

CENTRALIZED REPAIR SERVICE  
TRUNK AND DIALER CIRCUITS  
MISCELLANEOUS TESTS

1. GENERAL

1.01 This section describes a method of making miscellaneous tests of centralized repair service trunk and dialer circuits.

1.02 The tests covered are:

A. Trunk Lockout: This test checks the ability of the circuit to lock out seizure by a second trunk until after it has completed outpulsing.

B. Verification of Outpulsed Number: This test checks the ability of the dialer to outpulse the preset directory number.

C. Per Cent. Break: This test checks the per cent. break of the pulses outpulsed by the dialer.

1.03 To avoid interference with normal repair service traffic, tests covered in this section should not be made during the period the transfer key is operated at the local repair service desk.

1.04 Test A should be done only when this circuit is equipped with more than one trunk (Option 2).

1.05 Office records should be consulted to determine the number that this dialer circuit should outpulse.

2. APPARATUS

Test B

2.01 KS-7608 impulse counter.

2.02 Test receiver, No. 716C receiver (or replaced No. 528 receiver) attached to a W2AB cord equipped with two

No. 360A tools (No. 2W21A cord), one KS-6278 connecting clip and one No. 411A (test pick) tool (for use in checking for the presence of battery clicks).

Test C

2.03 KS-7361 per cent. break meter.

2.04 35F current flow test set or equivalent.

2.05 One No. 627A tool.

2.06 Testing cord, No. 893 cord, 6 feet long, equipped with two No. 360A tools (No. 1W13B cord) and two No. 364 tools.

Tests B and C

2.07 Patching cord, S2B cord, 6 feet long, equipped with one No. 310 plug (No. 2W5A cord), two No. 360A tools and two No. 364 tools

3. PREPARATION

All Tests

3.01 If impossible to perform the tests in this section during the period when the transfer key at the local repair service desk is normal, arrangements must first be made for an attendant to receive repair service traffic before restoring the key to normal.

Test B

3.02 Connect the two No. 364 tools of the No. 2W5A cord to the input terminals of the impulse counter.

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3.03 Connect the KS-6278 connecting clip of the test receiver to frame ground.

### Test C

3.04 On current flow test set - place all resistance slides to the extreme right, open all telegraph key-locking levers and operate BAT and GRD CO key.

3.05 Using the No. 2W5A cord, connect one No. 364 tool to terminal T on the current flow test set and the other No. 364 tool to one of the terminals of the KS-7361 per cent. break meter.

3.06 Using a No. 1W13B cord, connect one No. 364 tool to terminal R on the current flow test set and the other No. 364 tool to a terminal of the KS-7361 per cent. break meter.

## 4. METHOD

### STEP

### ACTION

### VERIFICATION

#### A. Trunk Lockout

NOTE: This test is to be performed only if circuit is arranged for two trunks.

1	Operate TRK 1 key.	L1, S1 and SL1 relays operate.
2	Operate TRK 2 key.	L2 relay operates. S2 and SL2 relays remain unoperated. L1, S1 and SL1 relays remain operated.
3	Release TRK 1 key.	L1, S1 and SL1 relays release. S2 and SL2 relays operate. L2 relay remains operated.
4	Operate TRK 1 key.	L1 relay operates. S1 and SL1 relays remain unoperated. L2, S2 and SL2 relays remain operated.
5	Release TRK 2 key.	L2, S2 and SL2 relays release. L1 relay remains operated. S1 and SL1 relays operate.
6	Release TRK 1 key.	All relays release.

#### B. Verification of Outpulsed Number

1	Insert No. 310 plug of No. 2W5A cord in PLS jack.	
2	Depress push key of impulse counter and turn indicator to 100 on dial.	
3	Operate TRK 1 key.	
4	Operate H1 relay momentarily.	Dialer outpulses directory number. At completion of outpulsing - impulse counter reading is equal to number of pulses in preset directory number.
5	Release TRK 1 key and impulse counter push key.	All relays release.

STEP	ACTION	VERIFICATION
<u>B. Verification of Outpulsed Number (Continued)</u>		
6	Repeat steps 2 to 4.	Same as step 4.
7	Release TRK 1 key and impulse counter push key.	All relays release.
8	Place test pick of test receiver on terminal 1 of terminal strip B.	
9	Operate TRK 1 key.	
10	Operate H1 relay momentarily.	Dialer outpulses directory number. Dial clicks are heard in test receiver.
11a	If circuit is arranged for two trunks - place test pick of test receiver on terminal 5 of terminal strip B.	
12a	Release and reoperate TRK 1 key.	
13a	Operate H1 relay momentarily.	Dialer outpulses directory number. Dial clicks are heard in test receiver.
14	Release TRK 1 key.	All relays release.
15	Remove No. 2W5A cord from PLS jack.	

### C. Per Cent. Break

1	Insert No. 310 plug of No. 2W5A cord in PLS jack.	
2	Using No. 627A tool, block operated P relay.	
3	Operate PS1 relay.	PS1 relay locks operated. SR1 and G relays operate.
4	On current flow test set - close locking lever of telegraph key No. 1 and operate 15 milli-ampere key.	
5	Adjust No. 1 slides on current flow test set for a 12 ma. current.	
6	Release 15 ma. key on current flow test set.	
7	Remove blocking tool from P relay.	Circuit outpulses one digit and restores to normal.

STEP

ACTION

VERIFICATION

C. Per Cent. Break (Continued)

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|----|--|--|
| 8  | Using No. 627A blocking tool -<br>block nonoperated SP relay.  |  |
| 9  | Operate and release TRK 1 key.   | P relay pulses steadily. Per cent. break<br>meter reads $60\% \pm 2\%$ . |
| 10 | If requirement of step 9 is<br>not met - consult Bell System<br>Practices for adjustment of<br>pulsing relays in this circuit. |  |
| 11 | Remove blocking tool from<br>SP relay.   |  |
| 12 | Operate and release TRK<br>1 key.  | Circuit restores to normal.  |
| 13 | Remove No. 2W5A cord from<br>PLS jack.   |  |