

SERVICE

662-TYPE TELEPHONE SETS

1. GENERAL

1.01 This section provides connection information for the 662-type telephone sets. This information was formerly found in Section 502-660-402 which will be canceled.

1.02 These sets are supplied factory-wired as 662A1 only. For conversion to 662A2 or 662A3 the appropriate key must be ordered and installed separately. Modification kits are available for field conversion to provide exclusion (662A4, 662A5, or 662A6 codes). For ordering and installation

information, refer to appropriate Reference section in Division 502. Speakerphone connections are shown in Division 512.

1.03 When a 662-type telephone set is not used as a speakerphone set and is multiplied with any other set capable of furnishing speakerphone feature, speakerphone leads 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 circuits of the multiplied telephone sets.

TABLE A

PICKUP-SIGNAL KEY CONVERSION — 662A1 OR 662A4 TELEPHONE SET

CONVERSION OPTIONS	657A OR 599A KEY LEADS					
	(O-W)	(S-W)	(G-R)	(BL-BK)	(BR-BK)	(BR-W)
HPPPPP (Note)	A2	A2	A2	A2	A2	5
HPPPPS	A2	A2	A2	A2	SG	5
HPPSSS	A2	A2	A2	SG	SG	5
HPPSSS	A2	A2	SG	SG	SG	5
HPPPP*S*	A2	A2	A2	S1	A2†	S1
HPPP*P*S*	A2	A2	S1	S1	A2†	S1
HPP*P*P*S*	A2	S1	S1	S1	A2†	S1

* These arrangements use line switch controlled ground for common signal key used with private or intercommunicating lines. Common signal should be used to operate a common signal relay. Do not wire directly to a buzzer. Fig. 2 or 3 shows line switch lead terminations.

† For 1A KTS connect (BR-BK) key lead to BL terminal.

Note: 657A or 599A key as furnished in 662A1 telephone set. To convert from pickup (locking) to signal (nonlocking) remove the P-10E837 screw from the plunger at the key position being converted.

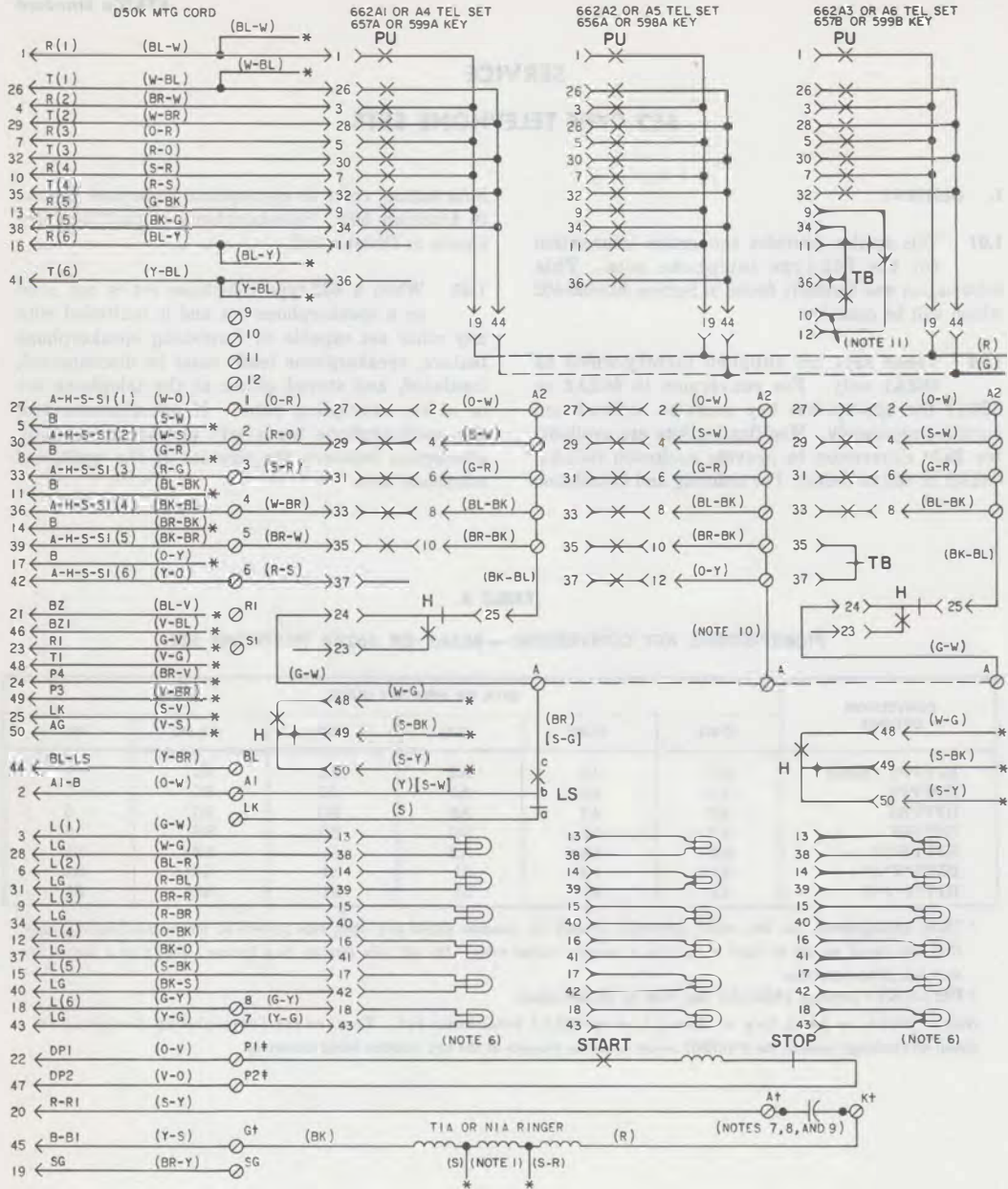
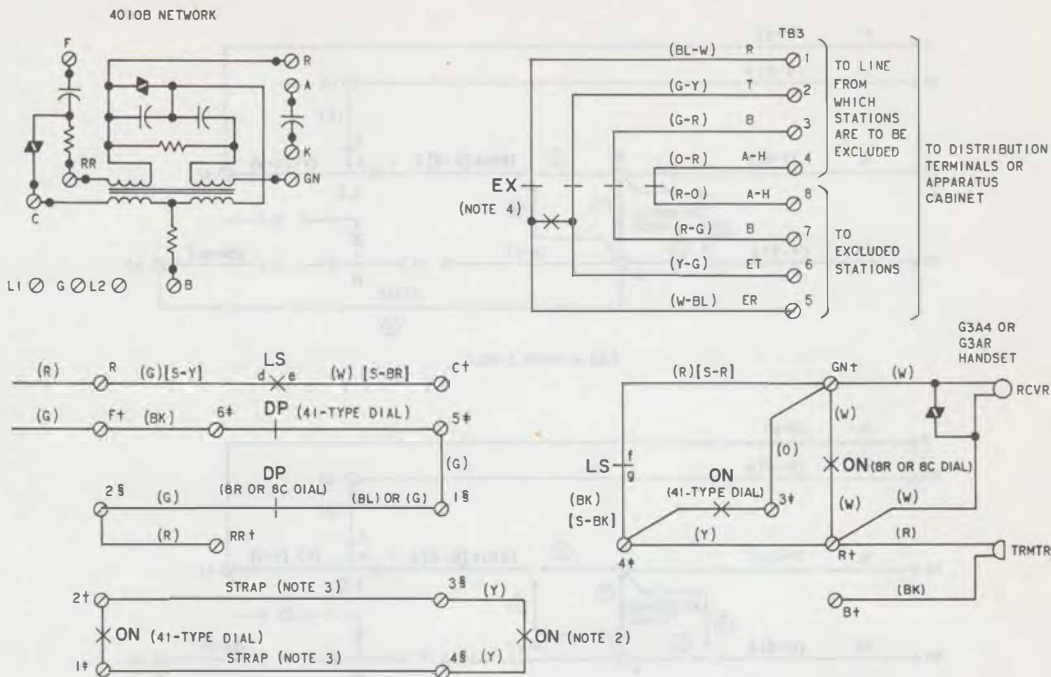
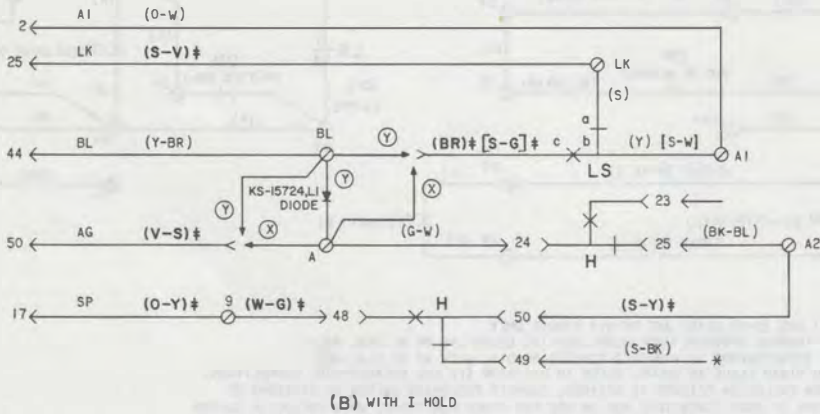
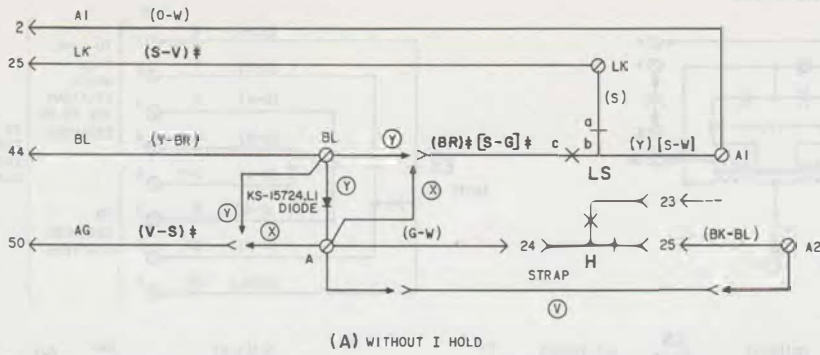


Fig. 1—662-Type Telephone Set, Connections (Sheet 1 of 2)



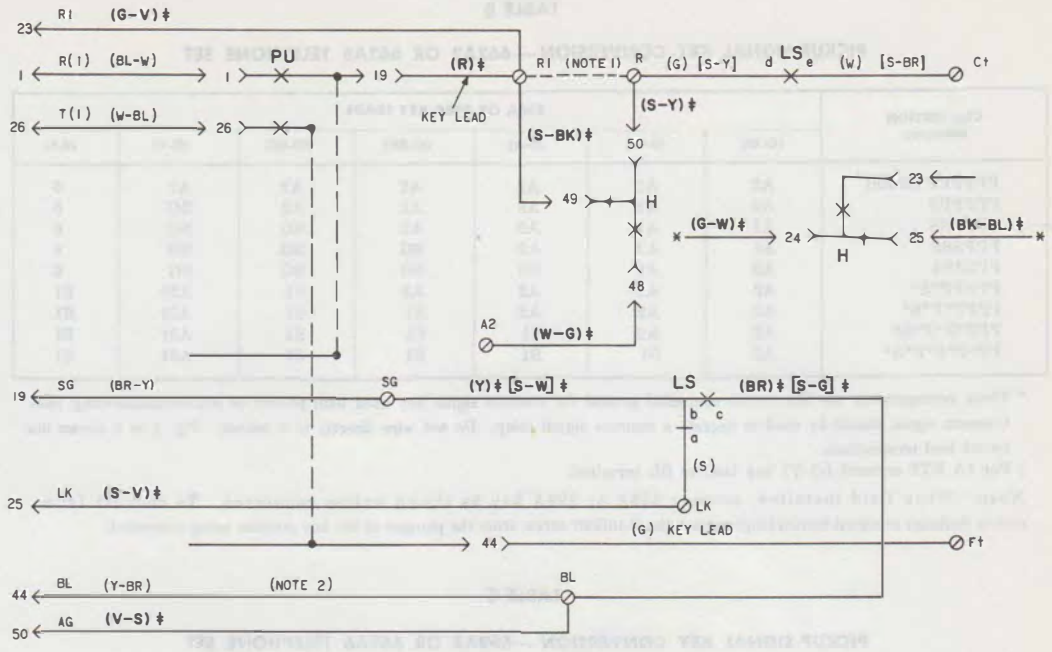
- NOTES:
1. (S) AND (S-R) LEADS ARE ON N1A RINGER ONLY.
 2. OFF-NORMAL CONTACTS AND ASSOCIATED (Y) LEADS ARE ON 8C DIAL ONLY.
 3. IF SPEAKERPHONE IS PROVIDED REPLACE 8R DIAL WITH AN 8C DIAL AND ADD STRAP LEADS AS SHOWN. REFER TO DIVISION 512 FOR SPEAKERPHONE CONNECTIONS.
 4. WHEN EXCLUSION FEATURE IS DESIRED, CONNECT EXCLUSION SWITCH TO STATIONS BY MEANS OF CORD CONDUCTORS NOT IN USE FOR OTHER FUNCTIONS. WHEN EXCLUSION SWITCH IS CONNECTED TO 1A KEY TELEPHONE SYSTEM, THE H AND B LEADS MUST BE PAIRED. WHEN CONNECTED TO 1A1 OR 1A2 KEY TELEPHONE SYSTEM, THE A LEADS MAY BE CONNECTED TO PAIRED OR NON PAIRED CONDUCTORS.
 5. AUXILIARY BUZZER MAY BE INSTALLED. USE B2 AND B2I LEADS TO CONNECT TO EQUIPMENT.
 6. TO USE 6TH LAMP, EQUIP KEY WITH PROPER LAMP AND CONNECT ASSOCIATED LEADS AT EQUIPMENT OR DISTRIBUTION TERMINAL AS REQUIRED.
 7. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT, MOVE (R) RINGER LEAD TO A OF NETWORK.
 8. TO SILENCE RINGER PERMANENTLY CONNECT (BK) RINGER LEAD TO K OF NETWORK.
 9. EXCLUSION KEY MAY BE USED TO CUTOFF RINGER IN SET.
 10. WHEN 656A OR 598A KEY IS PROVIDED ADD STRAP BETWEEN KEY TERMINALS A AND A2.
 11. THESE LEADS CONNECT TO (BR-BK) AND (O-Y) LEADS TERMINATED ON A2.
 12. LINE SWITCH SEQUENCE:
bc-MAKES
de-MAKES
ab-BREAKS
fg-BREAKS
- * - INSULATED AND STORED
 † - TERMINAL ON NETWORK, UNDESIGNATED
 ‡ - TERMINAL ON 41-TYPE DIAL
 § - TERMINAL ON TB1
 () - CURRENT COLOR CODE
 [] - MD COLOR CODE
- DP - DIAL PULSE CONTACTS PU - PICKUP KEY
 EX - EXCLUSION SWITCH
 H - HOLD KEY
 LS - LINE SWITCH
 ON - DIAL OFF-NORMAL CONTACTS
 TB - TURNBUTTON(CUTOFF)

Fig. 1—662-Type Telephone Set, Connections (Sheet 2 of 2)



- LS - LINESWITCH
 H - HOLD KEY
 (X) - WITHOUT BUSY LAMP
 (Y) - WITH BUSY LAMP
 (V) - ADD STRAP WHEN 656A OR 598A KEY IS FURNISHED
 () - CURRENT COLOR CODE
 [] - MD COLOR CODE
 * - INSULATED AND STORED
 ‡ - LEADS INVOLVED IN MODIFICATION

Fig. 2—1A1 or 1A2 KTS—I Hold and/or Station Busy Lamp Modification



NOTES:

1. WHEN 656A OR 598A KEY IS USED PLACE STRAP BETWEEN R AND RI.
2. IF STATION BUSY LAMP IS NOT PROVIDED, REMOVE (Y-BR) MOUNTING CORD LEAD FROM BL TERMINAL, INSULATE AND STORE.

- { } - CURRENT COLOR CODE
- [] - MD COLOR CODE
- H - HOLD KEY
- LS - LINE SWITCH
- PU - PICKUP KEY
- * - INSULATE AND STORE
- † - TERMINAL ON NETWORK, UNDESIGNATED TERMINALS ARE ON TB2.
- ‡ - LEADS INVOLVED IN MODIFICATION

Fig. 3—662-Type Telephone Set Converted For 1A KTS—With or Without Busy Lamp or Speakerphone

TABLE B

PICKUP-SIGNAL KEY CONVERSION — 662A2 OR 662A5 TELEPHONE SET

CONVERSION OPTIONS	656A OR 598A KEY LEADS						
	(O-W)	(S-W)	(G-R)	(BL-BK)	(BR-BK)	(O-Y)	(R-S)
PPPPPP (Note)	A2	A2	A2	A2	A2	A2	6
PPPPPS	A2	A2	A2	A2	A2	SG	6
PPPPSS	A2	A2	A2	A2	SG	SG	6
PPSSSS	A2	A2	A2	SG	SG	SG	6
PPSSSS	A2	A2	SG	SG	SG	SG	6
PPPPP*S*	A2	A2	A2	A2	S1	A2†	S1
PPPP*P*S*	A2	A2	A2	S1	S1	A2†	S1
PPP*P*P*S*	A2	A2	S1	S1	S1	A2†	S1
PP*P*P*P*S*	A2	S1	S1	S1	S1	A2†	S1

* These arrangements use line switch controlled ground for common signal key used with private or intercommunicating lines. Common signal should be used to operate a common signal relay. Do not wire directly to a buzzer. Fig. 2 or 3 shows line switch lead terminations.

† For 1A KTS connect (O-Y) key lead to BL terminal.

Note: When field installed, connect 656A or 598A key as shown unless converted. To convert from pickup (locking) to signal (nonlocking) remove the P-10E837 screw from the plunger at the key position being converted.

TABLE C

PICKUP-SIGNAL KEY CONVERSION — 662A3 OR 662A6 TELEPHONE SET

CONVERSION OPTIONS	657B OR 599B KEY LEADS								
	(O-W)	(S-W)	(G-R)	(BL-BK)	(W-BR)	(Y-BL)	(BL-Y)	(BR-BK)	(O-Y)
HPPPPC(Note)	A2	A2	A2	A2	4	†	†	A2	A2
HPPPSC	A2	A2	A2	SG	4	†	†	A2	A2
HPPSSC	A2	A2	SG	SG	4	†	†	A2	A2
HPPP*S*C	A2	A2	S1	A2§	S1	†	†	A2	A2
HPP*P*S*C	A2	S1	S1	A2§	S1	†	†	A2	A2
HPPPPC(1)	A2	A2	A2	A2	4	†	†	A2	A2
HPPPPC(2)	A2	A2	A2	A2	4	TB1-7†	A of Net†	†	†
HPPPPC(3)	A2	A2	A2	A2	4	Buzzer Terminals		†	†
HPPPPC(4)	A2	A2	A2	A2	4	†	†	†	†

* These arrangements use line switch controlled ground for common signal key with private or intercommunicating lines. Common signal should be used to operate a common signal relay. Do not wire directly to a buzzer. Fig. 2 or 3 shows line switch lead terminations.

† Insulated and stored.

‡ Remove mounting cord (S-Y) (Y-S) leads, insulate and store.

§ For 1A KTS connect (BL-BK) key lead to BL terminal.

Turnbutton may be used to

- (1) Operate auxiliary relay [through 5th R and T (G-BK) (BK-G) pair].
 - (2) Cutoff ringer in set
 - (3) Cutoff buzzer in set
 - (4) Cutoff external audible signal [connect 5th R and T (G-BK) (BK-G) pair to ringer or signal circuit.
- [connect 5th R and T (G-BK) (BK-G) pair to ringer or signal circuit.
- [connect 5th R and T (G-BK) (BK-G) pair to signal circuit; connect 6th R and T (BL-Y) (Y-BL) pair to external signal].

Note: When field installed, connect 657B or 599B key as shown unless converted. To convert from pickup (locking) to signal (nonlocking) remove the P-10E837 screw from the plunger at key position being converted.

TABLE D
CONDUCTOR ASSIGNMENTS USING 66E-TYPE CONNECTOR BLOCK OR A25B CONNECTOR CABLE

LEAD DESIG	TEL SET TERM.*	MTG CORD OR A25B CONN CABLE		PLUG OR CONN	66E-TYPE CONN BLOCK
		PAIR NO.	CONDUCTOR COLOR	PIN NO.	CLIP TERM. NO.
T	26	1	W-BL	26	1
R	1		BL-W	1	2
A, H, S, or S1	TB2-1	2	W-O	27	3
A1 or B†	TB2-A1		O-W	2	4
LG	38	3	W-G	28	5
L1	13		G-W	3	6
T	28	4	W-BR	29	7
R	3		BR-W	4	8
A, H, S, or S1	TB2-2	5	W-S	30	9
Spare or B†	‡		S-W	5	10
LG	39	6	R-BL	31	11
L2	14		BL-R	6	12
T	30	7	R-O	32	13
R	5		O-R	7	14
A, H, S, or S1	TB2-3	8	R-G	33	15
Spare or B†	‡		G-R	8	16
LG	40	9	R-BR	34	17
L3	15		BR-R	9	18
T	32	10	R-S	35	19
R	7		S-R	10	20
A, H, S, or S1	TB2-4	11	BK-BL	36	21
Spare or B†	‡		BL-BK	11	22
LG	41	12	BK-O	37	23
L4	16		O-BK	12	24
T	34	13	BK-G	38	25
R	9		G-BK	13	26
A, H, S, or S1	TB2-5	14	BK-BR	39	27
Spare or B†	‡		BR-BK	14	28
LG	42	15	BK-S	40	29
L5	17		S-BK	15	30
T	36	16	Y-BL	41	31
R	11		BL-Y	16	32
A, H, S, or S1	TB2-6	17	Y-O	42	33
Spare or B†	‡		O-Y	17	34
LG	TB2-7	18	Y-G	43	35
L6	TB2-8		G-Y	18	36
BL or LS	TB2-BL	19	Y-BR	44	37
SG	TB2-SG		BR-Y	19	38
B or B1	G of net	20	Y-S	45	39
R or R1	A of net		S-Y	20	40
BZ1	‡	21	V-BL	46	41
BZ	‡		BL-V	21	42
Spare or DP2	P2 of 41 dial	22	V-O	47	43
Spare or DP1	P1 of 41 dial		O-V	22	44
Spare T1	‡	23	V-G	48	45
Spare R1	‡		G-V	23	46
Spare P3	‡	24	V-BR	49	47
Spare P4	‡		BR-V	24	48
Spare AG	‡	25	V-S	50	49
Spare LK	‡		S-V	25	50

* Contacts of key plug unless otherwise noted.

† When set is used in 1A key telephone system, these balance leads must not be used for other purposes.

‡ Insulate and store.