

OPERATOR'S TELEPHONE SET AND  
OPERATOR'S TELEPHONE CIRCUIT  
NO. 12 SWITCHBOARD

1. GENERAL

1.01 This section describes methods of performing the following:

(A) Inspection and Test of Operator's Telephone Set.

(B) Test of Operator's Telephone Circuit.

1.02 These operations when conducted as routines should preferably be made during periods of light traffic to avoid interference with service.

2. APPARATUS

Test (B)

2.01 Operator's Telephone Set.

3. METHOD

(A) Inspection and Test of Operator's Telephone Set

3.01 Inspect the operator's telephone set for properly tied cords, loose, missing, or broken parts, dirty or bent receiver diaphragm, etc.

3.02 Insert the plug of the operator's telephone set to be tested into the telephone set jacks of a vacant position.

Note: The transmitter should be equipped with a mouthpiece and should be held in a quiet position while performing the following tests so as to avoid noise due to handling.

3.03 Current will flow through the transmitter and the associated cord conductors. Talk or blow into the transmitter and listen for side tone in the receiver. Note that there is no excess noise and that the set is not "dead." While talking or blowing into the transmitter, hold the plug of the operator's telephone set firmly in place and shake the cord by means of a gentle twisting and pulling movement beginning at the base of the plug and continuing throughout the entire length of the cord. Any defect in the cord will be noted by a click or scraping sound in the receiver.

3.04 Shake the plug gently while in the jack to detect poor contacts between

the tips of the plug and the springs of the jacks. Dirty plugs should be cleaned and worn or defective plugs should be repaired or replaced. If, upon a visual inspection, it appears that a cutout is caused by the wearing on one side of the tip, the shaft of the plug should be rotated 90° in the shell so as to present a new surface.

(B) Test of Operator's Telephone Circuit

Continuity Test

3.05 With an operator's telephone set connected to the position under test, check for loose connections or defective jack and key contacts by moving the telephone set plug up and down with slight pressure and by tapping lightly on the mountings of the monitoring and grouping keys. Clicks or disturbances in the receiver indicate a trouble condition.

3.06 Test for proper transmission by talking with an operator at a distant office using an idle cord circuit and an idle trunk. Observe that the reception is clear, sufficiently loud to be heard distinctly and that there is an absence of disturbing noises. The operator at the distant office should check for the same conditions.

Test of Monitoring Feature

3.07 With a connection established to an operator at a distant office as described in 3.06, operate the monitoring key while the distant operator is talking and observe that reception is satisfactory. Tap on the transmitter and note that this noise is not heard in the receiver. If this test is satisfactory it is an indication that the monitoring feature of the telephone circuit is operating properly.

Test of Grouping Feature

3.08 If the position under test is arranged to group to an adjacent position, operate the grouping key and repeat the test described in 3.06, using the same subscriber cord circuit, but using the operator's telephone circuit on the adjacent position. Tap lightly on the key-top of the grouping key while talking to detect possible cut-outs.

3.09 Restore the grouping key and take down the connections to the distant operator.

Test of Busy Test Feature

3.10 With the listening key operated, touch the tip of an idle calling(front) cord plug to the sleeve of an adjacent cord circuit plug and also to the sleeve of the D test jack. A distinct click should be heard in the receiver each time the cord tip is applied.

Test of Emergency Battery Feature

3.11 With the operator's telephone set connected to the position in which the emergency battery feature is equipped, operate the emergency battery key in the face

of the switchboard and note that the set is not "dead." The red emergency battery guard lamp associated with the emergency battery key should light.

3.12 Restore the emergency battery key and disconnect the operator's telephone set from the position under test. The emergency battery guard lamp should be extinguished.

4. REPORTS

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