MULTIFREQUENCY INCOMING REGISTER SD-26042-01
TESTS USING OFFICE TEST FRAME TEST CIRCUIT SD-27633-01 (J23260)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is reissued for the following reasons:

(a) To revise Tests A, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q and R

(b) To revise Part 3, Preparation

(c) To revise Part 5, Preparation of Test Chart.

(d) To revise Test Charts.

(e) To make minor changes as required.

This reissue affects Equipment Test Lists.

1.02 The tests covered are:

1.03 Test B requires action and verification at the local test desk.

1.04 Local instructions should be followed for recording and reporting any plant or traffic register operations caused by performing these tests.

1.05 Test Charts are provided which show priming information required for each test. Spaces are provided on the charts for listing specific priming information depending on local conditions. These charts should be filled out from local records in accordance with the instructions provided in Part 5, Preparation of Test Chart.

1.06 ▶For circuits equipped with E and M lead supervision, jacks may not be provided. In this case, it will be necessary to open the E and M leads at the MDF location of the incoming trunk used in test. The E and M leads towards the incoming trunk then should be connected to the T and R of the T2 jack of the miscellaneous circuit.◀

2. APPARATUS

2.01 The apparatus required for each test is listed in Table A. The details of each item are covered in the paragraph indicated by the number in parentheses.

2.02 Timing test set J24753A (SD-25707-01).

2.03 Patching cord, P3E cord, 8 feet long, equipped with two 310 plugs (3P6E cord).

2.04 Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord), one 624B (terminal connector) tool, and one KS-6278 connecting clip (used for connecting terminal 13 to ground).

2.05 Blocking and insulating tools as required. Use tools and apply as covered in Section 069-020-801.

2.06 ▶Patching cord, W3M cord, 15 feet long, equipped with one 310 plug and three 360 tools (3W4B cord) and two KS-6278 connecting clips (used to connect E and M leads to MDF terminal strip).◀

TABLE A

APPARATUS	TESTS																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	P.1	Q	R
322A (make-busy) Plugs							1												
KS-3008 Stopwatch or equivalent						1		1											
Test Set (2.02)							1												
Cord (2.03)	2		2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2
Cord (2.04)														1					
Tool (2.05)		√	√	√				√	√										
Cord (2.06)	1		1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1

√ As required.

3. PREPARATION

STEP	ACTION	VERIFICATION
All Tests Except B and G		
1	At OTF— Restore all keys and switches.	All lamps extinguished.
2	At TIC— Momentarily operate RLS key.	All lamps extinguished.
3	At OTF— Set RSG switch to select register group.	If make-busy guard lamp feature is provided— MBG lamp lighted.
4	Set RSS switch to select register under test.	
5	In accordance with Test Chart, have incoming trunk of proper class to be used in test made busy at distant office.	
6a	If trunk selected has loop supervision— At trunk relay rack frame— Using P3E cord, patch ITT jack to T jack of trunk.	
7a	▶Operate ITT1 key.	
8b	If trunk used in test is bylink— Operate BL key.	

STEP	ACTION	VERIFICATION
9b	Patch from BL jack to SP jack using P3E cord.	
10b	At relay rack frame— Patch W3M cord to SP jack and connect sleeve to terminal 42 on trunk unit terminal strip.	
11c	If trunk used in test is equipped with E and M lead supervision— At incoming trunk under test— Patch T1 jack of miscellaneous circuit to T jack of incoming trunk under test.	
12c	At access facilities for E and M leads associated with trunk under test— Patch T2 jack of miscellaneous circuit to access facilities for E and M leads associated with trunk under test. ***Note:*** See 1.06.	
13c	At OTF— Operate ITT2, ONHK keys.	
14d	If trunk used in test does not require a start dial signal— Operate ONHK key.	
15e	If trunk used in test has A relay ground shunt— Operate GS key.	
16f	If trunk used in test has short conductor loop— Operate SLP key.	
17	Set LL switch to 0.	
18	Operate MKR_ key for marker to be used in test.	
19	Operate ITT, MF, MCB keys.	
All Tests Except C, D, E, F, L		
20	Set PS switch to 66/10.	

STEP	ACTION	VERIFICATION

4. METHOD

STEP	ACTION	VERIFICATION

A. Regular Call

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 1.◀	
22	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through K_ lamps lighted corresponding to digit setting on A through K DIAL switches. TF_ lamps identifying trunk link frame number of trunk used in test lighted. INC, TOL, or TAN lamp lighted identifying incoming trunk class.
23	At OTF— Restore ST key.	All lamps extinguished.
24	At TIC— Momentarily operate RLS key.	All lamps extinguished.
25	▶Repeat Steps 21 through 24 for Test Chart Tests 2 through 16.	
26g	If multifrequency receiver has option for SP pulse corrector— Set PS switch to 70/24.	
27	Repeat Steps 21 through 24.	
28h	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
29	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
30	Reconnect E and M leads at MDF location if necessary.	
31	At OTF— Restore all keys and switches.	

STEP	ACTION	VERIFICATION
32	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
33	Have trunk restored to service at distant office.	

B. Special Call

Local Test Desk Arranged for Multifrequency Pulsing

1	Select from office records a multifrequency no-test trunk from the local test desk and determine incoming register link appearance.	
2	At incoming register link for trunk selected— Block operated RB_ relays associated with register under test in all horizontal groups except the one serving trunk used in test.	
3	Block operated RB_ relays associated with all other registers for the horizontal group serving trunk used in test.	
4	Establish off-hook condition for an office telephone and allow line to route to permanent signal holding trunk.	
5	At local test desk— Place call to line which off-hook condition established.	Permanent signal tone heard.
6	Release test connection.	Permanent signal tone silenced.
7	At incoming register link— Remove blocking tools from RB_ relays.	

Voltmeter Test Circuit Arranged for Use With No-Test Trunk Requiring Multifrequency Pulsing

8	Establish off-hook condition for an office telephone and allow line to route to permanent signal holding trunk.	
9	At OTF— Operate LT, T keys.	KP lamp lighted.
10	At multifrequency keyset— Dial digits for line which off-hook condition established.	

STEP	ACTION	VERIFICATION
11	At OTF— Restore LT key.	Permanent signal tone heard.
12	Release test connector.	KP lamp extinguished. Permanent signal tone silenced.
13	Restore all keys and switches not required in next test.	

C. Link Release and Verification of Trouble Indicating Leads

20	At register under test— Block nonoperated CK relay.	
21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 17.◀	
22g	If CLRR key is operated— At jack, lamp, and key circuit— Restore CLRR key.	
23	Operate ST key.	At TIC— Trouble display registered. INC, DCK, LR lamps lighted. ▶CN/RG/S◀ lamp identifying register under test lighted.
24	At OTF— Restore ST key.	All lamps extinguished.
25	At TIC— Momentarily operate RLS key.	All lamps extinguished.
26	▶At register under test— Remove blocking tool from CK relay.	
27h	If CLRR key had to be restored in Step 22g— Operate CLRR key.	
28i	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
29	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	

STEP	ACTION	VERIFICATION
30	Reconnect E and M leads at MDF location if necessary.	
31	At OTF— Restore all keys and switches.	
32	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
33	Have trunk restored to service at distant office.◀	
D. Double Connection		
20	At register under test— Block nonoperated DCK relay.	
21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 18.◀	
22g	If CLRR key is operated— At jack, lamp, and key circuit— Restore CLRR key.	
23	Operate ST key.	At TIC— Trouble display registered. INC, LR lamps lighted. DCK lamp ***not*** lighted.
24	At OTF— Restore ST key.	All lamps extinguished.
25	At TIC— Momentarily operate RLS key.	All lamps extinguished.
26	▶At register under test— Remove blocking tool from DCK relay.	
27h	If CLRR key was restored in Step 22g— Operate CLRR key.	
28i	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
29	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	

STEP	ACTION	VERIFICATION
30	Reconnect E and M leads at MDF location if necessary.	
31	At OTF— Restore all keys and switches.	
32	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
33	Have trunk restored to service at distant office.◀	
E. Abandoned Call		
20	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 19.◀	
21	Operate ST key.	IS lamp lighted.
22	Immediately after IS lamp lights— Restore ST key.	IS lamp extinguished.
23g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
24	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
25	Reconnect E and M leads at MDF location if necessary.	
26	At OTF— Restore all keys and switches.	
27	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
28	Have trunk restored to service at distant office.◀	
F. Permanent Signal		
20	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 20.◀	

STEP	ACTION	VERIFICATION
21	Operate ST key; ***start timing***	IS lamp lighted. In 19 to 37 seconds— Overflow tone heard.
22	Restore ST key.	IS lamp extinguished. Overflow tone silenced.
23g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
24	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
25	Reconnect E and M leads at MDF location if necessary.	
26	At OTF— Restore all keys and switches.	
27	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
28	Have trunk restored to service at distant office.◀	

G. Short Timeout

1	At jack, lamp, and key circuit— Insert make-busy plug into IRMB_ jack associated with register under test.	
2	▶At register under test— Block nonoperated TM and LR relays.	
3	Block operated CK, ON1 and RLK relays.	Within 150 to 250 milliseconds— RV relay operated.
4	Remove blocking tools from ON1 and RLK relays.	RV relay remains operated.
5	Remove blocking tool from CK relay.	RV relay released.
6	Remove blocking tool from LR relay.	
7	Block nonoperated RV relay.	
8	Block operated RLK and ON relays.	LR relay does not operate.

STEP	ACTION	VERIFICATION
9	Remove blocking tool from RLK relay.	Within 260 to 425 milliseconds— LR relay operated.
10	Remove blocking tool from ON relay.	LR relay released.
11	Remove blocking tools from TM and RV relays.	
12a	If precise timing intervals are to be checked— Measure RV and LR timing interval using the circuit requirement tables and timing test set.◀	
13	At jack, lamp, and key circuit— Remove make-busy plug from IRMB_ jack.	

H. Long Timeout and Alarm

21	At register under test— Block nonoperated MST relay.	
22	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 21.◀	
23	Operate ST key; after ED lamp lights, ***start timing.***	ED lamp lighted. After 7 seconds— TF lamp lighted. At jack, lamp, and key circuit— In 19 to 37 seconds— TO lamp lighted.
24	▶Restore RSS switch.◀	
25	After TO lamp lights, ***start timing.***	In 10 to 15 seconds— R-S-TOA lamp lighted. Major alarm sounds.
26	▶Reset RSS switch.◀	At jack, lamp, and key circuit— R-S-TOA lamp extinguished. Major alarm silenced.
27	At OTF— Restore ST key.	All lamps extinguished.
28	At TIC— Momentarily operate RLS key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
29g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
30	At incoming register under test— Remove blocking tool from MST relay.	
31	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
32	Reconnect E and M leads at MDF location if necessary.	
33	At OTF— Restore all keys and switches.	
34	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
35	Have trunk restored to service at distant office.◀	

I. Marker Start Signal

21	At register under test— Block nonoperated TEN relay.	
22	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 22.◀	
23	Operate ST key; ***start timing.***	In 7 seconds— TF lamp lighted. IS lamp lighted. In 19 to 37 seconds— Overflow tone heard. IS lamp extinguished.
24	Restore ST key.	TF lamp extinguished. Overflow tone silenced.
25	▶Repeat Steps 22 through 24 for Test Chart Tests 23 through 30.◀	
26	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
27	At register under test— Remove blocking tool from TEN relay.	
28g	If no further tests are to be performed— At trunk relay rack frame— Remove patching cord(s).	
29	▶At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
30	Reconnect E and M leads at MDF location if necessary.	
31	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.◀	
32	Have trunk used in test restored to service at distant office.	

J. Operator Error Detection

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 31.◀	
22	Operate ST key.	Overflow tone heard.
23	Restore ST key.	Overflow tone silenced.
24	▶Repeat Steps 21 through 23 for Test Chart Tests 32 through 50.	
25g	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
26	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
27	Reconnect E and M leads at MDF location if necessary.	
28	At OTF— Restore all keys and switches.	

STEP	ACTION	VERIFICATION
29	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
30	Have trunk restored to service at distant office.◀	
K. High and Low Level Test		
21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 51.◀	
22	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through D_ lamps corresponding to setting of A through D DIAL switches lighted. TF_ lamps identifying trunk link frame number of trunk used in test lighted.
23	At OTF— Restore ST key.	All lamps extinguished.
24	At TIC— Momentarily operate RLS key.	All lamps extinguished.
25	▶Repeat Steps 21 through 24 for Test Chart Test 52.	
26g	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
27	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
28	Reconnect E and M leads at MDF location if necessary.	
29	At OTF— Restore all keys and switches.	
30	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
31	Have trunk restored to service at distant office.	

STEP	ACTION	VERIFICATION
L. Slow Pulsing		
20	Set PS switch to SLOW.	
21	Operate keys and set switches in accordance with Test Chart Test 53.	
22	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through D_ lamps corresponding to setting of A through D DIAL switches lighted. TF_ lamps identifying trunk link frame number of trunk used in test lighted.
23	At OTF— Restore ST key.	All lamps extinguished.
24	At TIC— Momentarily operate RLS key.	All lamps extinguished.
25g	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
26	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
27	Reconnect E and M leads at MDF location if necessary.	
28	At OTF— Restore all keys and switches.	
29	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
30	Have trunk restored to service at distant office.	
M. Twist Test		
21	At OTF— Operate keys and set switches in accordance with Test Chart Test 54.	
22	Operate ST key.	IS lamp lighted until end of pulsing. At TIC—

STEP	ACTION	VERIFICATION
		Display registered. A_ through D_ lamps corresponding to setting of A through D DIAL switches lighted. TF_ lamps identifying trunk link frame number of trunk used in test lighted.
23	At OTF— Restore ST key.	All lamps extinguished.
24g	If no other tests are to be made— At relay rack frame— Remove all patching cords.	
25	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
26	Reconnect E and M leads at MDF location if necessary.	
27	At OTF— Restore all keys and switches.	
28	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
29	Have trunk restored to service at distant office.◀	

N. Modulation Products

21	At signaling receiving circuit associated with register under test— Connect ground to terminal 13 of terminal strip A.	
22	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 55.◀	
23	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through D_ lamps corresponding to setting of A through D DIAL switches lighted. TF_ lamps identifying trunk link frame number of trunk used in test lighted.
24	Restore ST key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
25	At TIC— Momentarily operate RLS key.	All lamps extinguished.
26	At OTF— Restore all keys and switches not required in next test.	
27	At signaling receiving circuit associated with register under test— Remove test connections from terminal strip A.	
28g	If no further tests are to be performed— At trunk relay rack frame— Remove patching cord(s).	
29	▶At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
30	Reconnect E and M leads at MDF location if necessary.	
31	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.◀	
32	Have trunk used in test restored to service at distant office.	

O. 11 Prefix Digits

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 56.◀	
22	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. ▶A_ lamp corresponding to setting of C DIAL switch lighted.◀
23	At OTF— Restore ST key.	All lamps extinguished.
24	At TIC— Momentarily operate RLS key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
25g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
26	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
27	Reconnect E and M leads at MDF location if necessary.	
28	At OTF— Restore all keys and switches.	
29	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
30	Have trunk restored to service at distant office.◀	

P. Single Frequency Digit

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 57.◀	
22	Operate ST key.	IS lamp lighted. At TIC— Trouble display registered. ▶A2 lamp lighted. B_ through D_ lamps lighted corresponding to setting of B through D DIAL switches.◀
23	At OTF— Restore ST key.	All lamps extinguished.
24	At TIC— Momentarily operate RLS key.	All lamps extinguished.
25g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
26	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	

STEP	ACTION	VERIFICATION
27	Reconnect E and M leads at MDF location if necessary.	
28	At OTF— Restore all keys and switches.	
29	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
30	Have trunk restored to service at distant office.◀	

P.1 3-Frequency Digit

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 58.◀	
22	Operate ST key.	Reorder tone heard.
23	Restore ST key.	Reorder tone silenced.
24g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
25	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
26	Reconnect E and M leads at MDF location if necessary.	
27	At OTF— Restore all keys and switches.	
28	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
29	Have trunk restored to service at distant office.◀	

Q. Delayed Start-Pulse Signal

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 59.◀	

STEP	ACTION	VERIFICATION
22	Operate ST key.	IS lamp lighted. In 19 to 37 seconds— Reorder tone heard.
23	Restore ST key.	IS lamp extinguished. Reorder tone silenced.
24g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
25	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
26	Reconnect E and M leads at MDF location if necessary.	
27	At OTF— Restore all keys and switches.	
28	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
29	Have trunk restored to service at distant office.◀	

R. False Keypulse Signal

21	At OTF— Operate keys and set switches in accordance with Test Chart ▶Test 60.◀	
22	Operate ST key.	IS lamp lighted.
23	During pulsing— Momentarily operate FKP key.	Reorder tone heard.
24	Restore ST key.	IS lamp extinguished. Reorder tone silenced.
25g	▶If no other tests are to be made— At relay rack frame— Remove all patching cords.	
26	At access facilities for E and M leads associated with trunk under test— Remove patching cords from T2 jack of	

STEP	ACTION	VERIFICATION
	miscellaneous circuit and E and M lead jack, or MDF location if necessary.	
27	Reconnect E and M leads at MDF location if necessary.	
28	At OTF— Restore all keys and switches.	
29	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks if necessary.	
30	Have trunk restored to service at distant office.◀	

5. PREPARATION OF TEST CHART

5.01 The Test Chart is used as a particular number chart and provides priming information required for each test.

5.02 When dedicated incoming trunks are provided for testing incoming multifrequency registers and incoming class is not pertinent, these trunks should be used in preference to working incoming trunks in tests of the registers. Where registration of incoming class is pertinent to the register under test, selection of working trunks is necessary to allow use of all incoming classes for which the register is wired.

5.03 Information obtained from local office records should be used to fill in the Test Chart in the following manner:

(a) ▶Where more than one incoming multifrequency register group is provided, make an entry in RSG SWITCH column to indicate the register group to which the test applies. Since it is possible to have a given combination of incoming class of call, code, and number of digits required for marker start and translator indication available in more than one register group, this column, when properly completed, may show several register groups.◀

(b) Record an equipped incoming class of call(s) in the INC CLASS OF CALL column.

(c) ▶Record A digit as required for a working thousand series in incoming class selected in the A DIAL switch column.

(d) Record A digit as required for a working office code, and B digit as required for a working thousand series in incoming class selected in the A and B DIAL switches columns.

(e) Record A, B and C digits as required for a working office code, and D digit as required for a working thousand series in incoming class selected in the A through D DIAL switches columns.

(f) Record A through F digits as required for working area and office codes, and G digit as required for a working thousand series in incoming class selected in the A through G DIAL switches columns.

(g) Record the number of digits to be dialed in the _D column.

5.04 ***Test A***

(1) Apply 5.01, 5.02, and 5.03 (a).

(2) For Tests 1 through 16, record all equipped incoming classes of calls served by the register in INC CLASS OF CALL column. If more than one class of call uses a given number of digits, all such classes must be recorded. Repeat use of class as required so that each working digit register will be tested using digits 3, 4, 5, and 7.

(3) For Tests 1 through 4 apply 5.03 (c).

(4) For Tests 5 through 8 apply 5.03 (d).

(5) For Tests 9 through 12 apply 5.03 (e).

(6) For Tests 13 through 16 apply 5.03 (f).

5.05 ***Tests C through F, and K through N***

(1) Apply 5.01, 5.02, and 5.03 (a), (b).

5.06 ***Test H***

(1) Apply 5.01, 5.02, and 5.03 (a), (d).

5.07 ***Test I***

(1) Apply 5.01 and 5.02.

(2) For Tests 22 through 25, apply 5.03 (c).

(3) For Tests 26 and 27, apply 5.03 (d).

(4) For Tests 28 through 30, apply 5.03 (g).

5.08 ***Test J***

(1) Apply 5.01 and 5.02.

(2) For Tests 31 through 38, apply 5.03 (c).

(3) For Tests 39 through 42, apply 5.03 (d).

(4) For Tests 43 through 50, apply 5.03 (b), (e) or (f) as required, and 5.03 (g).

5.09 ***Test O***

(1) Apply 5.01 and 5.02.

(2) Record C digit as required for working 11X code in C DIAL switches column.

5.10 ***Tests P and P.1***

(1) Apply 5.01 and 5.02.

5.11 ***Tests Q and R***

(1) Apply 5.01 and 5.02.

(2) Apply 5.03 (d).

TEST CHART

TEST	TYPE OF TEST	TEST NO.	OFFICE TEST FRAME PRIMING INFORMATION																			TEST NO.	TEST
			INC CLASS OF CALL	DIAL SWITCHES											MISC SWITCHES		MISC KEYS						
				A	B	C	D	E	F	G	H	J	K	L	RSG	MF	CB	—D	SF	3F	DSTP		
A	Regular Call	1			3	4	5									MAX L	√	4				1	A
		2			4	5	7										√					2	
		3			5	7	3										√					3	
		4			7	3	4										√					4	
		5			3	4	5	7									√	5				5	
		6			4	5	7	3									√					6	
		7			5	7	3	4									√					7	
		8			7	3	4	5									√					8	
		9						3	4	5							√	7				9	
		10						4	5	7							√					10	
		11						5	7	3							√					11	
		12						7	3	4							√					12	
		13									3	4	5				√	10				13	
		14									4	5	7				√					14	
		15									5	7	3				√					15	
		16									7	3	4				√					16	
C	Link Release and Verification of Trouble Indicating Leads.	17																				17	C
D	Double Connector	18																				18	D
E	Abandoned Call	19																				19	E
F	Permanent Signal	20																				20	F
H	Long Timeout and Alarm	21														MAX L		5				21	H
I	Marker Start Signal	22	OA		3	4	5											4				22	I
		23	OB		4	5	7															23	
		24	OAS		5	7	3															24	
		25	OBS		7	3	4															25	

Test Chart

TEST CHART

TEST	TYPE OF TEST	TEST NO.	OFFICE TEST FRAME PRIMING INFORMATION																			TEST NO.	TEST
			INC CLASS OF CALL	DIAL SWITCHES											MISC SWITCHES		MISC KEYS						
				A	B	C	D	E	F	G	H	J	K	L	RSG	MF	CB	−D	SF	3F	DSTP		
I	Marker Start Signal (Cont.)	26	AB			3	4	5								MAX L		5				26	I
		27	ABS			4	5	7										5				27	
		28	TAN																			28	
		29	N TAN																			29	
		30	TOL																			30	
J	Operator Error Detection	31	OA		3	4												3				31	J
		32	OA		3	4	5	7										5				32	
		33	OAS		3	4												3				33	
		34	OAS		3	4	5	7										5				34	
		35	OB		3	4												3				35	
		36	OB		3	4	5	7										5				36	
		37	OBS		3	4												3				37	
		38	OBS		3	4	5	7										5				38	
		39	AB		3	4	5											4				39	
		40	AB		3	4	5	7	3									6				40	
		41	ABS		3	4	5											4				41	
		42	ABS		3	4	5	7	3									6				42	
		43																				43	
		44																				44	
		45																				45	
		46																				46	
		47																				47	
		48																				48	
		49																				49	
		50																				50	

TEST CHART

TEST	TYPE OF TEST	TEST NO.	OFFICE TEST FRAME PRIMING INFORMATION																		TEST NO.	TEST
			INC CLASS OF CALL	DIAL SWITCHES											MISC SWITCHES		MISC KEYS					
				A	B	C	D	E	F	G	H	J	K	L	RSG	MF	CB	—D	SF	3F	DSTP	
K	High and Low Level Test	51			3	0	1									MAX L	✓	4				51	K
		52			0	1	6									MIN L	✓	4				52	
L	Slow Pulsing	53			1	6	7									MAX L	✓	4				53	L
M	Twist Test	54			0	1	3									TWT	✓	4				54	M
N	Modulation Product	55			6	7	0									MPT	✓	4				55	N
O	11 Prefix Digits	56		1	1											MAX L	✓	3				56	O
P	Single Frequency Digit	57		TST	4	7	3									MIN L	✓	4	✓			57	P
P.1	3-Frequency Digit	58		TST	4	7	3									MAX L	✓	4		✓		58	P.1
Q	Delayed Start — Pulse Signal	59				3	4	7									✓	5			✓	59	Q
R	False Keypulse Signal	60				3	4	7									✓	5				60	R

Test Chart