

**CORD CIRCUITS**  
**A-C. CONTINUITY TEST**  
**DSA SWITCHBOARDS NOS. 14C, 14D AND 15C**  
**STEP-BY-STEP SYSTEMS**

1. GENERAL

1.01 This section describes a method of making A-C. continuity tests of the cord circuits of the DSA board except single ended intercepting cords. The tests are based on the use of the DSA switchboard cord testing circuit per SD-31025-01 or SD-90501-01.

1.02 The section has been reissued to include the test of recording-completing cord circuits and to revise the manner of manipulating the cord and plug.

1.03 While making the test, it may be desirable to inspect the cords for frayed conditions indicating the need for repair.

2. APPARATUS

2.01 No. 528 Receiver equipped with a No. 712 Cord and a No. 109 Plug or an R2AC Cord and a No. 110 Plug.

3. METHOD

3.01 Insert the plug of the cord attached to the receiver into the REC jack of the cord testing circuit.

3.02 Before proceeding with the A-C. continuity test, check the operation of the tone circuit as follows: While listening in the receiver, partially insert the answering cord plug of the cord circuit to be tested into the CON jack, so that the tip of the plug makes contact with the ring spring of the jack and the sleeve of the plug makes contact with the sleeve of the jack. The cord supervisory lamp should light. If tone is received, it is an indication that the tone circuit is functioning properly.

Note 1: When testing a recording-completing cord circuit, insert the calling cord plug into the CON 1 jack before checking the tone circuit. The calling cord plug should remain in the CON 1 jack until the completion of the test.

Note 2: When testing an intercepting answering cord that requires ground on the ring of the connecting circuit to close the ring lead in the cord circuit, completely insert the

plug into the CON jack, then withdraw it until the tip of the plug just makes contact with the ring spring of the jack in order to check the tone circuit.

3.03 Complete the insertion of the plug of the cord under test into the CON jack of the testing circuit. If the flashing recall signal operates, stop it by operating and releasing the talking key.

3.04 It is probable that a slight tone will be heard in the receiver. This slight tone can be expected and is not an indication of trouble. After testing several cords, the tester should become familiar with the volume of the tone which is heard on normal cords. Cords on which this volume is increased appreciably should be considered in trouble.

3.05 Listen in the receiver during the following operations for any clicks or changes in the volume of the tone which will indicate a cutout or other trouble condition.

3.06 Hold the plug in the jack with one hand and shake the cord with the other hand.

3.07 Turn the plug around in the jack so as to cause the jack springs to make contact at all possible points of the tip and ring of the plug.

Note: Scratchy noises while the plug is being rotated should be disregarded.

3.08 With the keys of the cord circuit under test in the normal position, tap lightly on the key top to detect loose connections or defective contacts in the talking circuit.

3.09 Move the levers of lever type keys slightly forward and backward while exerting a reasonable pressure to the left and to the right to take up any play or side lash, in order to detect faulty key adjustments that might cause clicks.

3.10 On cord circuits having two-way lever type key combinations, talk-ring or ring forward-ring back, make a non-click test by operating the lever and allowing it to restore unrestrained. Any clicks in the receiver indicate excessive overthrow of

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the lever. Operate the keys as indicated below when testing the cord listed.

<u>Key Combination</u>	<u>Operate Lever to</u>	<u>Cord Tested</u>
Talk-Ring	Talk	Calling
Ring Back-	Ring Forward	Answering
Ring Forward	Ring Back	*Calling

\* This test does not apply on the calling cord of circuits SD-90453-01, SD-90453-02, SD-90454-01 and SD-90454-02.

3.11 Repeat the operations in 3.03 to 3.10 using the calling cord except on recording-completing cord circuits repeat only 3.05 to 3.07.

**4. REPORTS**

4.01 The required record of these tests should be entered on the proper form.