

BELL SYSTEM PRACTICES
Teletypewriter and Manual
Telegraph Station and P.B.X.
Installation and Maintenance

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99745M LINE AND SELECTOR JACK ASSEMBLY

DESCRIPTION AND ADJUSTMENT

1. GENERAL

1.01 This section describes the 99745M line and selector jack assembly and associated parts, and provides adjustments for the contacts contained in the assembly. This assembly is provided on Army Type Teletypewriter Apparatus and is used on some Bell System apparatus where conditions specifically require it.

2. DESCRIPTION

2.01 This device has been designed for optional use with 215, 255 and similar type relays to provide a feature whereby when the relay is removed from its connecting block the circuits to which the relay is connected will not open. Its principal field of use is expected to be on certain telegraph equipment in customers' offices. When its use is desired, the service order should give the necessary electrical connection information.

2.02 The parts required for an ordinary installation are as follows:

- 1—99745M Line and Selector Jack Assembly
- 1—99816M Relay Base Plate
- 1—P-241195 Spring

2.03 The 99745M line and selector jack assembly is provided with two pairs of contacts and it is necessary to wire these contacts to the circuits which it is desired to have remain closed. The contacts are allowed to close when the relay is removed from the relay mounting because of the action of a small insulating wedge operating between the contact springs. Since there are two pairs of contacts, two circuits may be con-

trolled in this manner or the contacts may be connected in parallel to assure more positive closure on one circuit. The 99816M relay base plate is the same as the 74719M relay base plate except that the 99816M relay base plate is drilled to accommodate the 99745M line and selector jack assembly.

2.04 These parts are suitable for use on No. 15 teletype-writers and on any other equipment where the 99816M relay base plate may be substituted for the 74719M relay base plate. It is necessary to add the P-241195 spring to the spring already at the top of the 18B relay connecting block to make sure that the weight of the relay does not cause it to sag and allow the contacts to close falsely. This additional spring is placed on top of the one normally used and is held in place by the regular spring mounting screws. The 99745M line and selector jack assembly may be employed also with any other type of mounting used with the 215, 255 or similar type relays if arrangements are made for proper drilling to accommodate the assembly.

3. ADJUSTMENTS

3.01 The adjustments required for the 99745M assembly when installed on the relay base plate are as follows:

- (a) **Contact Gap:** With the relay inserted in normal operation position, the contacts should open with a gap .015" to .020". To obtain this gap adjust the inner contact springs.
- (b) **Contact Pressure:** With the relay removed it should require a pull of five to seven ounces outward on the outer springs, (pulling next to the contacts at the bend in the outer springs) to just separate the contacts. This contact pressure is obtained by adjusting the outer contact springs. If the springs are adjusted the contact gap should be checked.