

REFERENCE

502-, 510-, 511-, 515-, 555-, AND 558-TYPE TELEPHONE SETS



Fig. 1—502-, 510-, 511-, 515-, 555-, and 558-Type Telephone Sets

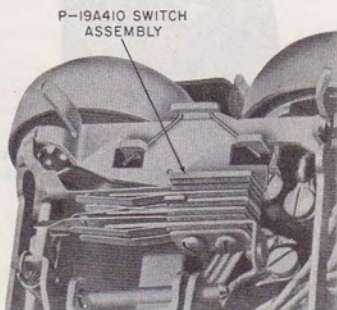
## 1. GENERAL

**1.01** This section is reissued to add C4B and H1B ringers, furnished in current production 502-, 510-, 511-, and 558-type telephone sets.

**1.02** This section covers rotary dial and manual telephone sets equipped with one or two of the following features.

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

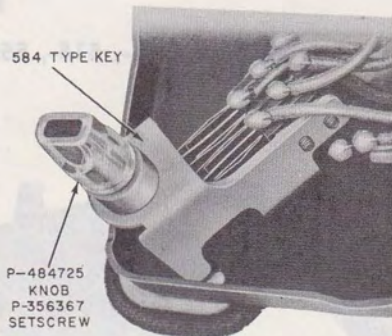
**1.03** Code numbers such as 511C/D cover both manual and dial versions, respectively, of the same type telephone set to permit converting to either type without changing the code number stamped on the base. The letter R was added to the code number at one time to indicate the set was equipped with a retractile handset cord.



**Fig. 2—Typical Exclusion Switch**

## 2. IDENTIFICATION

**2.01 Purpose:** These sets are used where exclusion, 2-line pickup, or both are desired in common battery areas, manual or dial.



**Fig. 3—Typical Turn Key**

**2.02 Ordering Guide:** Table A lists components of these sets.

**2.03 Color:**

- (a) All sets available in standard colors indicated in Section 500-120-100.
- (b) Components available in color include dial or apparatus blank, handset, mounting cord, and housing. Components other than housing must have code completed by adding desired color suffix. Housing P-number must have desired color suffix substituted for its last two digits.

## 3. OPERATION (515B AND 555B)

**3.01 515B and 555B Telephone Sets:**

*The following operating instructions should be explained to the customer upon installation of the set.*

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 (on top of housing) and operate the line key to the second line.



**TABLE A**  
**TELEPHONE SET COMPONENT PARTS\***

TEL. SET	CODE	HOUSING	MOUNTING CORD	RINGER	EXCLUSION OR HOLD KEY	584-TYPE KEY AND LEAD ASSEMBLY			
502	A	P-80D900	D6AA	C4A or C4B	P-19A410				
	B								
510	A	P-80D100	D4BJ	C4A		P-347015			
	B		D6AA	C4A or C4B					
	E								
	F								
511	A (MD)	P-80D700	D10P	C4A	P-19A410	P-20A455			
	B (MD)		D16D						
	C			D20J	H1A or H1B	P-20F139	P-20F137		
	D		D20K						
	F			D6AA	C4A	P-21F195	P-21F217		
	H								
515	B	P-81E800		C4A	P-21F197	P-21F218			
555	B				P-11E256				
558	A (MD)						H1A or H1B	P-20F167	P-20F166
	B (MD)								
	C								
	D								
	F								

\*In addition to parts in tabular listing, sets contain a 425-type network, G-type handset, and 7- or 9-type dial. 95-type apparatus blank included with 502A, 510A, E, 511A, C, and 558 A, C.

(2) When the call on second line is completed, operate the line key back to the first line position and depress the hold key plunger.

**Note:** Failure to depress the 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 the operating sequence (i.e., depressing the hold key plunger before operating line key to held line position) will disconnect the held line.

(3) If the second line is to be picked up 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.

(a) When replacement of a split coil ringer, i.e., a C4A or H1A is necessary, the single coil version C4B or H1B can be used in certain sets if tip party identification is not required.

(b) The G1- or G3-type handsets in these sets may be replaced by a G6AR(MD) or G6B handset for impaired hearing, a G7AR for weak speech, or a G8A(MD) or G8B for noisy locations. Refer to section covering handsets for additional information.

**4.02** For complete installation and maintenance information for all components of these sets refer to Division 502, section entitled 0- and 1-Button Sets, Common Installation and Maintenance Information.

**4. INSTALLATION AND MAINTENANCE**

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

**TABLE B**  
**502A/B LINE AND RINGER CONNECTIONS**

FEATURES					CONNECTIONS TO TERMINALS INSIDE SET													EXTERNAL CONNECTIONS FOR MOUNTING CORD											
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		EX-CLUSION KEY USED TO CUT OFF		MOUNTING CORD LEADS						EXCLUSION KEY LEADS			C4A RINGER LEADS (NOTE)			C4B RINGER LEADS (NOTE)			LINE		EX-CLUSION CIRCUIT		COM OR PVT LINE RINGER CIRCUIT		KEY EQUIP. OR STA BUSY LAMP CIRCUIT			
	LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	(R)	(G)	(Y)	(BK)	(BL)	(W)	(Y) [R-Y]	(BK) [G-Y]	(BL)	(W)	(R)	(BK)	(S)	(S-R)	(S)*	(BK)	(R)	RING	TIP	RING	TIP	R	B	A OR BL	A1 OR GRD
1	*		*		1	2	E1	E2	5	6	L2	L1	E1	E2	1	2	K	A	1	2	K	R	G	Y	BK			BL	W
1		*		*	1	2	E1	E2	5	6	4	3	E2	3	E1	4	A	A	E1	4	A	R	G			Y	BK	BL	W

( ) Current color code.

[ ] MD color code.

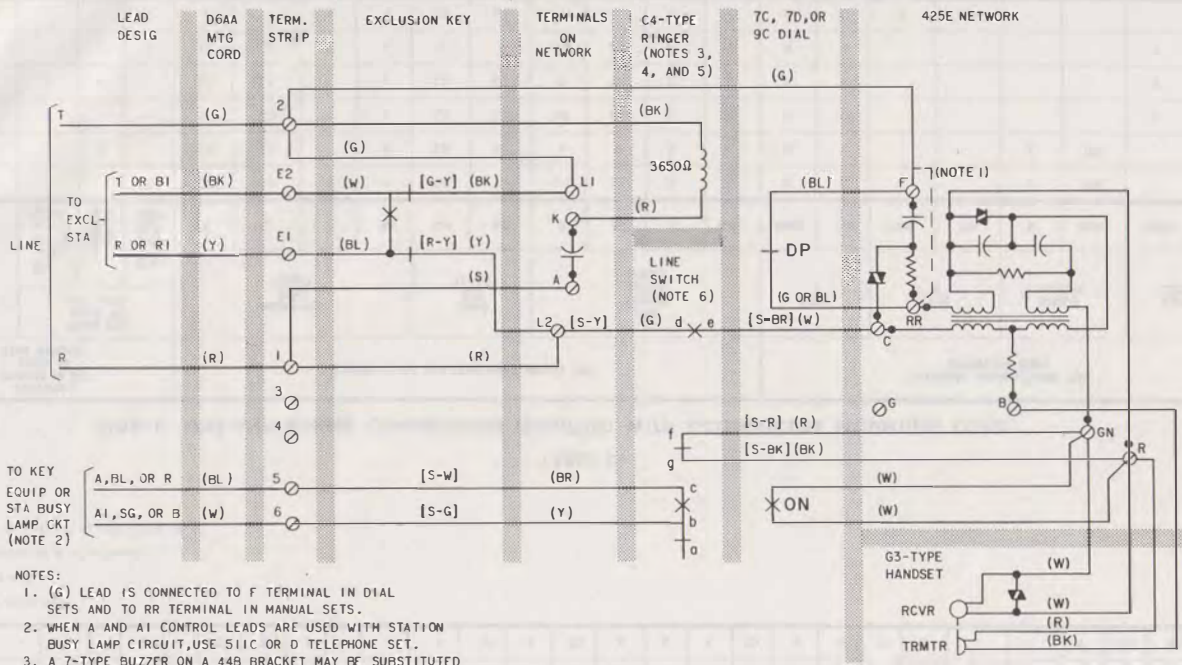
\*Strap connected to A of network.

Note: Refer to notes 3, 4, and 6, Fig. 4.

**TABLE C**  
**510A/B LINE AND RINGER CONNECTIONS (EQUIPPED WITH 4-CONDUCTOR MOUNTING CORD)**

FEATURES (RINGER IN SET USED AS LINE RINGER)					CONNECTIONS FOR TERMINALS INSIDE SET								EXTERNAL CONNECTIONS FOR MOUNTING CORD									
NUMBER OF LINES PICKED UP	SIGNALING	TURN KEY USED TO CUT OFF			MOUNTING CORD LEADS				TURN KEY LEADS		C4A RINGER LEADS (NOTE)				LINE 1		LINE 2		SIGNAL CIRCUIT		CUTOFF CIRCUIT	
		EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	R	G	Y	BK	S-R	S-G	R	BK	S	S-R	RING	TIP	RING	TIP	S	GRD	RING	TIP
1	*				L2	L1	5	6	L2	L1	L2	L1	K	A	R	G			Y	BK		
1	*		*		L2	L1	5	6	L2	L1	1	2	K	A	R	G			Y	BK		
1		*			L2	L1	3	4	L2	L1	L2	L1	K	A	R	G					Y	BK
1		*	*		L2	L1	3	4	L2	L1	3	4	K	A	R	G					Y	BK
1				*	L2	L1	3	4	G	R	L2	L1	K	A	R	G					Y	BK
2					1	2	3	4	L2	L1	1	2	K	A	R	G	Y	BK				

Note: Refer to notes 2, 3, 4, and 5, Fig. 5.



TO KEY EQUIP OR STA BUSY LAMP CKT (NOTE 2)

NOTES:

1. (G) LEAD IS CONNECTED TO F TERMINAL IN DIAL SETS AND TO RR TERMINAL IN MANUAL SETS.
2. WHEN A AND A1 CONTROL LEADS ARE USED WITH STATION BUSY LAMP CIRCUIT, USE 511C OR D TELEPHONE SET.
3. A 7-TYPE BUZZER ON A 44B BRACKET MAY BE SUBSTITUTED FOR THE RINGER AS A COMMON OR PRIVATE LINE AUDIBLE SIGNAL.
4. TO SILENCE RINGER PERMANENTLY, REMOVE (BK) RINGER LEAD FROM TERMINAL 2 INSULATE AND STORE.
5. SETS ARE FACTORY WIRED FOR BRIDGED RINGING SERVICE. CONNECTIONS FOR C4B RINGER SHOWN. IF C4A RINGER IS USED WIRE AS FOLLOWS:

(BK) TO 2 OF TERM. STRIP  
 (S) TO K OF NETWORK  
 (S-R) TO A OF NETWORK  
 (R) TO I OF TERM. STRIP  
 REMOVE (S) STRAP FROM A OF NETWORK AND I OF TERM. STRIP

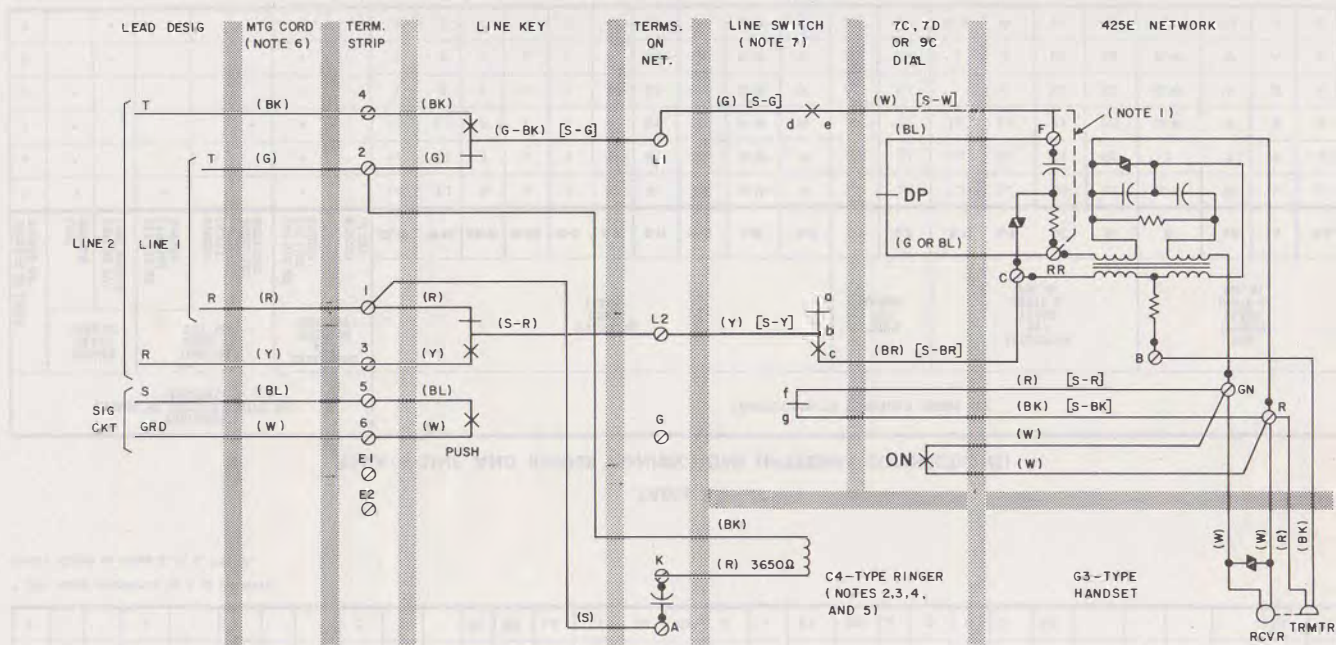
6. LINE SWITCH SEQUENCE, HANDSET REMOVED:  
 b c - MAKES  
 d e - MAKES  
 a b - BREAKS  
 f g - BREAKS

DP - DIAL PULSE CONTACTS  
 ON - DIAL OFF-NORMAL CONTACTS  
 ( ) - CURRENT COLOR CODE  
 [ ] - MD COLOR CODE

TPA 483439

Fig. 4—502A/B Telephone Set, Connections





NOTES:

- (W) [S-W] LINE SWITCH LEAD IS CONNECTED TO F TERMINAL IN DIAL SETS AND TO RR TERMINAL IN MANUAL SETS.
- SETS ARE FACTORY WIRED FOR BRIDGED RINGING SERVICE. CONNECTIONS FOR C4B RINGER SHOWN. IF C4A RINGER IS USED, WIRE AS FOLLOWS: (BK) TO 2 OF TERM. STRIP (S) TO K NETWORK (S-R) TO A OF NETWORK (R) TO 1 OF TERM. STRIP

REMOVE (S) STRAP FROM A OF NETWORK AND 1 OF TERM. STRIP.

- RINGER CONNECTIONS PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2, CONNECT (BK) RINGER LEAD AND (S) STRAP LEAD TO TERMINALS 4 AND 3 RESPECTIVELY.
- A 7-TYPE BUZZER ON A 44B BRACKET MAY BE SUBSTITUTED FOR THE RINGER AS A COMMON OR PRIVATE LINE AUDIBLE SIGNAL.
- TO SILENCE RINGER PERMANENTLY, REMOVE (BK) RINGER LEAD FROM TERMINAL 2, INSULATE AND STORE.
- 510A AND B SETS ARE EQUIPPED WITH D4BJ MTG CORD WHICH DOES NOT PROVIDE SIGNAL CKT LEADS. 510E AND F SETS ARE EQUIPPED WITH D6AA MTG CORD.

- LINE SWITCH SEQUENCE, HANDSET REMOVED:  
bc-MAKES  
de-MAKES  
ab-BREAKS  
fg-BREAKS

DP - DIAL PULSE CONTACTS  
ON - DIAL OFF-NORMAL CONTACTS  
( ) - CURRENT COLOR CODE  
[ ] - MD COLOR CODE

B-188003

Fig. 5—510A/B and E/F Telephone Set Connections, Wired For 2-Line Pickup and Signaling

**TABLE D**  
**510E/F LINE AND RINGER CONNECTIONS (EQUIPPED WITH 6-CONDUCTOR MOUNTING CORD)**

NUMBER OF LINES PICKED UP		FEATURES						CONNECTIONS TO TERMINALS INSIDE SET													EXTERNAL CONNECTIONS FOR MOUNTING CORD										
		SIGNALING		RINGER IN SET USED AS		TURN KEY USED TO CUT OFF		MOUNTING CORD LEADS						TURN KEY LEADS		C4A RINGER LEADS (NOTE)			C4B RINGER LEADS (NOTE)		LINE 1		LINE 2		SIGNAL CIRCUIT		CUTOFF CIRCUIT		COM OR PVT LINE RINGER CIRCUIT		
		LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	R	G	Y	BK	BL	W	S-R	S-G	R	BK	S	S-R	S*	BK	R	RING	TIP	RING	TIP	S	GRD	RING	TIP	R	B
1	*	*		*			L2	L1	3	4	5	6	L2	L1	L2	L1	K	A	L2	L1	K	R	G			BL	W	Y	BK		
1	*	*		*	*		L2	L1	3	4	5	6	L2	L1	1	2	K	A	1	2	K	R	G			BL	W	Y	BK		
1	*	*			*		L2	L1	3	4	5	6	G	R	L2	L1	K	A	L2	L1	K	R	G			BL	W	Y	BK		
2	*	*					1	2	3	4	5	6	L2	L1	1	2	K	A	1	2	K	R	G	Y	BK	BL	W				
2		*					1	2	3	4	E1	E2	L2	L1	E1	E2	A	A	E1	E2	A	R	G	Y	BK				BL	W	

\* (S) strap connected to A of network.

Note: Refer to notes 2, 3, 4, Fig. 5.

**TABLE E**  
**511A/B LINE AND RINGER CONNECTIONS (INTERNAL CONNECTIONS)**

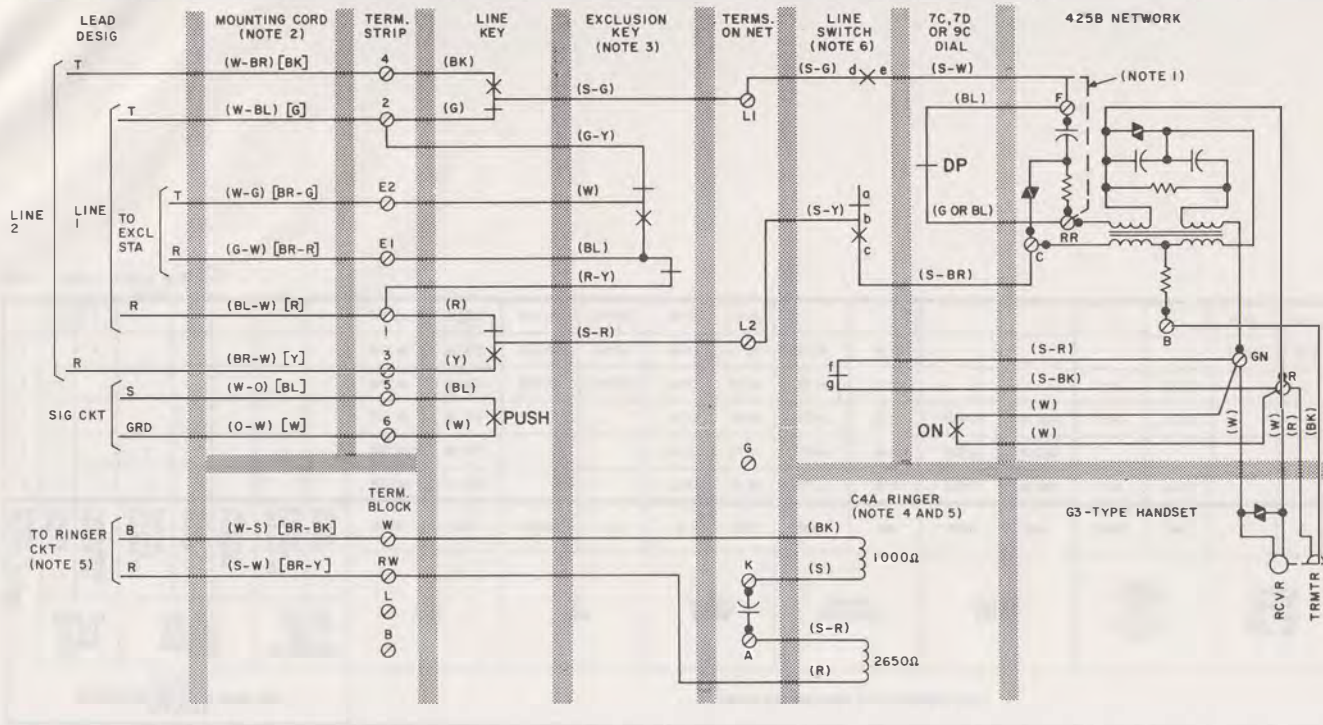
NUMBER OF LINES PICKED UP		FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)						CONNECTIONS TO TERMINALS INSIDE SET																			
		RINGER IN SET USED AS		TURN KEY USED TO CUT OFF		EXCLUSION KEY USED TO CUT OFF		MOUNTING CORD LEADS								TURN KEY LEADS		EXCLUSION KEY LEADS (NOTE 3, FIG. 6)				C4A RINGER LEADS (NOTE 4, FIG. 6)					
		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	BR-W	W-BR	W-O	O-W	G-W	W-G	S-W	W-S	S-R	S-G	R-Y	G-Y	BL	W	R	BK	S
1	*		*			*		L2	L1	3	4	5	6	E1	E2	R-W	W	L2	L1	L2	L1	E1	E2	R-W	W	K	A
1	*		*	*		*		L2	L1	3	4	5	6	E1	E2	R-W	W	L2	L1	L2	L1	E1	E2	1	2	K	A
1	*				*	*		L2	L1	3	4	5	6	E1	E2	R-W	W	G	R	L2	L1	E1	E2	R-W	W	K	A
2	*					*		1	2	3	4	5	6	E1	E2	R-W	W	L2	L1	1	2	E1	E2	R-W	W	K	A
2		*				*		1	2	3	4	5	6	E1	E2	R-W	W	L2	L1	1	2	E1	E2	R-W	W	A	A
2		*				*		1	2	3	4	5	6	E1	E2	R-W	W	L2	L1	R-W	W	E1	E2	E1	E2	A	A



**TABLE F**  
**511A/B LINE AND RINGER CONNECTIONS (EXTERNAL CONNECTIONS)**

FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)								EXTERNAL CONNECTIONS FOR MOUNTING CORD															
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		TURN KEY USED TO CUT OFF			EXCLUSION KEY USED TO CUT OFF		LINE 1		LINE 2		SIGNAL CIRCUIT		EXCLUSION CIRCUIT		CUTOFF CIRCUIT		LINE 1 OR 2 FOR LINE RINGER (NOTE)		COM OR PVT LINE RINGER CIRCUIT			
	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	RING		RING		S		GRD		RING		TIP		RING		TIP	
								RING	TIP	RING	TIP	S	GRD	RING	TIP	RING	TIP	RING	TIP	R	B		
1	*		*			*		BL-W	W-BL			W-O	O-W	G-W	W-G	BR-W	W-BR	S-W	W-S				
1	*		*	*		*		BL-W	W-BL			W-O	O-W	G-W	W-G	BR-W	W-BR						
1	*				*	*		BL-W	W-BL			W-O	O-W	G-W	W-G	BR-W	W-BR	S-W	W-S				
2	*					*		BL-W	W-BL	BR-W	W-BR	W-O	O-W	G-W	W-G			S-W	W-S				
2		*				*		BL-W	W-BL	BR-W	W-BR	W-O	O-W	G-W	W-G					S-W	W-S		
2		*				*		BL-W	W-BL	BR-W	W-BR	W-O	O-W							S-W	W-S		

Note: Refer to note 6, Fig. 6.



## NOTES:

- (S-W) LINE SWITCH LEAD IS CONNECTED TO F TERMINAL IN DIAL SETS AND TO RR TERMINAL IN MANUAL SETS.
- EARLY MODEL SETS ARE EQUIPPED WITH DIOF(MD) OR DIOH(MD) MOUNTING CORD AND CURRENT MODEL WITH DIOP.
- TWO-LINE PICKUP CONNECTIONS IN TABLE E PROVIDE FOR EXCLUSION ON LINE 1. FOR EXCLUSION ON LINE 2, CONNECT (R-Y) AND (G-Y) 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.
- FOR RINGER CONNECTIONS, TERMINATE (W-S) OR [BR-BK] AND (S-W) OR [BR-Y] LEADS TO LINE 1 OR 2 AT CONNECTING BLOCK.

## 6. LINE SWITCH SEQUENCE, HANDSET REMOVED:

- bc-MAKES
- de-MAKES
- fg-BREAKS

DP-DIAL PULSE CONTACTS

ON-DIAL OFF-NORMAL CONTACTS

( ) CURRENT COLOR CODE

[ ] MD COLOR CODE

B-188004

Fig. 6—511A/B Telephone Set Connections, 2-Line Pickup, Signaling, and Exclusion

**TABLE G**  
**511C/D LINE AND RINGER CONNECTIONS**  
**(INTERNAL CONNECTIONS)**

NUMBER OF LINES PICKED UP		FEATURES INCLUDED WITH ALL FEATURES)						CONNECTIONS TO TERMINALS INSIDE SET									
		RINGER IN SET USER AS		TURN KEY USED TO CUT OFF		EXCLUSION KEY USED TO CUT OFF		MOUNTING CORD LEADS		TURN KEY LEADS		EXCLUSION KEY LEADS (NOTE 4, FIG. 7)		C4A RINGER LEADS (NOTES 5 AND 6, FIG. 7)			
		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) [R]	(W-BL) [G]	(S-R)	(S-G)	(Y) [R-Y]	(BK) [G-Y]	(R)	(BK)	(S)
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	G	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

[ ] MD color code.

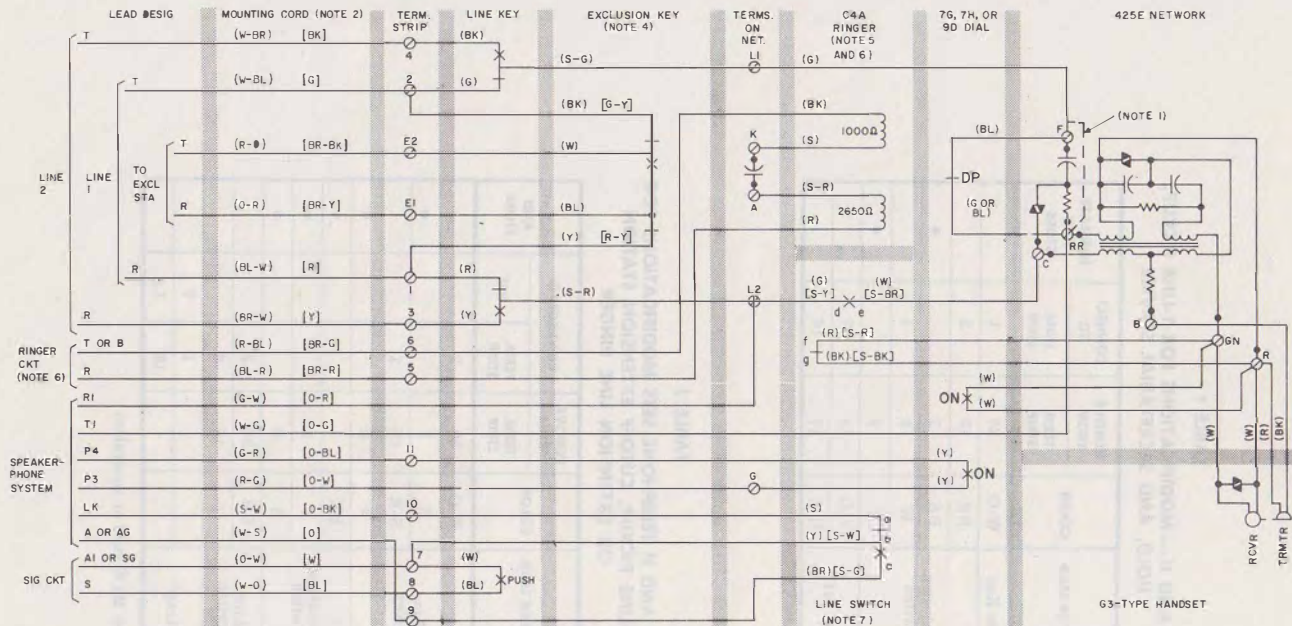
( ) Current color code.



TABLE H

## 511C/D LINE AND RINGER CONNECTIONS (EXTERNAL CONNECTIONS)

FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)										EXTERNAL CONNECTIONS FOR MOUNTING CORD (NOTE 2, FIG. 7)													
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		TURN KEY USED TO CUT OFF			EXCLUSION KEY USED TO CUT OFF		LINE 1		LINE 2		SIGNAL CIRCUIT		EXCLUSION CIRCUIT		CUTOFF CIRCUIT		LINE 1 OR 2 FOR LINE RINGER		COM OR PVT LINE RINGER CIRCUIT		KEY EQUIP. OR STA BUSY LAMP CIRCUIT (NOTE 3, FIG. 7)	
	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	RING	TIP	RING	TIP	S	GRD	RING	TIP	RING	TIP	RING	TIP	R	B	A OR BL	A1 OR GRD
1	*		*			*		R	G			BL	W	BR-Y	BR-BK	Y	BK	BR-R	BR-G			O	W
1	*		*	*		*		R	G			BL	W	BR-Y	BR-BK	Y	BK					O	W
1	*			*		*		R	G			BL	W	BR-Y	BR-BK							O	W
1	*				*	*		R	G			BL	W	BR-Y	BR-BK	Y	BK	BR-R	BR-G			O	W
2	*					*		R	G	Y	BK	BL	W	BR-Y	BR-BK			BR-R	BR-G			O	W
2		*				*		R	G	Y	BK	BL	W	BR-Y	BR-BK					BR-R	BR-G	O	W
2		*				*	*	R	G	Y	BK	BL	W							BR-R	BR-G	O	W



NOTES:

1. (G) LEAD IS CONNECTED TO F TERMINAL IN DIAL SETS AND RR TERMINAL IN MANUAL SETS.
2. OLDER SETS HAVE A D16F CORD. NEWER 511D SETS HAVE A D16F CORD.
3. USE A AND A1 CONTROL LEADS IN THE 1-LINE PICKUP FEATURES ONLY.
4. TWO-LINE PICKUP CONNECTIONS IN TABLE G PROVIDE FOR EXCLUSION ON LINE 1. FOR EXCLUSION ON LINE 2, CONNECT (Y) OR [R-Y] AND (BK) OR [G-Y] EXCLUSION KEY LEADS TO TERMINALS 3 AND 4, RESPECTIVELY.
5. A 7-TYPE BUZZER ON A 44B BRACKET MAY BE SUBSTITUTED FOR THE RINGER AS A COMMON OR PRIVATE LINE AUDIBLE SIGNAL.
6. FOR RINGER CONNECTIONS, TERMINATE (BL-R) OR [BR-R] AND (R-BL) OR [BR-G] MOUNTING CORD LEADS TO LINE 1 OR LINE 2 AT CONNECTING BLOCK.
7. LINE SWITCH SEQUENCE, HANDSET REMOVED:  
 dc - MAKES    db - BREAKS  
 de - MAKES    fg - BREAKS

DP - DIAL PULSE CONTACTS

ON - DIAL OFF-NORMAL CONTACTS

( ) - CURRENT COLOR CODE

[ ] - MD COLOR CODE

B-188000

Fig. 7—511C/D Telephone Set Connections, 2-Line Pickup, Signaling, Exclusion, and Speakerphone

**TABLE I**  
**511F AND H— MODIFICATIONS FOR 1-LINE PICKUP,**  
**HOLD, AND SECRETARIAL SERVICE**

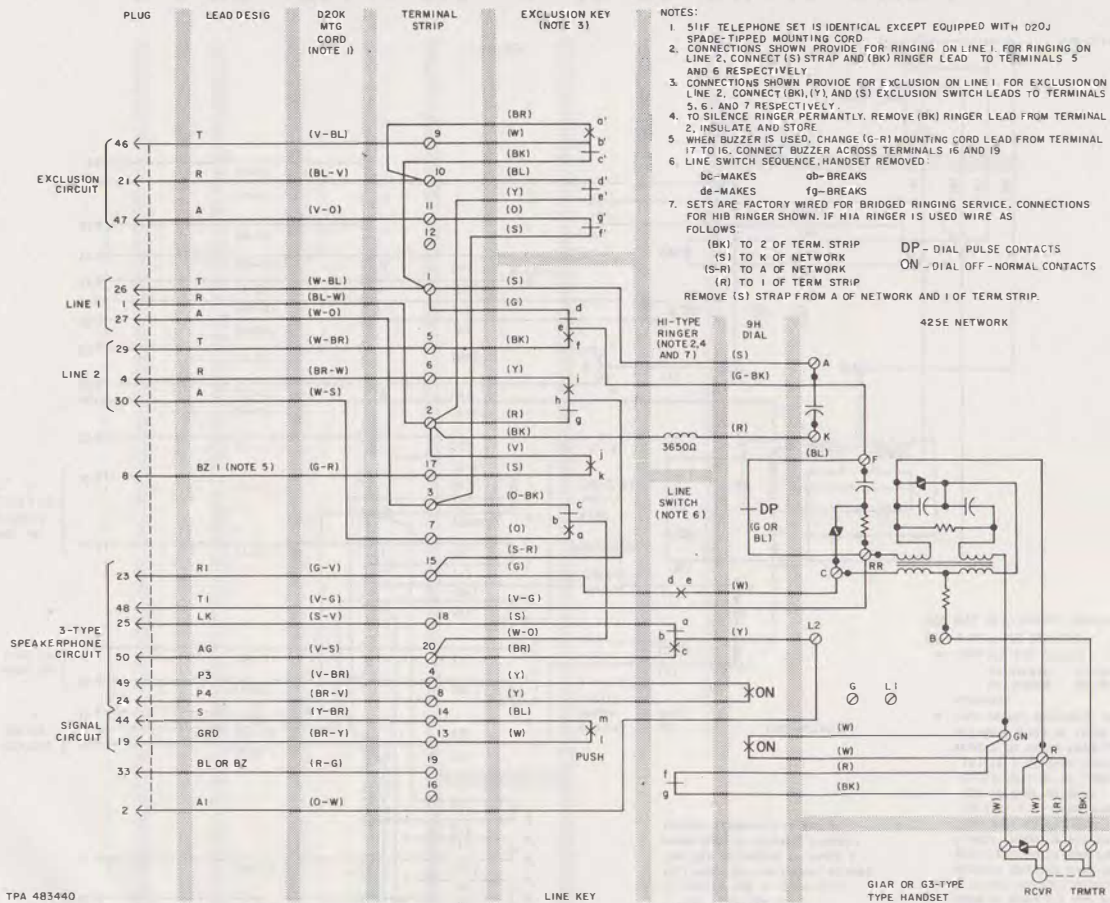
WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO	INSULATE AND STORE
		TERM. STRIP	TERM. STRIP	
Line Key	W-O	20	1	
Exclusion Switch	BR	10	2	
	BK	1		•
	W	9	1	
	Y	2		•
Mtg. Cord	V-O	11	17	
	G-R	17	16	

**TABLE J**  
**511F AND H TELEPHONE SETS MODIFICATIONS FOR**  
**1-LINE PICKUP, CUTOFF EXTENSION STATION**  
**OR EXTENSION LINE RINGER**

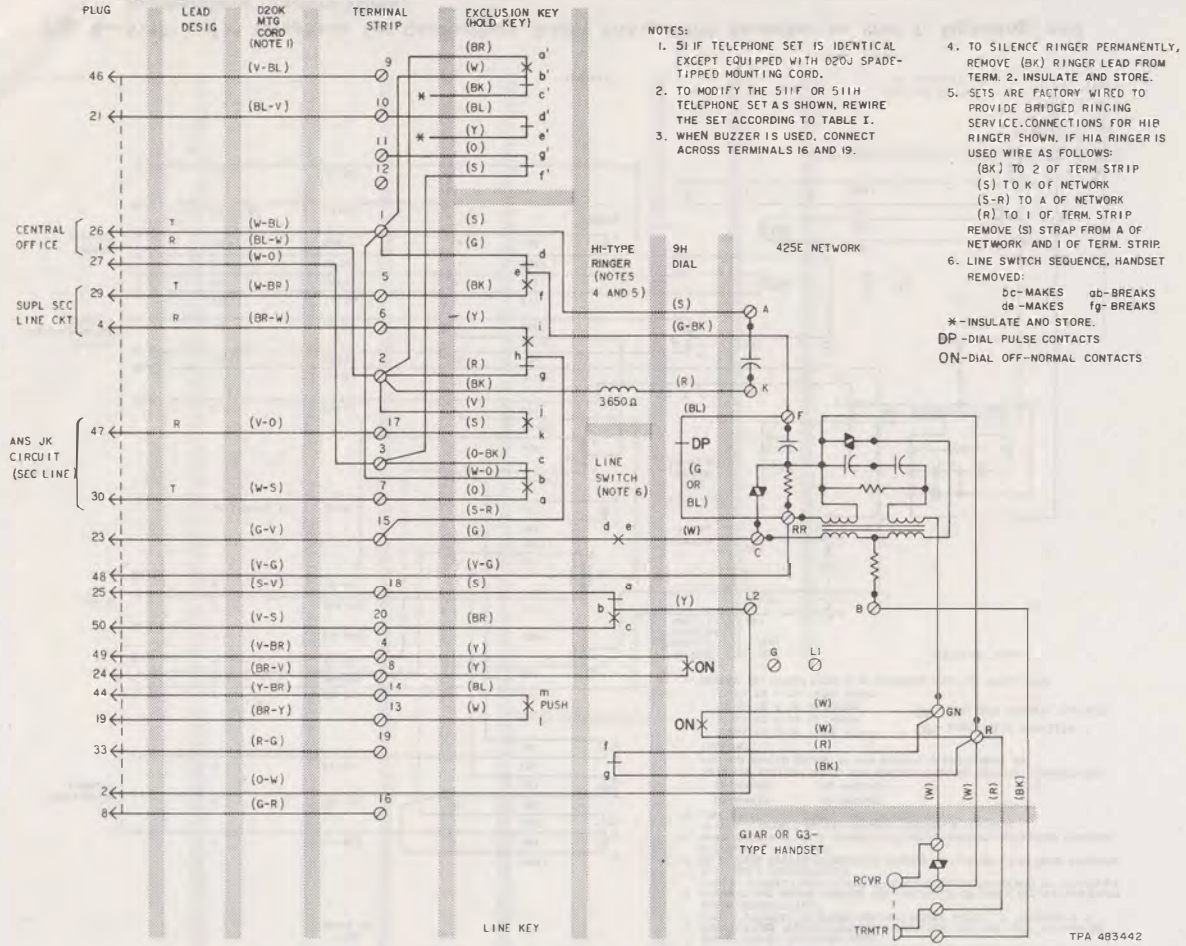
WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO		INSULATE AND STORE
		TERM. STRIP	TERM. STRIP	NET	
Line Key	W-O	20	3		
	R	2			•
	S-R	15	2		
	V	2			•
Exclusion Switch	BK	1			•
	Y	2			•
	S	3			•
Line Switch	BR	20	3		
	G	15	2		
Strap*			1	F	
			18	L2	

\*Use M1W cord or equivalent

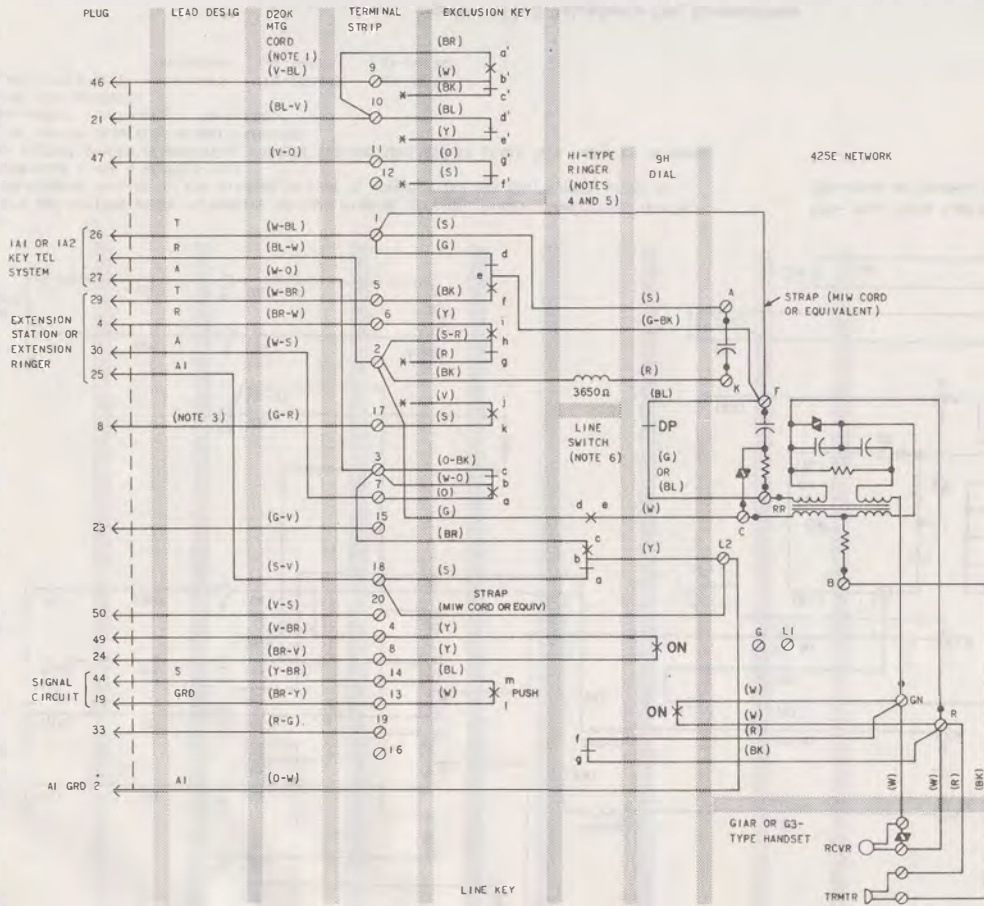




**Fig. 8—511F and H Telephone Set Connections, 2-Line Pickup With Exclusion on Line 1, Signaling, and Speakerphone (Factory Wired)**



TPA 493442



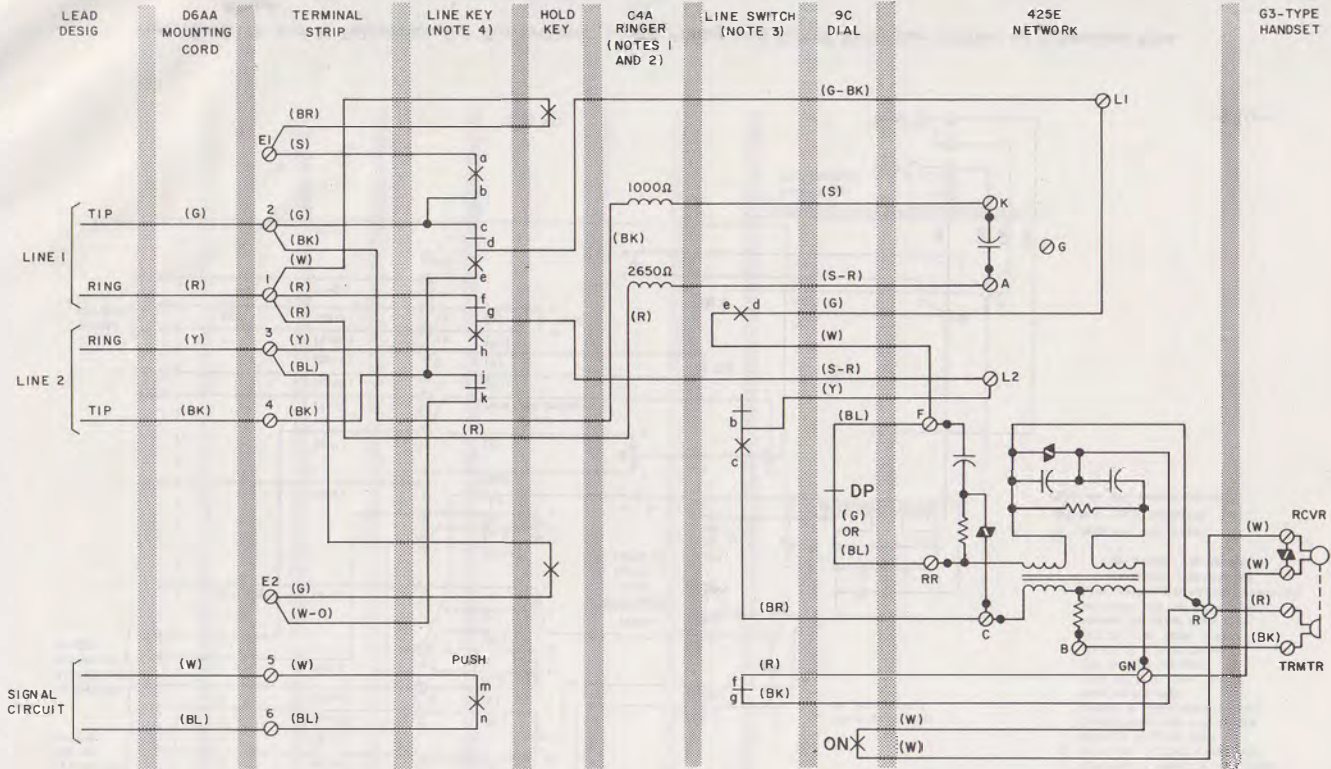
- NOTES:
- 511F TELEPHONE SET IS IDENTICAL EXCEPT EQUIPPED WITH G2BJ SPADE-TIPPED MOUNTING CORD.
  - TO MODIFY 511F OR H TELEPHONE SET AS SHOWN, REWIRE SET ACCORDING TO TABLE J.
  - WHEN BUZZER IS USED CHANGE (G-R) MOUNTING CORD LEAD FROM TERMINAL 17 TO TERMINAL 16. CONNECT BUZZER ACROSS TERMINALS 16 AND 19.
  - TO SILENCE RINGER PERMANENTLY, REMOVE (BK) RINGER LEAD FROM TERMINAL 2 INSULATE AND STORE.
  - SETS ARE FACTORY WIRED FOR BRIDGED RINGING SERVICE. CONNECTIONS FOR HIG RINGER SHOWN. IF H1A RINGER IS USED WIRE AS FOLLOWS:  
(BK) TO 2 OF TERM. STRIP  
(S) TO X OF NETWORK  
(S-R) TO 4 OF NETWORK  
(R) TO 1 OF TERM. STRIP  
REMOVE (S) STRAP FROM A OF NETWORK AND 1 OF TERM. STRIP
  - LINE SWITCH SEQ. HANDSET REMOVED:  
bc-MAKES ab-BREAKS  
de-MAKES fg-BREAKS

\* - INSULATE AND STORE.  
DP-DIAL PULSE CONTACTS  
ON-DIAL OFF NORMAL CONTACTS

Fig. 10—511F and H Telephone Set Connections, 1-Line Pickup and Cutoff Extension Station or Extension Line Ringer

TPA 483443





NOTES:

1. SETS ARE FACTORY WIRED TO PROVIDE BRIDGED RINGING SERVICE. RINGER CONNECTIONS PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2, CONNECT (R) AND (BK) RINGER LEADS TO TERMINALS 3 AND 4 RESPECTIVELY.
2. TO SILENCE RINGER PERMANENTLY, CONNECT (R) AND (BK) RINGER LEADS TO A AND K OF NETWORK.
3. LINE SWITCH SEQUENCE, HANDSET REMOVED:  
bc-MAKES de-MAKES fg-BREAKS
4. LINE KEY SEQUENCE:  
LINE 1 TO LINE 2    ab-MAKES    fg-BREAKS    gh-MAKES  
                         cd-BREAKS    de-MAKES    jk-BREAKS

DP- DIAL PULSE CONTACTS  
ON- DIAL OFF-NORMAL CONTACTS

TPA 485427

Fig. 11—515B Telephone Set, Connections

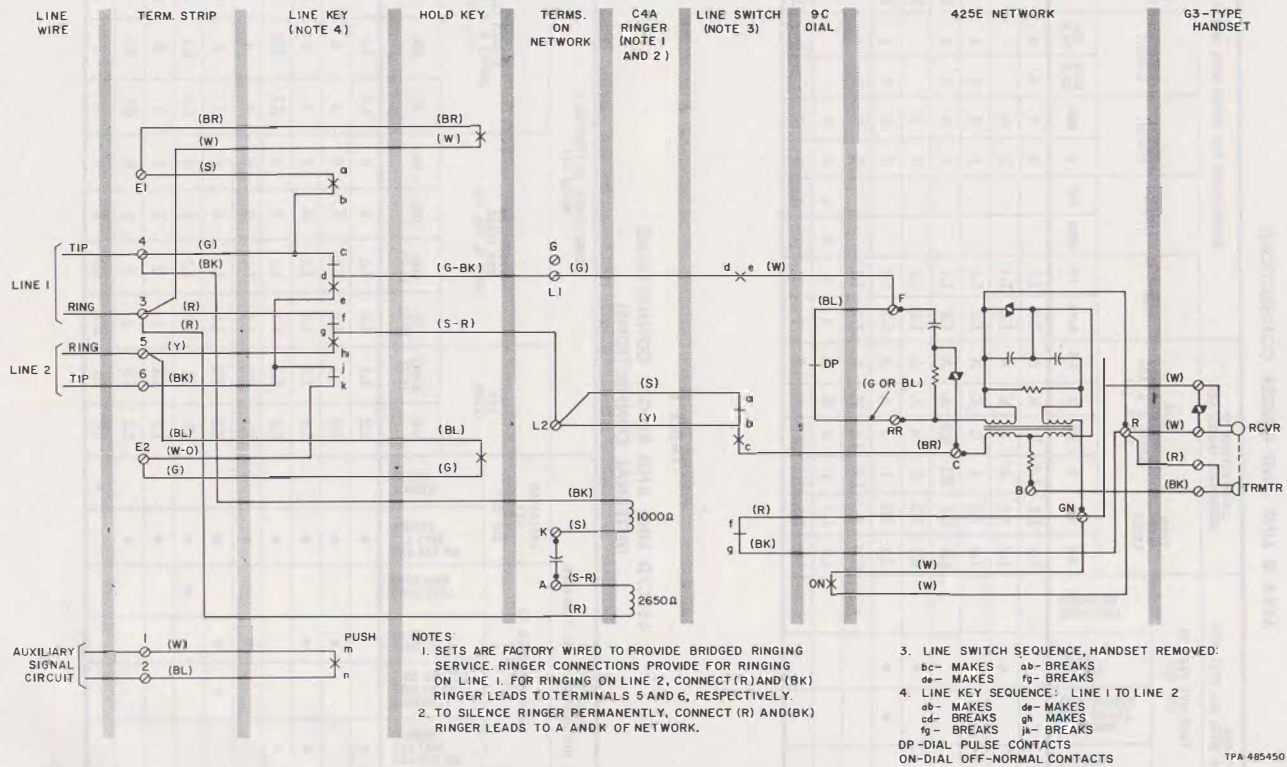


Fig. 12—555B Telephone Set, Connections

TPA 485450

TABLE K  
558A/B LINE AND RINGER CONNECTIONS

NUMBER OF LINES PICKED UP		FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)						CONNECTIONS TO TERMINALS INSIDE SET						CONNECTIONS FOR INSIDE WIRE IN SET									
		RINGER IN SET USED AS		TURN KEY USED TO CUT OFF				TURN KEY LEADS		C4A RINGER LEADS (NOTES 2, 3, AND 4, FIG. 13)				LINE 1		LINE 2		SIGNAL CIRCUIT		CUTOFF CIRCUIT		COMMON OR PRIVATE LINE RINGER CIRCUIT	
		LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	EXTERNAL COM OR PVT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	S-R	S-G	R	BK	S	S-R	RING	TIP	RING	TIP	S	GRD	RING OR R	TIP OR B	R	B
1	•		•				L2	L1	L2	L1	K	A	L2	L1			5	6	3	4			
1	•					•	L2	L1	3	4	K	A	L2	L1			5	6					
1	•		•			•	L2	L1	1	2	K	A	L2	L1			5	6	3	4			
1		•	•				L2	L1	E1	E2	A	A	L2	L1			5	6	3	4	E1	E2	
1		•				•	E1	E2	3	4	A	A	L2	L1			5	6			E1	E2	
1		•		•	•		E1	E2	1	2	A	A	L2	L1			5	6	3	4	E1	E2	
1	•					•	GN	R	L2	L1	K	A	L2	L1			5	6	3	4			
2	•						L2	L1	1	2	K	A	1	2	3	4	5	6					
2		•					L2	L1	E1	E2	A	A	1	2	3	4	5	6			E1	E2	

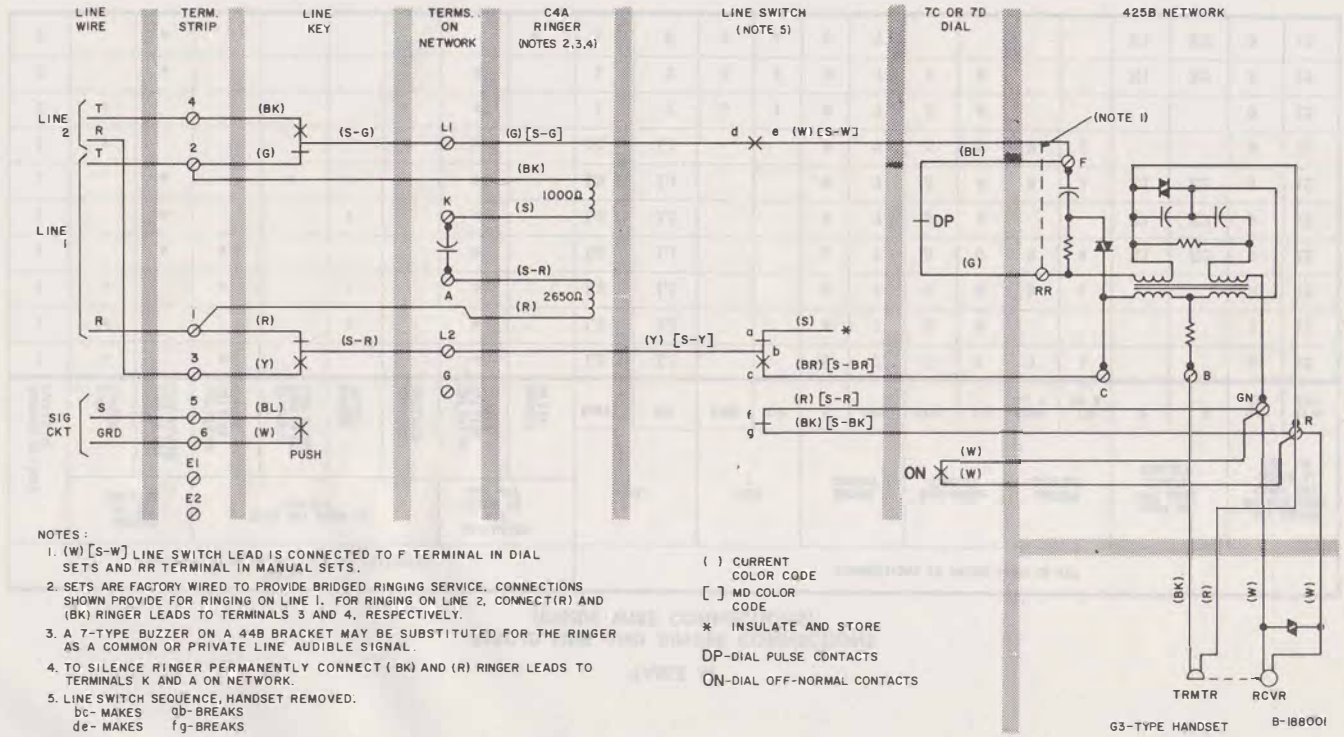
TABLE L  
558C/D LINE AND RINGER CONNECTIONS (INTERNAL CONNECTIONS)

NUMBER OF LINES PICKED UP		FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)						CONNECTIONS TO TERMINALS INSIDE SET											
		RINGER IN SET USED AS		TURN KEY USED TO CUT OFF				EXCLUSION KEY USED TO CUT OFF		TURN KEY LEADS		EXCLUSION KEY LEADS (NOTE 5, FIG. 14)				C4A RINGER LEADS (NOTES 6, 7, AND 8, FIG. 14)			
		LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	EXTERNAL COM OR PVT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	EXT STA OR EXT LINE RINGER	RINGER IN SET	(S-R)	(G-BK) [S-G]	(Y) [R-Y]	(BK) [G-Y]	(W)	(BL)	(R)	(BK)	(S)	(S-R)
1	•		•				•		L2	L1	L2	L1	5	6	L2	L1	K	A	
1	•					•	•		L2	L1	L2	L1	5	6	3	4	K	A	
1	•		•			•	•		L2	L1	L2	L1	5	6	1	2	K	A	
1		•	•				•		L2	L1	L2	L1	5	6	E1	E2	A	A	
1		•				•	•		E1	E2	L2	L1	5	6	3	4	A	A	
1		•		•	•		•		E1	E2	L2	L1	5	6	1	2	A	A	
1	•					•	•		G	R	L2	L1	5	6	L2	L1	K	A	
2	•						•		L2	L1	1	2	5	6	1	2	K	A	
2		•					•		L2	L1	1	2	5	6	E1	E2	A	A	
2		•					•		L2	L1	E1	E2	5	6	5	6	A	A	

( ) Current color code.

[ ] MD color code.



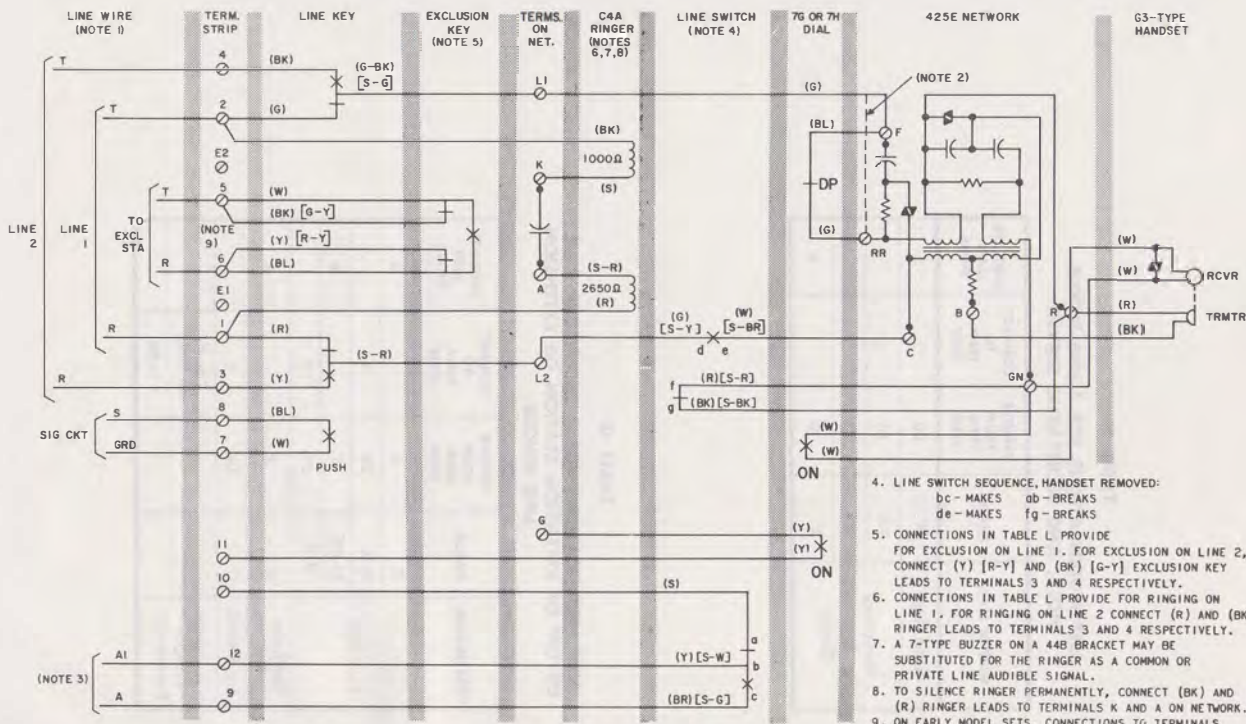


- NOTES:
1. (W) [S-W] LINE SWITCH LEAD IS CONNECTED TO F TERMINAL IN DIAL SETS AND RR TERMINAL IN MANUAL SETS.
  2. SETS ARE FACTORY WIRED TO PROVIDE BRIDGED RINGING SERVICE. CONNECTIONS SHOWN PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2, CONNECT (R) AND (BK) RINGER LEADS TO TERMINALS 3 AND 4, RESPECTIVELY.
  3. A 7-TYPE BUZZER ON A 44B BRACKET MAY BE SUBSTITUTED FOR THE RINGER AS A COMMON OR PRIVATE LINE AUDIBLE SIGNAL.
  4. TO SILENCE RINGER PERMANENTLY CONNECT (BK) AND (R) RINGER LEADS TO TERMINALS K AND A ON NETWORK.
  5. LINE SWITCH SEQUENCE, HANDSET REMOVED.  
bc- MAKES    bd- BREAKS  
de- MAKES    fg- BREAKS

Fig. 13—558A/B (MD) Telephone Set Connections, 2-Line Pickup and Signaling

**TABLE M**  
**558C/D LINE AND RINGER CONNECTIONS**  
**(INSIDE WIRE CONNECTIONS)**

FEATURES (SIGNALING INCLUDED WITH ALL FEATURES)										CONNECTIONS TO INSIDE WIRE IN SET												
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		TURN KEY USED TO CUT OFF				EXCLUSION KEY USED TO CUT OFF		LINE 1		LINE 2		SIGNAL CIRCUIT		EXCLUSION CIRCUIT		CUTOFF CIRCUIT		COM OR PVT LINE RINGER CIRCUIT		KEY EQUIP. OR STA BUSY LAMP CXT (NOTE 3, FIG. 14)	
	LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	EXTERNAL COM OR PVT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	EXT STA OR EXT LINE RINGER	RINGER IN SET	RING	TIP	RING	TIP	S	GRD	RING	TIP	RING OR R	TIP OR B	R	B	A or BL	A1 or GRD
1	•		•			•		L2	L1			8	7	5	6	3	4			9	12	
1	•					•	•	L2	L1			8	7	5	6					9	12	
1	•		•			•	•	L2	L1			8	7	5	6	3	4			9	12	
1		•	•					L2	L1			8	7	5	6	3	4	E1	E2	9	12	
1		•						L2	L1			8	7	5	6			E1	E2	9	12	
1		•		•	•		•	L2	L1			8	7	5	6	3	4	E1	E2	9	12	
1	•					•		L2	L1			8	7	5	6	3	4			9	12	
2	•							1	2	3	4	8	7	5	6					9	12	
2		•						1	2	3	4	8	7	5	6			E1	E2	9	12	
2		•						1	2	3	4	8	7					E1	E2	9	12	



NOTES:

1. FOR SET CONNECTIONS TO IA HOME INTERPHONE OR SPEAKERPHONE SYSTEM REFER TO RESPECTIVE SECTION.
2. (G) LEAD IS CONNECTED TO F TERMINAL IN DIAL SETS AND TO RR TERMINAL IN MANUAL SETS.
3. USE A AND AI CONTROL LEADS ON I-LINE PICKUP FEATURES ONLY.

4. LINE SWITCH SEQUENCE, HANDSET REMOVED:  
bc - MAKES    ab - BREAKS  
de - MAKES    fg - BREAKS

5. CONNECTIONS IN TABLE L PROVIDE FOR EXCLUSION ON LINE 1. FOR EXCLUSION ON LINE 2, CONNECT (Y) [R-Y] AND (BK) [G-Y] EXCLUSION KEY LEADS TO TERMINALS 3 AND 4 RESPECTIVELY.
6. CONNECTIONS IN TABLE L PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2 CONNECT (R) AND (BK) RINGER LEADS TO TERMINALS 3 AND 4 RESPECTIVELY.
7. A 7-TYPE BUZZER ON A 44B BRACKET MAY BE SUBSTITUTED FOR THE RINGER AS A COMMON OR PRIVATE LINE AUDIBLE SIGNAL.
8. TO SILENCE RINGER PERMANENTLY, CONNECT (BK) AND (R) RINGER LEADS TO TERMINALS K AND A ON NETWORK.
9. ON EARLY MODEL SETS, CONNECTIONS TO TERMINALS 5 AND 6 WERE REVERSED.

DP - DIAL PULSE CONTACTS  
ON - DIAL OFF-NORMAL CONTACTS

( ) CURRENT COLOR CODE.

[ ] MD. COLOR CODE.

8-18963I

Fig. 14—558C/D Telephone Set Connections, 2-Line Pickup, Signaling, Exclusion, and Control Leads



**TABLE N**  
**558F MODIFICATIONS FOR 1-LINE PICKUP,  
 HOLD, AND SECRETARIAL SERVICE**

WIRE OR LEAD	COLOR	REMOVE FROM TERM. STRIP	CONNECT TO TERM. STRIP	INSULATE AND STORE
Line Key	W-O	20	1	
Exclusion Key (Hold)	BR	10	2	
	W	9	1	
	Y	2		•

**TABLE O**  
**558F MODIFICATIONS FOR 1-LINE PICKUP AND CUTOFF OF EXTENSION STATION OR EXTENSION LINE RINGER**

WIRE OR LEAD	COLOR	REMOVE FROM TERM. STRIP	CONNECT TO TERM. STRIP	INSULATE AND STORE
Line Key	R	2		•
	S-R	15	2	
	O-BK	3		•
	W-O	20	3	
Exclusion Key	Y	2		•
Line Switch	G	15	2	
Strap M1W Cord or Equivalent			1 to F on Net.	
			3 to 20	

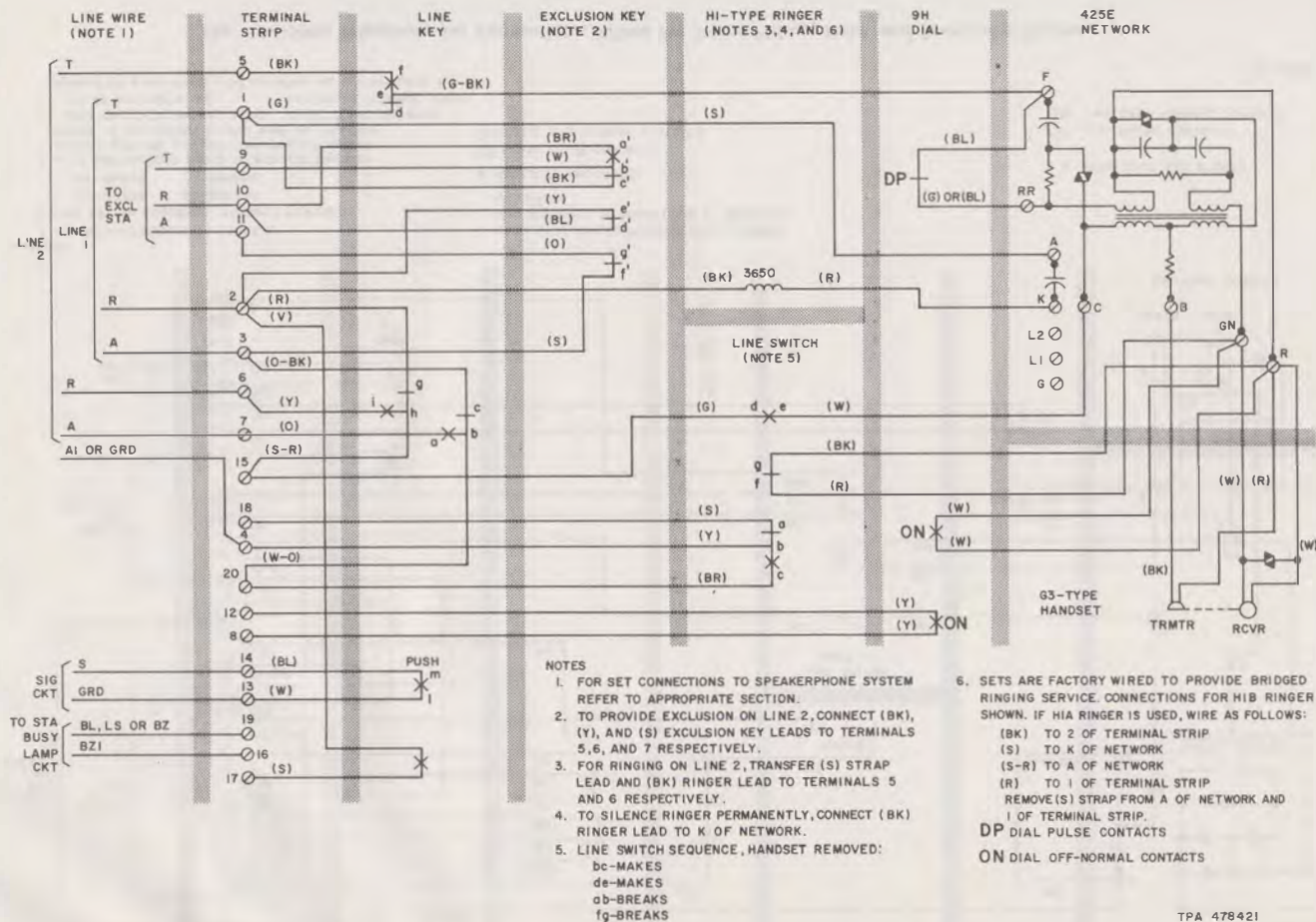
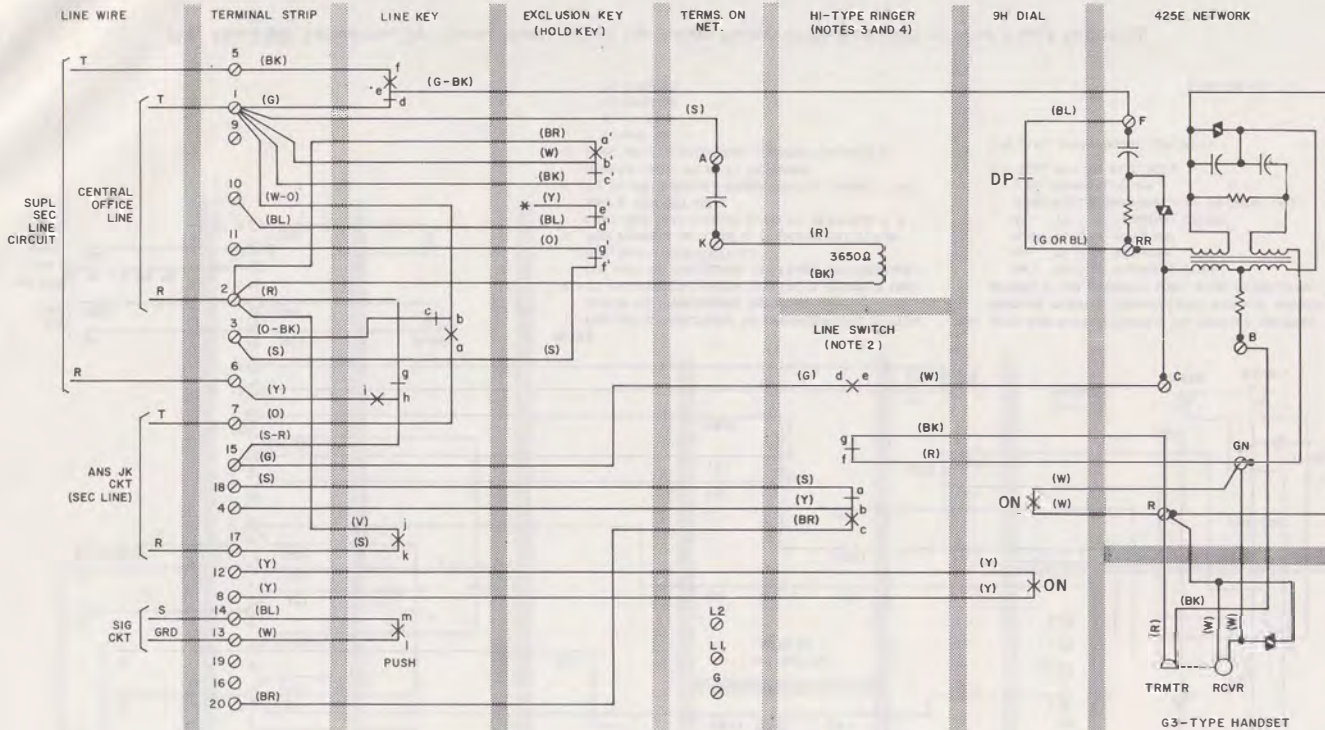


Fig. 1S—558F Telephone Set Connections, Wired For 2-Line Pickup With Exclusion on Line 1 and Signaling



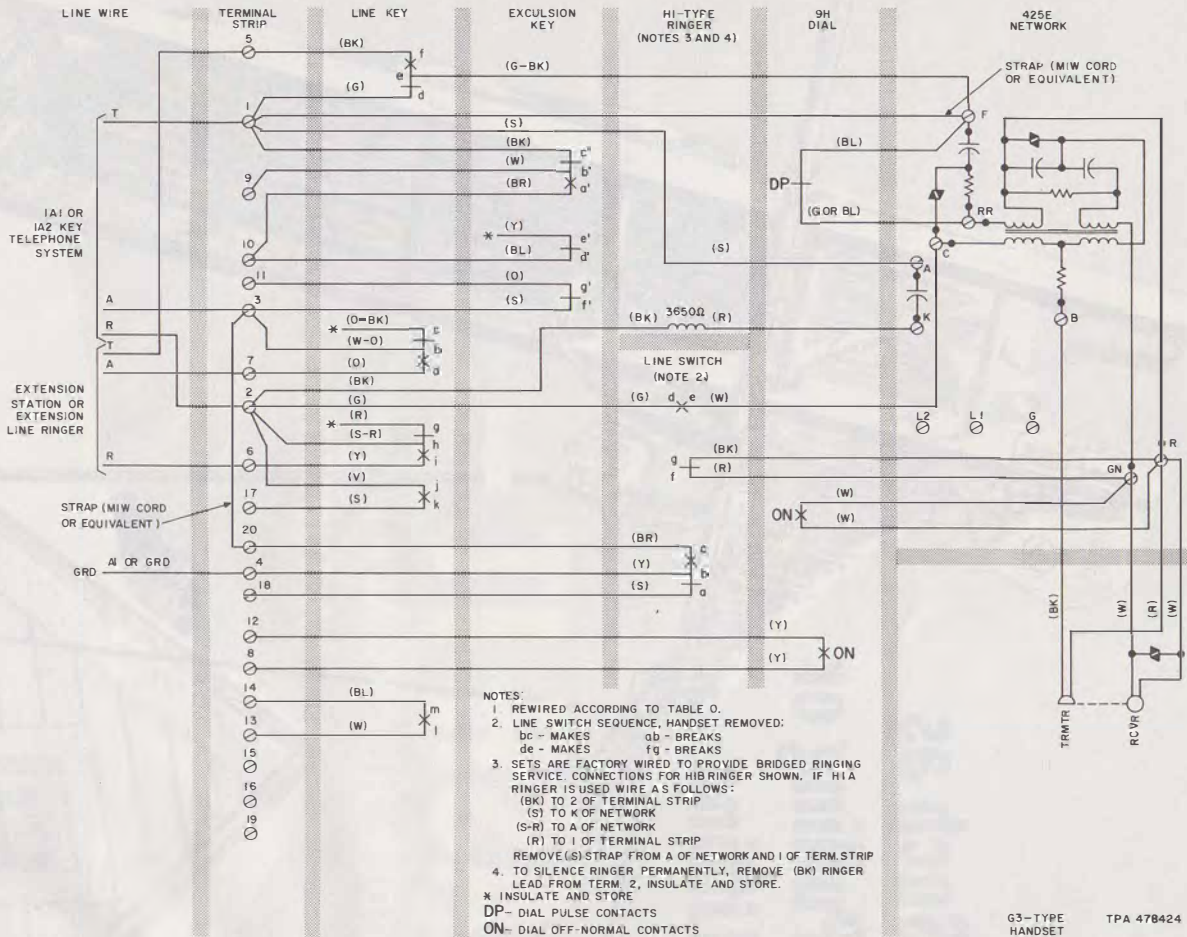
NOTES:

- |   |  |
|---|--|
| <p>1. REWIRED ACCORDING TO TABLE N.</p> <p>2. LINE SWITCH SEQUENCE, HANDSET REMOVED:<br/>bc - MAKES    ab - BREAKS<br/>de - MAKES    fg - BREAKS</p> <p>3. SETS ARE FACTORY WIRED TO PROVIDE BRIDGED RINGING SERVICE. CONNECTIONS FOR HIB RINGER SHOWN. IF HIA RINGER IS USED WIRE AS FOLLOWS:<br/>(BK) TO 2 OF TERMINAL STRIP    (S-R) TO A OF NETWORK<br/>(S) TO K OF NETWORK    (R) TO I OF TERMINAL STRIP<br/>REMOVE (S) STRAP FROM A OF NETWORK AND I OF TERMINAL STRIP.</p> | <p>4. TO SILENCE RINGER PERMANENTLY, REMOVE (BK) RINGER LEAD FROM TERM. 2, INSULATE AND STORE.</p> <p>* INSULATED AND STORED</p> <p>DP - DIAL PULSE CONTACTS<br/>ON - DIAL OFF - NORMAL CONTACTS</p> <p>* INSULATED AND STORED</p> <p>DP - DIAL PULSE CONTACTS<br/>ON - DIAL OFF - NORMAL CONTACTS</p> |
|---|--|

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Fig. 16—558F Telephone Set Connections, Wired For 1-Line Pickup, Hold, and Secretarial Service





**Fig. 17—558F Telephone Set Connections, Wired For 1-Line Pickup and Cutoff Extension Station or Extension Line Ringer**

# WHEN DOING HEAVY WORK

Such as  
Pulling or  
Lifting

# LASH IT —

LADDER HOOKS ARE NOT  
A SUBSTITUTE

