

## ATTENDANT TELEPHONE AND DIAL CIRCUITS TESTS AND INSPECTIONS 555, 556A AND 557A PBX

### 1. GENERAL

- 1.01 This section describes a method of testing the attendant telephone and dial circuit of the 555, 556A, and 557A PBX.
- 1.02 The section is reissued to include the 557A PBX. Since this reissue covers a general revision, the arrows ordinarily used to indicate changes have been omitted.
- 1.03 In order to avoid the effects of clicks, the test receiver should be kept away from the ear.

### 2. APPARATUS

#### Tests A, B, C, D, E, F, and H

- 2.01 Attendant telephone set connected in the telephone set jacks of the PBX.

#### Tests A, C, E, and G

- 2.02 Two WIU cords.

#### Tests C, E, and G

- 2.03 Test receiver—No. 716E receiver attached to a W2AB cord equipped with two No. 360A tools (2W21A cord) and two KS-6278 tools, or equivalent.

### 3. METHOD

#### A. Jack Test for Cutout or Noise

- 3.01 At the rear of the PBX, connect a WIU cord across terminals 5 and 7 of a vacant position of the 204-type connector (212A connector for the 557A PBX). Using another WIU cord, ground the sleeve of one STATION plug and operate the associated TALK & DIAL key. Sidetone should be heard in the attendant receiver.

**Note:** The top three terminals of the connector are 1, 2, and 3, beginning at the left, with 4, 5, and 6 directly below, etc. If there are no vacant cord circuit unit positions, detach the plug of an idle cord for the duration of the test.

- 3.02 Tap the plug while in the jack to detect poor contacts between the tips of the plug and the springs of the jack. If it appears that a cutout is caused by the wearing on one side of tip, rotate each shaft a quarter turn in the shell so as to present a new surface. No clicks or noise should be heard.

- 3.03 Test all spare attendant telephone sets in the same manner.

- 3.04 **557A PBX Only:** Test the attendant telephone set in the other set of telephone set jacks.

- 3.05 Disconnect the WIU cords and restore the equipment to normal.

#### B. Test of Position-splitting Feature (557A PBX Only)

- 3.06 With the attendant telephone set connected to the right telephone set jacks, operate the POSITION-SPLITTING key and the TALK & DIAL key of any cord Nos. 9 to 15. Sidetone should be heard.

- 3.07 Restore the TALK & DIAL key and operate the TALK & DIAL key of any cord Nos. 1 to 8. No sidetone should be heard.

- 3.08 Transfer the attendant telephone set to the left set of telephone set jacks. Sidetone should be heard.

- 3.09 Restore the TALK & DIAL key and again operate the TALK & DIAL key of any cord Nos. 9 to 15. No sidetone should be heard.

- 3.10 Restore the POSITION-SPLITTING key.

- 3.11 Sidetone should be heard.

- 3.12 Restore the TALK & DIAL key.

#### C. Test of Cord Splitting Feature

- 3.13 Connect the test receiver clips to the tip and ring of a TRUNK & STATION plug. Operate the TALK & DIAL key and tap the attendant transmitter. Tapping should be heard in the test receiver.

- 3.14 Operate the SPLIT key, and again tap the attendant transmitter. No tapping should be heard in the test receiver.

- 3.15 Connect one clip of a WIU cord to the tip of the STATION plug of this cord circuit. Tap the free clip of the WIU cord to the ring of the STATION plug. Clicks should be heard in the attendant receiver but not in the test receiver.

- 3.16 Restore the SPLIT key, and again tap the free clip of the WIU cord to the ring of the STATION plug. Clicks should be heard in both the attendant receiver and the test receiver.

- 3.17 Disconnect the test receiver, and restore the equipment to normal.

#### D. Test of Monitoring Key

- 3.18 Operate the TALK & DIAL key of the cord circuit. Sidetone should be heard in the attendant receiver.

- 3.19 Operate the MON key. No sidetone should be heard.

- 3.20 Restore the MON key to normal. Sidetone should be heard.

- 3.21 Restore the MON key.

#### E. Test of Dial Circuit Relay Functions

- 3.22 Operate a TALK & DIAL key. Move the dial off-normal and release it. Connect the test receiver across the tip and ring of the TRUNK & STATION plug. Connect a clip of a WIU cord to the tip, and touch the other clip to the ring of the STATION plug. A click should be heard in the test receiver and in the attendant receiver.

- 3.23 Disconnect the test equipment and restore the key to normal.

#### F. Test of Dial Speed

- 3.24 Dial the test desk or test code, and check the dial speed.

- 3.25 Restore the equipment to normal.

#### G. Test of Resistance Associated with Dial Circuit Retardation Coil

- 3.26 Make this test with all TALK & DIAL keys normal. Block the ON relay operated. Operate the SPLIT key. Connect one clip of a WIU cord to ground, and connect one clip of the test receiver to battery. Touch the free clip of the WIU cord to contact spring 3 top of the SP relay. Tap the free clip of the test receiver to contact spring 4 top of the SP relay several times. Clicks should be heard.

- 3.27 Remove the blocking tool from the ON relay and again tap the clip to the contacts of the SP relay. No clicks should be heard.

- 3.28 Disconnect the test equipment and restore the SPLIT key to normal.

#### H. Test of Busy Test Feature

- 3.29 Insert a STATION plug into an idle station jack. Operate the TALK & DIAL key of another idle cord circuit. Touch the tip of the STATION plug of this cord to the screw in the plug shell of the first STATION plug. A click should be heard in the attendant telephone set.

- 3.30 Restore the equipment to normal.