

1A SPEAKERPHONE SYSTEM

IDENTIFICATION

1.00 GENERAL

This section covers the identification and assembly of parts and operating instructions for the 1A speakerphone system.

2.00 IDENTIFICATION

2.01 The 1A speakerphone system, incorporating distant talking and loudspeaker features, may be switched from a hands-free or distant-talking set to a regular telephone set. It may be used with:

- Manual or dial individual lines, 2-party flat, ring party of all services, 4-party selective, and 8-party semiselective service.
- PBX extension stations.
- 1A and 1A1 key telephone systems.
- 750A and 755A dial PBX stations.

2.02 The 1A speakerphone system has two main groups of equipment:

- **The first group (595-type telephone set) consists of:**

592-type Telephone Set
758A Loudspeaker
KS-14964 or KS-14964, List 2 Control Unit

- **The second group consists of:**

656A Transmitter
758A Loudspeaker
KS-14964 or KS-14964, List 2 Control Unit, associated with a key telephone set, a 211N/P telephone set, or a 500R/S telephone set

- See Table A for available colors and manufacturer's ratings.

2.03 The 592-type telephone set shown in Fig. 1 has the same general appearance as the 500-type key telephone set. It contains:

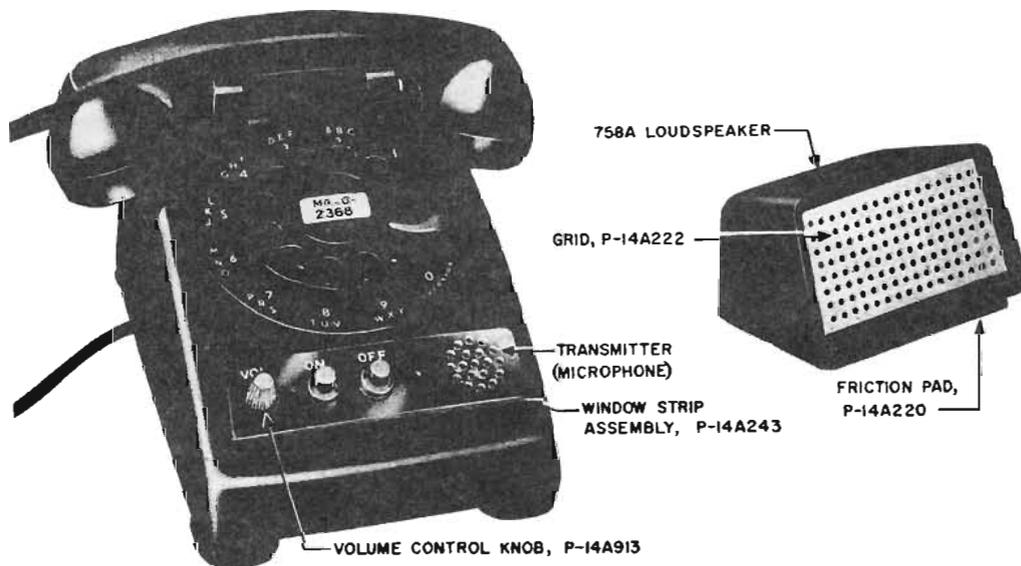


Fig. 1 – Speakerphone Components, Microphone in Base of Set (595-type Telephone Set)

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- A switching arrangement to transfer from regular usage to the distant talking feature.
- Volume control for associated 758A loudspeaker.
- Pilot lamp that lights when set is used as a distant talking set.
- Nonlocking ON and OFF keys.
- A modified U1 receiver mounted in a soft neoprene cushion and used as a microphone.
- A small speaker unit mounted on a metal chassis.
- Screw terminals for cord connection.
- A rectangular thermoplastic housing and metal grill.
- A 5-1/2 foot mounting cord that is arranged for connecting to 42-type connecting block.
- A base equipped with an adhesive-type friction pad.

2.04 For other information that is common to the 500-type telephones, see C Section entitled Telephone Sets, 500 Series, Identification and Assembly of Parts.

2.05 The 758A loudspeaker (Fig. 1 and 2) is used to provide loudspeaker facilities for the distant talking set. It consists of:

2.06 The 656A transmitter assembly is contained in a rectangular thermoplastic housing on a base equipped with an adhesive-type friction pad. The components are:

- A modified U1 receiver mounted in a soft neoprene cushion, used as a microphone, and equipped with an equalizer.



Fig. 2 — Speakerphone Components, Microphone Separate

- The volume control for associated 758A loudspeaker.
- Nonlocking ON and OFF keys.
- A pilot lamp to indicate when transmitter is coupled to the line.
- A 5-1/2 foot mounting cord equipped with a stay hook for fastening to either a 44-type block or directly to the terminal strip provided in the subscriber set.

2.07 The KS-14964 and KS-14964, List 2 control units (see Fig. 3 and 4) consist of an assembly of electronic apparatus mounted on a base approximately 9-5/8 by 7-1/8 inches.

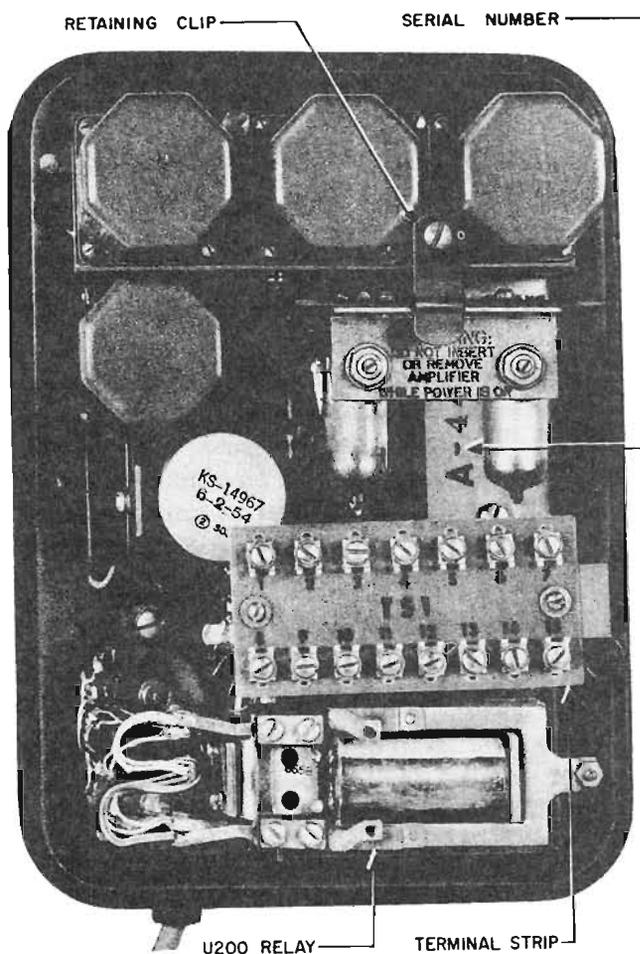


Fig. 3 – KS-14964 Control Unit

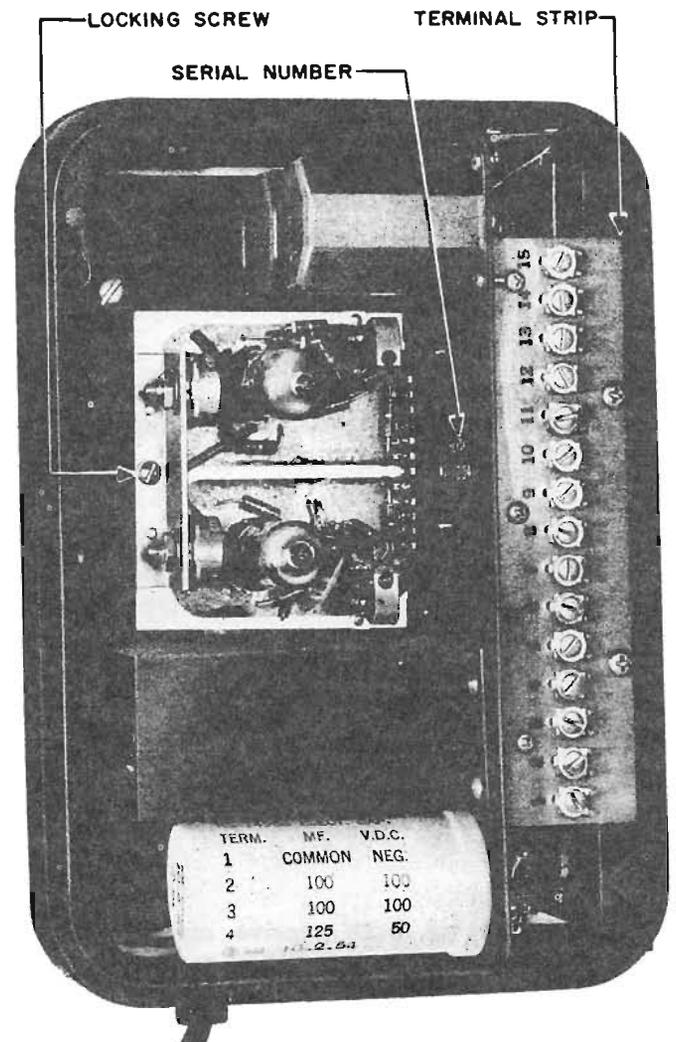


Fig. 4 – KS-14964, List 2 Control Unit

- The cover is approximately 4 inches deep with a beige-gray crinkle finish.
- The base may be mounted on a wall or desk.
- Entrance for inside wiring cable and power cord is located in bottom of unit.
- A screw-type terminal strip is provided for terminating inside wiring cable.
- A clamp is provided for fastening the inside wiring cable to the unit.



A 6-foot cord is provided for connecting to 60-cycle 105- to 125-volt commercial power supply. This unit will not operate on direct current.

- The power consumption for the KS-14964 unit is 8 watts for operating and 0.6 watt for stand-by.
- The power consumption for the KS-14964, List 2 unit is 8 watts for operating and 0.8 watt for stand-by.
- The power supply furnishes the plate supply of the KS-14990 amplifier, power for pilot lamp in either the 592-type set or 656A transmitter, and power to operate the U200 relay (see 2.08).

2.08 The KS-14990 amplifier (Fig. 5) is used in both the KS-14964 and KS-14964, List 2 control units.

- It furnishes both receive and transmit amplification for the distant talking set.
- The transmit volume is preset by the manufacturer. This adjustment should not be changed in the field.
- The receive volume is adjustable at receiving station by the customer.
- The amplifier circuits are mounted on a single plug-in type plastic card.
- The card fits into an elongated socket in the base of control unit.
- In the KS-14964 control unit, the amplifier is held in place by retaining clip (see Fig. 3).
- The amplifier is held in place by a screw when used with the KS-14964, List 2 control unit (see Fig. 4).

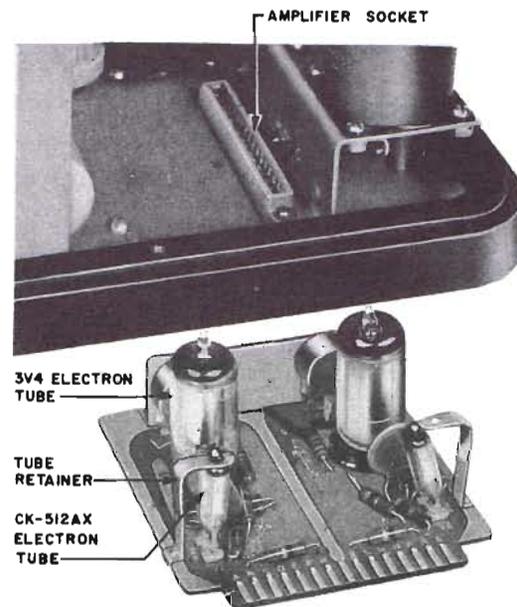


Fig. 5 – KS-14990 Amplifier

3.00 OPERATION OF THE 1A SPEAKERPHONE SYSTEM

3.01 When this is used as a regular telephone, the pilot lamp does not operate.

3.02 When it is used as a speakerphone system, the handset remains on the cradle and is untouched. The user should speak with a well modulated voice keeping the maximum distance between mouth and transmitter at approximately 2 feet. To initiate a call on the 1A speakerphone system:

1. Press ON button in the 592-type telephone or 656A transmitter; this operates the U200 relay and relay locks in.
2. The pilot lamp lights and either the operator or dial tone is heard from the loud-speaker.
3. Dial or pass the desired telephone number.
4. When called party answers, adjust the receive volume to desired level by the VOL control knob.
5. To disconnect, press OFF button.

3.03 To answer call using 1A speakerphone system, press ON button and proceed as in 3.02.

3.04 To transfer call from 1A speakerphone system to normal telephone use, remove handset from cradle; this releases the U200 relay and telephone is used in the normal manner. To disconnect, replace handset in cradle.

3.05 To transfer from handset or normal use to 1A speakerphone system, press the ON button and hold depressed until handset is placed in cradle and pilot lamp lights. Proceed as in 3.02.

3.06 The following is a list of piece parts in addition to those shown in Fig. 1 and 2.

- Friction pad for base of transmitter, P-14A965.
- Flat head machine screw with the base of loudspeaker, P-210799.
- Flat head machine screw for base of transmitter, P-353959.
- The 51A pilot lamp that lights the ON button.
- Plastic knob for potentiometer for 592-type telephone sets manufactured prior to 11-54, P-14A253.

TABLE A
AVAILABLE COLORS AND MANUFACTURER'S RATINGS

Available Colors	Color Code Number	656A Transmitter	785A Loudspeaker	592AR Telephone (Manual)	592BR Telephone (Dial)	595AR Telephone Set (Manual)	595BR Telephone Set (Dial)	592AR Telephone (Manual, two-tone)	592BR Telephone (Dial, two-tone)	595AR Telephone Set (Manual, two-tone)	595BR Telephone Set (Dial, two-tone)
Black	3	★									
Ivory	50										
Green	51	✘									
Gray	52	★									
Red	53	★									
Brown	54	★									
Beige	55	✘									
Yellow	56	★									
Blue	57	✘									
White	58	★									
Rose Pink	59	★									
Light Beige	60	★									
Light Gray	61	★									
Aqua Blue	62	★									

★ AT&TCo Standard.

✘ Mfr Disc.