

REFERENCE

2500M, 2500S, 2500Y, AND 2514B TELEPHONE SETS

1. GENERAL

1.01 This section provides identification, installation, maintenance, and connection information for special purpose telephone sets previously contained in Sections 502-510-121, 502-510-452, 502-510-454, 502-510-456, and 502-520-124 which are hereby canceled.

2. IDENTIFICATION

2.01 The 2500M, S, Y and 2514B telephone sets are equipped with a 12-button TOUCH-TONE® dial.

Design Features and Application

2.02 The 2500M telephone set provides an A lead control circuit or bridged ringer for use in 1A1 or 1A2 key telephone systems and 507A and 507B PBX attendant stations.

2.03 The 2500S telephone set provides connections for 3A speakerphone.

2.04 The 2500Y telephone set provides a message waiting feature.

2.05 The 2514B has jacks which accept an optional operators headset for use on 1A1 or 1A2 KTS. A turnbutton key is also provided for switching from handset to headset operation.

Ordering Guide

2.06 Basic Telephone Sets

Set, Telephone, 2500M-*

Set, Telephone, 2500S-*

Set, Telephone, 2500Y-*

Set, Telephone, 2514B-*

*Refer to Table A for color.

TABLE A
COLOR ORDERING GUIDE*

TEL SET, CORD HOUSING, HANDSET COLOR		COORDINATED FACEPLATE† COLOR	
Black	-03	Charcoal	-70
Ivory	-50	Muted Ivory	-80
Moss Green	-51	Light Green	-71
Red	-53	Muted Red	-69
Pastel Yellow	-56	Light Yellow	-72
White	-58	Light Gray	-73
Rose Pink	-59	Muted Pink	-74
Light Beige	-60	Muted Beige	-75
Light Gray	-61	Charcoal	-70
Aqua Blue	-62	Muted Blue	-76
Turquoise	-64	Muted Turquoise	-77

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

† Faceplates of same color as housing may be ordered (optional).

2.07 Refer to Table B for component ordering guide.

Operating Features

2.08 The 642A key on the 2514B telephone set switches mode of operation from handset to headset.

Optional Features

2.09 End-to-end signaling requires installation of polarity guard assembly when specified by local instructions. Refer to Table C.

3. INSTALLATION

3.01 Refer to Section 502-120-201 for installation information on the 2500S, Y, and M telephone sets.

3.02 Install the 2514B telephone set in accordance with standard procedures for desk-type telephone set, assuring that the jacks on the rear of the set are accessible to the user.

3.03 The D10P mounting cord is equipped with spade-tipped conductors for connection to standard 44-type connecting blocks.

Optional Buzzers (2514-type only)

3.04 To install KS-8109 type buzzer:

(a) Mount buzzer in space provided on jack mounting bracket near the network. Buzzer frame must be insulated from metal base of set.

(b) Connect buzzer as follows:

(1) To provide AC buzzer operation, terminate the BZ (BR-W) lead of the mounting cord to the A terminal of the buzzer and the BZ1 (W-BR) lead to the C terminal.

(2) To provide DC buzzer operation, terminate the BZ (BR-W) lead of the mounting cord to the frame of the buzzer by placing it under one of the mounting screws. Terminate the BZ1 (W-BR) lead to terminal C of the buzzer.

Note: Buzzer leads BZ (BR-W) and BZ1 (W-BR) may be connected to the R, R1, or BZ and B, B1, or BZ1 terminals, respectively, at the associated switching equipment to provide the required buzzer operation.

(c) Replace housing and faceplate.

3.05 To install KS-20419 buzzer:

(a) Place the KS-20419 buzzer inside the telephone set where it will not interfere with electrical or mechanical operation of the telephone set. The buzzer circuit is insulated from the case and bracket so that the buzzer can be attached to metal parts of the set.

(b) Connect buzzer leads to (BR-W) and (W-BR) mounting cord leads using D-161488 connectors or spare terminals.

4.01 Plungers, operating bracket switch and line switch shall move freely without binding or squeaking.

- Clean with KS-2423 cloth moistened with KS-7860 petroleum spirits.

- Lubricate plungers and bearing surfaces with No. 2 or softer graphite pencil.

4.02 Clean line switch contacts when required with a 265C tool. Replace set if other trouble exists in the line switch assembly.

4.03 Maintenance of 2514B telephone sets includes cleaning external plastic parts; replacement of defective apparatus, burnishing line switch and turn key contacts, or replacing entire set.

4.04 See sections covering maintenance of dials, handsets, ringers, etc., for maintenance of these components.

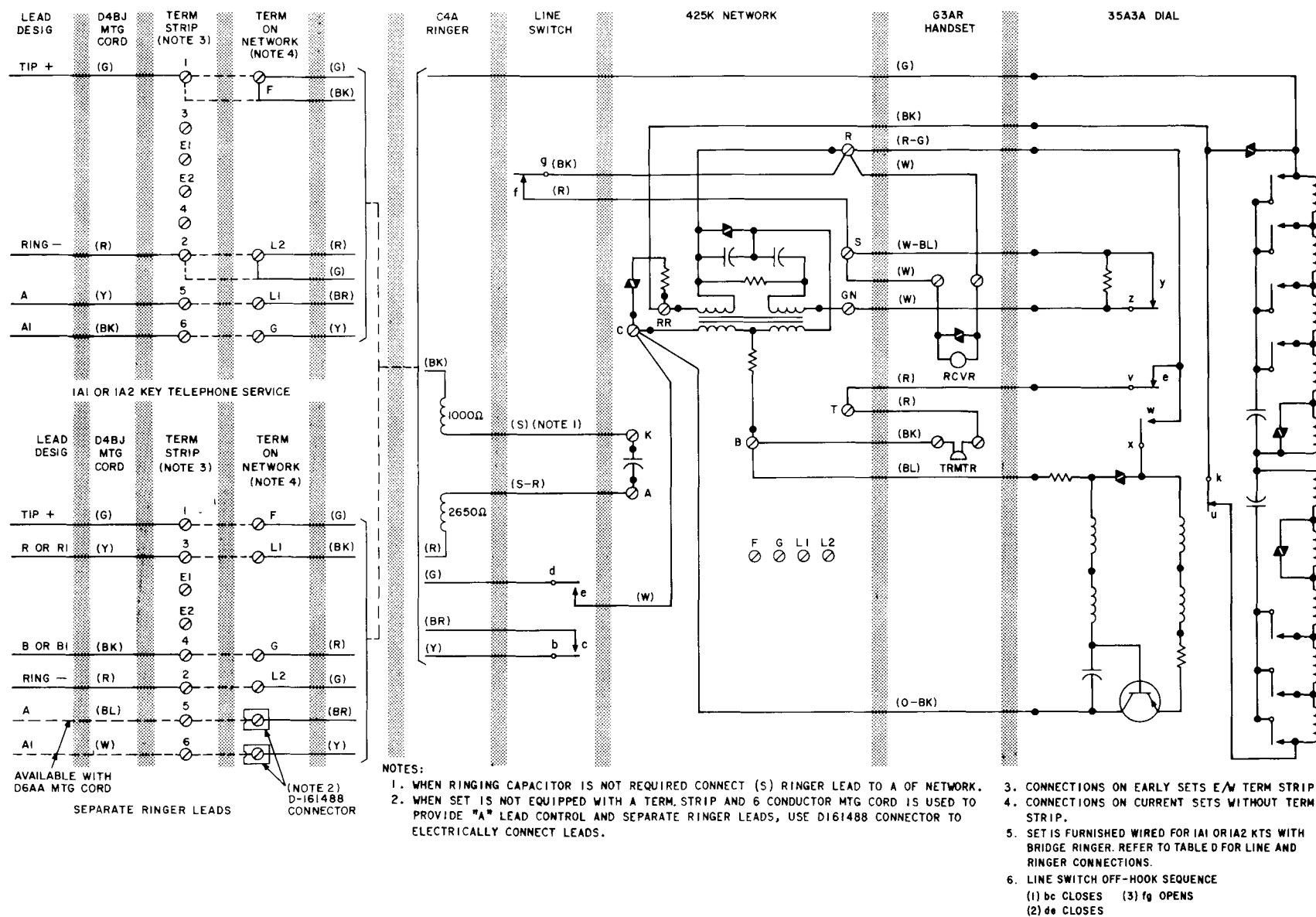
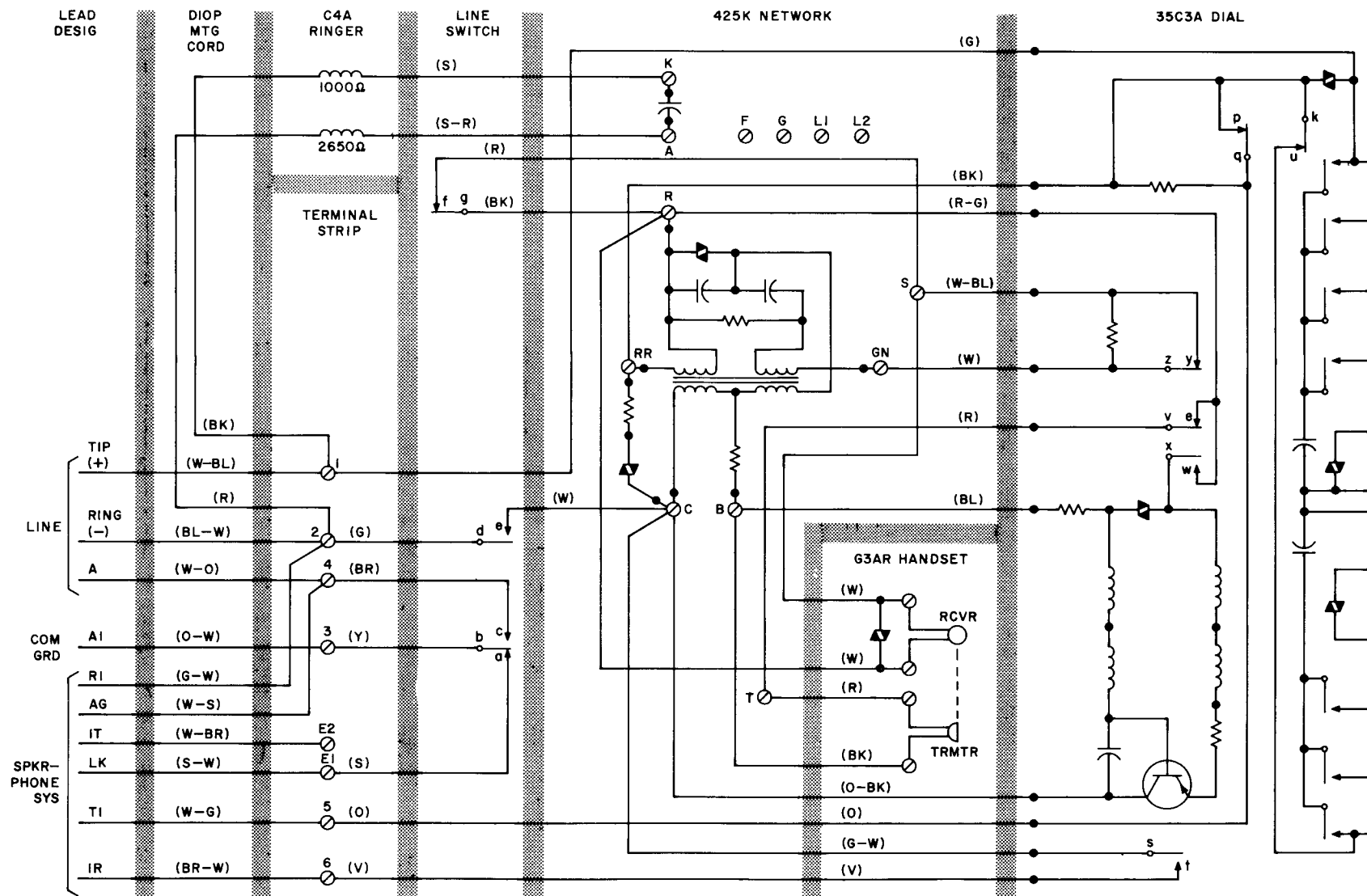


Fig. 1—2500M Telephone Set, Connections



NOTES:

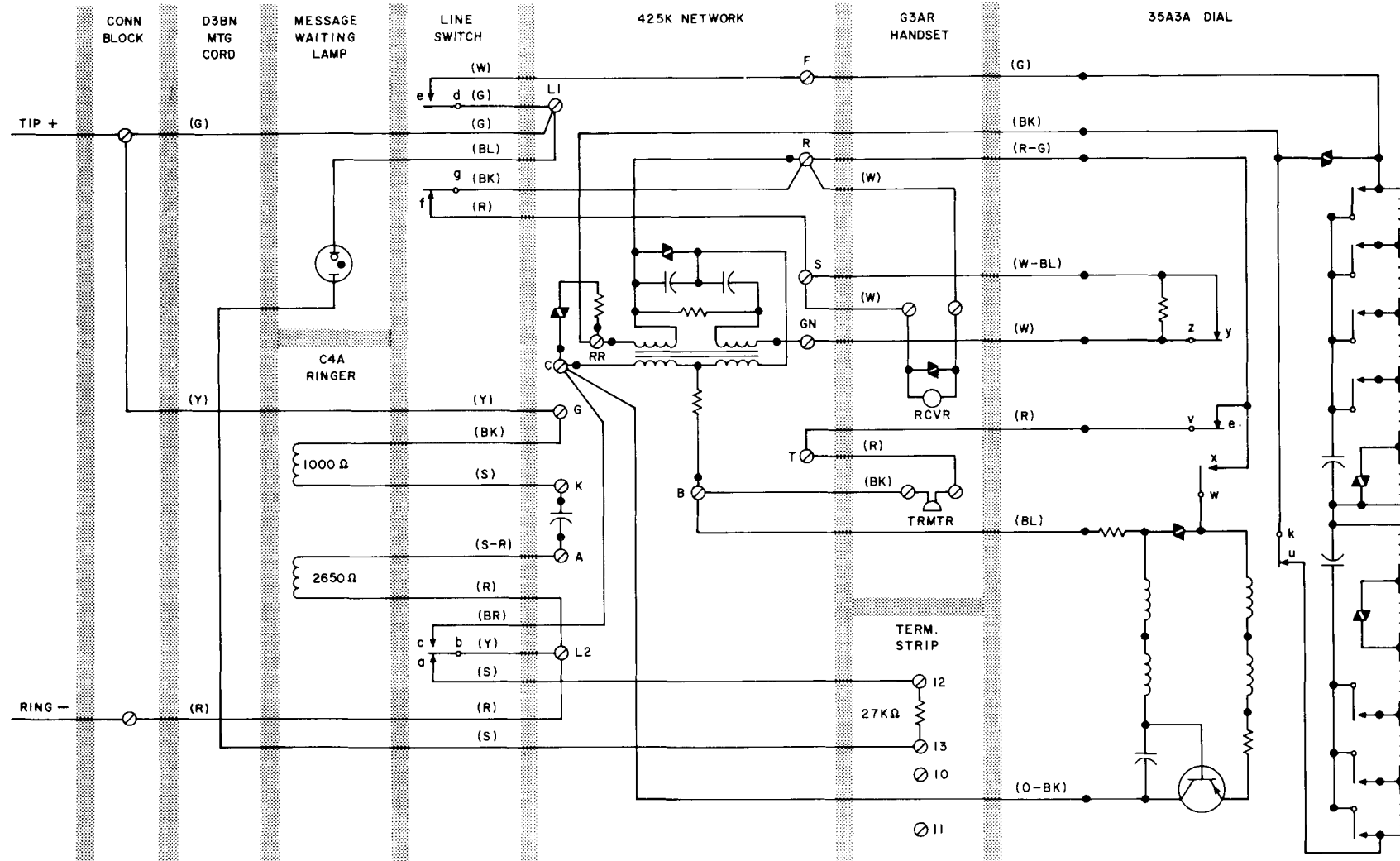
1. FURNISHED WITH RINGER CONNECTED FOR BRIDGED SERVICE. FOR RING PARTY MOVE RINGER (BK) LEAD FROM TERM. 1 TO TERM. 3 FOR TIP PARTY MOVE RINGER (R) LEAD FROM TERM. 2 TO TERM. 3.
2. TO PERMANENTLY SILENCE RINGER REMOVE (S-R) FROM TERM. A AND STORE ON TERM. G.

3. LINE SWITCH OFF HOOK SEQUENCE:

- bc CLOSES ab OPENS
de CLOSES fg OPENS

4. REFER TO TABLE E FOR STATION BUSY LAMP MODIFICATION.

Fig. 2—2500S Telephone Set, Connections



NOTES:

1. SET FACTORY - WIRED FOR BRIDGED SERVICE.
2. LINE SWITCH OFF HOOK SEQUENCE:
 (1) bc CLOSSES (3) ab OPENS
 (2) de CLOSSES (4) fq OPENS
3. TO PERMANENTLY SILENCE RINGER, PLACE (Y) MTG CORD LEAD ON SAME TERM AS (R) MTG CORD LEAD AT CONN BLOCK.

Fig. 3—2500Y Telephone Set, Connections

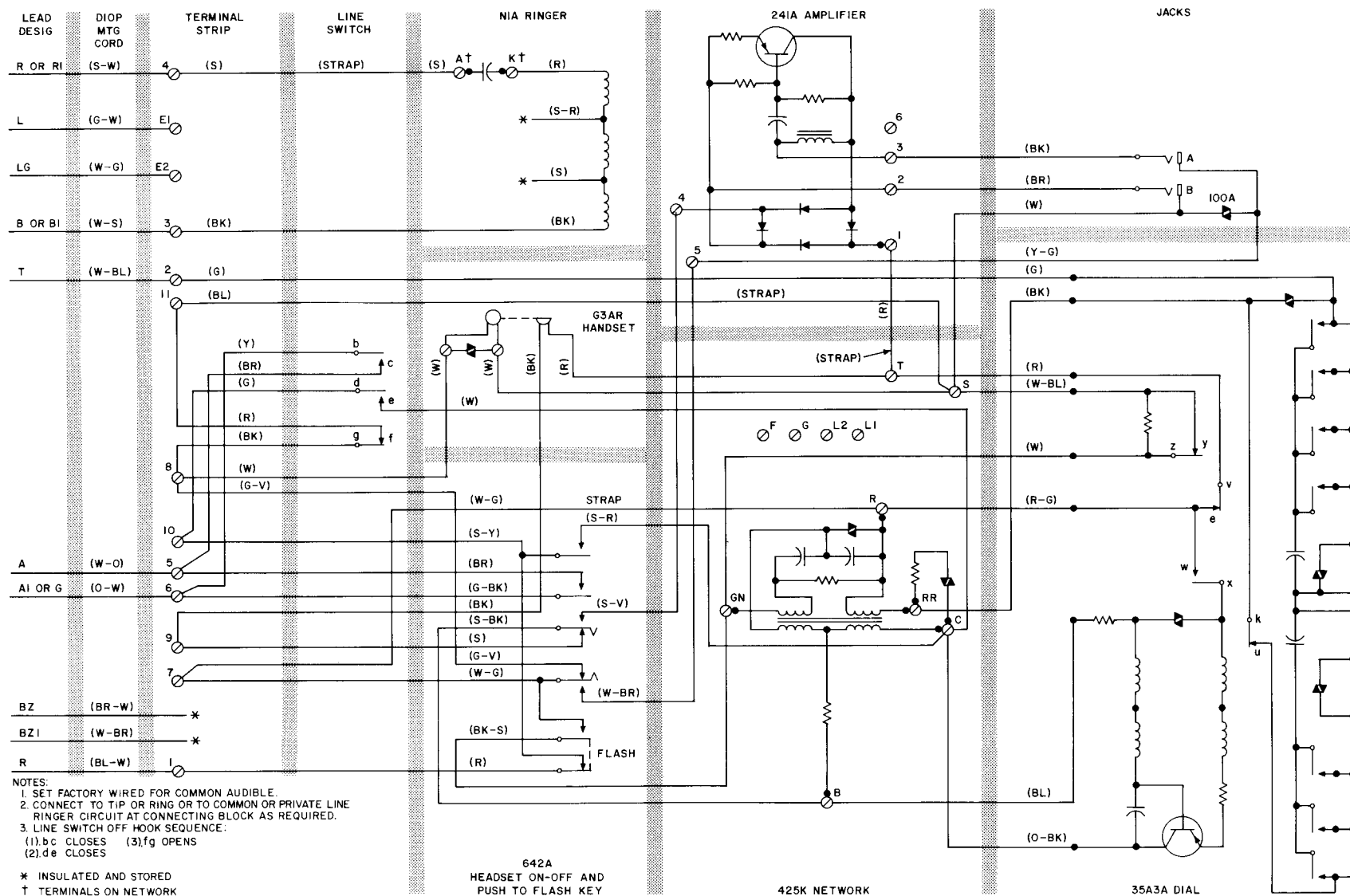


TABLE B
COMPONENT ORDERING GUIDE*

RELACEABLE COMPONENTS	TELEPHONE SET			
	2500M	2500S	2500Y	2514B
Amplifier				241A
Cord, Mounting	D4BJ	D10P	D3BN	D10P
Dial	35A3A	35C3A	35A3A	35A3A
Housing	P-83A3--	P-83A3--	P-83A3--	P-84E7--
Jack and Component Assy				P-44E420
Key				642A
Plate, Face, Assy	P-86D5--†	P-86D5--†	P-86D6--†	P-84J8--†
Retainer, Card	P-25E803	P-25E803	P-25E803	P-25E803
Ringer	C4A	C4A	C4A	N1A
Set, Hand	G3AR	G3AR	G3AR	G3AR
OPTIONAL				
Buzzer				KS-8109
Buzzer				KS-20419
Cord, Mounting‡			D3BU	
Guard Assy	P90D052	P-90D052	P-90D052	P-90D052

* Refer to Table A for color selection.

† Includes P-25E803 card retainer.

‡ Heavy duty, replaces D3BN in 9-, 13-, and 26-foot lengths.

TABLE C
POLARITY GUARD CONNECTIONS
(P-90D052 GUARD ASSEMBLY)

WIRE OR LEAD	COLOR	REMOVE FROM		CONNECT TO	
		NET.	NET.	POLARITY GUARD	
Dial	(G-W)† (BK)	C RR		S T	
Line Switch	(W) (BR)‡	C		S	
Polarity Guard	(G) (W)		RR C		
Handset ON-OFF Key	(S-R)*	C		S	

* This headset lead found on the 2514B only.

† This dial lead is found on the 2500S telephone set only.

‡ This line switch lead moved on the 2500Y telephone set only.

TABLE D

LINE AND RINGER CONNECTIONS FOR 2500S TELEPHONE SET

FEATURE (NOTE 1)	TERM. STRIP (NOTE 2)	CONNECTIONS IN SET								MTG CORD AT CONN BLOCK					
		MTG CORD						RINGER							
		G	R	Y	BK	BL	W	BK	R	G	R	Y	BK	BL	W
Separate Ringer	With	1	2	3	4			3	4	Tip	Ring	R-R1	B-B1		
	Without	F	L2	L1	G			L1	G						
Separate Ringer and 1A1 or 1A2 KTS (Note 1)	With	1	2	3	4	5	6	3	4	Tip	Ring	R-R1	B-B1	A	A1
	Without	F	L2	L1	G	(BR) (Y) (Note 3)		L1	G						

Notes:

1. Replace D4BJ mounting cord with D6AA.
2. Current production sets are not equipped with a terminal strip.
3. Use D-161488 connectors to electrically connect mounting cord conductors to (BR) and (Y) line switch leads.

TABLE E

MODIFICATION TO PROVIDE STATION BUSY LAMP
FOR 2500S TELEPHONE SET

LEAD	COLOR	REMOVE FROM	CONNECT TO
Mtg Cord	(G-W)	2	4
	(W-O)	4	8
KS-15724L1 Diode			8 4 ○ — — ○

Notes:

1. R1 lead must be added between ring side of line at connecting block and 55B control unit.
2. (G-W) lead is (BL) lead at key equipment.