REGULAR PRETRANSLATOR SD-25568-01
TESTS USING OFFICE TEST FRAME
TEST CIRCUIT SD-27633-01 (H595-950)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is reissued for the following reasons:

(a) To add Test I, J, and K which were previously covered in Section 218-720-503

(b) To remove reference to 2-digit office codes

(c) To cover interchangeable codes

(d) To add Tables A and B

(e) To revise Tables D and E which were designated A and B

(f) To revise section title

(g) To make minor changes as required.

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted. This reissue affects Equipment Test Lists.

1.02 The tests covered are:

PAGE

A. Translation Feature: This test checks the operation of the pretranslator digit registers and translators for all codes. 4

B. Open Receiving Lead Check Feature: This test checks that the pretranslator recognizes an open receiving (A-, B-, or C-) lead from the originating register. 5

C. Open Release Lead Check Feature: This test checks that the pretranslator recognizes open release (PRL) and release check (RLK) leads to the originating register. 6

D. Open Transmitting Lead Check Feature: This test checks that the pretranslator recognizes open transmitting leads (SD, CM3, CMA, CMB, and CMC) to the originating register. 9

E. No Locking Ground on Transmitting Lead Check Feature: This test checks that the pretranslator recognizes the failure to return locking ground on the transmitting leads from the originating register. 11

F. Open Trouble Release Lead Check Feature: This test checks that the pretranslator recognizes an open trouble release (PTR) lead in the pretranslator or originating register. 14

G. Transfer Start Feature: This test checks that the pretranslator recognizes a transferred start lead signal from the pretranslator connector. 16

H. Display Lost Feature: This test checks that the associated DL lamp is lighted when the trouble indicator is busy and the pretranslator attempts to make a trouble registration. 17

I. Work Timer and Trouble Recorder Timer Features: The following features are checked. (1) If the pretranslator is held longer than a specified time, the work timer will time out and cause a trouble indication display. (2) If, after the work timer has timed out, the trouble

PAGE

indication is not completed within a specified time, the trouble timer will time out. 19

J. Trouble Detection Feature for False Ground or Crosses: This test checks that all cross-detection relays function properly under trouble conditions. 20

K. Make-Busy Feature: This test checks that the MB relay is operated in all pretranslator make-busy conditions. 20

1.03 All tests covered in this section should be made during periods of light traffic.

1.04 All tests are made with the pretranslator *not* under test made busy.

1.05 Table A indicates the tests requiring action and/or verification at more than one location.

1.06 ***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.

1.07 When performing Tests A through H, the traffic register associated with the originating register APD lead will score on each test call.

2. APPARATUS

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

2.02 Office test frame SD-27633-01 (H595-950).

2.03 Trouble indicator and connector circuit SD-27634-01.

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

2.05 Patching cord, 3PD cord, 6 feet long, equipped with two 309 plugs (3P3A cord) (for use in selecting a particular originating register).

2.06 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one 419A (test connector) tool, and one KS-6278 connecting clip (used for making test connections to terminal strip and relay contact springs).

2.07 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 connecting clip, and one 411A (test pick) tool (used for making test connections to fuse alarm bar).

TABLE A

ACTION AND/OR VERIFICATION REQUIRED AT:	TESTS										
	A	B	C	D	E	F	G	H	I	J	K
Office Test Frame (OTF)	√	√	√	√	√	√	√	√			
Trouble Indicator and Connector Circuit (TIC)	–	√	√	√	√	√	√	√	√	√	–
Jack, Lamp, and Key Circuit	√	√	√	√	√	√	√	√	√	√	√
Pretranslator	–	–	√	√	√	√	√	–	√	√	√
Originating Register	√	√	√	–	√	–	–	√	–	–	–

√ As required

TABLE B

APPARATUS	TESTS										
	A	B	C	D	E	F	G	H	I	J	K
Test Circuit (2.02)	1	1	1	1	1	1	1	1			
Trouble Indicator (2.03)	1	1	1	1	1	1	1	1	1	1	
322A (make-busy) Plug	√	√	√	√	√	√	√	√	√	√	√
32A Test Set	1	1									
Blocking and Insulating Tools (2.04)		√	√	√	√	√	√	√	√		√
KS-3008 Stopwatch or Equivalent									1		
Patching Cord (2.05)	2	2	2	2	2	2	2	2			
Cord (2.06)										2	
Cord (2.07)											1

√ As required

3. PREPARATION

STEP	ACTION	VERIFICATION
Tests A, D, E, F		
1	From office records, for each of the transmitting leads listed in Table D, record an associated code which, when translated, will cause that transmitting lead(s) to be grounded.	
2	From office records, for each of the incompleted codes listed in Table E, record a code and also the designation of the transmitting lead(s) grounded.	

STEP	ACTION	VERIFICATION
4. METHOD		
A. Translation Feature		
3	At OTF— Restore all keys and switches.	All lamps extinguished.
4	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
5	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
6	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
7	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
8	Operate OTL, 3D, CB keys.	
9	Operate CL- key for noncoin class of service.	
10	Operate MKR- key associated with a completing marker.	
11	Set A-, B-, C- DIAL switches for first code listed in Table D.	
12	At originating register— Insert plug of 32A test set into RC jack.	
13	Momentarily operate white (ST) button.	Observe that PST, PRL relays designated the same as grounded transmitting lead(s) operated.
14	Momentarily operate red (RL) button.	Originating register released.
15	Repeat Steps 11, 13, 14 for remaining A-, B-, C- codes in Table D, then codes in Table E.	
16a	If one or more 1-1 prefix codes are listed in Table E— At OTF— Set A-, B-, C- DIAL switches for first 1-1 prefix code listed.	

STEP	ACTION	VERIFICATION
17a	Repeat Steps 13, 14.	
18a	Repeat Steps 16a, 17a for each 1-1 prefix code listed.	
19	Remove plug of 32A test set from RC jack.	
20	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
21	Remove patch cords from MB1, MB2 and ORMB- jacks.	
22	At OTF— Restore all keys and switches.	

B. Open Receiving Lead Check Feature

1	At TIC— Momentarily operate RLS key.	All lamps extinguished.
2	Operate TIR AR key.	
3	At OTF— Restore all keys and switches.	All lamps extinguished.
4	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
5	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
6	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
7	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
8	Operate OTL, 3D, CB keys.	
9	Operate CL- key for noncoin class of service.	
10	Operate MKR- key associated with a completing marker.	
11	Set A-, B-, C- DIAL switches for any code.	

STEP	ACTION	VERIFICATION
12	At originating register— Insert plug of 32A test set into RC jack.	
13	Block operated BS relay.	
14	Momentarily operate white (ST) button.	Originating register seized.
15	When originating register is seized and AS relay operates— ***Immediately*** remove blocking tool from BS relay.	At TIC— Display registered. PTR, PRT- lamps lighted. PRL, A- lamps ***not*** lighted.
16	Momentarily operate RLS key.	Display released.
17	At originating register— Momentarily operate red (RL) button.	Originating register released.
18	Remove plug of 32A test set from RC jack.	
19	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
20	Remove patching cords from MB1, MB2, and ORMB- jacks.	
21	At OTF— Restore all keys and switches.	
22	At TIC— Restore TIR AR key.	All lamps extinguished.

C. Open Release Lead Check Feature

1	At TIC— Momentarily operate RLS key.	All lamps extinguished.
2	Operate TIR AR key.	
3	At OTF— Restore all keys and switches.	All lamps extinguished.
4	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator under test.	
5	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
6	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other	

STEP	ACTION	VERIFICATION
	originating registers on same trunk link frame as originating register selected for test.	
7	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
8	Operate OTL, 3D, CB keys.	
9	Operate CL- key for noncoin class of service.	
10	Operate MKR- key associated with a completing marker.	
11	Set A-, B-, C- DIAL switches for any code.	
12	At pretranslator— Insulate 9T and 10T of RLK relay.	
13	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
14	At OTF— Operate ST key.	At TIC— Display registered. PTR, PRT- lamps lighted. PRL, RLK lamps ***not*** lighted.
15	Momentarily operate RLS key.	Display released.
16	At OTF— Restore ST key.	All lamps extinguished.
17	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
18	At pretranslator— Block operated TR2 relay.	
19	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
20	At OTF— Operate ST key.	At T1C— Display registered.

STEP	ACTION	VERIFICATION
		PRT-, TR2 lamps lighted. PTR, PRL, RLK lamps ***not*** lighted.
21	Momentarily operate RLS key.	Display released.
22	At OTF— Restore ST key.	All lamps extinguished.
23	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
24	At pretranslator— Remove insulator from 9T and 10T of RLK relay.	
25	At originating register— Insulate 4M of PRL relay.	
26	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
27	At OTF— Operate ST key.	At TIC— Display registered. PRT-, PRL, TR2 lamps lighted. PTR, RLK lamps ***not*** lighted.
28	Momentarily operate RLS key.	Display released.
29	At OTF— Restore ST key.	All lamps extinguished.
30	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
31	At pretranslator— Remove blocking tool from TR2 relay.	
32	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	

STEP	ACTION	VERIFICATION
33	At OTF— Operate ST key.	At TIC— Display registered. PRT-, PRL lamps lighted. PTR, RLK lamps ***not*** lighted.
34	Momentarily operate RLS key.	Display released.
35	At OTF— Restore ST key.	All lamps extinguished.
36	At originating register— Remove insulator from 4M of PRL relay.	
37	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
38	Remove patching cords from MB1, MB2, and ORMB- jacks.	
39	At OTF— Restore all keys and switches.	
40	At TIC— Restore TIR AR key.	

D. Open Transmitting Lead Check Feature

3	At TIC— Momentarily operate RLS key.	All lamps extinguished.
4	Operate TIR AR key.	
5	At OTF— Restore all keys and switches.	All lamps extinguished.
6	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator under test.	
7	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
8	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
9	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	

STEP	ACTION	VERIFICATION
10	Operate OTL, 3D, CB keys.	
11	Operate CL- key for noncoin class of service.	
12	Operate MKR- key associated with a completing marker.	
13	Set A-, B-, C- DIAL switches for a code which, when translated, grounds the CM3 transmitting lead only. (Refer to Table D or E).	
14	At pretranslator— Insulate 1T and 1B of KTR relay.	
15	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
16	At OTF— Operate ST key.	At TIC— Display registered. PTR, PRT- lamps lighted. CM3, RLK lamps ***not*** lighted.
17	Momentarily operate RLS key.	Display released.
18	At OTF— Restore ST key.	All lamps extinguished.
19	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
20	At pretranslator— Block operated TR2 relay.	
21	At OTF— Set A-, B-, C- DIAL switches for code which, when translated, grounds CMA, CMB, CMC or SD transmitting lead only. (Refer to Table D or E).	
22	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	

STEP	ACTION	VERIFICATION
23	At OTF— Operate ST key.	At TIC— Display registered. PRT-, TR2 lamps lighted. PTR, CM-, SD, RLK lamps ***not*** lighted.
24	Momentarily operate RLS key.	Display released.
25	At OTF— Restore ST key.	All lamps extinguished.
26	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
27	Repeat Steps 21 through 26 for each transmitting lead.	
28	At pretranslator— Remove insulators from 1T and 1B of KTR relay.	
29	Remove blocking tool from TR2 relay.	
30	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
31	Remove patching cords from MB1, MB2, and ORMB- jacks.	
32	At OTF— Restore all keys and switches.	
33	At TIC— Restore TIR AR key.	

E. No Locking Ground on Transmitting Lead Check Feature

3	At TIC— Momentarily operate RLS key.	All lamps extinguished.
4	Operate TIR AR key.	
5	At OTF— Restore all keys and switches.	All lamps extinguished.
6	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	

STEP	ACTION	VERIFICATION
7	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
8	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
9	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
10	Operate OTL, 3D, CB keys.	
11	Operate CL- key for noncoin class of service.	
12	Operate MKR- key associated with a completing marker.	
13	Set A-, B-, C- DIAL switches for a code which, when translated, grounds the CM3 transmitting lead only. (Refer to Table D or E.)	
14	At originating register— Insulate contacts of following relays: 10M of CM3 10M of CMA 10M of CMB 12M of CMC 10M of SD	
15	At OTF— Operate ST key.	At TIC— Display registered. PRT-, RLK lamps lighted. PTR, CM3 lamps not lighted.
16	Momentarily operate RLS key.	Display released.
17	At OTF— Restore ST key.	All lamps extinguished.
18	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
19	At pretranslator— Block operated TR2 relay.	

STEP	ACTION	VERIFICATION
20	At OTF— Set A-, B-, C- DIAL switches for code which, when translated, grounds CMA, CMB, CMC or SD transmitting lead only. (Refer to Table D or E.)	
21	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
22	At OTF— Operate ST key.	At TIC— Display registered. PRT-, RLK, TR2 lamps lighted. PTR, CM-, SD lamps ***not*** lighted.
23	Momentarily operate RLS key.	Display released.
24	At OTF— Restore ST key.	All lamps extinguished.
25	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
26	Repeat Steps 20 through 25 for each transmitting lead.	
27	At originating register— Remove insulators from the following relay contacts: 10M of CM3 10M of CMA 10M of CMB 12M of CMC 10M of SD	
28	At pretranslator— Remove blocking tool from TR2 relay.	
29	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
30	Remove patching cords from MB1, MB2, and ORMB- jacks.	
31	At OTF— Restore all keys and switches.	

STEP	ACTION	VERIFICATION
32	At TIC— Restore TIR AR key.	
F. Open Trouble Release Lead Check Feature		
3	At TIC— Momentarily operate RLS key.	All lamps extinguished.
4	At OTF— Restore all keys and switches.	All lamps extinguished.
5	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator under test.	
6	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
7	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
8	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
9	Operate OTL, 3D, CB keys.	
10	Operate CL- key for noncoin class of service.	
11	Operate MKR- key associated with a completing marker.	
12	Set A-, B-, C- DIAL switches for code which, when translated, grounds the CM3, CMA, CMB, or CMC transmitting lead. (Refer to Table D or E.)	
13	At pretranslator— Insulate 1T of HDK relay and 1B of TRB1 relay.	
14	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test, insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
15	At OTF— Operate ST key.	Minor alarm sounds. At TIC—

STEP	ACTION	VERIFICATION
		Display registered. PRT- lamp lighted. PRL, RLK, PTR lamps ***not*** lighted. At jack, lamp, and key circuit— TRR lamp lighted.
16	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
17	At TIC— Momentarily operate RLS key.	Display released.
18	Momentarily operate TIR AR key.	Minor alarm silenced. At jack, lamp, and key circuit— TRR lamp extinguished.
19	At OTF— Restore ST key.	All lamps extinguished.
20	At pretranslator— Remove insulator from 1B of TRB1 relay; insulate 1B of TR2 relay.	
21	Block nonoperated TRL relay.	
22	Block operated TR2 relay.	
23	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
24	At OTF— Operate ST key.	Major alarm sounds. At T1C— Display registered. PRT-, TR2 lamps lighted. PRL, RLK lamps ***not*** lighted. At jack, lamp, and key circuit— TRR lamp lighted.
25	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
26	At TIC— Momentarily operate RLS key.	Display released.

STEP	ACTION	VERIFICATION
27	Momentarily operate TIR AR key.	Major alarm silenced. At jack, lamp, and key circuit— TRR lamp extinguished.
28	At OTF— Restore ST key.	All lamps extinguished.
29	At pretranslator— Remove insulators from 1T of HDK and 1B of TR2 relays.	
30	Remove blocking tools from TR2 and TRL relays.	
31	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
32	Remove patching cords from MB1, MB2, and ORMB- jacks.	

G. Transfer Start Feature

1	At TIC— Momentarily operate RLS key.	All lamps extinguished.
2	Operate TIR AR key.	
3	At OTF— Restore all keys and switches.	All lamps extinguished.
4	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator under test.	
5	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
6	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
7	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
8	Operate OTL, 3D, CB keys.	
9	Operate CL- key for noncoin class of service.	

STEP	ACTION	VERIFICATION
10	Operate MKR- key associated with a completing marker.	
11	Set A-, B-, C- DIAL switches for any code.	
12	At pretranslator connector— Block operated TRS relay.	
13	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator under test; insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
14	At OTF— Operate ST key.	At TIC— Display registered. PRT-, TRS lamps lighted.
15	Momentarily operate RLS key.	Display released.
16	At OTF— Restore ST key.	All lamps extinguished.
17	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack associated with pretranslator ***not*** under test; insert make-busy plug into PRTMB jack associated with pretranslator under test.	
18	At pretranslator connector— Remove blocking tool from TRS relay.	
19	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
20	Remove patching cords from MB1, MB2 and ORMB- jacks.	
21	At OTF— Restore all keys and switches.	
22	At TIC— Restore TIR AR key.	

H. Display Lost Feature

1	At TIC— Momentarily operate RLS key.	All lamps extinguished.
2	At OTF— Restore all keys and switches.	All lamps extinguished.

STEP	ACTION	VERIFICATION
3	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
4	Patch OR jack in MB2 jack field to ORMB- jack of originating register to be used for test.	
5	Patch from the 0 through 9 jacks in the MB1 jack field to the ORMB- jacks of all other originating registers on same trunk link frame as originating register selected for test.	
6	At OTF— Operate FS- key to select trunk link frame of originating register to be used for test.	
7	Operate OTL, 3D, CB keys.	
8	Operate CL- key for noncoin class of service.	
9	Operate MKR- key associated with a completing marker.	
10	At TIC— Insert make-busy plug into T1C-MB PRT- jack associated with pretranslator under test.	
11	At originating register— Block nonoperated PRL relay.	
12	At OTF— Set A-, B-, C- DIAL switches for any code.	
13	Operate ST key.	Minor alarm sounds. At TIC— PRT-DL lamp lighted. At jack, lamp, and key circuit— TRR lamp lighted.
14	At TIC— Momentarily operate TIR AR key.	Minor alarm silenced. PRT-DL lamp extinguished. At jack, lamp, and key circuit— TRR lamp extinguished.
15	At OTF— Restore ST key.	All lamps extinguished.
16	At originating register— Remove blocking tool from PRL relay.	

STEP	ACTION	VERIFICATION
17	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	
18	Remove patching cords from MB1, MB2, and ORMB- jacks.	
19	At TIC— Remove make-busy plug from TIC-MB PRT- jack.	
20	At OTF— Restore all keys and switches.	

I. Work Timer and Trouble Recorder Timer Features

1	At TIC— Insert make-busy plug into TIC-MB PRT- jack associated with pretranslator under test.	
2	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator under test.	
3	At pretranslator frame— Block nonoperated TR relay.	
4	Manually operate RLK relay; ***start timing.***	In 0.2 to 0.4 seconds— WT relay operated.
5	Release RLK relay.	
6	Remove blocking tool from TR relay.	
7	Block nonoperated TRB relay.	
8	Block operated RLK relay; ***start timing.***	In 2.2 to 3.4 seconds— Major alarm sounds. TRT- lamp lighted.
9	Remove blocking tool from TRB and RLK relays.	
10	Momentarily operate AR key.	Major alarm silenced. TRT- lamp extinguished.
11	At TIC— Remove make-busy plug from TIC-MB PRT- jack associated with pretranslator tested.	
12	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	

STEP	ACTION	VERIFICATION
J.	**Trouble Detection Feature for False Ground or Crosses**	
1	At TIC— Momentarily operate RLS key.	All lamps extinguished.
2	Operate TIR AR key.	
3	At jack, lamp, and key circuit— Insert make-busy plug into PRTMB jack associated with pretranslator ***not*** under test.	
4	At pretranslator frame— For first lead provided in Table C, block the indicated relay(s) and momentarily ground the indicated relay contact or terminal strip terminals.	At TIC— Display registered. PRT-,XX lamps lighted.
5	Momentarily operate RLS key.	All lamps extinguished.
6	At pretranslator frame— Remove blocking tool(s).	
7	Repeat Step 4 through 6 for each lead in Table C.	
8	At jack lamp and key circuit— Remove make-busy plug from PRTMB jack.	
9	At TIC— Restore TIR AR key.	
K.	**Make-Busy Feature**	
1	At jack, lamp, and key circuit— Insert make-busy plug into PRT-MB jack associated with pretranslator under test.	At pretranslator frame— MB relay operated—
2	Momentarily connect battery to fuse alarm bar associated with pretranslator.	FA1 relay operated.
3	At jack, lamp, and key circuit— Remove make-busy plug from PRTMB jack.	At pretranslator frame— FA1, MB relays remain operated.
4	Insulate 3B, 4B and 4T, 5T of TR relay.	
5	Block operated TR relay.	
6	Momentarily operate AR key.	FA1 relay released. MB relay remains operated.
7	Block operated TRL relay.	

STEP	ACTION	VERIFICATION

TABLE C

LEAD UNDER TEST	RELAYS BLOCKED		GROUND	
	OPERATED	NONOPERATED	RELAY CONTACTS	PTC TERMINAL STRIP TERMINALS
SD			2T of PW1	
CM3			2T of CM3	
CMA			2T of CMA	
CMB			2T of CMB	
CMC			2T of CMC	
PTR			2B of FA1	
PRL			5T of TRTR	
RLK			8T of TRTR	
BSP, BSS	*TM	*WT		BSP, BSS

* First block WT relay, then TM relay.

8	Remove blocking tool and then insulators from TR relay.	MB relay remains operated.
9	Block operated TRB1 relay.	
10	Remove blocking tool from TRL relay.	MB relay remains operated.
11	Block operated the first pretranslator connector PCA- relay associated with pretranslator under test.	
12	Remove blocking tool from TRB1 relay.	MB relay remains operated.
13	Block operated the second pretranslator connector PCA- relay associated with pretranslator under test.	
14	Remove blocking tool from first PCA- relay.	MB relay remains operated.
15	Remove blocking tool from second PCA-relay.	MB relay released.

TABLE D

TRANSMITTING LEADS GROUND	CODE*			CODE†	
	A	B	C	11	A
None	___	___	___	11	___
CMA	___	___	___	11	___
CMB	___	___	___	11	___
CMC	___	___	___	11	___
CM3	___	___	___	11	___
SD & CMA	___	___	___	11	___
SD & CMB	___	___	___	11	___
SD & CMC	___	___	___	11	___
SD & CM3	___	___	___	11	___
SD	___	___	___	11	___

* Pretranslators arranged for translation of (a) 3-digit home area office codes or (b) 3-digit home area office codes and 3-digit NPA codes.

† Pretranslators arranged for translation of 11 prefix codes.

TABLE E

CODE*			TRANSMITTING LEADS GROUNDED	CODE†			TRANSMITTING LEADS GROUNDED	CODE‡			TRANSMITTING LEADS GROUNDED
A	B	C		A	B	C		A	B	C	
2	___	___	___	___	0	___	___	___	___	0	___
3	___	___	___	___	1	___	___	___	___	1	___
4	___	___	___	___	1	1+	___	___	___	2	___
5	___	___	___	___	2	___	___	___	___	3	___
6	___	___	___	___	3	___	___	___	___	4	___
7	___	___	___	___	4	___	___	___	___	5	___
8	___	___	___	___	5	___	___	___	___	6	___
9	___	___	___	___	6	___	___	___	___	7	___
				___	7	___	___	___	___	8	___
				___	8	___	___	___	___	9	___
				___	9	___	___				

* List 3-digit codes which require A-, A-B-, or A-B-C- digit(s) for translation.

† List 3-digit codes which require A-B- or A-B-C- digits for translation.

‡ List 3-digit codes which require A-B-C- digits for translation.

\+ Record this code only when the code is an X11 code.