

**EMERGENCY TRANSFER CIRCUIT PER SD-96425-01**  
**TO PROVIDE EMERGENCY MANUAL SERVICE FOR DIAL SUBSCRIBERS**  
**OPERATION TESTS**  
**STEP-BY-STEP SYSTEMS**

**1. GENERAL**

**1.01** This section covers a method of testing dial subscriber line circuits with emergency transfer from originating dial to originating manual service per SD-96425-01.

**1.02** This section is reissued to bring it into conformity with other material in the Plant Series. In this process marginal arrows have been omitted.

**1.03** This operational test checks:

- (a) The line circuit with emergency transfer from dial-to-manual service on an originating call.
- (b) That the transmission is satisfactory.
- (c) That a busy signal is received at the switchboard when the transferred line is busy on an incoming dial call.
- (d) That incoming dial calls will receive either a busy indication or an intercepting operator when the C key associated with the line is operated.
- (e) That the operator can monitor and talk on a line whether it is transferred or not.
- (f) That a line lamp lights at the switchboard when the receiver is removed from the switchhook of a transferred line, and is extinguished when the operator answers.
- (g) That the circuit provides switchhook supervision to the operator.

(h) That when an originating call is made on a transferred basis the subscriber line is made busy to incoming calls.

**1.04** This test should be made during a period of light traffic and every precaution taken to avoid interruptions to subscriber service.

**1.05** Should a subscriber attempt to use his line while it is under test, inform him that the testing will be immediately discontinued and request him to try the call again. If testing on a line that has been transferred to emergency manual service, inform the subscriber that he will receive a switchboard operator instead of dial tone. Discontinue further testing on this line until it is idle.

**1.06** An assistant will be required at the switchboard for the test outlined in this section. The test should preferably be made from the switchboard position having access to the end of the multiple. When testing on a dial subscriber line circuit associated with a line used as a first or intermediate line of a PBX or terminal hunting group an assistant will be required at the outgoing trunk test frame.

**1.07** Each transfer key is designed to serve one or up to a maximum of five subscriber lines. Complete tests should be made of the group of subscriber lines associated with a particular transfer key and the group restored to normal service before proceeding with the tests of any other group.

**1.08** Local instructions should be followed with respect to advising the repair service bureau and traffic operating forces of the test being made on this equipment.

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**1.09 Lettered Steps:** The letters a, b, c, etc, are added to a step number to indicate that the steps cover an action which may or may not be required, depending on local conditions. The conditions under which a lettered step or series of steps should be made are given in the ACTION column and all steps governed by the same condition are designated by the same letter. Where a condition does not apply, the associated steps should be omitted.

**2. APPARATUS**

- 2.01** No. 1011G Dial Handset (or equivalent).
  - 2.02** No. 52-type Head Telephone Set (or equivalent).
  - 2.03** No. 508A Tools (Relay Armature Blocking Tools) (or equivalent). (For use when T (transfer) key is associated with more than one subscriber line.)
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**3. PREPARATION**

STEP	ACTION	VERIFICATION
1	Obtain a record indicating the association of subscriber lines with the dial subscriber line circuits, the transfer keys, and all relative assignments.	
2	Establish talking connections between the assistants as required.	

**4. METHOD**

STEP	ACTION	VERIFICATION
3a	When T (transfer) key is associated with more than one subscriber line — At emergency transfer relay circuit — Block nonoperated all T relays associated with T key of subscriber line circuit to be tested.	
4	At MDF — Using handset connect to cable pair of line associated with circuit under test with handset switch in MON position. (If line is busy select another until idle line is found.)	
5a	At emergency transfer relay circuit — Remove block from T relay associated with circuit to be tested.	
6	At MDF — Operate handset switch to TALK position.	Dial tone received.
7	Dial one digit other than 0 or 1.	Dial tone removed.
8	At switchboard — Insert answering cord plug into ANS jack associated with circuit under test.	
9	Operate cord circuit TALK key.	Conversation can be carried on.
10	At MDF — Disconnect and reoperate handset switch to TALK position.	At MDF and switchboard — Dial tone received.

STEP	ACTION	VERIFICATION
11	At switchboard — Operate T key associated with circuit under test.	
12	At MDF — Disconnect and reoperate handset switch to TALK position.	Dial tone removed. Conversation can be carried on.
13	At switchboard — Restore T key to normal.	
14	At MDF — Disconnect and reoperate handset switch to TALK position.	Dial tone received.
15	At switchboard — Reoperate T key.	
16	Operate C key associated with line under test.	Dial tone removed.
17	Restore C key to normal.	
18	Restore TALK key.	
19	Remove answering cord plug from ANS jack.	At switchboard — Line lamp lights.
20	At MDF — Disconnect and reoperate handset switch to TALK position.	At switchboard — Line lamp momentarily extinguished on disconnect.
21	At switchboard — Insert answering cord plug into ANS jack associated with circuit under test.	Line lamp extinguished.
22b	When circuit under test is associated with a line used as a first or intermediate line of a PBX or terminal hunting group — Using a "verification trunk" outgoing to the test distributor set up a connection over the test train to associated line.	Busy indication received by a dark cord supervisory lamp.
23c	When circuit under test is associated with other than a line used as a first or intermediate line of a PBX or terminal hunting group — At switchboard — Originate a call to line associated with circuit under test.	Busy signal received.

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
24	Release connection made in Step 22b or 23c and restore TALK key to normal.	
25	At MDF — Operate handset switch to MON position.	At switchboard — Answering cord supervisory lamp lights.
26	At switchboard — Remove answering cord plug from ANS jack of line under test.	
27	Operate C key associated with circuit under test.	
28d	If circuit under test is arranged to connect incoming calls to an intercepting operator when C key is operated — At switchboard — Originate a call to associated line using a controlled ringing trunk.	Intercepting operator answers.
29d	Release connection to intercepting operator.	
30e	When circuit under test is arranged to make the associated line busy while the C key is operated, and associated line is used as a first or intermediate line of a PBX or terminal hunting group — Using a "verification trunk" outgoing to the test distributor set up a connection over the test train to associated line.	Busy indication received by a dark cord supervisory lamp.
31	Release connection made in Step 30e and restore TALK key to normal.	
32	Restore C key to normal.	
33	At switchboard — Restore T key associated with line under test.	
34a	When T key is associated with more than one subscriber line — At emergency transfer relay circuit — Remove blocking tools from all T relays associated with T key of circuit under test.	
35	At MDF — Check for dial tone and disconnect from line associated with circuit under test.	