TRANSLATORS AND DECODERS
OPERATION TESTS
USING MANUAL TEST SET SD-32363-01 (J34727)
STEP-BY-STEP COMMON CONTROL OFFICES

1. GENERAL

1.01 This section describes a method of testing operational functions of the translator and decoder circuits using manual test set (SD-32363-01) and manual test circuit (SD-32362-01). Translator features as used in TOUCH-TONE calling only or translator and decoder features as used in controlled outpulsing with or without TOUCH-TONE calling are tested in this section. Foreign area translator features are tested in certain decoder tests.

1.02 This section is reissued to add decoders to the title and to add features for testing decoders and translators as used in controlled outpulsing. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The tests covered are:

TOUCH-TONE Calling Only

A. Translator Seizure and Service Code: This test determines that a translator will be seized upon receipt of a 3-digit code by an originating register and that the translator will furnish to the register appropriate called number structure information for a 3-digit service code.

B. Reverting Code: This test checks that the translator will furnish a register with the expected number of digits on a reverting code.

C. Office and Area Code: This test checks that the translator will furnish a register with the expected number of digits or vacant code indication after translating the office or area code digits.

D. Interchangeable Office and Area Code: This test checks that the translator will recognize an interchangeable code and signal the register to time before resolving the number of digits required.

E. Vacant Code: This test checks that the translator will recognize a vacant code and give the proper indication to the register.

F. Permanent Signal: This test checks that the translator will respond to a permanent signal indication from the register and transmit a permanent signal code to the register.

Controlled Outpulsing With or Without TOUCH-TONE Calling

G. Zero Operator Route: This test checks that the translator and decoder function to transmit the proper routing information when a zero is dialed or keyed.

H. 3-Digit Service Code: This test checks that the translator and decoder function to transmit the proper routing information when a 3-digit service code is dialed or keyed.

I. Reverting Code: This test checks that the translator and decoder function to transmit the proper routing information when a 4- or 5-digit reverting code is dialed or keyed.

J. Information Route: This test checks that the translator and decoder function to transmit the proper routing information when a local, home area, or foreign area information code is dialed or keyed.

K. Nonsender Routes: This test checks that the translator and decoder function to transmit the proper routing information when a 7- or 10-digit nonsender class call is dialed or keyed. It also checks functions when simulated busy conditions exist.

L. Controlled Outpulsing Route: This test checks that the translator and decoder function to transmit the proper routing information when a 7- or 10-digit sender class call is dialed or keyed. It also checks that when certain busy indications are simulated, the decoder will transmit alternate route information.

M. Interchangeable Code Routes: This test checks that the translator and decoder function to transmit the proper routing information when an interchangeable code is dialed or keyed.

N. Class Screening: This test checks that the translator and decoder will recognize a certain class of service and transmit the proper routing based on the dialed or keyed number and the originating class of service.

O. Cancel Alternate Route Control: This test checks that the translator and decoder function to transmit intercept or announcement trunk routing when an alternate route is called for with the corresponding CAR- key operated.

P. Permanent Signal Routing: This test checks that the translator and decoder function to transmit the proper routing information when a permanent signal indication is received from the register.

Q. Foreign Area Translator Routes: This test checks that the translator and decoder will recognize an area code which requires foreign area translation and will cause the register to reseize a translator and decoder which, in turn, uses a foreign area translator for office code translation.

R. Miscellaneous Routing: This test checks that the translator and decoder function to transmit the proper routing for miscellaneous conditions such as class cross and decoder trouble release.

1.04 For Tests A through E, Test Chart A provides spaces for listing specific numbers to be keyed, depending on local conditions. This test chart should be filled out from local records in accordance with the instructions provided in Part 5, Preparation of Test Chart.

1.05 For Tests H through R, Test Chart B is provided which shows the keys to be operated for each test. Spaces are provided on the charts for listing specific numbers to be dialed or keyed, 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 Tests D and M should be performed if interchangeable office and area codes exist.

1.07 Tests F and P should be performed if office is equipped with permanent signal holding trunks.

1.08 Test Q should be performed if office is equipped with foreign area translators.

1.09 Tests A through F apply to those offices arranged for TOUCH-TONE calling only. Test Chart A is used with Tests A through E. Tests H through R apply to those offices arranged for controlled outpulsing with or without TOUCH-TONE calling. Test Chart B is used with Tests H through R and local office records should be consulted to determine which test numbers apply to the particular office in which these tests are being performed.

1.10 The trouble ticketer may be made busy to the decoder under test during testing. This is done at the jack, key, and lamp circuit by inserting a make-busy plug into the TTMB-DR- jack corresponding to the decoder under test.

1.11 Test numbers that are outpulsed by the originating register pulse generator may be controlled and observed as displayed on the digital indicator on a digit-at-a-time basis. To make the digit control feature effective, momentarily operate the DC key of manual test set after the test number has been keyed or dialed. After the first digit is displayed, the originating register pulse generator is blocked. Momentarily reoperate the DC key for each subsequent digit to be displayed.

1.12 ***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

All Tests

2.01 Manual test circuit, SD-32362-01.

2.02 Manual test set, J34727 (SD-32363-01).

2.03 Patching cord, P3E cord, 6 feet long, equipped with two 310 plugs (3P7A cord) (for connecting test control circuits in originating register to manual test set).

2.04 Two W35A cords, used to connect equipment under test to manual test set.

2.05 Head telephone set.

2.06 322A (make-busy) plug.

3. PREPARATION

STEP	ACTION	VERIFICATION
All Tests		
	Note: Belt line jacks and ORT- jacks are located on register frame and on jack, key, and lamp circuit.	
1	At manual test set — Restore test set keys.	
2	At manual test circuit — Plug A, B connectors of manual test set into A, B belt line jacks.	
3	At manual test set — Insert 310 plug of P3E cord into ORT- jack.	
4	At jack, key, and lamp circuit — Insert 310 plug of P3E cord into ORT- jack associated with register to be used in test.	
5	At manual test set — Connect head telephone set to H1, H2 jacks.	
6	Operate XPT key.	
7	At manual test circuit — Operate TDS switch to number corresponding to translator or decoder to be tested.	

STEP	ACTION	VERIFICATION
Tests A through E		
8	At manual test set — Operate KY key.	
Tests G through R		
9	Operate DL or KY key, as required.	
10	At manual test circuit — Operate TC switch to number corresponding to desired class of service.	

4. METHOD

STEP	ACTION	VERIFICATION
Test 1		
	A. Translator Seizure and Service Code	
9	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
10	After DT lamp lights — Key 3-digit service code as shown in Test Chart A.	DT lamp extinguishes. Keyed digits displayed. RLC lamp lights.
11	Restore TST key.	RLC lamp extinguishes.
12a	If no further tests are to be made — Remove all cords and restore all keys.	
13a	At manual test circuit — Restore TDS switch to normal.	
	B. Reverting Code	
Tests 2 and 3		
9	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
10	After DT lamp lights — Key reverting code as shown in Test Chart A.	DT lamp extinguishes. Portion of keyed digits displayed in sequence.

STEP	ACTION	VERIFICATION
11	Immediately after keying code — Operate ABN2 key.	Remainder of keyed digits displayed in sequence. RLC lamp lights.
12	Restore TST, ABN2 keys.	RLC lamp extinguishes.
13a	If no further tests are to be made — Remove all cords and restore all keys.	
14a	At manual test circuit — Restore TDS switch to normal.	

C. Office and Area Code

Tests 4 through 9

9	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
10	After DT lamp lights — Key test number as shown in Test Chart A.	DT lamp extinguishes. Keyed digits displayed. RLC lamp lights.
11	Restore TST key.	RLC lamp extinguishes.
12a	If no further tests are to be made — Remove all cords and restore all keys.	
13a	At manual test circuit — Restore TDS switch to normal.	

D. Interchangeable Office and Area Code

Tests 10 through 15

9	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
10	After DT lamp lights — Key test number as shown in Test Chart A.	DT lamp extinguishes. Keyed digits displayed. RLC lamp lights.
11	Restore TST key.	RLC lamp extinguishes.
12a	If no further tests are to be made — Remove all cords and restore all keys.	
13a	At manual test circuit — Restore TDS switch to normal.	

STEP	ACTION	VERIFICATION
	E. Vacant Code	
Test 16		
9	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
10	After DT lamp lights — Key 7-digit vacant code as shown in Test Chart A.	DT lamp extinguishes. First three digits displayed. RLC lamp lights.
11	Restore TST key.	RLC lamp extinguishes.
12a	If no further tests are to be made — Remove all cords and restore all keys.	
13a	At manual test circuit — Restore TDS switch to normal.	
	F. Permanent Signal	
9	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights. After approximately 20 seconds — 1-, 2-, or 3-digit code displayed. RLC lamp lights. PS lamp lights.
10	Restore TST key.	RLC lamp extinguishes. PS lamp extinguishes.
11a	If no further tests are to be made — Remove all cords and restore all keys.	
12a	At manual test circuit — Restore TDS switch to normal.	
	G. Zero Operator Route	
11	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights. Key or dial digit 0.	DT lamp extinguishes. Digit or digits displayed. RLC lamp lights.
13	Restore TST key.	RLC lamp extinguishes.
14	Operate CC key.	

STEP	ACTION	VERIFICATION
15	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
16	After DT lamp lights — Key or dial digit 0.	DT lamp extinguishes. Digit or digits displayed. RLC lamp lights.
17	Restore TST, CC keys.	RLC lamp extinguishes.
18a	If no further tests are to be made — Remove all cords and restore all keys.	
19a	At manual test circuit — Restore TDS switch to normal.	

H. 3-Digit Service Code

Test 1

11	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights — Key or dial 3-digit service code (X11 or 11X).	DT lamp extinguishes. Digits displayed as indicated in Test Chart B. RLC lamp lights.
13	Restore TST key.	RLC lamp extinguishes.

Test 2

14	Operate CC key.	
15	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
16	After DT lamp lights — Key or dial 3-digit service code (X11 or 11X).	DT lamp extinguishes. Digits displayed as indicated in Test Chart B. RLC lamp lights.
17	Restore TST, CC keys.	RLC lamp extinguishes.
18a	If no further tests are to be made — Remove all cords and restore all keys.	

STEP	ACTION	VERIFICATION
19a	At manual test circuit — Restore TDS switch to normal.	

I. Reverting Code

Tests 3 and 4

11	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights — Key or dial reverting code.	DT lamp extinguishes. Portion of digits displayed.
13	Immediately after keying dialing reverting code — Operate ABN2 key.	Remainder of digits displayed. RLC lamp lights.
14	Restore TST, ABN2 keys.	RLC lamp extinguishes.
15a	If no further tests are to be made — Remove all cords and restore all keys.	
16a	At manual test circuit — Restore TDS switch to normal.	

J. Information Route

Tests 5 through 7

11	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights — Key or dial information code as indicated in Test Chart B.	DT lamp extinguishes. Digits displayed as indicated in Test Chart B. RLC lamp lights.
13	Restore TST key.	RLC lamp extinguishes.
14a	If no further tests are to be made — Remove all cords and restore all keys.	
15a	At manual test circuit — Restore TDS switch to normal.	

STEP	ACTION	VERIFICATION
	K. Nonsender Routes	
Tests 8 through 11		
11	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights — Dial or key test number as shown in Test Chart B.	DT lamp extinguishes. Digits displayed as indicated in Test Chart B. RLC lamp lights.
13	Restore TST key.	RLC lamp extinguishes.
Tests 12 through 15		
14	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
15	After DT lamp lights — Operate RB2 key.	
16	Dial or key first digit of test number as shown in Test Chart B.	DT lamp extinguishes. First digit displayed.
17	Restore RB2 key.	
18	Dial or key balance of digits of test number.	Digits displayed as indicated in Test Chart B. RLC lamp lights.
19	Restore TST key.	RLC lamp extinguishes.
20a	If no further tests are to be made — Remove all cords and restore all keys.	
21a	At manual test circuit — Restore TDS switch to normal.	
	L. Controlled Outpulsing Routes	
Tests 16 through 27		
11	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.

STEP	ACTION	VERIFICATION
12	After DT lamp lights — Operate RB2 key.	
13	Dial or key first digit of test number as indicated in Test Chart B.	DT lamp extinguishes. First digit displayed.
14	Dial or key balance of digits of test number.	Balance of digits displayed as indicated in Test Chart B. RLC lamp lights.
15	Restore TST key.	RLC lamp extinguishes.
Tests 28 through 33		
16	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
17	After DT lamp lights — Momentarily operate RB1 key.	
18	Dial or key digits of test number as indicated in Test Chart B.	DT lamp extinguishes. First exit digit displayed for initial route. Translator and decoder reseized. Digits displayed as indicated in Test Chart B. RLC lamp lights.
19	Restore TST key.	RLC lamp extinguishes.
Tests 34 through 39		
20	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
21	After DT lamp lights — Operate RB1 key.	
22	Dial or key test number as indicated in Test Chart B.	DT lamp extinguishes. Digits displayed as indicated in Test Chart B. RLC lamp lights.
23	Restore TST, RB1 keys.	RLC lamp extinguishes.
24a	If no further tests are to be made — Remove all cords and restore all keys.	

STEP	ACTION	VERIFICATION
25a	At manual test circuit — Restore TDS switch to normal.	

M. Interchangeable Code Routes

Tests 40 through 43

11	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights — Dial or key test number as indicated in Test Chart B.	DT lamp extinguishes. Digits displayed as indicated in Test Chart B. RLC lamp lights.
13	Restore TST key.	RLC lamp extinguishes.
14a	If no further tests are to be made — Remove all cords and restore all keys.	
15a	At manual test circuit — Restore TDS switch to normal.	

N. Class Screening

Test 44

11	At manual test circuit — Operate TC switch to position corresponding to flat rate originating class.	
12	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
13	After DT lamp lights — Dial or key test number for extended area call as indicated in Test Chart B.	DT lamp extinguishes. Digits displayed for charge route as indicated in Test Chart B. RLC lamp lights.
14	Restore TST key.	RLC lamp extinguishes.

Test 45

15	At manual test circuit — Operate TC switch to position corresponding to extended area service originating class.	

STEP	ACTION	VERIFICATION
16	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
17	After DT lamp lights — Dial or key test number for extended area call as indicated in Test Chart B.	DT lamp extinguishes. Digits displayed for noncharge route as indicated in Test Chart B. RLC lamp lights.
18	Restore TST key.	RLC lamp extinguishes.
19a	If no further tests are to be made — Remove all cords and restore all keys.	
20a	At manual test circuit — Restore TDS switch to normal.	

O. Cancel Alternate Route Control

Caution: Before making Test O, consult with the Traffic Department in accordance with local instructions.

Tests 46 through 55

11	At miscellaneous relay rack — Operate CAR- key as indicated in Test Chart B.	
12	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
13	After DT lamp lights — Operate RB2 key.	
14	Dial or key test number for initial route call with an alternate route corresponding to operated CAR- key as indicated in Test Chart B.	DT lamp extinguishes. BAR (blocked alternate route) route digits displayed as indicated in Test Chart B. RLC lamp lights.
15	Restore RB2, TST keys.	RLC lamp extinguishes.
16	At miscellaneous relay rack — Restore CAR- key.	
17a	If no further tests are to be made — At manual test set — Remove all cords and restore all keys.	
18a	At manual test circuit — Restore TDS switch to normal.	

STEP	ACTION	VERIFICATION
	P. Permanent Signal Routing	
Test 56		
11	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights. After approximately 20 seconds — Permanent signal routing digits displayed as indicated in Test Chart B. PS, RLC lamps light.
12	Restore TST key.	PS, RLC lamps extinguish.
	Q. Foreign Area Translation	
Test 57		
11	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
12	After DT lamp lights — Dial or key test number which has area code corresponding to foreign area translator 0 as indicated in Test Chart B.	DT lamp extinguishes. Translator and decoder reseized. Digits of initial route displayed. RLC lamp lights.
13	Restore TST key.	RLC lamp extinguishes.
Tests 58 through 61		
14	Repeat Steps 11 through 13 for foreign area translators 1 through 4.	
15a	If no further tests are to be made — Remove all cords and restore all keys.	
16a	At manual test circuit — Restore TDS switch to normal.	
	R. Miscellaneous Routing	
Test 62		
11	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.

STEP	ACTION	VERIFICATION
12	At manual test circuit — Operate DRR key.	
13	At manual test set — After DT lamp lights. Dial or key test number as indicated in Test Chart B.	DT lamp extinguishes. Minor alarm sounds. Initial route digits displayed. RLC lamp lights. At jack, key, and lamp circuit — TR- lamp corresponding to translator selected by TDS switch extinguishes. TR- lamp corresponding to alternate translator lights.
14	At jack, key, and lamp circuit — Momentarily operate TT-AR key.	Minor alarm silences.
15	At manual test set — Restore TST key.	TR- lamp extinguishes. At manual test set — RLC lamp extinguishes.
16	At manual test circuit — Restore DRR key.	
Test 63		
17	Operate DTR key.	
18	At manual test set — Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
19	After DT lamp lights — Dial or key test number as indicated in Test Chart B.	DT lamp extinguishes. Major alarm sounds. ROD lamp lights. At jack, key, and lamp circuit — TR- lamp corresponding to translator selected by TDS switch extinguishes. TR- lamp corresponding to alternate translator lights momentarily.
20	At jack, key, and lamp circuit — Momentarily operate TT-AR key.	Major alarm silences.
21	At manual test set — Restore TST key.	ROD lamp extinguishes.
22	At manual test circuit — Restore DTR key.	

STEP	ACTION	VERIFICATION
Test 64		
23	Set TC switch to any position except position 9.	
24	At manual test set — Operate CLX, TST keys.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
25	After DT lamp lights — Dial or key test number as indicated in Test Chart B.	DT lamp extinguishes. Minor alarm sounds. Digits of route displayed after second seizure of translator and decoder. RLC lamp lights.
26	At jack, key, and lamp circuit — Momentarily operate TT-AR key.	Minor alarm silences.
27	At manual test set — Restore TST key.	RLC lamp extinguishes.
28	Restore CLX key.	
Test 65		
29	Operate CC key.	
30	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
31	After DT lamp lights — Dial or key test number for toll route as indicated in Test Chart B.	DT lamp extinguishes. Digits of intercept or operator route displayed as indicated in Test Chart B. RLC lamp lights.
32	Restore TST, CC keys.	RLC lamp extinguishes.
Test 66		
33	Operate TST key.	If register is busy — BY lamp lights. If register is idle — DT lamp lights.
34	After DT lamp lights — Dial or key a vacant code as indicated in Test Chart B.	DT lamp extinguishes. Digits of vacant code route displayed as indicated in Test Chart B. RLC lamp lights.

STEP	ACTION	VERIFICATION
35	Restore TST key.	RLC lamp extinguishes.
36a	If no further tests are to be made — Remove all cords and restore all keys.	
37a	At manual test circuit — Restore TDS switch to normal.	

5. PREPARATION OF TEST CHART

5.01 The test charts at the end of this section are intended for use as particular number charts. These charts show test set, test circuit, and jack, key, and lamp circuit keys and switches to be operated for each test. Information obtained from local office records should be used to fill in the test charts.

5.02 For Test Charts A and B, consult Parts 3 and 4 of this section for the sequence of operation of test keys, switches, and lamps.

5.03 The KEYED DIGITS columns of Test Chart A should be filled out in accordance with the explanation of the type of test call as listed in Table A.

5.04 The KEYED/DIALED DIGITS columns and the DISPLAYED DIGITS columns of Test Chart B should be filled out in accordance with the explanation of the type of test call as listed in Table B.

TABLE A

BSP TEST	TEST NO.	TEST CALL NUMBER KEYED DIGITS	DISPLAYED DIGITS
A	1	3-digit service code (11X or X11)	Service code digits
B	2	4-digit reverting code (11XX)	Reverting code digits
	3	5-digit reverting code (11XXX)	Reverting code digits
C	4	7-digit local number (NXX + XXXX)	Keyed digits
	5	1 plus 7-digit toll number (1 + NXX + XXXX)	7-digit toll number digits
	6	0 plus 7-digit toll number (0 + NXX + XXXX)	7-digit toll number digits
	7	10-digit multimessage unit (NXX + NXX + XXXX)	10-digit multimessage unit digits
	8	1 + 10-digit foreign area toll (1 + NXX + NXX + XXXX)	10-digit foreign area toll digits
	9	0 + 10-digit foreign area toll (0 + NXX + NXX + XXXX)	10-digit foreign area toll digits
D	10	7-digit nontoll with interchangeable code	7-digit nontoll digits
	11	1 + 7-digit toll with interchangeable code	7-digit toll digits
	12	0 + 7-digit toll with interchangeable code	7-digit toll digits
	13	10-digit multimessage with interchangeable code	10-digit multimessage digits
	14	1 + 10-digit foreign area with interchangeable code	10-digit foreign area digits
	15	0 + 10-digit foreign area with interchangeable code	10-digit foreign area digits
E	16	7-digit vacant code number	1st 3 or 4 keyed digits

TABLE B

BSP TEST	TEST NO.	PREFIX DIGIT 0/1	TEST CALL NUMBER KEYED OR DIALED DIGITS	DISPLAYED DIGITS
H	1		3-digit service code noncoin (11X or X11)	Service code digits noncoin
	2		3-digit service code coin (11X or X11)	Service code digits coin
I	3		4-digit reverting code (11XX)	Reverting code route digits
	4		5-digit reverting code (11XXX)	Reverting code route digits
J	5		Local information code (411)	Information code route digits
	6	1	Home area information code (1 + 411)	Information code route digits
	7	1	Foreign area information code (1 + NXX + 411)	Information code route digits
K	8		7-digit nonsender class — no alternate route	Initial route digits
	9	√	10-digit nonsender class — no alternate route	Initial route digits
	10	√	7-digit nonsender class — alternate route	Initial route digits
	11	√	10-digit nonsender class — alternate route	Initial route digits
	12		7-digit nonsender class — no alternate route	Overflow route digits
	13	√	10-digit nonsender class — no alternate route	Overflow route digits
	14		7-digit nonsender class — alternate route	Alternate route digits
	15	√	10-digit nonsender class — alternate route	Alternate route digits
L	16	√	7-digit — MF — no alternate route	Initial route digits
	17	√	7-digit — DP (no stop-go) — no alternate route	Initial route digits
	18	√	7-digit — DP (stop-go) — no alternate route	Initial route digits
	19	√	10-digit — MF — no alternate route	Initial route digits
	20	√	10-digit — DP (no stop-go) — no alternate route	Initial route digits
	21	√	10-digit — DP (stop-go) — no alternate route	Initial route digits
	22	√	7-digit — MF — alternate route	Initial route digits
	23	√	7-digit — DP (no stop-go) — alternate route	Initial route digits

TABLE B (Cont)

BSP TEST	TEST NO.	PREFIX DIGIT 0/1	TEST CALL NUMBER KEYED OR DIALED DIGITS	DISPLAYED DIGITS
	24	√	7-digit — DP (stop-go) — alternate route	Initial route digits
	25	√	10-digit — MF — alternate route	Initial route digits
	26	√	10-digit — DP (no stop-go) — alternate route	Initial route digits
	27	√	10-digit — DP (stop-go) — alternate route	Initial route digits
M	28	√	7-digit — MF — alternate route	Alternate route digits
	29	√	7-digit — DP (no stop-go) — alternate route	Alternate route digits
	30	√	7-digit — DP (stop-go) — alternate route	Alternate route digits
	31	√	10-digit — MF — alternate route	Alternate route digits
	32	√	10-digit — DP (no stop-go) — alternate route	Alternate route digits
	33	√	10-digit — DP (stop-go) — alternate route	Alternate route digits
	34	√	7-digit — MF — alternate route	1st exit digit
	35	√	7-digit — DP (no stop-go) — alternate route	1st exit digit
	36	√	7-digit — DP (stop-go) — alternate route	1st exit digit
	37	√	10-digit — MF — alternate route	1st exit digit
	38	√	10-digit — DP (no stop-go) — alternate route	1st exit digit
	39	√	10-digit — DP (stop-go) — alternate route	1st exit digit
	40	√	7-digit — Interchangeable code with same route	Initial route digits
	41	√	10-digit — Interchangeable code with same route	Initial route digits
	42	√	7-digit — Interchangeable code with different route	Initial route digits
	43	√	10-digit — Interchangeable code with different route	Initial route digits
N	44		10-digit — Extended area code (Flat rate originating class)	Charge route digits
	45		10-digit — Extended area code (Extended area originating class)	Noncharge route digits

TABLE B (Cont)

BSP TEST	TEST NO.	PREFIX DIGIT 0/1	TEST CALL NUMBER KEYED OR DIALED DIGITS	DISPLAYED DIGITS
O	46	√	7-digit — Nonsender class — alternate route corresponding to CAR0	Intercept or announcement trunk route
	47	√	7-digit — Nonsender class — alternate route corresponding to CAR1	Intercept or announcement trunk route
	48	√	7-digit — Nonsender class — alternate route corresponding to CAR2	Intercept or announcement trunk route
	49	√	7-digit — Nonsender class — alternate route corresponding to CAR3	Intercept or announcement trunk route
	50	√	7-digit — Nonsender class — alternate route corresponding to CAR4	Intercept or announcement trunk route
	51	√	7-digit — Nonsender class — alternate route corresponding to CAR5	Intercept or announcement trunk route
	52	√	7-digit — Nonsender class — alternate route corresponding to CAR6	Intercept or announcement trunk route
	53	√	7-digit — Nonsender class — alternate route corresponding to CAR7	Intercept or announcement trunk route
	54	√	7-digit — Nonsender class — alternate route corresponding to CAR8	Intercept or announcement trunk route
	55	√	7-digit — Nonsender class — alternate route corresponding to CAR9	Intercept or announcement trunk route
P	56		Permanent Signal (no digits)	Permanent signal route digits
Q	57	√	10-digit sender class with area code corresponding to foreign area 0	Digits of initial route translated from office code
	58	√	10-digit sender class with area code corresponding to foreign area 1	Digits of initial route translated from office code
	59	√	10-digit sender class with area code corresponding to foreign area 2	Digits of initial route translated from office code
	60	√	10-digit sender class with area code corresponding to foreign area 3	Digits of initial route translated from office code
	61	√	10-digit sender class with area code corresponding to foreign area 4	Digits of initial route translated from office code
R	62	√	7-digit w/alternate route (1 time-out on release)	Initial route digits
	63	√	7-digit w/alternate route (2 time-outs on release)	1st exit digit
	64	√	7-digit w/alternate route (class cross trouble release)	1st exit digit
	65	1	7-digit w/alternate route (toll route)	Intercept or operator route digits
	66		7-digit vacant code number	Vacant code route digits

TEST CHART A

(TOUCH-TONE CALLING ONLY)

BSP TEST	TEST NO.	TEST SET KEYS				TEST CIRCUIT SWITCH TDS	TEST SET LAMPS			KEYED DIGITS										
		TST	KY	ABN2	XPT		DT	RLC	MISC	A	B	C	D	E	F	G	H	J	K	L
A	1	√	√		√	√	√	√		—	—	—								
B	2	√	√	√	√	√	√	√		—	—	—	—							
	3	√	√	√	√	√	√	√		—	—	—	—	—						
C	4	√	√		√	√	√	√		—	—	—	—	—	—	—				
	5	√	√		√	√	√	√		1	—	—	—	—	—	—	—			
	6	√	√		√	√	√	√		0	—	—	—	—	—	—	—			
	7	√	√		√	√	√	√		—	—	—	—	—	—	—	—	—	—	
	8	√	√		√	√	√	√		1	—	—	—	—	—	—	—	—	—	—
	9	√	√		√	√	√	√		0	—	—	—	—	—	—	—	—	—	—
D	10	√	√		√	√	√	√		—	—	—	—	—	—	—				
	11	√	√		√	√	√	√		1	—	—	—	—	—	—	—			
	12	√	√		√	√	√	√		0	—	—	—	—	—	—	—			
	13	√	√		√	√	√	√		—	—	—	—	—	—	—	—	—	—	
	14	√	√		√	√	√	√		1	—	—	—	—	—	—	—	—	—	—
	15	√	√		√	√	√	√		0	—	—	—	—	—	—	—	—	—	—
E	16	√	√		√	√	√	√		—	—	—	—	—	—	—				

TEST CHART B

CONTROLLED OUTPULSING WITH OR WITHOUT TOUCH-TONE CALLING

BSP TEST	TEST NO.	TEST SET KEYS								TEST CIRCUIT KEYS		MISC KEYS	TEST CIRCUIT SWITCH		KEYED/DIALED DIGITS										DISPLAYED DIGITS												TEST SET LAMPS			MISC LAMPS
		TST	KY/DL	CC	ABN2	RB1	RB2	XPT	CLX	DRR	DTR		TC	TDS	A	B	C	D	E	F	G	H	J	K	L												DT	RLC	ROD	
H	1	√	√					√					√	√	—	—	—									—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	2	√	√	√				√					√	√	—	—	—									—	—	—	—	—	—	—	—	—	—	—	—	√	√		
I	3	√	√		√			√					√	√	1	1	—	—								—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	4	√	√		√			√					√	√	1	1	—	—	—							—	—	—	—	—	—	—	—	—	—	—	—	√	√		
J	5	√	√					√					√	√	4	1	1									—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	6	√	√					√					√	√	1	4	1	1								—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	7	√	√					√					√	√	1	—	—	—	4	1	1					—	—	—	—	—	—	—	—	—	—	—	—	√	√		
K	8	√	√					√					√	√	—	—	—	—	—	—	—					—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	9	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	10	√	√					√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	11	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	12	√	√				√	√					√	√	—	—	—	—	—	—	—					—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	13	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	14	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	15	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
L	16	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	17	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	18	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	19	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	20	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	21	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	22	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	23	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	24	√	√				√	√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	25	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	26	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		

TEST CHART B (Cont)

CONTROLLED OUTPULSING WITH OR WITHOUT TOUCH-TONE CALLING

BSP TEST	TEST NO.	TEST SET KEYS								TEST CIRCUIT KEYS		MISC KEYS	TEST CIRCUIT SWITCH		KEYED/DIALED DIGITS										DISPLAYED DIGITS												TEST SET LAMPS			MISC LAMPS
		TST	KY/DL	CC	ABN2	RB1	RB2	XPT	CLX	DRR	DTR		TC	TDS	A	B	C	D	E	F	G	H	J	K	L												DT	RLC	ROD	
L	27	√	√				√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
(Cont)	28	√	√			M*		√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	29	√	√			M		√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	30	√	√			M		√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	31	√	√			M		√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	32	√	√			M		√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	33	√	√			M		√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	34	√	√			√		√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	35	√	√			√		√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	36	√	√			√		√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	37	√	√			√		√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	38	√	√			√		√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	39	√	√			√	√	√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
M	40	√	√					√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	41	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	42	√	√					√					√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	43	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
N	44	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—	√	√		
	45	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—	√	√		
O	46	√	√				√	√				CAR0	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	47	√	√				√	√				CAR1	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	48	√	√				√	√				CAR2	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	49	√	√				√	√				CAR3	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	50	√	√				√	√				CAR4	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	51	√	√				√	√				CAR5	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	52	√	√				√	√				CAR6	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		
	53	√	√				√	√				CAR7	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	√	√		

*Momentarily

TEST CHART B (Cont)

CONTROLLED OUTPULSING WITH OR WITHOUT TOUCH-TONE CALLING

BSP TEST	TEST NO.	TEST SET KEYS								TEST CIRCUIT KEYS		MISC KEYS	TEST CIRCUIT SWITCH		KEYED/DIALED DIGITS										DISPLAYED DIGITS												TEST SET LAMPS			MISC LAMPS
		TST	KY/DL	CC	ABN2	RB1	RB2	XPT	CLX	DRR	DTR		TC	TDS	A	B	C	D	E	F	G	H	J	K	L												DT	RLC	ROD	
O	54	√	√				√	√				CAR8	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
(Cont)	55	√	√				√	√				CAR9	√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
P	56	√	√					√					√	√												—	—	—	—	—	—	—	—	—	—	—	—	√	√		PS
Q	57	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	58	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	59	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	60	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	61	√	√					√					√	√	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	√	√		
R	62	√	√					√		√			√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		TR-
	63	√	√					√			√		√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√	√	TR-
	64	√	√					√	√				√	√	—	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		
	65	√	√	√				√					√	√	1	—	—	—	—	—	—	—				—	—	—	—	—	—	—	—	—	—	—	—	√	√		