

MULTICHANNEL TONE TEST UNIT—SD-7C004-01

TESTS

	PAGE
1. GENERAL	
1.01 This section describes methods of making in-service and out-of-service tests on the Multichannel Tone Test Unit (MTTU), SD-7C004-01.	
1.02 This issue affects the Equipment Test List.	
1.03 The tests covered are:	
A. Major Alarm: This test checks the capability of the fuse and alarm circuit to detect missing -48 volts, +130 volts or AMA lockup.	4
B. Minor Alarm: This test checks the capability of the fuse and alarm circuit to detect missing -5 volts, -24 volts or 2600 Hz signal that has been applied to the channel detector circuit for a period of time greater than 12 seconds.	5
C. 2600 Hz Tone Detection: This test checks the capability of the channel detector circuits to detect 2600 Hz signals at different voltage levels and duration.	6
D. CII/AMA Interface: This test checks the operation of the Call Identity Indexer (CII) relays, Trunk Identity (TI) relays and associated driver circuits.	11
E. Input Transformer and Trunk Identity: This test verifies that the input transformer is operational and checks the 2 out of 5 coding capability of the matrix decoding (LU-1) circuits.	13
F. Pulsing Generator: This test checks the pulsing rate of the 1 PPS generator output.	15
1.04 An equipment layout showing the numerical location of the Channels and Channel Detectors (LS-1 circuit packs) can be seen in Fig. 1.	
1.05 If the requirements of this section can not be met, remove the MTTU from service until the trouble can be analyzed. To remove the MTTU from service, at the power and control panel disconnect the alarm cable and operate the POWER switch to the OFF position.	
1.06 When trunk identification is not required, the switch and relay panel and the matrix decode circuit pack will not be used in the MTTU. When these units are not used, the +130V screw switch, S-1, and the AMA LOCK UP screw switch, S-2, will be screwed down. These switches are located on the fuse and alarm circuit pack printed wiring board.	
1.07 When trunk identity is desired, the switch and relay panel and matrix decode circuit pack must be used. When these units are used, the trunk numbers, MTTU channel numbers, and CII switch assignments must be entered in the Correlation Log (see Fig. 2). If this data has been previously entered in the Correlation Log, verify that no changes are to be made in the data, then date and sign the Correlation Log.	
1.08 At times when all of the channels are not being used, the unused channels must be terminated with a 600 ohm termination plug (ADC PJ743). These channels must be entered in the 600 ohm Termination Log (see Fig. 3). If this data has been previously entered in the 600 ohm Termination Log, verify that no changes are to be	

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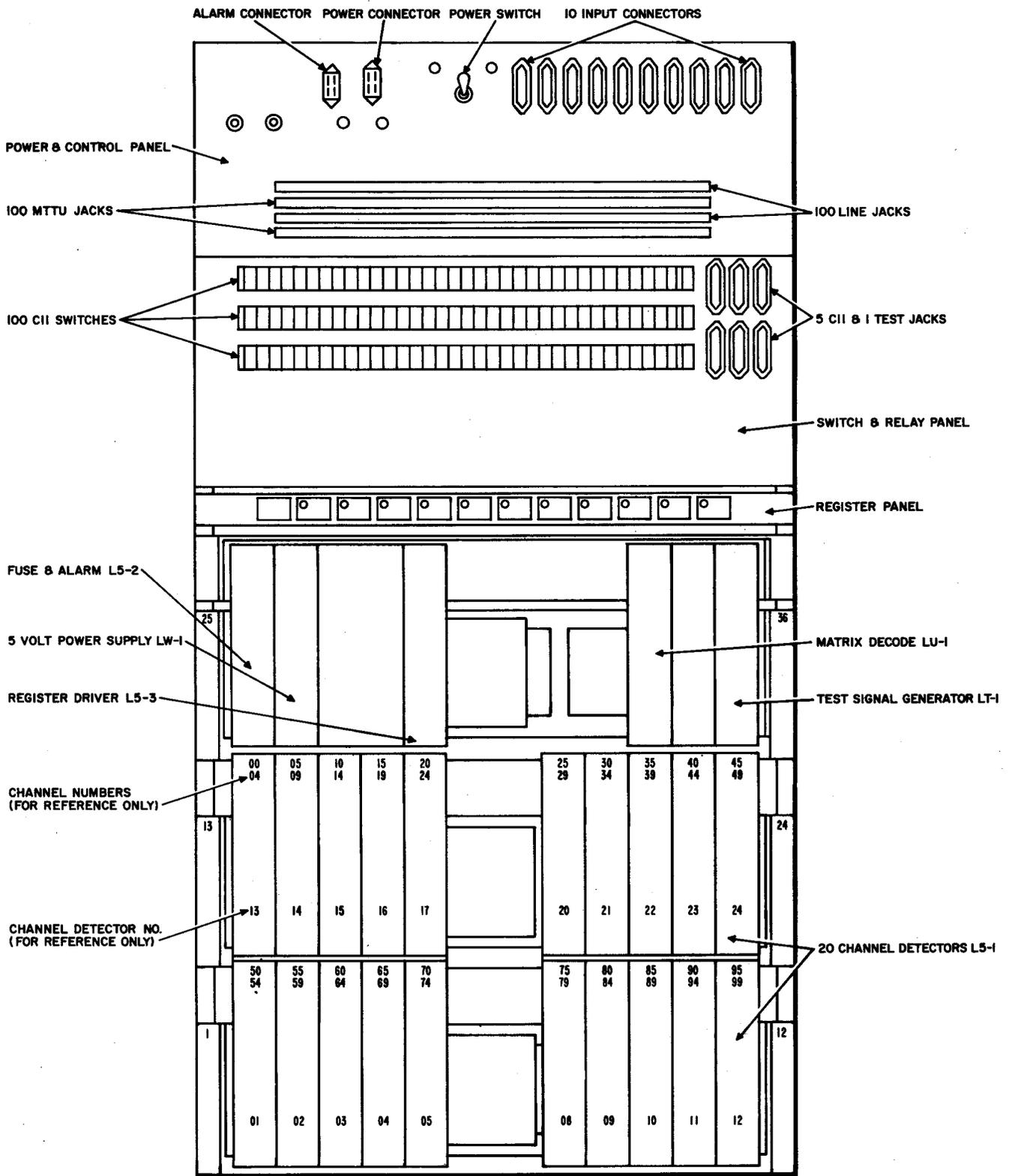


Fig. 1—MTTU Layout Showing Location of Units

made in the data, then date and sign the Termination Log.

1.09 When all the tests have been completed, record in the MTTU TEST LOG any troubles that are encountered. The trouble entry should be dated and initialed (see Fig. 4).

1.10 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 4 of this section, indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the

ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

2. APPARATUS:

Test D and E

2.01 MTTU test cable W-1.

TEST E

2.02 MTTU test cable W-2.

3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

- | | | |
|---|---|--|
| 1 | At test signal generator circuit pack (LT-1)—
Operate SIG OUTPUT switch to DETECTOR. | |
| 2 | Rotate OPERATE/TEST switch to OPER. | |
| 3 | Rotate SIGNAL MODE switch to OFF. | |
| 4 | At matrix decode circuit pack (LU-1)—
Rotate CII switch to OPER. | |
| 5 | Rotate TRNK IDTY switch to OPR. | |
| 6 | At power and control panel—
Operate POWER switch to ON. | |

Note: If AMA LOCKUP lamp on the fuse and alarm circuit pack is lighted, momentarily depress the AMA LOCKUP switch on the fuse and alarm circuit pack.

—48V and +130V lamps lighted.
MAJOR and MINOR lamps extinguished
At the test signal generator circuit pack (LT-1)—
1 PPS lamp flashes at 1 pulse per second rate.

Tests A through E

- | | | |
|---|--|--|
| 7 | At the power and control panel—
Disconnect the 10 input cables. | |
| 8 | At the switch and relay panel—
Disconnect five CII cables. | |
| 9 | At the power and control panel.
Disconnect alarm cable. | |

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STEP	ACTION	VERIFICATION
4. METHOD		
A. Major Alarm		
10	At power and control panel— Remove -48V fuse.	-48V lamp extinguished. <i>Note:</i> MAJOR lamp will not light since -48 volts controls alarm circuits.
11	Replace -48V fuse.	-48V and MAJOR lamps lighted. At fuse and alarm circuit pack LS-2— AMA LOCKUP lamp lighted.
12	Momentarily depress AMA LOCKUP switch.	AMA LOCKUP lamp extinguished. At power and control panel— MAJOR lamp extinguished.
13	Remove +130V fuse.	+130V lamp extinguished. MAJOR lamp lighted.
14	Replace +130V fuse.	+130V lamp lighted. MAJOR lamp extinguished.
15	At fuse and alarm circuit pack (LS-2)— Fully depress and hold AMA LOCKUP switch.	After approximately 12 seconds— AMA LOCKUP lamp lighted. At power and control panel— After approximately 12 seconds— MAJOR lamp lighted.
16	At fuse and alarm circuit pack (LS-2)— Release AMA LOCKUP switch. <i>Note:</i> Momentarily depress AMA LOCKUP switch again if AMA LOCKUP lamp is not extinguished.	AMA LOCKUP lamp extinguished. At power and control panel— MAJOR lamp extinguished.
17	Connect alarm cable.	
18	Remove +130V fuse.	+130V lamp extinguished. MAJOR lamp lighted. Major alarm sounds.
19	Replace +130V fuse.	+130V lamp lighted. MAJOR lamp extinguished. Major alarm silenced.
20a	If no other tests are to be performed— At power and control panel— Reconnect 10 input cables.	
21a	At switch and relay panel— Reconnect 5 CII cables.	

STEP	ACTION	VERIFICATION
22b	If other tests are to be performed— At power and control panel— Disconnect alarm cable.	
B. Minor Alarm		
<i>Note:</i> If removal and replacement of fuses cause AMA LOCKUP lamp to light, depress AMA LOCKUP switch on fuse and alarm circuit pack (LS-2).		
10	At fuse and alarm circuit pack (LS-2)— Remove fuse F-1.	At power and control panel— MINOR lamp lighted.
11	At fuse and alarm circuit pack (LS-2)— Replace fuse F-1.	At power and control panel— MINOR lamp extinguished.
12	At fuse and alarm circuit pack (LS-2)— Remove fuse F-2.	At power and control panel— MINOR lamp lighted.
13	At fuse and alarm circuit pack (LS-2)— Replace fuse F-2.	At power and control panel— MINOR lamp extinguished.
14	At fuse and alarm circuit pack (LS-2)— Remove fuse F-3.	At power and control panel— MINOR lamp lighted.
15	At fuse and alarm circuit pack (LS-2)— Replace fuse F-3.	At power and control panel— MINOR lamp extinguished.
16	At fuse and alarm circuit pack (LS-2)— Remove fuse F-4.	At power and control panel— MINOR lamp lighted.
17	At fuse and alarm circuit pack (LS-2)— Replace fuse F-4.	At power and control panel— MINOR lamp extinguished.
18	At fuse and alarm circuit pack (LS-2)— Depress and hold 2600 Hz TONE switch for approximately 13 seconds.	2600 Hz CONT TONE lamp flashes at 1 pulse per 2 seconds for 12 seconds. After 12 second— 2600 Hz CONT TONE lamp lighted continuously. At power and control panel— After 12 seconds— MINOR lamp lighted.
19	At fuse and alarm circuit pck (LS-2)— Release 2600 Hz TONE switch.	2600 Hz CONT TONE lamp extinguished. At power and control panel— MINOR lamp extinguished.
20	Connect alarm cable.	
21	At fuse and alarm circuit pack (LS-2)— Depress and hold 2600 Hz TONE switch for approximately 13 seconds.	2600 Hz CONT TONE lamp flashes at 1 pulse per 2 seconds for 12 seconds. After 12 seconds—

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STEP	ACTION	VERIFICATION
		2600 Hz CONT TONE lamp lighted continuously. At power and control panel— MINOR lamp lighted. Minor alarm sounds.
22	At fuse and alarm circuit pack (LS-2)— Release 2600 Hz TONE switch.	2600 Hz CONT TONE lamp extinguished. At power and control panel— MINOR lamp extinguished. Minor alarm silenced.
23a	If no other tests are to be performed— At power and control panel— Reconnect 10 input cables.	
24a	At switch and relay panel— Reconnect 5 CII cables.	
25b	If other tests are to be performed— At power and control panel— Disconnect alarm cable.	

C. 2600 Hz Detection

10	At register panel— Pull knobs of resettable registers.	Registers indicated zeros.
11	At test signal generator circuit pack (LT-1)— Observe 1 PPS LED for 60 ± 1 seconds.	Pulse rate should be 60 ± 3 pulses per minute.
12a	If pulse rate does not meet requirements— At test signal generator circuit pack (LT-1)— Adjust PULSE FREQUENCY ADJ for 60 ± 3 pulses per minute.	
13	Momentarily depress CLEAR switch.	CLEAR lamp flashes.
14	Operate SIG OUTPUT switch to DETECTOR position.	
15	Rotate SIGNAL MODE switch to 1 PPS position.	
16	Rotate OPERATE/TEST switch to position 1.	TEST MODE and TONE ON lamps lighted.
17	Rotate DETECTOR CHANNEL switch to ODD-1 position.	At all odd-numbered channel detector circuit packs (LS-1) (See Fig. 4)— FD and STORE lamps not lighed.
18	Repeat Step 17 for DETECTOR CHANNEL switch positions ODD-2 through EVEN-5.	

STEP	ACTION	VERIFICATION
	<i>Note:</i> Allow 1 PPS lamp to light at least one time between switch positions of DETECTOR CHANNEL switch.	
19	Repeat Step 17.	
20	At test signal generator circuit pack (LT-1)— Rotate OPERATE/TEST switch to position 2.	At all odd-numbered channel detector circuit packs (LS-1) (see Fig. 1)— Channel 1 FD lamps flash at 1 PPS rate. STORE lamps of the same channels light and remain lighted for 12 seconds, extinguish for 1 second and then relight. At register panel— Registers operated at same rate as FD lamps on channel detectors (LS-1). At matrix decode circuit pack (LU-1)— FD and ID lamps lighted and extinguished at same rate as STORE lamps.
21	At test signal generator circuit pack (LT-1)— Rotate DETECTOR CHANNEL switch to positions ODD-2 through EVEN-5, allowing 13 seconds between positions. <i>Note:</i> STORE lamps of previous channels will remain lighted for 12 seconds after DETECTOR CHANNEL switch is rotated to next channel position.	At channel detector circuit pack (LS-1)— FD lamps corresponding to DETECTOR CHANNEL switch position flash at 1 PPS rate. STORE lamps of same channels light and remain lighted for 12 seconds, extinguish for 1 second and then relight. At register panel— Registers operated at same rate as FD lamps on channel detectors (LS-1). At matrix decode circuit pack (LU-1)— FD and ID lamps lighted and extinguished at same rate as STORE lamps.
22	Rotate DETECTOR CHANNEL switch to ODD-1.	At all odd-numbered channel detector circuit packs (LS-1)— Channel 1 FD lamps flash at 1 PPS rate. STORE lamps of same channels lighted. At matrix decode circuit pack (LU-1)— FD and ID lamps lighted. At register panel— Registers operated at same rate as FD lamps on channel detector circuit packs.
23	At test signal generator circuit pack (LT-1)— Rotate OPERATE/TEST switch to position 3.	Same as verification in Step 22.

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STEP	ACTION	VERIFICATION
24	<p>At test signal generator circuit pack (LT-1)— Rotate DETECTOR CHANNEL switch to positions ODD-2 through EVEN-5, allowing 13 seconds between positions.</p> <p><i>Note:</i> STORE lamps of previous channels will remain lighted for 12 seconds after DETECTOR CHANNEL switch is rotated to next channel position.</p>	<p>At channel detector circuit pack (LS-1)— FD lamps corresponding to DETECTOR CHANNEL switch position flash at 1 PPS rate. STORE lamps of same channels light and remain lighted for 12 seconds, extinguish for 1 second and then relight. At register panel— Registers operated at same rate as FD lamps on channel detectors (LS-1). At matrix decode circuit pack (LU-1)— FD and ID lamps lighted and extinguished at same rate as STORE lamps.</p>
25	Repeat Step 22.	
26	<p>At test signal generator circuit pack (LT-1)— Rotate OPERATE/TEST switch to position 4.</p>	<p>TEST MODE and TONE ON lamps remain lighted. At all odd-numbered channel detector circuit packs (LS-1)— FD and STORE lamps extinguished. At matrix decode circuit pack (LU-1)— FD and ID indicators extinguished. At fuse and alarm circuit pack (LS-2)— AMA LOCKUP lamp remains lighted.</p>
27	<p>At test signal generator circuit (LT-1)— Rotate DETECTOR CHANNEL switch to positions ODD-2 through EVEN-5.</p>	<p>At channel detector circuit packs (LS-1)— FD and STORE lamps corresponding to DETECTOR CHANNEL switch positions not lighted. At matrix decode circuit pack (LU-1)— FD and ID lamps not lighted.</p>
28	<p>At signal generator circuit pack (LT-1)— Rotate DETECTOR CHANNEL switch to ODD-1 position.</p>	Same as Step 22.
29	Rotate SIGNAL MODE switch to OFF position.	<p>TONE ON lamp extinguished. TEST MODE lamp lighted.</p>
30	Rotate OPERATE/TEST switch to position 1.	TEST MODE lamp lighted.
	<p><i>Note:</i> Read all of verification for Step 31 before performing test.</p>	
31	<p>At test signal generator circuit pack (LT-1)— Rotate SIGNAL MODE switch to CW.</p>	<p>TONE ON and TEST MODE lamps lighted. At fuse and alarm circuit pack (LS-2)— 2600 Hz CONT TONE lamp flashed at 1 pulse per 2 seconds for 12 seconds; and after 12 seconds, lighted continuously. At power and control panel— After 12 seconds—</p>

STEP	ACTION	VERIFICATION
		<p>MINOR lamp lighed.</p> <p>At all odd-numbered channel detector circuit packs (LS-1)—</p> <p>Channel 1 FD and STORE lamps lighted.</p> <p>After approximately 2 minutes—</p> <p>STORE lamps on all odd-numbered channel detectors extinguished.</p> <p>At matrix decode circuit pack (LU-1)—</p> <p>FD and ID lamps lighted.</p> <p>After approximately 2 minutes—</p> <p>FD and ID lamps extinguished.</p> <p>At power and control panel—</p> <p>After approximately 2 minutes—</p> <p>MINOR lamp extinguished.</p>
32	At test signal generator circuit pack (LT-1)— Rotate SIGNAL MODE switch to OFF position.	<p>At fuse and alarm circuit pack (LS-2)—</p> <p>2600 HZ CONT TONE lamp extinguished.</p> <p>At all odd-numbered channel detector circuit packs (LS-1)—</p> <p>FD lamp extinguished.</p> <p>At test signal generator circuit pack (LT-1)—</p> <p>TONE ON lamp extinguished.</p>
33	At test signal generator circuit pack (LT-1)— Rotate DETECTOR CHANNEL switch to EVEN-1.	
34	At test signal generator circuit pack (LT-1)— Rotate SIGNAL MODE switch to CW position.	<p>TONE ON and TEST MODE lamps lighted.</p> <p>At fuse and alarm circuit pack (LS-2)—</p> <p>2600 HZ CONT TONE lamp flashed at 1 pulse per 2 seconds for 12 seconds; and after 12 seconds, lighted continuously.</p> <p>At power and control panel—</p> <p>After 12 seconds—</p> <p>MINOR lamp lighted.</p> <p>At all even numbered channel detector packs (LS-1)—</p> <p>Channel 1 FD and STORE lamps lighted.</p> <p>After approximately 2 minutes—</p> <p>STORE lamps on all even-numbered channel detectors extinguished.</p> <p>At matrix decode circuit pack (LU-1)—</p> <p>FD and ID lamps lighted.</p> <p>After approximately 2 minutes—</p> <p>FD and ID lamps extinguished.</p> <p>At power and control panel—</p> <p>After approximately 2 minutes.</p> <p>MINOR lamp extinguished.</p>
35	At test signal generator circuit pack (LT-1)— Rotate SIGNAL MODE switch to MAN position.	<p>TEST MODE and TONE ON lamps lighted.</p> <p>At all even-numbered channel detector circuit</p>

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STEP	ACTION	VERIFICATION
		packs (LS-1)— FD lamps extinguished.
36	Rotate DETECTOR CHANNEL switch to ODD-1 position.	At test signal generator circuit pack (LT-1)— TEST MODE and TONE ON lamps lighted.
37	Rotate OPERATE/TEST switch to position 2.	Same as Step 36.
38	Depress and release MANUEL PULSE switch.	At all odd-numbered channel detector circuit packs (LS-1)— Channel 1 FD lamps flashed. Channel 1 STORE lamps lighted. At matrix decode circuit pack (LU-1)— FD and ID lamps lighted.
39	At test signal generator circuit pack (LT-1)— Depress and release CLEAR switch.	CLEAR lamp flashed. At all odd-numbered channel detector circuit packs (LS-1)— STORE lamps extinguished. At matrix decode circuit pack (LU-1)— FD and ID lamps extinguished.
40	At test signal generator circuit pack (LT-1)— Rotate SIGNAL MODE switch to OFF position.	TONE ON lamp extinguished. TEST MODE remains lighted. At all odd-numbered channel detector circuit packs (LS-1)— Channel 1 FD lamps flashed. Channel 1 STORE lamps lighted. At matrix decode circuit pack (LU-1)— FD and ID lamp lighted.
41	At test signal generator circuit pack (LT-1)— Depress and release CLEAR switch.	CLEAR lamp flashed. At all odd-numbered channel detector circuit packs (LS-1)— STORE lamps extinguished. At matrix decode circuit pack (LU-1)— FD and ID lamps extinguished. TEST MODE extinguished.
42	At test signal generator circuit pack (LT-1)— Rotate OPERATE/TEST switch to OPER position.	
43	At central office interface panel— Momentarily depress MTTU ALARM RELEASE switch.	At fuse and alarm circuit pack (LS-2)— AMA LOCKUP lamp extinguished. At power and control panel— MAJOR lamp extinguished.
44c	If no other tests are to be performed— At power and control panel— Reconnect 10 input cables.	

STEP	ACTION	VERIFICATION
45b	Reconnect alarm cable.	
46b	At switch and relay panel— Reconnect 5 CII cables.	
D. CII/AMA Interface		
10	At switch and relay panel— Connect cable W-1 between TEST connector and CII-0 connector.	
11	At matrix decode circuit pack (LU-1)— Rotate CII switch to "0."	TEST MODE lamp flashed at 1 pulse per second rate.
12	Rotate TRNK IDTY switch to T0, U0.	FD and ID lamps lighted. "0" lamps in TENS and UNITS columns lighted.
13	Rotate TRNK IDTY switch to T1, U1.	"1" lamps in TENS and UNITS columns should not light. "0" lamps in TENS and UNITS columns remain lighted. FD and ID lamps remain lighted.
14	Momentarily depress CH switch.	RR, CH and DJ lamps flashed. FD lamp extinguished. OT, ID, and MA lamps lighted.
15	Momentarily depress RC switch.	OT, ID, and MA lamps extinguished. "0" lamps in TENS and UNITS columns extinguished. FD and ID lamps lighted. "1" lamps in TENS and UNITS columns lighted.
16	Rotate TRNK IDTY switch to T2, U2.	"2" lamps in TENS and UNITS columns not lighted. "1" lamps in TENS and UNITS columns remain lighted. FD and ID lamps remain lighted.
17	Repeat Step 14.	
18	Momentarily depress RC switch.	OT, ID, and MA lamps extinguished. "1" lamps in TENS and UNITS columns extinguished. FD and ID lamps lighted. "2" lamps in TENS and UNITS columns lighted.
19	Rotate TRNK IDTY switch to T4, U4.	"4" lamps in TENS and UNITS columns not lighted.

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STEP	ACTION	VERIFICATION
		"2" lamps in TENS and UNITS columns remain lighted. FD and ID lamps remain lighted.
20	Repeat Step 14.	
21	Momentarily depress RC switch.	OT, ID, and MA lamps extinguished. "2" lamps in TENS and UNITS columns extinguished. FD and ID lamps lighted. "4" lamps in TENS and UNITS columns lighted.
22	Rotate TRNK IDTY switch to T7, U7.	"7" lamps in TENS and UNITS columns not lighted. "4" lamps in TENS and UNITS columns remain lighted. FD and ID lamps remain lighted.
23	Repeat Step 14.	
24	Momentarily depress RC switch.	OT, ID, and MA lamps extinguished. "4" lamps in TENS and UNITS columns extinguished. FD and ID lamps lighted. "7" lamps and TENS and UNITS columns lighted.
25	Repeat Step 14.	
26	Momentarily depress RC switch.	OT, ID, and MA lamps extinguished. "7" lamps in TENS and UNITS columns extinguished. FD and ID lamps extinguished. TEST MODE lamp remains lighted.
27	Rotate TRNK IDTY switch to OPER.	
28	At switch and relay panel— Disconnect test cable W-1 from CII-0 and connect to CII-1.	
29	At matrix decode circuit pack (LU-1)— Rotate CII switch to position 1.	
30	Repeat Steps 12 through 27.	
31	At switch and relay panel— Disconnect test cable W-1 from CII-1 and connect to CII-2.	

STEP	ACTION	VERIFICATION
32	At matrix decode circuit pack (LU-1)— Rotate CII switch to position 2.	
33	Repeat Steps 12 through 27.	
34	At switch and relay panel— Disconnect test cable W-1 from connector CII-2 and connect to CII-3.	
35	At matrix decode circuit pack (LU-1)— Rotate CII switch to position 3.	
36	Repeat Steps 12 through 27.	
37	At switch and relay panel— Disconnect test cable W-1 from CII-3 and connect to CII-4.	
38	At matrix decode circuit pack (LU-1)— Rotate CII switch to position 4.	
39	Repeat Steps 12 through 27.	
40	Rotate CII switch to OPR.	
41	At switch and relay panel— Disconnect test cable W-1 from TEST connector and CII-4 connector.	
42a	If no other tests are to be performed— At power and control panel— Reconnect 10 input cables.	
43a	Reconnect alarm cable.	
44a	At switch and relay panel— Reconnect 5 CII cables.	

E. Input Transformer and Trunk Identity

10	At power and control panel— Remove 600 ohm terminations (ADC PJ743) from MTTU test jacks.	
11	At switch and relay panel— Operate 100 CII switches to "0" position.	
12	Connect test cable W-1 to TEST connector and CII-0 connector.	
13	At test signal generator circuit pack (LT-1)— Connect test cable W-2 to TEST JACK.	

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STEP	ACTION	VERIFICATION
14	At power and control panel— Connect other end of test cable W-2 to MTTU jack "00."	
	<i>Caution: Make sure cord is not inserted in LINE jack.</i>	
15	At test signal generator circuit pack (LT-1)— Rotate SIGNAL OUTPUT switch to TEST JACK.	
16	Rotate SIGNAL MODE switch to CW.	
17	Rotate OPERATE/TEST switch to position 1.	At channel detector circuit pack (LS-1)— FD and STORE lamps of appropriate channel and channel detector lighted (see Fig. 1). At matrix decode circuit pack (LU-1)— FD and ID lamps lighted. Appropriate lamps in TENS and UNITS columns lighted (see Table A).
		<i>Note:</i> Disregard all other lamps on fuse and alarm panel.
18	At power and control panel— Disconnect test cable W-2 from MTTU jack "00."	At channel detector circuit pack (LS-1)— FD lamp extinguished. After approximately 12 seconds— STORE lamp extinguished. At matrix decode circuit pack (LU-1)— FD and ID lamps and four lamps in TENS and UNITS column extinguished.
19	Repeat Steps 14 through 18 for MTTU jacks 01 through 99.	
20	Repeat Steps 11 through 19 for positions 1, 2, 3, and 4 of 100 CII switches and CII connectors CII-1, CII-2, CII-3, and CII-4.	
21	At test signal generator circuit pack (LT-1)— Rotate SIGNAL MODE switch to OFF.	
22	Rotate OPERATE/TEST switch to OPER.	TEST MODE and TONE ON lamps extinguished.
23	At switch and relay panel— Disconnect test cables W-1 from TEST connector and CII-4 connector.	
24	At test signal generator circuit pack (LT-1)— Disconnect test cable W-2 from TEST JACK.	

STEP	ACTION	VERIFICATION
25	At register panel— Pull knobs on resettable registers.	Registers indicated zeros.
26	Record readings of registers in REGISTER LOG (see Fig. 5).	
27	At switch and relay panel— Operate CII switches as indicated in CORRELATION LOG (see Fig. 2).	
28	At power and control panel— Insert 600 ohm terminations (ADC PJ743) in MTTU jacks of unused channels.	
29	Record unused channel numbers in 600 OHM TERMINATION LOG (see Fig. 3).	
30a	If no other tests are to be performed— At power and control panel— Reconnect 10 input cables.	
31a	Reconnect alarm cable.	
32a	At switch and relay panel— Reconnect 5 CII cables.	
33a	At fuse and alarm circuit pack (LS-2)— Momentarily depress AMA LOCKUP switch.	AMA LOCKUP lamp extinguished.

F. Operational Check

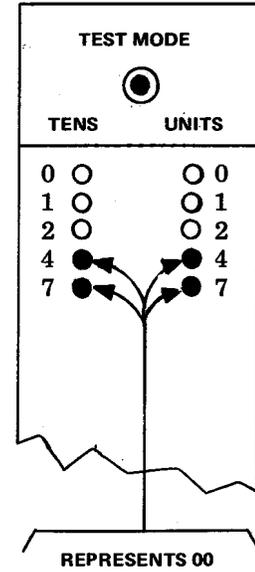
7	At test signal generator circuit pack (LT-1)— Observe 1 PPS lamp.	1 PPS Lamp flashed at 1 PPS rate.
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Note: Lighted and extinguished time duration should be approximately equal.

TABLE A

2 OUT OF 5 CODE FOR ALL 100 CHANNELS

CHANNEL NUMBERS	TENS COLUMN	UNITS COLUMN	CHANNEL NUMBERS	TENS COLUMN	UNITS COLUMN
00	7 4	7 4	50	4 1	7 4
01	7 4	0 1	51	4 1	0 1
02	7 4	0 2	52	4 1	0 2
03	7 4	2 1	53	4 1	2 1
04	7 4	0 4	54	4 1	0 4
05	7 4	4 1	55	4 1	4 1
06	7 4	4 2	56	4 1	4 2
07	7 4	0 7	57	4 1	0 7
08	7 4	7 1	58	4 1	7 1
09	7 4	7 2	59	4 1	7 2
10	0 1	7 4	60	4 2	7 4
11	0 1	0 1	61	4 2	0 1
12	0 1	0 2	62	4 2	0 2
13	0 1	2 1	63	4 2	2 1
14	0 1	0 4	64	4 2	0 4
15	0 1	4 1	65	4 2	4 1
16	0 1	4 2	66	4 2	4 2
17	0 1	0 7	67	4 2	0 7
18	0 1	7 1	68	4 2	7 1
19	0 1	7 2	69	4 2	7 2
20	0 2	7 4	70	0 7	7 4
21	0 2	0 1	71	0 7	0 1
22	0 2	0 2	72	0 7	0 2
23	0 2	2 1	73	0 7	2 1
24	0 2	0 4	74	0 7	0 4
25	0 2	4 1	75	0 7	4 1
26	0 2	4 2	76	0 7	4 2
27	0 2	0 7	77	0 7	0 7
28	0 2	7 1	78	0 7	7 1
29	0 2	7 2	79	0 7	7 2
30	2 1	7 4	80	7 1	7 4
31	2 1	0 1	81	7 1	0 1
32	2 1	0 2	82	7 1	0 2
33	2 1	2 1	83	7 1	2 1
34	2 1	0 4	84	7 1	0 4
35	2 1	4 1	85	7 1	4 1
36	2 1	4 2	86	7 1	4 2
37	2 1	0 7	87	7 1	0 7
38	2 1	7 1	88	7 1	7 1
39	2 1	7 2	89	7 1	7 2
40	0 4	7 4	90	7 2	7 4
41	0 4	0 1	91	7 2	0 1
42	0 4	0 2	92	7 2	0 2
43	0 4	2 1	93	7 2	2 1
44	0 4	0 4	94	7 2	0 4
45	0 4	4 1	95	7 2	4 1
46	0 4	4 2	96	7 2	4 2
47	0 4	0 7	97	7 2	0 7
48	0 4	7 1	98	7 2	7 1
49	0 4	7 2	99	7 2	7 2



600 OHM TERMINATION LOG		
DATE OF TEST	UNUSED MTTU CHANNELS THAT HAVE 600 OHM TERMINATIONS IN MTTU JACKS	OPERATOR

Fig. 3—600-Ohm Termination Log

MTTU TEST LOG

DATE OF TEST	TYPE OF TEST (NOTE 1)	TEST RESULTS (NOTE 2)	OPER.

Note 1: See Equipment Test List for type of test (Section 179-001-011).

Note 2: Include time and date MTTU is placed back in service.

Fig. 4—MTTU Test Log

