# 5A AND 5B KEY EQUIPMENTS

# **IDENTIFICATION**

#### 1.00 INTRODUCTION

- **1.01** This section identifies 5A and 5B key equipments.
- **1.02** It is reissued to add information on:
  - 6017AM key
  - 6017AN key
  - 106-type loudspeaker set
  - 107A loudspeaker set.

1.03 The 100-type loudspeaker set is rated Manufacture Discontinued. However, information on use of this set in 5A and 5B key equipments is included in this section.

**1.04** Due to extensive changes, marginal arrows have been omitted.

## 2.00 GENERAL

2.01 The 5A and 5B key equipments are key control arrangements which connect loud-speaker sets with central office or PBX extension lines. This permits a group of people to hear a person speaking from another location over a regular telephone connection.

2.02 The 5B key equipment provides the additional feature of bridging a loudspeaker set across the receiver circuit of a telephone set. This permits parties on both ends of a telephone connection to be heard over the loudspeaker set.

2.03 The reception provided by these loudspeaker sets may vary due to differences in line conditions, type of telephone set used at the talking customer station, the manner in which the speaker at the distant end talks into the transmitter, and room conditions at the loudspeaker station. 2.04 A 500-type telephone set is recommended for use with 5A and 5B key equipments. In general, higher received volume levels are obtained with 500-type set.

2.05 With either 5A or 5B key equipment the telephone connection will be broken if handset is replaced on switchhook before call is completed.

- 2.06 Handset must be off-hook to connect loudspeaker set to line.
- **2.07** Table A gives sections for connection information reference.
- **2.08** Table B gives components that may be used with each type of key equipment.

#### TABLE A

### SECTIONS WITH CONNECTION INFORMATION

Apparatus	Section Entitled	
5A and 5B key equip-	5A and 5B Key Equip-	
ments	ments, Connections	
106-type loudspeaker	Loudspeaker Sets, 106	
set	Type	
107A loudspeaker set	Loudspeaker Set, 107A	

#### TABLE B

#### 5A AND 5B KEY EQUIPMENTS, COMPONENTS

Key Equipment	Control Key	Loudspeaker Set	Subscriber Set
5A	6017K	100 type*	
5B	6017L		534BP*
5A	6017AM	106 type	
5B	6017AN	107A	

\* Manufacture Discontinued.

#### 3.00 IDENTIFICATION

3.01 The 5A key equipment is used where the distant party is to do most of the talking.A 2-position control key, in normal position, connects telephone set to line. In operated position, key disconnects talking circuit of telephone set and connects loudspeaker set to line.

3.02 The 5B key equipment provides the same features as the 5A key equipment with the additional feature of a loudspeaker bridged across the receiver circuit of a telephone set. The 5B requires a 3-position control key. Two positions of the key are the same as described in 3.01 for 5A key equipment. The third position bridges the loudspeaker set across the receiver circuit of the telephone set. Transmission on both handset and loudspeaker will be lower when loudspeaker set is bridged across receiver circuit.

3.03 A 6017-type control key (Fig. 1) is used on both 5A and 5B key equipments. Table B
gives type of key used with each key equipment.
See section entitled Station Control Keys, Identification and Installation, for identification and wiring diagrams of 6017-type keys.

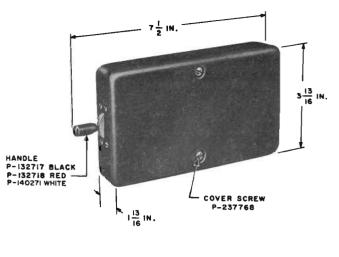


Fig. 1 - 6017-Type Key

3.04 The 534BP subscriber set (Fig. 2) consists of a black finished metal base with mounted apparatus and a black finished hinged metal cover. It is intended for use with 5B key equipment as an attenuation and filter unit in conjunction with the 100-type loudspeaker set. This subscriber set permits regulation of the maximum amplification by means of a control located within the set.

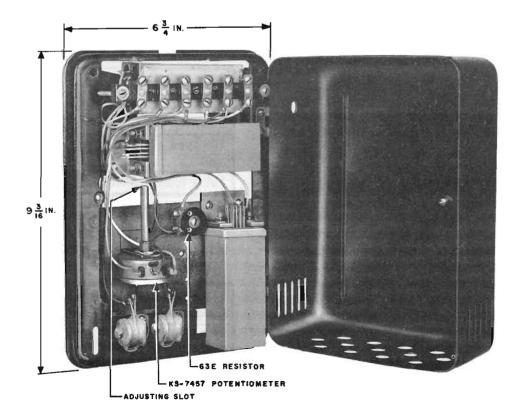
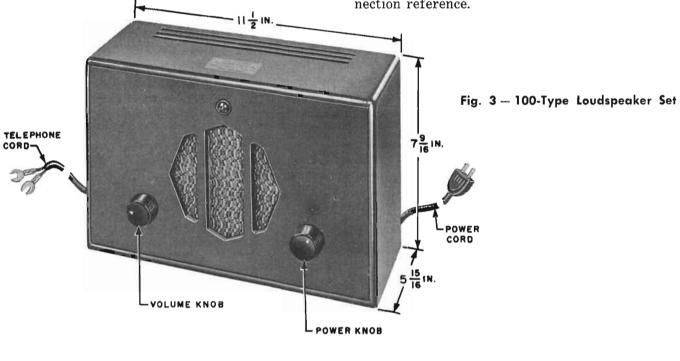


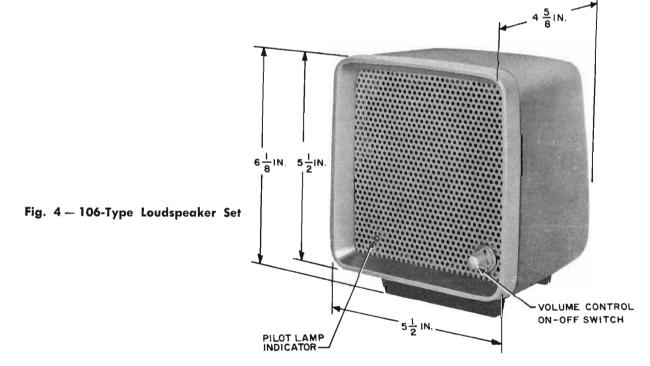
Fig. 2 – 534BP Subscriber Set

3.05 The 100-type loudspeaker set (Fig. 3) consists essentially of a 2-stage resistance coupled amplifier and a loudspeaker mounted in a walnut-finished wooden cabinet. It is provided with a 6-foot power supply cord equipped with a plug and a 5-foot 6-inch telephone cord for input connections.

**3.06** The 106-type loudspeaker set (Fig. 4) consists of a loudspeaker set and a transistor

amplifier assembly. The set may be desk or panel mounted. An external power supply is required. Three power supply options are available: 48 volts dc, 24 volts dc, or a combination of 12 and 30 volts dc. J87202A, List 1 rectifier supplies the combination of 12 and 30 volts dc. See Table A for connection reference.





3.07 The 107A loudspeaker set (Fig. 5) consists of a loudspeaker and a transistor amplifier circuit. An external power supply of 18 to 22 volts ac or dc is required. This set was designed to use 2012B transformer. See Table A for connection reference.



Fig. 5 - 107A Loudspeaker