

S1A AND S1AM TONE RINGERS

1. GENERAL

1.01 This section contains identification, installation, connections, and maintenance information on the S1A (MD) and S1AM (modular) tone ringers.

1.02 This section is reissued to:

- Add information on S1AM (modular) tone ringer
- Show S1A tone ringer MD

2. IDENTIFICATION

2.01 **Purpose:** The S1A and S1AM tone ringers (Fig. 1 and 2) are extension ringers for people with impaired hearing.

2.02 **Ordering Guide:**

- Ringer, S1AM-*

*Available in Ivory (-50) and Gold (-63) only.

2.03 **Associated Equipment or Apparatus (ordered separately):**

- Cord, Mounting, D4BU-29
- Plate, Mounting, 1049A
- Adapter, 285A.

2.04 **Design Features:**

- To be mounted on a vertical wall surface
- Volume control switch provides LOW-OFF-LOUD positions
- Alerting signal consists of two equal amplitude frequency components at approximately 750 and 1500 Hz

- Higher frequencies are attenuated by a side branch resonator to reduce annoyance to persons with normal hearing

- S1AM modular mounting cord.

2.05 **Application:**

- Individual lines
- 2-party flat rate
- PBX stations.

Note: When tip party identification is required, it should be obtained through the ringer associated with each telephone set. Refer to particular telephone set used for connections.

3. INSTALLATION

3.01 Select a central location about 5 feet above the floor so that the customer can hear the ringer in LOW volume position in largest area of residence.

3.02 Install both ringers with volume control switch down. Allow space on top of ringer to remove cover.

3.03 The S1AM (modular) tone ringer (Fig. 2) may be made portable by adding a 285A adapter and a 1049A mounting plate which must be ordered separately. Install the ringer as follows:

- Using hardware provided with 285A adapter, attach adapter to back side of ringer.
- Mount the 1049A mounting plate on wall surface using appropriate hardware for the particular wall material.
- Place ringer over studs on mounting plate and move downward to snap into detented slots.

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

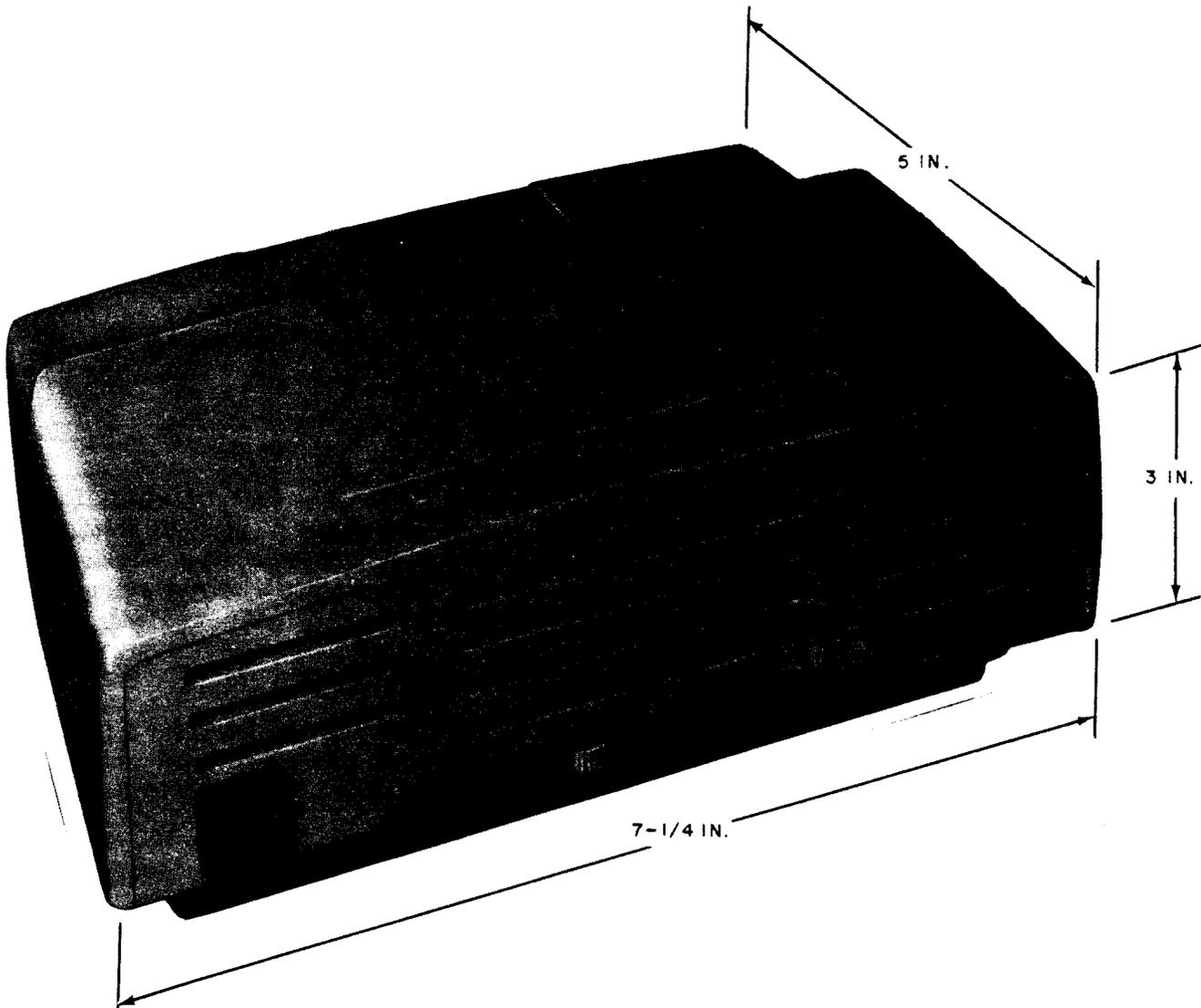


Fig. 1—S1AM Tone Ringer

- (d) Connect the D4BU mounting cord between the connecting block and ringer jack.
- 3.04 The S1A (MD) ringer is designed to be mounted on a wall surface with two fasteners. Select length of fastener to provide secure mounting for the particular wall material.
- 3.05 To remove the louvered cover from either tone ringer, release the two captive screws which fasten cover to the base (Fig. 3).

3.06 Inside wire may enter tone ringer from back, bottom, or either side (S1A only).

3.07 The ringer voltage margin test should be made at time of installation and on maintenance visits where trouble is indicated in the ringer.

4. CONNECTIONS

4.01 Ringer Voltage Margin Test:

Note: The ringer is furnished from the factory wired in the high-bias condition with

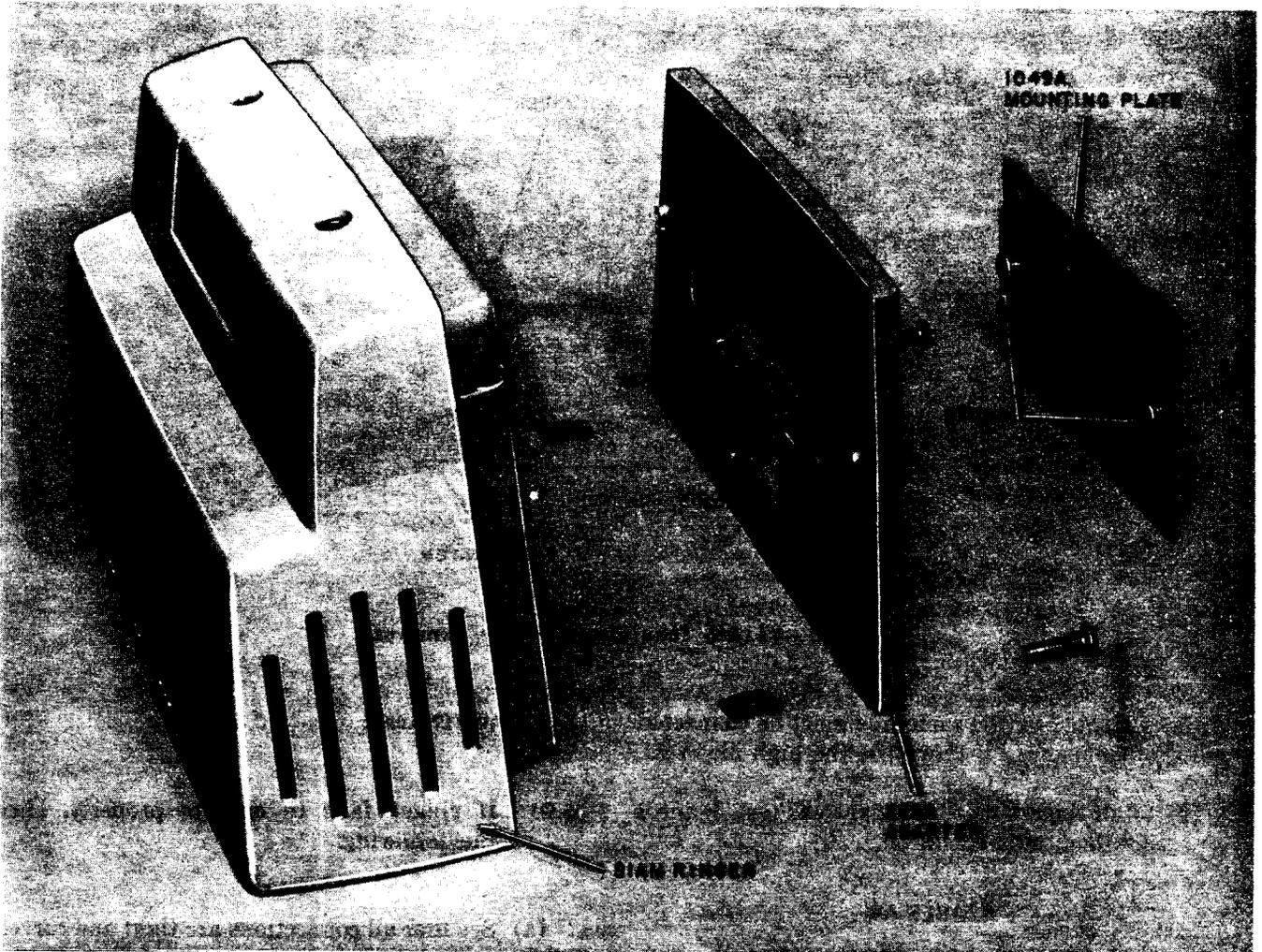


Fig. 2—♦S1AM Tone Ringer With Adapter and Mounting Plate♦

the WHITE lead connected between HB1 terminal and R4 resistor terminal (Fig. 5).♦

- (a) Move line wire from terminal 4 to terminal 5 of the ringer terminal board (Fig. 4 and 5).
- (b) Obtain ringing test according to local instructions. Check ringer in LOW and LOUD volume positions.
- (c) If ringer operates properly, move line wire from terminal 5 back to terminal 4 and replace cover.

Note: In no case should the line wire be left on terminal 5 after the test is completed.

- (d) If in step (b) the ringer does not operate properly, disconnect WHITE bias lead at HB1 terminal of the ringer terminal board, insulate and store for low bias condition.

(e) Repeat steps (a) and (b).

- (f) If ringer does not operate properly, replace tone ringer and repeat test.

4.02 Voltage Margin for Multiple S1A or ♦S1AM♦ Ringers: When more than one ringer is connected to a line, observe the following:

- (a) When it is necessary to connect one S1A or ♦S1AM♦ ringer in the low-bias condition, all

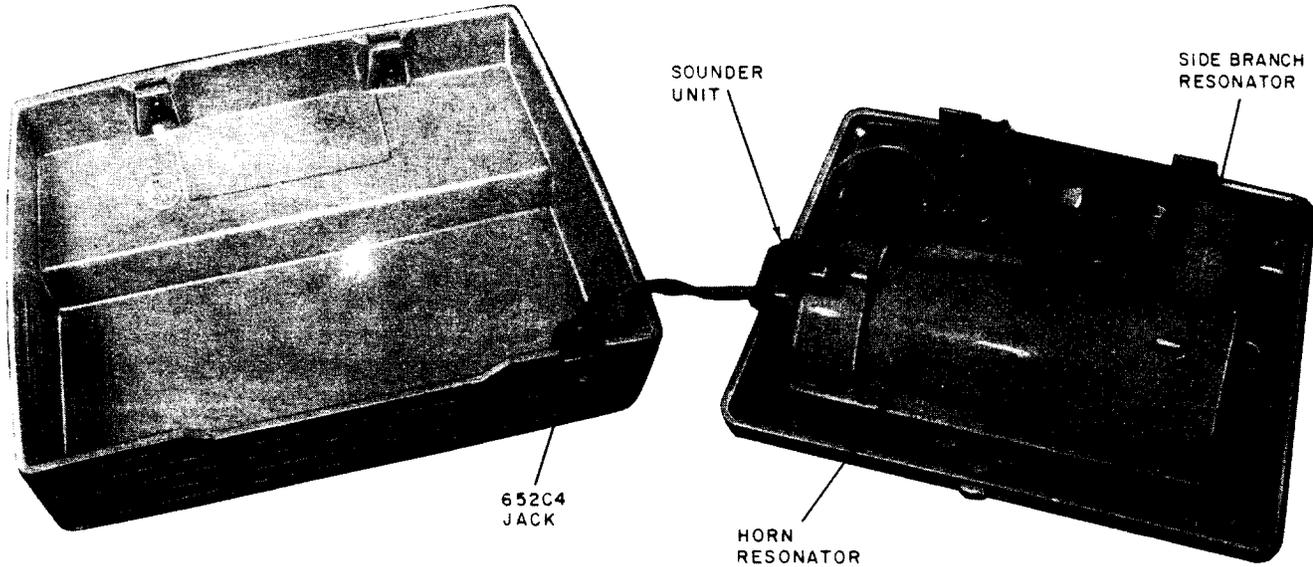


Fig. 3—S1AM Tone Ringer, Cover Removed

other ringers on the same line must be connected for low-bias even if they pass the high-bias test.

(b) If all ringers meet the high-bias test, connect for high-bias condition.

5. MAINTENANCE

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

- (a) See that all connections are tight and correct.
- (b) Make ringer voltage margin test per 4.01.
- (c) Verify that ringing bridge limitations are not exceeded.
- (d) If tone ringer still fails to operate properly, replace ringer.

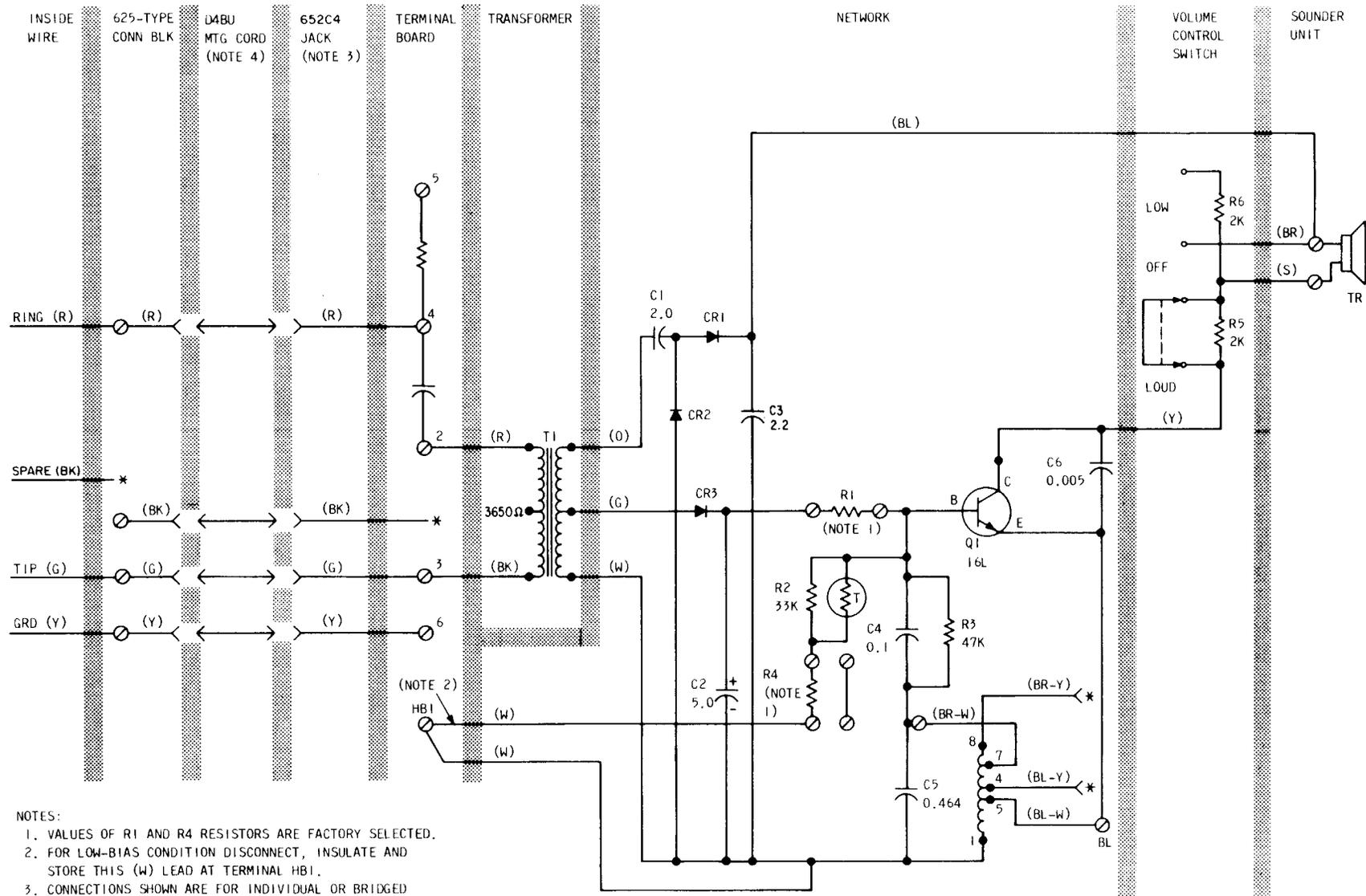
TABLE A

LINE (S1A) AND JACK (S1AM) TONE RINGER CONNECTIONS

WIRE OR LEAD (See Note)		COLOR	TERMINAL BOARD IN RINGER		
			INDIV OR BRDG	RING PARTY	TIP PARTY
Inside Wire or 652C4 Jack	Ring	R	4	4	6
	Tip	G	3	6	3
	GRD	Y	6	3	4
	Spare	BK	*	*	*

* Insulated and stored.

Note: For connecting other classes of service, see section for the particular telephone set used.



- NOTES:
1. VALUES OF R1 AND R4 RESISTORS ARE FACTORY SELECTED.
 2. FOR LOW-BIAS CONDITION DISCONNECT, INSULATE AND STORE THIS (W) LEAD AT TERMINAL HBI.
 3. CONNECTIONS SHOWN ARE FOR INDIVIDUAL OR BRIDGED RINGING. REFER TO TABLE A FOR ALL OTHER CLASSES OF SERVICE.
 4. MUST BE ORDERED SEPARATELY.
- * INSULATED AND STORED.

Fig. 4—S1AM Tone Ringer, Connections

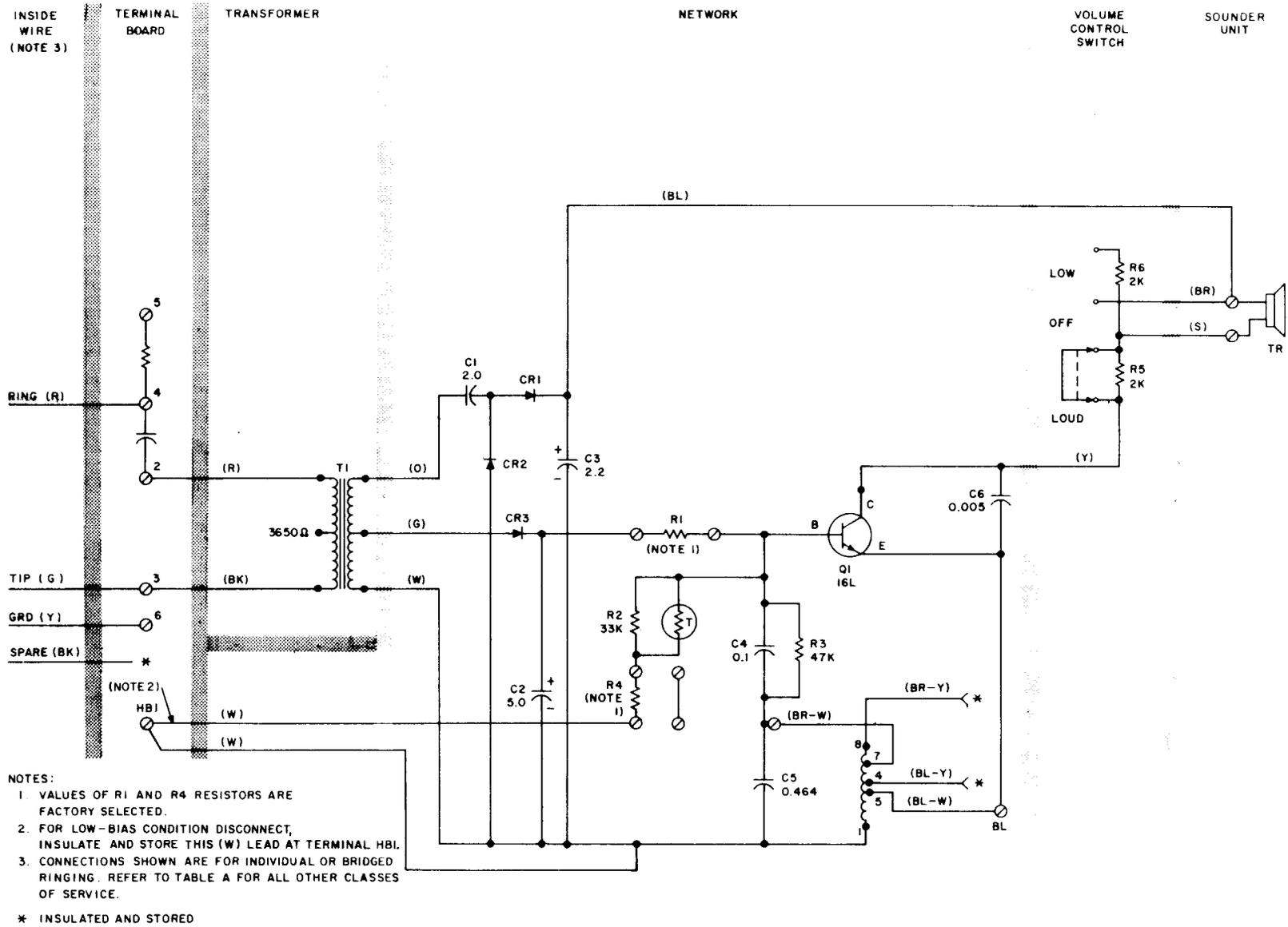


Fig. 5—S1A (MD) Tone Ringer, Connections