

## SERVICE

### 564B, 564C, 564D, AND 564H TELEPHONE SETS

#### 1. GENERAL

1.01 This section provides maintenance and connection information for the 564B, C, D, and H (MD) telephone sets previously contained in Section 502-525-400.

#### 2. MAINTENANCE

##### *Components*

2.01 Maintenance of handsets, dials, and ringers is outlined in sections covering these components.

##### *Removing and Replacing Housing*

2.02 To remove housing, loosen captive screws in base of set. Lift housing up and toward front of set.

2.03 To replace housing, guide lower front of housing over pushbuttons, align housing with base of set, and gently press housing into place. Tighten captive screws in base of set.

##### *Mounting Cords*

2.04 Replace mounting cords of early manufacture (Fig. 1) as follows:

- (1) Remove dial from its mounting bracket.
- (2) Remove terminal screws.
- (3) Disconnect spade-tipped conductors and wafer sections.
- (4) Disengage cord stay hook from right leg of dial mounting bracket.

2.05 Mounting cords of late manufacture feature a slotted wafer strip (Fig. 2) to facilitate replacement.

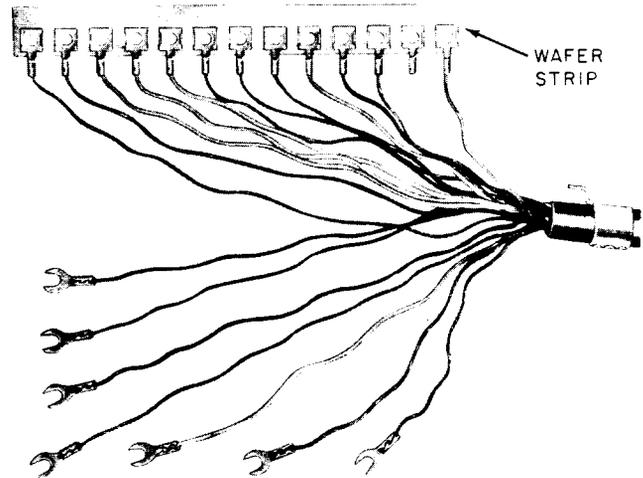


Fig. 1—Nonslotted Wafer Strip End of Mounting Cord, Early Type

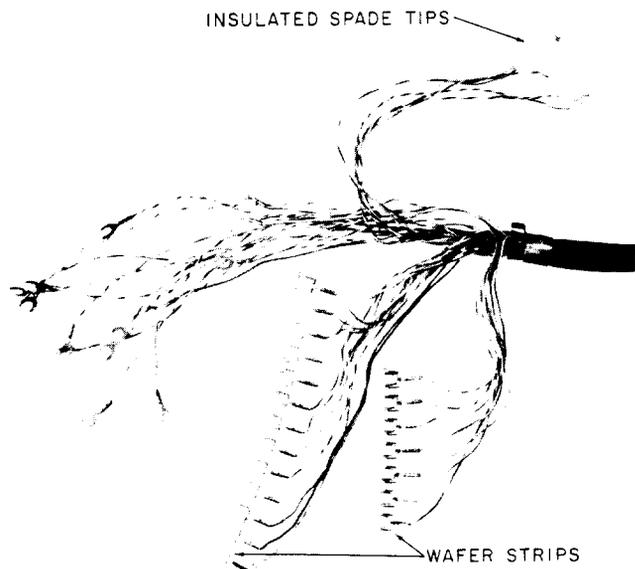


Fig. 2—Slotted Wafer Strip End of Mounting Cord, Later Type

**Lamps and Pushbuttons**

**2.06** Replace cracked pushbuttons or collars. Remove accumulated dirt or film from lamps, collars, and pushbuttons with a water dampened cloth. **DO NOT USE SOLVENTS OF ANY KIND.** If cleaning does not correct binding of pushbuttons, replace button and collar assembly.

**2.07** To replace defective lamp:

- (1) Remove dial from its mounting bracket and lay to one side. Leads need not be disconnected.
- (2) Lift lamp from socket with KS-6320 orange stick.
- (3) Align lamp contact surfaces when placing new lamp in socket.
- (4) Remount dial.

**2.08** The button and collar assembly should be carefully aligned to avoid interference with removal or replacement of housing.

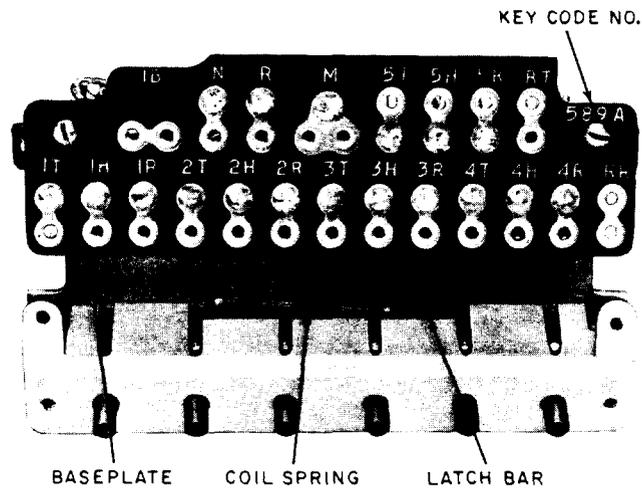
**589-Type Keys**

**2.09** Field maintenance of the 589-type key (Fig. 3 and 4) consists of:

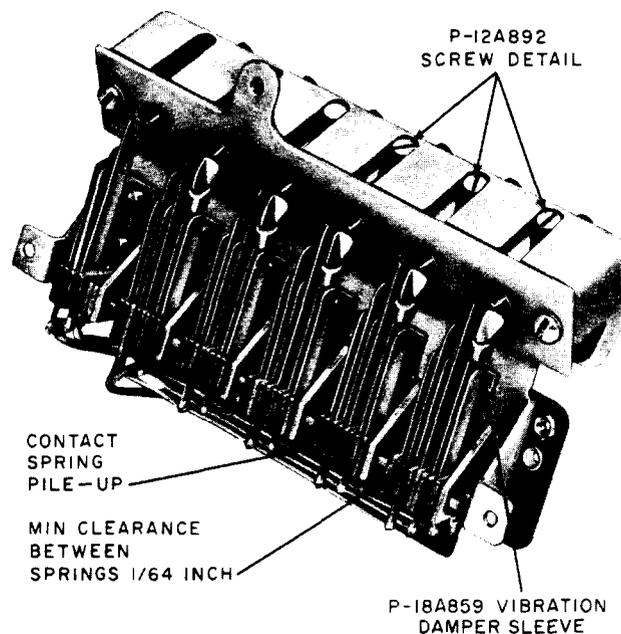
- (a) Cleaning contacts with a 265C tool.
- (b) Replacing loose or missing damper studs with P-18A859 vibration damper sleeves (Fig. 4). Later 589-type keys do not require this vibration damper.

**2.10** Contact follow and separation is obtained by using a 363 tool at a point adjacent to contact spring pile-up (Fig. 4). When adjusting springs:

- (a) There should be a minimum spring clearance of 1/64-inch between contact springs and those parts of the key which do not make contact with springs.
- (b) Normally open contacts should make with perceptible follow on locking keys before key plunger assumes locked position.



**Fig. 3—589-Type Key, Top View**



**Fig. 4—589-Type Key, Bottom View**

**2.11** Replace set if the following requirements cannot be met:

- (a) When depressed, locking plunger should on its downstroke release any previously locked plunger.

- (b) When any pushbutton plunger is released from its operated position, it should return with a snap to its nonoperated position.
- (c) An operated key plunger should not release during downstroke of hold button.
- (d) An operated key plunger should release from its operated position on the upstroke of the hold button.

**TABLE A**  
**PICKUP-SIGNAL KEY CONVERSION**

KEY TEL SET	CONVERTIBLE KEY OPTIONS	KEY LEADS			
		Y-BR	BR	S-BR	BK-BR
564H (MD)	HPPPPP	M	M	M	X
	HPPPPS	M	M	M	SG
	HPPSSS	M	M	SG	X
	HPPSSS	M	X	SG	X
	HPPP*P*S*	M	X	5H	N
	HPP*P*P*S*	X	X	5H	N

\* These pickup key options are used on private or intercommunicating lines with the signal key common to each line. The signal key will operate the signal circuit of each line when associated pickup key is depressed. Use S lead on 2nd, 3rd, or 4th pickup key as required and A1 lead for common signal ground.

**Note:** Pickup keys of the 564B (MD), 564C (MD), and 564D (MD) telephone sets are not convertible.

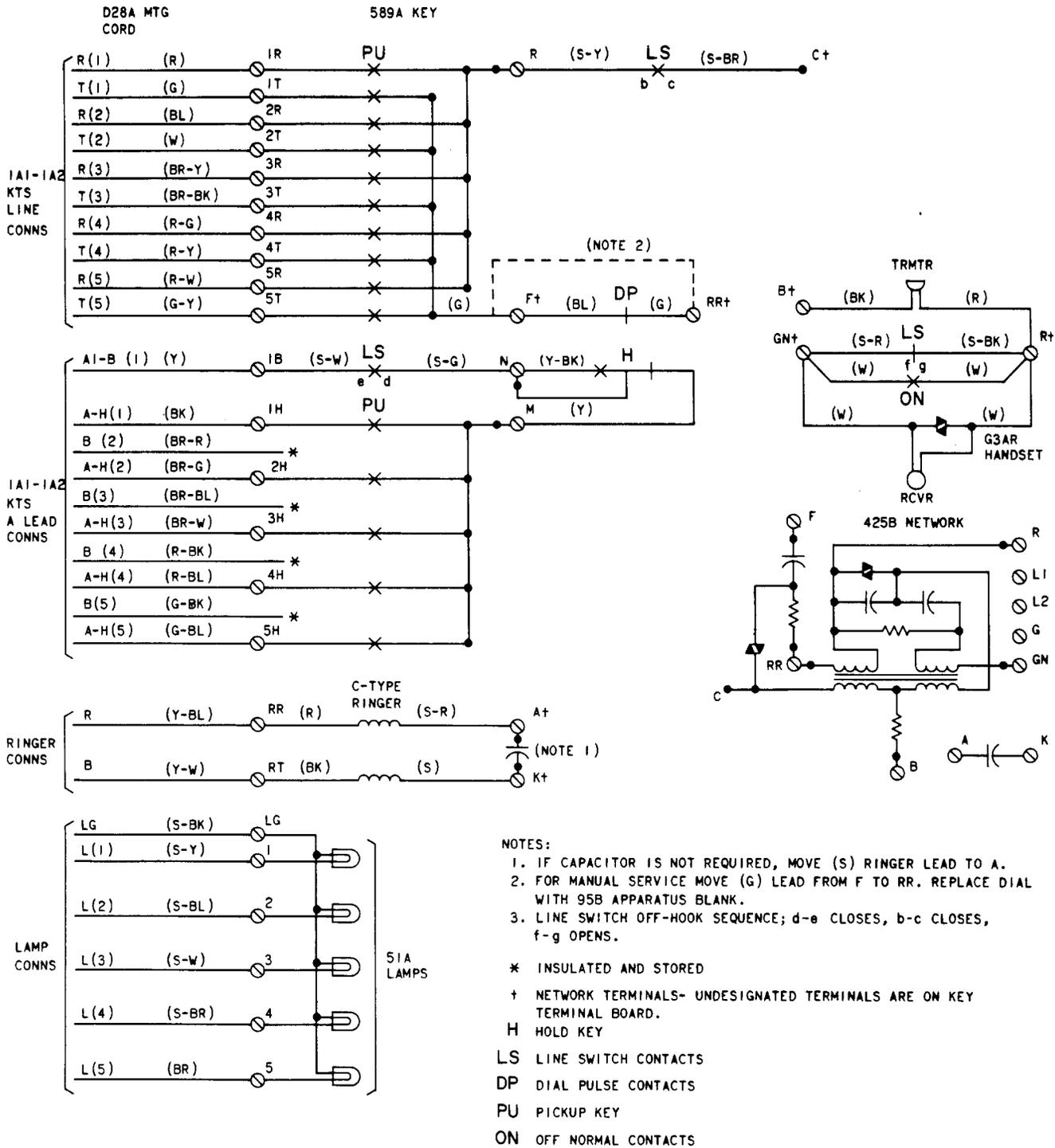


Fig. 5—564B (MD) Telephone Set, Connections

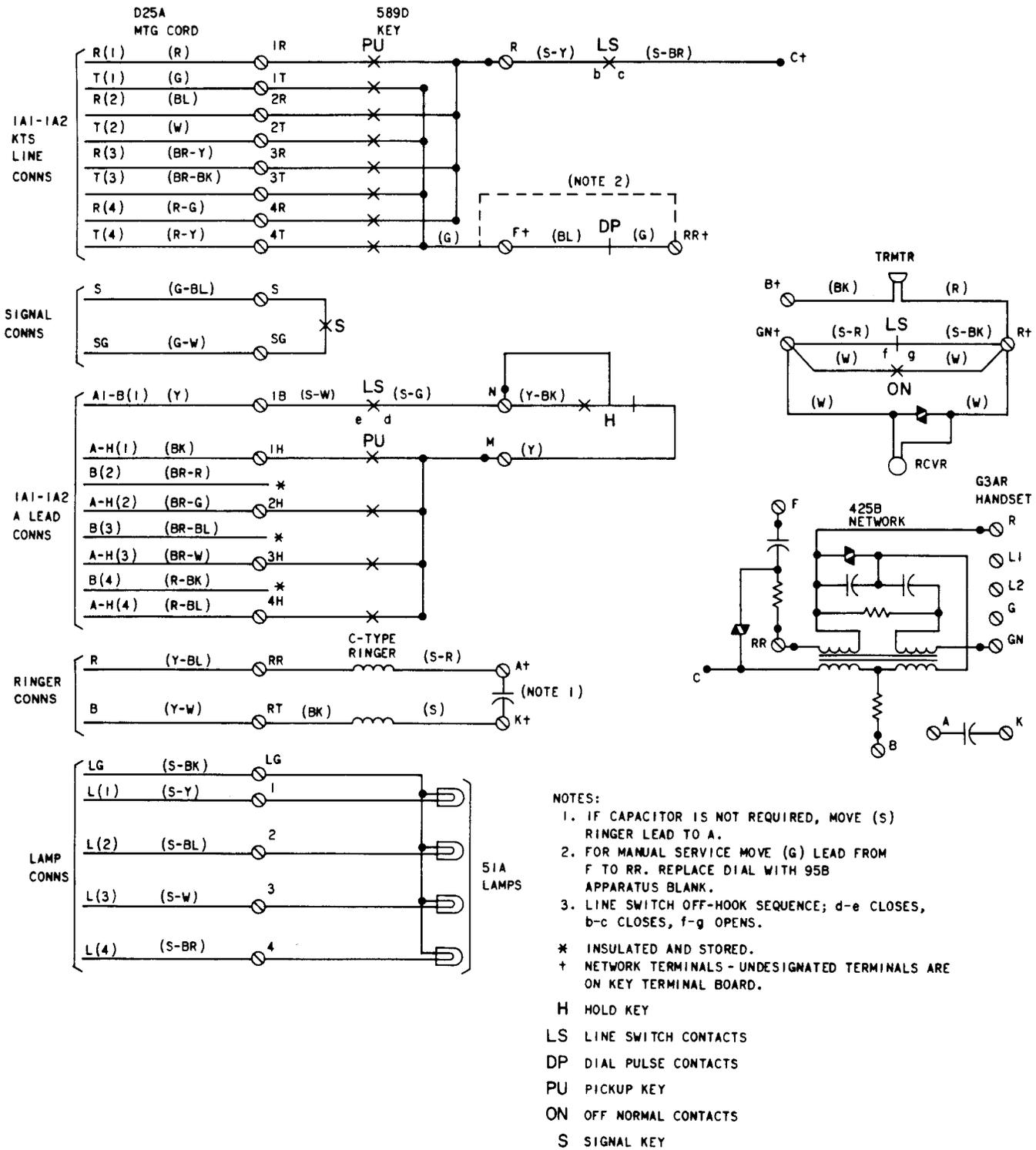


Fig. 6—564C (MD) Telephone Set, Connections

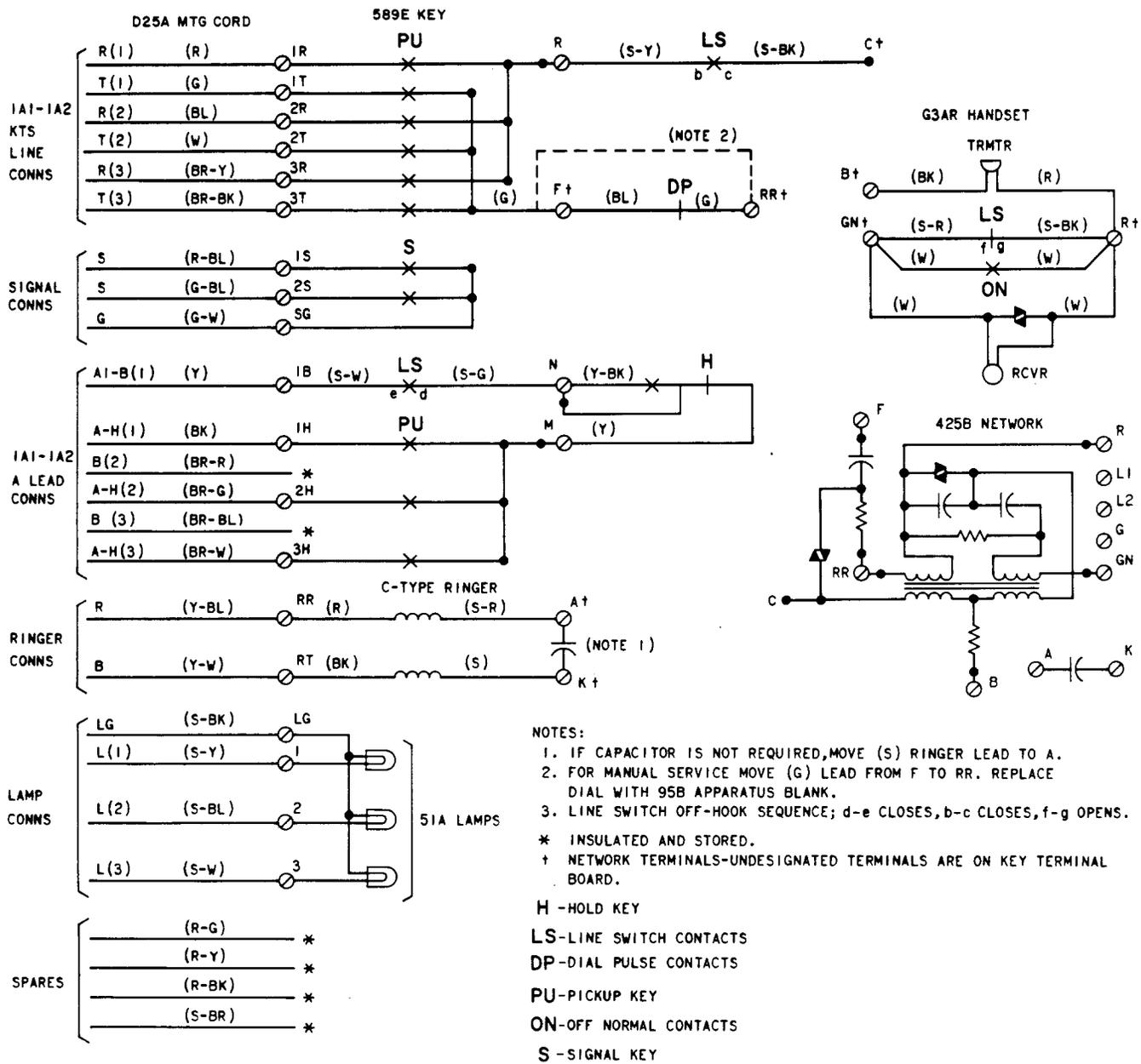


Fig. 7—564D (MD) Telephone Set, Connections

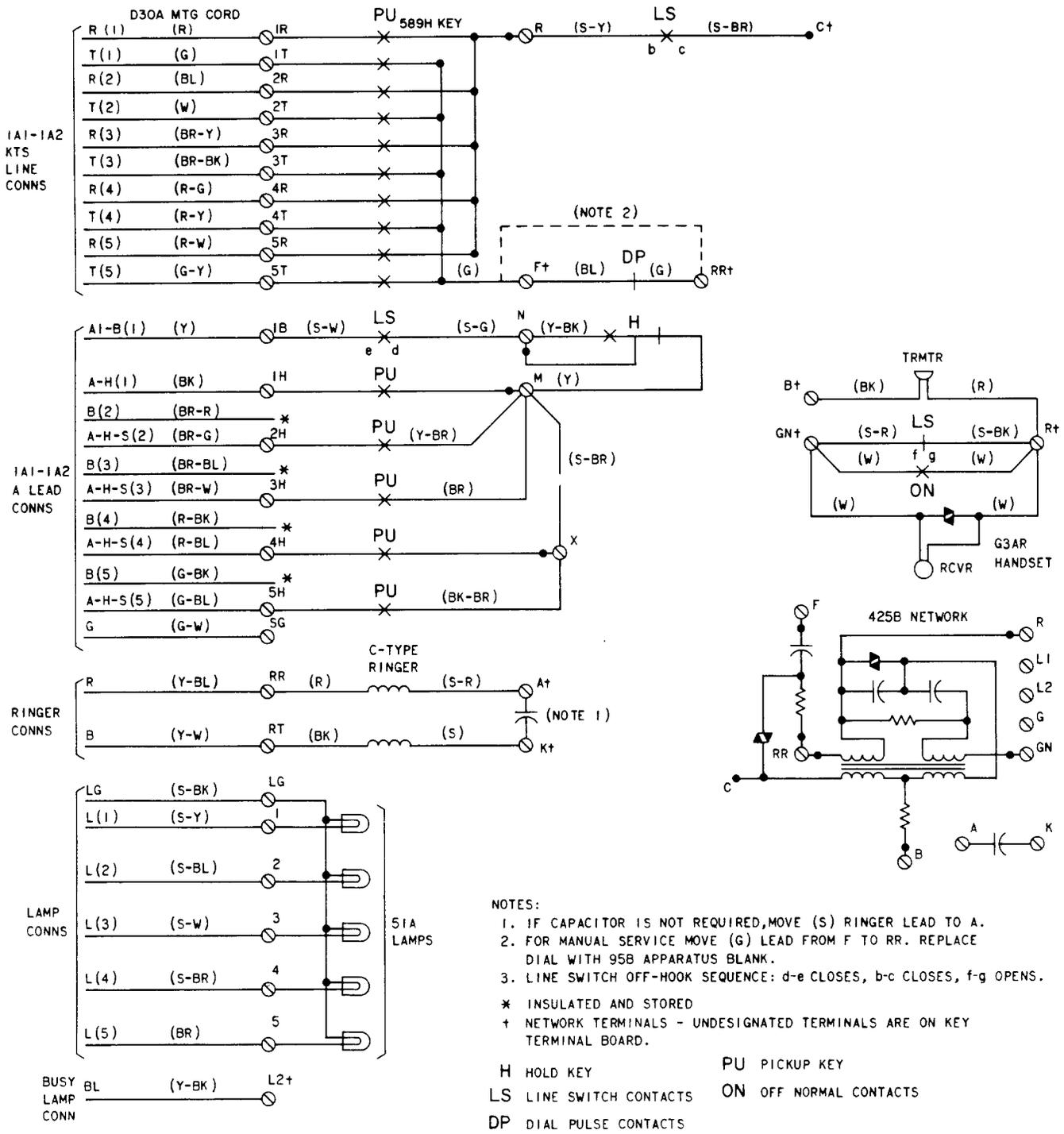


Fig. 8—564H (MD) Telephone Set, Connections

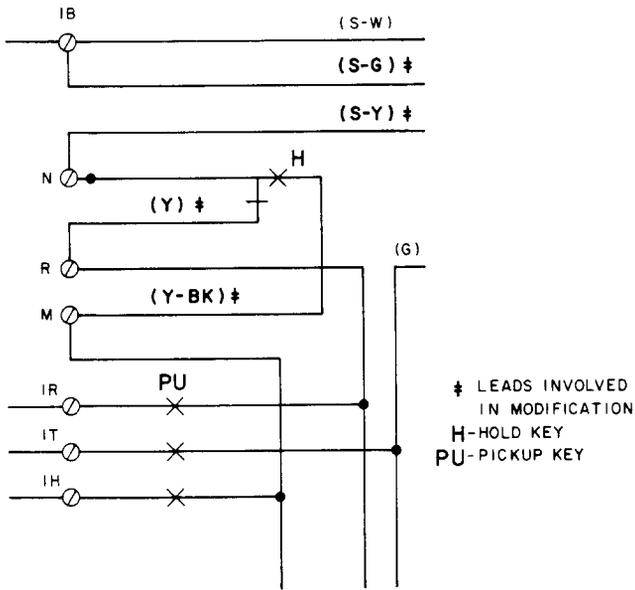
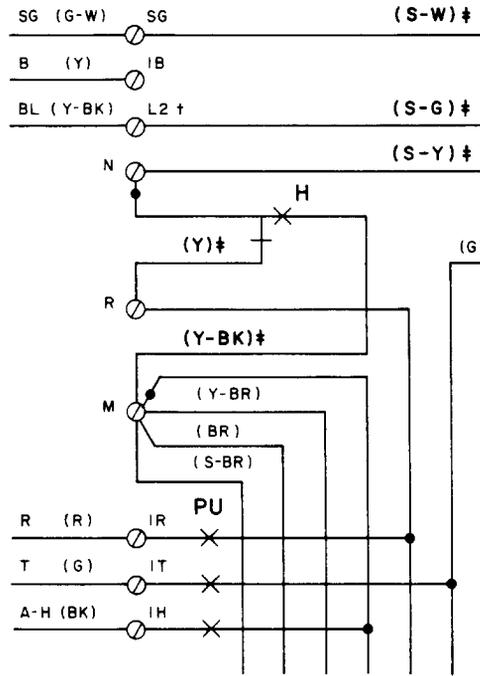
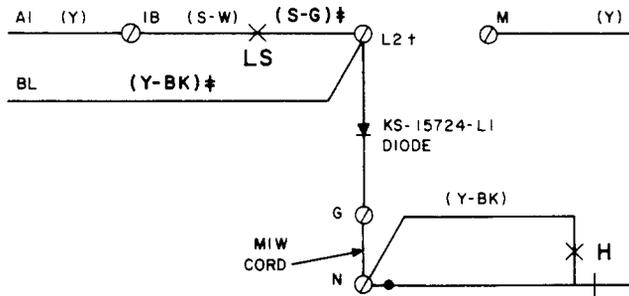


Fig. 9—564B, C, and D (MD) Telephone Sets Wired For 1A KTS



A- WIRED FOR 1A WITH BUSY LAMP OPTION



B- 1A1-1A2 KTS WIRED FOR BUSY LAMP OPTION

- † - NETWORK TERMINALS-UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD.
- ‡ - LEADS INVOLVED IN MODIFICATION
- H-HOLD KEY
- PU-PICKUP KEY
- LS-LINE SWITCH

Fig. 10—564H (MD) Telephone Set—Optional Features

**TABLE B**  
**TERMINATIONS AT CONNECTING BLOCK**  
**FOR 564B, 564C, 564D, AND 564H (MD) TELEPHONE SETS**

CKT	LEAD DESIG		KEY CABLE	CONN BLOCK		MOUNTING CORD LEADS			
	1A	1A1 OR 1A2	D TYPE	TERM.	NO.	564B (MD)	564C (MD)	564D (MD)	564H (MD)
Line 1	R	R	BL	1	1 Block Nearest Cord Butt	R	R	R	R
	T	T	W	2		G	G	G	G
	B	A1	O	4		Y	Y	Y	Y
	H	A	W	5		BK	BK	BK	BK
	Line 2 and Sig	R	R	G		6	BL	BL	BL
T		T	W	7		W	W	W	W
B		—	BR	9		BR-R	BR-R	BR-R	BR-R
Line 3 and Sig	H-S	A-S	W	10		BR-G	BR-G	BR-G	BR-G
	R	R	S	3		BR-Y	BR-Y	BR-Y	BR-Y
Line 4 and Sig	T	T	W	8		BR-BK	BR-BK	BR-BK	BR-BK
	B	—	BL	1	2	BR-BL	BR-BL	BR-BL	BR-BL
H-S	A-S	R	2	BR-W		BR-W	BR-W	BR-W	
Line 5 and Sig	R	R	O	4		R-G	R-G	R-G*	R-G
	T	T	R	5		R-Y	R-Y	R-Y*	R-Y
	B	—	G	6		R-BK	R-BK	R-BK*	R-BK
Sig Grd	H-S	A-S	R	7		R-BL	R-BL	R-BL	R-BL
	R	R	BR	9		R-W			R-W
Sta Bsy Lp	T	T	R	10		G-Y			G-Y
	B	—	S	3		G-BK			G-BK
Ringer or Buz	H-S	A-S	R	8		G-BL	G-BL	G-BL	G-BL
	G	G	BL	1		G-W	G-W	G-W	
Excluded Ckt	BL	BL	BK	2				Y-BK	
	R	R	O	4	Y-BL	Y-BL	Y-BL	Y-BL	
Lamp 1	B	B	BK	5	Y-W	Y-W	Y-W	Y-W	
	R	R	G	6					
Lamp 2	T	T	BK	7					
	B	†	BR	9					
Lamp 3	H	A	BK	10					
			S	3					
Lamp 4			BK	8					
	L	L	BL	1	4 Place Straps	S-Y	S-Y	S-Y	S-Y
LG	LG	Y	2†	S-BK		S-BK	S-BK	S-BK	
Lamp 5	L	L	O	4		S-BL	S-BL	S-BL	S-BL
	LG	LG	Y	5†					
Lamp 6	L	L	G	6		S-W	S-W	S-W	S-W
	LG	LG	Y	7†					
Lamp 7	L	L	BR	9		S-BR	S-BR	S-BR*	S-BR
	LG	LG	Y	10†					
Lamp 8	L	L	S	3		BR			BR
	LG	LG	Y	8†					

\* Not used in set.

† To advance A1 lead to excluded station, place strap at connecting block from terminal 4 of 1st block to terminal 9 of 3rd block.

‡ Strap common at connecting block.