AMARS
ANI B IDENTIFIER
IDENTIFICATION OF CALLING CUSTOMERS DIRECTORY
NUMBER FOR LOCAL CALLS

CONTENTS

1. GENERAL INFORMATION

2. RECORDS AND REQUIREMENTS

3. TEST EQUIPMENT

4. SET-UP INFORMATION

5. TEST PROCEDURE

6. TROUBLESHOOTING GUIDE

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1. GENERAL INFORMATION

1.1 Description

1.11 This section describes the operational tests to be perform on the Identifier circuit, SD-1C593-01, the Scan Control circuit, SD-32555-01 and the Identification Relay Selector circuit, SD-32557-01, to verify the correct operation of: 1) a Call Data Accumulator (CDA) to request the ANI B Identifier to identify a calling customers billing directory; 2) the ability of the Identifier to place a tone on the customer's sleeve lead via the associated bidding CDA, scan for calling customer info and transmit this data to the Scan Control circuit.

1.12 This section uses the J1C081G test set to monitor local traffic within a given CDA. This process is intended to verify that both identifiers can identify the calling line party for those central office codes served by the CDA.

1.13 Calls are also placed from selected types of lines to either the ITE-5471 Terminating Test Set or an existing test line that provides answer supervision. The results of these tests will be recorded by the J1C081G Identifier Test Set and the ITE-5474 No. 1 AMARS Data Monitoring Test Set.

1.2 Sequence of Operation

1.21 Before performing the operations per this section, the tests of the following shall have been performed:

HANDBOOK 95	HANDBOOK 59
Section 438	Section 115B
439	115C
440	115D
443B	115E

1.3 General Precautions

1.31 Before engaging or disengaging any circuit pack, make sure that the fuse supplying that circuit has been removed. Insertion or removal of a circuit pack with power applied may result in damage to the integrated circuits on that circuit pack.

2. RECORDS AND REQUIREMENTS

2.1 Records

2.11 Results of this section shall be recorded on forms SD-97-1313 and SD-97-1315.

2.2 Requirements

2.21 The following types of lines are needed to originate test calls:

1) One party line (bridged or ring to ground only)

2) Tip party line only

3) Two party line

4) Multi-party line

The above should be provided for each central office being monitored by a CDA.

3. TEST EQUIPMENT

3.1 Test Sets

3.11 The following equipment is required to perform the tests per this section:

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AMT	ITE	DESCRIPTION
1	2580B or C	Handset
1		J1C081G Identifier Test Set
1	5471	No. 1 AMARS Call Terminating Test Set
1	5474	No. 1 AMARS Data Monitoring Test Set

4. TEST SET-UP

4.1 Identifier Unit

4.11 Connect the J1C081G Identifier Test Set per Section 115C, Paragraph 7.1.

4.12 Insert the JW93 circuit pack associated with the CDA under test (loc 3B10-3B13, 3A14,3B8,3A4-3A13) and remove the temporary ground strap from the corresponding terminals on the input request control CP JW137 circuit pack (see FS1 of SD-1C593-01).

4.13 Set J1C081G test set switches as follows:

MTCH,OFX,AKF Switch: MTCH
ACLR Switch   : Up
MCB1,MCA1,MCD,MCC,MCB,MCA Switches: Per table below.

CDA UNDER TEST ASSOCIATED WITH CHANNEL #	SWITCHES					
	MCB1	MCA1	MCD	MCC	MCB	MCA
1	DN	DN	DN	DN	UP	DN
2	DN	DN	DN	UP	DN	DN
3	DN	DN	DN	UP	UP	DN
4	DN	DN	UP	DN	DN	DN
5	DN	DN	UP	DN	UP	DN
6	DN	DN	UP	UP	DN	DN
7	DN	DN	UP	UP	UP	DN
8	DN	UP	DN	DN	DN	DN
9	DN	UP	DN	DN	UP	DN
10	DN	UP	DN	UP	DN	DN
11	DN	UP	DN	UP	UP	DN
12	DN	UP	UP	DN	DN	DN
13	DN	UP	UP	DN	UP	DN
14	DN	UP	UP	UP	DN	DN
15	DN	UP	UP	UP	UP	DN
16	UP	DN	DN	DN	DN	DN

4.2 CDA Unit

4.21 Connect the M1 lead of the Identifier to the CDA system under test (Identifier can interface with 16 CDA units).

5. TEST PROCEDURE

5.1 For the identifier under test plug Identifier (0) or Identifier (1) busy at MB jack located at trouble ticketer.

CAUTION: DO NOT REMOVE AN IDENTIFIER FROM SERVICE IF IT IS THE ONLY UNIT PROCESSING TOLL TRAFFIC.

5.2 Monitoring CDA Traffic

5.21 The purpose of this section is to observe the identifier as it processes identification requests from a given CDA. This will be accomplished by observing each call as it is displayed on the J1C081G Identifier test set.

5.22 Connect the ITE-5474 test set per Section 440, Paragraph 4.5.

5.23 Initialize the CDA unit per Section 440, Paragraph 5.2.

5.24 Set the ITE-5474 POLLING switch to the TRANSMIT position. Momentarily depress pushbutton CD on the JW84 circuit pack in the Scan Control circuit and verify that no LED's are lit.

5.25 Observe the calling line information as it is displayed on the test set until at least ten numbers are properly identified for the central office code assigned to OFO in the identifier.

NOTE: Other LED's on the test set may light. Make sure that the ID ON LED corresponding to the identifier under test lights.

5.26 Repeat Paragraph 5.25 except the numbers observed should be associated with any other office codes assigned to the identifier (OF1-OF6).

5.27 If calling number information is incomplete, use the troubleshooting guide in Paragraph 6 to analyze and correct the problem.

5.3 Recording Identifier Data via CDA

5.301 Obtain or create a one party line (bridged or ring to ground) that can be identified by ANI-B.

5.302 Operate the ITE-5474 test set LOAD switches to the ON and CLG NO. positions.

5.303   Type on the test set keyboard the
        following digit calling number:

                    X-cccc

        where   X = office number of obtained
                     or created line
              cccc = four digit calling number
                     of the obtained or created
                     line

5.304   Set the test set LOAD switch to the OFF
        position. Verify that the proper call-
        ing number is displayed on the SORT
        display.

5.305   Momentarily operate the SORT CONTROL
        switch to the START SORT position.

5.306   Place a test call from the selected
        line to a test line which returns
        answer supervision.

5.307   Verify that the following is displayed
        at the ITE-5474 test set:

    SCAN PORT: Scan port address of the line
               finder switch through which
               the call was placed.

CALLING NUMBER: X-cccc as in Paragraph 5.303.

CALLED NUMBER: Office test line number*.

        STATUS: 074

* Will be displayed only if Scan Control cir-
  cuit is equipped form MMU.

5.308   If any other than the above messages
        are displayed, refer to Paragraph 6.

5.309   Obtain or create a tip party only line
        that can be identified by ANI-B.

5.310   Repeat steps 5.302 through 5.308.

        NOTE: CALLING NUMBER in 5.307 will be
        F-FFFF. STATUS in 5.307 will be 004.

5.311   Obtain or create a two party line that
        can be identified by ANI-B.

5.312   Repeat steps 5.302 through 5.308.

        NOTE: CALLING NUMBER in 5.307 will be
        ring party number. STATUS in 5.307
        will be 064 (class of service mark
        provided) or 074.

5.313   Obtain or create a multi-party line (if
        feature provided) that can be identified
        by ANI-B.

5.314   Repeat steps 5.302 through 5.308.

        NOTE: CALLING NUMBER in 5.307 will be
        X-FFFF. STATUS in 5.307 will be 014.

5.315   Repeat 5.301 through 5.314 for each
        different office code that a CDA unit
        can monitor.

5.4   Test Call on Scan Ports 016 and 416

5.41   Multiplexer 0

5.411   Set the ITE-5474 LOAD switch to ON.

5.412   Type on the keyboard scan port address
        016.

5.413   Set the LOAD switch to OFF.

5.414   Momentarily operate the SORT CONTROL
        switch to the START SORT position.

5.415   Within 13.6 minutes verify that the
        ITE-5474 will display the following
        message:

        SCAN PORT - 016
    CALLING NUMBER - Test number assigned in
                     identifier
   *CALLED NUMBER - 123-4890
    (For MMU Only)
        STATUS   - 074

* Less the digits cross connected for digit
  absorbtion.

5.416   If calling number is not properly dis-
        played, refer to Paragraph 6.

5.42   Multiplexer 1

5.421   Repeat Paragraphs 5.411-5.416 except
        monitor scan port 416.

5.43   Remove the make busy plug for the
        identifier under test.

5.44   Repeat Section 5 for the other identifer.

5.45   Remove the make busy plug for the
        identifier under test and disconnect
        all test connections of the ITE-5471
        (if used) and ITE-5474 test sets.

6.   TROUBLESHOOTING GUIDE

6.1   General

6.11   When substituting circuit packs to
        isolate a trouble and the replacement
        does not clear the trouble, do not
        leave the replaced circuit pack in
        place. Put the original pack back in
        the unit.

6.12   Each circuit pack definitely identified as defective should be tagged and returned for repair per established procedures.

6.13   The LED indicators and the two numerical displays on the J1C081G test set can be used to isolate the problem, if one occurs. An error condition can be locked on the test set and can only be cleared when the MDC key is momentarily depressed.

6.2   Monitoring CDA Traffic

6.21   The local identification process uses many of the same circuit packs as the toll identification. The following procedure is general in nature to uncover possible bad packs not previously tested.

CAUTION: AN ALL F's INDICATION ON THE IDENTIFIER TEST SET COULD INDICATE A BAD LINE FINDER USED BY THE CDA.

(1) Verify that pin 105 of the CP JW 93 board associated with the CDA under test is changing from a logic 0 to a logic 1. If not, replace the CP JW93, then check AREQ H and AREQ L wiring between the CDA Scan Control Ckt and the Identifier, and then replace CP JW94 board on Scan Control Circuit position 2A7.

(2) Verify that bursts of 5800 hz tone can be been on the M- lead of the CP JW134 board (see Sheet B12 of SD) for the CDA under test. If not, replace the appropriate CP JW141 (before replacing this board see Section 115C, Paragraph 4.13C), then CP JW129 on the Tone Multiplexer Position 4 (ID0) or Position 7 (ID1), then CP JW94 on the Tone Multiplexer position 11, then CP JW143 on the Identifier position 2A4.

(3) If MEM B and MEM A displays are incorrect, replace CP JW124 in the Identifier position 2A11 then CP JW130 in the Identifier position 2A5.

(4) If not obtaining proper class of service, replace CP JW134 in the Identifier position 2A6.

(5) Other boards that could cause the local identification not to work are CP JW123 position 2A9, CP JW 124 position 2A11, CP JW137 position 3B7 (ID0) or position 3B14 (ID1) and CP JW 136 position 2A13.

6.3   Recording Identifier Data Via CDA

6.31   Once local calls are being properly displayed on the identifier test set the following procedure can be used if the proper numbers are not being displayed on the ITE-5474 Data Monitoring Test Set:

(1) Verify the interface wiring between the Identifier and the CDA.

(2) In the Identifier replace the CP JW93 board associated with the CDA under test, then CP JW142 position 3B6 (ID0) or 3B9 (ID1), then CP JW140 position 3B16 (CDA 1-7) or position 3B15 (CDA 8-16). In the CDA Scan Control Circuit replace CP JW 94 position 2A7, CP JW 77 position 2A11, CP JW117 position 2A8, and CP JW83 position 2A16.

6.4   Test Calls

6.41   Using sheet B12 of SD-1C593-01 verify that a test number network has been assigned and the associated TEST- relay is wired to theCDA Identifier Relay Selector Ckt.

Manager, Product Engineering
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