

## SERVICE

### 2636- AND 2637-TYPE TELEPHONE SETS

#### 1. GENERAL

**1.01** This section contains connection and maintenance information for the 2636- and 2637-type telephone sets. Connection information for these sets was formerly contained in Section 502-636-421 which is hereby canceled.

#### 2. CONNECTIONS

**2.01** These sets are factory-wired for use with 1A1 or 1A2 KTS line circuits. They may also be used with 1A or 6A KTS by modifying the set as shown in Tables A and B. 1A and 1A1 or 1A2 KTS line circuits may be connected to the same set under the following conditions:

- 1A1 or 1A2 KTS lines must be connected to the first key units, with 1A lines connected to supplementary key units (Table A).
- 1A, 1A1, or 1A2 KTS lines should not be connected to the same 6-line key unit.



*Some mounting cord conductors are dead dressed with insulators (tubing). When these conductors are required, do not use long-nose pliers to remove tubing, as this may break the conductor or pull off the spade tip. Remove tubing with electrician's scissors or diagonal pliers.*

**2.02** These sets are not intended for use with 3-type speakerphone systems.

**2.03** Replacement or substitution of the key in the first module may require wiring changes as shown in the notes for Fig. 2.

**2.04** When station busy lamp feature is required with these sets having 1A1 or 1A2 KTS line

circuits, a P-90D033 Printed Wiring Board Assembly must be ordered separately and installed in the 2636- or 2637-type telephone set. Install as follows:

- (1) Remove set housing.
- (2) Loosen screws on dial mounting plate, move mounting to left and lift out.
- (3) Remove right-hand dial mounting screw.
- (4) Place dial mounting screw through hole in wiring board and replace screw in dial. Components on board should be positioned so as not to interfere with other set components when dial mounting plate is replaced.
- (5) Replace and secure dial mounting plate.
- (6) Connect wiring board leads and make wiring changes as shown in Fig. 2 and 3.

**2.05** Supplementary hold feature can be provided in two configurations (Fig. 4). **Priority Hold** requires a 599H key in the first module. **I Hold** requires a wiring modification of the existing hold key in first module. Refer to Division 518 and SD-69530-01 for detailed information on supplementary hold.

**2.06** When a polarity guard is required with these sets, install a P-90D197 Guard Assembly and connect as shown in Table D. Polarity guards should be installed only when authorized by local instructions to prevent battery and ground reversals encountered in end-to-end signaling.

#### 3. MAINTENANCE

**3.01** Replaceable components are listed in the Reference section for these sets.

**3.02** Maintenance of components such as dials, keys, ringers, etc is covered in the sections pertaining to those components.

**TABLE A**  
**WIRING MODIFICATIONS FOR COMBINING 1A AND 1A1 OR 1A2 KTS LINES**

KEY TELEPHONE SYSTEM	MOUNTING CORD LEADS												SET LINE SWITCH (BR)
	HOLD KEY					CHAINING SWITCH					TEL SET CONTROL		
						18- AND 30-BUTTON SETS			30-BUTTON SETS ONLY				
	1ST KEY	2ND KEY	3RD KEY	4TH KEY	5TH KEY	RING	A1						
(Y-G)	(G-Y)	(V-O)	(BR-V)	(V-BR)	(V-G)	(V-G)	(V-G)	(V-G)	(V-G)	(BL-V)	(O-V)		
1A1 or 1A2 (shop wiring)	A-H I	A-H I	*	*	*	A-H I	A-H II	A-H III	A-H IV	A-H V	R I	1B VI	5 Note 1
1A1 or 1A2 on 1st key unit; 1A on remaining units.	A-H I	Y VI	*	1† I	R II	Y VI	A-H II	A-H III	A-H IV	A-H V	R I	1B VI	5 Note 1
1A1 or 1A2 on 1st and 2nd key units; 1A on remaining key units	A-H I	Y VI	*	1† II	R III	A-H I	Y VI	A-H III	A-H IV	A-H V	R I	1B VI	5 Note 1
1A1 or 1A2 on 1st, 2nd, and 3rd key units; 1A on remaining key units (30-button sets)	A-H I	Y VI	*	1† III	R IV	A-H I	A-H II	Y VI	A-H IV	A-H V	R I	1B VI	5 Note 1
1A1 or 1A2 on 1st through 4th key units; 1A on fifth key unit (30-button sets)	A-H I	Y VI	*	1† IV	R V	A-H I	A-H II	A-H III	Y VI	A-H V	R I	1B VI	5 Note 1
1A only	Y VI	A-H I	*	R1 VI	R I	A-H I	A-H II	A-H III	A-H IV	A-H V	R1 VI	SG VI	6

\*Insulate and store.

†Disconnect, insulate, and store (BL-Y) chaining switch lead at this terminal.

**Notes**

1. See station busy lamp connections, Fig. 3. Terminals referred to are on telephone set terminal block.
2. Roman numerals refer to terminal board number.



Notes for Fig. 2:

1. When necessary to install a 599A or 599B key in the 1st module, the following leads must be insulated and stored:

- Mounting cord leads — (G-Y), (Y-G)
- Module plug leads — (Y-O)
- Plug straps — (Y-BL), (BL-Y)

In addition, for a 599B key, insulate and store the (BR-BK) module plug lead.

2. When installing 598A key in 1st module:

- Place strap from terminal 5 of telephone set terminal block to A-H of TBI or use stored (V-O) strap.
- Connect (G-Y) (Y-G) to (S-V) (V-S) respectively, using spare terminals or D-161488 connectors.
- Connect (Y-O) and (BR-BK) to A-H of TBI.

3. When providing station busy lamp with 1A1 or 1A2 KTS, connect A or H lead (G-V) from last module to terminal X of TBVI. Insulate and store (BL-V) and (V-BL) leads from last module. For 1A KTS with busy lamp, move (O-V) from 1B to SG on TBVI.

4. T, R, A, and L leads of lines wired for supplementary hold feature must be routed per SD-69530-01 rather than directly to line circuits.

5. To transfer A lead from ground to -24V for *I hold* feature, connect stored (BR-V) lead from 1st module plug to any spare mounting cord lead using spare terminal or D-161488 connector. Mounting cord lead becomes SP lead at key equipment.

6. The PB lead (BR-Y) is used for add-on conference control of the 6A KTS.

7. These leads are insulated and stored in the second and last modules and dead-ended in the third and fourth modules.

8. When 617A key is required as a dual-purpose key, remove brass strap. Connect S1 of key to a dissimilar or ungrounded circuit.

\* Insulated and stored.

† Dead-ended.



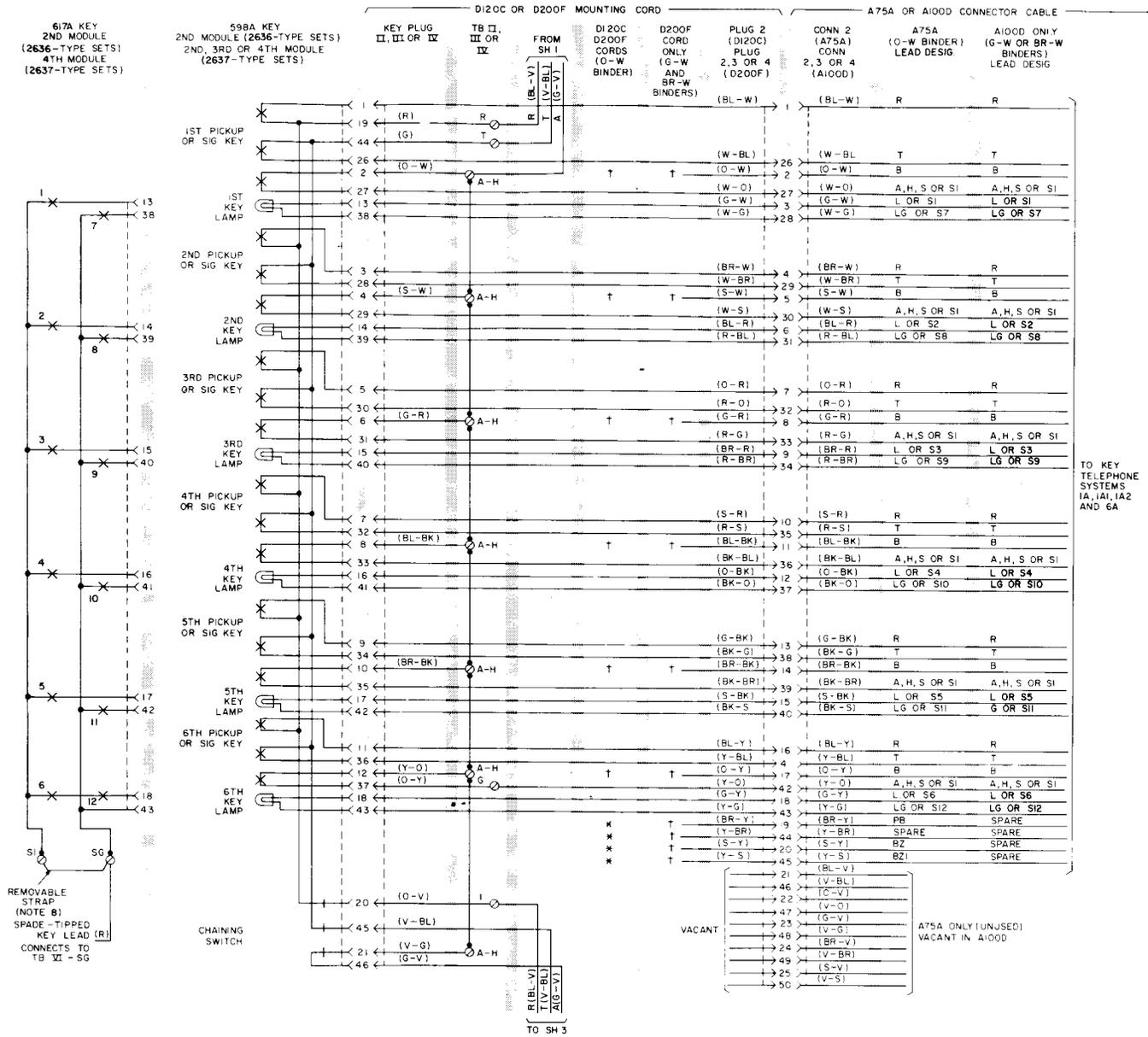


Fig. 2—Module Arrangements and Cord and Cable Connections (Sheet 2 of 3)

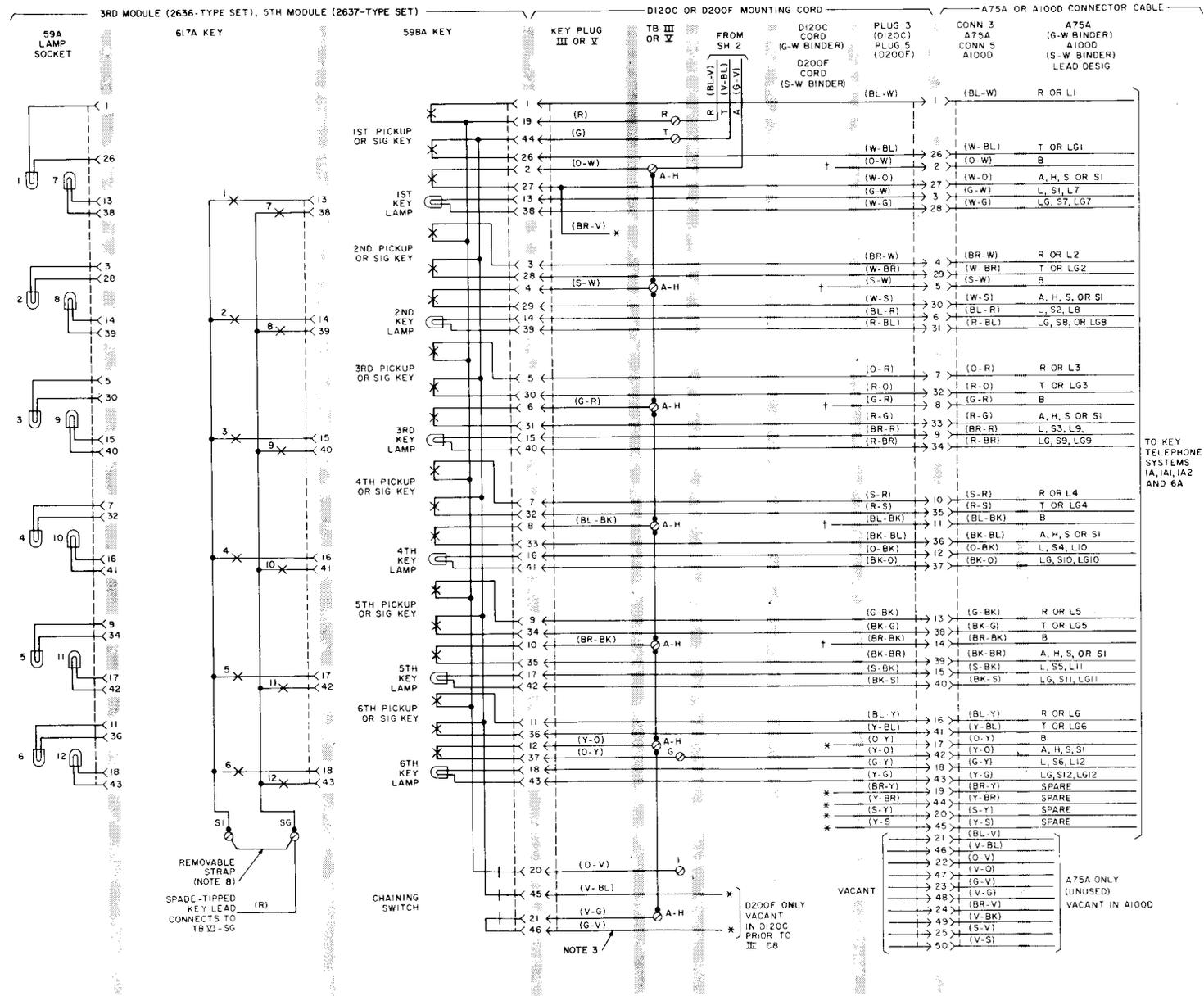
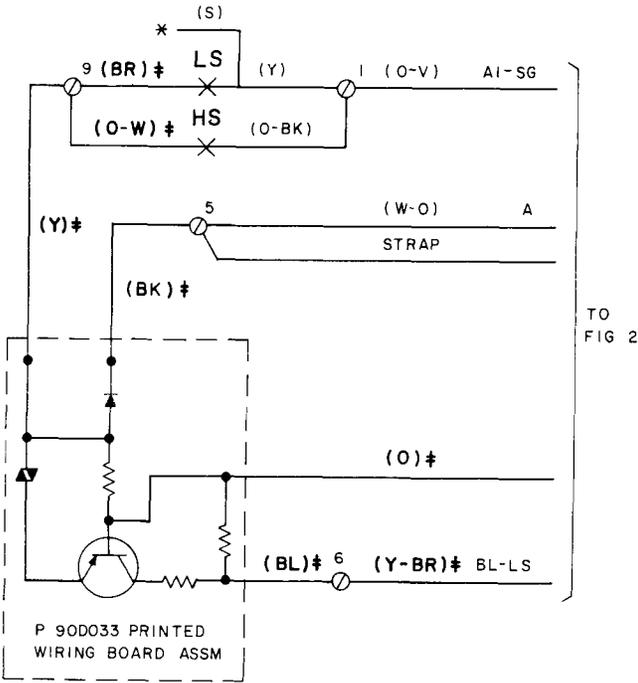
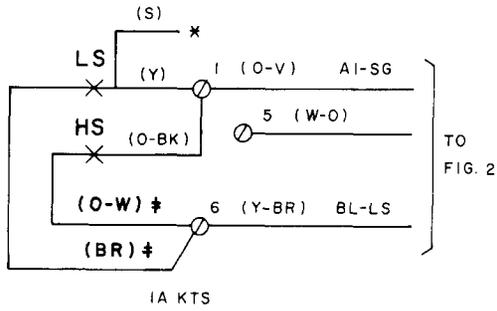
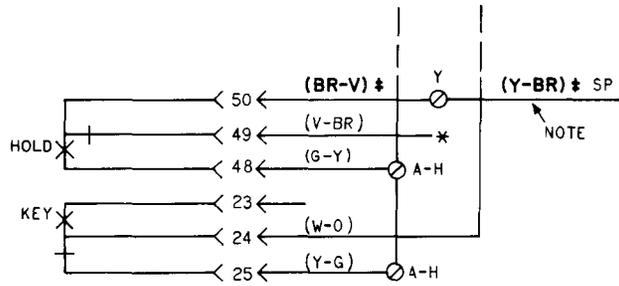


Fig. 2—Module Arrangements and Cord and Cable Connections (Sheet 3 of 3)



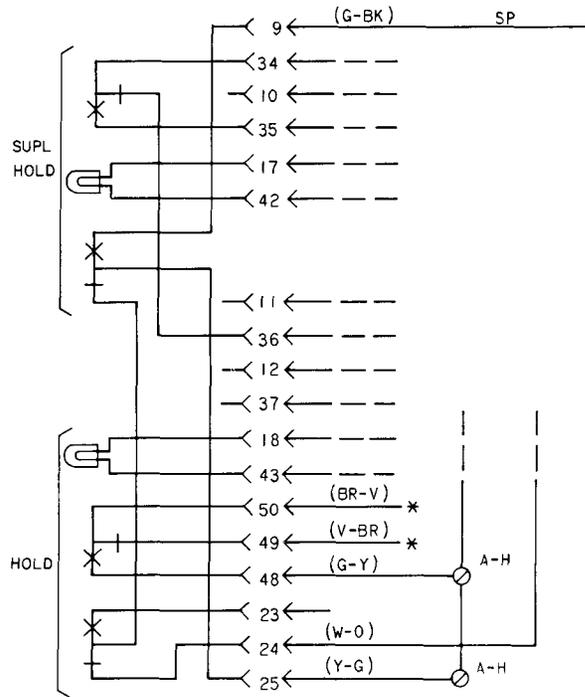
‡ LEADS INVOLVED IN MODIFICATION

Fig. 3—Station Busy Lamp Modification



NOTE: USE STORED (Y-BR) MTG CO CONDUCTOR FROM O-W BINDER OR ANY OTHER SPARE CONDUCTOR.  
‡ LEAD INVOLVED IN MODIFICATION

A. 1 HOLD



NOTE: REQUIRES 599H OR 657H KEY IN 1ST MODULE

B. PRIORITY HOLD

Fig. 4—Supplementary Hold Arrangement

**TABLE B**  
**PICKUP-SIGNAL KEY CONVERSION**

NO. OF PICKUP KEYS	NO. OF SIG. KEYS	NO. OF PRIVATE AND INTERCOM LINES WITH COM SIG KEY	KEY LEADS AND TERMINALS OF KEY UNITS INVOLVED							
			(O-W)	(S-W)	(G-R)	(BL-BK)	(BR-BK)	(Y-O)	(O-Y)	
6			A-H	A-H	A-H	A-H	A-H	A-H	A-H	G
5	1		A-H	A-H	A-H	A-H	A-H	A-H	SG*	G
4	2		A-H	A-H	A-H	A-H	A-H	SG*	SG*	G
3	3		A-H	A-H	A-H	SG*	SG*	SG*	SG*	G
2	4		A-H	A-H	SG*	SG*	SG*	SG*	SG*	G
1	5		A-H	SG*	SG*	SG*	SG*	SG*	SG*	G
	6		SG*	SG*	SG*	SG*	SG*	SG*	SG*	G
3	1	2	A-H	A-H	A-H	C*	C*	A-H	A-H	C
2	1	3	A-H	A-H	C*	C*	C*	A-H	A-H	C
1	1	4	A-H	C*	C*	C*	C*	A-H	A-H	C
	1	5	C*	C*	C*	C*	C*	A-H	A-H	C

\*Located on TBVI.

- Notes: 1. Table B shows conversion for one 6-button ky unit. Convert buttons on right-hand unit first (module 3 or 5). When more than six buttons are used for common signaling, move spade-tipped leads of the additional buttons from terminal A-H of unit involved to terminal C. If additional terminals are required, use X or Y if idle and strap to C.
2. Convert keys to signaling by removing P-10E837 screw detail from positions involved.

TABLE C

## 599B (TURNKEY) KEY CONNECTIONS

FEATURE	FIRST MODULE KEY LEADS						SPADE-TIPPED LEADS OF MOUNTING CORD					
	5TH			6TH			(BL-Y)	(Y-BL)	(O-Y)	(Y-O)	(BR-BK)	
	R	T	A	R	T	A						
	(G-BK)	(BK-G)	(BK-BR)	(BL-Y)	(Y-BL)	(Y-O)						
Cutoff sta on 1A1 or 1A2 sys	To KTS Equip			To Ext Sta			Insulate and store					
Cutoff sta on 1A sys without hold feature	To KTS Equip			To Ext Sta			Insulate and store					
Cutoff station on 1A system with hold feature	To Aux Relay used to cut off T, R, B, and H						Insulate and Store			SG*	SG*	
Cutoff external ringer or buzzer	To KTS Equip			To Ext Ringer or Buzzer			Insulate and store					
Cutoff ringer in set (Note 1)	To KTS Equip						3‡ (Note 2)	A‡ (Note 2)	Insulate and Store			
Cutoff Buzzer in Set (Note 1 and 2)	AC Buzzer	To BZ and BZ1 at KTS Equip						A	C	Insulate and Store		
	DC Buzzer							D	C			
	Com. Audible							Cap.	C			
Monitoring	To MON Equip						R TBI	T TBI				

\*Terminal on TBVI.

‡Telephone set terminal strip.

‡Network terminal.

**Notes:**

1. Insulate and store BZ and BZ1 leads at buzzer or ringer terminal board.
2. The (BL-Y) and (Y-BL) mounting cord leads should be insulated and stored at the equipment end when the bridged spade-tipped leads are used in the set.

**TABLE D**  
**POLARITY GUARD CONNECTIONS**  
**(P-90D197 GUARD ASSEMBLY)**

LEAD		REMOVE FROM		CONNECT TO		
		NET	TERM. BLOCK	NET	TERM BLOCK	POLARITY GUARD
Dial	BK	RR				T
Line Switch	W		7			S
Jacks	BK-S		7			S
Polarity Guard	W G			RR	7	

**Note:** For use when specified by local instructions for end-to-end signaling.