779-301 (SIO diagnostic)

REFERENCE DOCUMENTS

Section 218-779-101
Section 218-779-301
Section 218-779-106 (Table A)

CDT-DATLK

CDT-DBSE

LAMP INFORMATION

Lamp - ECT2, ECU2, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT tests the data base defined by the system cross connections (wired data base) to determine its validity.

DESCRIPTION OF FAILURE

The A-E digits denote the types of trouble as listed in Section 218-776-106, Table A, under error code 22.

NORMAL SEQUENCE OF OPERATION

Does not apply.

TROUBLE DUPLICATION INFORMATION

Check cross connections and associated wiring of cross-connect fields as indicated by A - E digits (Section 218-779-306) by utilizing directed scan diagnostic of system points to verify wired points and to isolate trouble.

REFERENCE DOCUMENTS

Section 218-779-106, Table A
Section 218-779-306
SD-28130-01 FS4

CDT-DBSE

CDT - FN

LAMP INFORMATION

Lamp - ECT1, ECU4, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker, and tests for a coding error, among the ITR, SOG, FN, FNA or FNB code points.

DESCRIPTION OF FAILURE

An error was detected in the marker data. The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION

Does not apply.

TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BJ.

REFERENCE DOCUMENTS

Section 218-423-514
SD-26002-01 FS32, FS96
SD-28130-01 FS1 BOARD PINS 148-150 (FN, FNB), 153, 154 (ITR, SOG) ON:
UNIT 06 MISC 0 BOARD PAIR 01
UNIT 16 MISC 1 BOARD PAIR 01
UNIT 07,08 MKS BOARD PAIR 01,04,07,10

CDT - FN

CDT-FU

LAMP INFORMATION

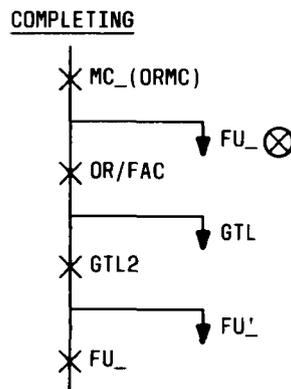
Lamp - ECT2, ECU9, CDC_
 No Lamp - FU_

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the translator access circuit.
 The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-423-514 Test BJ

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01 FS1

SD-28130-01 FS1 BOARD PINS 036-040 (FU7-FU0) ON:

UNIT 06	MISC 0	BOARD PAIR 02
UNIT 16	MISC 1	BOARD PAIR 02
UNIT 07,08	MKS	BOARD PAIR 02,05,08,11

CDT-FU

CDT - GARBAGE

LAMP INFORMATION

Lamp - ECT_, ECU_, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

Does not apply

DESCRIPTION OF FAILURE

CDT trouble data could not be analyzed based on available information.

NORMAL SEQUENCE OF OPERATION

Does not apply.

TROUBLE DUPLICATION INFORMATION

Apply CDC_, ECT_ and ECU_ data (if available) to Section 218-779-106 to isolate trouble.

REFERENCE DOCUMENTS

Section 218-779-104
Section 218-779-106 Table A
Section 218-779-305
SD-28130-01
SD-28131-01

CDT - GARBAGE

CDT-HG

LAMP INFORMATION

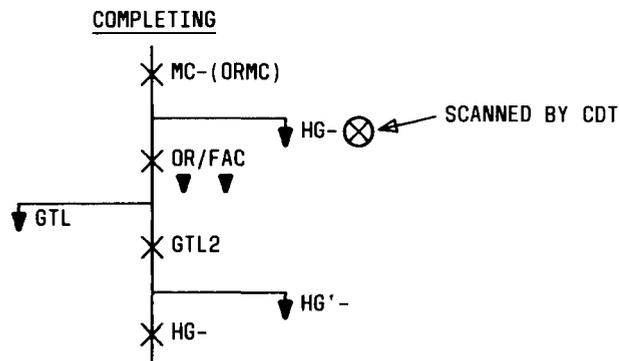
Lamp - ECT2, ECU9, CDC_
 No Lamp - HG_

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the translator access circuit.
 The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

SD-26002-01 FS1
 SD-28130-01 FS1 BOARD PINS 052-056 (HG7-HG0) ON:
 UNIT 06 MISC 0 BOARD PAIR 02
 UNIT 16 MISC 1 BOARD PAIR 02
 UNIT 07,08 MKS BOARD PAIR 02,05,08,11

CDT-HG

CDT-INIT

LAMP INFORMATION

Lamp - ECT0, ECU1, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

During system initialization, various diagnostic tests are run on the controller.

DESCRIPTION OF FAILURE

The A-C digits provide the diagnostic test number and loop number respectively. The TFU_, TNT_ and TNU_ contain information for data field 1 and data field 2. Refer to Section 218-779-106, Table A for pertinent indications.

NORMAL SEQUENCE OF OPERATION

Does not apply.

TROUBLE DUPLICATION INFORMATION

Section 218-779-104 covers system initialization and recovery. Table A in that section provides not only the TEST, LOOP, and DATA FIELDS 1 and 2 but also the cause of the errors and reference to the recovery procedure to be used to correct the error. Follow the procedures outlined in Part 3 of that section for controller recovery.

REFERENCE DOCUMENTS

Section 218-779-104
Section 218-779-106 Table A

CDT-INIT

CDT-LT/X11

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_, more that one of: LT, LT1, LT2, LT3, X11
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the translator access circuit.
 The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

SD-28130-01 FS1	BOARD PINS	141-143, 151, 152	(LT, LT1, X11, LT2, LT3) ON:
	UNIT 06	MISC 0	BOARD PAIR 01
	UNIT 16	MISC 1	BOARD PAIR 01
	UNIT 07,08	MKS	BOARD PAIR 01,04,07,10

CDT-LT/X11

CDT - MB/NMB

LAMP INFORMATION

Lamp - ECT2, ECU7, CDC_, DR_
No Lamp - Does not apply

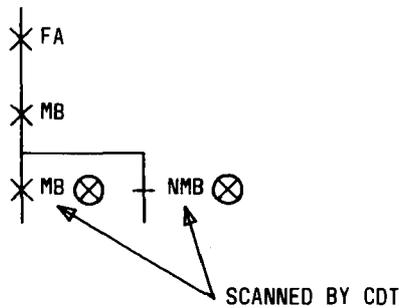
DESCRIPTION OF CIRCUIT OPERATION

CDT scans MB and NMB scan points in translator access circuit for make-busy status.

DESCRIPTION OF FAILURE

One-out-of-two check failure identified on MB and NMB scan points.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Check MB, NMB scan points, wiring and associated relay operation in SD-28131-01

REFERENCE DOCUMENTS

SD-28131-01 FS7

CDT-MKRTK

LAMP INFORMATION

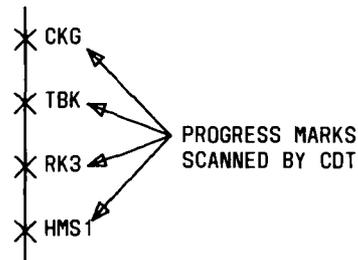
Lamp - ECT0, ECU7, CDC_
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scan an idle completing marker to determine the state of CKG, RK3, TBK and HMS1 progress marks.

DESCRIPTION OF FAILURE

Marker progress marks occurred out of proper sequence. When CKG scan operated, a TBK, RK3, or HMS1 scan point also operated; or RK3, HMS1 or TBK scan point operated with CKG scan point not operated. The A- and B-digit values indicate the specific trouble as listed in Section 218-779-106.

NORMAL SEQUENCE OF OPERATION**TROUBLE DUPLICATION INFORMATION**

Check wiring and scan points of marker progress marks.

REFERENCE DOCUMENTS

SD-26002-01 FS2, 27, 44 50

SD-28130-01 FS1 BOARD PINS

UNIT 06

" 16

" 07,08

153-156

MISC 0

" 1

MKS

(HMS1, RK3, TBK, CKG) ON:

BOARD PAIR 00

" " 00

" " 00, 03, 06, 09

CDT-MKRTK

CDT-MKS

LAMP INFORMATION

Lamp - CDC_, ECT_, ECU_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data for completing marker and categorizes invalid data received while scanning the marker.

DESCRIPTION OF FAILURE

Trouble categories include error codes 7, 9, 11 and 12. A-F digits and CKG, RK3, TBK and HMS1 progress marks and associated ECT_, ECU_ identify the trouble category. Refer to Section 218-779-106 Table A.

NORMAL SEQUENCE OF OPERATION

Does not apply.

TROUBLE DUPLICATION INFORMATION

Refer to Section 218-779-106 Table A

REFERENCE DOCUMENTS

Section 218-779-511 (ERROR CODE 7)
SD-28130-01 FS1
SD-26002-01 FS2, 27, 47, 50, 106

CDT-MKS

CDT - MUT . CGA / CGB

PUNCH INFORMATION

Lamp - CGA, CGB, ECT2, ECU9, CDC_
 No Lamp - Does not apply

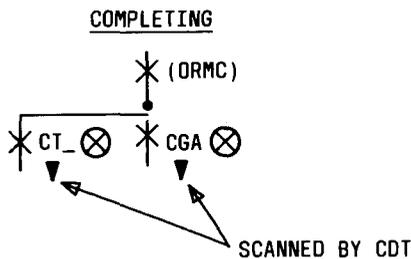
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the translator access circuit.
 The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A			
SD-26002-01 FS10			
SD-28130-01 FS1	BOARD PINS	041,042	(CGA,CGB) ON:
	UNIT 06	MISC 0	BOARD PAIR 02
	" 16	" 1	" " 02
	" 07,08	MKS	" " 02, 05, 08, 11

CDT - MUT . CGA / CGB

CDT-MUT/CT

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_
 No Lamp - Does not apply

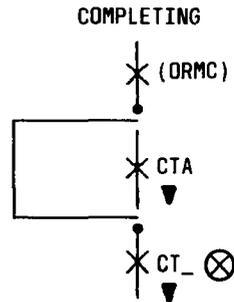
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data for completing marker.

DESCRIPTION OF FAILURE

An error was detected in the class of service tens marker data scanned by CDT. The marker data field and associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01 FS10

SD-28130-01 FS1

BOARD PINS

UNIT 06

" 16

" 07,08

125-129

MISC 0

" 0

MKS

(CT7-CT0) ON:

BOARD PAIR 02

" " 02

" " 02, 05, 08, 11

CDT - MUT/FU

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_, FU_
 No Lamp - FU_, (two-out-of-five)

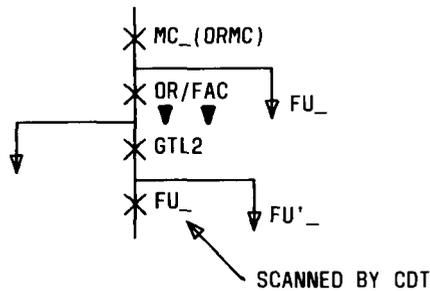
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01 FS1

SD-28130-01 FS1

BOARD PINS

UNIT 06

" 16

" 07,08

036-040

MISC 0

" 1

MKS

(FU7-FU0) ON:

BOARD PAIR 02

" " 02

" " 02, 05, 08, 11

CDT - MUT/FU

CDT - MUT/HG

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_, HG_
 No Lamp - Does not apply

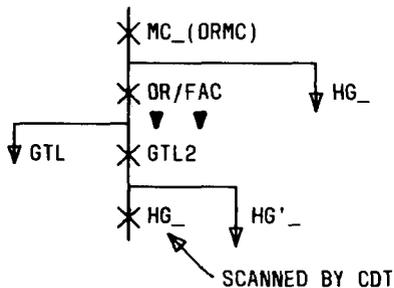
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Tests BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01 FS1

SD-28130-01 FS1

BOARD PINS	052-056
UNIT 06	MISC 0
" 16	" 1
" 07,08	MKS

(HG7-HG0) ON:
BOARD PAIR 02
" " 02
" " 02, 05, 08, 11

CDT-MUT.TLF

LAMP INFORMATION

Lamp - ECT0, ECU9, CDC_, FS_
 No Lamp - Does not apply

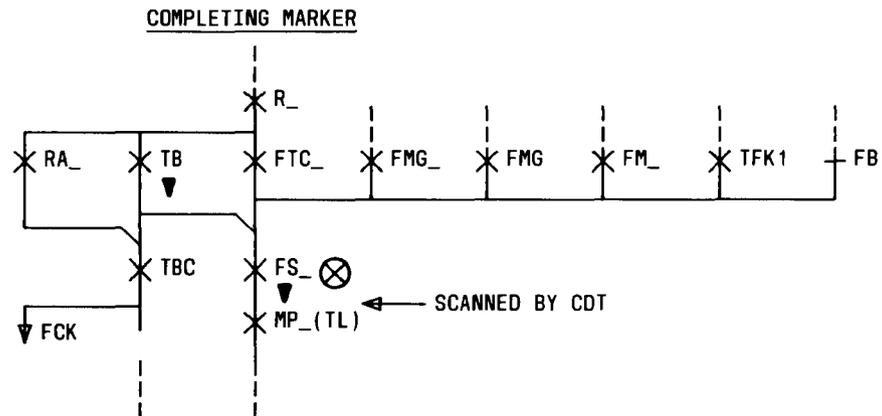
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

On trunk seizure the S1 scan point operated, but no marker was found in matching trunk link frame. Section 218-779-106, Table A lists the called number and associated FS_ (trunk link frame) for error code 9.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BI

REFERENCE DOCUMENTS

Section 218-779-106 Table A
 SD-28130-01 FS1 BOARD PINS 042-056(FS29-FS15), 126-140(FS14-FS00) ON:
 UNIT 06 MISC 0 BOARD PAIR 02
 " 16 " 1 " " 02
 " 07,08 MKS " " 00, 03, 06, 09

CDT - MUT/VF

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_, VF_
 No Lamp - VF_ (one-out-of-five)

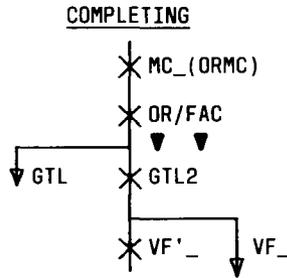
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Tests BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A
 SD-26002-01 FS1
 SD-28130-01 FS1

BOARD PINS	047-051	(VF4-VF0) ON:
UNIT 06	MISC 0	BOARD PAIR 02
" 16	" 1	" " 02
" 07,08	MKS	" " 02, 05, 08, 11

CDT-MUT/VG

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_, VG_
 No Lamp - VG_ (two-out-of-six)

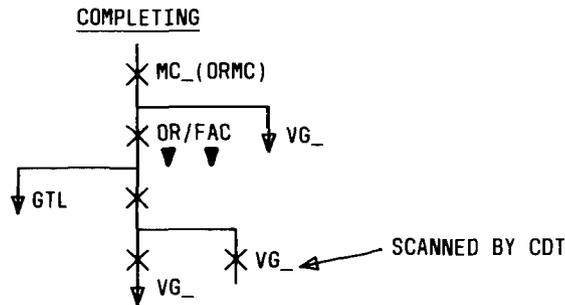
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01 FS1

SD-28130-01 FS1

BOARD	PINS	026-031
UNIT	06	MISC 0
"	16	" 1
"	07,08	MKS

(VG10-VG0)	ON:
BOARD PAIR	02
" "	02
" "	02, 05, 08, 11

CDT-OBS/NOB

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_
 No Lamp - OBS OR NOB

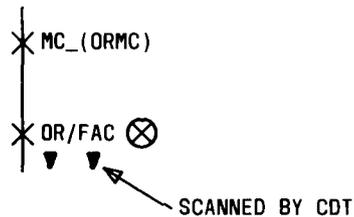
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Tests BF

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01	FS65				
SD-28130-01	FS1	BOARD PINS	139,140	(OBS/NOB) ON:	
		UNIT 06	MISC 0	BOARD PAIR 01	
		" 16	" 1	" " 0	
		" 07,08	MKS	" " 01, 04, 07, 10	

CDT-PMORT

LAMP INFORMATION

Lamp - ECT1, ECU8, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

Post mortem critical elements of a failure are presented by the A0-F7 digits of the called number.

Two types of post mortem records may be taken. The first type contains either one or two lamps or registrations in the A 0-7, B 0-7, and C 0-7 in the 2/5 fields of the called number.

The second type has all lamps or registrations in the A 0-7, B 0-7, and C 0-7 in the 2/5 fields of the called number.

DESCRIPTION OF FAILURE

Refer to Section 218-779-106 Table A, error code 18.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Does not apply - for information purposes only.

REFERENCE DOCUMENTS

Section 218-779-106 Table A

CDT-PMORT

CDT - RCD

LAMP INFORMATION

Lamp - ECT1, ECU3, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error occurred in the coding for flat rate screening. (NRD1 and RCD1)

NORMAL SEQUENCE OF OPERATION

MARKER SCAN POINTS

RCD0, NRD1	--	
RCD1, NRD0	---	Send call to AMARC
RCD0, NRD0	---	Send call to AMARC
RCD1, NRD1	---	Bad scan points -- take a trouble record -- send call to AMARC

TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Tests BH

REFERENCE DOCUMENTS

Section 218-779-106 Table A

SD-26002-01	FS41				
SD-28130-01	FS1	BOARD PINS	144,147	(NRD0,1, RCD0,1)	ON:
	UNIT	06	MISC	0	BOARD PAIR 01
	"	16	"	1	" " 01
	"	07,08	MKS	"	" 01, 04, 07, 10

CDT-SMP

LAMP INFORMATION

Lamp - ECT1, ECU5, CDC_
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.
 Two types of traffic sampling apply: CCSA for distribution of revenue,
 and point-to-point for traffic engineering studies of tandem trunk groups.

DESCRIPTION OF FAILURE

The one-out-of-fifteen sample check failed. Check scan points and wiring of SMP 1-15 leads to the marker. Also check marker cross connections and associated terminals in marker for possible false crosses or grounds. Refer to Section 219-779-106 Table A, error code 15 for sample leads and A- through C-digit cross reference.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BG

REFERENCE DOCUMENTS

Section 218-779-106 Table A
 SD-26002-01 FS64
 SD-28130-01 FS1 Board Pins 026-040 (SMP15-SMP01) on:

UNIT 06	MISC 0	BOARD PAIR 00
" 16	" 1	" " 00
" 07,08	MKS	" " 00, 03, 06, 09

Also FS1 BOARD PINS 125-130 (SA15, 12, 9, 6, 3, 0) on:

UNIT 06	MISC 0	BOARD PAIR 08
---------	--------	---------------

and FS4

CDT-SMP

CDT-TAS

LAMP INFORMATION

Lamp - ECT0, ECU7, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

For a test call directed to one particular translator access circuit, a CDT system equipped with both the dedicated and the shared translator circuit scans the TAS and TAD scan points.

DESCRIPTION OF FAILURE

Both TAS and TAD scan points were grounded for a test call directed to a particular translator access circuit. The A- and B-digit values indicate the specific trouble as listed in Section 218-779-106.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Check wiring of the TAD and TAS system points at the test frame and also at the CDT DAS.

REFERENCE DOCUMENTS

Section 218-779-106 Table A
SD-28130-01 FS1 BOARD PINS 034, 035 (TAS, TAD) on:
UNIT 06 MISC 0 BOARD PAIR 08

CDT-TAS

CDT-TKS

LAMP INFORMATION

Lamp - ECT0, ECU8 or ECT1, ECU0, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the S1 and CS scan points for each trunk assigned to CDT.

DESCRIPTION OF FAILURE

If the error code is eight a trunk seizure occurred - S1 scan operated but no marker found in matching trunk link frame. For error code 8, check S1, CS wiring and scan points for associated trunk. Use directed scan - trunks (Section 218-779-301).

If the error code is 10, multiple trunk seizure occurred in same trunk link frame. For error code 10, check S1, CS scan points and wiring for the two trunks. First trunk number is TNU_; second trunk number is indicated with trunk tens in A- and trunk units in B-.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-301 - Test trunk using directed scan.

REFERENCE DOCUMENTS

Section 218-779-106 Table A
SD-28130-01 FS1 TKS UNITS

CDT-TKS

CDT-TRK

LAMP INFORMATION

Lamp - ECT1, ECU6 or 7, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT scans the S1 and CS scan points for each trunk assigned to CDT.

DESCRIPTION OF FAILURE

If the error code is 16, there is a stuck CS in trunk, Check CS scan point and wiring and operation of trunk.

If the error code is 17, and error was encountered when setting track bit in trunk. Track bit already set or the S1 is released. Check S1 scan point and wiring and operation of trunk, identified by TFU-, TNT- and TNU-.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-301 - Test trunk using directed scan.

REFERENCE DOCUMENTS

SD-28130-01 FS1 - TKS UNITS

CDT-TRK

CDT-TST1

LAMP INFORMATION

Lamp - TVT, CDC_, RCD1, LT2
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT provides the means for performing diagnostic tests to verify distribute points, trouble indicator relay contacts and wiring associated with a lamp display request by CDT.

DESCRIPTION OF FAILURE

To determine an error(s) for test 1, input the following message at the ATA terminal: BINLIST:XBTYPE CDT-TST1! Match the printout for CDT-TST1 with the bin listing to determine if an error(s) occurs.

NORMAL SEQUENCE OF OPERATION

Enter diagnostic test 1 at the diagnostic test panel: EC12XDalX
 where: a = 0 for dedicated translator access circuit
 a = 1 for shared

TROUBLE DUPLICATION INFORMATION

Repeat diagnostic test 1 to isolate the error.

REFERENCE DOCUMENTS

Section 218-779-101
 Section 218-779-305
 SD-28130-01 FS1 UNIT 06 MISC 0 BOARD PAIRS 05, 06
 " 16 " 1 " " 05-11

CDT-TST1

CDT-TST2

LAMP INFORMATION

Lamp - TVT, CDC_, SMPA, LT1
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT provides the means for performing diagnostic tests to verify distribute points, trouble indicator relay contacts and wiring associated with a lamp display request by CDT

DESCRIPTION OF FAILURE

To determine an error(s) for test 2, input the following message at the ATA terminal: BINLIST:XBTYPE CDT-TST2! Match the printout for CDT-TST2 with the bin listing to determine if an error(s) occurs.

NORMAL SEQUENCE OF OPERATION

Enter diagnostic test 2 at the diagnostic test panel: EC12XDa2X
where: a = 0 for dedicated translator access circuit
a = 1 for shared

TROUBLE DUPLICATION INFORMATION

Repeat diagnostic test 2 to isolate the error.

REFERENCE DOCUMENTS

Section 218-779-101
Section 218-779-305
SD-28130-01 FS1 UNIT 06 MISC 0 BOARD PAIRS 05, 06
" 16 " 1 " " 05-11

CDT-TST3**LAMP INFORMATION**

Lamp - TVT, CDC_, NRDO, HMS1
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT provides the means for performing diagnostic tests to verify distribute points, trouble indicator relay contacts and wiring associated with a lamp display request by CDT

DESCRIPTION OF FAILURE

To determine an error(s) for diagnostic test 3, input the following message at the ATA terminal: BINLIST:XBTYP CDT-TST3! Since test 3 contains the 2TR lamp, the output will appear in the AMA-2TR bin. To obtain the results input the following message at the ATA terminal: OP: [SITEID.] ACT AMA-2TR; LAST LONG! (or ALL LONG!). Approximately two minutes after the test is run at the diagnostic test panel, if the 2TR lamp did not appear, test 3 results will bin as CDT-TST3. Match the printout for AMA-2TR with bin listing for CDT-TST3.

NORMAL SEQUENCE OF OPERATION

Enter diagnostic test 3 at the diagnostic test panel: EC12XDa3X
 where: a = 0 for dedicated translator access circuit
 a = 1 for shared " " "

TROUBLE DUPLICATION INFORMATION

Repeat diagnostic test 3 to isolate the error.

REFERENCE DOCUMENTS

Section 218-779-101
 Section 218-779-305
 SD-28130-01 FS1 UNIT 06 MISC 0 BOARD PAIRS 05, 06
 " 16 " 1 " " 05-11

CDT-TST3

CDT-TST4

LAMP INFORMATION

Lamp - TVT, CDC_, MTK, TBY
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT provides the means for performing diagnostic tests to verify distribute points, trouble indicator relay contacts and wiring associated with a lamp display request by CDT

DESCRIPTION OF FAILURE

To determine an error(s) for diagnostic test 3, input the following message at the ATA terminal: BINLIST:XBTYPE CDT-TST4! Match printout for CDT-TST4 with the bin listing to determine if any errors occur.

NORMAL SEQUENCE OF OPERATION

Enter diagnostic test 3 at the diagnostic test panel: EC12XDa4X
where: a = 0 for dedicated translator access circuit
a = 1 for shared " " "

TROUBLE DUPLICATION INFORMATION

Repeat diagnostic test 4 to isolate the error.

REFERENCE DOCUMENTS

Section 218-779-101
Section 218-779-305
SD-28130-01 FS1 UNIT 06 MISC 0 BOARD PAIRS 05, 06
" 16 " 1 " " 05-11

CDT-TST5

LAMP INFORMATION

Lamp - TVT, CDC_, RCD0, OC
 No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT provides the means for performing diagnostic tests to verify distribute points, trouble indicator relay contacts and wiring associated with a lamp display request by CDT

DESCRIPTION OF FAILURE

To determine an errors for diagnostic test 5, input the following message at the ATA terminal: BINLIST:XBTYP E CDT-TST5! Match the printout for CDT-TST5 with the bin listing to determine if any errors occur.

NORMAL SEQUENCE OF OPERATION

Enter diagnostic test 5 at the diagnostic test panel: EC12XDa5X
 where: a = 0 for dedicated translator access circuit
 a = 1 for shared " " "

TROUBLE DUPLICATION INFORMATION

Repeat diagnostic test 5 to isolate an error.

REFERENCE DOCUMENTS

Section 218-779-101
 Section 218-779-305
 SD-28130-01 FS1 UNIT 06 MISC 0 BOARD PAIRS 05, 06
 " 16 " 1 " " 05-11

CDT-TST5

CDT - VF

LAMP INFORMATION

Lamp - CDC_, ECT2, ECU9
 No Lamp - VF_

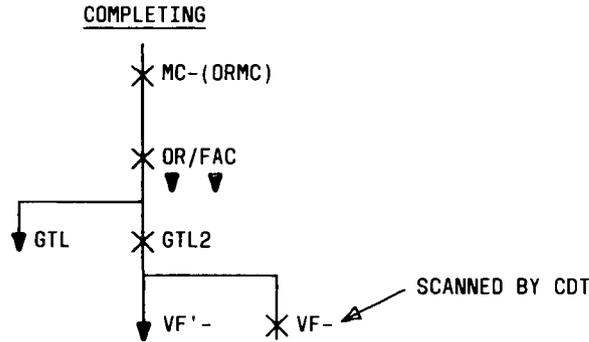
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring, and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

Section 218-779-106
 SD-26002-01 FS1
 SD-28130-01 FS1 BOARD PINS 047-051 (VF4-VF0) on:

UNIT	06	MISC	0	BOARD	PAIRS	02
"	16	"	1	"	"	02
"	07,08	MKS		"	"	02, 05, 08, 11

CDT - VG

LAMP INFORMATION

Lamp - ECT2, ECU9, CDC_
 No Lamp - VF_

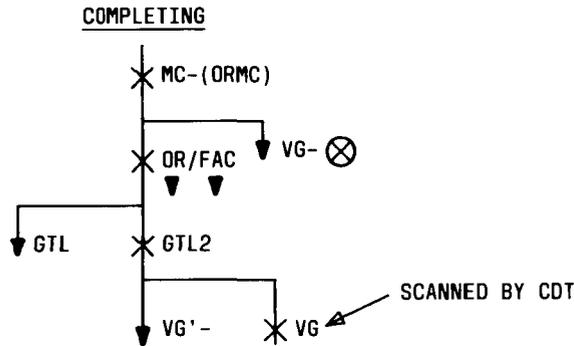
DESCRIPTION OF CIRCUIT OPERATION

CDT scans the call record data from the completing marker circuit.

DESCRIPTION OF FAILURE

An error was detected in the marker data at the CDT. The marker data field, associated wiring and scan points should be checked.

NORMAL SEQUENCE OF OPERATION



TROUBLE DUPLICATION INFORMATION

Section 218-423-514 Test BF

REFERENCE DOCUMENTS

Section 218-779-106

SD-26002-01 FS1

SD-28130-01 FS1 BOARD PINS 026-031 (VG10-VG0) on:

UNIT	06	MISC	0	BOARD	PAIRS	02
"	16	"	1	"	"	02
"	07,08	MKS		"	"	02, 05, 08, 11

CDT - 23

LAMP INFORMATION

Lamp - ECT2, ECU3, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT identifies an error which occurred while executing its data processing routines.

DESCRIPTION OF FAILURE

Refer to Section 218-779-106 Table A

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-301 (Diagnostics and status request)

REFERENCE DOCUMENTS

Section 218-779-301
Section 218-779-301

CDT - 23

CDT-25

LAMP INFORMATION

Lamp - ECT2, ECU5, CDC_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT executes BUS/DAS peripheral diagnostic routines on the system.

DESCRIPTION OF FAILURE

Determine error type by A, B, D and E digits, and circuit pack location by TFU_, TNT_ and TNU_. Refer to Section 218-779-106 Table A for required corrective action.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-301

REFERENCE DOCUMENTS

Section 218-779-106
Section 218-779-301

CDT-26

LAMP INFORMATION

Lamp - ECT2, ECU6, CDC_, DR_
No Lamp - Does not apply

DESCRIPTION OF CIRCUIT OPERATION

CDT forwards the call record data to the translator access circuit, for converting the line equipment number to obtain the billing telephone number via the AMA translator circuit.

DESCRIPTION OF FAILURE

This error code may indicate translator access circuit crosses, software work timeout, or invalid progress mark transition. Data available for this bin could not be analyzed and placed into other AMA categories. The probable cause of error may be determined from the available data. DR_ lamp identifies the translator access circuit associated with the failure.

NORMAL SEQUENCE OF OPERATION

Does not apply

TROUBLE DUPLICATION INFORMATION

Section 218-779-106 Figure 1
Section 218-779-503 Tests A-G

REFERENCE DOCUMENTS

SD-25754-01
SD-26019-01
SD-28131-01 FS2-6, SC1-3

CDT-26