

SERVICE

2660-TYPE TELEPHONE SETS

1. GENERAL

1.01 Reissued to add:

- M1B ringer
- D4BT-87 mounting cord
- 4228B network
- G3A6 handset

1.02 The 2660-type telephone set is furnished in the A1 code only. Modification kits are available for field conversion to provide exclusion, signaling, and/or 2-line pickup.

1.03 When any of these features are required the appropriate mounting cord and D-kit of parts must be installed.

1.04 Refer to Section 502-603-120 for identification and ordering information.

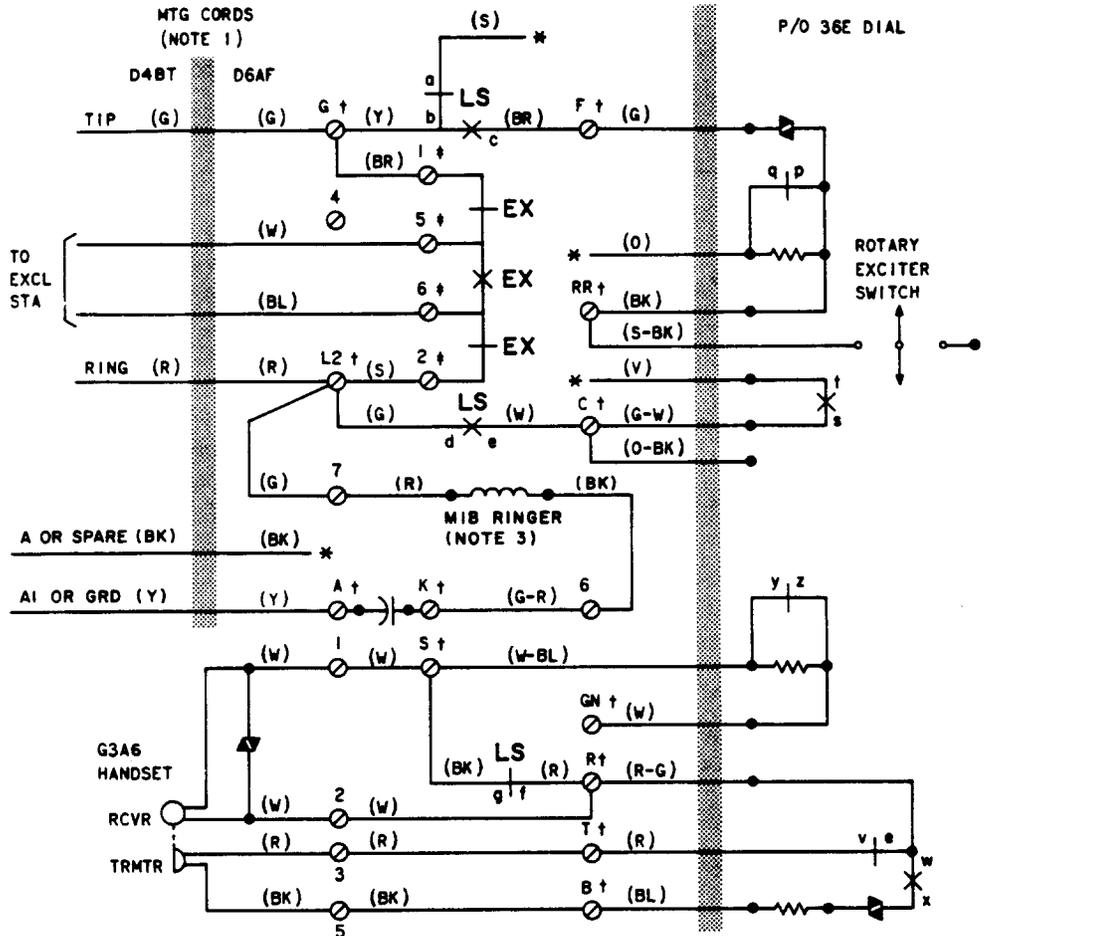
1.05 To install kit of parts or for common installation and maintenance information, refer to Section 502-600-102.

1.06 Speakerphone connections are covered in Division 512.

1.07 ♦When a 2660-type telephone set is used as a speakerphone set and is multiplied with any other set capable of furnishing speakerphone feature, the speakerphone leads (T1, R1, IT, IR, AG, and LK) at sets not having speakerphone must be disconnected, insulated and stored either at the telephone set or at the multiplying point. If not disconnected, the speakerphone leads will provide a common connection between the circuit of the multiplied telephone sets.♦

1.08 Current production 2660-type telephone sets are equipped with a D4BT-87 mounting cord. Early sets were equipped with a D3BN mounting cord.

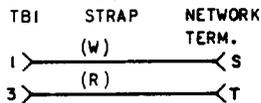
**Reprinted to comply with modified final judgment.



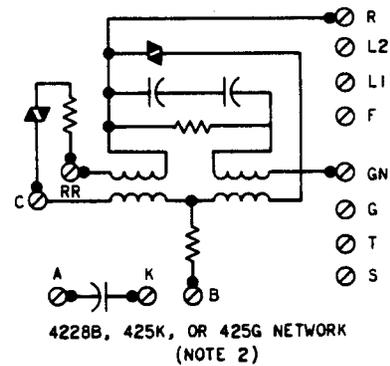
NOTES:

1. D4BT MTG CORD FURNISHED WITH 2660A1 CODE ONLY. D6AF MTG CORD (ORDERED SEPARATELY) REPLACES D4BT MTG CORD TO ADD EXCLUSION FEATURE, 2660A2 CODE.
2. THE 425G NETWORK IS ELECTRICALLY THE SAME AS THE 425K OR 4228B NETWORK. THE 425K OR 4228B PROVIDES TWO ADDITIONAL TIE POINT TERMINALS, S AND T.
3. CONNECTIONS FOR MIB RINGER SHOWN. CONNECTIONS FOR MIA SAME AS MIB EXCEPT (S) AND (S-R) RINGER LEADS ARE INSULATED AND STORED. MIA RINGER MUST BE USED FOR TIP PARTY IDENTIFICATION.

- * - INSULATED AND STORED.
- + - NETWORK TERMINAL, UNDESIGNATED TERMINALS ARE ON TBI.
- † - EXCLUSION SWITCH TERMINAL BOARD.
- § - STRAPS REQUIRED:



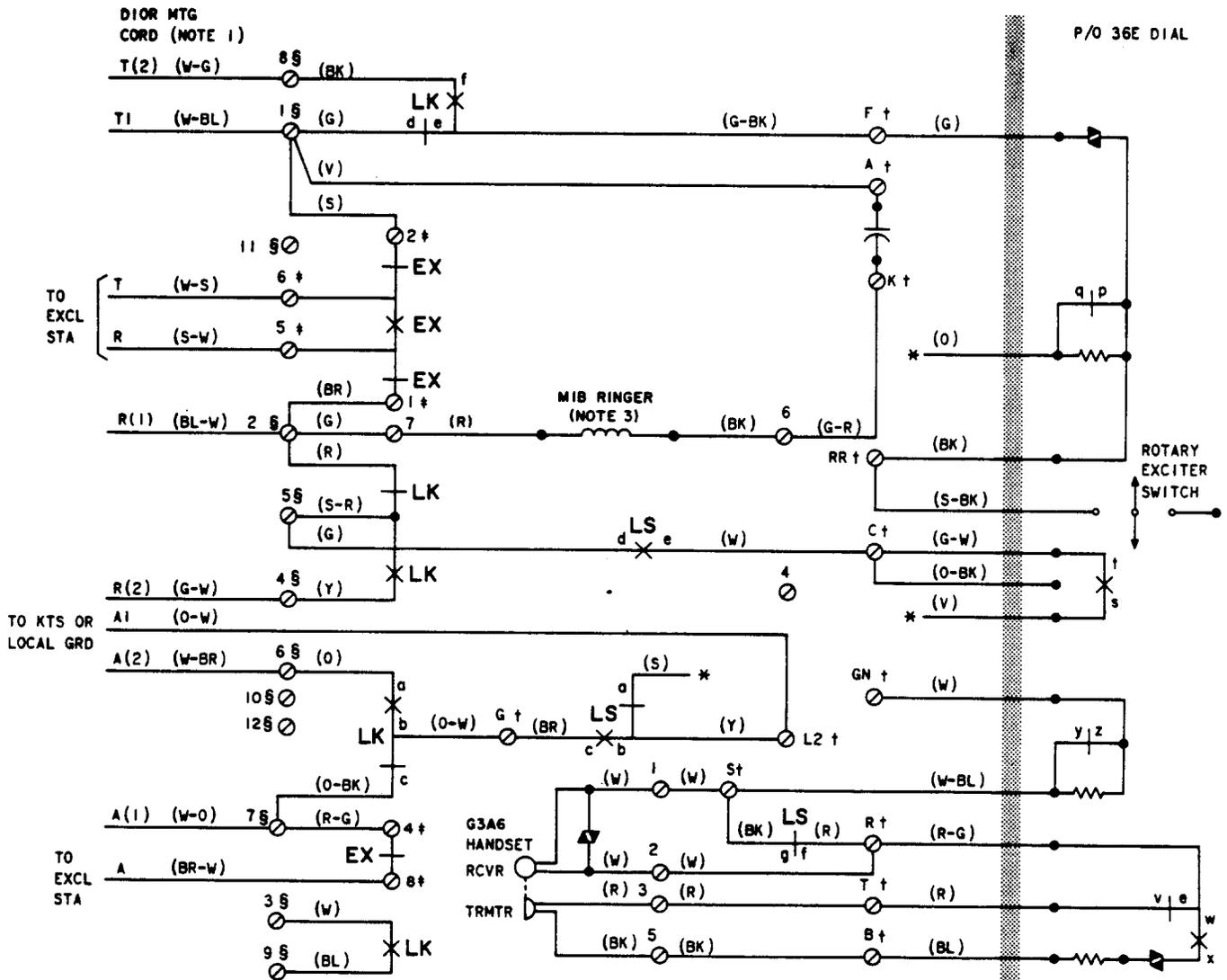
LS - LINE SWITCH
EX - EXCLUSION SWITCH



NETWORK CONNECTIONS

LEADS	COLOR	425G	4228B § OR 425K §
LINE SWITCH	BK	1 ON TBI	S ON NETWORK
DIAL	W-BL	3 ON TBI	T ON NETWORK
	R		

Fig. 1—2660A1 and 2660A2 Telephone Set Connections



NOTES:

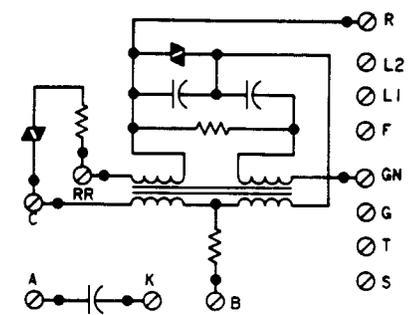
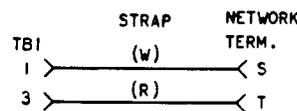
1. THE 2660A3 CODE PROVIDES FOR 2-LINE PICKUP AND SIGNALING. 2660A4 CODE ADDS EXCLUSION FEATURE. INSULATE AND STORE UNUSED MTG CORD CONDUCTORS.
2. THE 425G NETWORK IS ELECTRICALLY THE SAME AS THE 425K OR 4228B NETWORK. THE 425K OR 4228B PROVIDES TWO ADDITIONAL TIE POINT TERMINALS, S AND T.
3. CONNECTIONS FOR MIB RINGER SHOWN. CONNECTIONS FOR MIA RINGER SAME AS MIB EXCEPT (S) AND (S-R) RINGER LEADS ARE INSULATED AND STORED. MIA RINGER MUST BE USED FOR TIP PARTY IDENTIFICATION.

- * - INSULATED AND STORED
- † - NETWORK TERMINAL, UNDESIGNATED TERMINALS ARE ON TBI
- ‡ - EXCLUSION SWITCH TERMINAL BOARD
- § - TERMINAL BOARD 2
- LS - LINE SWITCH
- LK - LINE KEY
- EX - EXCLUSION SWITCH

NETWORK CONNECTIONS

LEADS	COLOR	425G	4228B* OR 425K†
LINE SWITCH	BK	1 ON TBI	S ON NETWORK
	W-BL		
DIAL	R	3 ON TBI	T ON NETWORK

* - STRAPS REQUIRED:



4228B, 425K, OR 425G NETWORK (NOTE 2)

Fig. 2—2660A3 and 2660A4 Telephone Set, Connections

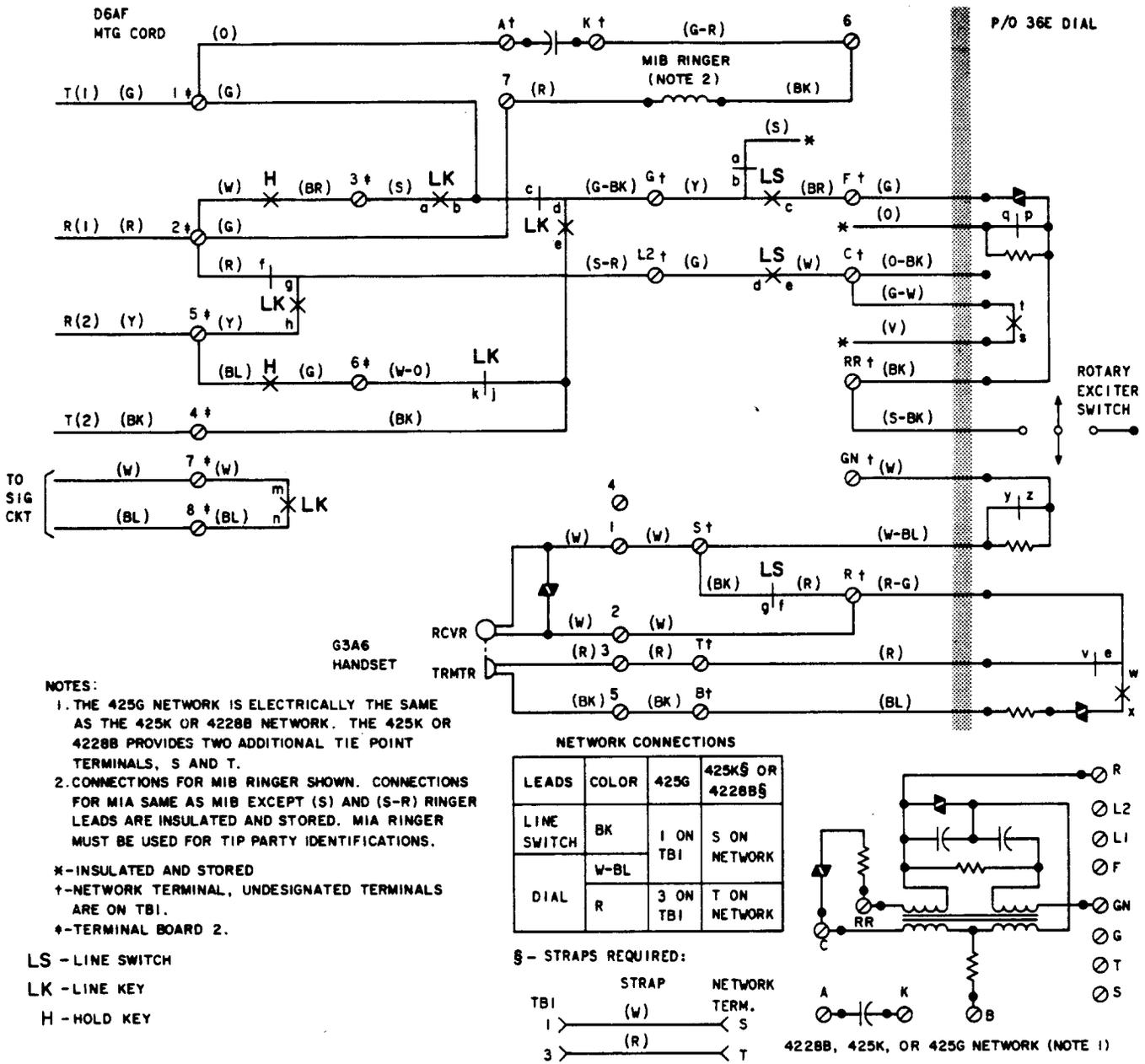


Fig. 3—2660A1 Telephone Set Modified for 2-Line Pickup and Hold (Nonkey Telephone Systems)

◆ TABLE A ◆

LINE AND RINGER CONNECTIONS — 2660A1 AND 2660A2 TELEPHONE SETS

WIRE OR LEAD		INDIV OR BRIDGED	RING PARTY	TIP PARTY				1A1 OR 1A2* KEY TEL SYSTEM	EXCLUSION† (2660A2 ONLY)
				NO IDENT GROUND	IDENT GROUND				
					1000 Ω	2650 Ω			
Mounting Cord at Connecting Block	Tip	(G)	G	G	G	G	G	G	2
	Ring	(R)	R	R	R	R	R	R	1
	Grd A1	(Y)	G	Y	Y	Y	Y	Y	4
	A	(BK)						B	5
	ET	(BL)							7
	ER	(W)							6
Mounting Cord in Set	Tip	(G)	G	G	G	G	G	A	G
	Ring	(R)	L2	L2	L2	L2	L2	L2	L2
	Grd A1	(Y)	A	A	A	L1	L1	G	A
	A	(BK)	*	*	*	*	*	F	*
	ET	(BL)							6‡
	ER	(W)							5‡
Ringer Leads	(R)		7	7	7	7	7	7	7
	(BK)		6	6	6	6	6	6	6
	(S)§		*	*	*	5	*	*	*
	(S-R)§		*	*	*	*	5	*	*
Line Switch	(BR)		F	F	F	F	F	F	F
	(W)		C	C	C	C	C	C	C
	(S)		*	*	*	K	K	*	*
Dial	(G)		F	F	F	F	F	A	F
Ringer Straps	(G)		7 to L2	7 to L2	7 to G	7 to A	7 to A	7 to L2	7 to L2
	(G-R)		6 to K	6 to K	6 to K	6 to L1	6 to L1	6 to K	6 to K
Exclusion Straps (2660A2 only)	(BR)								G to 1‡
	(S)								L2 to 2‡

* Insulate and store.

† Replace D4BT with D6AF mounting cord.

‡ Terminals on exclusion terminal board.

§ Leads on M1A ringer only. M1A ringer must be used for tip party identification.

TABLE B — CONVERSION OF 2660A1 TO 2660A3 TELEPHONE SETS

LEADS		REMOVE FROM	FOR 2-LINE PICKUP AND SIGNALING		FOR 1-LINE, SIGNALING AND SET RINGER USED AS LINE RINGER		
			SET RINGER USED AS LINE RINGER ON LINE 1 CONNECT TO	SET RINGER USED AS COM. OR PVT. LINE RINGER CONNECT TO	EXT. STA. OR RINGER CUT-OFF BY TURN KEY CONNECT TO	EXT. STA. OR RINGER AND SET RINGER CUTOFF BY TURN KEY CONNECT TO	
Line Switch	(Y)	G of network	L2 of network				
	(BR)	F of network	G of network				
	(G)	L2 of network	TB2-5				
Ringer Strap	(G)	L2 of network	TB2-2†	*	TB2-5	TB2-2	
D10R Mtg. Cord (added)	(W-BL)		TB2-1		A of network	F of network	
	(BL-W)		TB2-2		TB2-5		
	(W-O)		TB2-7		G of network		
	(O-W)		L2 of network		L2 of network		
	(W-G)		TB2-8		TB2-1		
	(G-W)		TB2-4		TB2-2		
	(W-BR)		TB2-6		TB2-7		
	(BR-W)		*	TB2-3		*	
	(W-S)		TB2-3	TB1-6‡		TB2-3	
	(S-W)		TB2-9	TB1-7		TB2-9	
Key Assy (added)	(O-W)		G of network				
	(G-BK)		F of network				
	(G)		TB2-1				
	(R)		TB2-2				
	(W)		TB2-3				
	(Y)		TB2-4				
	(S-R)		TB2-5				
	(O)		TB2-6				
	(O-BK)		TB2-7				
	(BK)		TB2-8				
	(BL)		TB2-9				
Strap(added)	(V)		TB2-1 and A of net.†	Store in set	F of net. and A of net.	TB2-1 and A of net.	

*Insulate and store.

†For ringer on line 2 move strap (G) from TB2-2 to TB2-4 and strap (V) from TB2-1 to TB2-8.

‡Ringer connected without capacitor for common or private line ringing. If common audible signal power failure feature is provided, connect capacitor in circuit by moving mounting cord (W-S) lead from TB1-6 to A of network.

TABLE C
2660A3 TELEPHONE SET
CONDUCTOR ASSIGNMENT
USING 44A CONNECTING BLOCK

D10R MTG CORD	44A CONN. BLOCK TERMINAL	LINE 1	LINE 2 OR CUTOFF CIRCUIT	SIGNAL* OR COM. RINGER CIRCUIT
(W-BL)	2	T		
(BL-W)	1	R		
(W-O)	5	A		
(O-W)	4	A1 or GRD		
(W-G)	7		T	
(G-W)	6		R	
(W-BR)	10		A	
(BR-W)	9			SPARE or S*
(W-S)	8			S or R
(S-W)	3			G or B

*When both signaling and common ringer are required, connect mtg. cord (BR-W) set end to TB2-3 and place strap between TB2-9 and L2 of network.

TABLE D
2660A4 TELEPHONE SET
CONDUCTOR ASSIGNMENT
USING 44A CONNECTING BLOCK

D10R MTG CORD	44A CONN. BLOCK TERMINAL	LINE 1	LINE 2, CUTOFF, OR SIGNAL CIRCUIT	EXCLUSION OR SIGNAL CIRCUIT
(W-BL)	2	T		
(BL-W)	1	R		
(W-O)	5	A		
(O-W)	4	A1 or GRD		
(W-G)	7		T or S*	
(G-W)	6		R or G*	
(W-BR)	10		A or SPARE	
(BR-W)	9			A or SPARE
(W-S)	8			T or S
(S-W)	3			R or G

*Used when both signaling and exclusion are required.

TABLE E

**MODIFICATION FOR 2-LINE PICKUP AND HOLD
(NONKEY TELEPHONE SYSTEM)**

WIRE OR LEAD	COLOR	CONNECT TO*
2-Line Pickup Key Assembly	S	3
	G	1
	G-BK	G of network
	BK	4
	R	2
	S-R	L2 of network
	Y	5
	W-O	6
	W	7
	BL	8
Hold Key Assembly	G	6
	BL	5
	W	2
	BR	3
D6AF Mounting Cord†	G	1
	R	2
	Y	5
	BK	4
	W	7
Strap (added)	O	TB2-1 and A of network
Ringer Strap‡	G	2

*Terminals on TB2 except where noted otherwise.

†D6AF mounting cord replaces original D4BT mounting cord.

‡Move existing ringer strap (G) from L2 of network to TB2-2.

TABLE F

P-90D012 OR 819040122 POLARITY GUARD CONNECTIONS

	TEL SET LEADS			POLARITY GUARD LEADS	
	(W) LINE SWITCH	(G-W) DIAL	(BK) DIAL	(W)	(G)
Remove From	C of network		RR of network	—	—
Connect To	S of polarity guard		T of polarity guard	C of network	RR of network

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

TABLE G
CONVERSION OF 2660A1 TO 2660A4 TELEPHONE SETS

LEADS		REMOVE FROM	FOR 2-LINE PICKUP - RINGER ON LINE 1	
			WITH EXT EXCL CONNECT TO	WITH SIG AND SET RINGER CUTOFF BY EXCL SWITCH CONNECT TO
Line Switch	(Y)	G of net.	L2 of net.	L2 of net.
	(BR)	F of net.	G of net.	G of net.
	(G)	L2 of net.	TB2-5	TB2-5
Ringer Strap	(G)	L2 of net.	TB2-2†	Excl TB-6
D10R Mtg. Cord (added)	(W-BL)		TB2-1	TB2-1
	(BL-W)		TB2-2	TB2-2
	(W-O)		TB2-7	TB2-7
	(O-W)		L2 of net.	L2 of net.
	(W-G)		TB2-8	TB2-8
	(G-W)		TB2-4	TB2-4
	(W-BR)		TB2-6	TB2-6
	(BR-W)		Excl TB-8	.
	(W-S)		Excl TB-6	TB2-3
	(S-W)		Excl TB-5	TB2-9
Key Assy (added)	(O-W)		G of net.	
	(G-BK)		F of net.	
	(G)		TB2-1	
	(R)		TB2-2	
	(W)		TB2-3	
	(Y)		TB2-4	
	(S-R)		TB2-5	
	(O)		TB2-6	
	(O-BK)		TB2-7	
	(BK)		TB2-8	
	(BL)		TB2-9	
Straps (added)	(V)		TB2-1 and A of net.‡	A of net and Excl TB-5
	(S)		TB2-1 and Excl TB-2†	TB2-1 and Excl TB-2
	(BR)		TB2-2 and Excl TB-1†	TB2-2 and Excl TB-1
	(R-G)		TB2-7 and Excl TB-4†	.

* Insulate and store.

† For exclusion on line 2, move strap (S) from TB2-1 to TB2-8, strap (BR) from TB2-2 to TB2-4, and strap (R-G) from TB2-7 to TB2-6.

‡ For ringer on line 2, move strap (G) from TB2-2 to TB2-4 and strap (V) from TB2-1 to TB2-8.

TABLE G (Cont)
CONVERSION OF 2660A1 TO 2660A4 TELEPHONE SETS

LEADS		REMOVE FROM	FOR 1-LINE PICKUP — SET RINGER USED AS LINE RINGER		
			WITH EXT EXCL AND EXT STA OR RINGER CUTOFF BY TURN KEY CONNECT TO	WITH SIG, EXT STA OR RINGER CUTOFF BY TURN KEY AND SET RINGER CUTOFF BY EXCL SWITCH CONNECT TO	WITH SIG, SET RINGER CUTOFF BY TURN KEY, AND EXT EXCL CONNECT TO
Line Switch	(Y)	G of net.	L2 of net.	L2 of net.	L2 of net.
	(BR)	F of net.	G of net.	G of net.	G of net.
	(G)	L2 of net.	TB2-5	TB2-5	TB2-5
Ringer Strap	(G)	L2 of net.	Excl TB-2	Excl TB-6	TB2-2
D10R Mtg. Cord (added)	(W-BL)		F of net.	F of net.	F of net.
	(BL-W)		TB2-5	TB2-5	TB2-5
	(W-O)		G of net.	G of net.	G of net.
	(O-W)		L2 of net.	L2 of net.	L2 of net.
	(W-G)		TB2-1	TB2-1	TB2-3
	(G-W)		TB2-2	TB2-2	TB2-9
	(W-BR)		TB2-7	TB2-7	*
	(BR-W)		Excl TB-8	*	Excl TB-8
	(W-S)		Excl TB-6	TB2-3	Excl TB-6
	(S-W)		Excl TB-5	TB2-9	Excl TB-5
Key assy (added)	(O-W)		G of net.		
	(G-BK)		F of net.		
	(G)		TB2-1		
	(R)		TB2-2		
	(W)		TB2-3		
	(Y)		TB2-4		
	(S-R)		TB2-5		
	(O)		TB2-6		
	(O-BK)		TB2-7		
	(BK)		TB2-8		
	(BL)		TB2-9		
Straps (added)	(V)		A of net. and Excl TB-1	A of net. and Excl TB-5	TB2-1 and A of net.
	(S)		F of net. and Excl TB-2	F of net. and Excl TB-2	F of net. and Excl TB-2
	(BR)		TB2-5 and Excl TB-1	TB2-5 and Excl TB-1	TB2-5 and Excl TB-1
	(R-G)		G of net. and Excl TB-4	*	G of net. and Excl TB-4

* Insulate and store.

† For exclusion on line 2, move strap (S) from TB2-1 to TB2-8, strap (BR) from TB2-2 to TB2-4, and strap (R-G) from TB2-7 to TB2-6.

‡ For ringer on line 2, move strap (G) from TB2-2 to TB2-4 and strap (V) from TB2-1 to TB2-8.