

REVERTIVE PULSE INCOMING REGISTER
FOR USE WITH CENTRAL B SWITCHBOARD
TESTS USING TEST SET SD-25676-01 (J24756B)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers a method of testing "B" Switchboard revertive pulse incoming register circuits Terminating Office Part using the incoming register test circuit SD-25988-01 and the register test set circuit SD-25676-01 in No. 5 crossbar offices.

1.02 The tests and the features tested are:

A. Registration

The features tested are:

- (a) Registration of trunk link frame number
- (b) Registration of trunk number
- (c) Registration of pulses on each selection
- (d) Ability to recognize the completion of a selection
- (e) Translation of number on a two out of five basis
- (f) Ability of selecting bars, centering and snubbing springs to restore to normal before following selection is registered when maximum number of fingers are engaged in one direction

B. Tell Tale - Resulting From Position Disconnect

This test checks the ability of the register to recognize a reversed battery signal and release after a trouble record is taken.

C. Over-all Time Out

This test checks that the over-all timer will cause a trouble release within the required interval.

D. Link Release

This test checks the ability of the register to cause a trouble release when linkage is not established within one second.

E. Common Alarm Timing

F. Trouble Release

G. Double Connection

This test checks that the register recognizes a double connection at the link switch.

1.03 Local instructions should be followed with reference to recording any register operations caused by performing these tests.

1.04 Tests A through F are made with the register test set located at the master test frame. For Test G and for trouble locating purposes, the register test set shall be located at the register frame and the operated or released ON relay in the register under test should be substituted for the verification of the lighted or extinguished IRON lamp respectively.

1.05 When tests are made at the register frame or to avoid duplicate trouble recorder cards, release the ITRR key.

1.06 If the office is equipped with both automatic monitor and incoming register test circuits the STT/STM key of the automatic monitor should be restored to normal before starting any tests using the incoming register test circuit. If the STT/STM key of the automatic monitor is operated while a test by the incoming test circuit is in progress, the circuit will release as if the RL key had been operated.

1.07 Test C should preferably be made during periods of light traffic.

2. APPARATUS

Tests A through F

2.01 Incoming register test circuit (SD-25988-01).

2.02 Register test set circuit J24756B (SD-25676-01).

2.03 Test cord - 20 conductor cord, 6 feet long, equipped with one KS-13875 plug and one KS-13895 plug (W20C cord). (For connecting IRT jack of register test set to IRT jack of incoming register test circuit.)

2.04 No. 1011G dial hand test set equipped with a No. 2W38A cord assembly consisting of a W2CK cord, a No. 310 plug and a No. 471A jack.

Tests A through G

2.05 No. 322A (make busy) plug.

Tests C, D, and E

2.06 KS-3008 stop watch or equivalent.

Test G

2.07 Test cord - No. 893 cord, 6 feet long, equipped with two No. 360A tools (1W13B cord) two KS-6278 tools (for connecting ground to terminal strip punchings).

SECTION 218-139-507

3. PREPARATION

<u>STEP</u>	<u>ACTION</u>	<u>VERIFICATION</u>
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Preparation for Tests A through F

At Master Test Frame

- 1 Insert make busy plug into IRMB jack of register under test
- 2 Set IRG switch to select the register group
- 3 Set IR switch to select the register under test within the group
- 4 Set TCL switch to select the trunk class

At Register Test Set

- 5 Patch IRT jack of register test set to IRT jack of incoming register test circuit
- 6 Insert the plug of a telephone hand set into the PLS jack of the register test set
- 7 Set L switch to 0 position

4. METHOD

<u>STEP</u>	<u>ACTION</u>	<u>VERIFICATION</u>
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A. Registration

- | | | |
|----|---|--|
| 8 | Operate ITRR key | |
| 9 | Operate STT key momentarily | IRT, IRON, RR lamps lighted
Order tone heard |
| 10 | Pass to the "B" operator the code of the office under test, followed by the number for test call 1 shown in Table 1 | Trouble record taken and IRON, RR lamps extinguished |

Table 1

<u>Test Call</u>	<u>Selections to be keyed</u>					<u>Perforations on trouble recorder card</u>			
	<u>IB</u>	<u>IG</u>	<u>FB</u>	<u>FT</u>	<u>FU</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
1	0	0	0	0	1	0	0	0	1
2	1	1	1	1	0	2	6	1	0
3	2	2	2	2	3	5	2	2	3
4	3	3	3	3	2	7	8	3	2
5	4	0	4	4	5	8	4	4	5
6	1	2	1	5	7	3	1	5	7
7	0	3	0	6	8	1	5	6	8
8	2	1	2	7	9	4	7	7	9
9	3	0	3	8	6	6	3	8	6
10	4	3	4	9	4	9	9	9	4
11	0	2	0	2	0	1	0	2	0
12	1	3	1	3	1	3	6	3	1
13	2	0	2	0	2	4	2	0	2
14	3	1	3	1	3	6	8	1	3
15	4	2	4	2	4	9	4	2	4
16*	0	5	0	5	4	0	0	5	4
17*	0	6	0	6	7	0	5	6	7
18*	0	7	0	7	6	1	0	7	6
19*	0	8	0	8	9	1	5	8	9
20*	0	9	0	9	8	0	0	9	8

* Omit test calls 16-20 when high incoming group selection is not required.

<u>STEP</u>	<u>ACTION</u>	<u>VERIFICATION</u>
11	Operate RL key momentarily	All lamps extinguished Check perforations of trouble recorder card for the number shown for the test call in Table 1, trunk frame number, trunk number and trunk class
12	Repeat steps 9 to 11 for test calls 2 to 20 shown in Table 1	
13	Restore ITRR key	
<u>B. Tell Tale - Resulting from Position Disconnect</u>		
8	Operate ITRR key	
9	Operate STT key momentarily	IRT, IRON, RR lamps lighted Order tone heard
10	Pass to the "B" operator the code of the office under test, then request the operator to depress the position disconnect key	Trouble record taken and IRON, RR lamps extinguished
11	Operate RL key momentarily	All lamps extinguished Trouble record card shows R0 perforation
12	Restore ITRR key	
<u>C. Over-all Time Out</u>		
8	Operate STT key momentarily Start timing	IRT, IRON, RR lamps lighted Order tone heard
9	Request the "B" operator to delay keying	IRON lamp extinguished in 20 to 37 seconds
10	Operate RL key momentarily	All lamps extinguished
<u>D. Link Release</u>		
8	Set TCL switch to OFF position	
9	Operate ITRR key	
10	Operate STT key momentarily	IRON lamp lighted for approximately one second IRT lamp lighted Trouble record taken
11	Operate RL key momentarily	All lamps extinguished Trouble recorder card shows LR perforation
12	Restore ITRR key	
<u>E. Common Alarm Timing</u>		
8	Block TRL relay nonoperated	
9	Insulate 3B of M relay	
10	Operate STT key momentarily and start timing	IRT, IRON lamps lighted TO lamp lighted at master test frame jack bay in 20 to 37 seconds

<u>STEP</u>	<u>ACTION</u>	<u>VERIFICATION</u>
11	Remove make busy plug from IRMB jack and start timing	RS-TOA lamps lighted at master test frame jack bay in 10 to 15 seconds <u>Note:</u> If the RS-TOA lamp is lighted in less than 10 seconds, it will be necessary to replace the make busy plug in the IRMB jack and repeat step 10 because another circuit may have seized the common alarm circuit.
12	Remove blocking tool from TRL relay	IRON lamp extinguished
13	Remove insulator from M relay	
14	Operate RL key momentarily	All lamps extinguished

F. Trouble Release

8	Operate IRBT key	
9	Operate STT key momentarily	IRT, IRON, RR lamps lighted Order tone heard
10	Pass to the "B" operator the code of the office under test, followed by any test call number shown in Table 1, Test A	IRON, RR lamps extinguished
11	Operate RL key momentarily	All lamps extinguished
12	Restore IRBT key	

G. Double Connection

1	At master test frame jack bay - Insert make busy plug into IRMB jack of register under test	
2	Ground HM lead (punching C18 of register control unit terminal strip)	H relay operated
3	Block TRL relay nonoperated	
4	Manually operate and hold ON relay	TC1, TC2 relays operated after approximately one second DCK relay not operated Trouble record taken DCK designation not perforated
5	Release ON relay	
6	Remove blocking tool from TRL relay	
7	Remove ground from HM lead	
8	Block operated H relay	
9	Manually operate and hold ON relay	DCK relay operated
10	Release ON relay	