

NO. 3 ESS
 STATION RINGER TEST CIRCUIT

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- | <p>1. <u>GENERAL INFORMATION</u></p> <p>1.1 <u>Description</u></p> <p>1.11 This section describes the operational test of the Station Ringer Test (SRT) circuit. The test consists of testing a private party phone and a coin phone test line with the SRT circuit. It also includes a test using the Local Test Desk with the SRT circuit.</p> <p>1.2 <u>Sequence</u></p> <p>1.21 Before this section can be performed, the following must have been completed:</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Section</u></th> <th style="text-align: left;"><u>Title</u></th> </tr> </thead> <tbody> <tr> <td>533</td> <td>Junctor Circuits</td> </tr> <tr> <td>534</td> <td>Service Circuits</td> </tr> <tr> <td>535</td> <td>Trunk Circuits</td> </tr> </tbody> </table> <p>1.3 <u>References</u></p> <p>For reference refer to the following:</p> <table border="0"> <tr> <td>SD-3H520 (CPS FB521
CD- & FB522)</td> <td>Station Ringer Test Circuit</td> </tr> <tr> <td>SRTT</td> <td>Station Ringer Test Program</td> </tr> <tr> <td>TDHP</td> <td>Local Test Desk Program</td> </tr> <tr> <td>BSP 662-202-500</td> <td>Local Test Cabinet No. 3</td> </tr> <tr> <td>BSP 662-400-500</td> <td>Local Test Desk - 14 Type</td> </tr> <tr> <td>BSP 502-522-401</td> <td>1500D Telephone Set</td> </tr> <tr> <td>BSP 502-523-401</td> <td>2500D Telephone Set</td> </tr> <tr> <td>BSP 506-329-100</td> <td>Coin Telephone Sets
1C and 2C Types</td> </tr> </table> | <u>Section</u> | <u>Title</u> | 533 | Junctor Circuits | 534 | Service Circuits | 535 | Trunk Circuits | SD-3H520 (CPS FB521
CD- & FB522) | Station Ringer Test Circuit | SRTT | Station Ringer Test Program | TDHP | Local Test Desk Program | BSP 662-202-500 | Local Test Cabinet No. 3 | BSP 662-400-500 | Local Test Desk - 14 Type | BSP 502-522-401 | 1500D Telephone Set | BSP 502-523-401 | 2500D Telephone Set | BSP 506-329-100 | Coin Telephone Sets
1C and 2C Types | <p>2. <u>RECORDS AND REQUIREMENTS</u></p> <p>2.1 <u>Records:</u> The results of the test of this section shall be recorded on forms SD-97-1313 and SD-97-1315. For detailed information on filling out test records see Section 6B, Handbook 3.</p> <p>2.2 <u>Requirements:</u> The tests in this section are based on the No. 3 ESS Performance Requirements BSP 820-650-180.</p> <p>3. <u>TEST EQUIPMENT</u></p> <p>3.1 <u>Test Phones</u></p> <p>3.11 The following types of phones will be needed to perform this section:</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Type</u></th> <th style="text-align: center;"><u>Amt.</u></th> </tr> </thead> <tbody> <tr> <td>1500D Telephone Set</td> <td>10-digit TOUCH-TONE</td> <td></td> </tr> <tr> <td style="text-align: center;">or</td> <td></td> <td style="text-align: center;">1</td> </tr> <tr> <td>2500D Telephone Set</td> <td>12-digit TOUCH-TONE</td> <td></td> </tr> <tr> <td>1C2 Coin Phone
or equivalent</td> <td>12-digit TOUCH-TONE</td> <td style="text-align: center;">1</td> </tr> </tbody> </table> <p>3.12 During the test it will be necessary to ground the tips of the phones through 900 ohms. This can be accomplished by grounding the tip lead at the CDF.</p> <p>3.2 <u>Test Accessories</u></p> <p>3.21 One ITE-5191 Detail 5 will be needed to perform this test. They are supplied in the ITE-5653 Test Accessory Set for No. 3 ESS.</p> | | <u>Type</u> | <u>Amt.</u> | 1500D Telephone Set | 10-digit TOUCH-TONE | | or | | 1 | 2500D Telephone Set | 12-digit TOUCH-TONE | | 1C2 Coin Phone
or equivalent | 12-digit TOUCH-TONE | 1 |
|--|--|--------------|-----|------------------|-----|------------------|-----|----------------|-------------------------------------|-----------------------------|------|-----------------------------|------|-------------------------|-----------------|--------------------------|-----------------|---------------------------|-----------------|---------------------|-----------------|---------------------|-----------------|--|---|--|-------------|-------------|---------------------|---------------------|--|----|--|---|---------------------|---------------------|--|---------------------------------|---------------------|---|
| <u>Section</u> | <u>Title</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 533 | Junctor Circuits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 534 | Service Circuits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 535 | Trunk Circuits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SD-3H520 (CPS FB521
CD- & FB522) | Station Ringer Test Circuit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SRTT | Station Ringer Test Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TDHP | Local Test Desk Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BSP 662-202-500 | Local Test Cabinet No. 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BSP 662-400-500 | Local Test Desk - 14 Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BSP 502-522-401 | 1500D Telephone Set | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BSP 502-523-401 | 2500D Telephone Set | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BSP 506-329-100 | Coin Telephone Sets
1C and 2C Types | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <u>Type</u> | <u>Amt.</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1500D Telephone Set | 10-digit TOUCH-TONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| or | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2500D Telephone Set | 12-digit TOUCH-TONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1C2 Coin Phone
or equivalent | 12-digit TOUCH-TONE | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

4. TEST PROCEDURE

4.1 Normal Test from Telephone Set

4.11 The test must be performed from each of the following types of phones (when they are equipped with test lines in an office).

- a) private - one-party, TOUCH-TONE
- b) coin phone

4.12 Use Office Record Form ESS 3306, Line Class Code Record, and Table 1 to find the line class code for the types of phones given in paragraph 4.11. Use the major class given in Table 1 to locate entries in Form ESS 3306. The line class code can then be read off the form.

4.13 Referring to Office Record Form 3100-2, the Telephone Number Record, find a test line for each of the line class codes found in paragraph 4.12. Select test lines with TOUCH-TONE features.

4.14 After locating the test lines, connect the proper type of phone to each. Then follow the test procedure outlined in Table 2 for each of the phones.

4.2 Local Test Desk Feature Test

After all phones have been tested using Table 2, follow the procedure outlined in Table 3 to test the operation of the Dial Test from a No. 14 Local Test Desk or a No. 3 Local Test Cabinet. Remove all but one SRT, then perform the test in Table 3. After that member of the group has been tested successfully, remove that member and restore the next member and repeat the test in Table 3. Follow this procedure until all SRT circuits have been tested by Table 3.

TABLE 1

TYPE OF PHONE	ORIGINATING MAJOR CLASS	TERMINATING MAJOR CLASS
Private	08	08
Coin Phone	24 or 25	24 or 25

TABLE 2

TEST FROM SUBSCRIBER		
1)	Find the Station Ringer Access Code (normally a three-digit number) by referring to Office Record form ESS 3303-2, Route Index Record and locating the Route Index associated with the Station Ringer trunk group. (Note that while each 3-digit office code in the office will have its own Station Ringer Access Code, only one is needed to run this test.) With the RI found above, enter the Code Index Table, ESS 3304-1 forms and get the CDI for the RI, now enter the Three and Six Digit Record form, ESS 3300-1 and find the Access Code (Digits 1, 2, and 3) associated with the CDI.	
2)	Dial the 3-digit Station Ringer Access Code + NNX + last four digits of some Legal Directory number other than the one for the phone being used.	Busy Tone (60 IPM) is returned.
3)	Remove all SRT circuits from service (see the Input Manual). Dial the 3-digit access code + NNX + last four digits of the test line's directory number.	Overflow tone (120 IPM) is returned.
4)	Restore only the first member of the Station Ringer Test group.	
5)	Dial the access code + NNX + last four digits of the test line's directory number.	Dial tone returned (successful access).

TABLE 2 (Cont.)

TOUCH-TONE DIAL TEST		
<p>NOTE: Dial tone will remain for the entire duration of the TOUCH-TONE dial test, i.e., before and after pulsing the digits, and before and after the Success or Failure Signal.</p>		
6)	Pulse the 10 TOUCH-TONE digits in the following order: 1,2,3,4,5,6,7,0,8,9	A single burst of high tone is returned (failure). This time varies and depends on time since last failure signal.
7)	Pulse the TOUCH-TONE digits in the following order: 1,2,3,4,5,6,7,8,9,0	As soon as the last digit is pulsed a double burst of high tone is returned. (Successful TOUCH-TONE test)
8)	Dial digit * if present on phone.	Double burst of high tone is returned.
9)	Dial digit # if present on phone.	Double burst of high tone is returned.
OFF-HOOK GROUND TEST		
10)	Flash switch hook.	If no ground is present on tip or ring (i.e., a high resistance exists from tip or ring to ground) steady high tone is returned. If a low resistance to ground (less than 4K) is present, 60 IPM high tone is returned. See Table 4 for the expected results for each type of phone.
RINGER TEST		
11)	After flashing in step 10, hang up.	If no ground is present in the ringer circuit, the phone will ring and after answering, steady high tone will be returned. If a low resistance to ground (less than 4K) is present, no ringing will be heard, and 60 IPM high tone is returned when receiver is picked up. (An example is a test line with Tip ground Identification feature.) See Table 4 for the expected results for each type of phone.
12)	Ground tip of test phone through 900 ohms using ITE-5191 Detail 5 and flash switch hook.	
13)	After flashing in step 12, hang up.	With ground present no ringing will be heard and when the receiver is taken off-hook 60 IPM high tone will be heard.

14) Remove 900 ohms ground.	
15) Repeat steps 10 and 11.	
16) For a private party phone skip to step 19. For a coin phone place a coin in the phone while it is off-hook and flash.	The coin in the hopper should place a ground on the tip which should cause a 60 IPM high tone to be returned.
17) After flashing in step 16, hang up.	Coin should be returned and phone should ring. A steady high tone will be heard when the phone is answered.
18) Repeat steps 10 and 11.	
19) Hang up without flashing to terminate test.	
20) Remove from service the SRT circuit just tested and restore to service the next member of the group.	
21) Repeat steps 5 through 20 until all members of the Station Ringer Test group have been tested.	
22) When all members have been tested, restore all members to service.	

TABLE 3

TEST WITH LOCAL TEST DESK OR LOCAL TEST CABINET	
NOTE: For instructions on using the Local Test Desk or Local Test Cabinet, refer to the Local Test Desk or Local Test Cabinet BSPPs and the Incoming Local Test Desk Program PD which are listed in paragraph 1.3.	
1) From Local Test Desk (LTD) call phone connected to test line with TOUCH-TONE private line features.	
2) Answer phone connected to test line.	Connection established between LTD and test line phone.
3) Operate "T" key at LTD to connect headset. Verify talking connection.	
4) Operate "TOUCH-TONE" key at LTD.	Both circuits connected to SRT.
5) Dial the digits from the test line phone in the following order: 1,2,3,4,5,6,7,0,8,9	Single burst of high tone heard immediately by both LTD and test line phone when digit out of order is pulsed.
6) Dial the digits from the test line phone in the following order: 1,2,3,4,5,6,7,8,9,0	Double burst of high tone heard immediately after last digit is pulsed (successful test).
7) Dial digit * if present on phone.	Immediate double burst of high tone is returned.
8) Dial digit # if present on phone.	Immediate double burst of high tone is returned.
9) Release the "TOUCH-TONE" key at LTD.	SRT circuit is disconnected. The connection between the LTD and the test line is reestablished.
10) Disconnect the LTD to test line connection at the LTD to terminate the test. Hang up test line phone.	

TABLE 4

EXPECTED TEST RESULTS (See Steps 10 & 11)		
TYPE OF PHONE	TYPE OF TEST	
	OFF-HOOK GROUND TEST	RINGER TEST
Private Line	Steady high tone is returned.	The phone will ring and when answered, steady high tone is returned.
Coin Phone		
a) <u>Dial Tone First</u>	Steady high tone is returned.	The phone will ring and when answered, steady high tone is returned.
b) <u>Prepay</u>	<u>1st Attempt:</u> 60 IPM High tone is returned.	<u>1st Attempt:</u> Coin in hopper is returned, phone will ring, and when answered, steady high tone is returned.
	<u>Subsequent Attempts:</u> Steady high tone is returned.	<u>Subsequent Attempts:</u> Phone will ring, and when answered, steady high tone is returned.

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