

SERVICE

608- AND 618-TYPE TELEPHONE SETS

1. GENERAL

1.01 This section contains connection and maintenance information for the 608- and 618-type telephone sets. Connection information for these sets was formerly contained in Section 502-608-400 which is hereby canceled.

2. CONNECTIONS

2.01 These sets feature an FW relay for use with either 2- or 4-wire line circuits. Since 4-wire operation requires **A** lead control they are not compatible with the 1A Key Telephone System.

2.02 Sets may be equipped with either an 8C or 8R dial. If speakerphone is to be provided, an 8C dial is required to provide the second set of off-normal contacts.

2.03 Supplementary hold can be provided in two configurations (Fig. 5). **Priority Hold** requires a 599H key in the first module. No set wiring changes are involved. **I Hold** requires a wiring modification of the existing hold key. Refer to Division 518 and SD-69530-01 for detailed information on this feature.

2.04 All 608-type telephone sets may use the P-90D033 Printed Wiring Board when busy lamp feature is provided. Only 618-type sets with a D120C cord bearing manufacture date of III, 68 or later can use this circuit. Earlier manufactured sets must use the auxiliary relay circuit shown in Fig. 7.

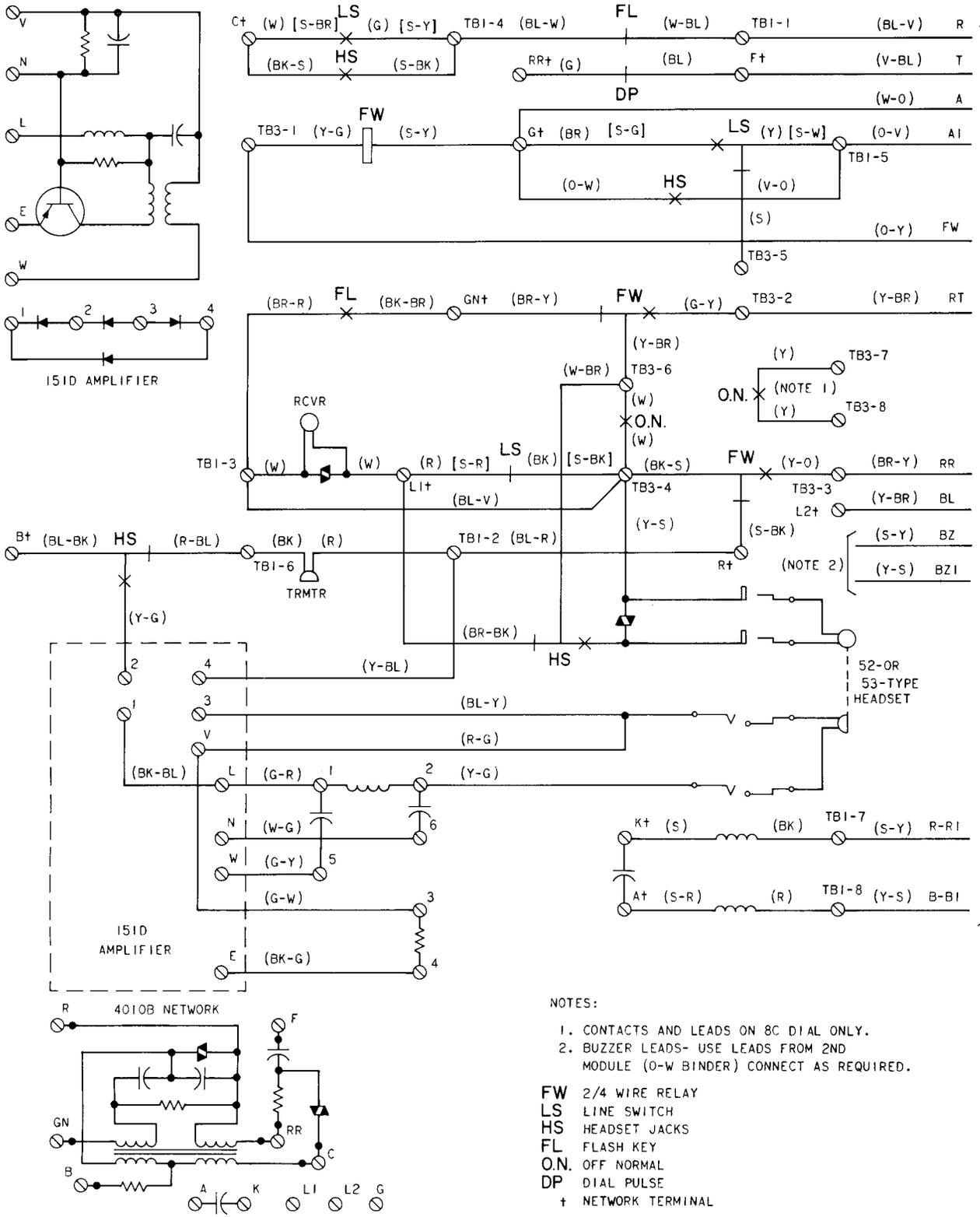
2.05 The printed wiring board assembly mounts under the right-hand dial mounting screw. Connect as shown in Fig. 3 and 6.

3. MAINTENANCE

3.01 Field maintenance of these sets should be limited to the replaceable components listed in the Reference section for these sets.

3.02 Maintenance of items such as dials, keys, ringers, etc is covered in the sections pertaining to the components.

3.03 The 667B transmitter is subject to pickup of mechanical spring vibrations when a held line button is released and the speakerphone is on. This vibration is transmitted through the control unit and back over the line. If condition exists, replace transmitter with modified unit ordered as follows: Transmitter, 667B, modified per D-180196.



TO FIG. 3

- NOTES:
1. CONTACTS AND LEADS ON 8C DIAL ONLY.
 2. BUZZER LEADS- USE LEADS FROM 2ND MODULE (O-W BINDER) CONNECT AS REQUIRED.
- FW 2/4 WIRE RELAY
 LS LINE SWITCH
 HS HEADSET JACKS
 FL FLASH KEY
 O.N. OFF NORMAL
 DP DIAL PULSE
 + NETWORK TERMINAL

Fig. 1—608B and 618A Telephone Set, Connections

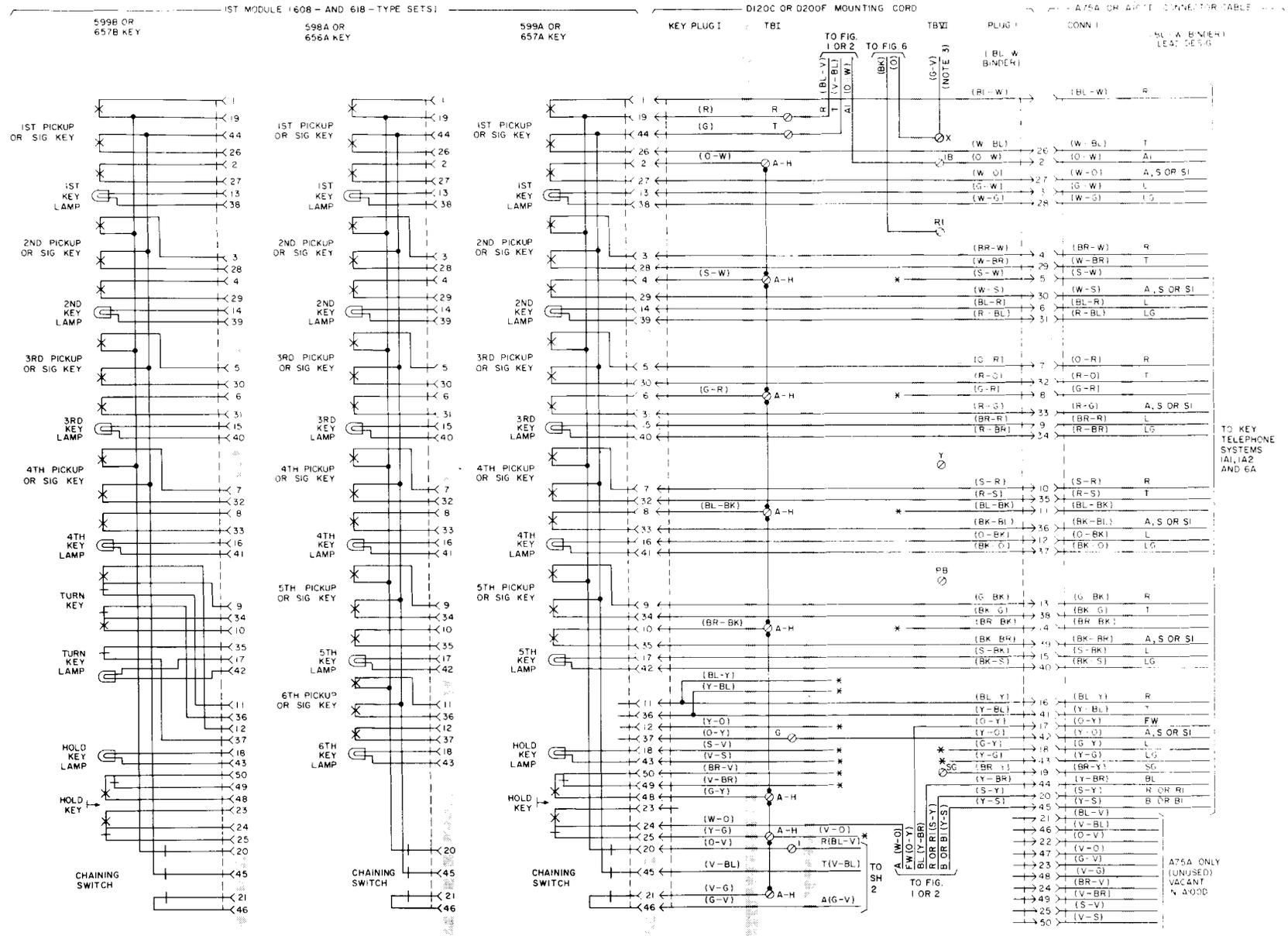


Fig. 3—Module Arrangements and Cord and Cable Connections (Sheet 1 of 3)

617A KEY
2ND MODULE
(618-TYPE SETS)
4TH MODULE
(608-TYPE SETS)

598A OR 656A KEY
2ND MODULE (618-TYPE SETS)
2ND, 3RD OR 4TH MODULE
(608-TYPE SETS)

D120C OR D200F MOUNTING CORD
KEY PLUG II, III OR IV
TB II, III OR IV
FROM SH 1
D120C-(O-W) BINDER
D200F-(O-W),(G-W)
OR (BR-W) BINDER
PLUG 2, 3 OR 4
A75A OR A1000 CONNECTOR CABLE
CONN 2, 3 OR 4
A75A-(O-W) BINDER
A1000-(G-W),(S-W)
OR (BR-W) BINDER
LEAD PINS

NOTES:

1. FOR ADD-ON CONFERENCE CONTROL IN THE 6A KEY TELEPHONE SYSTEM, CONNECT (BR-Y) MOUNTING CORD LEAD (O-W BINDER GROUP) TO TB XI - PB. ALSO REMOVE COMMON LEAD OF ADD-ON CONFERENCE BUTTON (CONVERTED TO SIGNALING) FROM A-H TERMINAL AND CONNECT TO PB. THE 617A KEY MAY ALSO BE USED IN A SIMILAR MANNER.
 2. WHEN THE 617A KEY IS REQUIRED AS A DUAL-PURPOSE KEY, THE BRASS STRAP BETWEEN THE SI AND SG TERMINALS OF THE KEY MAY BE REMOVED. USE MIW CORD OR EQUIVALENT TO CONNECT SI TERMINAL OF 617A KEY TO A DISSIMILAR GROUND OR A NONGROUNDED CIRCUIT.
 3. USE A LEAD (G-V) FROM LAST KEY MODULE WHEN USING P-90D033 PRINTED WIRING BOARD FOR BUSY LAMP FEATURE (SEE FIG. 6).
 4. USE LEADS (BR-Y)(Y-BR) FROM LAST KEY MODULE AS RR AND RT LEADS.
- * INSULATED AND STORED
† DEAD ENDED

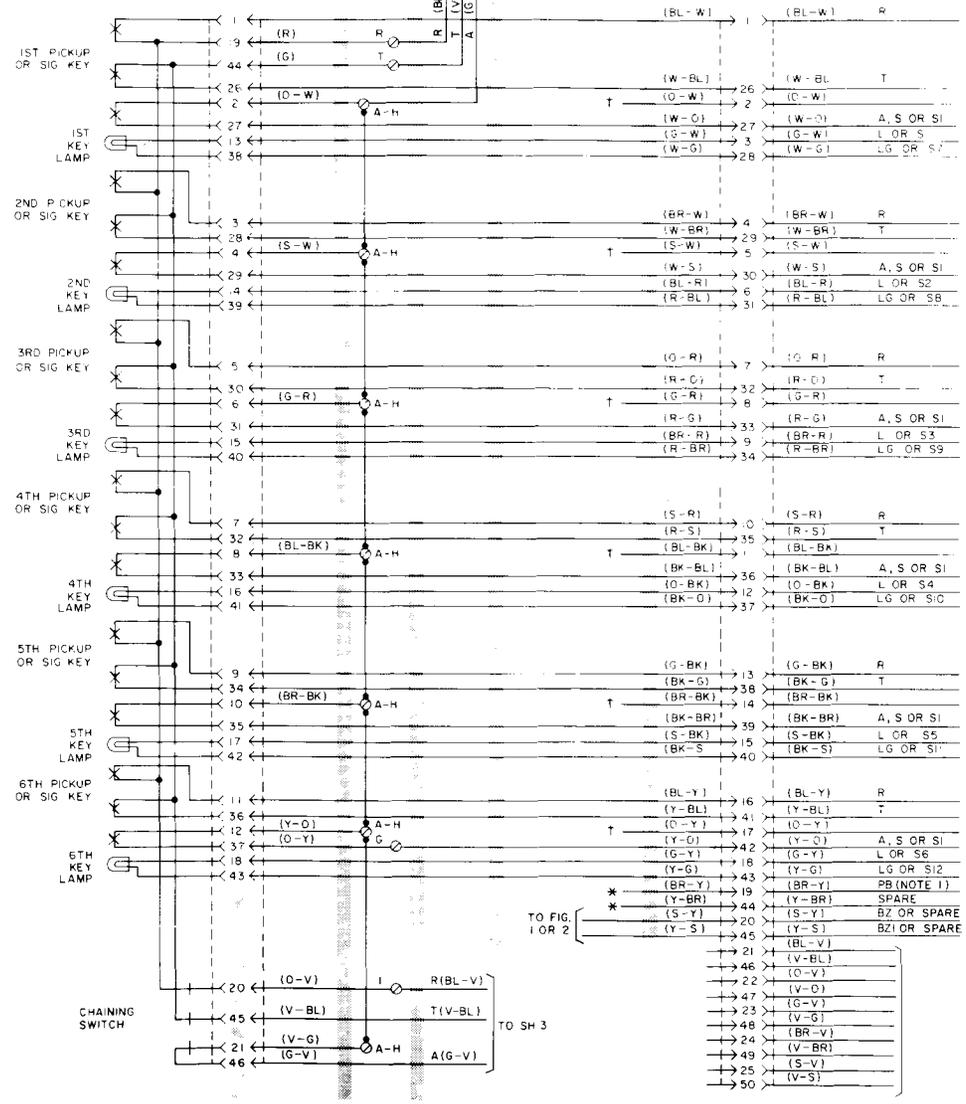
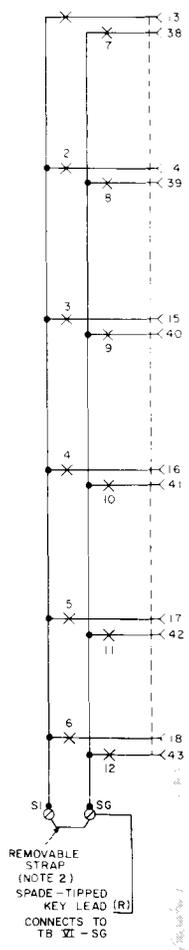


Fig. 3—Module Arrangements and Cord and Cable Connections (Sheet 2 of 3)

617A KEY
2ND MODULE
(618-TYPE SETS)
4TH MODULE
(608-TYPE SETS)

598A OR 656A KEY
2ND MODULE (618-TYPE SETS)
2ND, 3RD OR 4TH MODULE
(608-TYPE SETS)

KEY PLUG
II, III OR IV
TB II,
III OR
IV
FROM
SH 1
D120C-(O-W) BINDER
D200F-(O-W), (G-W)
OR (BR-W) BINDER
PLUG
2, 3 OR 4
A75A OR A1000
CONNECTOR CABLE
A75A-(O-W) BINDER
A1000-(O-W), (G-W)
OR (BR-W) BINDER
LEAF 1, 2, 3, 4

NOTES:

1. FOR ADD-ON CONFERENCE CONTROL IN THE 6A KEY TELEPHONE SYSTEM, CONNECT (BR-Y) MOUNTING CORD LEAD (O-W BINDER GROUP) TO TB VI - PB. ALSO REMOVE COMMON LEAD OF ADD-ON CONFERENCE BUTTON (CONVERTED TO SIGNALING) FROM A-H TERMINAL AND CONNECT TO PB. THE 617A KEY MAY ALSO BE USED IN A SIMILAR MANNER.
 2. WHEN THE 617A KEY IS REQUIRED AS A DUAL-PURPOSE KEY, THE BRASS STRAP BETWEEN THE SI AND SG TERMINALS OF THE KEY MAY BE REMOVED. USE MIN. CORD OR EQUIVALENT TO CONNECT SI TERMINAL OF 617A KEY TO A DISSIMILAR GROUND OR A NONGROUNDED CIRCUIT.
 3. USE A LEAD (G-V) FROM LAST KEY MODULE WHEN USING P-900033 PRINTED WIRING BOARD FOR BUSY LAMP FEATURE (SEE FIG. 6).
 4. USE LEADS (BR-Y)(Y-BR) FROM LAST KEY MODULE AS RR AND RT LEADS.
- * INSULATED AND STORED
† DEAD ENDED

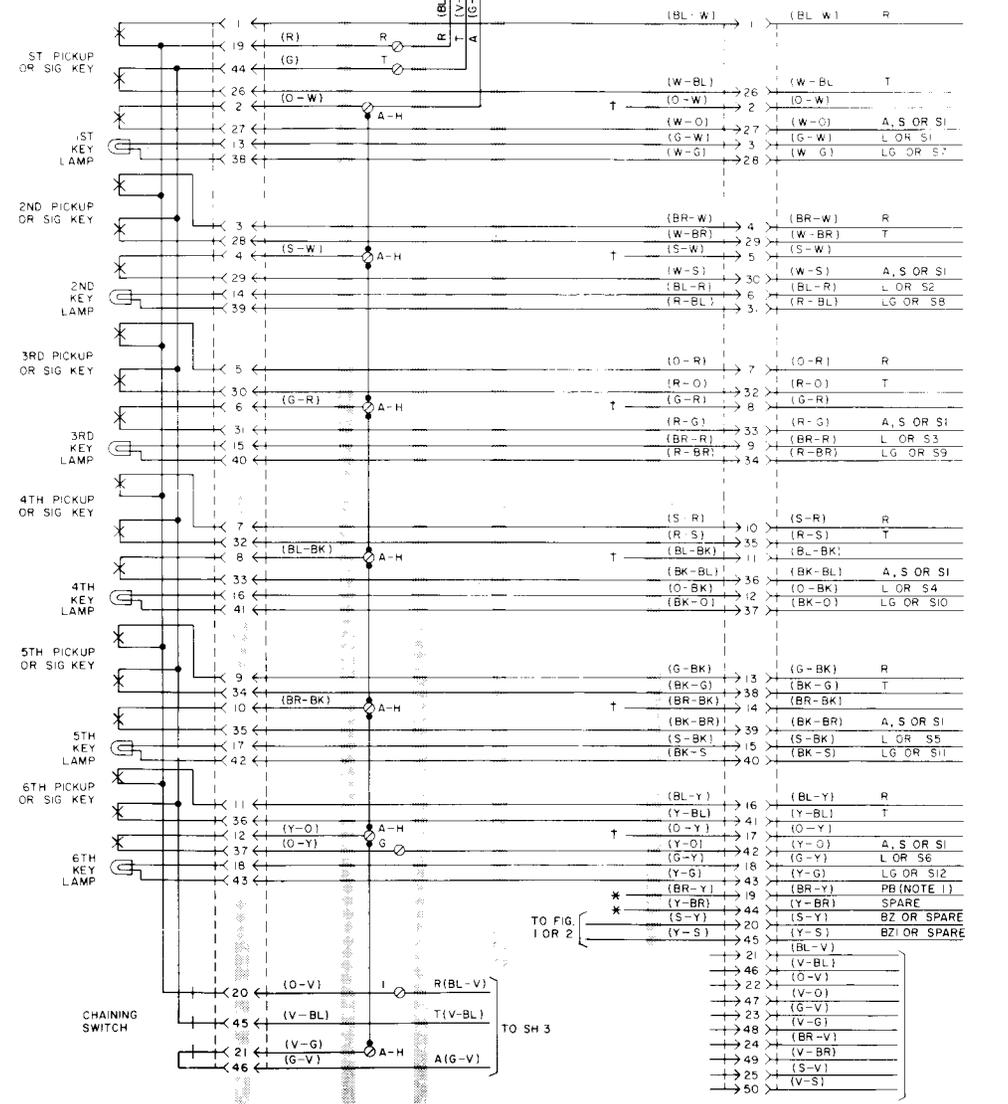
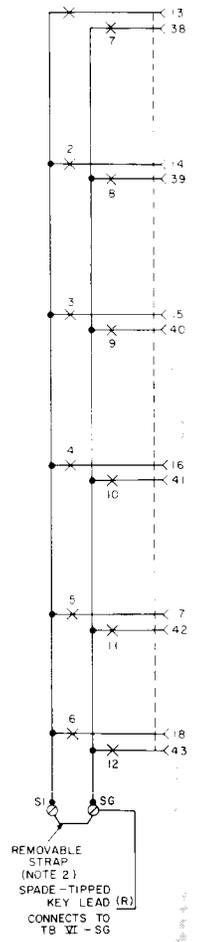


Fig. 3—Module Arrangements and Cord and Cable Connections (Sheet 2 of 3)

TABLE A
PICKUP-SIGNAL KEY CONVERSION

NO. OF PICKUP KEYS	NO. OF SIG. KEYS	NO. OF PRIVATE AND INTERCOM LINES WITH COM SIG KEY	KEY LEADS AND TERMINALS OF KEY UNITS INVOLVED							
			(O-W)	(S-W)	(G-R)	(BL-BK)	(BR-BK)	(Y-O)	(O-Y)	
6			A-H	A-H	A-H	A-H	A-H	A-H	A-H	G
5	1		A-H	A-H	A-H	A-H	A-H	SG*	SG*	G
4	2		A-H	A-H	A-H	A-H	SG*	SG*	SG*	G
3	3		A-H	A-H	A-H	SG*	SG*	SG*	SG*	G
2	4		A-H	A-H	SG*	SG*	SG*	SG*	SG*	G
1	5		A-H	SG*	SG*	SG*	SG*	SG*	SG*	G
	6		SG*	SG*	SG*	SG*	SG*	SG*	SG*	G
3	1	2	A-H	A-H	A-H	C*	C*	A-H	A-H	C
2	1	3	A-H	A-H	C*	C*	C*	A-H	A-H	C
1	1	4	A-H	C*	C*	C*	C*	A-H	A-H	C
	1	5	C*	C*	C*	C*	C*	A-H	A-H	C

*Located on TBVI.

Note 1: Table B shows conversion for one 6-button key unit. Convert buttons on right-hand unit first (module 3 or 5). When more than six buttons are used for common signaling, move spade-tipped leads of the additional buttons from terminal A-H of unit involved to terminal C. If additional terminals are required, use X or Y if idle and strap to C.

2: Convert keys to signaling by removing P-10E837 screw detail from positions involved.

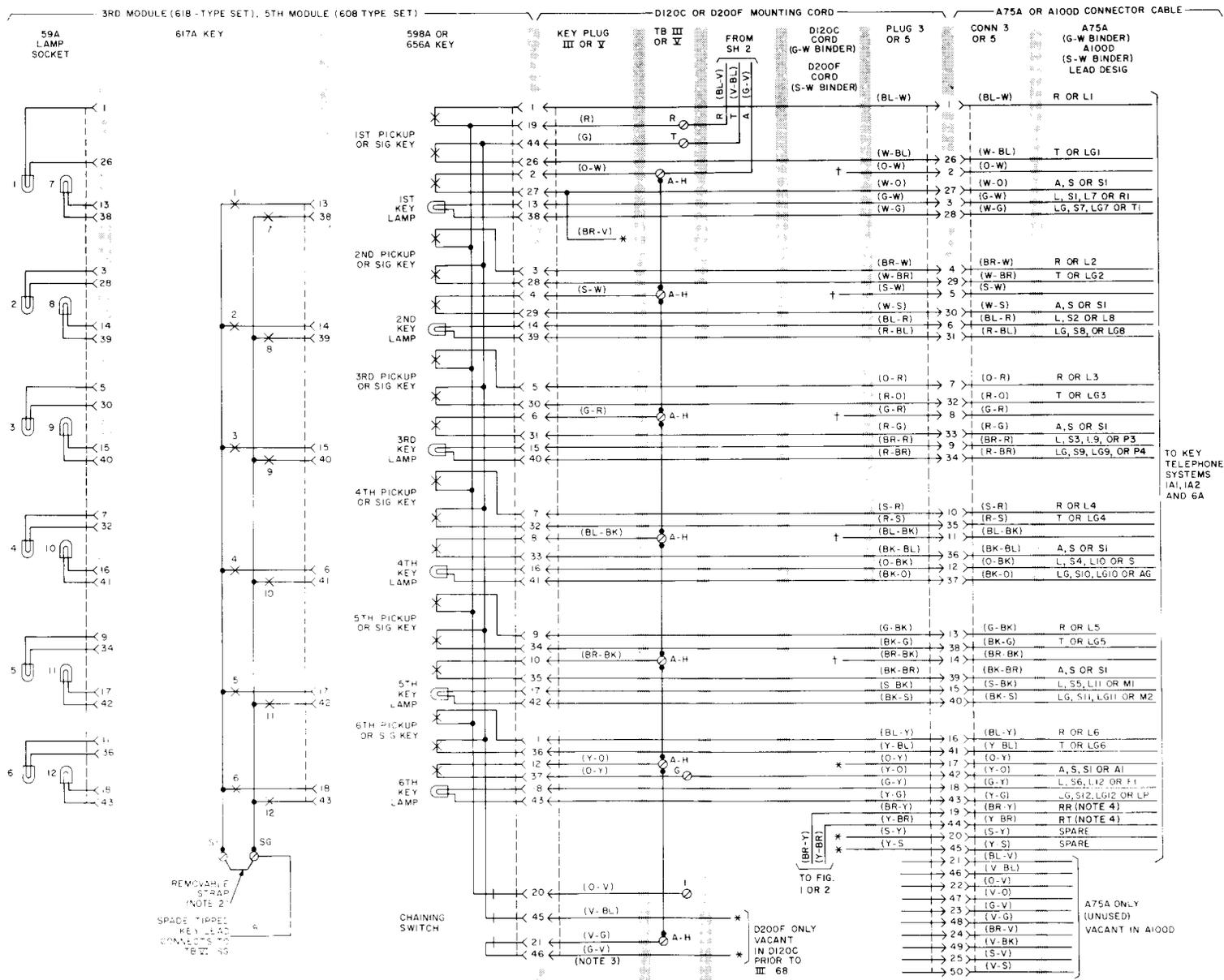


Fig. 3—Module Arrangements and Cord and Cable Connections (Sheet 3 of 3)

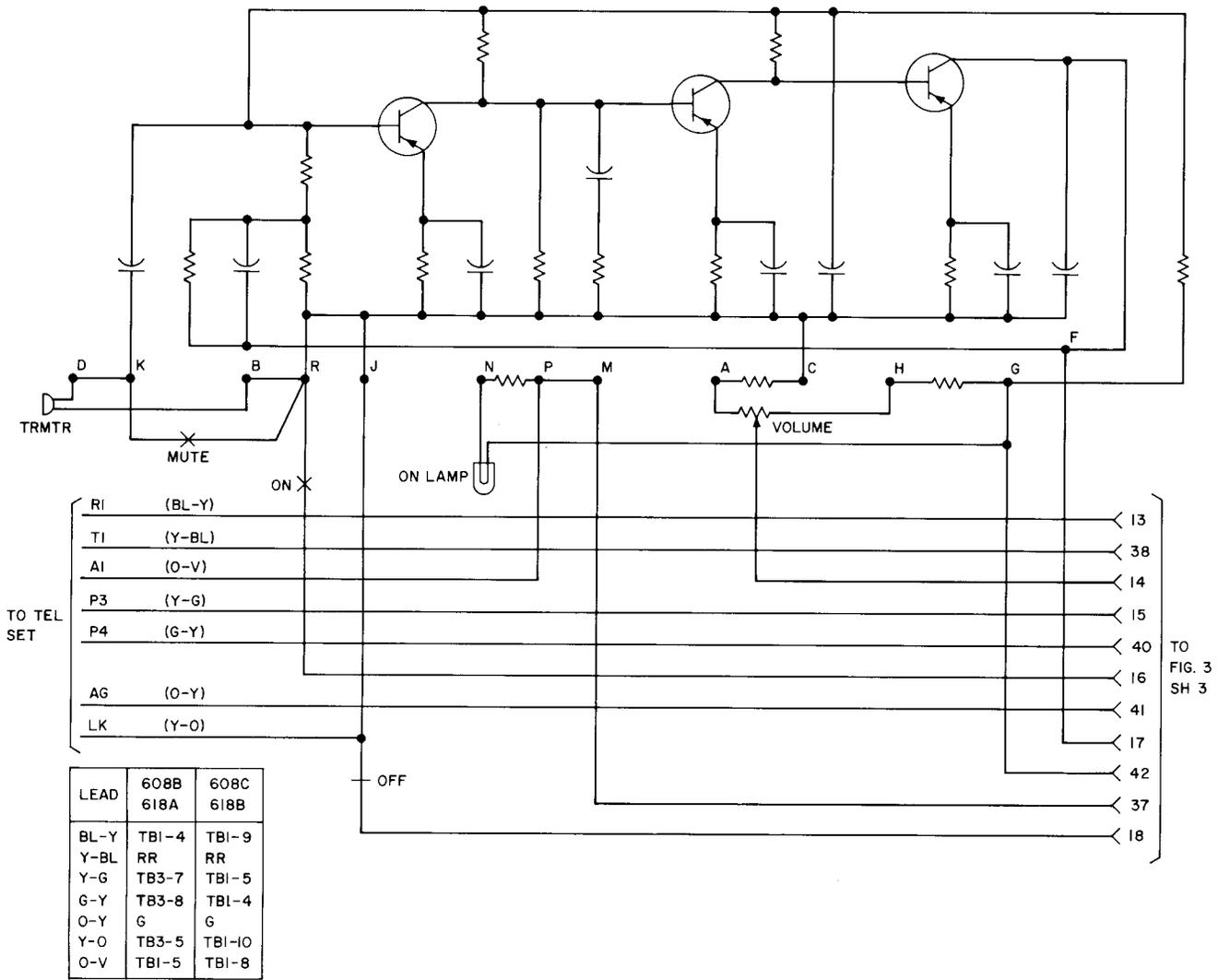
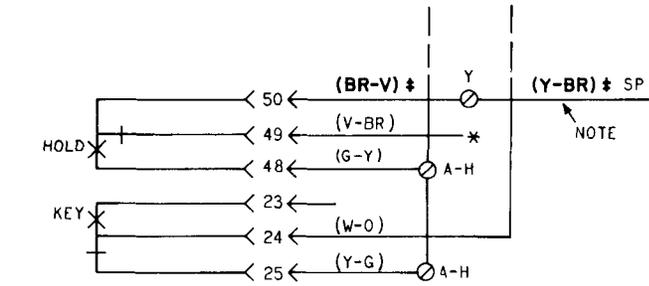
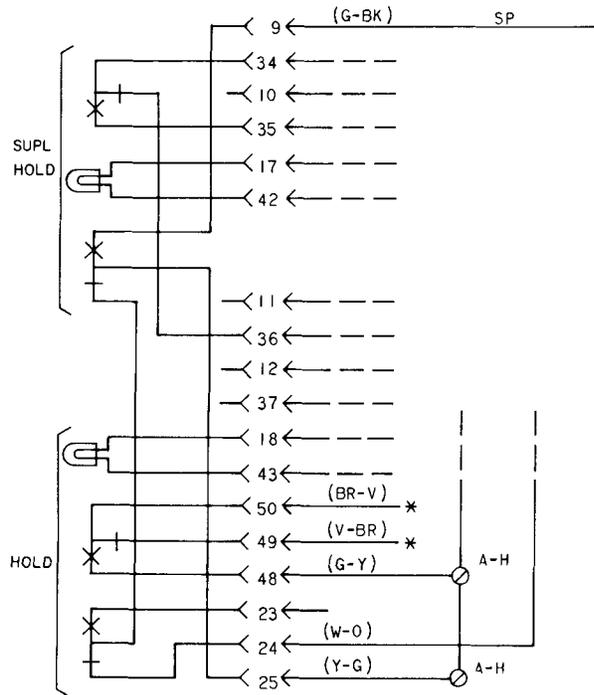


Fig. 4—667B Transmitter and Connections



NOTE: USE STORED (Y-BR) MTG CO CONDUCTOR FROM O-W BINDER OR ANY OTHER SPARE CONDUCTOR.
 ‡ LEAD INVOLVED IN MODIFICATION

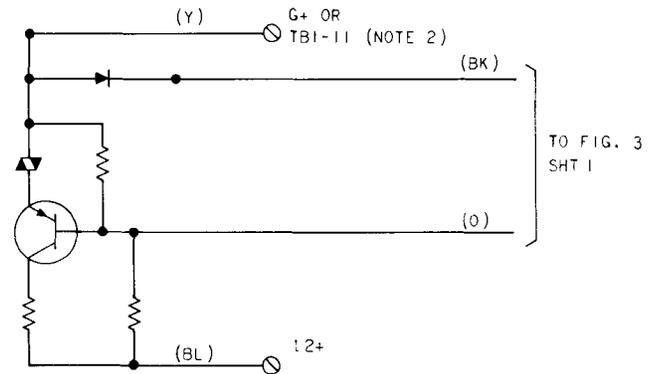
A. I HOLD



NOTE: REQUIRES 599H OR 657H KEY IN 1ST MODULE

B. PRIORITY HOLD

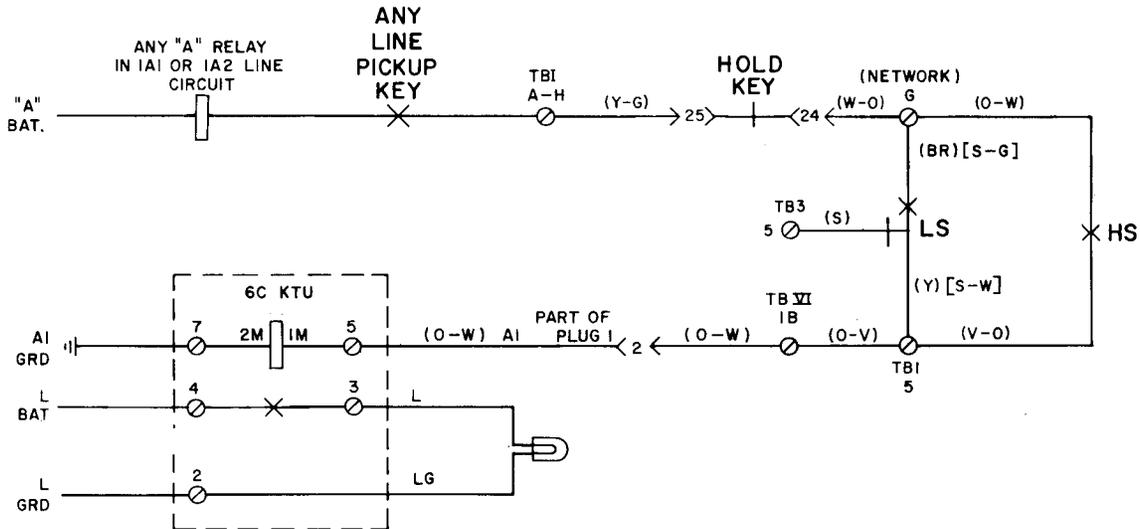
Fig. 5—Supplementary Hold Arrangements



NOTES:

1. THIS CIRCUIT CAN BE USED WITH ALL 608-TYPE SETS OR 618-TYPE MANUFACTURED AFTER III-68. FOR 618-TYPE SETS MADE PRIOR TO THAT DATE USE FIG. 7
 2. MOVE (W-O) FROM G (608B) OR TBI-11 (608C AND 618B) TO R1 OF TBV.
- + NETWORK TERMINAL

Fig. 6—Busy Lamp Feature Using P-90D033 Printed Wiring Board



RANGE OF "A" RELAY AND 6C KTU
 14 VOLTS FOR 190 Ω MAX. TO OPERATE BOTH RELAYS IN SERIES.
 20 VOLTS FOR 520 Ω MAX. TO OPERATE BOTH RELAYS IN SERIES.
 26 VOLTS FOR 840 Ω MAX. TO OPERATE BOTH RELAYS IN SERIES.
 LEAD (Y-BR) DESIGNATION BL OR LS NOT USED.
 () INDICATES CURRENT COLOR CODE
 [] INDICATES MD COLOR CODE

LS - LINE SWITCH
 HS - HEADSET JACK

Fig. 7—Busy Lamp Circuit Controlled by 6C KTU

TABLE B
CONNECTIONS FOR 599B KEY (TURNKEY)

FEATURE	PICKUP KEY LEADS						SPADE-TIPPED LEADS IN SET				
	R G-BK	T BK-G	A BK-BR	R BL-Y	T Y-BL	A Y-O	BL-Y†	Y-BL†	O-Y	Y-O	BR-BK
Cutoff Sta on 1A1 and 1A2 KTS	To Equip.			To Ext Sta			Insulate and Store		TB1 G	TB6-X	
Cutoff Sta on 4-Wire Line (Aux Relay Required)	To Equip. GRD	To Equip. Aux Rel				Insulate and Store	Insulate and Store		TB1 G	TB1 G	
Cutoff Ext Ring. or Buz	To Equip.			To Ext Ring. or Buz			Insulate and Store				
Cutoff Bell in Set	To Equip.			*	*		TB1‡ 7§	TB1‡ 8§	Insulate and Store		
Cutoff Buz in Set	To Equip.			*	*		D A Cap.	C C C	Insulate and Store		
Monitoring	To Mon Equip.						R TB1	T TB1			

* Insulate and store the BL-Y and Y-BL leads at the equipment when spade tipped leads are used in set.

† Must be insulated and stored when replacing 599B key with 599H key.

‡ Insulate and store BZ and BZ1 leads from TB1.

§ Use screw terminals 7 and 8 on the 608B and 618A sets. Use screw terminal 12 and network terminal A on the 608C and 618B sets.