

## SERVICE

### 2565HK, 2565HKM, AND 2565HKMS TELEPHONE SETS

## CONNECTIONS

#### 1. GENERAL

1.01 This section contains information for the 2565HK (MD), 2565HKM (MD), and 2565HKMS telephone sets (Fig. 1 and 2).

1.02 Reissued to:

- Show 2565HKM telephone set MD
- Show 3-type speakerphone MD
- Add information on 2565HKMS telephone set
- Add information on 533K diode.

1.03 ♦The 2565HKMS set is similar to the 2565HKM except a new line switch is provided in the 2565HKMS telephone set which breaks both the tip and ring side of the line.♦

#### 2. CONNECTIONS

2.01 These sets are factory-wired for use with 1A1 or 1A2 key telephone systems (KTS), 4A speakerphone, and individual or common line ringer. They can be used with 1A KTS by modifying as shown in Fig. 3 and 4.

2.02 Mounting cord leads are provided for illuminating the hold key position but 51A lamp is not furnished with set and must be ordered separately.

2.03 These sets are factory-equipped with a KS-20419L1 (10 volt ac only) buzzer.

2.04 The H1B ringer leads are factory-wired to terminals RR and RT. When power failure

feature is provided in the KTS, common audible signal must be wired with capacitor in series.

2.05 If 3-type (MD) speakerphone control unit is located near telephone set, the necessary mounting cord conductors can be extended to the control unit using a 149-type adapter or 66E-type connecting block. If control unit is located at key equipment, extend leads through A25B connector cable or inside wiring cable. Speakerphone connections for the 2565-type telephone sets are shown in Division 512.

2.06 When a 2565HK or 2565HKM (manufactured prior to July 20, 1979) telephone set is not used as a speakerphone set and is multiplied with any other set capable of furnishing speakerphone feature, the T1 (V-G) and R1 (G-V) speakerphone leads must be disconnected, insulated and stored at the telephone set. If not disconnected, these speakerphone leads will provide a common path between the circuits of the multiplied telephone sets. Speakerphone, connections are shown in Division 512.

2.07 Exclusion can be added to these sets by installing a D-179935 Kit of Parts which must be ordered separately. Connect as shown in Table A. Exclusion key can also be used to cut off a ringer or buzzer in set.

2.08 All convertible key positions are supplied as pickup keys. To convert from pickup (locking) to signaling (nonlocking), remove the 811218924 (P-12A892) screw detail from key position involved. Make necessary wiring changes as shown in Table B.

#### NOTICE

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2.09 When polarity guard is required in these sets, connect guard assembly as shown in Table C.

2.10 Additional terminating points can be gained when required for auxiliary services such

as buzzers, lamps, etc. by installing 812559623 (P-25E962) terminal strip assembly.

2.11 Installation of exclusion switch, polarity guard, and auxiliary terminal strip is covered in Section 502-500-120.

When a switch or terminal is required, use the following information to determine the correct location and wiring for the switch or terminal. The switch or terminal should be installed in the equipment rack and should be connected to the correct wiring. The switch or terminal should be installed in the equipment rack and should be connected to the correct wiring. The switch or terminal should be installed in the equipment rack and should be connected to the correct wiring.

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NOTE

For the use of this information, see the following information.

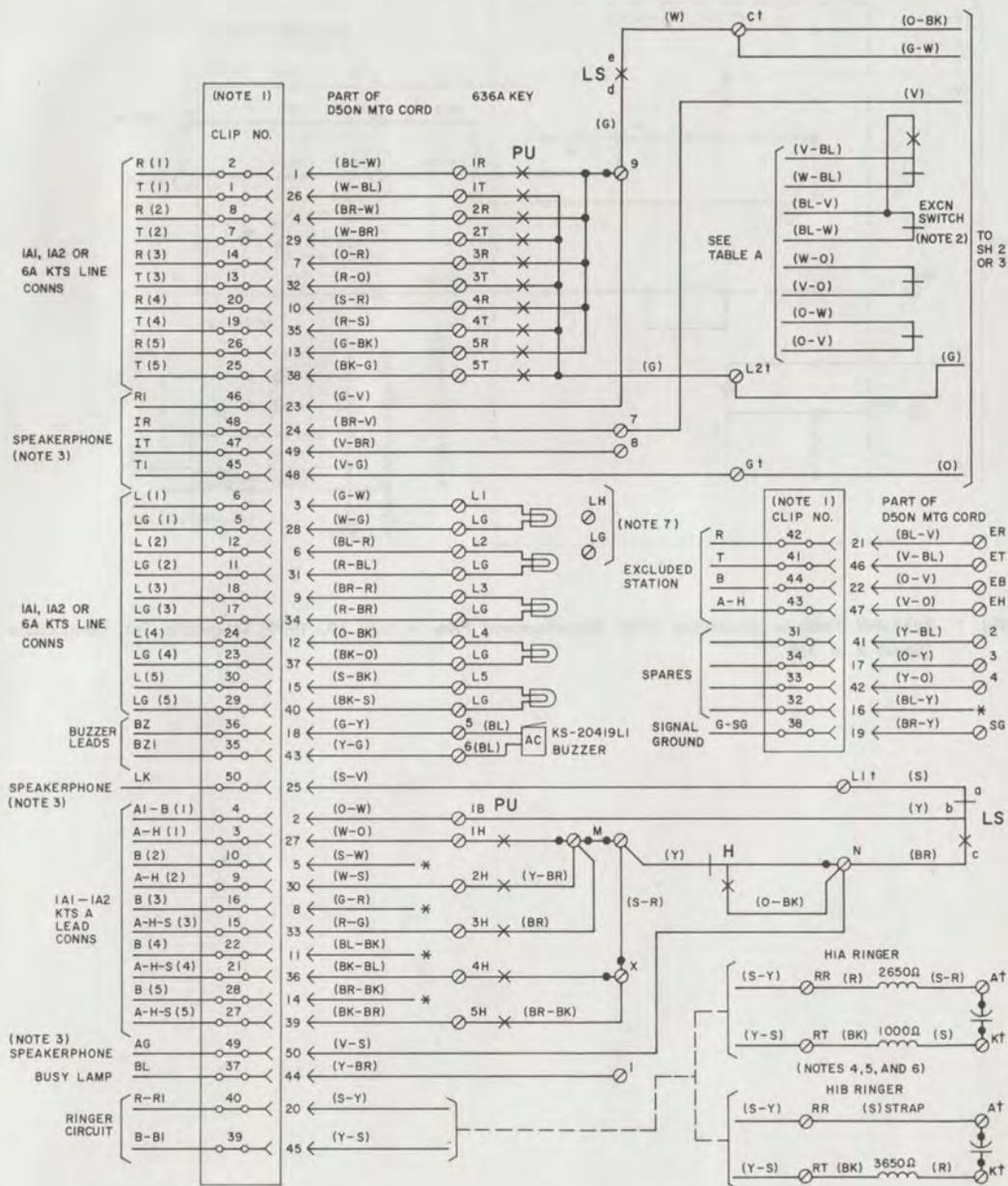
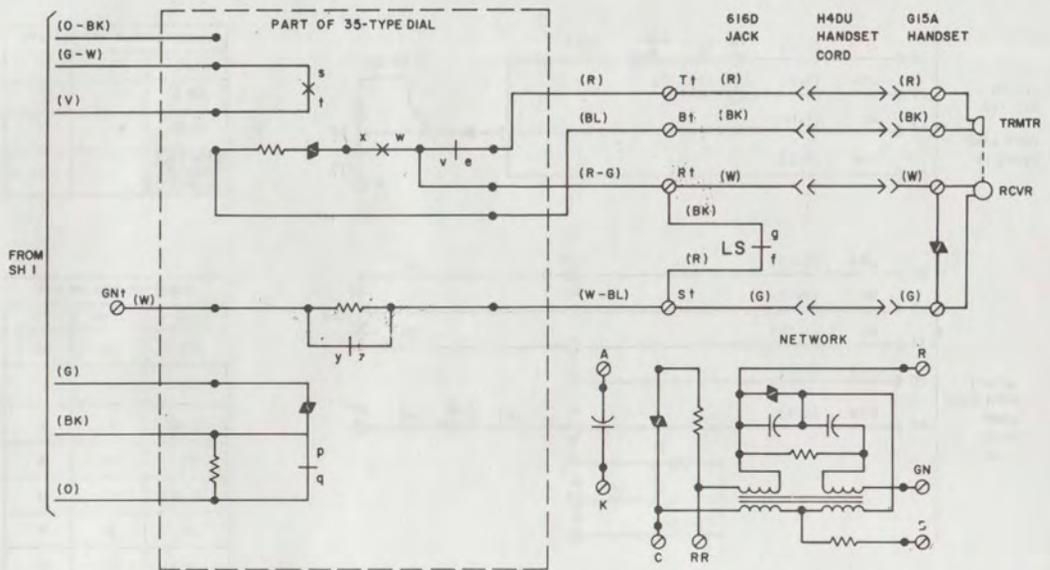


Fig. 1—2565HK (MD) or 2565HKM [(MD) Manufactured Prior to July 20, 1979] Telephone Set, Connections (Sheet 1 of 3)









## NOTES:

- 66E-TYPE CONNECTING BLOCK SHOWN. MOUNTING CORD MAY BE PLUGGED DIRECTLY INTO CONNECTOR CABLE. COLORS AND PIN NUMBERS FOR CONNECTOR CABLE ARE SAME AS MOUNTING CORD.
- IF EXCLUSION FEATURE IS ADDED, CONNECT SWITCH LEADS PER TABLE A.
- WHEN A SPEAKERPHONE IS INSTALLED, CONNECT (G-V) MOUNTING CORD LEAD TO TERMINAL 9 AND (V-G) MOUNTING CORD LEAD TO NETWORK TERMINAL G. ALSO, REMOVE (G) LEAD FROM NETWORK TERMINAL L2 AND CONNECT TO NETWORK TERMINAL F.
- FOR BRIDGED RINGER ON ANY LINE USING HIB RINGER, REMOVE (S) STRAP LEAD FROM RR (KEY TERMINAL BOARD) AND CONNECT TO RING AND REMOVE (BK) RINGER LEAD FROM RT (KEY TERMINAL BOARD) AND CONNECT TO TIP OF LINE INVOLVED.
- IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT, MOVE THE (R) RINGER LEAD TO A OF NETWORK.
- TO SILENCE RINGER PERMANENTLY REFER TO SECTION 501-294-100.
- IF HOLD POSITION LAMP IS REQUIRED, USE SPARE PAIR AND TERMINATE ON LH AND LG TERMINALS.

PU - PICKUP KEY

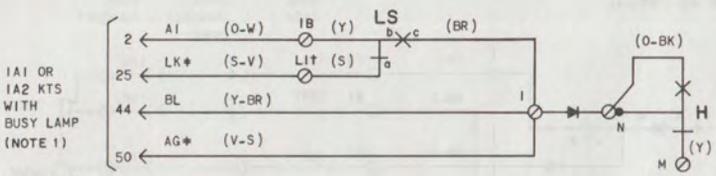
H - HOLD KEY

LS - LINE SWITCH

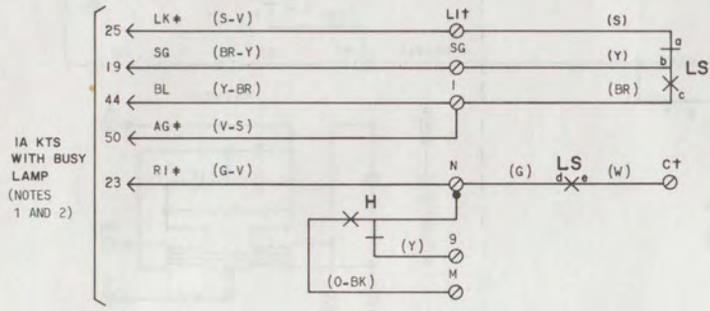
\* - INSULATED AND STORED

† - NETWORK TERMINAL - UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD.

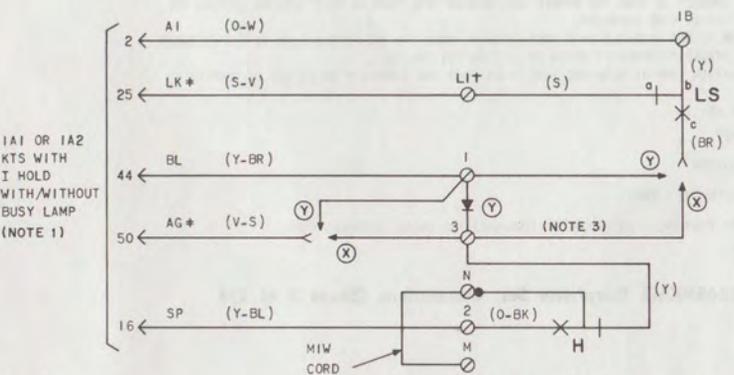
Fig. 2—2565HKMS Telephone Set, Connections (Sheet 2 of 2)



MODIFICATION IA1-IA2 KTS		
LEAD	FROM	TO
(BR)	N	I
(V-S)	N	I
533K DIODE (ORDERED SEPARATELY)		I TO N



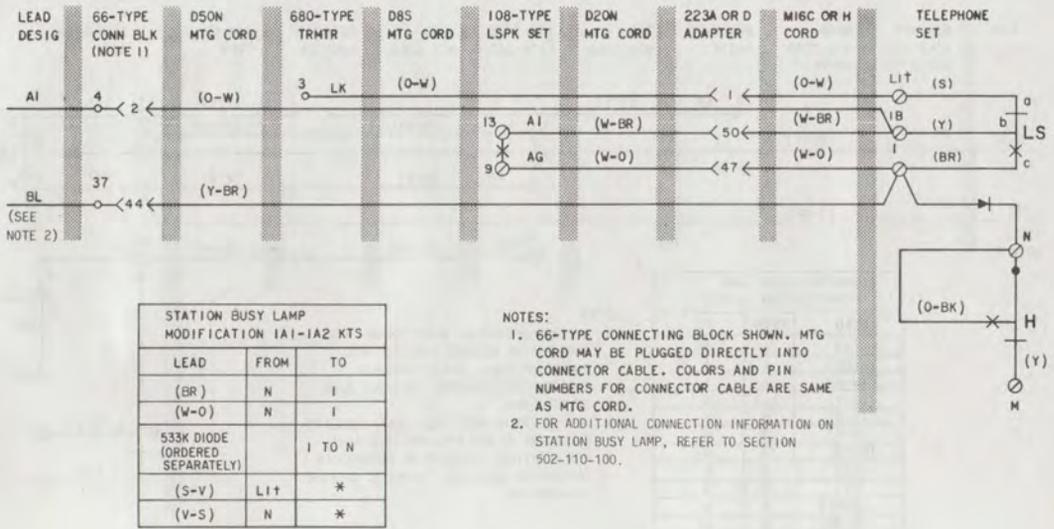
MODIFICATION IA KTS		
LEAD	FROM	TO
(Y)	IB	SG
(BR)	N	I
(V-S)	N	I
(Y)	M	9
(O-BK)	N	M
(G)	9	N
(G-V)	9	N



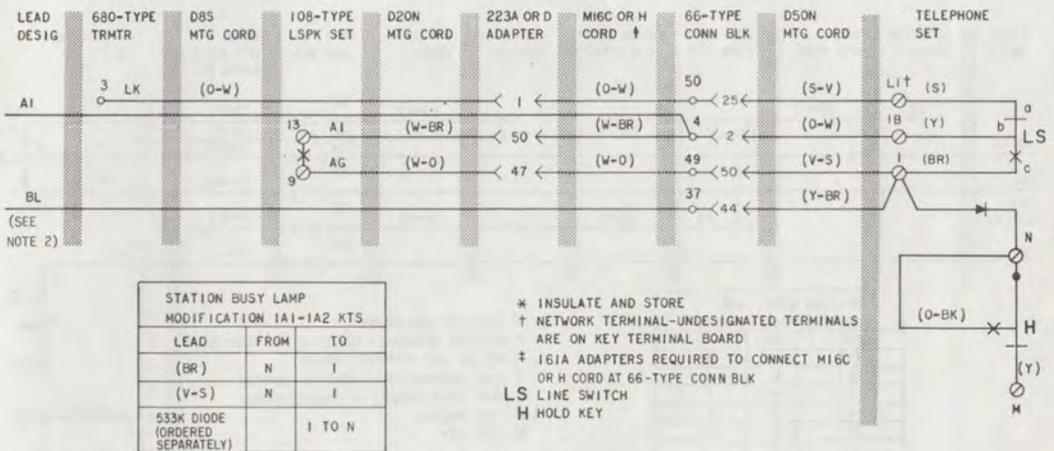
MODIFICATION I HOLD AND IA1-IA2 KTS			
	LEAD	FROM	TO
WITH BUSY LAMP OPTION (Y)	(BR)	N	I
	(V-S)	N	I
	533K DIODE (ORDERED SEPARATELY)		I TO 3
	(Y)	M	3
	(O-BK)	N	2
WITHOUT BUSY LAMP OPTION (X)	(BR)	N	3
	(V-S)	N	3
	(Y)	M	3
	(O-BK)	N	2
	MIW CORD		N TO M

- NOTES:
- FOR ADDITIONAL CONNECTION INFORMATION ON STATION BUSY LAMP, REFER TO SECTION 502-110-100.
  - FOR IA KTS WITHOUT BUSY LAMP, INSULATE AND STORE (Y-BR) D50N MTG CORD LEAD.
  - REMOVE (O-Y) D50N MTG CORD LEAD FROM KEY TERMINAL 3. INSULATE AND STORE.
- † NETWORK TERMINALS. UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD  
 ‡ 3-TYPE SPEAKERPHONE LEAD  
 LS - LINE SWITCH  
 H - HOLD KEY

Fig. 3—Optional Features with 3-Type (MD) Speakerphone

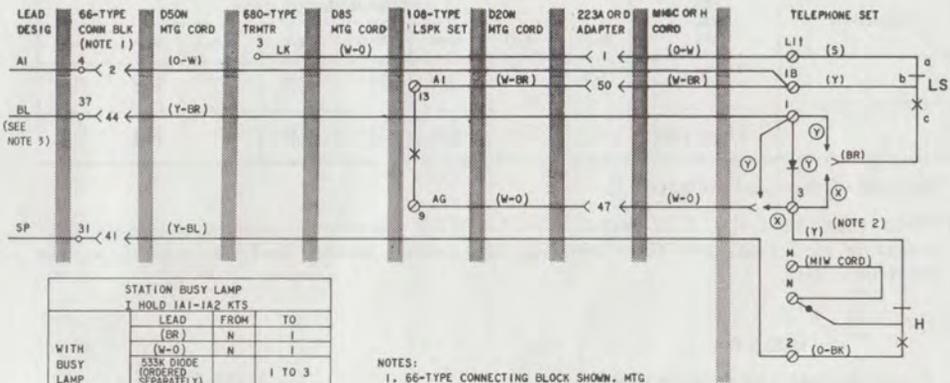


A. 1A1-1A2 KTS WIRED FOR BUSY LAMP WITH M16C OR H CORD TERMINATED IN TEL SET



B. 1A1-1A2 KTS WIRED FOR BUSY LAMP WITH M16C OR H CORD TERMINATED AT 66-TYPE CONN BLK

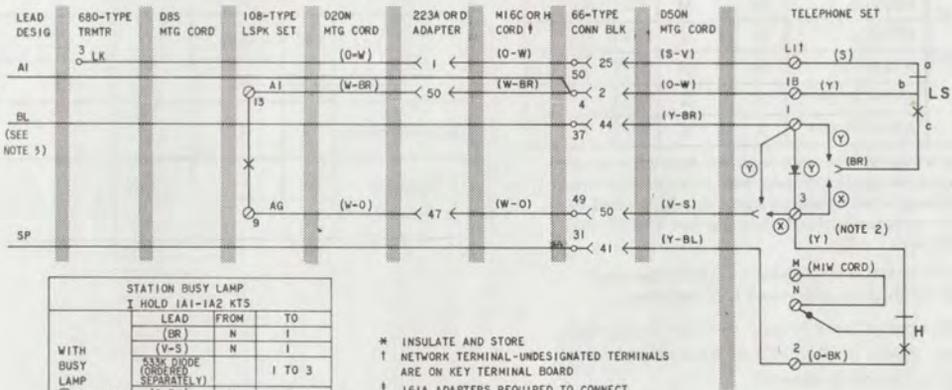
Fig. 4—Optional Features with 4A Speakerphone (Sheet 1 of 3)



STATION BUSY LAMP † HOLD 1A1-1A2 KTS			
	LEAD	FROM	TO
WITH BUSY LAMP (Y) OPTION	(BR)	N	1
	(W-O)	N	1
	333K DIODE (ORDERED SEPARATELY)		1 TO 3
	(O-BK)	N	2
	(Y)	M	3
	MIW CORD		N TO M
WITHOUT BUSY LAMP (X) OPTION	(BR)	N	3
	(W-O)	N	3
	(O-BK)	N	2
	(Y)	M	3
WITH OR WITHOUT BUSY LAMP	(S-V)	L1†	*
	(Y-S)	N	*

- NOTES:
- 66-TYPE CONNECTING BLOCK SHOWN. MTG CORD MAY BE PLUGGED DIRECTLY INTO CONNECTOR CABLE. COLORS AND PIN NUMBERS FOR CONNECTOR CABLE ARE SAME AS MTG CORD.
  - REMOVE (O-Y) D50W MTG CORD LEAD FROM KEY TERM. 3, INSULATE AND STORE.
  - FOR ADDITIONAL CONNECTION INFORMATION ON STATION BUSY LAMP, REFER TO SECTION 502-110-100.

A. 1A1-1A2 KTS WIRED FOR BUSY LAMP AND I HOLD WITH M16C OR H CORD TERMINATED IN TEL SET



STATION BUSY LAMP † HOLD 1A1-1A2 KTS			
	LEAD	FROM	TO
WITH BUSY LAMP (Y) OPTION	(BR)	N	1
	(V-S)	N	1
	333K DIODE (ORDERED SEPARATELY)		1 TO 3
	(O-BK)	N	2
	(Y)	M	3
	MIW CORD		N TO M
WITHOUT BUSY LAMP (X) OPTION	(BR)	N	3
	(V-S)	N	3
	(O-BK)	N	2
	(Y)	M	3
WITH OR WITHOUT BUSY LAMP	(S-V)	L1†	*
	(Y-S)	N	*

- \* INSULATE AND STORE  
 † NETWORK TERMINAL-UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD  
 ‡ 161A ADAPTERS REQUIRED TO CONNECT M16C OR H CORD AT 66-TYPE CONN BLK  
 LS LINE SWITCH  
 H HOLD KEY

B. 1A1-1A2 KTS WIRED FOR BUSY LAMP AND I HOLD WITH M16C OR H CORD TERMINATED AT 66-TYPE CONN BLK

Fig. 4—Optional Features with 4A Speakerphone (Sheet 3 of 3)

**TABLE A**  
**EXCLUSION SWITCH CONNECTIONS**

EXCLUSION	KEY TEL SYS	EXCLUSION SWITCH LEADS							
		BL-W	W-BL	O-W	W-O	BL-V	V-BL	O-V	V-O
On any line	1A	R*	T*	1B†	H*	ER	ET	EB	EH
	1A1 or 1A2	R*	T*	EB	H*	ER	ET	EB	EH

\*Terminal of line to be excluded.

† When other than line 1 is excluded on 1A KTS, disconnect, insulate, and store O-W mounting cord conductor from terminal 1B; connect balance lead conductor from line involved to 1B.

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

KEY TEL SET	CONVERSION OPTIONS	636A KEY LEADS			
		Y-BR	BR	S-R	BR-BK
2565HK, 2565HKM, or 2565HKMS	HPPPPP (Note)	M	M	M	X
	HPPPPS	M	M	M	SG
	HPPPSS	M	M	SG	X
	HPPSSS	M	X	SG	X
	HPPPP*S*	M	M	5H	†
	HPPP*P*S*	M	X	5H	†
	HPP*P*P*S*	X	X	5H	†

\* These arrangements use line switch controlled ground for common signal key used with private or intercommunicating lines. Common signal should be used to operate a common signal relay. Do not wire directly to a buzzer.

† Connect to the same terminals as (BR) line switch lead depending on option and KTS required.

**Note:** To convert from pickup (locking) to signaling (nonlocking) remove the 811218924 or P-12A892 screw detail at the key position being converted.

**TABLE C**  
**POLARITY GUARD CONNECTIONS [819040528 (P-90D052) GUARD ASSEMBLY]**

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