

## SERVICE

### RINGERS—L1A

#### 1. IDENTIFICATION

1.01 The L1A ringer (Fig. 1) is a single-coil, high impedance, loud ringing signal for indoor and outdoor use.

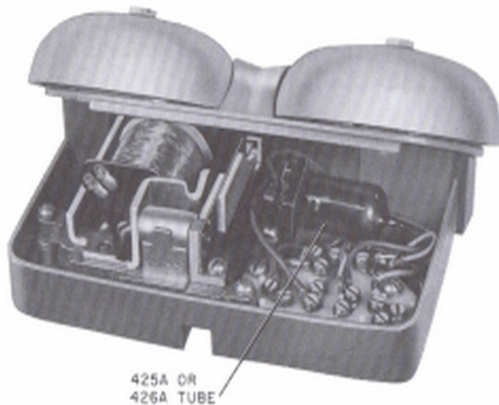


Fig. 1—L1A Ringer with 425A or 426A Tube

1.02 The ringer has mounting facilities and space provided for the installation of a 425A or 426A electron tube.

#### 2. INSTALLATION

2.01 Select a location that will permit customer to hear ringer.

2.02 Mount ringer in a vertical position with gongs at top.

2.03 If location is indoors, ringer may be fastened directly to wall surface with two fasteners as follows:

- (a) For fastening to wood, use No. 8 RH wood screws.
- (b) For hollow wall construction, use B wall screw anchors.
- (c) For concrete and masonry surfaces, use C plastic anchors.

2.04 When mounting ringer outdoors, use a 181A-49 backboard.

2.05 Wire may enter ringer from top, bottom, or back.

#### 3. CONNECTIONS

3.01 See Table A for line and ringer connections.

#### 4. MAINTENANCE

4.01 If ringer fails to operate properly, check the following:

- (a) All leads should be dressed away from clapper and armature.
- (b) Armature air gap should be free of dirt and foreign material.
- (c) All terminal connections should be tight and correctly terminated.
- (d) Biasing spring should not touch or rub pole piece and should be in correct notch.



*Correct biasing spring tension has been set at factory. Do not bend biasing spring. Spring can be moved to either notch as required.*

**SECTION 501-258-400**

**Note:** See section on maintenance of C-type ringers for proper bias position on a particular class of service.

(e) Clapper should have perceptible to 1/32 inch clearance from 26F gong when armature is nonoperated. With armature operated clearance

should be perceptible to 1/32 inch between clapper and 26E gong. Gongs are on an eccentric pivot and may be rotated to meet this requirement.

(f) If ringer still does not operate properly, replace ringer.

**TABLE A**  
**LINE, RINGER, AND TUBE CONNECTIONS**

	INDIVIDUAL BRIDGED	2-PARTY		SELECTIVE RINGING AND AVERAGE INDUCTION (UP TO 30 VOLTS) *				SEVERE INDUCTION (30 TO 80 VOLTS) *			
		RING	TIP	(-) RING PARTIES (1-5)	(-) TIP PARTIES (2-6)	(+) RING PARTIES (3-7)	(+) TIP PARTIES (4-8)	(-) RING PARTIES (1-5)	(-) TIP PARTIES (2-6)	(+) RING PARTIES (3-7)	(+) TIP PARTIES (4-8)
INSIDE WIRE	4	4	3	4	3	4	3	4	3	4	3
	3	3	4	3	4	3	4	3	4	3	4
	6	6	6	6	6	6	6	6	6	6	6
RINGER	4	4	4	6	6	4	4	1	1	4	4
	J	1	1	1	1	1	1	4	4	1	1
	S	2	2	2	2	2	2	4	4	2	2
	BK	3	6	6	6	4	4	2	2	4	4
CAPACITOR	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
426A TUBE *	R			6	6	4	4				
	BK			1	1	1	1				
	Y			4	4	6	6				
426A TUBE SEVERE † INDUCTION	R			3	3						
	BK			1	1						
	Y			4	4						
425A TUBE *	R							3	3	4	4
	BK							6	6	1	1
	Y							1	1	6	6
	G							4	4	3	3

\* Use negative party connections when capacitor type grounded ringing must be replaced with tube type ringing due to inductive noise.

† The three element 426A tube can be used to combat severe inductive noise (30 to 80 volts) on negative parties only. It cannot be used on positive parties.