

## SERVICE

### 662A1M TELEPHONE SETS

#### 1. GENERAL

- 1.01** Whenever this section is reissued the reason for reissue will be listed in this paragraph.
- 1.02** The 662A1M (modular) telephone set is equipped with a 635A5 key. A modification kit is available for field conversion to provide exclusion.
- 1.03** For identification and ordering information, refer to reference Section 502-601-131.
- 1.04** To install exclusion switch, or for common installation and maintenance information,

refer to Section 502-600-102. Speakerphone connections are found in Division 512.

**1.05** When a 662A1M 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, P3, P4, AG, and LK) at all 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 circuits of the multiplied telephone sets.

**1.06** For additional information on the modular concept, refer to Section 503-100-100.

TABLE A

PICKUP-SIGNAL KEY CONVERSION – 662A1M TELEPHONE SET

CONVERSION OPTIONS	635A5, 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: 635A5 key is furnished in 662A1M telephone set. To convert from pickup (locking) to signal (nonlocking) remove 812857738 or P-28E773 screw from the plunger at the key position being converted.

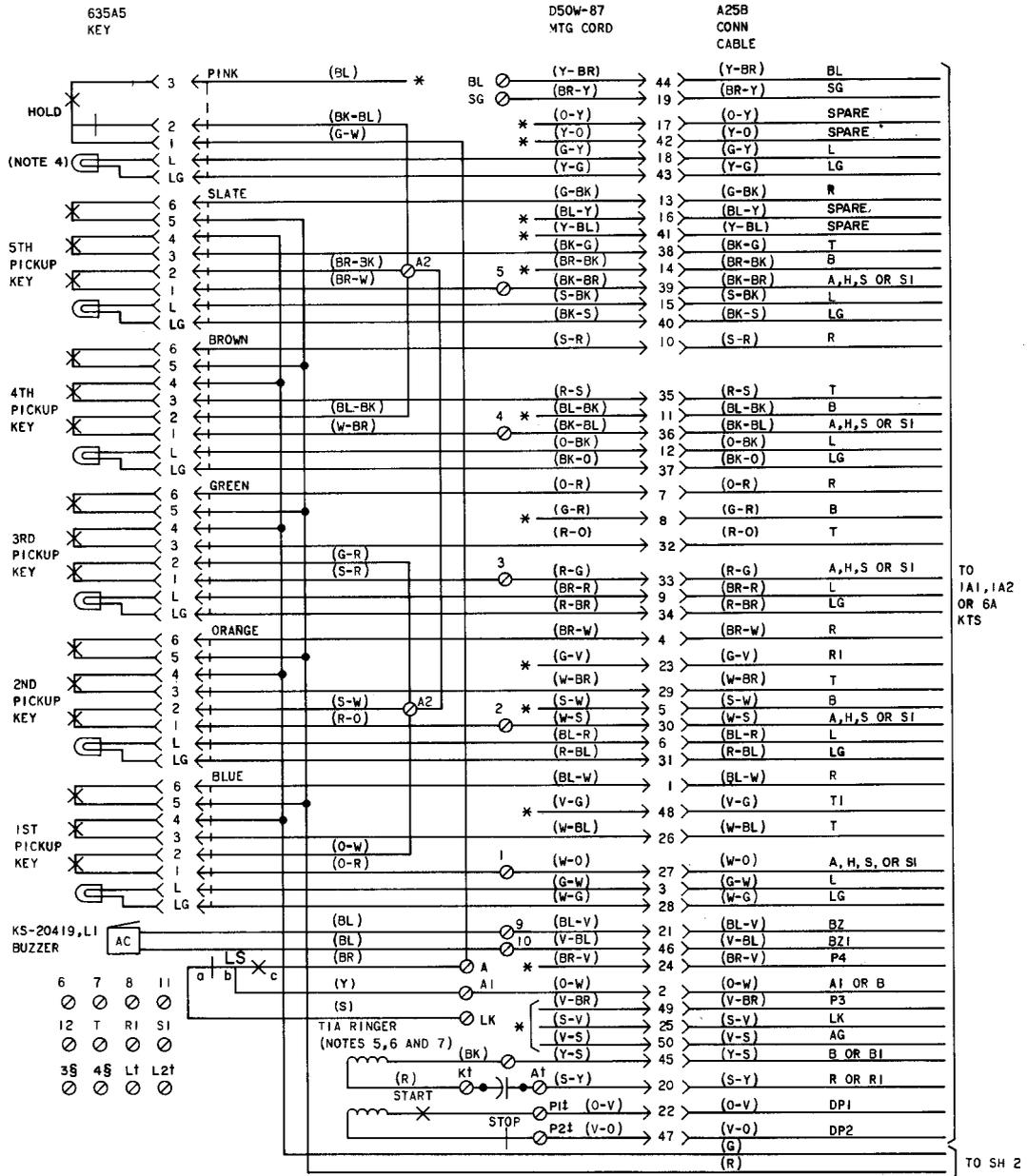


Fig. 1—662A1M Telephone Set Connections (Sheet 1 of 2)

NOTES:

1. OFF-NORMAL CONTACTS AND ASSOCIATED (Y) LEADS ARE ON 8C DIAL ONLY.
2. IF SPEAKERPHONE IS PROVIDED REPLACE 8R DIAL WITH AN 8C DIAL AND ADD STRAP LEADS AS SHOWN. REFER TO DIVISION 512 FOR SPEAKERPHONE CONNECTIONS.
3. 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.
4. TO USE 6TH LAMP, EQUIP KEY WITH PROPER LAMP AND CONNECT ASSOCIATED LEADS AT EQUIPMENT OR DISTRIBUTION TERMINAL AS REQUIRED.
5. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT, MOVE (R) RINGER LEAD TO A OF NETWORK.
6. TO SILENCE RINGER PERMANENTLY CONNECT (BK) RINGER LEAD TO K OF NETWORK.
7. EXCLUSION KEY MAY BE USED TO CUTOFF RINGER IN SET.
8. LINE SWITCH OFF-HOOK SEQUENCE
  - bc - MAKES
  - de - MAKES
  - ab - BREAKS
  - fg - BREAKS

- \* - INSULATED AND STORED
  - † - TERMINAL ON NETWORK, UNDESIGNATED
  - ‡ - TERMINALS ARE ON TB2
  - § - TERMINAL ON 41-TYPE DIAL
  - ⊥ - TERMINAL ON TB1
- DP - DIAL PULSE CONTACTS
  - EX - EXCLUSION SWITCH
  - H - HOLD KEY
  - LS - LINE SWITCH
  - ON - DIAL OFF-NORMAL CONTACTS
  - TB - TURNBUTTON(CUTOFF)

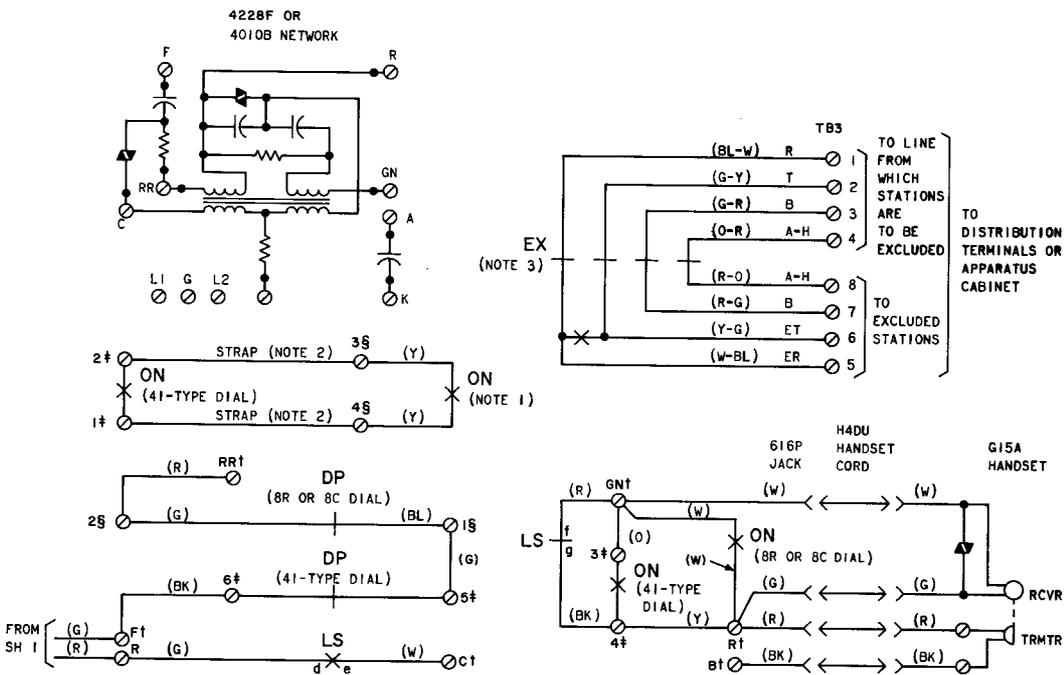
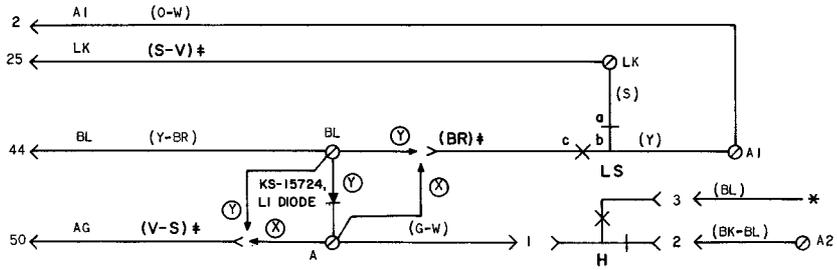
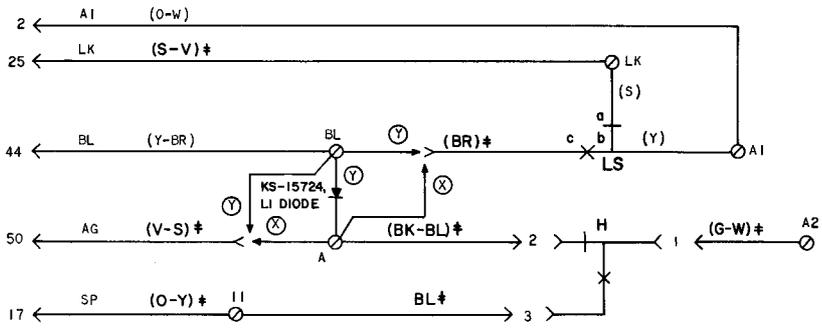


Fig. 1—662AIM Telephone Set Connections (Sheet 2 of 2)



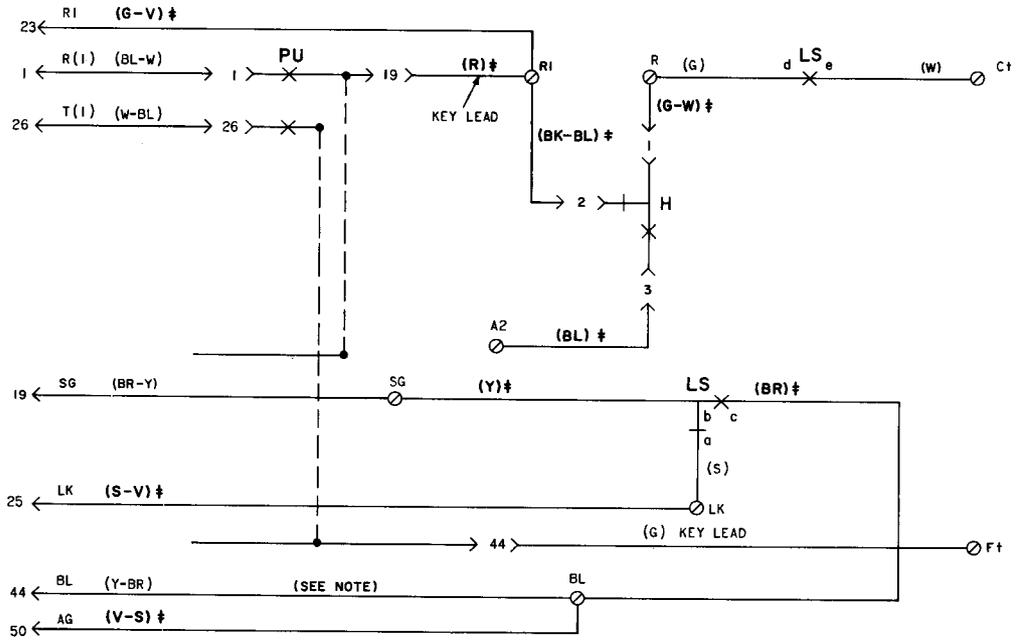
(A) WITHOUT I HOLD



(B) WITH I HOLD

- LS - LINESWITCH
- H - HOLD KEY
- (X) - WITHOUT BUSY LAMP
- (Y) - WITH BUSY LAMP
- \* - INSULATED AND STORE
- † - LEADS INVOLVED IN MODIFICATION

Fig. 2—1A1 or 1A2 KTS - I Hold and/or Station Busy Lamp Modification (662A1M) Telephone Set



NOTE:  
 IF STATION BUSY LAMP IS NOT PROVIDED, REMOVE (Y-BR)  
 MOUNTING CORD LEAD FROM BL TERMINAL, INSULATE AND STORE.

H - HOLD KEY  
 LS - LINE SWITCH  
 PU - PICKUP KEY

† - TERMINAL ON NETWORK, UNDESIGNATED TERMINALS ARE ON TB2.  
 ‡ - LEADS INVOLVED IN MODIFICATION

Fig. 3—662A1M Telephone Set Converted for 1A KTS - With or Without Busy Lamp or Speakerphone

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

LEAD DESIG	662A1M TEL SET TERM.‡	MTG CORD OR A25B CONN CABLE		PLUG OR CONN	66E-TYPE CONN BLOCK
		PAIR NO.	COND COLOR	PIN NO.	CLIP TERM. NO.
T R	3 6	1	W-BL BL-W	26 1	1 2
A, H, S, or S1 A1 or B†	TB2-1 TB2-A1	2	W-O O-W	27 2	3 4
LG L1	LG L	3	W-G G-W	28 3	5 6
T R	3 6	4	W-BR BR-W	29 4	7 8
A, H, S, or S1 Spare or B†	TB2-2 *	5	W-S S-W	30 5	9 10
LG L2	LG L	6	R-BL BL-R	31 6	11 12
T R	3 6	7	R-O O-R	32 7	13 14
A, H, S, or S1 Spare or B†	TB2-3 *	8	R-G G-R	33 8	15 16
LG L3	LG L	9	R-BR BR-R	34 9	17 18
T R	3 6	10	R-S S-R	35 10	19 20
A, H, S, or S1 Spare or B†	TB2-4 *	11	BK-BL BL-BK	36 11	21 22
LG L4	LG L	12	BK-O O-BK	37 12	23 24
T R	3 6	13	BK-G G-BK	38 13	25 26
A, H, S, or S1 Spare or B†	TB2-5 *	14	BK-BR BR-BK	39 14	27 28
LG L5	LG L	15	BK-S S-BK	40 15	29 30
Spare Spare	* *	16	Y-BL BL-Y	41 16	31 32
Spare Spare	* *	17	Y-O O-Y	42 17	33 34
LG L6	LG L	18	Y-G G-Y	43 18	35 36
BL SG	TB2-BL TB2-SG	19	Y-BR BY-Y	44 19	37 38
B or B1 R or R1	G of net A of net	20	Y-S S-Y	45 20	39 40
BZ1 BZ	TB2-10 TB2-9	21	V-BL BL-V	46 21	41 42
Spare or DP2 Spare or DP1	P2 of 41 dial P1 of 41 dial	22	V-O O-V	47 22	43 44
Spare or T1 Spare or R1	* *	23	V-G G-V	48 23	45 46
Spare or P3 Spare or P4	* *	24	V-BR BR-V	49 24	47 48
Spare or AG Spare or LK	* *	25	V-S S-V	50 25	49 50

\* Insulate and store.

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

‡ Contacts of key plug unless otherwise noted.