

SERVICE
1662-TYPE TELEPHONE SETS

1. GENERAL

1.01 These sets are supplied factory-wired as 1662A1 or 1662B1 only. For conversion to 1662A2, 1662A3, 1662B2, or 1662B3 the appropriate key unit must be ordered and installed separately. Modification kits are available for field conversion to provide exclusion (1662A4, 1662A5, 1662A6, 1662B4, 1662B5, or 1662B6 codes). For ordering and installation information refer to the appropriate Reference section in Division 502. Speakerphone connections are shown in Division 512.

1.02 When a 1662-type (MD) 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.

1.03 Connection information for the 1662-type (MD) telephone set was formerly found in Section 502-660-412 which will be canceled.

TABLE A

P-90D012 POLARITY GUARD CONNECTIONS

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

* 26F dial only.

Note: Polarity guard used when specified by local instruction for end-to-end signaling installation when battery and ground reversals may be encountered.

() — Current color code.

[] — MD color code.

TABLE B

PICKUP-SIGNAL KEY CONVERSION, 1662A1, 1662B1, 1662A4, OR 1662B4 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
HPPPSS	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. 3 and 4 show line switch lead terminations.

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

Note: 657A or 599A key as furnished in 1662A1 telephone set. To convert from pickup (locking) to signal (nonlocking) remove the P-10E837 screw from the plunger at the key position being converted.

SECTION 502-618-402

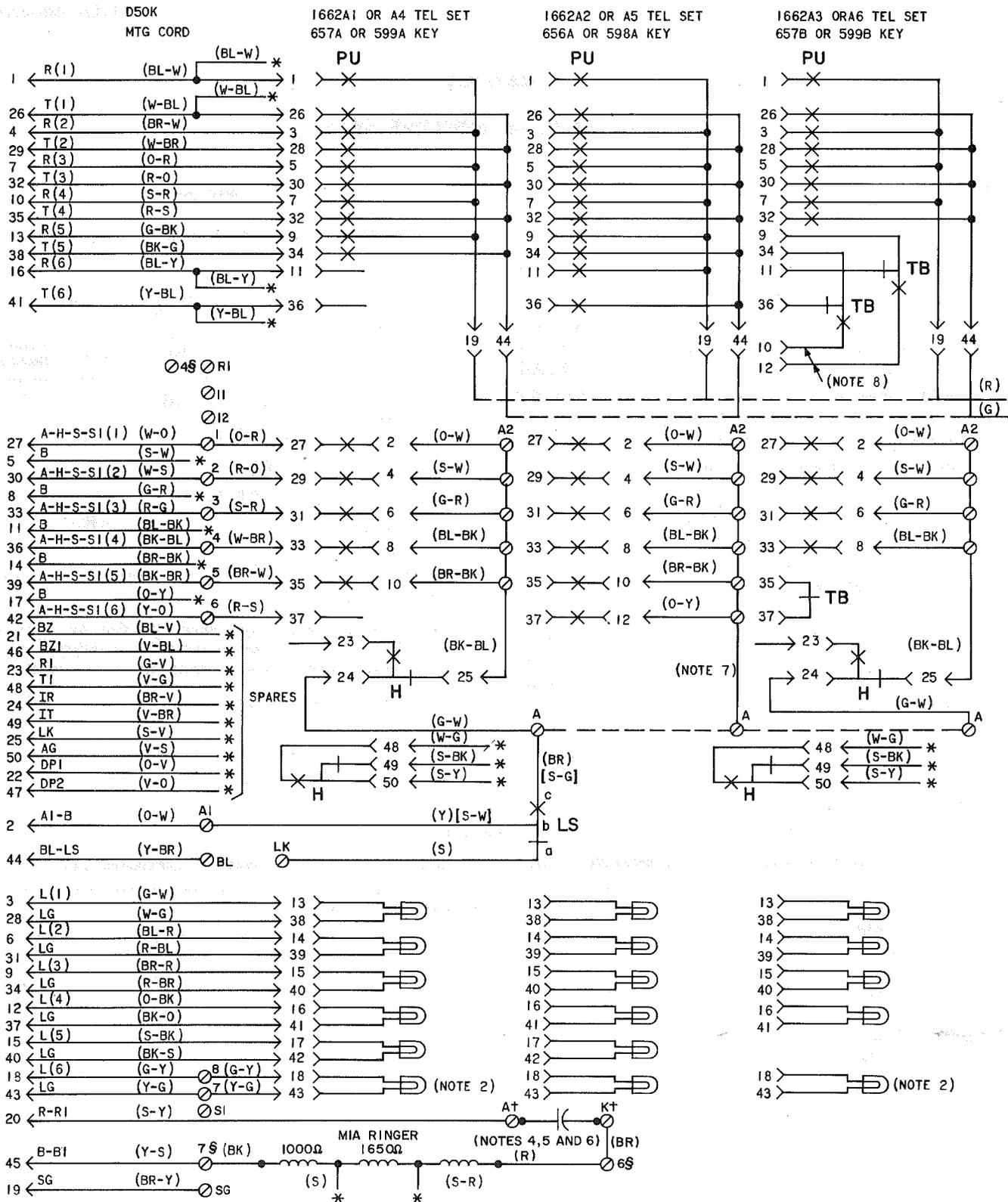
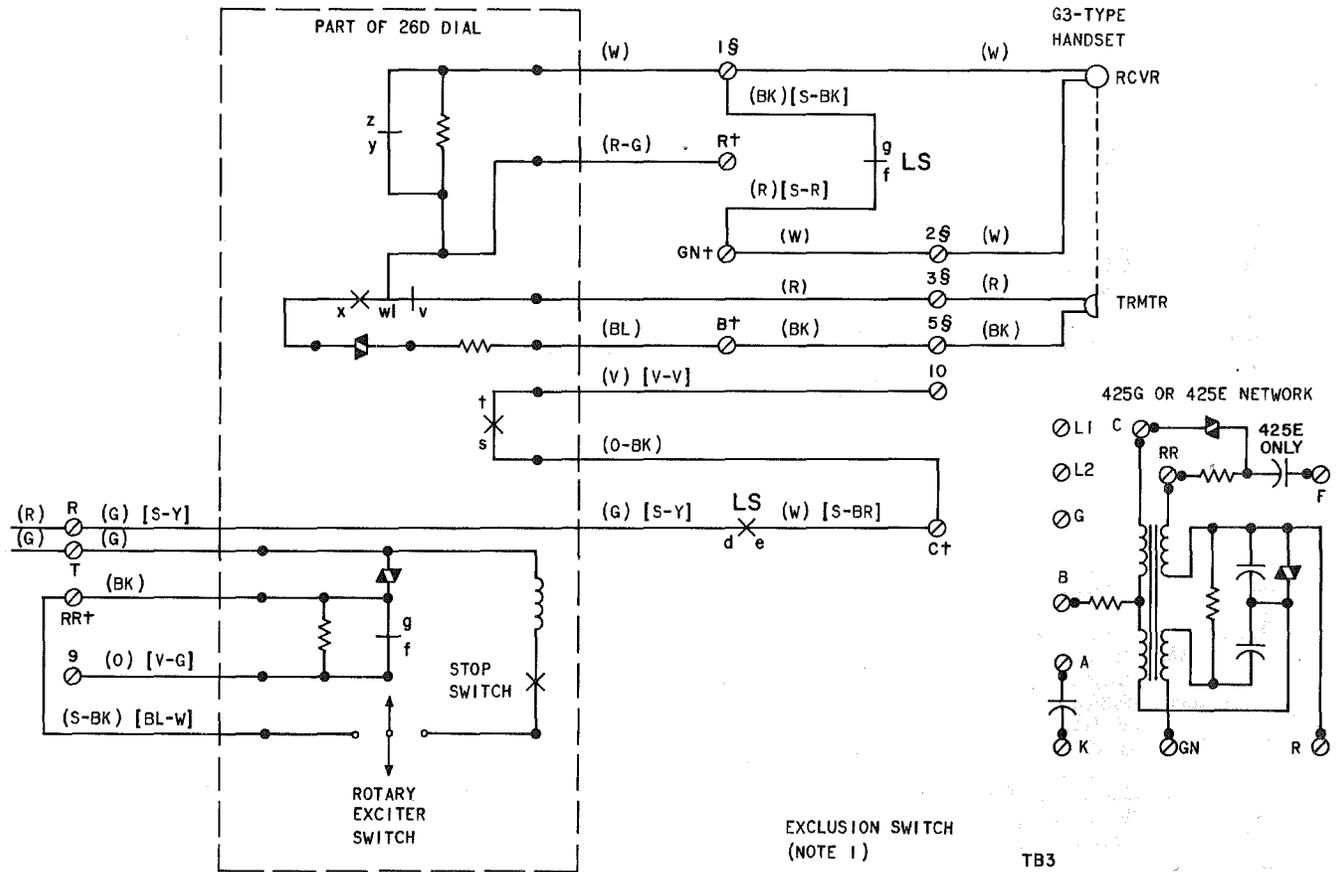


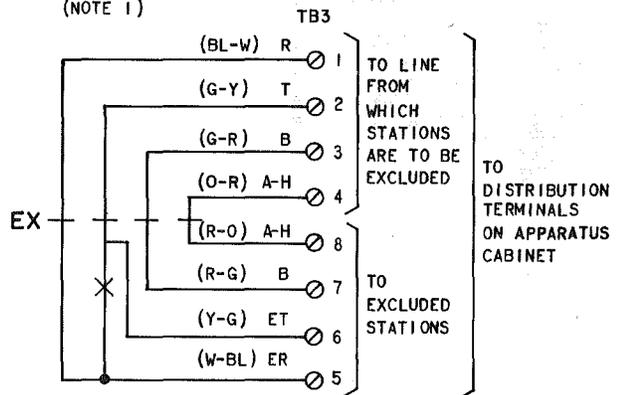
Fig. 1—1662A-Type (MD) Telephone Sets, Connections (Sheet 1 of 2)



NOTES:

1. 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 NONPAIRED CONDUCTORS.
2. TO USE 6TH LAMP, EQUIP KEY WITH PROPER LAMP AND CONNECT ASSOCIATED LEADS AT EQUIPMENT OR DISTRIBUTION TERMINAL AS REQUIRED.
3. AUXILIARY BUZZER MAY BE INSTALLED. USE BZ AND BZ1 LEADS TO CONNECT EQUIPMENT.
4. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT, MOVE (BR) LEAD FROM K TO A OF NETWORK.
5. TO SILENCE RINGER PERMANENTLY MOVE (BK) RINGER LEAD FROM TERMINAL 7 TO TERMINAL 6 OF TB1.
6. EXCLUSION KEY MAY BE USED TO CUT OFF RINGER IN SET.
7. WHEN 656A OR 598A KEY IS PROVIDED ADD STRAP BETWEEN KEY TERMINALS A AND A2.
8. THESE PINS CONNECT TO (BR-BK) AND (O-Y) LEADS TERMINATED ON A2.
9. LINE SWITCH SEQUENCE, HANDSET REMOVED:
 - bc-MAKES
 - de-MAKES
 - ab-BREAKS
 - fg-BREAKS

EXCLUSION SWITCH
(NOTE 1)



- () - CURRENT COLOR CODE
- [] - MD COLOR CODE
- * - INSULATED AND STORED
- + - NETWORK TERMINAL, UNDESIGNATED TERMINALS ARE ON TB2
- § - TERMINAL ON TB1
- EX - EXCLUSION SWITCH
- H - HOLD KEY
- LS - LINE SWITCH
- TB - TURNBUTTON (CUTOFF)
- PU - PICKUP KEY

Fig. 1—1662A-Type (MD) Telephone Sets, Connections (Sheet 2 of 2)

SECTION 502-618-402

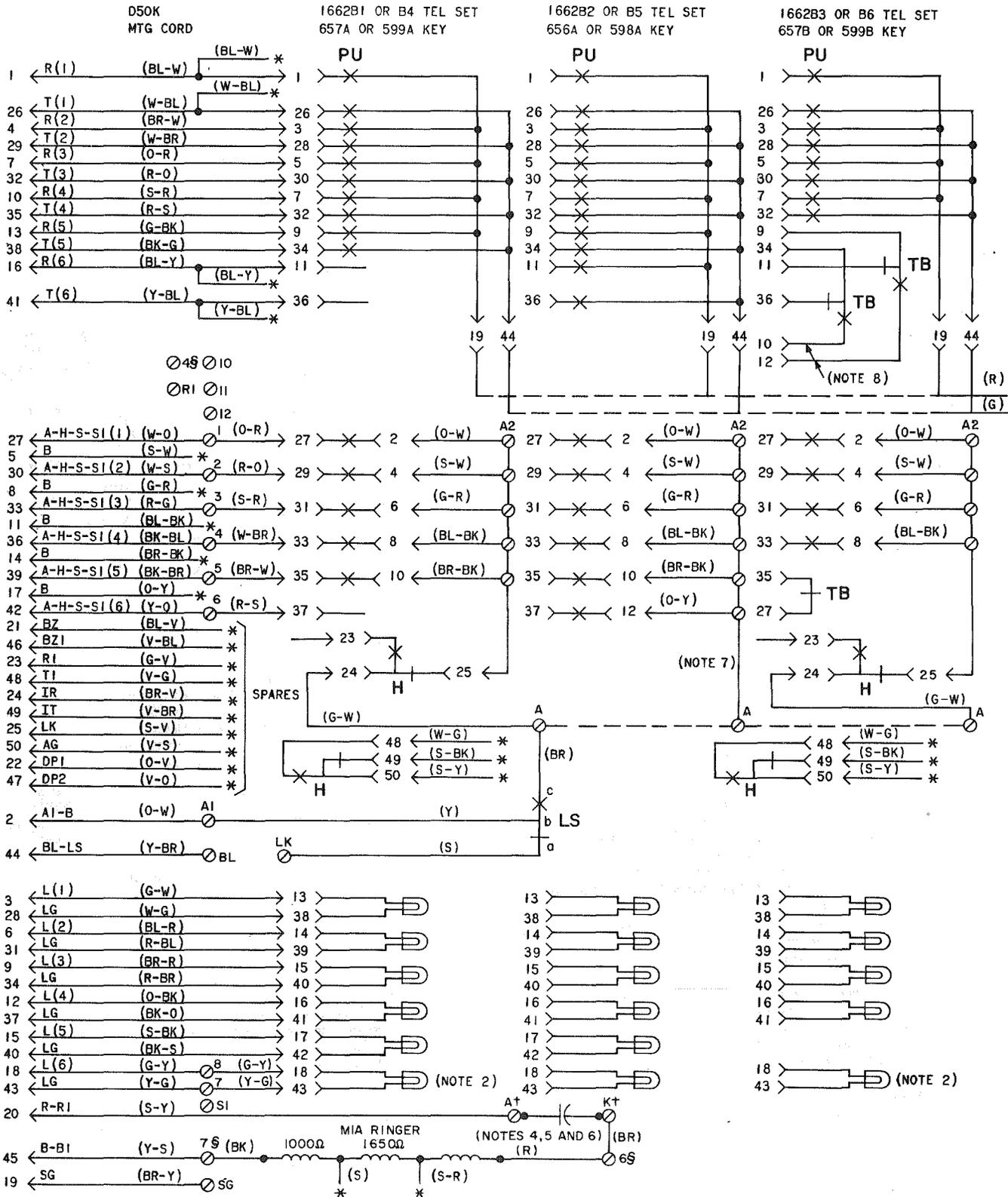
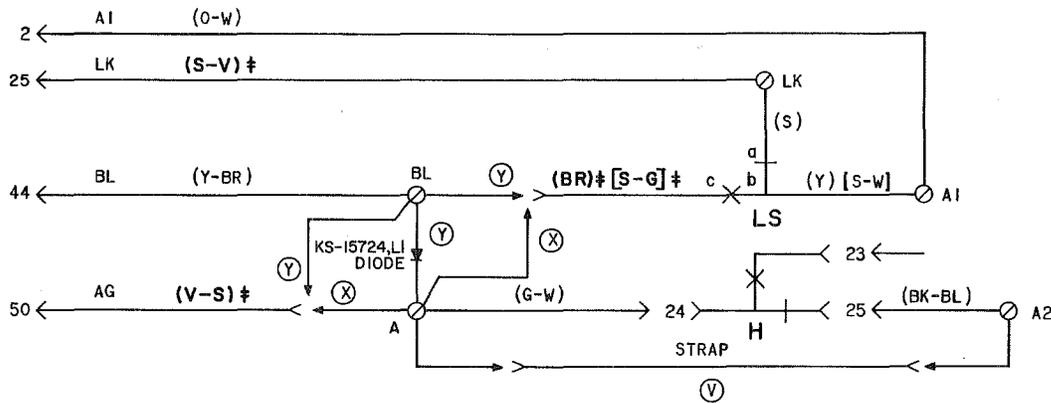
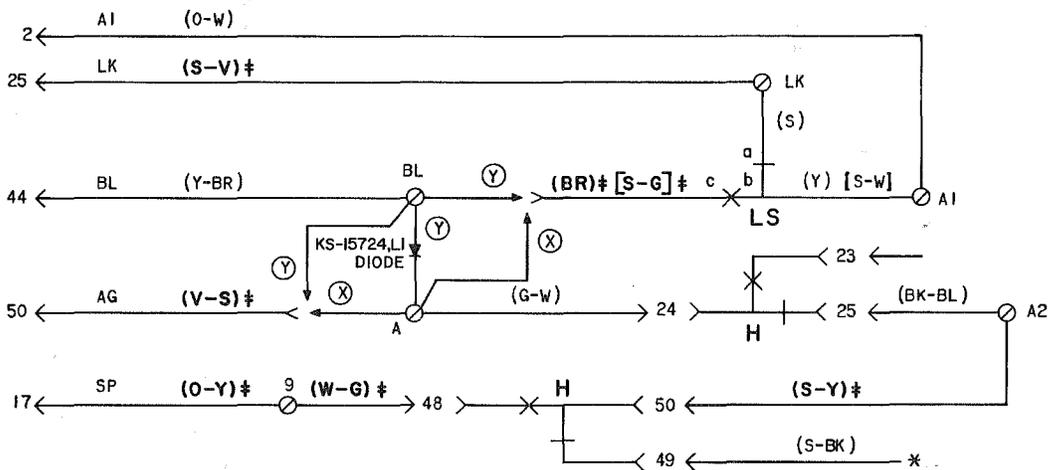


Fig. 2—1662B-Type (MD) Telephone Sets, Connections (Sheet 1 of 2)



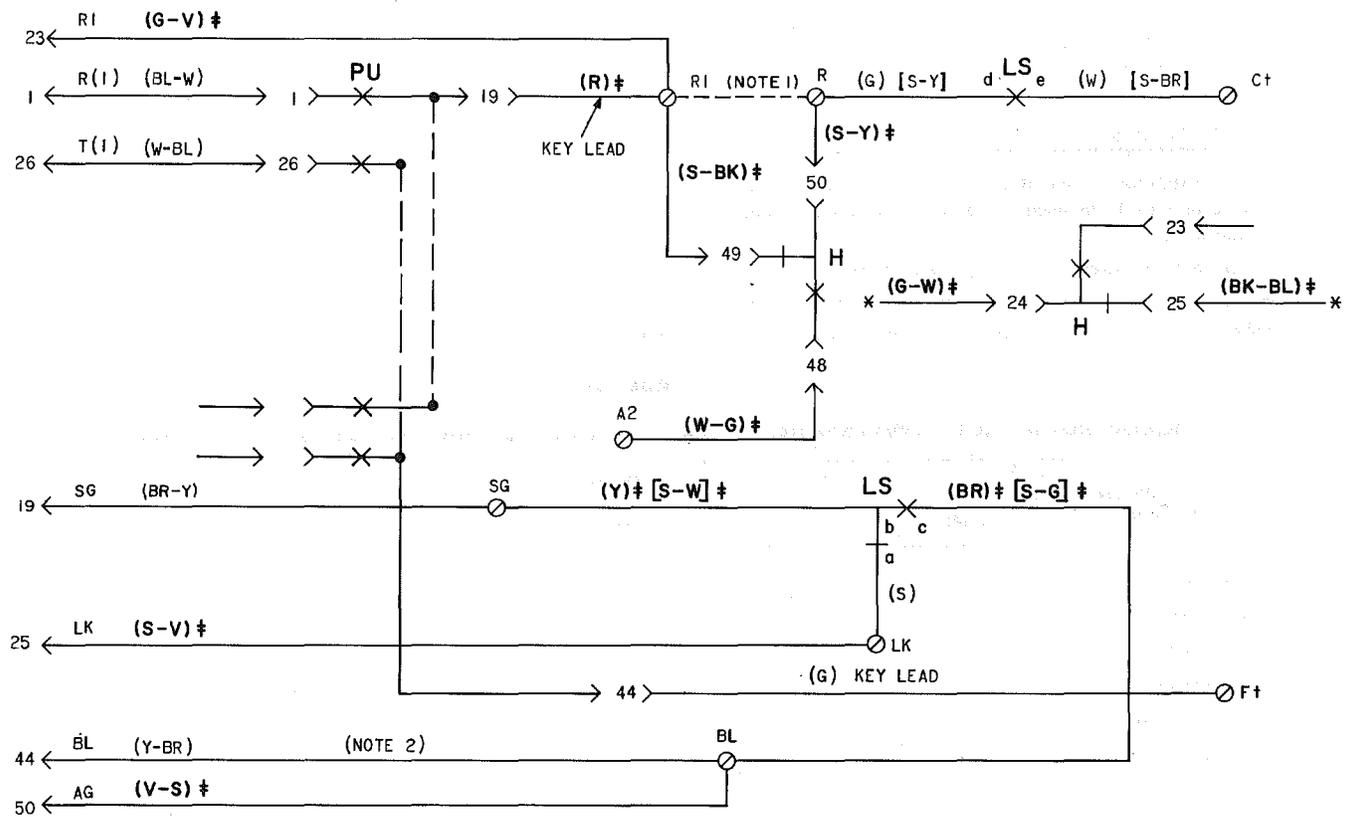
(A) WITHOUT I HOLD



(B) WITH I HOLD

- 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. 3—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. 4—1662-Type (MD) Telephone Set Converted for IA KTS—With or Without Busy Lamp or Speakerphone

TABLE C

PICKUP-SIGNAL KEY CONVERSION, 1662A2, 1662B2, 1662A5, OR 1662B5 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. 3 and 4 show line switch lead terminations.

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

Note: 656A or 598A key as furnished in 1662A2 telephone set. To convert from pickup (locking) to signal (nonlocking) remove the P-10E837 screw from the plunger at the key position being converted.

TABLE D

PICKUP-SIGNAL KEY CONVERSION, 1662A3, 1662B3, 1662A6, OR 1662B6 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
HPPPPSC	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. 3 and 4 show 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.

Turn button 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 signal circuit; connect 6th R and T (BL-Y) (Y-BL) pair to external signal]
- } connect 5th R and T (G-BK) (BK-G) pair to ringer or signal circuit.

Note: 657B or 599B key wired as furnished in 1662A3 telephone set. To convert from pickup (locking) to signal (nonlocking) remove the P-10E837 screw from the plunger at key position being converted.

TABLE E
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	TB1-7	20	Y-S	45	39
R or R1	A of net		S-Y	20	40
Spare or BZ1	‡	21	V-BL	46	41
Spare or BZ	‡		BL-V	21	42
Spare	‡	22	V-O	47	43
Spare	‡		O-V	22	44
T1	‡	23	V-G	48	45
R1	‡		G-V	23	46
IT	‡	24	V-BR	49	47
IR	‡		BR-V	24	48
AG	‡	25	V-S	50	49
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.