

## TELEPHONE SETS — 2568HP/HU

### IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE



- 2-AND 4-WIRE SERVICE
- END-TO-END SIGNALING
- EXCLUSION
- SPEAKERPHONE (OPTIONAL)

Fig. 1 — 2568HP (MD) and 2568HU Telephone Set

#### 1. GENERAL

1.01 The 2568-type telephone set (Fig. 1) is intended solely for use with specially engineered lines — *not for general telephone use.*

1.02 This section is reissued to:

- Add 425K network (2568HU)
- Include connections formerly found in Section 529-225-468
- Revise Tables
- Revise set connection figures

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

#### 2. IDENTIFICATION

##### ORDERING GUIDE

Set, Telephone, 2568HP-\* (MD)

Set, Telephone, 2568HU-\*

##### (a) Replaceable Common Components

- Cord, Mounting D50N-\*
- Key, 636D
- Lamp, 51A
- P-12A858 Blocking Ring (Shipped loose)
- P-21F159 Switch Assembly (Line)
- P-25E118 Switch Assembly (Exclusion)
- P-25E120 Button and Collar Assembly
- P-25E785 Card Retainer
- P-86D7\* Faceplate
- P-90D052 Guard Assembly
- Set, Hand, G3Y-\*

##### (b) Replaceable Components [2568HP (MD) only]

- Dial, 35C3B
- P-25E963 Relay Assembly (4-wire)
- P-88B9\* Housing Assembly
- Ringer, H1A

##### (c) Replaceable Components (2568HU only)

- Dial, 35C3A
- P-88E5\* Housing Assembly
- P-90D062 Printed Wiring Board Assembly (4-wire relay)
- P-90D064 Bracket, Arm, and Component Assembly (includes N1A Ringer)

\* Add appropriate color suffix from Table A.

(d) *Replaceable Optional Components*

- Buzzer, KS-8109L2

TABLE A

## TELEPHONE SET AND FACEPLATE COLOR GUIDE

TELEPHONE SET*		FACEPLATE	
STANDARD COLOR	SUFFIX	COORDINATED COLOR	SUFFIX
Black	-03	Charcoal	-70
Green	-51	Lt. Green	-71
Red	-53	Muted Red	-69
Yellow	-56	Lt. Yellow	-72
White	-58	Lt. Gray	-73
Rose Pink	-59	Muted Pink	-74
Lt. Beige	-60	Muted Beige	-75
Lt. Gray	-61	Charcoal	-70
Aqua Blue	-62	Muted Blue	-76
Turquoise	-64	Muted Turquoise	-77

\* Refer to Section 500-120-100 for promoted colors.

## DESIGN FEATURES

- 2- and 4-wire operation
- 5-line pickup (illuminated key buttons)
- Hold on all lines (key button arranged for but not equipped with 51A lamp for illumination)
- Three pickup keys convertible for signaling
- Common ringer
- Extension exclusion
- End-to-end signaling
- Six transfer switch hook
- AC or DC operated buzzer (optional)
- Speakerphone (optional)

## APPLICATION

- Central Office, PBX, and private or inter-communicating 2- and 4-wire lines
- 1A1, 1A2, and 6A key telephone system line circuits

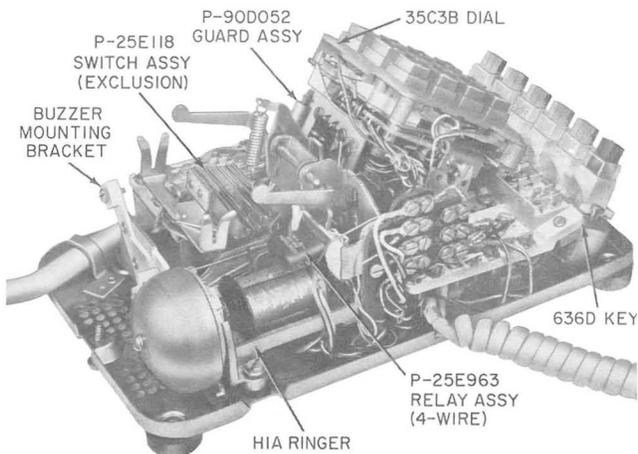


Fig. 2 — 2568HP (MD) Telephone Set, Housing Removed

## OPERATING FEATURES

- Exclusion Switch:** operated by left line switch plunger (pull up to operate exclusion; depress to restore).
- Ringer Volume Control:** provides manual control of ringer volume [accessible from bottom of 2568HP (MD) set, left side of 2568HU set].

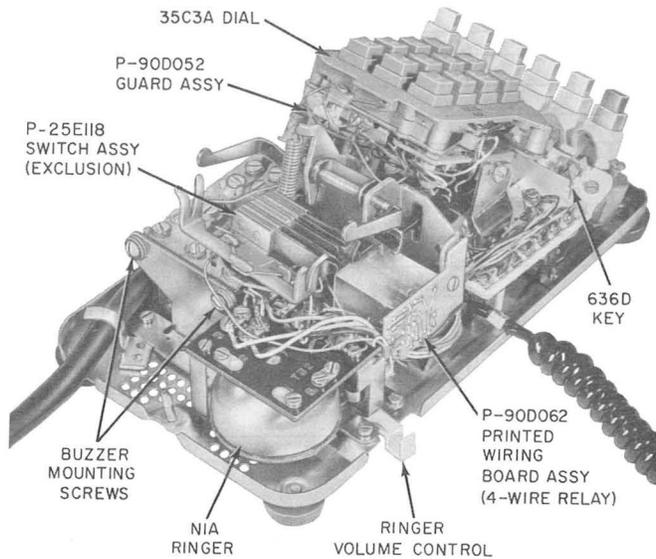
## OPTIONAL FEATURES

- Buzzer:** a KS-8109L2 or equivalent buzzer may be mounted on the bracket provided (Fig. 2 and 3).

## 3. INSTALLATION

(a) *Planning*

- Consider safety for yourself, customer, and maintenance personnel
- Location — desk, table, console, etc.
- Space requirements
- Distance between associated apparatus and equipment
- User convenience
- General appearance of installation



**Fig. 3 — 2568HU Telephone Set, Housing Removed**

**(b) Installing**

- Install sets in accordance with standard installation procedures.
- Use electricians scissors or diagonal cutting pliers to remove insulators from stored spade-tipped leads (to avoid stripping tips or damaging conductors) when optional connections are made.
- Install the KS-8109L2 buzzer (ordered separately) on mounting bracket using hardware provided. Make sure buzzer is insulated from metal base of set.

**4. CONNECTION INDEX**



*No changes in wiring other than those specified in this section shall be made.*

Table B — Pickup-Signal Key Conversion

Table C — Exclusion Conversion

Table D — Speakerphone Connections

Table E — Conductor Assignments Using 66E-Type Connecting Block or A25B Connector Cable

Table F — 2568HU Telephone Set Ringer or Buzzer Connections

Table G — 2568HP (MD) Telephone Set Ringer or Buzzer Connections

Fig. 4 — 2568HU Telephone Set, Connections

Fig. 5 — 2568HP (MD) Telephone Set, Connections

Fig. 6 — Buzzer Connections

Refer to SD-69487-01 for connections to speakerphone system

**5. MAINTENANCE**

- (a) These sets are maintained in accordance with standard procedures for TOUCH-TONE® key telephone sets.
- (b) See appropriate sections for maintenance of individual components such as handsets, ringers, and dials.

SECTION 529-225-134

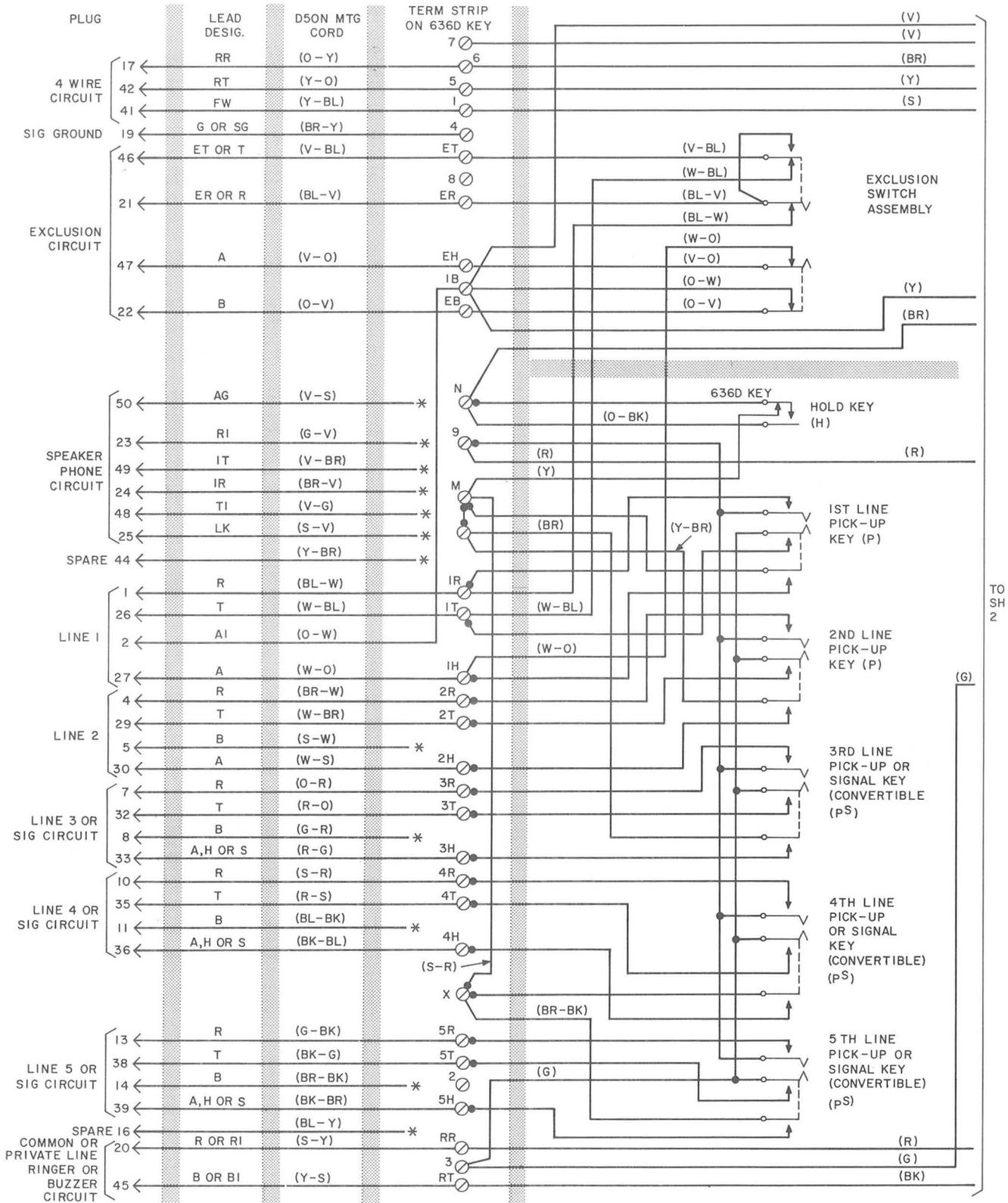


Fig. 4 — 2568HU Telephone Set, Connections (Sheet 1 of 2)

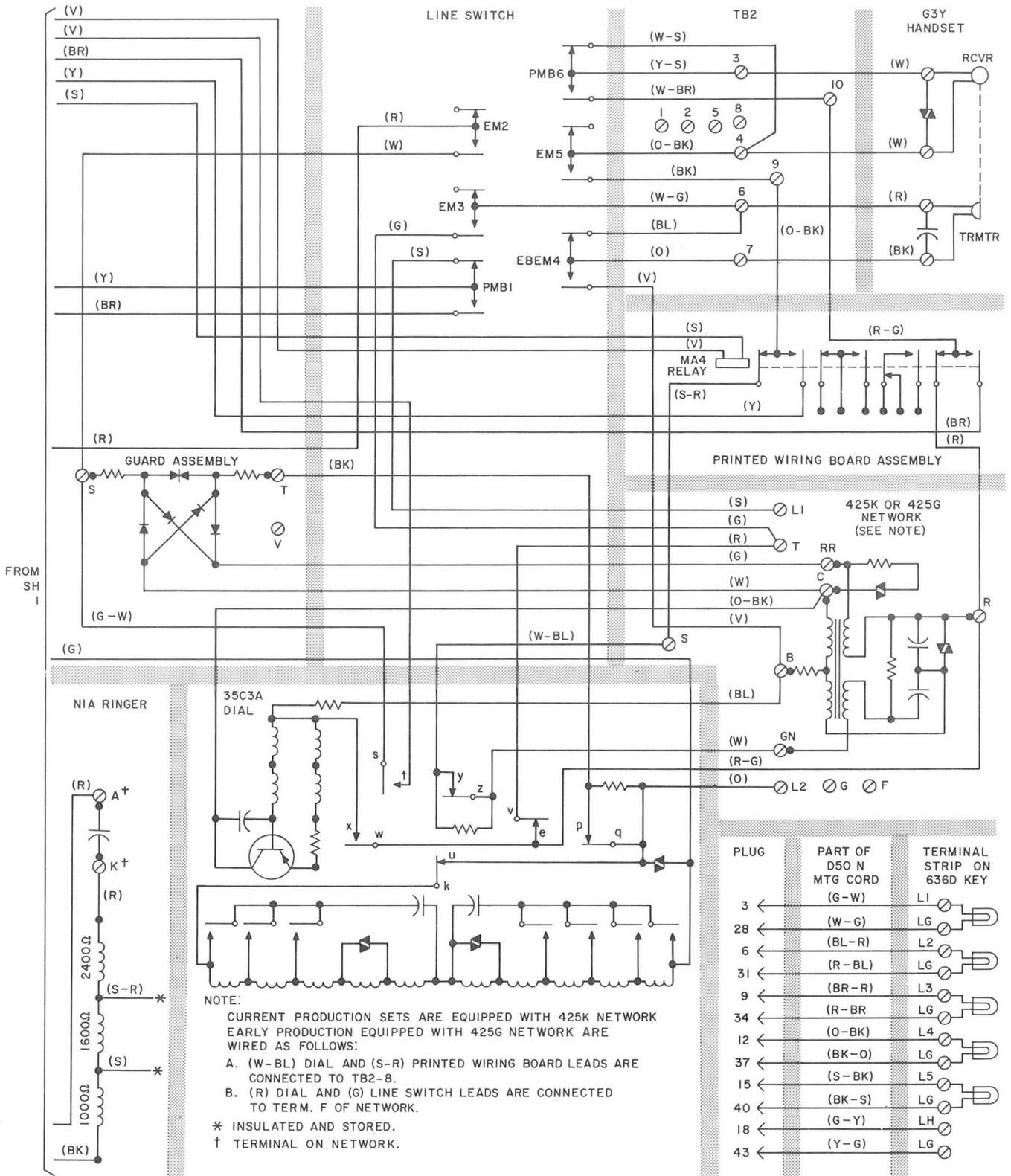


Fig. 4 — 2568HU Telephone Set, Connections (Sheet 2 of 2)

SECTION 529-225-134

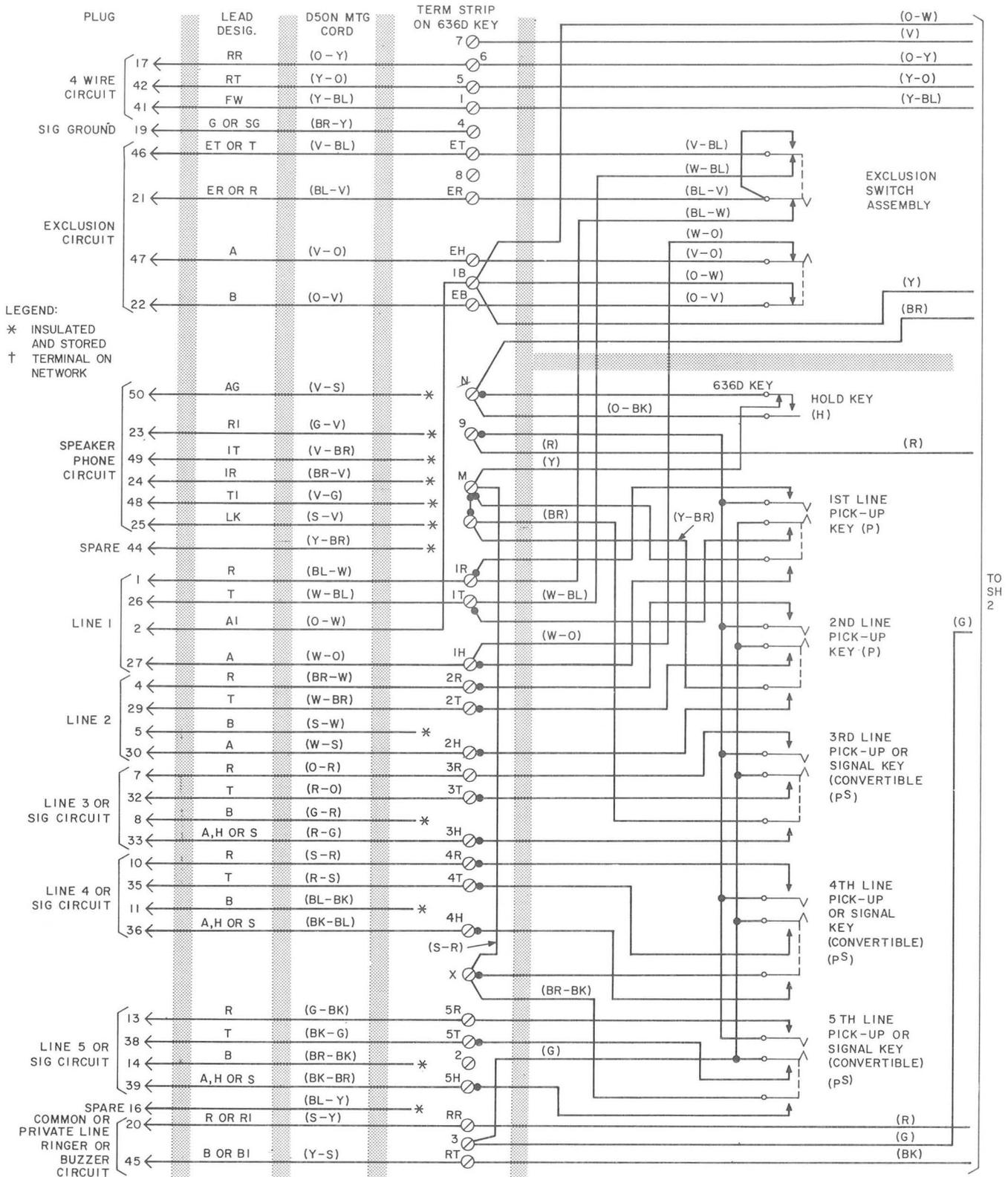


Fig. 5 — 2568HP (MD) Telephone Set, Connections (Sheet 1 of 2)

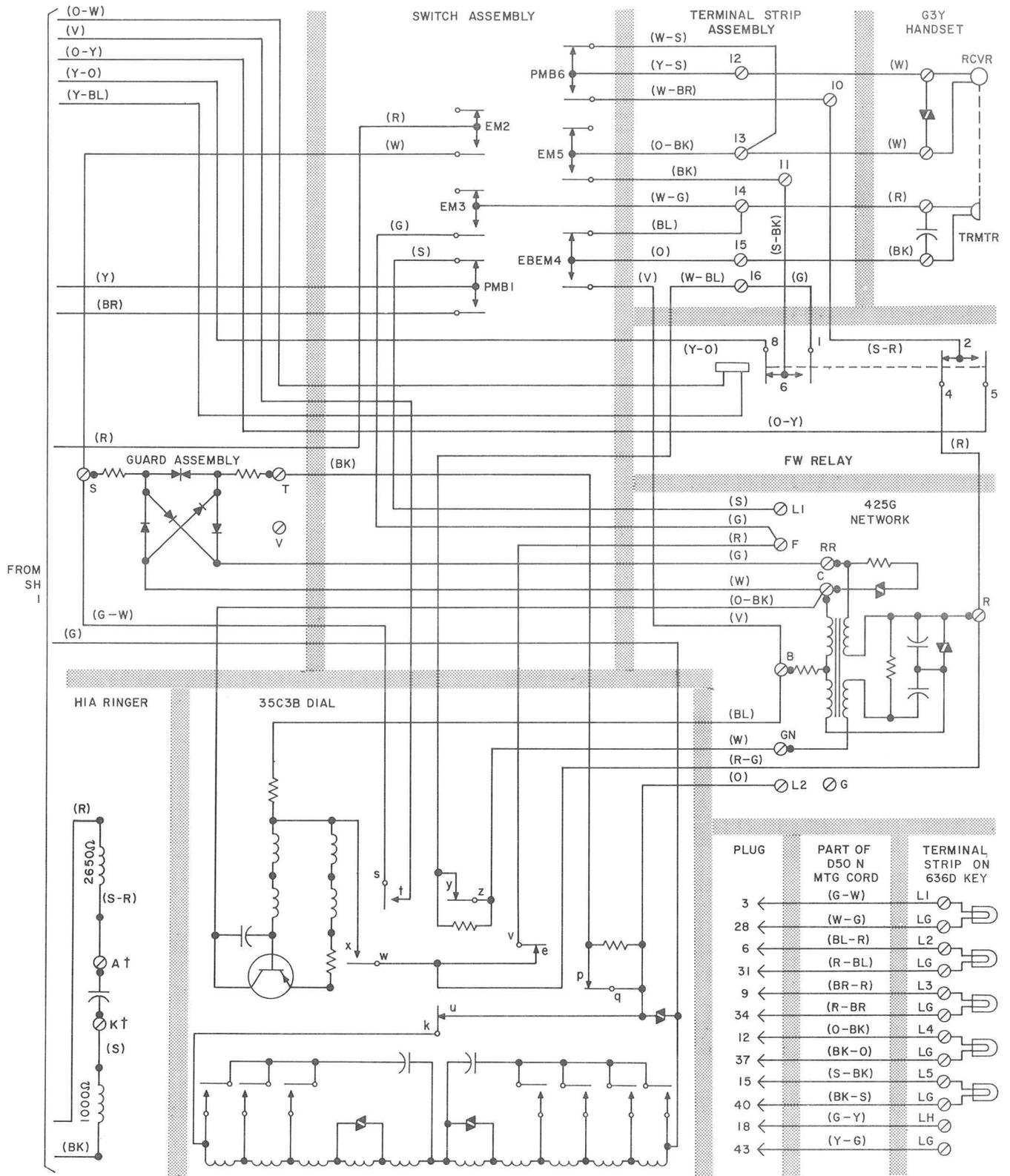


Fig. 5 — 2568HP (MD) Telephone Set, Connections (Sheet 2 of 2)

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

CONVERTIBLE-KEY OPTIONS	KEY LEADS		
	BR	S-R	BR-BK
HPPPPP	M	M	X
HPPPPS	M	M	4
HPPPSS	M	4	X
HPPSSS	X	4	X

\* All convertible key positions are arranged in the shop as pickup positions. To convert a key position from pickup (locking) to signal (non-locking), remove the P-12A892 screw detail and make necessary connection changes. To convert a key position from nonlocking to locking, reverse above procedure. When using convertible keys for signaling, use S lead of key involved for signal circuit and G lead for common signal ground.

**TABLE C**  
**EXCLUSION CONVERSION**

EXCLUSION OPTION	EXCLUSION KEY LEADS		
	BL-W	W-BL	W-O
Line 1 (2-wire)*	1R	1T	1H
Line 2 (2-wire)	2R	2T	2H
Line 3 (2-wire)	3R	3T	3H
Line 4 (2-wire)	4R	4T	4H
Line 5 (2-wire)	5R	5T	5H
4-wire†	‡	‡	‡

\* Set is shop wired to provide exclusion for 2-wire service on line 1.

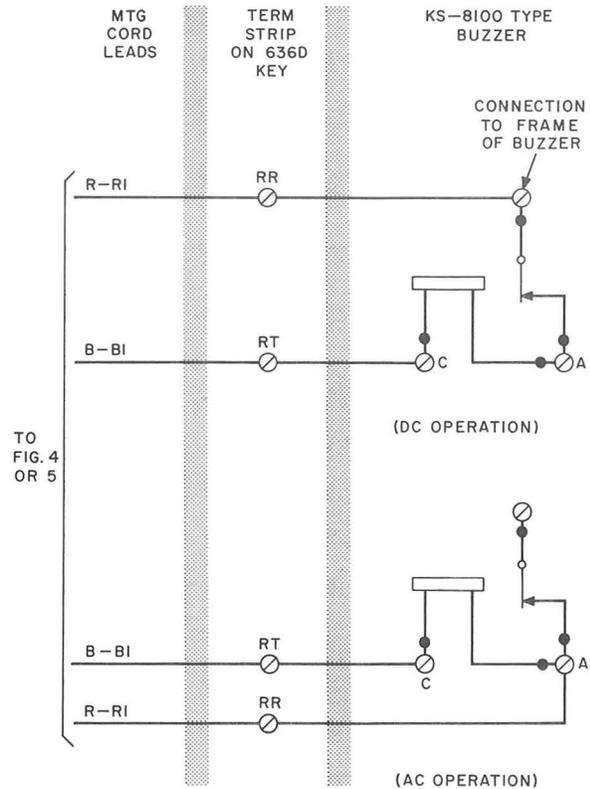
† Connect ET(V-BL) and ER(BL-V) from set to external pickup relay associated with control station.

‡ Individually insulate and store.

**TABLE D**  
**SPEAKERPHONE CONNECTIONS**

MOUNTING CORD LEAD		CONNECT TO TEL SET TERMINAL
COLOR	DESIG	
G-V	R1	9
V-G	T1	T (Polarity Guard)
BR-V	IR	7
V-BR	IT	*
S-V	LK	L1 (ON Network)
V-S	AG	N

\* Insulated and stored.



**Fig. 6 — Buzzer Connections**

TABLE E

## CONDUCTOR ASSIGNMENTS USING 66E-TYPE CONNECTING BLOCK OR A25B CONNECTOR CABLE

LEAD DESIG	MOUNTING CORD			A25B CONNECTOR CABLE			66E-TYPE CONNECTING BLOCK	
	CORD CONDUCTOR	TEL SET TERMINAL	PIN NO.	CONNECTOR CABLE PAIR NO.	CONDUCTOR COLOR	PIN NO.	CLIP TERMINAL NO.	BLOCK NO.
T	W-BL	1T	26	1	W-BL	26	1	1
R	BL-W	1R	1		BL-W	1	2	
A	W-O	1H	27	2	W-O	27	3	
A1	O-W	1B	2		O-W	2	4	
LG	W-G	LG	28	3	W-G	28	5	
L1	G-W	L1	3		G-W	3	6	
T	W-BR	2T	29	4	W-BR	29	7	
R	BR-W	2R	4		BR-W	4	8	
A	W-S	2H	30	5	W-S	30	9	
B	S-W	*	5		S-W	5	10	
LG	R-BL	LG	31	6	R-BL	31	11	
L2	BL-R	L2	6		BL-R	6	12	
T	R-O	3T	32	7	R-O	32	13	
R	O-R	3R	7		O-R	7	14	
A, H, or S	R-G	3H	33	8	R-G	33	15	
B	G-R	*	8		G-R	8	16	
LG	R-BR	LG	34	9	R-BR	34	17	
L3	BR-R	L3	9		BR-R	9	18	
T	R-S	4T	35	10	R-S	35	19	
R	S-R	4R	10		S-R	10	20	
A, H, or S	BK-BL	4H	36	11	BK-BL	36	21	
B	BL-BK	*	11		BL-BK	11	22	
LG	BK-O	LG	37	12	BK-O	37	23	
L4	O-BK	L4	12		O-BK	12	24	
T	BK-G	5T	38	13	BK-G	38	25	
R	G-BK	5R	13		G-BK	13	26	
A, H, or S	BK-BR	5H	39	14	BK-BR	39	27	
B	BR-BK	*	14		BR-BK	14	28	
LG	BK-S	LG	40	15	BK-S	40	29	
L5	S-BK	L5	15		S-BK	15	30	
FW	Y-BL	1	41	16	Y-BL	41	31	
Spare	BL-Y	*	16		BL-Y	16	32	
RT	Y-O	5	42	17	Y-O	42	33	
RR	O-Y	6	17		O-Y	17	34	
	Y-G	LG	43	18	Y-G	43	35	
	G-Y	LH	18		G-Y	18	36	
Spare	Y-BR	*	44	19	Y-BR	44	37	
G or SG	BR-Y	4	19		BR-Y	19	38	
B or B1	Y-S	RT	45	20	Y-S	45	39	
R or R1	S-Y	RR	20		S-Y	20	40	
ET or T	V-BL	ET	46	21	V-BL	46	41	
ER or R	BL-V	ER	21		BL-V	21	42	
A	V-O	EH	47	22	V-O	47	43	
B	O-V	EB	22		O-V	22	44	
T1	V-G	*†	48	23	V-G	48	45	
R1	G-V	*†	23		G-V	23	46	
IT	V-BR	*†	49	24	V-BR	49	47	
IR	BR-V	*†	24		BR-V	24	48	
AG	V-S	*†	50	25	V-S	50	49	
LK	S-V	*†	25		S-V	25	50	

\*Leads individually insulated and stored.

†For speakerphone feature, terminate these leads as shown in Table D.

**TABLE F**  
**2568HU TELEPHONE SET RINGER OR BUZZER CONNECTIONS**

OPTION		N1A RINGER LEADS					BUZZER	
		S-R	S	R	BK	STRAP (R) BETWEEN	CONNECT USING M1W CORD OR EQUIV.	
Bridged ringer on any line		*	*	K of net.	T†	A of network and R†		
Common or private line ringer or buzzer§	With Capacitor	*	*	K of net.	RT	A of network and RR‡		
	Without Capacitor§	*	*	A of net.	RT	A of network and RR‡	RT	RR
Ringer permanently silenced		*	*	K of net.	*	A of network and RR‡		

\* Individually insulated and stored.

† Terminals of line involved.

‡ RR terminal on terminal strip.

§ Connect ringer without capacitor as common, private, or intercommunicating line signal unless otherwise directed.

**Note:** Connect KS-8100 type buzzer in place of set ringer (Fig. 6).

**TABLE G**  
**2568HP (MD) TELEPHONE SET RINGER OR BUZZER CONNECTIONS**

OPTION		H1A RINGER LEADS				BUZZER	
		S-R	S	R	BK	CONNECT USING M1W CORD OR EQUIV.	
Bridged ringer on any line		A of net.	K of net.	R†	T†		
Common or private line ringer or buzzer§	With Capacitor	A of net.	K of net.	RR‡	RT		
	Without Capacitor	A of net.	A of net.	RR‡	RT	RR‡	RT
Ringer permanently silenced		A of net.	K of net.	*	*		

\* Individually insulated and stored.

† Terminals of line involved.

‡ RR terminal on terminal strip.

§ Connect ringer without capacitor as common, private, or intercommunicating line signal unless otherwise directed.

**Note:** Connect KS-8100 type buzzer in place of set ringer (Fig. 6).