DIAL PULSE INCOMING REGISTERS SD-26041-01
TESTS USING OFFICE TEST FRAME TEST CIRCUIT SD-27633-01 (J-23260)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 ▶This section describes the tests required for testing the dial pulse incoming registers SD-26041-01, using the office test frame (OTF) test circuit SD-27633-01 in No. 5 crossbar offices.◀

1.02 The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the move signficiant changes. Equipment Test Lists are affected.

(a) To expand Test J to check the operate path of the DT timer.

(b) To make minor changes as required.

1.03 The tests covered are:

1.04 Test B requires action and verification at the incoming register link frame and at the local test desk.

1.05 Tests H and I should be performed only during light traffic periods.

1.06 If the selected register is plugged busy, the plug must be removed after the RSS switch is set.

1.07 Tests D and E will cause operation of the LR register. Local instructions should be followed for recording and reporting any register operations caused by performing these tests.

1.08 When an office is equipped with only bylink trunks, one direct pulsing trunk must be provided for incoming register testing.

1.09 ***Lettered Steps:*** A letter a, b, c, etc, added to a step number in Parts 3 and 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.

1.10 An interchangeable code is a code that represents both a working office code in the home area and a working foreign area code. When pretranslators are provided, the dialing of an interchangeable code will result in the pretranslator grounding the CMB lead to the incoming register.

1.11 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 should be connected to the T and R of the T2 jack of the miscellaneous circuit.

2. APPARATUS

All Tests Except B and J

2.01 Office test frame (OTF).

Tests A and C Through I

2.02 Patch cords as required, P3E cord, 8 feet long, equipped with two 310 plugs (3P6E cord).

Test C

2.03 Patching cord, W3M cord, 15 feet long, equipped with one 310 plug, three 360 tools (3WAB cord), and one KS-6278 connecting clip (used to connect SP jacks to unit terminal strip).

Tests B, D, E, H, and I

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

Tests G Through I

2.05 KS-3008 stopwatch or equivalent.

Test J

2.06 Test set for timing tests J24753A (SD-25707-01), 322A make-busy plug.

All Tests Except B and J

2.07 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).

Test M

2.08 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 connecting clip, and one 6248 tool.

3. PREPARATION

STEP	ACTION	VERIFICATION
All Tests Except J		
1	At OTF— Restore all keys and switches.	
2	At TIC— Momentarily operate RLS key.	
All Tests Except B and J		
3	At OTF— Set RSS switch to select incoming register under test.	
4a	If office is not equipped with an incoming trunk for testing incoming registers— From office records, select an incoming trunk of proper class to be used in test served by register under test and have trunk made busy at distant office.	
5b	If trunk selected has loop supervision— At relay rack— Using P3E cord, patch ITT jack to T jack of trunk to be used in test.	
6b	At OTF— Operate ITT1 key.	
7	Operate MCR, ITT keys.	
8	Operate MKR_ key to select a completing marker.	
9c	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.	

STEP	ACTION	VERIFICATION
10c	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 paragraph 1.11.	
11c	Operate ITT2 key.	
12d	At OTF— If trunk used in test does not require a start dial signal— Operate ONHK key.	
13e	If trunk used in test has A relay ground shunt— Operate GS key.	
14f	If trunk used in test has short conductor loop— Operate SLP key.	
All Tests Except A, B, and J		
15g	If trunk used in test is bylink— Operate BL key.	
16g	Patch from BL jack to SP jack using P3E cord.	
17g	At relay rack frame— Patch W3M cord to SP jack and connect sleeve to terminal 42 on trunk unit terminal strip.	

4. METHOD

STEP	ACTION	VERIFICATION
	Note: Bylink trunk may ***not*** be used on Test A.	
A. Regular Call		
15	At OTF— Operate keys and set switches in accordance with Test Chart Test 1.	If provided— MBG lamp lighted.
16	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through K_ lamps lighted corresponding

STEP	ACTION	VERIFICATION
		to digits set up on A through K DIAL switches. TF_ lamp lighted identifying trunk link frame number of trunk used in test.
17	At OTF— Restore ST key.	
18	At TIC— Momentarily operate RLS key.	Display released.
19	Repeat Steps 4a through 18 for Test Chart Tests 2 through 25.	
20h	If no further tests are to be made— At relay rack— Remove all patching cords.	
21	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.	
22	Reconnect E and M leads at MDF location if necessary.	
23h	If trunk was made busy at distant office and no further tests are to be performed— Have trunk restored to service.	
24h	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

B. Special Call

3	From office records, select a no-test trunk from the local test desk and determine incoming register link (IRL) appearance.	
4	At IRL for trunk selected— Block operated RB_ relays associated with register being tested in all horizontal groups except the one serving the trunk used in test.	
5	Block operated RB_ relays associated with all other registers for the horizontal group serving the trunk used in test.	
6	Establish an off-hook condition for an office telephone and allow line to route to a permanent signal holding trunk.	

STEP	ACTION	VERIFICATION
7	At local test desk— Place call to line used in Step 6.	Permanent signal tone heard.
8	Release test connection.	
9	At IRL— Remove blocking tools from RB_ relays.	
10	Replace office telephone used in Step 6 to on-hook condition.	

C. Number of Digits to Be Received

18	At OTF— Operate keys and set switches in accordance with Test Chart Test 26.	◗If provided— MBG lamp lighted.◖
19	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through K_ lamps lighted corresponding to digits set up on A through K DIAL switches.
20	At OTF— Restore ST key.	
21	At TIC— Momentarily operate RLS key.	Display released.
22	Repeat Steps 4a through 21 for Test Chart Tests 27 through 50 as required.	
23h	If no further tests are to be made— At relay rack— 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 jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
27i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	

STEP	ACTION	VERIFICATION
28	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.
	D. Link Release and Verification of Trouble Indicating Leads	
18	Operate keys and set switches in accordance with Test Chart Test 51.	◗If provided— MBG lamp lighted.◖
19	At jack, lamp, and key circuit— Restore CLRR key if operated.	
20	At register under test— Block CK relay nonoperated.	
21	At OTF— Operate ST key.	At TIC— Display registered. INC, DCK, LR lamps lighted. CN/RG/S lamp lighted, identifying register under test.
22	Restore ST key.	
23	At TIC— Momentarily operate RLS key.	Display released.
24	At register under test— Remove blocking tool from CK relay.	
25h	If no further tests are to be made— At relay rack— 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 to MDF location if necessary.	
28	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
29i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
30	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

STEP	ACTION	VERIFICATION
E. Double Connection		
18	Operate keys and set switches in accordance with Test Chart Test 52.	◗If provided— MBG lamp lighted.◖
19	At jack, lamp, and key circuit— Restore CLRR key if operated.	
20	At register under test— Block nonoperated DCK relay.	
21	At OTF— Operate ST key.	At TIC— Display registered. INC, LR lamps lighted. DCK lamp not lighted.
22	Restore ST key.	
23	At TIC— Momentarily operate RLS key.	Display released.
24	At register under test— Remove blocking tool from DCK relay.	
25h	If no further tests are to be made— At relay rack— 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 jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
29i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
30	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.
F. Abandoned Call		
18	Operate keys and set switches in accordance with Test Chart Test 53.	◗If provided— MBG lamp lighted.◖

STEP	ACTION	VERIFICATION
19	Operate ST key.	IS lamp lighted.
20	Immediately after IS lamp lights— Restore ST key.	IS lamp extinguished.
21h	If no further tests are to be made— At relay rack— Remove all patching cords.	
22	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.	
23	Reconnect E and M leads at MDF location if necessary.	
24	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
25i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
26	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

G. Reorder

Permanent Signal

18	Operate keys and set switches in accordance with Test Chart Test 54.	▶If provided— MBG lamp lighted.◀
19	Operate DIAL key.	
20	Operate ST key, ***start timing.***	IS lamp lighted. In approximately 19 to 37 seconds— Reorder tone heard. IS lamp extinguished.
21	Restore ST key.	Tone removed.

Interdigital Time-out

22	Operate 1D key.	
23	Set A DIAL switch to 2.	
24	Restore DIAL key.	

STEP	ACTION	VERIFICATION
25	Operate ST key, ***start timing.***	IS, A/1 lamps lighted. In approximately 19 to 37 seconds— Reorder tone heard. IS, A/1 lamps extinguished.
26	Restore ST key.	Tone removed.
27h	If no further tests are to be made— At relay rack— Remove all patching cords.	
28	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.	
29	Reconnect E and M leads at MDF location if necessary.	
30	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
31i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
32	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

H. Over-all Time-out

18	Operate keys and set switches in accordance with Test Chart Test 55.	◗If provided— MBG lamp lighted.◖
19	At incoming register under test— Block nonoperated OVL relay.	
20	Operate ST key, ***start timing.***	IS lamp lighted. In approximately 19 to 37 seconds— Reorder tone heard. IS lamp extinguished.
21	Restore ST key.	Tone removed.
22	At relay rack— Block operated RB2 relay in group-busy circuit associated with register being tested.	
23	At incoming register under test— Remove blocking tool from OVL relay.	

STEP	ACTION	VERIFICATION
24	At OTF— Operate ST key, ***start timing.***	IS lamp lighted. In approximately 4 to 9 seconds— Reorder tone heard. IS lamp extinguished.
25	Restore ST key.	Tone removed.
26	At relay rack— Remove blocking tool from RB2 relay.	
27h	If no further tests are to be made— At relay rack— Remove all patching cords.	
28	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.	
29	Reconnect E and M leads at MDF location if necessary.	
30	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
31i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
32	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.
I. Common Alarm Timing		
18	Operate keys and set switches in accordance with Test Chart Test 56.	▶If provided— MBG lamp lighted.◀
19	At register under test— Block nonoperated MST, RO, OVL relays.	
20	At OTF— Operate ST key; after ED lamp lights, ***start timing.***	ED lamp lighted. At jack, lamp, and key circuit— In approximately 19 to 37 seconds— TO lamp lighted.
21	Set RSS switch to OFF.	In approximately 10 to 15 seconds— R-S-TOA lamp lighted. Major alarm sounds.
22	Set RSS switch to select register under test.	R-S-TOA lamp extinguished. Major alarm silenced.

STEP	ACTION	VERIFICATION
23	Restore ST key.	At OTF— ED lamp extinguished. At jack, lamp, and key circuit— To lamp extinguished.
24	At register under test— Remove blocking tools from MST, RO, OVL relays.	
25h	If no further tests are to be made— At relay rack— 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 jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
29i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
30	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

J. AC, RV, LR and ◗DT◖ Timers

1	At jack, lamp, and key circuit— Insert make-busy plug into IRMB_ jack associated with register being tested.	
2	At register under test— Complete Steps 1 through 45 on Table A.	
3a	If precise timing intervals are to be checked— Measure AC, RV, LR, ◗DT◖ timing interval, using the circuit requirements tables and timing test set.	
4	At jack, lamp, and key circuit— Remove make-busy plug from IRMB_ jack.	

TABLE A

	OPERATIONS			VERIFICATIONS			
	BLOCK RELAY		REMOVE BLOCKING TOOL FROM RELAY	OBSERVE RELAY			
	OPERATED	NONOPERATED		OPERATES	RELEASES	DOES NOT OPERATE	DOES NOT RELEASE
1		ON, TC1					
2	RLK						
3	ON1					LR	
4			RLK	LR			
5			ON1		LR		
6			ON, TC1				
7		TMA, ON1, TC1, P1, RA, AS					
8	CK, ON, RV1 DP			RV			
9		DP, CK	RV1				RV
10			ON		RV		
11			TMA, ON1, TC1, P1, RA, AS, DP, CK				
12		ON, TC1					
13	ON1					AC	
14	BL			AC			
15			BL, ON1		AC		
16	ON1						
17	CK			AC			
18			ON1		AC		
19	ACC						
20	ON1					AC	
21			ACC	AC			
22			ON1		AC		
23	BLK						
24	ON1					AC	
25			BLK	AC			
26			ON1		AC		
27		TC2, MST1					
28	RV, TC1						

TABLE A (Con'td)

OPERATIONS			VERIFICATIONS			
BLOCK RELAY		REMOVE BLOCKING TOOL FROM RELAY	OBSERVE RELAY			
OPERATED	NONOPERATED		OPERATES	RELEASES	DOES NOT OPERATE	DOES NOT RELEASE
29 ON1					AC	
30		RV	AC			
31		ON1		AC		
32 RV						
33 ON1					AC	
34	TC1		AC			
35	ON1			AC		
36		CK, RV, TC2 MST1, TC1, ON				
37	AC, LR, ON					
38 ON1, RA1					DT	
39 DL			DT			
40		RA1				DT
41		DL		DT		
42 TDL, RA1					DT	
43 DL			DT			
44		DL		DT		
45		ON1, RA1, AC, LR, ON				

STEP	ACTION	VERIFICATION
K. One-One Prefix Digits		
18	Operate keys and set switches in accordance with Test Chart test 57.	⧫If provided— MBG lamp lighted.⧫
19	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through K_ lamps lighted corresponding to digits set on A through K DIAL switches. TF_ lamp lighted, identifying trunk link frame number of trunk used in test.
20	At OTF— Restore ST key.	
21	At TIC— Operate RLS key.	Display released.
22h	If no further tests are to be made— At relay rack— Remove all patching cords.	
23	At access facilities for E and M leads associated with trunk used in test— Remove patching cords from T2 jack of miscellaneous circuit and E and M lead jack, or MDF location if nessary.	
24	Reconnect E and M leads at MDF location if necessary.	
25	At jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
26i	If trunk was made busy at distant office and no further tests are to be performed— Have trunk used in test restored to service.	
27	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.
L. Pretranslation		
18	Operate keys and set switches in accordance with Test Chart Test 58.	⧫If provided— MBG lamp lighted.⧫
19	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through K_ lamps lighted corresponding to digits set up on A through K DIAL switches.

STEP	ACTION	VERIFICATION
		PRL lamp lighted. If 7-digit interchangeable codes are used— At incoming register under test— MST relay operates in 2.4 to 5.8 seconds after HS relay operates.
20	At OTF— Restore ST key.	
21	At TIC— Momentarily operate RLS key.	Display released.
22	Repeat Steps 19 through 21 for other codes with different number of digits expected.	
23	At relay rack— Remove all patching cords.	
24	At access facilities for E and M leads associated with trunk used in 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 jack, lamp, and key circuit— Remove patching cord from SP, BL jacks.	
27h	If trunk was made busy at distant office— Have trunk restored to service.	
28	Repeat Steps 18 through 27h for Test Chart Tests 59 through 74 for each equipped incoming class requiring pretranslation. If test chart positions past 74 are required, make duplicate test charts.	
29	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

M. Pretranslator Trouble and False Release Signal

18	Insert make-busy plugs into all incoming registers in same pretranslator subgroup as register under test.	
19	Insert make-busy plug into BSR_jack associated with same pretranslator subgroup as register under test.	

STEP	ACTION	VERIFICATION
20	Operate keys and set switches in accordance with Test Chart Test 75.	If provided— MBG lamp lighted.
21	At incoming register under test— Strap 11M of LCM relay to upper winding of TR relay.	
22	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through K_ lamps lighted corresponding to digits set up on A through K DIAL switches. If 7-digit interchangeable codes are used— At incoming register under test— MST relay operates in 2.4 to 5.8 seconds after HS relay operates. TR, CMB relays momentarily operated.
23	Momentarily operate RLS key.	All lamps extinguished.
24	At OTF— Restore ST key.	
25	Remove make-busy plug from BSR_ jack.	
26	At incoming register under test— Remove strap from 11M of LCM relay and upper winding of TR relay.	
27	Strap 10M of PST relay to upper winding of PRL relay.	
28	At OTF— Operate ST key.	At TIC— Display registered. CN/RG/S, LR lamps lighted. Reorder tone heard. At register under test— PRL relay momentarily operated. CMA relay not operated.
29	AT TIC— Momentarily operate RLS key.	All lamps extinguished.
30	At OTF— Restore ST key.	
31	At incoming register under test— Remove strap from 10M of PST relay and upper winding of PRL relay.	
32b	If trunk selected has loop supervision— At relay rack—	

STEP	ACTION	VERIFICATION
	Remove patching cord from ITT jack and T jack of trunk under test.	
33c	If trunk used in test is equipped with E and M lead supervision— At relay rack— Remove patching cord from T1 jack and T jack of trunk under test.	
34c	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.	
35a	If office is not equipped with an incoming trunk for testing incoming registers— At distant office— Have trunk restored to service.	
36g	If trunk used in test is bylink— At OTF— Remove patching cord from BL and SP jacks.	
37g	At relay rack— Remove patching cord from SP jack and terminal 42 on turnk unit terminal strip.	
38	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.
39	Remove make-busy plugs from all incoming registers in same pretranslator subgroup as register under test.	

N. Information Codes

Tandem Trunks

18	At OTF— Operate keys and set switches in accordance with Test Chart Test 76.	If provided— MBG lamp lighted.
19	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through C_ lamps lighted corresponding to digits set up on A through C DIAL switches. TAN lamp lighted identifying incoming tandem type trunk used to select incoming register. TF_ lamp lighted identifying trunk link frame

STEP	ACTION	VERIFICATION
		number of incoming tandem trunk used in test.
20	At OTF— Restore ST key.	
21	At TIC— Momentarily operate RLS key.	Display released.
Intertoll Trunks		
22	At OTF— Operate keys and set switches in accordance with Test Chart Test 77.	If provided— MBG lamp remains lighted.
23	Operate ST key.	IS lamp lighted until end of pulsing. At TIC— Display registered. A_ through C_ lamps lighted corresponding to digits set up on A through C DIAL switches. TOL lamp lighted identifying incoming intertoll type trunk used to select incoming register. TF_ lamp lighted identifying trunk link frame number of incoming intertoll trunk used in test.
24b	If trunk selected has loop supervision— At relay rack— Remove patching cord from ITT jack and T jack of trunk under test.	
25c	If trunk used in test is equipped with E and M supervision— At relay rack— Remove patching cord from T1 jack and T jack of trunk under test.	
26c	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.	
27a	If office is not equipped with an incoming trunk for testing incoming registers— At distant office— Have trunk restored to service.	
28g	If trunk used in test is bylink— At OTF— Remove patching cord from BL and SP jacks.	

STEP	ACTION	VERIFICATION
29g	At relay rack Remove patching cord from SP jack and terminal 42 on trunk unit terminal strip.	
30	At OTF— Restore all keys and switches.	If provided— MBG lamp extinguished.

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. A check in a column indicates the key must be operated for test being made.

5.02 A test incoming trunk may be provided for incoming register testing of various pulsing tests. If not, a working trunk must be made busy from the originating end, to be used for incoming register testing.

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

(a) Record incoming class of trunk in INC CLASS column.

(b) Record incoming register group in RSG column.

(c) Record working thousand digit in A DIAL SWITCH column. Use all available thousand digits possible, to use all 2/5 combinations if possible.

(d) Record working office code in A DIAL SWITCH column. Record working thousand digit in B DIAL SWITCH column. Use all available office codes and thousands digits possible, to use all 2/5 combinations if possible.

(e) Record working office codes in A, B, C DIAL SWITCHES columns. Record working thousand digit in D DIAL SWITCH column. Use all available office codes and thousands digits possible, to use all 2/5 combinations if possible.

(f) Record working area codes, office codes and digits in A through K DIAL SWITCHES columns. Use all available area and office code digits possible, to use all 2/5 combinations if possible.

(g) Record prefix digits, area and office codes, and digits required for INC CLASS selected.

(h) Record—D key for number of digits recorded in DIAL SWITCHES columns.

5.04 ***Test A***

(1) For Test Chart Tests 1 through 4, apply 5.02 and 5.03(a), (b), (c).

(2) For Test Chart Tests 5 through 8 apply 5.02 and 5.03(a), (b), (d).

(3) For Test Chart Tests 9 through 12 apply 5.02 and 5.03(a), (b), (e).

(4) For Test Chart Tests 13 through 16 apply 5.02 and 5.03(a), (b), (e).

(5) For Test Chart Tests 17 through 25 apply 5.02 and 5.03(a), (b), (g), (h).

5.05 ***Tests B, J***

(1) Test Chart not required.

5.06 ***Test C***

(1) For Test Chart Tests 26 through 33, apply 5.02 and 5.03(a), (b), (c).

(2) For Test Chart Tests 34 through 37, apply 5.02 and 5.03(a), (b), (d).

(3) For Test Chart Tests 38 through 50, apply 5.02 and 5.03(a), (b), (g), (h).

5.07 ***Tests D, E, I***

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

5.08 ***Tests F, G, H***

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

5.09 ***Test K***

(1) Apply 5.02 and 5.03(a), (b), (h),

(2) Record working 11X code digit C and appropriate codes and digits as required in C through K columns.

5.10 ***Test L***

(1) For tests 58 through 75, apply 5.02 and 5.03 (a), (b), (g), (h), selecting incoming trunks to be used for test with an incoming class that requires pretranslation to determine the number of digits to be expected.

(2) Use as many Test Chart Test numbers as required to test each incoming class requiring pretranslation, for all combinations of number of digits to be expected.

5.11 ***Test M***

(1) Apply 5.02 and 5.03(a), (b), (g), (h).

5.12 ***Test N***

(1) For Test 76, apply 5.03(a), (b), (h), selecting an incoming trunk to be used for test with a tandem incoming class and local translator indication.

(2) For Test 77, apply 5.03(a), (b), (h), selecting an incoming trunk to be used for test with a toll incoming class and local translator indication.

TEST CHART

TEST	TYPE OF TEST	TEST NO.	OTF KEYS AND SWITCHES																					TEST NO.	TEST
			INC CLASS	SWITCHES												KEYS									
				DIAL										MISC											
				A	B	C	D	E	F	G	H	J	K	PS	L-L	RSG	— D	CB							
A	Regular Call	1			6	7	3							50/7	9		4	√						1	A
		2			0	1	6							80/7	9		4	√						2	
		3			7	3	0							55/24	5		4	√						3	
		4			1	6	7							70/24	10		4	√						4	
		5				3	0	1						ANY	8		5	√						5	
		6				6	7	3						70/24	0		5	√						6	
		7				0	1	6						50/7	9		5	√						7	
		8				7	3	0						80/7	9		5	√						8	
		9						1	6	7				55/24	5		7	√						9	
		10						3	0	1				70/24	10		7	√						10	
		11						6	7	3				ANY	8		7	√						11	
		12						0	1	6				70/24	0		7	√						12	
		13								7	3	0	1	50/7	9		10	√						13	
		14								6	7	3	0	80/7	9		10	√						14	
		15								1	6	7	3	55/24	5		10	√						15	
		16								0	1	6	7	70/24	10		10	√						16	
		17												ANY	8			√						17	
		18												70/24	0			√						18	
		19												50/7	9			√						19	
		20												80/7	9			√						20	
		21												55/24	5			√						21	
		22												70/24	10			√						22	
		23												ANY	8			√						23	
		24												70/24	0			√						24	
		25												50/7	9			√						25	

TEST CHART

TEST	TYPE OF TEST	TEST NO.	OTF KEYS AND SWITCHES																					TEST NO.	TEST
			INC CLASS	SWITCHES												KEYS									
				DIAL										MISC											
				A	B	C	D	E	F	G	H	J	K	PS	L-L	RSG	— D	CB							
C	Number of Digits to be Received	26	OA		0	1	3							50/7	0		4	√						26	C
		27	OAS		6	7	0							50/7	0		4	√						27	
		28	OA1		1	3	6							50/7	0		4	√						28	
		29	OAS1		7	0	1							50/7	0		4	√						29	
		30	OB		3	6	7							50/7	0		4	√						30	
		31	OBS		0	1	3							50/7	0		4	√						31	
		32	OB1		6	7	0							50/7	0		4	√						32	
		33	OBS1		1	3	6							50/7	0		4	√						33	
		34	AB			7	0	1						50/7	0		5	√						34	
		35	ABS			3	6	7						50/7	0		5	√						35	
		36	AB1			0	1	3						50/7	0		5	√						36	
		37	ABS1			6	7	0						50/7	0		5	√						37	
		38	NTAN											50/7	0			√						38	
		39	TAN											50/7	0			√						39	
		40	TAN1											50/7	0			√						40	
		41	TAN2											50/7	0			√						41	
		42	TAN3											50/7	0			√						42	
		43	TAN4											50/7	0			√						43	
		44	TOL											50/7	0			√						44	
		45	TOL1											50/7	0			√						45	
		46	TOL2											50/7	0			√						46	
		47	TOL3											50/7	0			√						47	
		48	TOL4											50/7	0			√						48	
		49	CAMA0											50/7	0			√						49	
		50	CAMA1											50/7	0			√						50	

→TEST CHART←

TEST	TYPE OF TEST	TEST NO.	OTF KEYS AND SWITCHES																				TEST NO.	TEST
			INC CLASS	SWITCHES												KEYS								
				DIAL										MISC										
				A	B	C	D	E	F	G	H	J	K	PS	L-L	RSG	— D	CB						
D	Link Release and Verification of Trouble Indicating Leads	51			0	1	3							50/7	0		4						51	D
E	Double Connection	52			6	7	0							50/7	0		4						52	E
F	Abandoned Call	53												50/7	0								53	F
G	Reorder	54												50/7	0								54	G
H	Over-all Timeout	55												50/7	0		4		Dial				55	H
I	Common Alarm Timing	56			1	3	6							50/7	0				Dial				56	I
K	One-One Prefix Digits	57		1	1									50/7	0			√					57	K
L	Pretranslation	58												50/7	0			√					58	L
		59												50/7	0			√					59	
		60												50/7	0			√					60	
		61												50/7	0			√					61	
		62												50/7	0			√					62	
		63												50/7	0			√					63	
		64												50/7	0			√					64	
		65												50/7	0			√					65	
		66												50/7	0			√					66	
		67												50/7	0			√					67	
		68												50/7	0			√					68	
		69												50/7	0			√					69	
		70												50/7	0			√					70	
		71												50/7	0			√					71	
		72												50/7	0			√					72	
		73												50/7	0			√					73	
		74												50/7	0			√					74	
M	Pretranslator Trouble and False Release Signal	75												50/7	0			√					75	M
N	Information Codes	76		4	1	1								50/7	0			√					76	N
		77		4	1	1								50/7	0			√					77	