

BARNETT, R. G. 9

GRAY, J. E. 0

MILLER, R. W. 9

MOORE, H. T. 0

MULLER, A. 9

MURPHY, H. C. 0

SCHMIDT, W. F. 9

SUBSCRIBER SET

694-TYPE

IDENTIFICATION, INSTALLATION, CONNECTION, AND MAINTENANCE

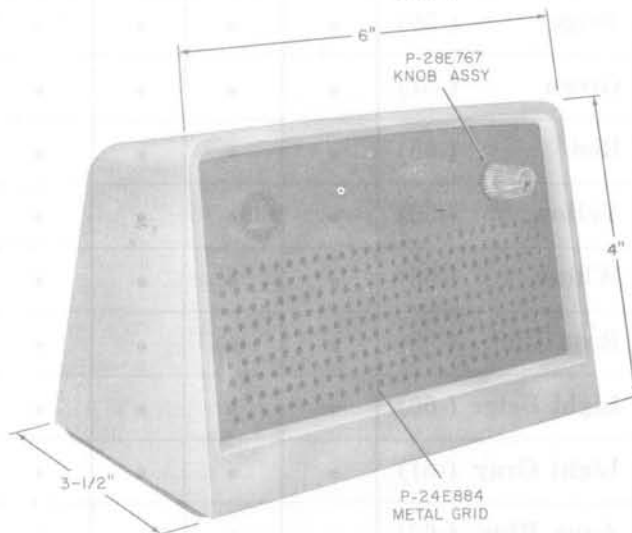


Fig. 1—694A Subscriber Set

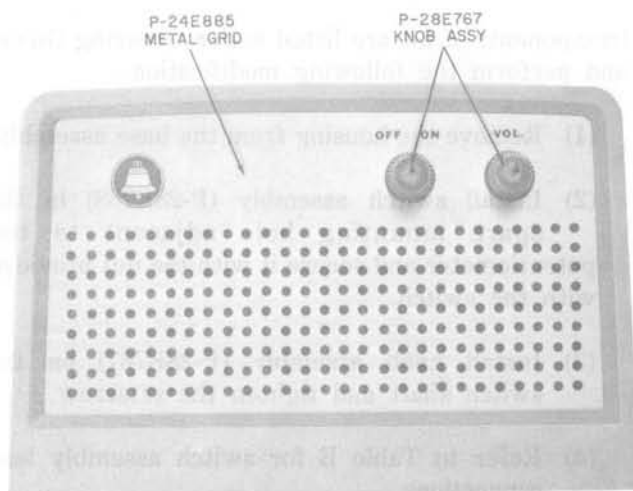


Fig. 2—694B Subscriber Set

1. GENERAL

1.01 This section is reissued to:

- Revise available color list of 694-type subscriber sets
- Revise type of loudspeaker unit used in 694-type subscriber sets
- Change color of strap between connection points 5 and 8 on terminal strip of 694A subscriber set.

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

2. IDENTIFICATION

2.01 The 694-type subscriber set consists of a transistorized amplifier, loudspeaker, transmitter, volume control, and in the 694B an ON-OFF switch. All of these components are mounted on a metal base and enclosed in a plastic housing.

PURPOSE

2.02 To provide hands free listening and talking at station of the 2A Communication System.

APPLICATION

2.03 To be used with key telephone stations associated with a 2A Communication System

ORDERING GUIDE

- Set, Subscriber, 694A/B-*
- Kit, Mounting, D-179997
- Kit of Parts, D-180033

(a) *Replaceable Components*

- P-83B4* Housing
- Cord, Mounting, D4BM-*
- Unit, Transmitter, AC1
- Unit, Loudspeaker, KS-16881L5
- P-28E451 Potentiometer Assembly (Volume Control)
- P-28E450 Potentiometer and Switch Assembly (B-type only)
- P-28E447 Printed Wiring Board Assembly
- P-24E889 Bracket
- P-24E884 Grid (A-type only)
- P-24E885 Grid (B-type only)†
- P-28E768 Switch Assembly (ON-OFF Switch)†
- P-28E767 Knob Assembly†
- P-27E889 Shelf‡
- P-180924(2) Screw BHM‡

* Refer to Table A for color suffix

† Components of D-180033 Kit of Parts

‡ Components of D-179997 Mounting Kit.

DESIGN FEATURES

2.04 The 694A and 694B subscriber sets (Fig. 1 and 2, respectively) are similar in appearance with the exception of the ON-OFF switch on the 694B.

2.05 The interior of the 694B subscriber set is shown in Fig. 3.

2.06 The 694A and 694B subscriber sets both have a potentiometer which provides volume control of the loudspeaker.

2.07 To convert a 694A subscriber set to a 694B subscriber set obtain a D-180033 Kit of Parts

TABLE A
COLOR ORDERING GUIDE

COLOR	SUFFIX	SUB SETS		MTG CORD	HOUSING
		694A-	694B-	D4BM-	P-83B4-
Black	(-03)	•	•	•	•
Beige	(-50)	•	•	•	•
Green	(-51)	•	•	•	•
Red	(-53)	•	•	•	•
Yellow	(-56)	•	•	•	•
White	(-58)	•	•	•	•
Rose Pink	(-59)	•	•	•	•
Light Beige	(-60)	•	•	•	•
Light Gray	(-61)	•	•	•	•
Aqua Blue	(-62)	•	•	•	•
Turquoise	(-64)	•	•	•	•

(components of kit are listed under Ordering Guide) and perform the following modification.

- (1) Remove the housing from the base assembly.
- (2) Install switch assembly (P-28E768) in the spare mounting hole adjacent to the potentiometer and secure it with the nut provided with the switch.
- (3) Install knob assembly (P-28E767) on the switch shaft and tighten the setscrew.
- (4) Refer to Table B for switch assembly lead connections.
- (5) Remove the (BL) strap wire from between terminals 5 and 8.
- (6) Replace P-24E884 grid with P-24E885 grid.
- (7) Install the housing on the base assembly.

- (8) Change the code number on the bottom of the set from 694A to 694B.

2.08 To convert a 694B subscriber set to a 694A subscriber set, obtain a P-24E884 grid and perform the following modification.

- (1) Remove the housing from the base assembly.
- (2) Refer to Table C to disconnect switch assembly leads from terminal strip.
- (3) Install a (BL) strap wire between terminals 5 and 8 (Fig. 4).
- (4) Loosen the setscrew and remove P-28E767 knob assembly from the switch shaft.
- (5) Remove the nut and the P-28E768 switch assembly from the mounting bracket.
- (6) Replace P-24E885 grid with P-24E884 grid.
- (7) Install the housing on the base assembly.
- (8) Change the code number on the bottom of the set from 694B to 694A.

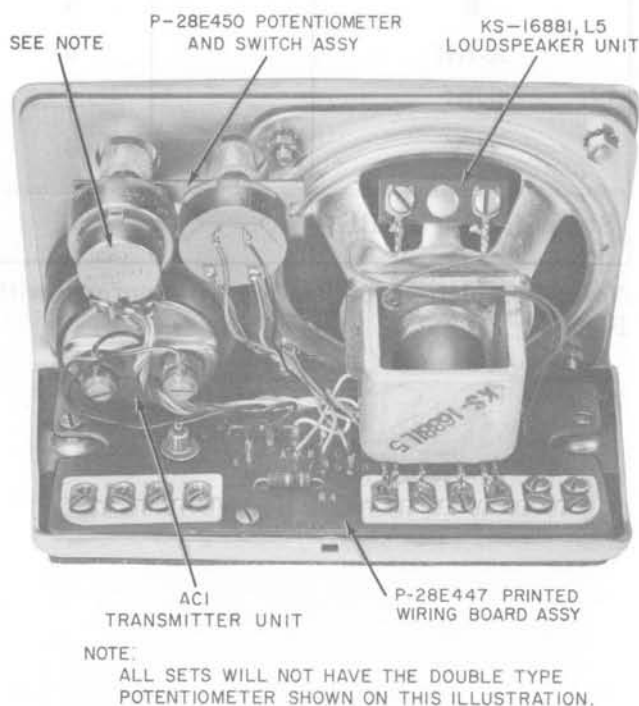


Fig. 3—694B Subscriber Set, Interior

3. INSTALLATION

3.01 The 694-type subscriber set can be mounted on a vertical wall by using a D-179997 mounting kit (components of kit listed in Ordering Guide). Mounting tabs with slotted holes are part of the 3- by 5-inch aluminum shelf for mounting the shelf to a vertical wall (screws are not furnished for this purpose). Two BHM screws are furnished with the kit of parts to secure the subscriber set to the shelf. Utilize two 9/64-inch holes in the shelf for this purpose.

3.02 Only one 694-type subscriber set is to be provided at each station.

3.03 Place 694-type subscriber set at the same location as the station for best possible transmission.

4. CONNECTIONS

4.01 The circuit of the 694A and 694B subscriber sets (Fig. 4 and 5, respectively) are identical electrically except the 694A is equipped with a strap wire on terminals 5 and 8 which has been replaced by a on-off switch in the 694B (Table B, Fig. 5).

4.02 Connection Index

Table B—Modification to Add ON-OFF Switch Assembly to 694A Subscriber Set

Table C—Modification to Remove ON-OFF Switch Assembly from 694B Subscriber Set

Fig. 4—694A Subscriber Set, Connections

Fig. 5—694B Subscriber Set, Connections

5. MAINTENANCE

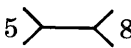
5.01 If replacement of any component becomes necessary reterminate leads in the same relative position that existed before their removal.

5.02 Reversal of the M1 and M2 leads will cause low microphone output.

5.03 When radio interference is encountered refer to Section 500-150-100 for radio suppression information.

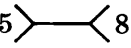
Note: When radio suppression becomes necessary, replace 694A and 694B subscriber sets with a modified subscriber set designated with an asterisk after the code. Specify "Modified for Radio Suppression" when ordering a subscriber set, and the distributing house will include capacitors properly positioned in the circuitry on the printed wiring board to suppress radio interference. Subscriber set will then be coded 694A* or 694B*.

TABLE B
MODIFICATION TO ADD ON-OFF SWITCH
ASSEMBLY FROM 694A SUBSCRIBER SET

P-28E768 SWITCH	TERMINAL STRIP	
LEAD COLOR	CONNECT TO	REMOVE FROM
R	5	
R-BR	6	
R-BL	7	
G-Y	8	
Strap (BL) [BL-BL]		5  8

Note: Completed modification will conform with Fig. 5.

TABLE C
MODIFICATION TO REMOVE ON-OFF SWITCH
ASSEMBLY FROM 694B SUBSCRIBER SET

P-28E768 SWITCH	TERMINAL STRIP	
LEAD COLOR	CONNECT TO	REMOVE FROM
R		5
R-BR		6
R-BL		7
G-Y		8
Strap (BL) [BL-BL]	5  8	

Note: Completed modification will conform with Fig. 4.

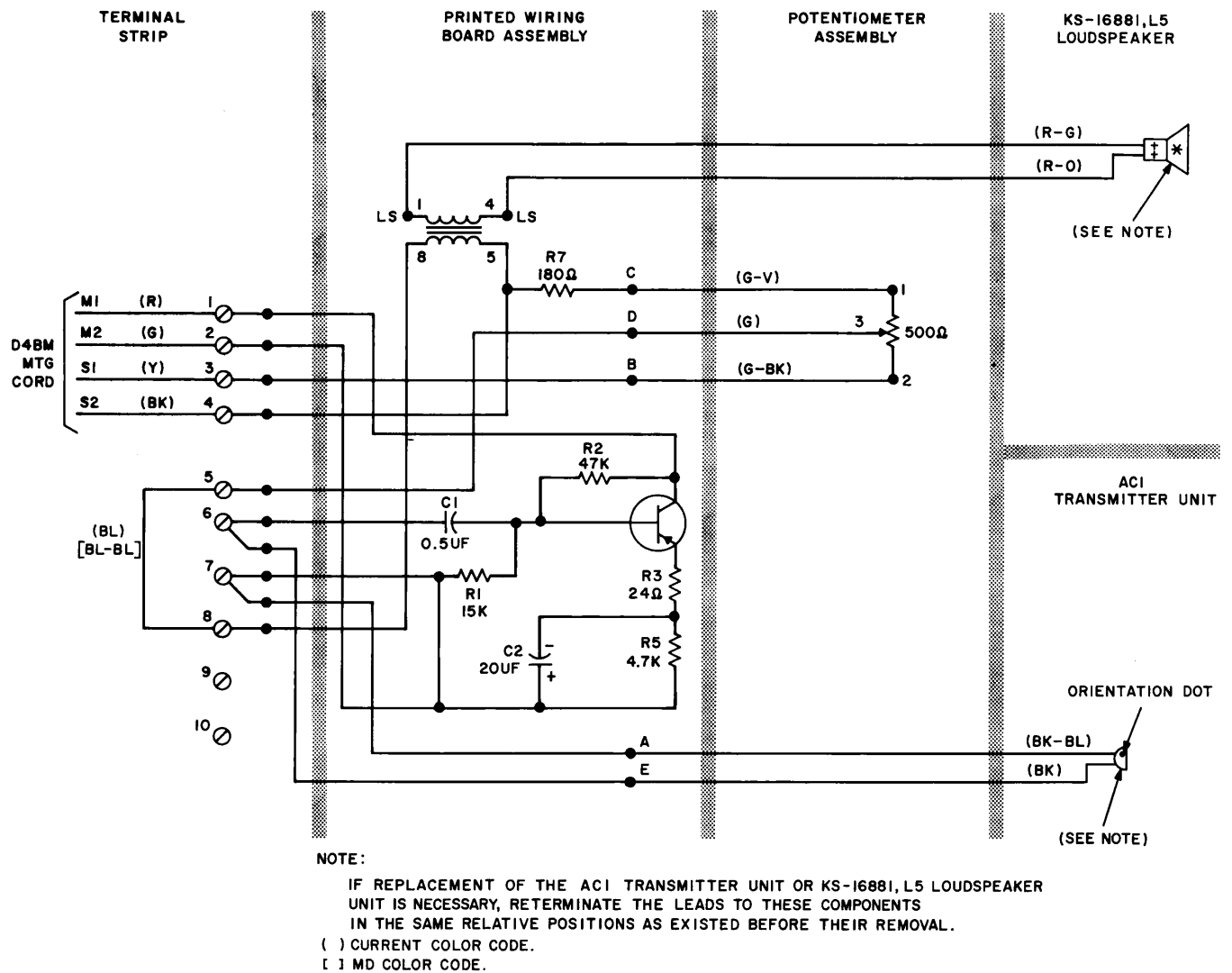


Fig. 4—694A Subscriber Set, Connections

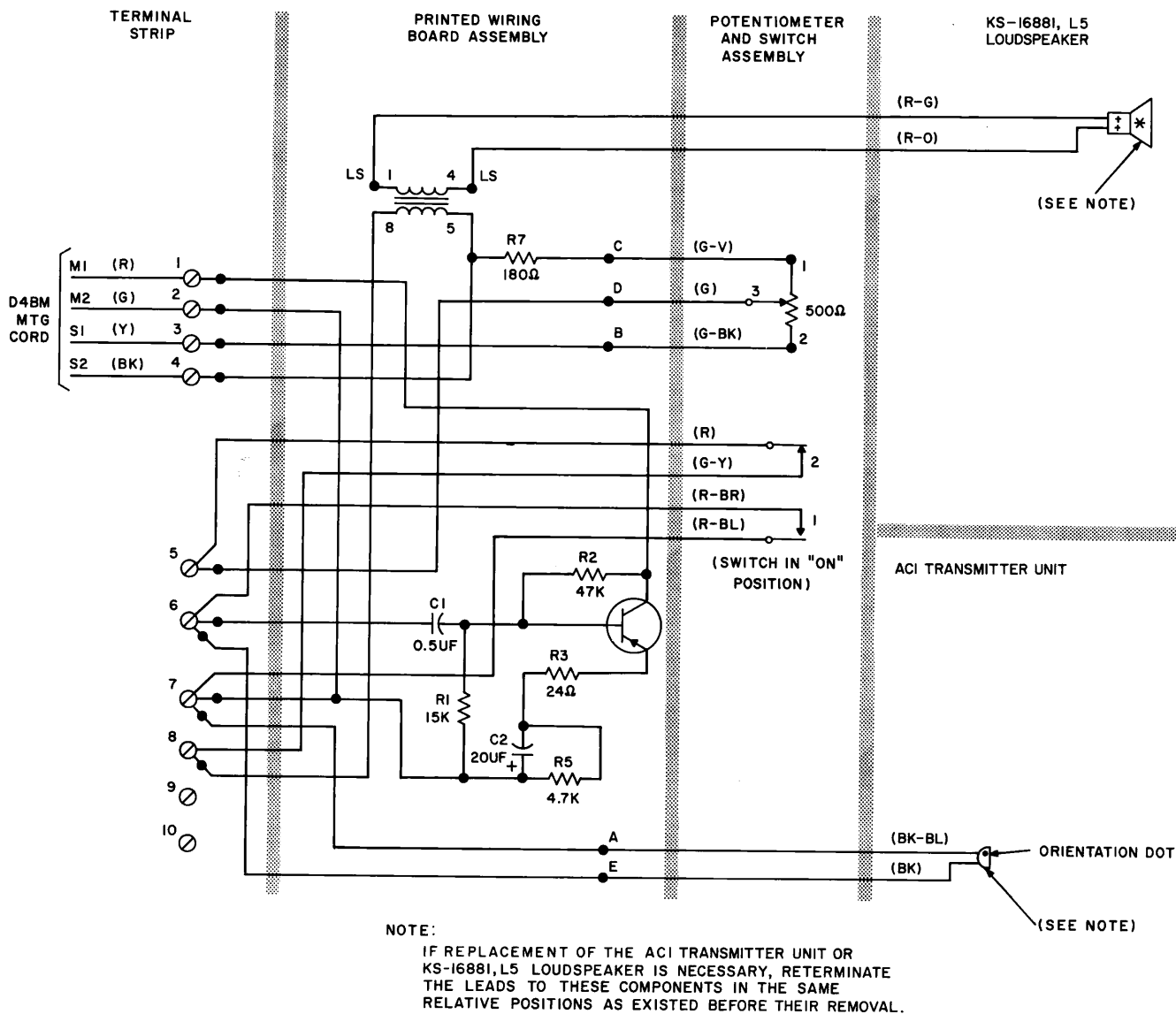


Fig. 5—694B Subscriber Set, Connections