

## E1A RINGER

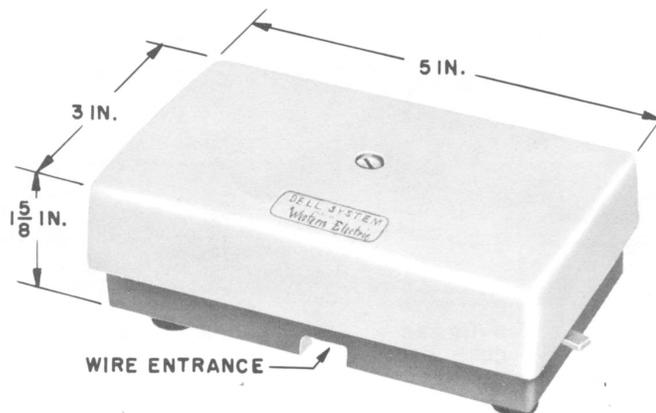


Fig. 1 — E1A Ringer, External View

### 1.00 INTRODUCTION

This section covers the identification, installation, connections, and maintenance of the E1A ringer.

### 2.00 IDENTIFICATION

2.01 The E1A ringer is a high-impedance ringing bridge. The ringer consists of a 7-terminal connecting block and a single-gong ringing mechanism in series with a 0.40-uf capacitor. ←

2.02 The 7-terminal connecting block is included to provide a means for connecting the ringer to the line and for terminating the mounting cord.

2.03 The operational characteristics of the E1A ringer are similar to those of a C-4 ringer in series with a 0.40-uf capacitor. ←

2.04 The ringing mechanism, capacitor, and connecting block are all mounted on a gray metal base and enclosed with a blue-beige plastic cover (Fig. 1 and 2). The color code is -42.

2.05 The ringer is furnished with a volume control lever. See 4.05 and 4.06.

### 3.00 GENERAL

3.01 The E1A ringer may be used as a ringer or of service.

- Individual line
- 2-party flat and message rate
- 4-party semiselective
- Nonselective party line
- Divided code ringing
- Regular PBX station

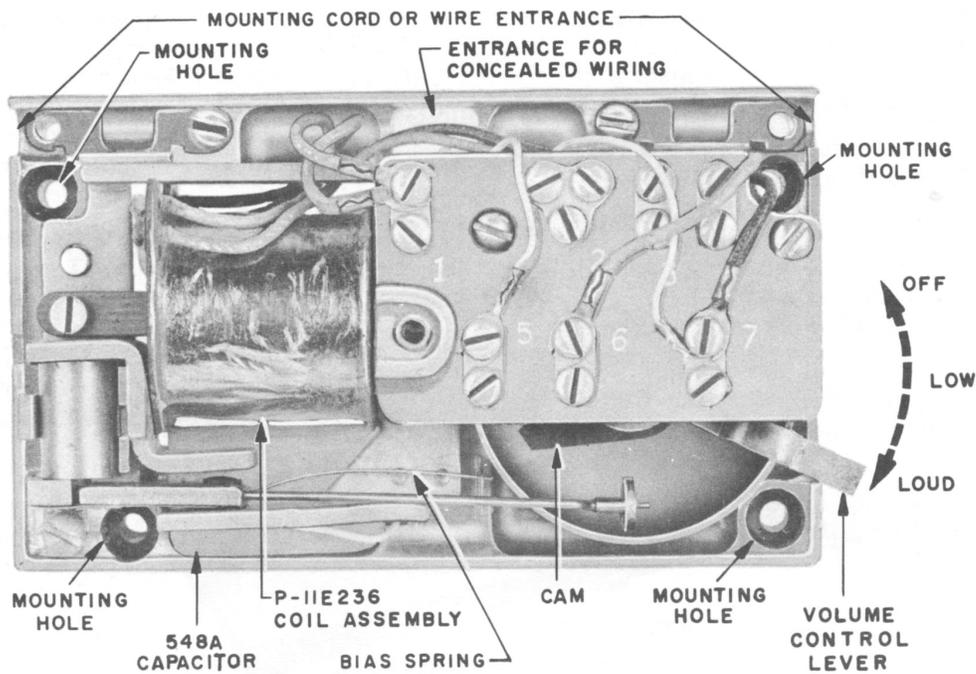


Fig. 2 — E1A Ringer, Cover Removed

3.02 When controlled by a 531C or 687B subscriber set, the E1A ringer may be used on the following services.

- 4-party selective
- 8-party semiselective

**Note:** See C Section entitled Subscriber Sets, Ringer and Relay Types, Polarized Ringing, 531C; 534DT; 592C; 687B, Common and Local Battery, Connections for connections of these sets.

3.03 Where tip party identification is required, it should be obtained through the ringer associated with each station as shown in the C Section covering connections for the particular type of telephone set used.

#### 4.00 INSTALLATION

4.01 Using the mounting holes provided (Fig. 2), fasten the ringer to the wall with fasteners of sufficient length to hold it securely.

4.02 The mounting holes are equipped with rubber grommets.

4.03 The inside wire may enter the ringer from the back, bottom, or either end (Fig. 1 and 2).

4.04 When the inside wire enters the ringer from the bottom or back, the mounting cord from the telephone set may be brought in either end of the ringer. When the inside wire enters from one end, the set cord (if used) can enter from the opposite end. Secure the telephone set cord to the ringer as shown in Fig. 3.

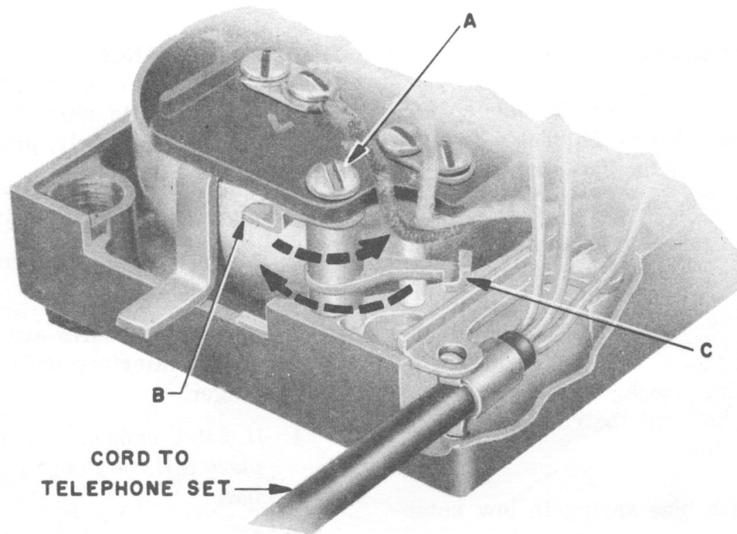


Fig. 3 - End View of E1A Ringer

4.05 The volume control lever on the ringer may be moved from loud to low. By loosening screw A (Fig. 3) and swinging stop B (Fig. 3) to the extreme right, the lever may also be moved to the off position. A detent differentiates between the low-volume and off positions.

4.06 To silence the ringer permanently, loosen screw A (Fig. 3) and move stop B (Fig. 3) to the right. Move the volume control lever to the off position. Move latch C (Fig. 3) to the left so that it falls in place over the volume control lever, locking it in the off position.



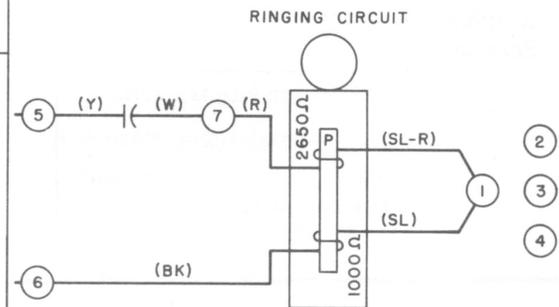
Be sure to acquaint customer with location and use of ringer volume control lever. ←  
←

5.00 CONNECTIONS

Connect the E1A ringer as indicated in Table A.

TABLE A  
E1A RINGER CONNECTIONS

	PARTY		
	INDIVIDUAL, COIN, OR OTHER BRIDGE STATIONS	RING STATION	TIP STATION
WIRE FROM PROTECTOR OR LINE	RING	RING	TIP
	TIP	GRD	GRD



**6.00 BIAS SPRING POSITION**

**6.01** The ringer is shipped with the bias spring in the high (outside) notch. Table B indicates the proper position of the bias spring for the various classes of service.



*Correct bias spring tension has been set at the factory. Do not bend bias spring.*

**6.02** After completing work, obtain a ringing test according to local instructions. Check for bell taps while dialing.

**6.03** If bell taps with bias spring in low notch and the ringer properly connected, move bias spring to high notch. Repeat ringing test. If ringer fails to operate properly, change ringer.

**7.00 MAINTENANCE**

On a maintenance visit where the ringer fails to operate properly, proceed as follows:

1. Check air gap at armature for dirt or foreign material and clean if necessary.
2. Make sure all connections are tight and correct.
3. See that all wires are dressed so that they do not interfere with the operation of the ringer.
4. If 548A capacitor is open or shorted, replace it through opening in bottom of metal base.
5. If ringer still does not operate properly or if coil is open or shorted, replace complete ringer.

**TABLE B**  
**BIAS SPRING POSITION**

Class of Service		Bias Spring Notch	Remarks
Bridged Ringing Service	Individual line and PBX stations	High	When three or more ringers are bridged across line and operation is not satisfactory, bias spring may be placed in low notch on all ringers. If condition is not corrected, change ringer.
	Nonselective party lines	Low	
Grounded Ringing Service	2-party flat and message rate	High	Where five ringers are connected between same side of line and ground and operation is not satisfactory, bias spring may be placed in low notch on all ringers on that side of line. If condition is not corrected, change ringer.
	4-party semiselective	High	
	4-party selective, 8-party semiselective, and Divided code	Low	