

MANUAL TEST OF
LINE LOAD CONTROL EQUIPMENT
SPECIAL NO. 9 OFFICES

1. GENERAL

1.01 This section describes a method of making tests of line load control equipment per SK-3039, where provided in Special No. 9 offices.

1.02 Line load control equipment provides means for denying originating service to a large portion of the lines in an office. It is, therefore, extremely important that every safeguard should be employed to guard against operations resulting in denial of originating service during the test. The test described herein may delay originating service for a few seconds. Therefore, in order to avoid delaying service beyond this, the following should be observed:

(a) Tests should be made only when specific authorization is obtained in accordance with local instructions.

(b) Where possible, it may be desirable to have someone in a supervisory capacity supervise the tester while he is making the test.

(c) Care should be taken that trouble clearing activities do not introduce hazards of denying service.

(d) If it is desired to discontinue testing at anytime, even temporarily, the line load equipment should be restored to normal.

(e) The caution which appears in the test procedures should be given special attention.

1.03 Line relays in Special No. 9 offices, where line load control equipment per SK-3039 is provided, are treated in groups of five in so far as the battery supply is concerned. Therefore, if one line relay in a group of five line relays is associated with a line classified as "essential" to National Defense and public welfare during an emergency, all line relays in the group of five are fed from the same essential (EB) battery supply terminal. However, only essential lines have distinctive answering jack markings or lamp caps at the switchboard. All groups of five line relays not containing one or more relays associated with essential lines are fed from non-essential (NEB) battery supply terminals. During an emergency, battery may be removed from the non-essential (NEB) battery supply terminals by the operation of a load control (LC) key mounted in the face of the switchboard section. The (LC) key, which is of the turn-button type, controls the operation of an (LC) relay having break contacts to open the battery supply. Operation of the key, therefore, prevents the line relays in the non-essential groups in the section from operating. Established calls are not affected by the operation of the (LC) key.

1.04 Associated with the (LC) key is a (SL)

lamp, also mounted in the face of the switchboard section. This lamp is intended to serve as a guard and is lighted as long as the (LC) key is operated.

1.05 The test of the line load control equipment should be made using one idle line in each non-essential line group. In testing line groups containing one or more essential line relays, an essential line should be used for the test.

1.06 Care should be taken not to connect to a busy line. It is assumed that a busy test will be made before any connection is established to a line to be used for test.

2. APPARATUS

2.01 Operator's Telephone Set.

2.02 No. 257A Plug, (with tip and ring short-circuited). For use in offices equipped with No. 141 type jacks.

2.03 Special L-4439 Plug, (with the ring and sleeve short-circuited in the plug). For use in offices equipped with No. 112 type jacks.

3. METHOD

3.01 After making sure that the line to be used for the test is idle, insert the short-circuited plug in the line jack. Insert the plug into the jack so that the white line is on top. Observe that the line lamp lights.

3.02 Operate the line load control key associated with the section in which the line relay groups are being tested. If the group of lines being tested does not contain an essential line, observe that the line lamp is extinguished. If the group of lines being tested contains essential lines, use an essential line for test and observe that the line lamp is not extinguished. Note that the guard lamp associated with the line load control key is lighted when the key is operated. Restore the line load control key, noting that the guard lamp is extinguished, and remove the plug from the line jack. It will not be necessary to observe the guard lamp for more than the test of one or two lines in each section.

Caution: Originating service will be delayed on all lines controlled by the line load control key during the interval when the key is operated. Observations should be made as rapidly as possible, therefore, to avoid delaying of service any longer than necessary.

3.03 Repeat this test for each group of five lines in the switchboard section and then proceed to the next section and repeat the operations described above.

4. RECORDS

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