TEST JACK ASSEMBLIES AND NAVY TYPE SHELF JACKS ADJUSTMENT

1. GENERAL

1.01 This Section provides the procedures for the adjustment of test jack assemblies and Navy type shelf jacks. The Navy type shelf jacks are used with components of SATT equipment. They are also used as breaker switches in the detector common and detector access circuits.

1.02 The Navy type shelf jack assembly has a maximum of 32 terminals. The standard type Strowger switch shelf jack assembly has a maximum of 24 terminals.

1.03 Very little readjustment will be necessary for shelf jacks. To be certain of proper tension of the jack springs against the switch jacks, they should be inspected periodically and adjusted if necessary.

1.04 Test jacks should also be inspected periodically to be certain of proper spring tension and ease of insertion of the test plugs.

2. ADJUSTMENT APPARATUS

2.01 The apparatus required when readjustment is required is as follows:

(a) W.E.Co. 415-B Spring Adjuster.

(b) A.E.Co. H-50620 Duck-Bill Pliers.

(c) Bates Florida Type 325 Orange (Testing) Stick.

(d) GT-1105 Tension Gauge (200-1600 gms.).

3. NAVY TYPE SHELF JACK ADJUSTMENT

3.01 Remove the switch jack from the shelf jack and check that the clearance between each pair of jack springs is minimum .020 inch, maximum .050 inch, gauged by eye. Gauge the clearance at the closest point between the available contacting surfaces.

3.02 Check that the springs of a pair are approximately parallel except as specified below:

(a) The forming of the tips, terminals, etc., should not be altered from that specified on the manufacturing print to obtain the above result, except as noted in (b).

(b) When adjacent jack springs are required to make contact when a switch is removed from the shelf (not in the jack), the springs required to make contact should be tensioned against each other so that when the pressure of one spring of the pair is removed, its mate will follow approximately to the outside edge of the opposing spring or approximately 3/64 inch. The contact surface of the springs shall not be bent in meeting this requirement. When checking movement of springs, use the orange stick.

3.03 When a switch jack is properly inserted in the shelf jack, check that there is perceptible clearance between adjacent springs not in the same pair.

4. ADJUSTING NAVY TYPE SHELF JACKS USED AS BREAKER SWITCHES

4.01 Check the spring tension of Navy type shelf jacks used as breaker switches in the detector common and detector access circuits. Check that each spring has a tension of minimum 250 grams, maximum 600 grams. Use the G.E.Co. GT-1105 tension gauge to measure the spring tension. When checking the spring tension, hold the opposing spring from moving, using the orange stick.

4.02 If it is necessary to adjust a spring, use the W.E.Co. 415-B spring adjuster. When adjusting a spring, check that the tension is minimum 400 grams, maximum 600 grams.

5. TEST JACKS

5.01 The spring tips of test jacks may be bent, when necessary, to such an extent that the plug corresponding to a given jack will readily enter the jack when the plug is held at approximately a 10-degree angle above the horizontal. With the plug in position, each jack spring should make contact with its corresponding plug terminal, and adjacent pairs should have a clearance of 1/32 inch minimum.

5.02 If it is necessary to adjust a spring, use the W.E.Co. 415-B spring adjuster.

6. TESTS

6.01 After all adjustments have been completed, perform a functional test on the equipment.