

REFERENCE

1502-, 1510-, 1511-, 1515-, 1555-, AND 1558-TYPE TELEPHONE SETS

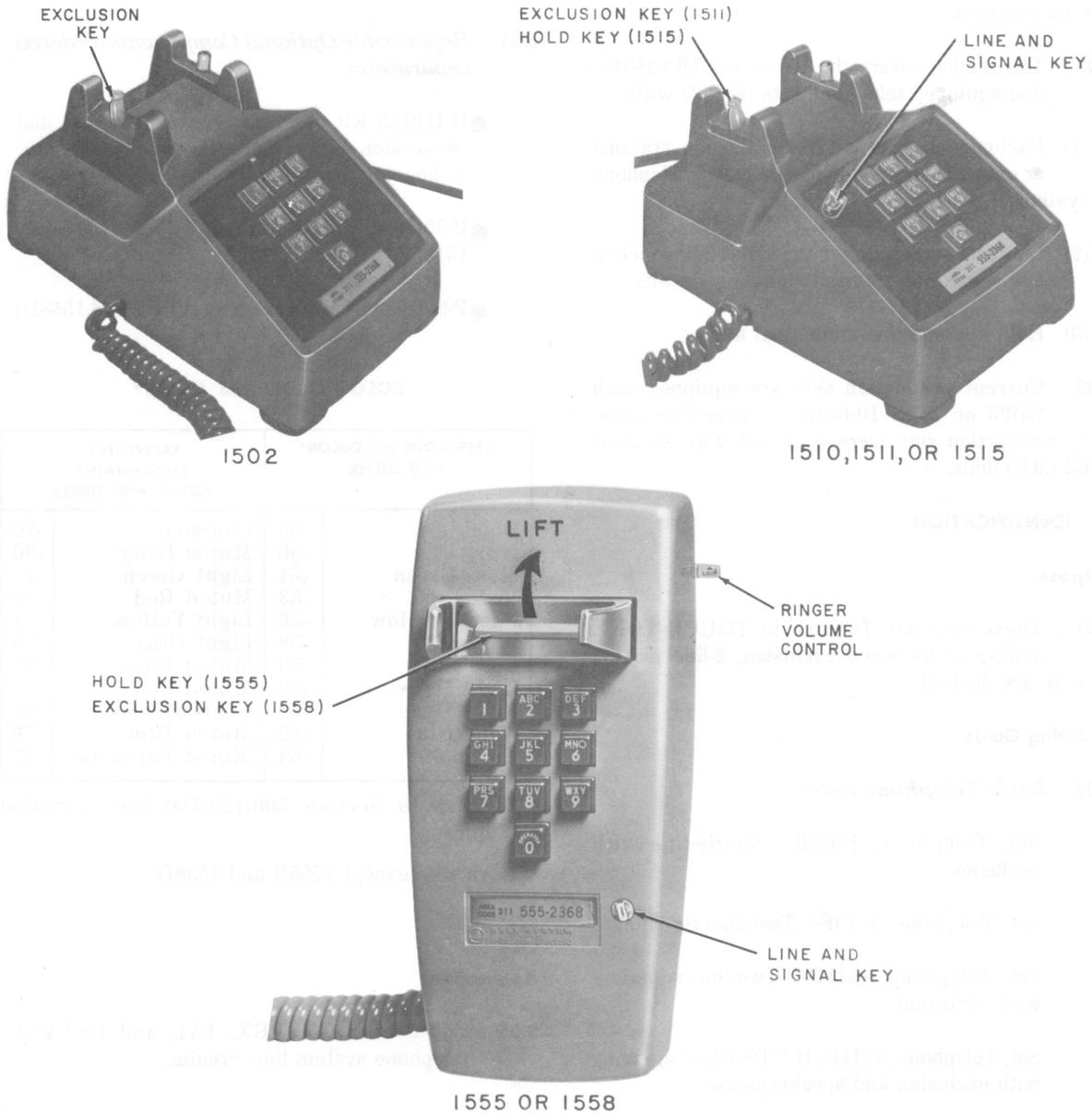


Fig. 1—1502-, 1510-, 1511-, 1515-, 1555-, and 1558-Type Telephone Sets

Dial Conversion

3.03 A D-180115 Kit of Parts (ordered separately) is available when it becomes necessary to convert a 25W3 or 25Y3 10-button dial to 12-buttons. Refer to section on 25-type dials for conversion procedures.

Polarity Guard

3.04 To install polarity guard assembly (ordered separately) in desk-type sets:

- (1) Remove housing and loosen right-hand dial mounting screw.
- (2) Mount guard assembly to the dial bracket with the component side of the board oriented to the rear of the set. The bracket is placed under the dial mounting screw with its lip over the top of the dial mounting bracket.
- (3) Tighten dial mounting screw. Make connections as shown in Table E and replace housing.

3.05 To install polarity guard assembly (ordered separately) in wall-type sets:

- (1) Remove housing. Remove set from wall to gain access to rear of baseplate.
- (2) Remove dial but do not disconnect dial leads.
- (3) From the rear of the baseplate, place two screws through the holes located below the ringer. Place the polarity guard terminal board over the screws with its components facing the front of the set. Secure using two nuts furnished with guard assembly.
- (4) Replace dial and refasten set to wall.
- (5) Make connections as shown in Table F and replace housing.

Faceplates

3.06 1502-, 1510-, 1511-, and 1515-type telephone sets are equipped with a plastic faceplate and numbers card retainer. To remove faceplate:

- (1) Place tip of KS-16750 type releaser at front edge of latch and push latch toward rear of set and pry upward.
- (2) To replace faceplate, reverse procedure.

Ringers

3.07 Volume is adjustable from LOUD to OFF. The OFF position is blocked by a detent spring (desk sets) or stop screw (wall sets). To permit use of OFF position, remove housing and bend detent spring or remove stop screw. See section covering the particular ringer for appropriate procedures.

4. OPERATION

4.01 Exclusion switch: Pull up left-hand line switch plunger of desk-type sets or lift line switch actuator of wall-type sets.

4.02 Line pickup key: Turn to connect talking circuit to either of two lines or provide desired cutoff function.

4.03 Signaling key: Pushbutton portion of line pickup key. Depress to activate signaling device, if provided.

4.04 Customer Instructions: If a call is received on one line and it is desired to hold the party while transferring to the other line:

- (1) Lift the hold key plunger and operate the line key to pick up second line (Fig. 1).
- (2) When call on second line is completed, operate line key back to first line position and depress hold key plunger.

Note: Failure to depress hold key plunger when a held line is reconnected will automatically place a hold on the unused line preventing its use for either incoming or outgoing calls. Reversal of this procedure (i.e. depressing the hold key before operating line key back to held line) will disconnect held line.

TABLE B
TELEPHONE SET COMPONENT PARTS

TELEPHONE SET†	DIAL	RINGER	MOUNTING CORD†	HOUSING†	FACEPLATE†	HANDSET†
1502B	25A3* or 25W3	C4A	D6AA	P-86C6__	P-84G0__	G3AR
1510F				P-83A1__	P-84G1__	
1511D*	25B3* or 25Y3	D16F	P-86C6__			
1511F		D20J				
1511H		D20K				
1515B	25A3* or 25W3	C4A	D6AA	None	None	
1555B		P1A	None			
1558D		M2B or P1A				

* MD

† See table A for color suffix.

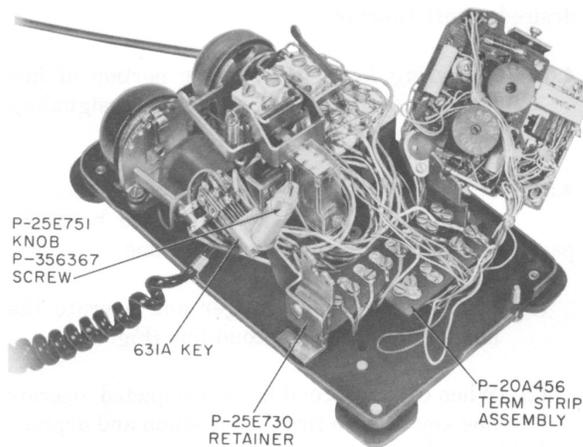


Fig. 2—1510F Telephone Set, Interior

3.02 Install wall-type sets as follows:

- (1) Remove set housing (5.02).

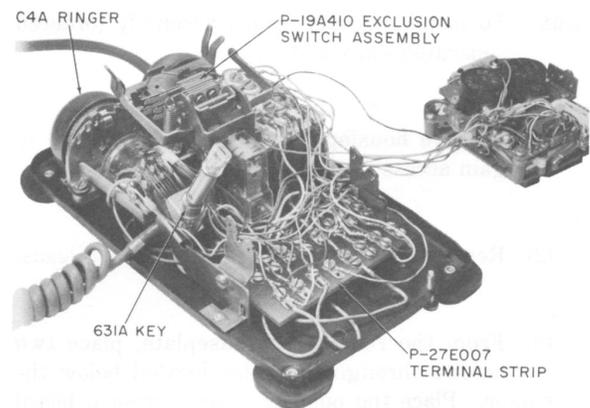


Fig. 3—1511D Telephone Set, Interior

- (2) Secure base to flat surface using suitable fasteners. Connect inside wire to terminal strip as shown in appropriate connection figure.

- (3) Replace and secure housing.

SECTION 502-502-102

1. GENERAL

1.01 Information contained in this section was formerly found in Section 502-515-111, Section 502-515-115, Section 502-515-421, Section 502-515-425, Section 502-515-425, Section 502-515-430, Section 502-515-431, and Section 502-515-435 which are hereby canceled.

1.02 This section covers the 10-button TOUCH-TONE® dial equipped telephone sets (Fig. 1) with:

- (1) Exclusion key to control extension stations or external signaling circuits in key telephone systems.
- (2) Line and signaling key to permit 2-line pickup and control of external signaling circuits.
- (3) Hold key and line and signal key.

1.03 Current production sets are equipped with 25W3 or 25Y3 10-button convertible dials; early production sets were equipped with 25A3 or 25B3 (MD) dials.

2. IDENTIFICATION

Purpose

2.01 These sets are for use in TOUCH-TONE dialing areas when exclusion, 2-line pickup, or both are desired.

Ordering Guide

2.02 Basic Telephone Sets:

Set, Telephone, 1502B-* Single-line with exclusion

Set, Telephone, 1510F-* Two-line/signaling

Set, Telephone, 1511D-* Two-line/signaling with exclusion

Set, Telephone, 1511F, H-* Two-line/signaling with exclusion and speakerphone

Set, Telephone, 1515B-* Two-line/signaling with hold

Set, Telephone, 1555B-* Two-line/signaling with hold

Set, Telephone, 1558D-* Two-line/signaling with exclusion

*Add appropriate color suffix from Table A.

2.03 Replaceable components are listed in Table B.

2.04 Replaceable Optional Components (ordered separately)

- D-180115 Kit of Parts (10- to 12-button dial conversion kit; replace faceplate assembly or housing as required)
- P-90D052 Guard Assembly (1502B, 1510F, 1511D, F, H and 1515B)
- P-90D053 Guard Assembly (1555B and 1558D)

**TABLE A
COLOR ORDERING GUIDE***

TELEPHONE SET COLOR* AND SUFFIX		FACEPLATE † COORDINATED COLOR AND SUFFIX	
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.

† All sets except 1555B and 1558D.

Application

2.05 For use on CO, PBX, 1A1, and 1A2 key telephone system line circuits.

3. INSTALLATION

3.01 Desk-type sets are installed in accordance with standard procedures.

- (3) If the second line is to be held for pickup by an extension station, the hold key is left operated (lifted) until the extension is answered. After the extension handset is lifted, the hold key (first set) must be depressed to connect the talking path of the extension.

5. MAINTENANCE

Inspection

5.01 Inspect exterior and interior of these sets for obvious defects such as loose, displaced, or broken parts. Check also for obstruction of moving parts or the presence of foreign matter that may interfere with proper operation of the set.

5.02 Check line terminations before determining trouble causes from Table C.

Housings

5.03 In desk-type sets, housings are secured to the base by two P-44E734 screws.

5.04 To remove housing on wall-type telephone sets:

- (1) Using a KS-16750 type releaser, or equivalent, remove number card holder and number card.
- (2) Loosen two captive screws located in the number card recess.
- (3) Remove housing.

5.05 To replace housing:

- (1) Fit housing over dial, handset hook, and line key knob.
- (2) Press housing into place and tighten captive screws.
- (3) Replace number card.
- (4) Replace number card holder by inserting one end in the recess. Apply slight pressure on the free end to cause an outward bow. Snap free end into recess.

Mechanical Maintenance

5.06 *Plungers:* Should move freely throughout entire travel without binding or squeaking.

- Clean with KS-2423 cloth moistened with KS-7860 petroleum spirits and lubricate with a No. 2 or softer graphite pencil.
- Replace housing assembly if plungers do not move freely after cleaning and lubricating.

5.07 *Operating Bracket Assemblies:* Should function throughout entire travel without binding or squeaking. Clean bosses on bracket arms where plungers rest, spring anchor points, and shaft bearing points with KS-2423 cloth moistened in KS-7860 petroleum spirits and lubricate bearing surfaces with a No. 2 or softer graphite pencil.

5.08 *Exclusion Switch and Plunger Unit:*



Do not perform any field maintenance other than cleaning of contacts with 265C tool.

(a) The exclusion plunger shall:

- Remain in the operated position when pulled up to the full extent of its stroke.
- Return to the fully depressed position when the handset is placed on the cradle of desk sets or hook of wall sets.
- Drop by its own weight from the mid position to the fully depressed position when the right plunger is depressed (desk sets only).

(b) The exclusion switch:

- Normally closed contacts shall have perceptible follow when switch is operated.
- Normally open contacts shall have a minimum separation of 0.015-inch.

(c) Replace set if exclusion switch and plunger unit fails to meet these requirements.

TABLE C
TROUBLES, PROBABLE CAUSES, AND CORRECTIVE MEASURES

TROUBLE	PROBABLE CAUSE	CORRECTIVE MEASURE
Bell Does Not Ring	Ringer disconnected or incorrectly wired in set.	Connect correctly.
	Volume control in off position.	Move control to ring position.
	Open winding.	Replace ringer.
	Metal particles in armature gap.	Remove with Scotch tape or equivalent.
	Faulty capacitor.	Replace telephone set
Bell Too Loud	Volume control in wrong position.	Move control to softer position and advise customer on proper use.
Bell Too Soft	Volume control in wrong position.	Move control to louder position and advise customer on proper use.
	Set on sound-absorbent material.	Place set on hard surface.
	Cord touching gong.	Dress cord properly.
Bell Taps While Dialing or Operating Switch	Incorrect wiring.	Check mounting cord and ringer connections.
	Loose gong.	Tighten screw as required.
	Incorrect bias spring tension.	Place spring in high tension notch.
Bell Rings When Other Party Is Called: Cross Ring or False Ring	Incorrect wiring.	Check mounting cord and ringer connections.
	Biasing tension too low.	Place bias spring in high tension notch. If ringer still cross-rings, replace ringer.
Bell Keeps Ringing When Handset Is Removed	Open handset cord.	Replace handset cord.
	Defective network or open set wiring.	Replace set.
	Line contacts on switch do not close.	Check switch cover and ears. Ears should fit into notches.
No Dial Tone or Set Dead	Open mounting cord or handset cord.	Replace cord.
	Defective receiver unit or varistor shorted.	Replace receiver unit.
	Open induction coil.	Replace telephone set.
	Switch contacts do not operate.	Check switch cover for proper installation.

TABLE C (Cont)

TROUBLES, PROBABLE CAUSES, AND CORRECTIVE MEASURES

TROUBLE	PROBABLE CAUSE	CORRECTIVE MEASURE
Cannot Break Dial Tone	TOUCH-TONE dial defective.	Replace dial.
	TOUCH-TONE dial leads reversed.	Check dial lead polarity.
	Depressing more than one button.	Instruct subscriber.
Cannot Hear	Open or shorted receiver unit or handset cord.	Replace receiver unit or handset cord.
	Open induction coil or network.	Replace telephone set.
	Switch receiver contacts do not open.	Check switch cover for interference.
Cannot be Heard	Defective transmitter or open handset cord.	Replace transmitter or handset cord.
	Defective 241A amplifier.	Replace amplifier.
High Sidetone	Defective sidetone balancing network.	Replace telephone set.

5.09 584- or 631-type key:

Adjust this key only if replacement of the complete telephone set is impracticable.

- (a) Use 363 tool to adjust key. Pay particular attention to contact sequence.
- (b) After any adjustments are made, key must meet the following requirements.
 - Knob shall operate freely to either position and return to normal after being depressed to the limit of its stroke.
 - When button is fully depressed, there shall be perceptible clearance between the bottom pushbutton contact and the base of set.
 - Contacts for turnkey operation shall not be operated when the key is operated as a pushbutton.

- Pushbutton contacts shall have a minimum separation of 0.030-inch.
- It shall not be possible to make or break the contacts by any side thrust on the knob in either position.
- All contacts shall have perceptible follow.
- All normally closed contacts shall break before any normally open contact makes.
- Normally closed contacts shall break at least 0.015-inch. Normally open contacts shall have a break of at least 0.025-inch.

5.10 Line Switch Contacts:

Perform no field maintenance other than replacing cover and cleaning contacts.

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(1) Remove line switch cover by pressing sides between thumb and index finger and tilting cover up and away from mounting (Fig. 4).

(2) Clean contacts with 265C tool.

5.11 Other components: Maintenance of handsets, dials, and ringers is covered in the sections covering these individual components.

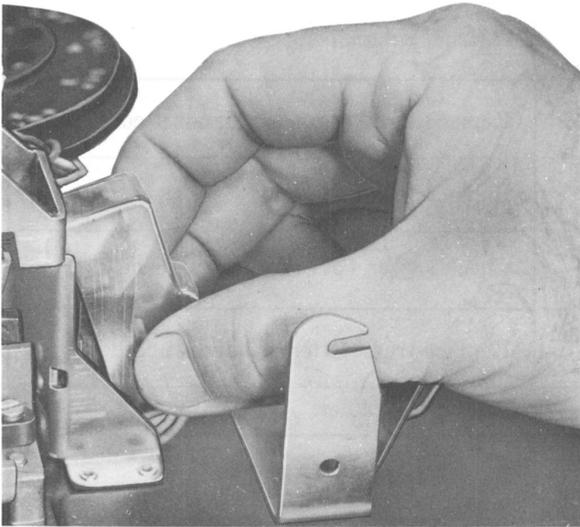


Fig. 4—Removing Line Switch Cover

6. CONNECTION INDEX

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Fig. 6—1502B Telephone Set Connections, With 25A3 (MD) Dial

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Fig. 8—1510F Telephone Set Connections, With 25A3 (MD) Dial, 2-Line Pickup, and Signaling

Fig. 9—1510F Telephone Set Connections, With 25W3 Dial, Line Pickup, Cutoff Extension or Ringer and Signaling

Fig. 10—1510F Telephone Set Connections, With 25A3 (MD) Dial, Line Pickup, Cutoff Extension Station or Ringer, and Signaling

Fig. 11—1511D Telephone Set Connections With 25Y3 Dial, 2-Line Pickup, Signaling, Exclusion, and Control Leads

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Fig. 13—1511F/H Telephone Set Connections, With 25Y3 Dial, 2-Line Pickup, Exclusion, Signaling, and Speakerphone

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Fig. 19—1555B Telephone Set Connections, With 25W3 Dial

Fig. 20—1555B Telephone Set Connections, With 25A3 (MD) Dial

Fig. 21—1558D Telephone Set Connections, With 25W3 Dial, 2-Line Pickup,

Signaling, and 1A1 and 1A2 Key Telephone Systems

Fig. 22—1558D Telephone Set Connections With 25A3 (MD) Dial, 2-Line Pickup, Signaling, and 1A1 and 1A2 Key Telephone Systems

Fig. 23—1558D Telephone Set Connections, 1-Line Pickup, Cutoff Extension Station or Extension Line Ringer

Fig. 24—1558D Telephone Set Connections, 2-Line Pickup, Hold on Line 1, Used With 1A2 Key Telephone Systems, and Signaling

Fig. 25—1558D Telephone Set Connections For Secretarial Service, and Hold

TABLE D
1502B TELEPHONE SET MODIFICATION FOR CUTOFF OF COMMON AUDIBLE RINGER

EXCLUSION KEY LEADS				RINGER LEADS			
(Y) [R-Y]	(BK) [G-Y]	BL	W	R	BK	S	S-R
4	3	E2	3	E1	4	K*	A

* For common or private line ringer without condenser, move (S) ringer lead to A.

() Current color code

[] MD color code

TABLE E
1502-, 1510-, 1511-, AND 1515-TYPE TELEPHONE SETS POLARITY GUARD CONNECTIONS (P-90D052 GUARD ASSEMBLY)

LEAD	COLOR	REMOVE FROM	CONNECT TO	
		NET.	NET.	POLARITY GUARD
Dial	(BK)	RR		T
Line Switch	(W)* [S-BR]	C		S
Polarity Guard	(G)		RR	
	(W)		C	

* This lead is (BR) in 1510- and 1515-type telephone sets.
Note: For use when specified by local instructions for end-to-end signaling installations.

() Current color code

[] MD color code

TABLE F
1555- AND 1558-TYPE TELEPHONE SETS POLARITY GUARD CONNECTIONS (P-90D053 GUARD ASSEMBLY)

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

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

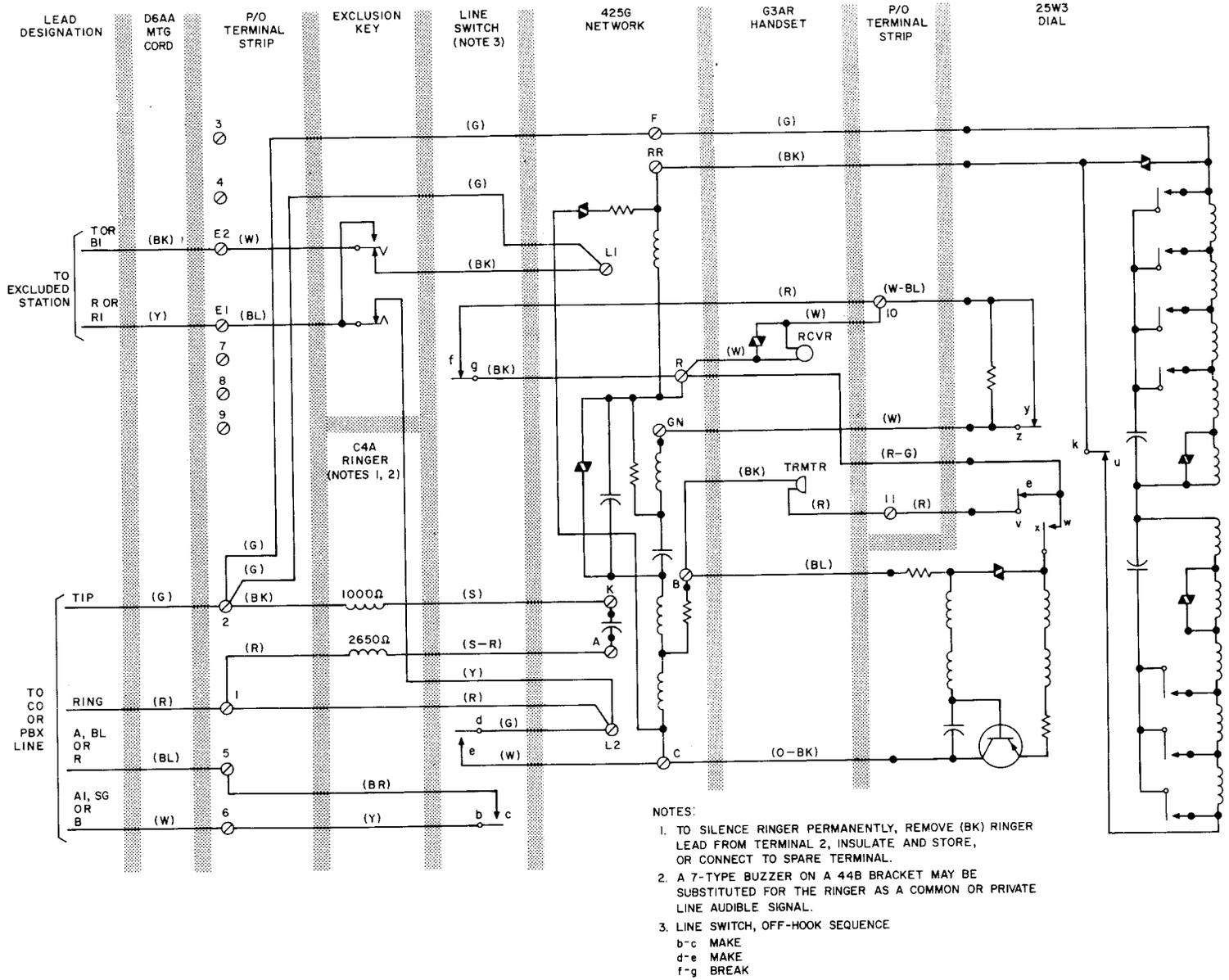
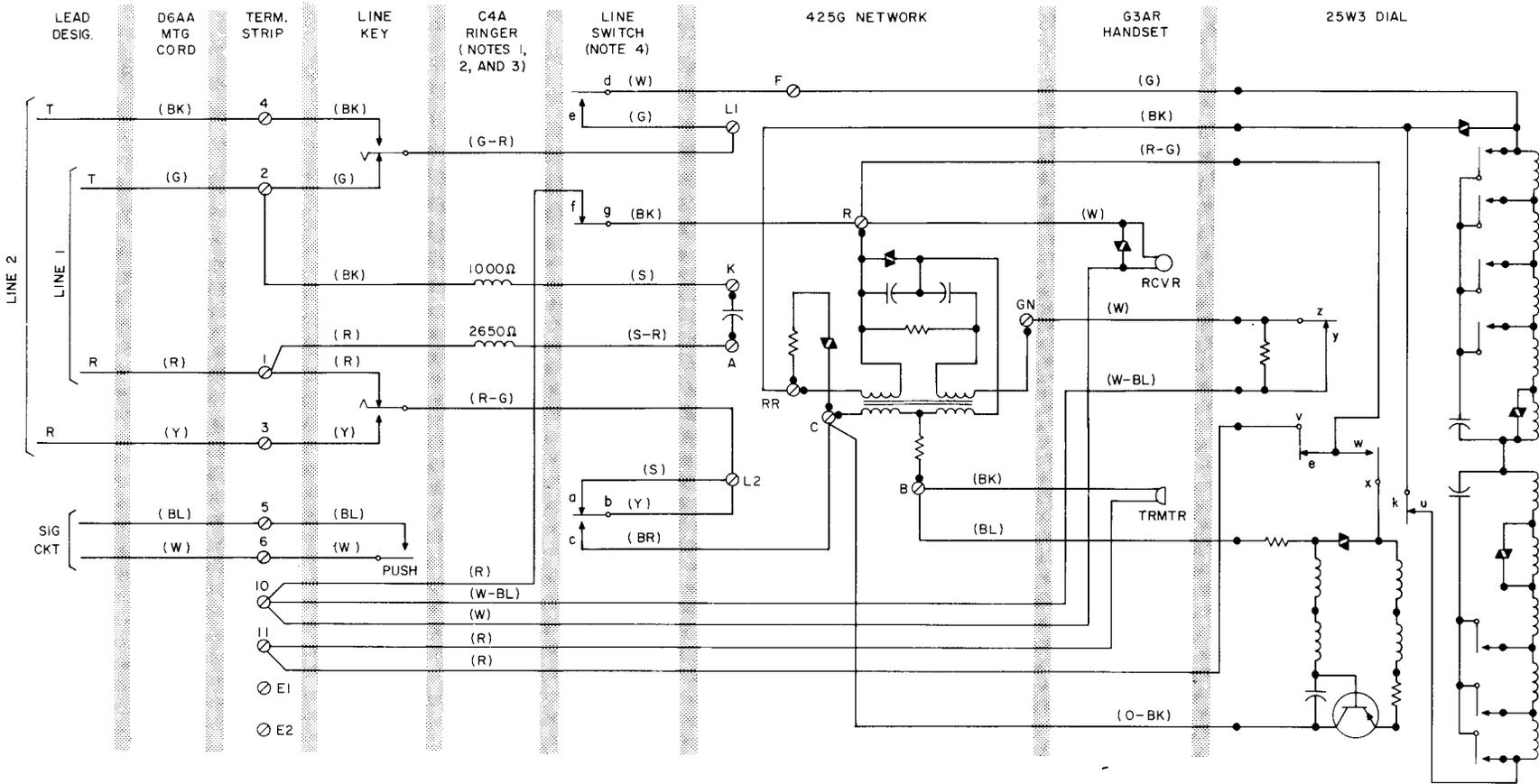


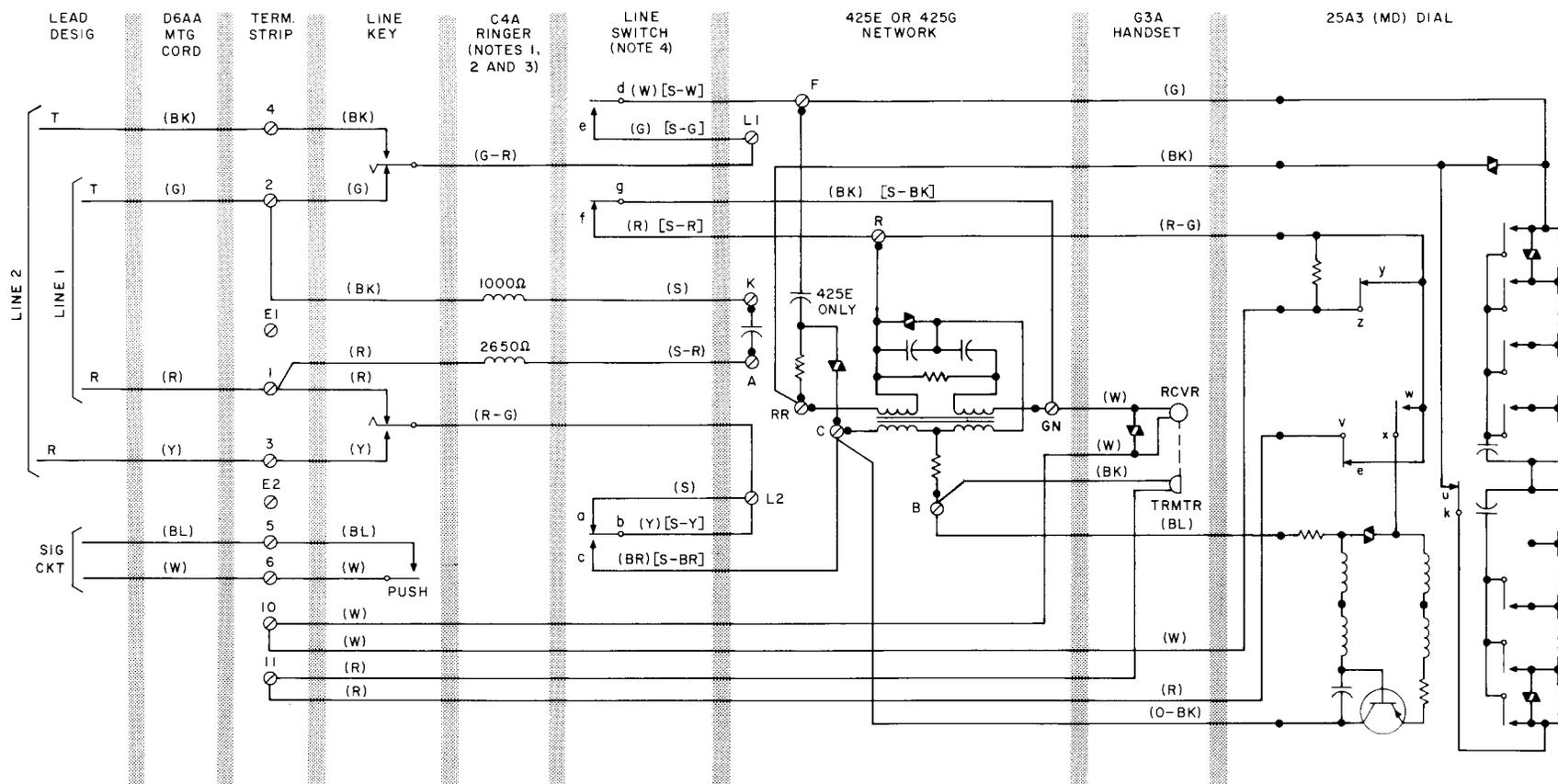
Fig. 5—1502B Telephone Set Connections, With 25W3 Dial



NOTES:

1. CONNECTIONS SHOWN ARE FOR RINGING ON LINE 1. TO RING ON LINE 2, MOVE (R) AND (BK) RINGER LEADS TO TERMINALS 3 AND 4.
2. TO SILENCE RINGER PERMANENTLY REMOVE (BK) RINGER LEAD FROM TERMINAL 2, INSULATE AND STORE OR CONNECT TO SPARE TERMINAL.
3. WHERE COMMON OR PRIVATE LINE RINGER IS REQUIRED, CONNECT (BL), (W) MTG CORD LEADS AND (R), (BK) RINGER LEADS TO E1 AND E2.
4. LINE SWITCH, OFF-HOOK SEQUENCE:
 b-c MAKE
 d-e MAKE
 a-b BREAK
 f-g BREAK

Fig. 7—1510F Telephone Set Connections, With 25W3 Dial, 2-Line Pickup, and Signaling

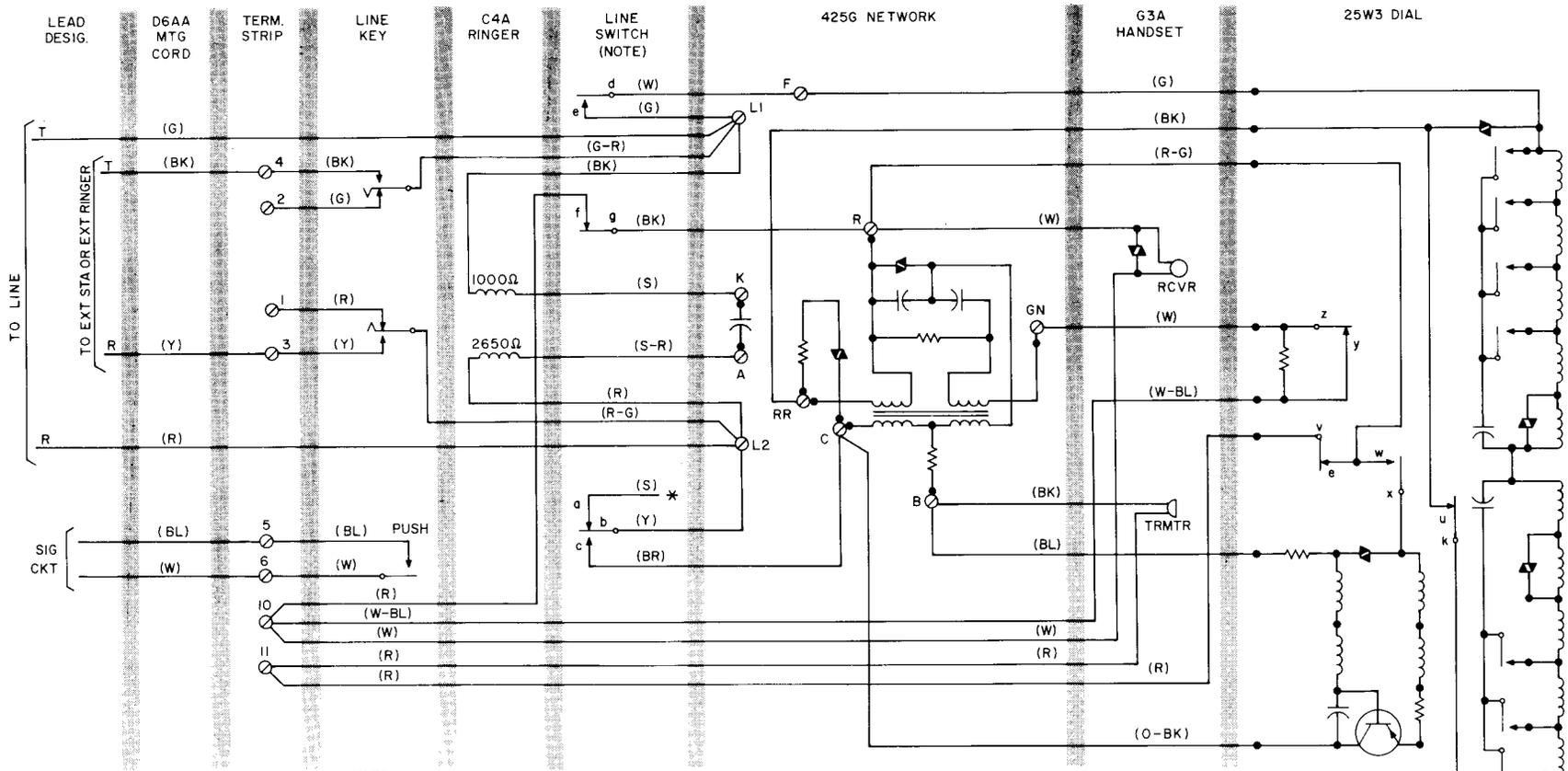


() CURRENT COLOR CODE
 [] MD COLOR CODE

NOTES:

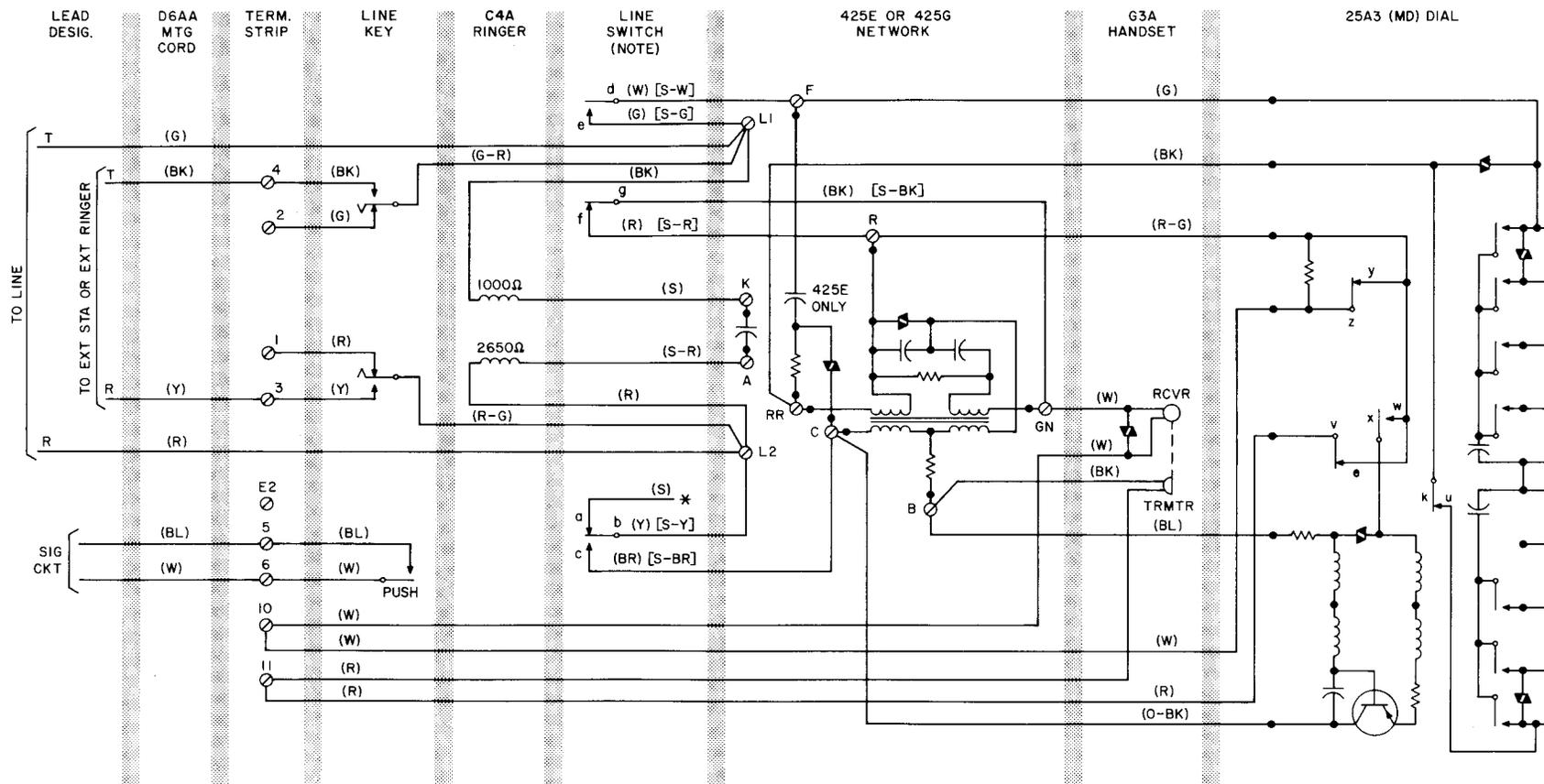
1. CONNECTIONS SHOWN ARE FOR RINGING ON LINE 1, TO RING ON LINE 2 MOVE (R) AND (BK) RINGER LEADS TO TERMINALS 3 AND 4.
2. TO SILENCE RINGER PERMANENTLY REMOVE (BK) RINGER LEAD FROM TERMINAL 2, INSULATE AND STORE OR CONNECT TO SPARE TERMINAL.
3. WHERE COMMON OR PRIVATE LINE RINGER IS REQUIRED, CONNECT (BL), (W) MTG CORD LEADS AND (R), (BK) RINGER LEADS TO E1 AND E2.
4. LINE SWITCH, OFF-HOOK SEQUENCE:
 - b - c MAKE
 - d - e MAKE
 - a - b BREAK
 - f - g BREAK

Fig. 8—1510F Telephone Set Connections, With 25A3(MD) Dial 2-Line Pickup, and Signaling



NOTE:
 LINE SWITCH, OFF-HOOK SEQUENCE:
 b-c MAKE
 d-e MAKE
 a-b BREAK
 f-g BREAK
 * INSULATED AND STORED

Fig. 9—1510F Telephone Set Connections, With 25W3 Dial, Line Pickup, Cutoff Extension Station or Ringer, and Signaling



* INSULATED AND STORED
 () CURRENT COLOR CODE
 [] MD COLOR CODE

NOTE: LINE SWITCH, OFF-HOOK SEQUENCE

b-c MAKE
 d-e MAKE
 a-b BREAK
 f-g BREAK

Fig. 10—1510F Telephone Set Connections, With 25A3(MD) Dial, Line Pickup, Cutoff Extension Station or Ringer, and Signaling

TABLE G

1511D LINE AND RINGER CONNECTIONS (EXTERNAL CONNECTIONS)

		NUMBER OF LINES PICKED UP			1	1	1	1	2	2	2
Features (Signaling included with all features)	Ringer in set used as	Line Ringer	•	•	•	•	•	•			
		Common or Private Line Ringer								•	•
	Turnkey used to cut off	Ext Sta or Line Ringer	•	•							
		Ringer in set		•	•						
Exclusion Key used to cut off	Aux Revr					•					
	Ext Sta or Line Ringer	•	•	•	•	•	•	•	•	•	
Ringer in set	Ext Sta or Line Ringer	•	•	•	•	•	•	•	•	•	
	Ringer in set									•	
External Mtg Cord Conn	Line 1	Ring	[R] (BL-W)	[R] (BL-W)							
		Tip	[G] (W-BL)	[G] (W-BL)							
	Line 2	Ring					[Y] (BR-W)	[Y] (BR-W)	[Y] (BR-W)		
		Tip					[BK] (W-BR)	[BK] (W-BR)	[BK] (W-BR)		
	Signal Ckt	S	[BL] (W-O)								
		GRD	[W] (O-W)								
	Exclusion Ckt	Ring	[BR-Y] (O-R)								
		Tip	[BR-BK] (R-O)								
	Cut off Circuit	Ring	[Y] (BR-W)	[Y] (BR-W)		[Y] (BR-W)					
		Tip	[BK] (W-BR)	[BK] (W-BR)		[BK] (W-BR)					
	Line 1 or 2 for Line Ringer*	Ring	[BR-R] (BL-R)			[BR-R] (BL-R)	[BR-R] (BL-R)				
		Tip	[BR-G] (R-BL)			[BR-G] (R-BL)	[BR-G] (R-BL)				
	Common or Private Line Ringer Ckt †	R						[BR-R] (BL-R)	[BR-R] (BL-R)		
		B						[BR-G] (R-BL)	[BR-G] (R-BL)		
Key Equip or Sta Busy Lamp Ckt ‡	A or BL	[O] (W-S)	[O] (W-S)	[O] (W-S)	[O] (W-S)	[O] (W-S)	[O] (W-S)	[O] (W-S)			
	A1 or GRD	[W] (O-W)	[W] (O-W)	[W] (O-W)	[W] (O-W)	[W] (O-W)	[W] (O-W)	[W] (O-W)			

* For ringer connections, terminate [BR-R] (BL-R) and [BR-G] (R-BL) mounting cord leads to line 1 or line 2 at connecting block.

† A 7-type buzzer on a 44B bracket may be substituted for the ringer as a common or private line audible signal.

‡ Use A and A1 control leads with 1-line pickup feature only.

() Indicates current color code

[] Indicates MD color code

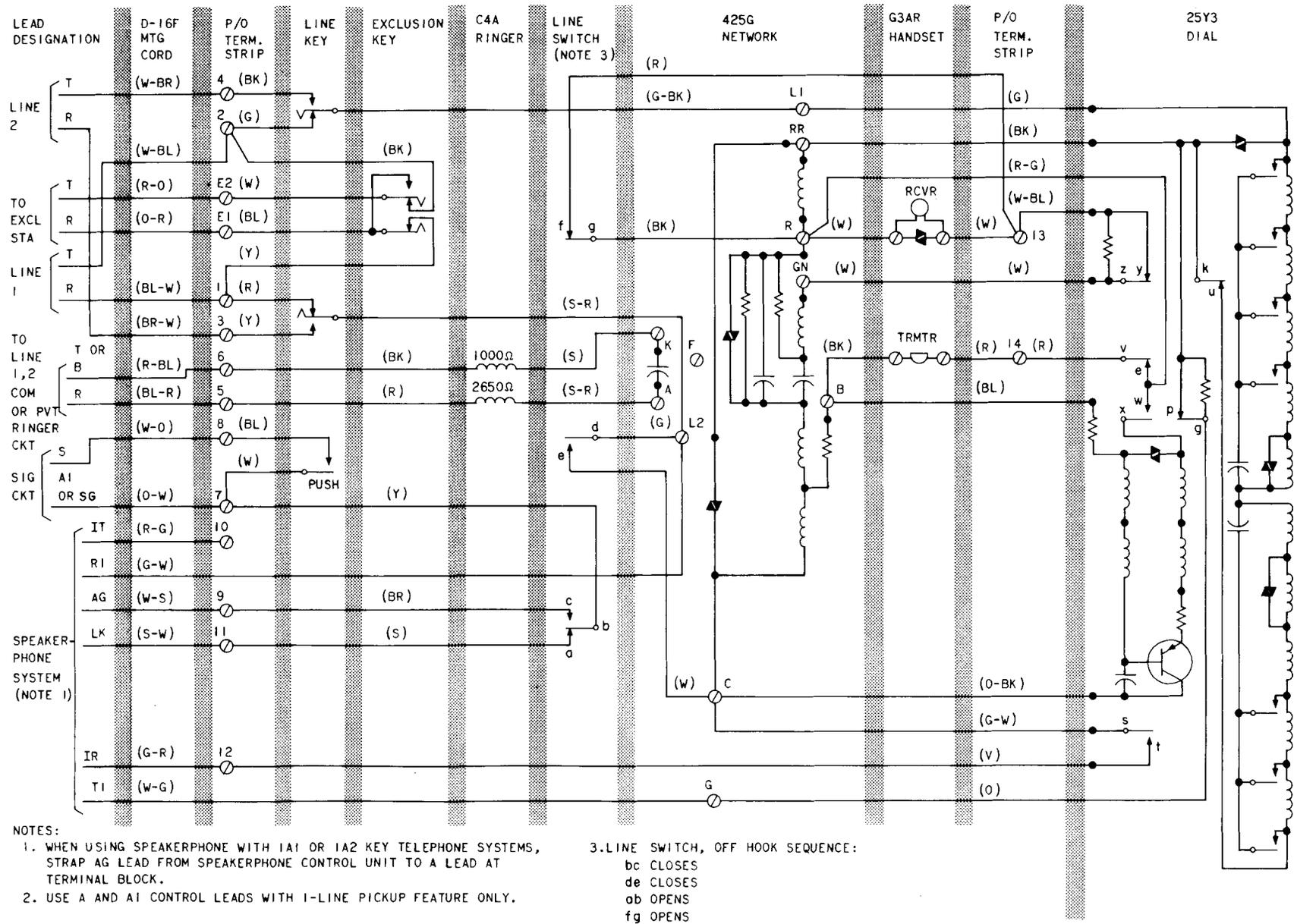


Fig. 11—1511D Telephone Set Connections With 25Y3 Dial, 2-Line Pickup, Signaling, Exclusion, and Control Leads

TABLE H

1511D LINE AND RINGER CONNECTIONS (INTERNAL CONNECTIONS)

FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)							CONNECTIONS TO TERMINALS INSIDE SET										
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		TURNKEY USED TO CUT OFF			EXCLUSION KEY USED TO CUT OF		MTG CORD LEADS		TURNKEY LEADS		EXCLUSION KEY LEADS*		RINGER LEADS†			
	LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	EXT STA OR EXT LINE RINGER	RINGER IN SET	(BL-W)	(W-BL)	(S-R)	(G-BK)	(Y)	(BK)	(R)	(BK)	(S)	(S-R)
								[R]	[G]	[R-G]	[G-R]	[R-Y]	[G-Y]				
1	•		•			•		L2	L1	L2	L1	L2	L1	5	6	K	A
1	•		•	•		•		L2	L1	L2	L1	L2	L1	1	2	K	A
1	•			•		•		L2	L1	L2	L1	L2	L1	3	4	K	A
1	•				•	•		L2	L1	GN	R	L2	L1	5	6	K	A
2	•					•		1	2	L2	L1	1	2	5	6	K	A
2		•				•		1	2	L2	L1	1	2	5	6	A	A
2		•					•	1	2	L2	L1	5	6	E1	E2	A	A

* 2-line pickup connections provide for exclusion on line 1. For exclusion on line 2, connect [R-Y] (Y) and [G-Y] (BK) exclusion key leads to terminals 3 and 4, respectively.

† A 7-type buzzer on a 44B bracket may be substituted for the ringer as a common or private line audible signal.

() Indicates current color code

[] Indicates MD color code

TABLE I

1511F/H — MODIFICATION FOR 1-LINE PICKUP,
HOLD, AND SECRETARIAL SERVICE

ITEM	WIRE OR LEAD	REMOVE FROM	CONNECT TO
Exclusion Switch (Hold)	(BR)	10	2
	(W)	9	1
	(BK)	1	*
	(Y)	2	*
Line Key	(W-O)	20	1
Mtg. Cord	(V-O)	11	17
	(G-R)	17	16

*Insulate and store.

TABLE J

1511F/H — MODIFICATION FOR 1-LINE PICKUP,
CUTOFF EXTENSION STATION OR EXTENSION LINE
RINGER

ITEM	WIRE OR LEAD	REMOVE FROM	CONNECT TO
Line Key	(V)	2	*
	(R)	2	*
	(W-O)	20	3
	(S-R)	15	2
Line Switch	(BR)	20	3
	(G)	15	2
Exclusion Switch	(BK)	1	*
	(Y)	2	*
	(S)	3	*
M1W Strap or Equivalent			1 ↔ F
			18 ↔ L2

*Insulate and store.

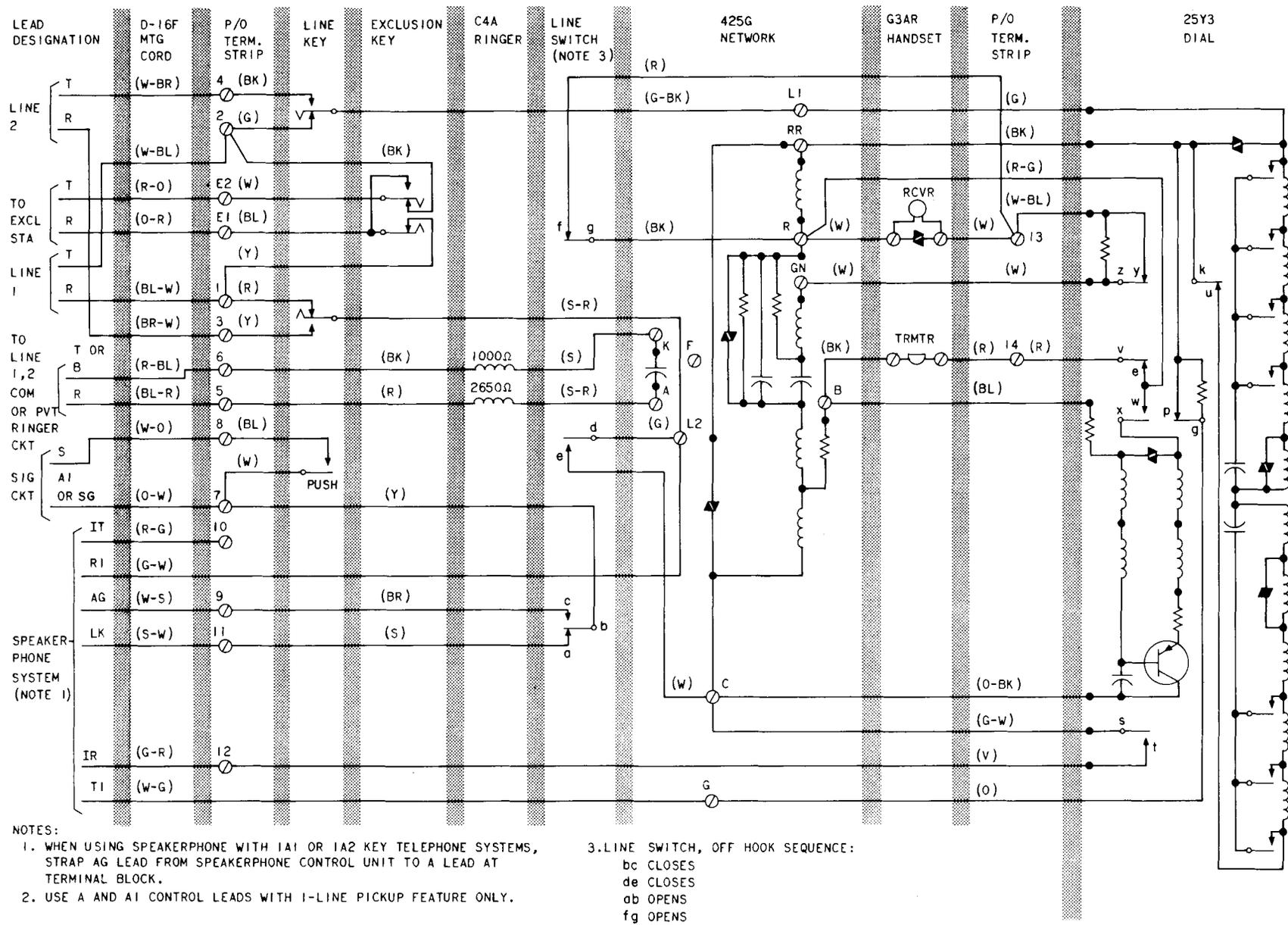


Fig. 11—1511D Telephone Set Connections With 25Y3 Dial, 2-Line Pickup, Signaling, Exclusion, and Control Leads

TABLE H

1511D LINE AND RINGER CONNECTIONS (INTERNAL CONNECTIONS)

FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)							CONNECTIONS TO TERMINALS INSIDE SET										
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		TURNKEY USED TO CUT OFF			EXCLUSION KEY USED TO CUT OFF		MTG CORD LEADS		TURNKEY LEADS		EXCLUSION KEY LEADS*		RINGER LEADS†			
	LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	EXT STA OR EXT LINE RINGER	RINGER IN SET	(BL-W)	(W-BL)	(S-R)	(G-BK)	(Y)	(BK)	(R)	(BK)	(S)	(S-R)
								[R]	[G]	[R-G]	[G-R]	[R-Y]	[G-Y]				
1	•		•			•		L2	L1	L2	L1	L2	L1	5	6	K	A
1	•		•	•		•		L2	L1	L2	L1	L2	L1	1	2	K	A
1	•			•		•		L2	L1	L2	L1	L2	L1	3	4	K	A
1	•				•	•		L2	L1	GN	R	L2	L1	5	6	K	A
2	•					•		1	2	L2	L1	1	2	5	6	K	A
2		•				•		1	2	L2	L1	1	2	5	6	A	A
2		•					•	1	2	L2	L1	5	6	E1	E2	A	A

* 2-line pickup connections provide for exclusion on line 1. For exclusion on line 2, connect [R-Y] (Y) and [G-Y] (BK) exclusion key leads to terminals 3 and 4, respectively.

† A 7-type buzzer on a 44B bracket may be substituted for the ringer as a common or private line audible signal.

() Indicates current color code

[] Indicates MD color code

TABLE I

1511F/H — MODIFICATION FOR 1-LINE PICKUP, HOLD, AND SECRETARIAL SERVICE

ITEM	WIRE OR LEAD	REMOVE FROM	CONNECT TO
Exclusion Switch (Hold)	(BR)	10	2
	(W)	9	1
	(BK)	1	*
	(Y)	2	*
Line Key	(W-O)	20	1
Mtg. Cord	(V-O)	11	17
	(G-R)	17	16

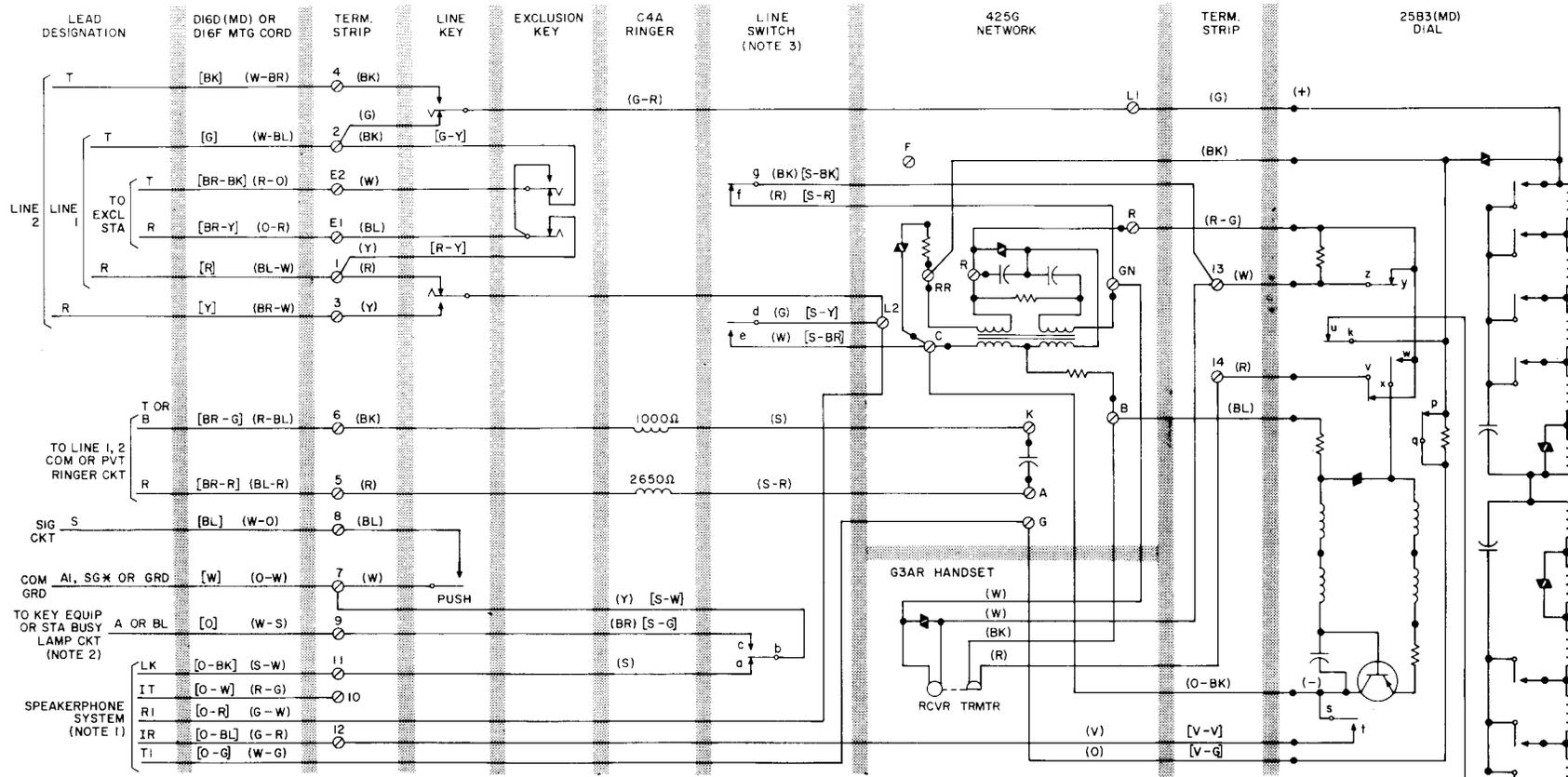
*Insulate and store.

TABLE J

1511F/H — MODIFICATION FOR 1-LINE PICKUP, CUTOFF EXTENSION STATION OR EXTENSION LINE RINGER

ITEM	WIRE OR LEAD	REMOVE FROM	CONNECT TO
Line Key	(V)	2	*
	(R)	2	*
	(W-O)	20	3
	(S-R)	15	2
Line Switch	(BR)	20	3
	(G)	15	2
Exclusion Switch	(BK)	1	*
	(Y)	2	*
	(S)	3	*
M1W Strap or Equivalent			1 ↔ F
			18 ↔ L2

*Insulate and store.



NOTES:

1. WHEN USING SPEAKERPHONE WITH IA1 OR IA2 KEY TELEPHONE SYSTEMS, STRAP AG LEAD FROM SPEAKERPHONE CONTROL UNIT TO A LEAD AT TERMINAL BLOCK.
2. USE A AND AI CONTROL LEADS WITH I-LINE PICKUP FEATURE ONLY.
3. LINE SWITCH, OFF-HOOK SEQUENCE.
 b-c MAKE
 d-e MAKE
 o-b BREAK
 f-g BREAK

- () CURRENT COLOR CODE.
 [] MD COLOR CODE.
 * LEAD DESIGNATION FOR SPEAKERPHONE SYSTEM.

Fig. 12—1511D Telephone Set Connections With 25B3 (MD) Dial, 2-Line Pickup, Signaling, Exclusion, and Control Leads

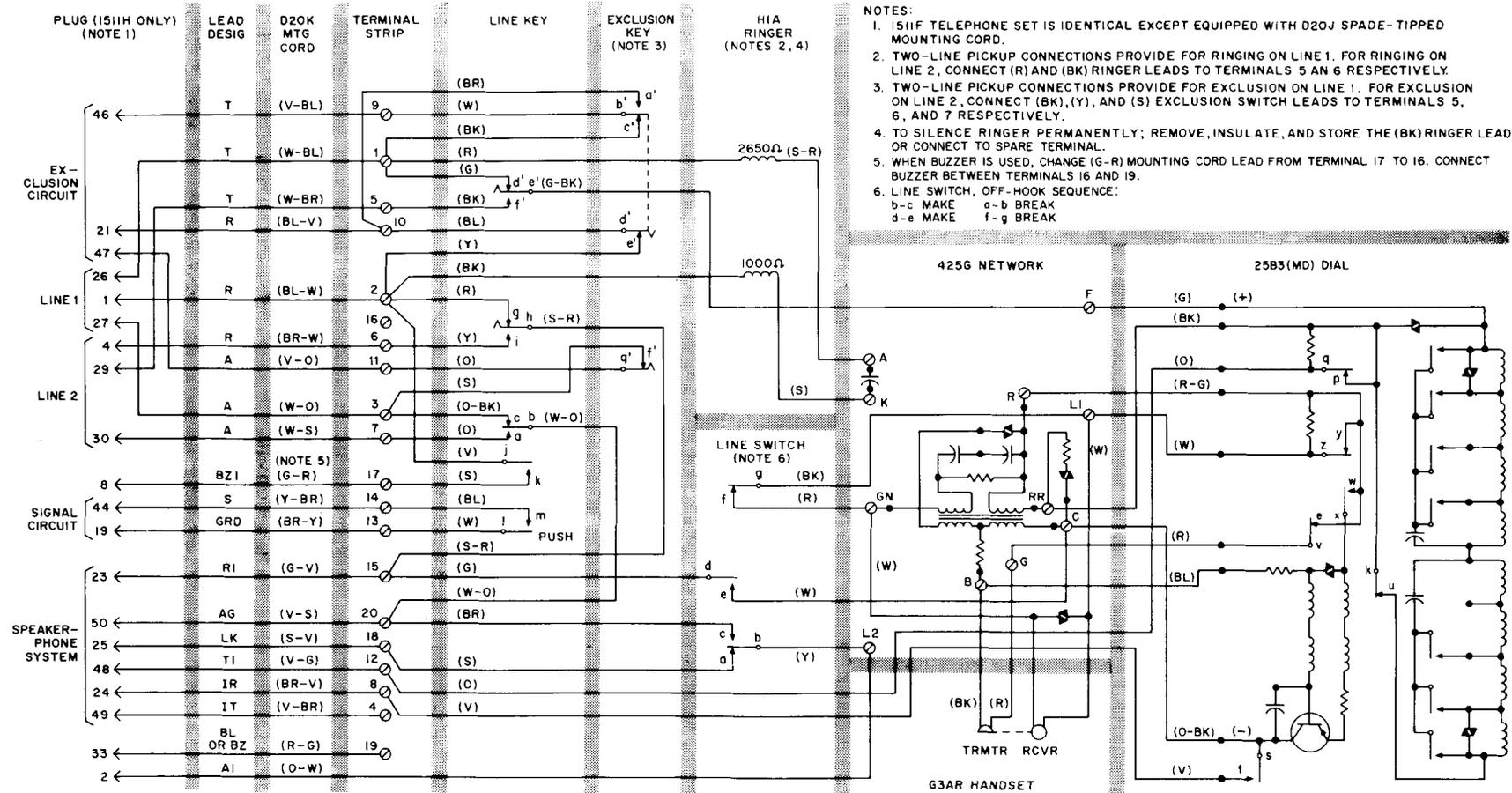


Fig. 14—1511F/H Telephone Set Connections, With 25B3(MD) Dial, 2-Line Pickup, Exclusion, Signaling, and Speakerphone

SECTION 502-502-102

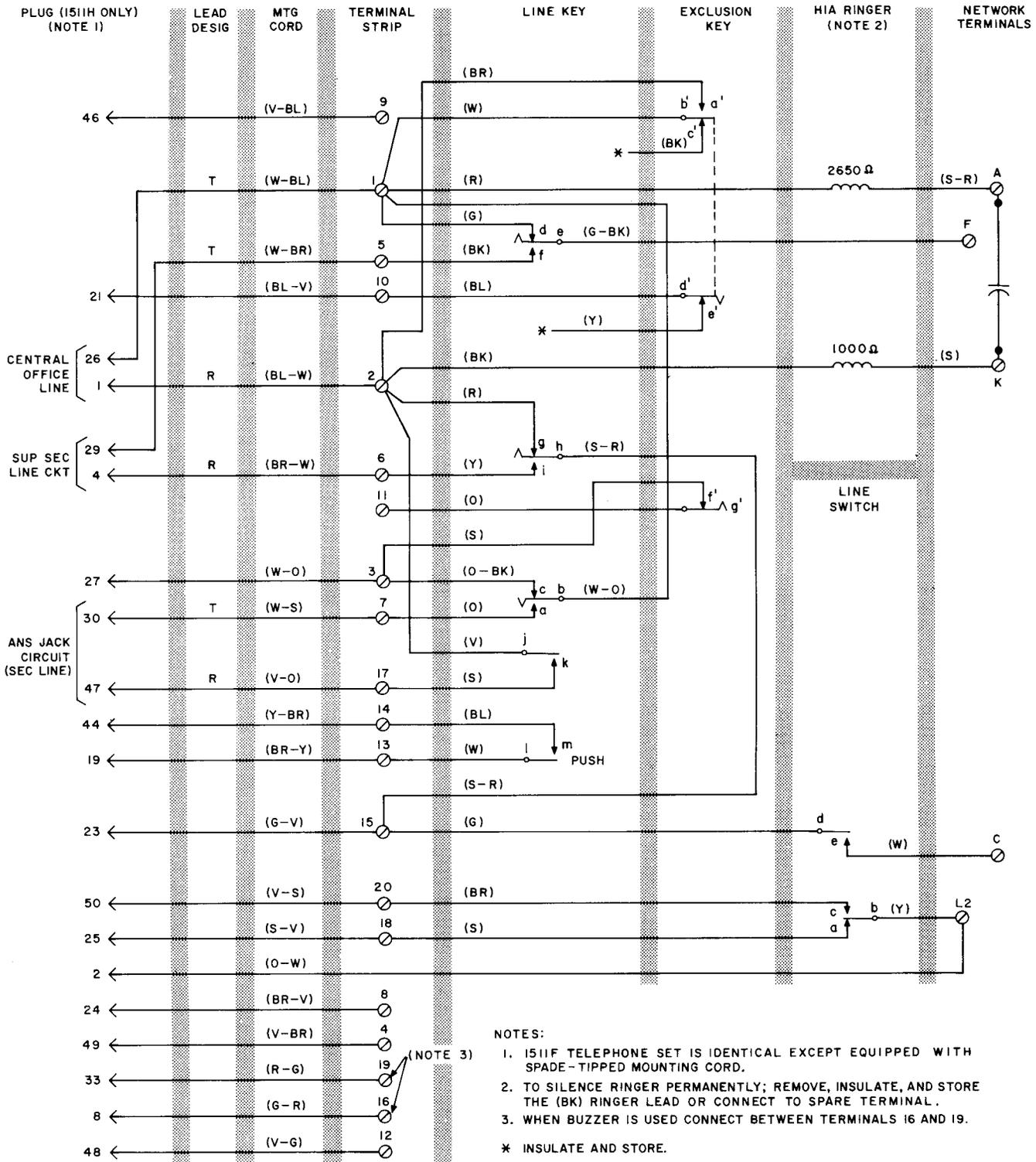


Fig. 15—1511F/H Telephone Set Connections, 1-Line Pickup, Hold, and Secretarial Service

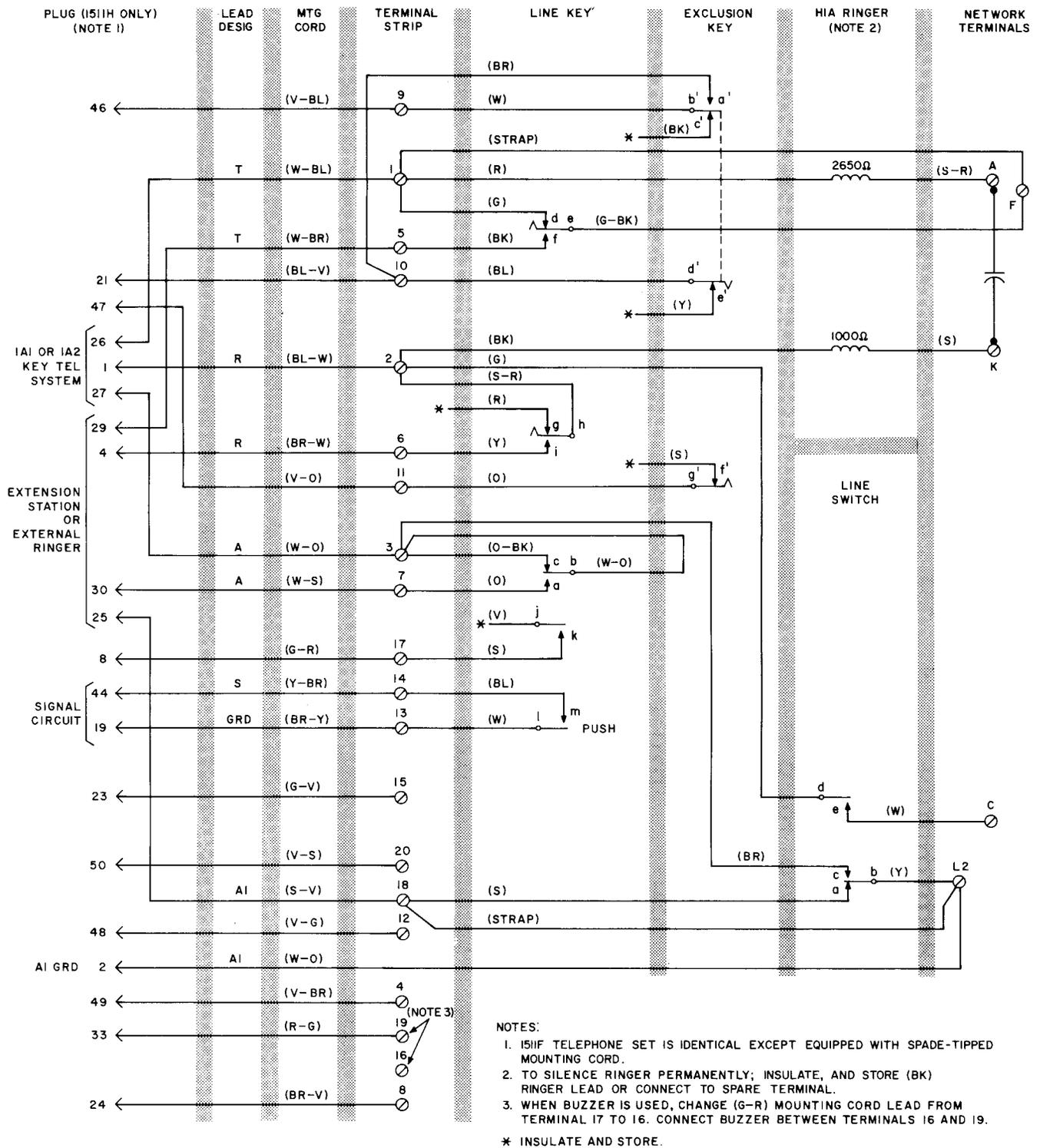
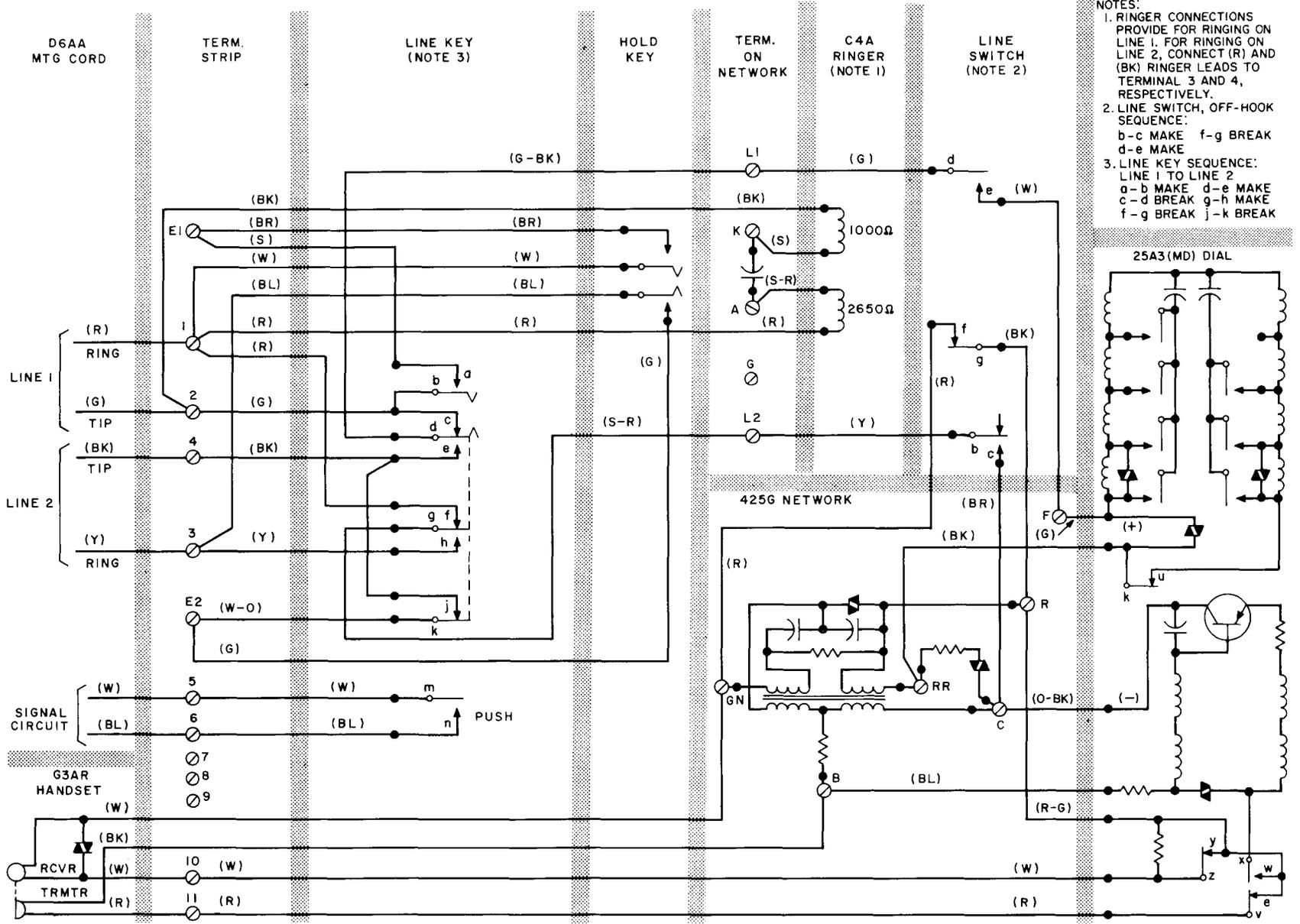


Fig. 16—1511F/H Telephone Set Connections, 1-Line Pickup, Cutoff Extension Station or Extension Line Ringer



- NOTES:
1. RINGER CONNECTIONS PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2, CONNECT (R) AND (BK) RINGER LEADS TO TERMINAL 3 AND 4, RESPECTIVELY.
 2. LINE SWITCH, OFF-HOOK SEQUENCE:
b-c MAKE f-g BREAK
d-e MAKE
 3. LINE KEY SEQUENCE:
LINE 1 TO LINE 2
a-b MAKE d-e MAKE
c-d BREAK g-h MAKE
f-g BREAK j-k BREAK

Fig. 18—1515B Telephone Set Connections, With 25A3(MD) Dial

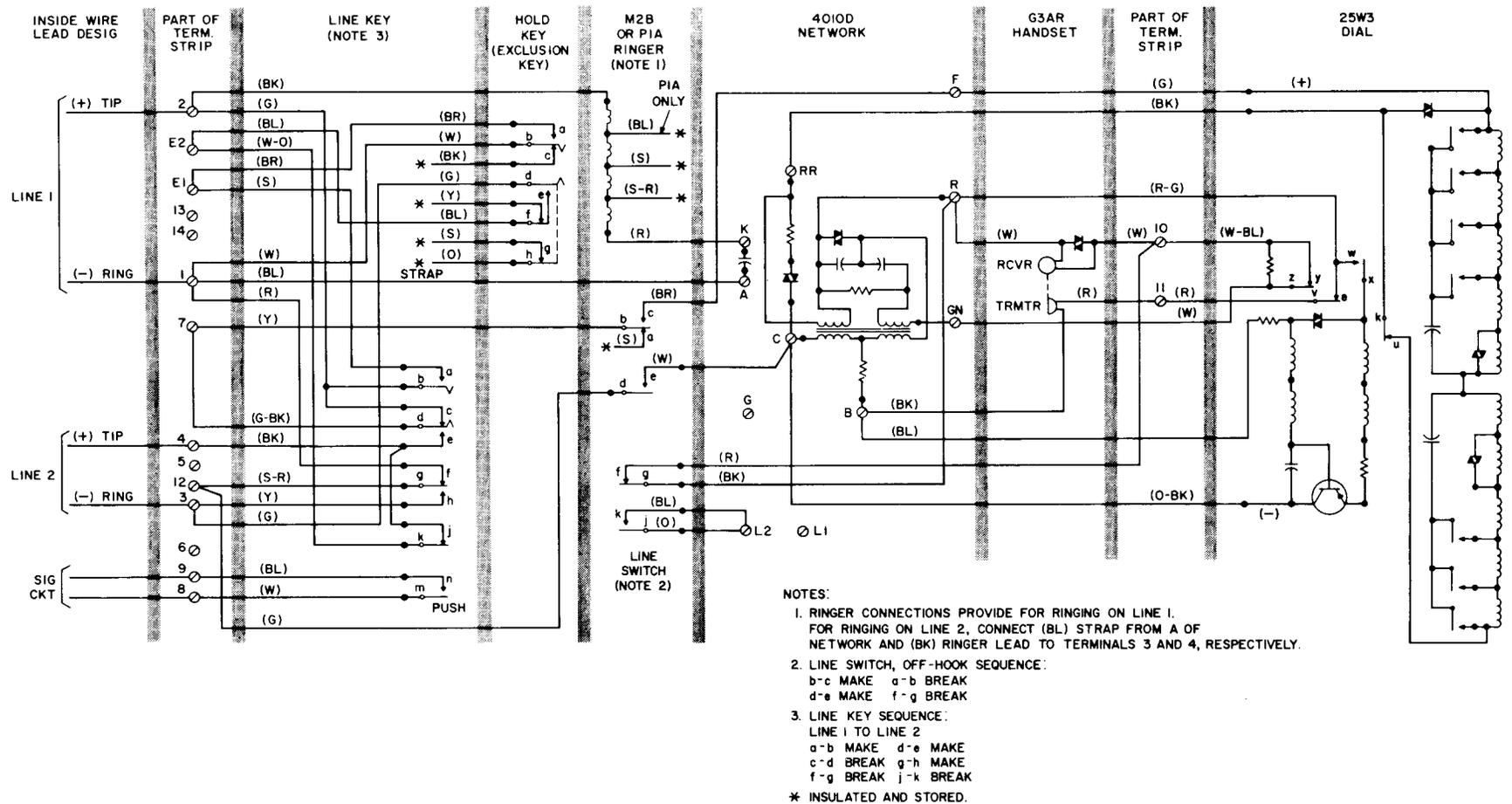


Fig. 19—1555B Telephone Set Connections, With 25W3 Dial

TABLE K
1558D WIRING CHANGES TO PROVIDE 1-LINE PICKUP, CUTOFF EXT STATION OR EXT RINGER

LINE KEY (584H)			EXCLUSION KEY			LINE SWITCH		
LEAD	FROM	TO	LEAD	FROM	TO	LEAD	FROM	TO
R	1	*	BR	E1	*	G	12	1
S-R	12	1	Y	E1	*	Y	7	13
O-BK	5	*	BL	1	*	S	14	7
W-O	G	5	S	13	*	BR	G	5
			O	5	*			

Strap 7 to 13 on terminal strip
 Strap F of network to 2 on terminal strip

* Insulate and store.

TABLE L
1558D WIRING CHANGES TO PROVIDE 2-LINE PICKUP, HOLD ON LINE 1, 1A1 AND 1A2 KEY TELEPHONE SYSTEM, AND SIGNALING

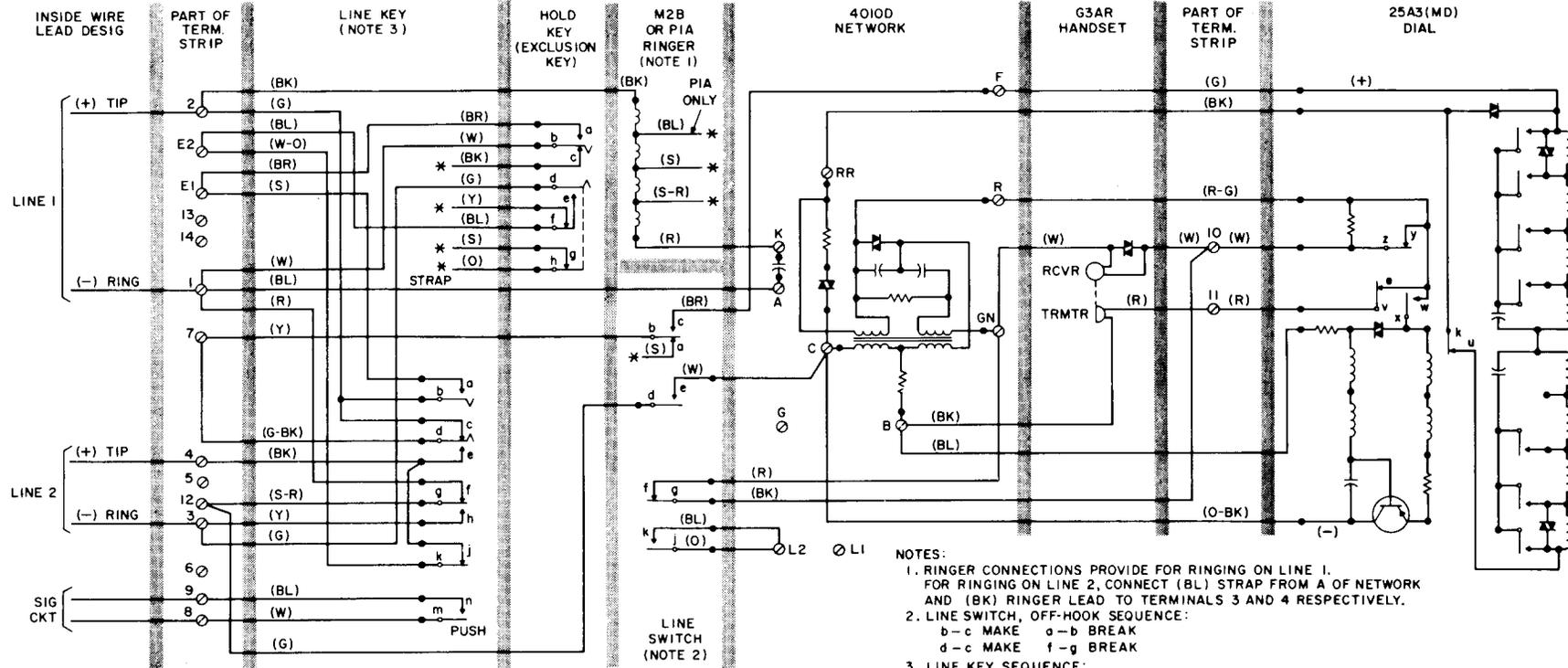
HOLD KEY							
LEAD	BK	W	BR	Y	BL	S	O
FROM	2	E2	E1	E1	1	13	5
TO	*	2	1	*	*	*	*

* Insulate and store.

TABLE M
1558D WIRING CHANGES TO PROVIDE SECRETARIAL SERVICE WITH HOLD

LINE KEY (584H)			EXCLUSION KEY		
LEAD	FROM	TO	LEAD	FROM	TO
(W-O)	G	2	(W)	E2	2
(S)	*	E2	(BR)	E1	1
(V)	*	1			

* Stored location.



- NOTES:
1. RINGER CONNECTIONS PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2, CONNECT (BL) STRAP FROM A OF NETWORK AND (BK) RINGER LEAD TO TERMINALS 3 AND 4 RESPECTIVELY.
 2. LINE SWITCH, OFF-HOOK SEQUENCE:
 b-c MAKE a-b BREAK
 d-c MAKE f-g BREAK
 3. LINE KEY SEQUENCE:
 LINE 1 TO LINE 2
 a-b MAKE d-e MAKE
 c-d BREAK g-h MAKE
 f-g BREAK j-k BREAK
- * INSULATED AND STORED.

Fig. 20—1555B Telephone Set Connections, With 25A3(MD) Dial

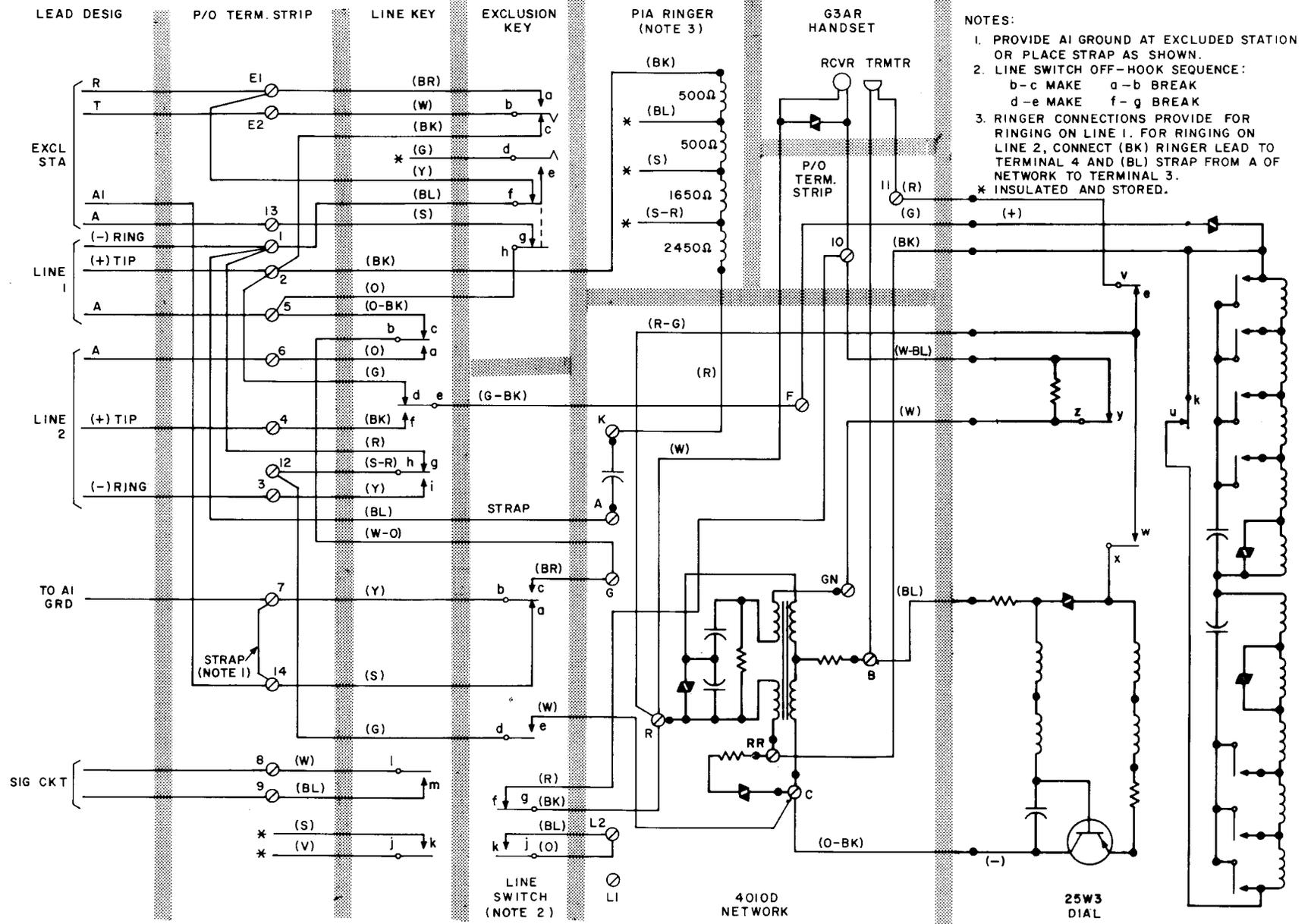


Fig. 21—1558D Telephone Set Connections, With 25W3 Dial, 2-Line Pickup, Signaling, and 1A1 and 1A2 Key Telephone Systems

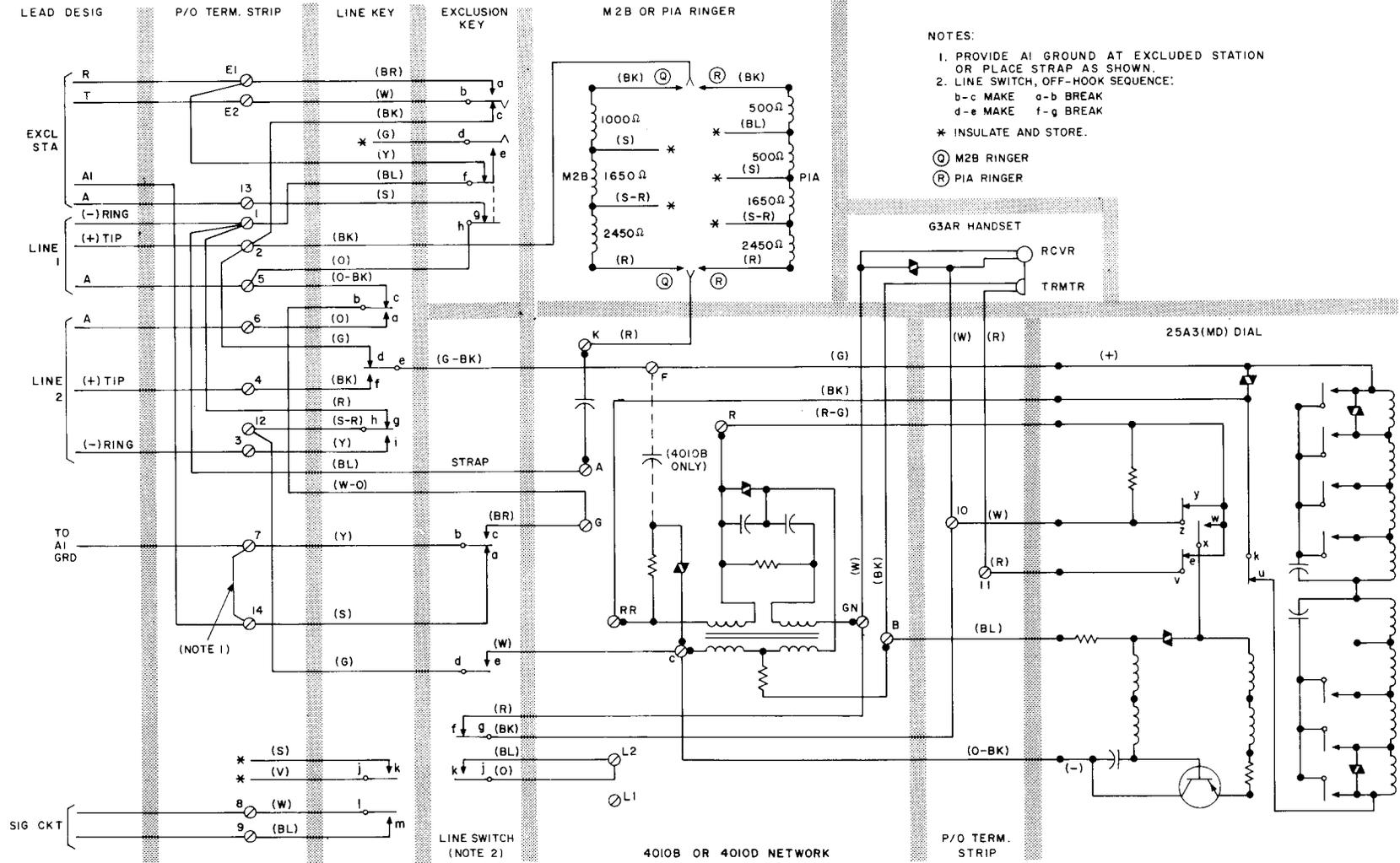


Fig. 22—1558D Telephone Set Connections, With 25A3(MD) Dial, 2-Line Pickup, Signaling, and 1A1 and 1A2 Key Telephone Systems

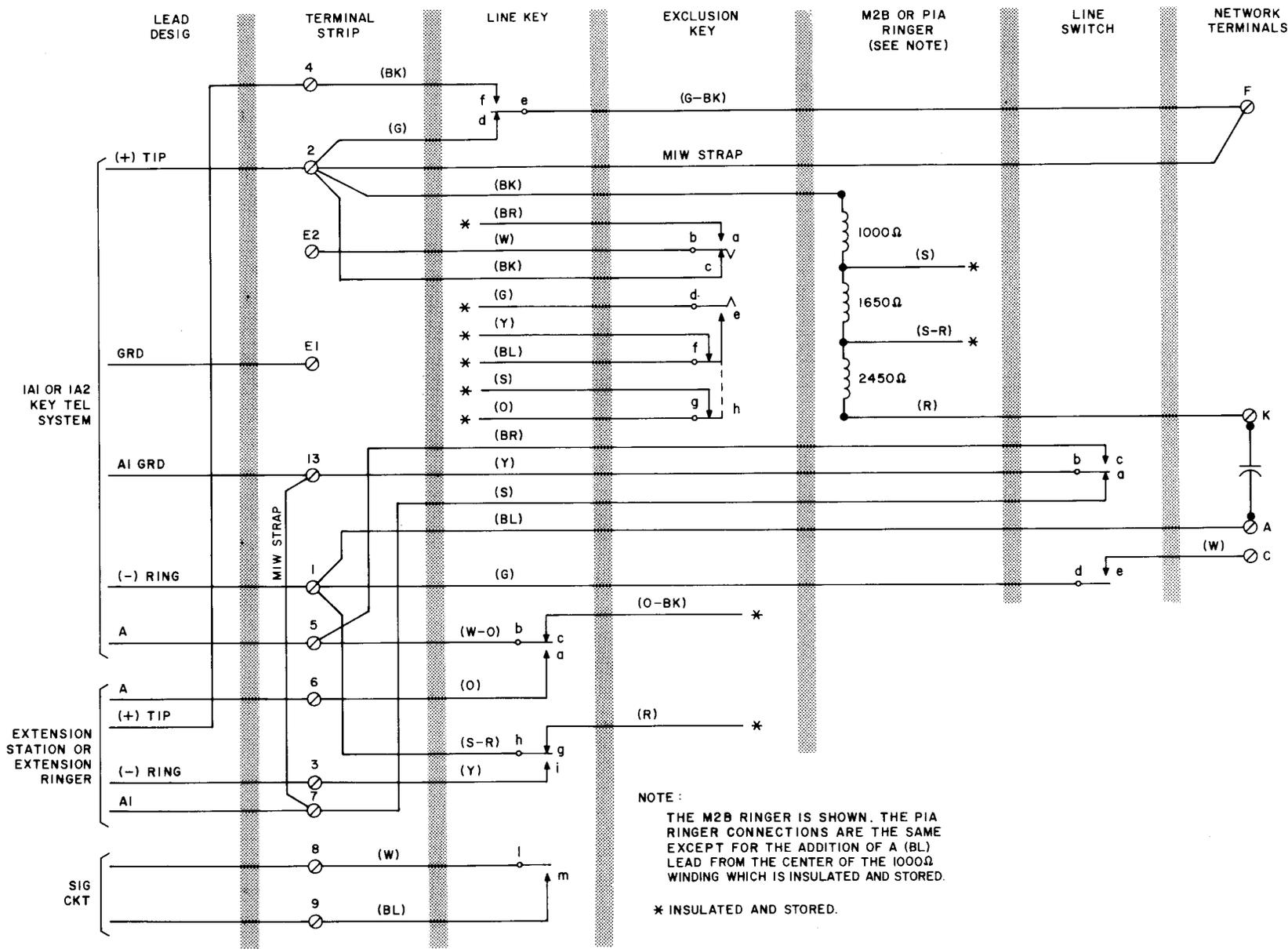


Fig. 23—1558D Telephone Set Connections, 1-Line Pickup, Cutoff Extension Station, or Extension Line Ringer

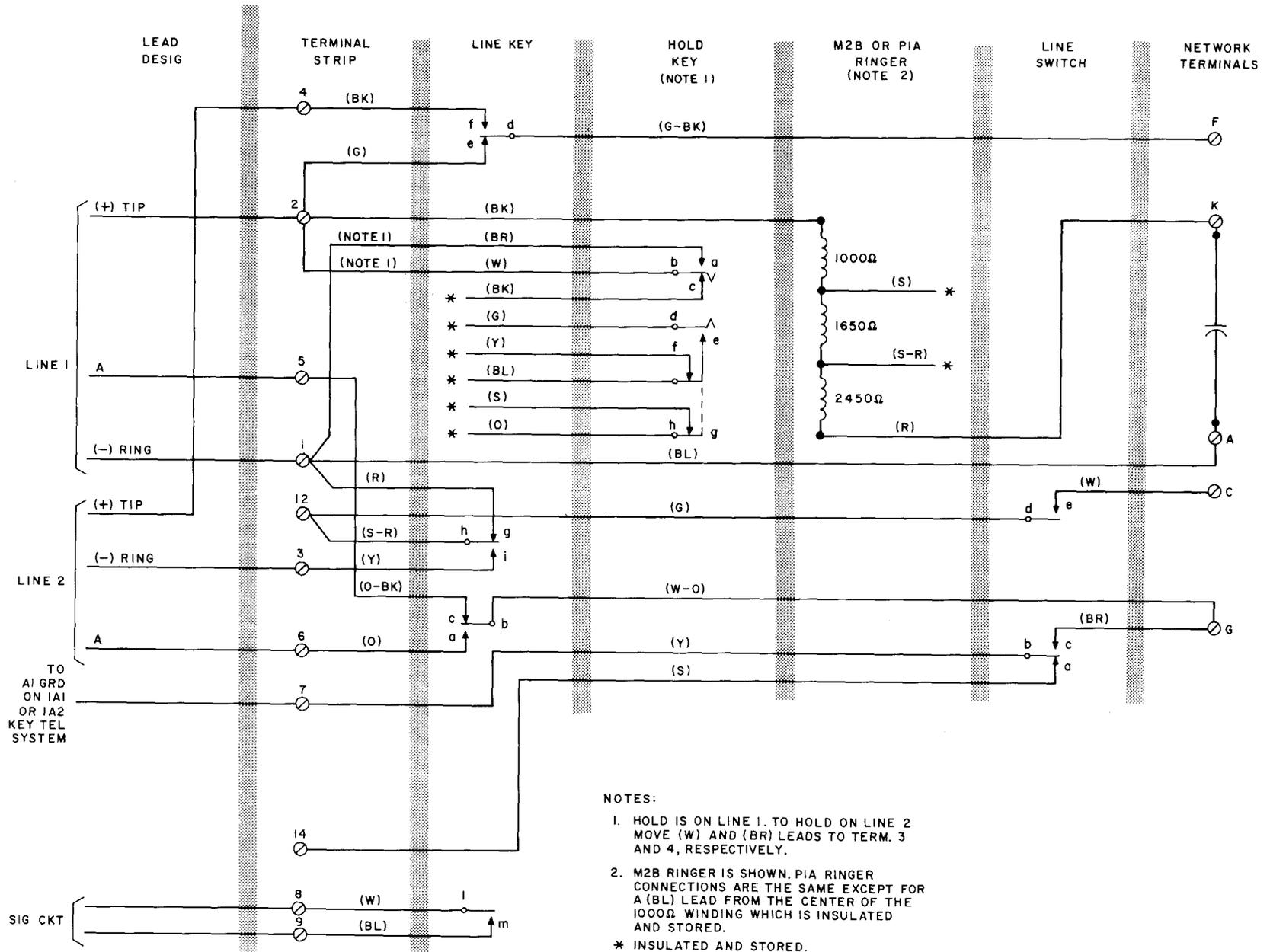


Fig. 24—1558D Telephone Set Connections, 2-Line Pickup, Hold on Line 1, Used With 1A1 and 1A2 Key Telephone Systems, and Signaling

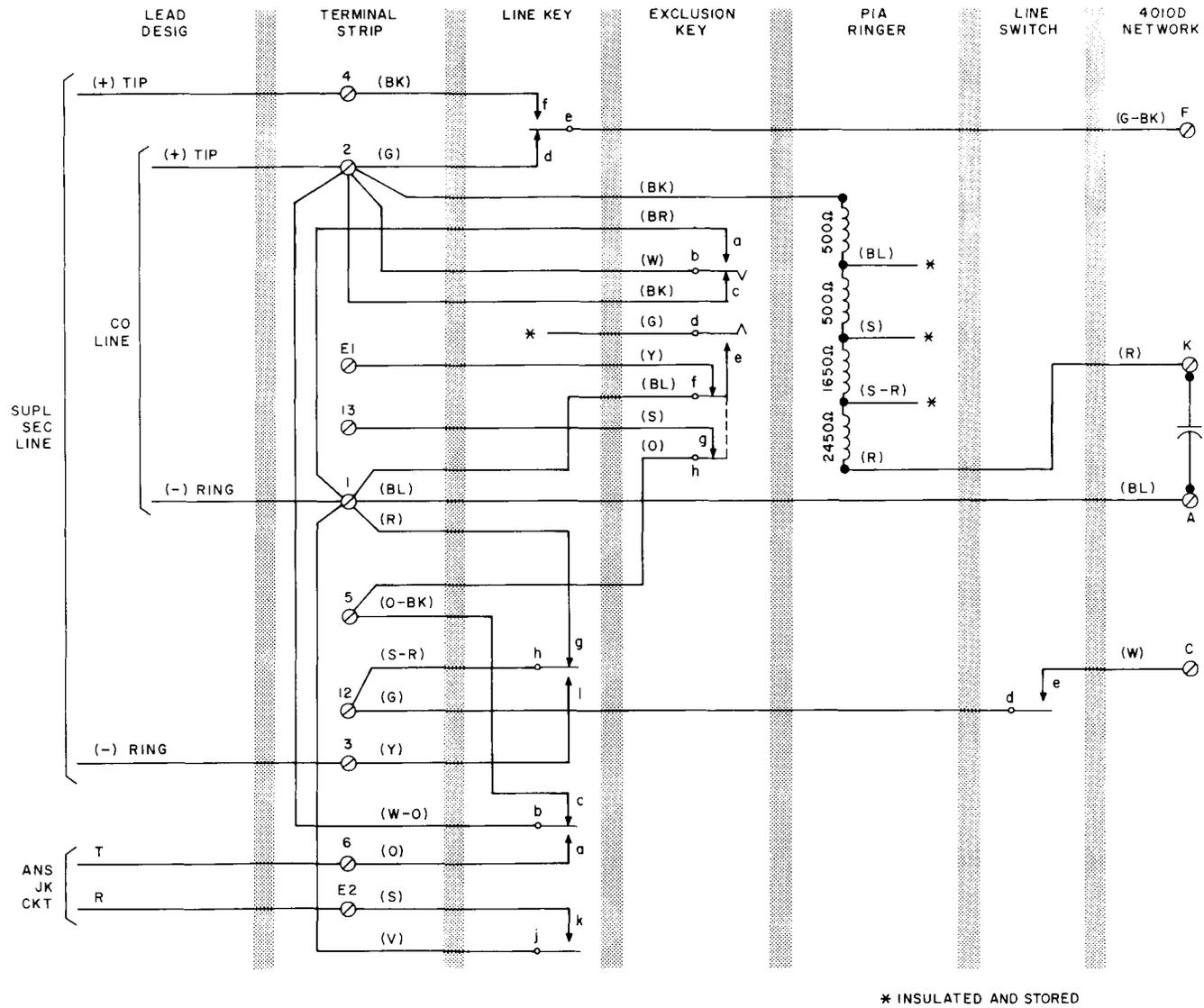


Fig. 25—1558D Telephone Set Connections For Secretarial Service and Hold