SERVICE

660-TYPE TELEPHONE SETS

1. GENERAL

1.01 These sets are supplied factory wired as a 660A1 only. Modification kits are available for field conversion of the basic set to provide exclusion.
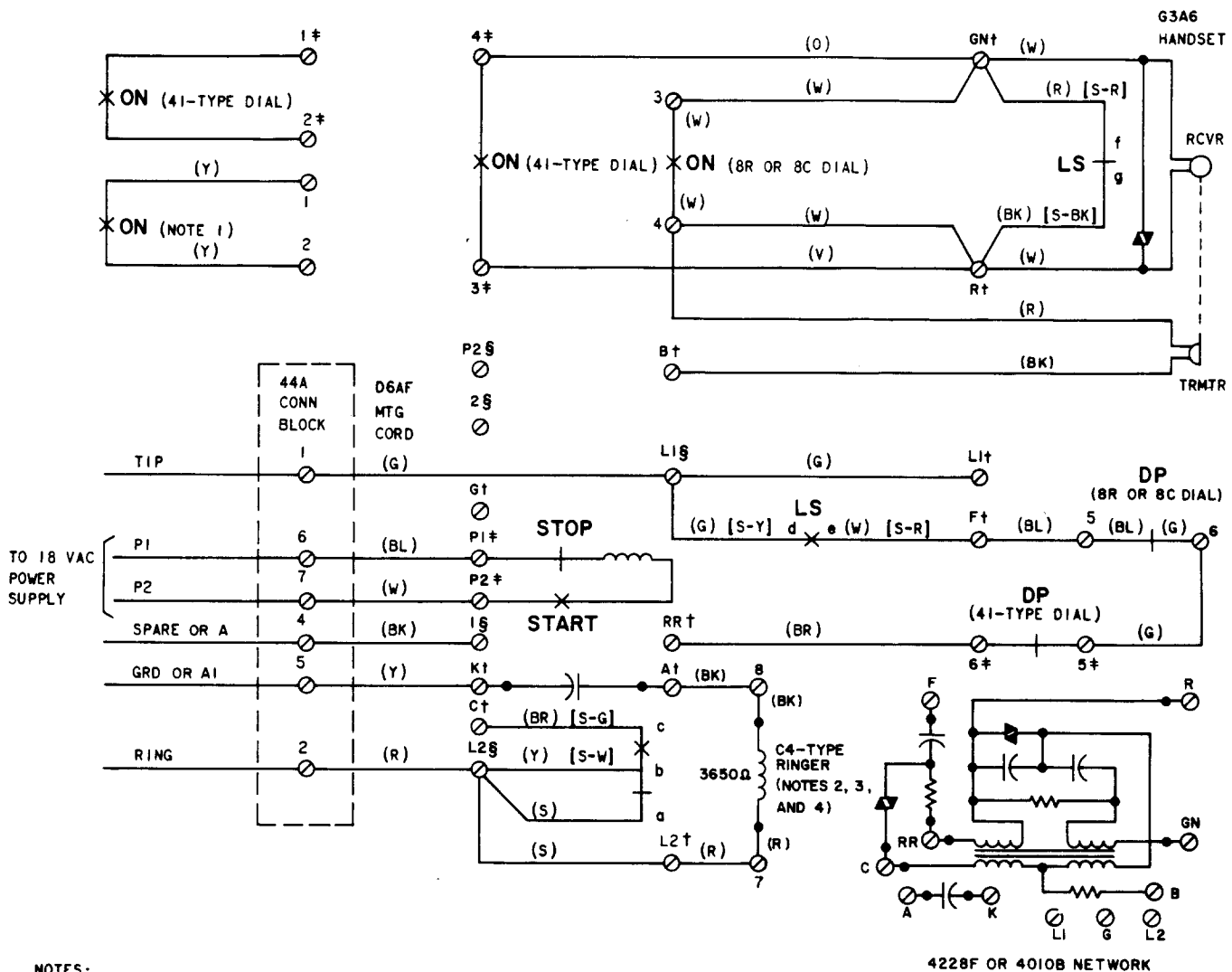
1.02 Reissued to add:

- G3A6 handset

- Key systems lead designation A and A1.

1.03 ◆Refer to Section 502-617-405 for connection information for the 660A1M (modular) telephone set.◀

1.04 ◆For identification and ordering information refer to Reference Section 502-601-120.◀

1.05 For speakerphone connections refer to Division 512.

1.06 ◆To install exclusion switch or for common installation and maintenance information, refer to Section 502-600-102.◀

NOTES:
1. OFF-NORMAL CONTACTS AND ASSOCIATED (Y) LEADS ARE ON 8C DIAL ONLY.
2. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT MOVE (BK) RINGER LEAD TO TERMINAL K ON NETWORK. FOR LINE AND RINGER CONNECTIONS REFER TO TABLE A.
3. TO SILENCE RINGER PERMANENTLY, REMOVE (BK) RINGER STRAP FROM A OF NETWORK AND CONNECT TO TERMINAL 8 OF TB2.
4. CONNECTIONS FOR C4B RINGER SHOWN. FOR LINE AND RINGER CONNECTIONS REFER TO TABLE A. WHEN C4A RINGER IS PROVIDED CONNECT AS FOLLOWS:

    (R) RINGER LEAD TO 7 OF TB2.   (R) RINGER STRAP BETWEEN 7 OF TB2 AND L2 OF NETWORK.
    (BK) RINGER LEAD TO 8 OF TB2.   (BK) RINGER STRAP BETWEEN 8 OF TB2 AND G OF NETWORK.
    (S) RINGER LEAD TO 9 OF TB2.   ¶¶ (S) RINGER STRAP BETWEEN 9 OF TB2 AND K OF NETWORK.
    (S-R) RINGER LEAD TO 10 OF TB2.   ¶¶ (S-R) RINGER STRAP BETWEEN 10 OF TB2 AND A OF NETWORK.
C4A RINGER MUST BE USED FOR TIP PARTY IDENTIFICATION. FOR LINE AND RINGER CONNECTIONS REFER TO TABLE B.

5. LINE SWITCH SEQUENCE, HANDSET REMOVED:
    bc — MAKES   ab — BREAKS
    de — MAKES   fg — BREAKS

( ) - CURRENT COLOR CODE
[ ] - MD COLOR CODE
† - NETWORK TERMINAL, UNDESIGNATED TERMINALS ARE ON TB2
‡ - TERMINAL ON 41-TYPE DIAL

§ - TERMINAL ON TB1
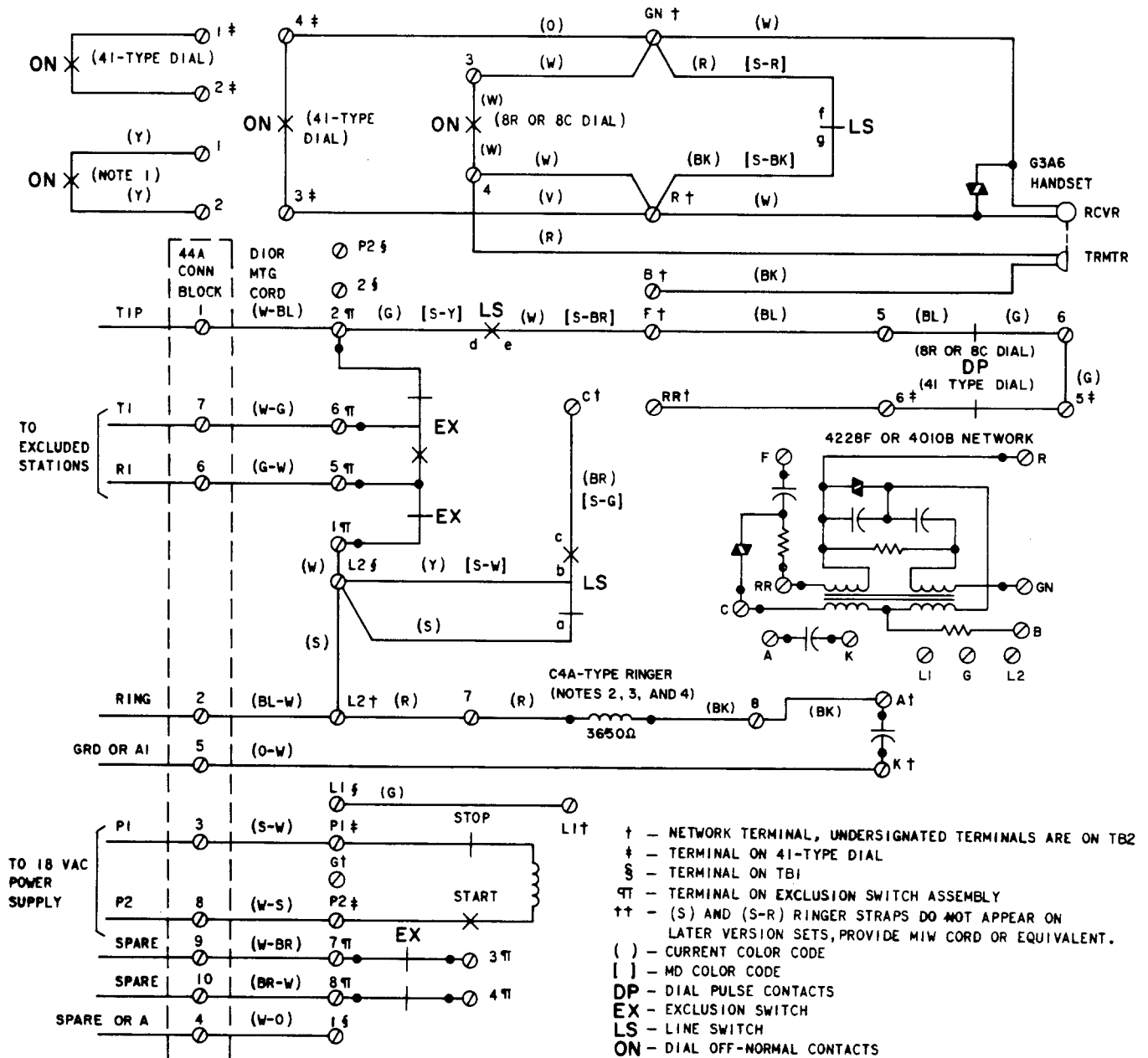¶¶ - (S) AND (S-R) RINGER STRAPS DO NOT APPEAR ON LATER VERSION SETS, PROVIDE M1W CORD OR EQUIVALENT.
DP - DIAL PULSE CONTACTS
LS - LINE SWITCH
ON - DIAL OFF-NORMAL CONTACTS

Fig. 1—660A1 Telephone Set, Connections

† — NETWORK TERMINAL, UNDERSIGNATED TERMINALS ARE ON TB2
‡ — TERMINAL ON 41-TYPE DIAL
§ — TERMINAL ON TB1
⊓ — TERMINAL ON EXCLUSION SWITCH ASSEMBLY
†† — (S) AND (S-R) RINGER STRAPS DO NOT APPEAR ON
       LATER VERSION SETS, PROVIDE MIW CORD OR EQUIVALENT.
( ) — CURRENT COLOR CODE
[ ] — MD COLOR CODE
DP — DIAL PULSE CONTACTS
EX — EXCLUSION SWITCH
LS — LINE SWITCH
ON — DIAL OFF-NORMAL CONTACTS

NOTES:
1. OFF-NORMAL CONTACTS AND ASSOCIATED (Y) LEADS ARE ON 8C DIAL ONLY.
2. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT MOVE (BK) RINGER STRAP TO K OF NETWORK.
3. TO SILENCE RINGER PERMANENTLY, REMOVE (BK) RINGER STRAP FROM TERMINAL 8 OF TB2 AND CONNECT TO A OF NETWORK.
4. CONNECTIONS FOR C4B RINGER SHOWN. FOR LINE AND RINGER CONNECTIONS REFER TO TABLE C. WHEN C4A RINGER IS PROVIDED CONNECT
   AS FOLLOWS:

   (R) RINGER LEAD TO 7 OF TB2   (R) RINGER STRAP BETWEEN 7 OF TB2 AND L2 OF NETWORK
   (BK) RINGER LEAD TO 8 OF TB2   (BK) RINGER STRAP BETWEEN 8 OF TB2 AND G OF NETWORK
   (S) RINGER LEAD TO 9 OF TB2   †† (S) RINGER STRAP BETWEEN 9 OF TB2 AND K OF NETWORK
   (S-R)RINGER LEAD TO 10 OF TB2   †† (S-R)RINGER STRAP BETWEEN 10 OF TB2 AND A OF NETWORK

   C4A RINGER MUST BE USED FOR TIP PARTY IDENTIFICATION. FOR LINE AND RINGER CONNECTIONS REFER TO TABLE D.
5. LINE SWITCH SEQUENCE, HANDSET REMOVED:

   bc— MAKES   ab— BREAKS
   de— MAKES   fg— BREAKS

◊ Fig. 2—660A2 Telephone Set, Connections ◊

TABLE A

LINE AND C4B RINGER CONNECTIONS — 660A1 TELEPHONE SET

WIRE OR LEAD			INDIV OR BRIDGED	RING PARTY	TIP PARTY — NO IDENT GROUND	1A1 OR 1A2 KEY TEL SYSTEM (NOTE)
Line Wire	Tip Ring Grd A1 A	Connecting Block	1 2 5*	1 2 5	1 2 5	1 2 5 4
Mounting Cord	(G) (R) (Y) (BK)	Connecting Block	1 2 1 4	1 2 5 4	2 1 5 4	1 2 5 4
Mounting Cord in Set	(G) (R) (Y) (BK)	TB1	L1 L2 K† 1	L1 L2 K† 1	L1 L2 K† 1	L1 L2 2 1
Ringer Leads	(R) (BK)	TB2	7 8	7 8	7 8	7 8
Ringer Straps	(R) (BK)	Net.	L2 A	L2 A	L2 A	L2 A
Line Switch	(S) [S-W] (Y) [S-G] (BR) [S-Y] (G)	TB1	L2 L2 C† L1	L2 L2 C† L1	L2 L2 C† L1	2 2 1 L2

* Ground may be omitted if not required for service. Not required for protection of 41-type dial power supply.

† Terminal on network.

( ) Current color code.

[ ] MD color code.

Note: Move (G) strap from L1 to C of network and provide M1W strap between C and K of network.

♦TABLE B♦

LINE AND C4A RINGER CONNECTIONS — 660A1 TELEPHONE SET

WIRE OR LEAD			INDIV OR BRIDGED	RING PARTY	TIP PARTY			1A1 OR 1A2 KEY TEL SYSTEM (NOTE)
					NO IDENT GROUND	IDENTIFYING GROUND		
						1000Ω	2650Ω	
Line Wire	Tip Ring Grd A1 A	Connecting Block	1 2 5*	1 2 5	1 2 5	1 2 5	1 2 5	1 2 5 4
Mounting Cord	(G) (R) (Y) (BK)		1 2 1 4	1 2 5 4	2 1 5 4	2 1 5 4	2 1 5 4	1 2 5 4
Mounting Cord in Set	(G) (R) (Y) (BK)	TB1	L1 L2 G† 1	L1 L2 G† 1	L1 L2 G† 1	L1 L2 G† 1	L1 L2 G† 1	L1 L2 2 1
Ringer Leads	(R) (BK) (S) (S-R)	TB2	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10
Ringer Straps ‡	(R) (BK) (S) (S-R)	Net.	L2 G K A	L2 G K A	L2 G K A	K G B B	B B K G	L2 C K A
Line Switch	(S) [S-W] (Y) [S-G] (BR) [S-Y] (G)	TB1	L2 L2 C† L1	L2 L2 C† L1	L2 L2 C† L1	A† L2 C† L1	A† L2 C† L1	2 2 1 L2

* Ground may be omitted if not required for service. Not required for protection of 41-type dial power supply.

† Terminals on network.

‡ (S) and (S-R) ringer straps do not appear on later version sets, provide M1W cord or equivalent.

( ) Current color code.

[ ] MD color code.

Note: Move (G) strap from L1 of network to C of network.

TABLE C

LINE AND C4B RINGER CONNECTIONS — 660A2 TELEPHONE SET

WIRE OR LEAD			INDIV OR BRIDGED	RING PARTY	TIP PARTY	1A1 OR 1A2 KEY TEL SYSTEM
					NO IDENT GROUND	
Line Wire	Tip Ring Grd A1 A	Connecting Block	1 2 5*	1 2 5	1 2 5	1 2 5 4
Mounting Cord	(W-BL) (BL-W) (O-W) (W-O)		1 2 1 4	1 2 5 4	2 1 5 4	1 2 5 4
Mounting Cord in Set	(W-BL) (BL-W) (O-W) (W-O)		2† L2‡ K‡ 1§	2† L2‡ K‡ 1§	2† L2‡ K‡ 1§	2† L2‡ L2§ 1§
Ringer Leads	(R) (BK)	TB2	7 8	7 8	7 8	7 8
Ringer Straps	(R) (BK)	Net.	L2 A	L2 A	L2 A	L2 A
Line Switch	(S) [S-W] (Y) [S-G] (BR) [S-Y] (G)	TB1	L2 L2 C‡ 2†	L2 L2 C‡ 2†	L2 L2 C‡ 2†	L2 L2 1 L2‡
Straps	(S)		L2§ to L2‡	L2§ to L2‡	L2§ to L2‡	L2§ to L2‡	1† to L2‡
	(W)		L2§ to 1†	L2§ to 1†	L2§ to 1†	L2§ to 1†	2† to C‡

* Ground may be omitted if not required for service. Not required for protection of 41-type dial power supply.

† Terminal on exclusion switch terminal board.

‡ Terminals on network.

§ TB1.

( ) Current color code.

[ ] MD color code.

♦TABLE D♦

LINE AND C4A RINGER CONNECTIONS — 660A2 TELEPHONE SET

WIRE OR LEAD			INDIV OR BRIDGED	RING PARTY	TIP PARTY			1A1 OR 1A2 KEY TEL SYSTEM
					NO IDENT GROUND	IDENTIFYING GROUND		
						1000Ω	2650Ω	
Line Wire	Tip Ring Grd A1 A	Connecting Block	1 2 5*	1 2 5	1 2 5	1 2 5	1 2 5	1 2 5 4
Mounting Cord	(W-BL) (BL-W) (O-W) (W-O)	Connecting Block	1 2 1 4	1 2 5 4	2 1 5 4	2 1 5 4	2 1 5 4	1 2 5 4
Mounting Cord in Set	(W-BL) (BL-W) (O-W) (W-O)		2† L2‡ G‡ 1§	2† L2‡ G‡ 1§	2† L2‡ G‡ 1§	2† L2‡ G‡ 1§	2† L2‡ G‡ 1§	2† L2‡ L2§ 1§
Ringer Leads	(R) (BK) (S) (S-R)	TB2	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10
Ringer Straps¶	(R) (BK) (S) (S-R)	Net.	L2 G K A	L2 G K A	L2 G K A	K G B B	B B K G	L2 C K A
Line Switch	(S) [S-W] (Y) [S-G] (BR) [S-Y] (G)	TB1	L2 L2 C‡ 2†	L2 L2 C‡ 2†	L2 L2 C‡ 2†	A‡ L2 C‡ 2†	A‡ L2 C‡ 2†	L2 L2 1 L2‡
Straps	(S)	L2§ to L2‡	L2§ to L2‡	L2§ to L2‡	L2§ to L2‡	L2§ to L2‡	L2§ to L2‡	1† to L2‡
Straps	(W)	L2§ to 1†	L2§ to 1†	L2§ to 1†	L2§ to 1†	L2§ to 1†	L2§ to 1†	2† to C‡

* Ground may be omitted if not required for service. Not required for protection of 41-type dial power supply.

† Terminal on exclusion switch terminal board.

‡ Terminal on network.

§ TB1.

¶ (S) and (S-R) ringer straps do not appear on later version sets, provide M1W cord or equivalent.

( ) Current color code.

[ ] MD color code.