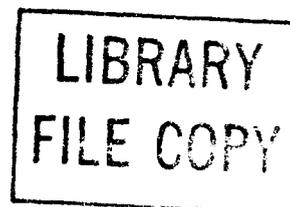


SERVICE
2636- AND 2637-TYPE TELEPHONE SETS
CONNECTIONS AND MAINTENANCE



1. GENERAL

1.01 This section contains information on 2636CA (MD), 2636CAM (MD), or 2636CAMS1 (18-button) and 2637DA (MD), 2637DAM (MD), or 2637DAMS1 (30-button) CALL DIRECTOR® telephone sets equipped with headset jacks (Fig. 1 and 2).

1.02 The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the more significant changes.

- Add 6B KTU
- Add KS-20419L2 buzzer
- Add Fig. 7 and 9
- Change 241B amplifier connections, Fig. 1 and 2.

2. CONNECTIONS

2.01 These sets are factory-wired for use with 1A1, 1A2, 6A, or 6B KTS line circuits. They may also be used with 1A KTS line circuits by modifying the set as shown in Tables A and B. Line circuits for 1A, 1A1, or 1A2 KTS may be connected to the same set under the following conditions.

- (a) The 1A1 or 1A2 KTS lines must be connected to the first key units with 1A lines connected to supplementary key modules.
- (b) The 1A, 1A1, or 1A2 KTS lines should not be connected to the same six line key module.
- (c) The 1A, 1A1, or 1A2 KTS lines appearing behind a manual switchboard should not be intermixed on a CALL DIRECTOR telephone set due to the different time-out intervals provided by the associated KTUs.

2.02 The new *S* coded sets are similar to the previous type sets except for a new line switch

which breaks both the tip and ring side of the line. Previous sets only broke the ring side of the line.

2.03 These sets are equipped with a 635A5C (5-line pickup and hold) key in the first module position. Contact strip assemblies [required with sets equipped with a D120K (MD) or D200S (MD) mounting cord] differ between 635A5C and 635AD5C keys. If ordered for field replacement, the 635AD5C key is furnished with a piggy-back adapter to which the slate mounting cord plug is connected. The necessary contact strip assemblies (840151039 and 840151047) will be shipped with the 635AD5C key, and will replace the 840151120 and 840151138 assemblies supplied with the 635A5C key. Cut-off key connections for the 635AD5C key are shown in Table C.

2.03 Because of the physical arrangement of the 635-type key, the contact strips do not extend to the chaining switch. This requires a second tip and ring conductor to each module (except the last). See Fig. 3, sheets 1 through 5.

2.04 The line conductors of the mounting cords for these sets terminate in individual plugs on a per line basis and are connected to the rear of the keys. This permits rearrangement of line appearances either in the set or at the key equipment distribution point. Current production sets are equipped with a satin-silver (-87) mounting cord.

2.05 All line pickup key positions are convertible to signaling or common signaling arrangements by removing the 812857738 (P-28E773) screw detail from key positions involved and making the necessary wiring changes per Table D.

2.06 These sets are not intended for use with speakerphone systems.

2.07 The 2636- and 2637-type telephone sets are factory equipped with a KS-20419L1 or ♦KS-20419L2♦ (10 volt ac only) buzzer.

NOTICE

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SECTION 502-612-410

2.08 When station busy lamp feature is required install a D-180463 Kit of Parts (ordered separately) (Fig. 4), consisting of Printed Wiring Board Assembly and 840361836 plug assembly (light beige). Connect kit of parts as shown in Fig. 5. Install the wiring board and plug assembly as follows.

- (1) Remove set housing. ♦If the set is a new set with "clip in" dial mounting, store the wiring board in a location so as not to hinder normal set operation and proceed to Step (5). If it is an old type set proceed to Step (2).♦
- (2) Loosen screws on dial mounting plate, move mounting to left and lift out. ♦If the set is equipped with an 814454104 buzzer mounting bracket, the bracket must be removed before lifting the dial mounting plate out.♦
- (3) Remove right-hand dial mounting screw.
- (4) Place dial mounting screw through hole in wiring board and replace screw in dial.
- (5) Connect plug assembly to chaining switch of third module (2636-type) or fifth module (2637-type), and terminate (G-V) and (V-G) leads of plug (Fig. 3). Insulate and store unused plug leads.
- (6) Replace and secure dial mounting plate.

2.09 ♦For multiple busy lamps, a 6B or 6C KTU must be connected as shown in Fig. 6 or 7. These circuits may also be used for a single busy lamp feature. For sets associated with 1A1 KTS line circuits the busy lamp(s) will light whenever a line pickup button is depressed and the handset is off-hook or the headset is plugged into the jack (Fig. 6). For sets associated with 1A2 KTS line circuits, only the handset need be off-hook or the handset plugged into the jack to light the busy lamp(s) (Fig. 7). Optional equipment (6B or 6C KTU) must be ordered separately. ♦

Note: Refer to Section 502-110-100 for additional connection information on station busy lamp.

2.10 The hold key in the first module is used for normal hold functions or if required ***I Hold***.

An additional hold key can be installed in the second key module location for ***Priority Hold*** (Fig. 8). The D-180411 Kit of Parts consisting of a 635A5C key, two contact strip assemblies, and a pink plug assembly must be ordered separately for ***Priority Hold***.

(a) Install as follows.

- (1) Unplug and remove existing key from second module.
- (2) Install contact strips and associated leads if applicable (see note).

Note: Contact strips are not required with sets equipped with D120M or D200AA mounting cord or sets equipped with a modified D120K or D200S mounting cord.

- (3) Place the pink plug assembly from the kit of parts into the hold position on the 635A5C key. Insulate and store the white set plug. Place the remaining set plugs into their proper positions on the key.
- (4) Make the necessary wiring connections and modifications as shown in Fig. 5.

2.11 When required, these sets may be equipped with a polarity guard. Polarity guards should be installed only when specified by local instructions for end-to-end signaling purposes when battery and ground reversals are encountered. The current 840364376 polarity guard (Fig. 9) is ordered as a D-181006 Kit of Parts. Connect as shown in Table E.

3. MAINTENANCE

3.01 For maintenance information, refer to Section 502-600-100. Individual components such as dials, keys, ringers, etc. are covered in sections pertaining to the particular item.

3.02 Do not use solvents to clean plastic parts of these sets. Use a damp cloth only. If discolored, replace part.

TABLE A

1A, 1A1, AND 1A2 CONVERSION—2636-TYPE TELEPHONE SET

| KEY MODULE ARRANGE- MENT | LEAD | | | | | | | | | | | |
|---|----------|----|------|------|-------------------|-------------------|-----------------|-----------------|--------------------------|-----------------|-----------------|-------------|
| | HOLD KEY | | | | CHAINING PLUG | | | | CONTACT STRIP OR PLUG | | | LINE SW. |
| | Y | G | BR-V | V-BR | V-G 1ST MOD | V-G 2ND MOD | R 1ST MOD | R 2ND MOD | R 1ST MOD | R 2ND MOD | R 3RD MOD | Y |
| 1A1/1A2 Only | 10 | 10 | * | * | 5 | 15 | 9 | 11 | 9 | 11 | 21 | 8 |
| 1A1/1A2- 1st, 2nd Mod 1A-3rd Mod | 10 | 35 | 21 | 40 | 5 | 35 | 9 | 11 | 9 | 11 | 40 | 8 |
| 1A1/1A2- 1st Mod 1A-2nd, 3rd Mod | 10 | 35 | 11 | 40 | 35 | 15 | 9 | 40 | 9 | 40 | 21 | 8 |
| 1A Only | * | 10 | 26 | 9 | 5 | 15 | 26 | 11 | 26 | 11 | 21 | 18 |

* Insulated and stored.

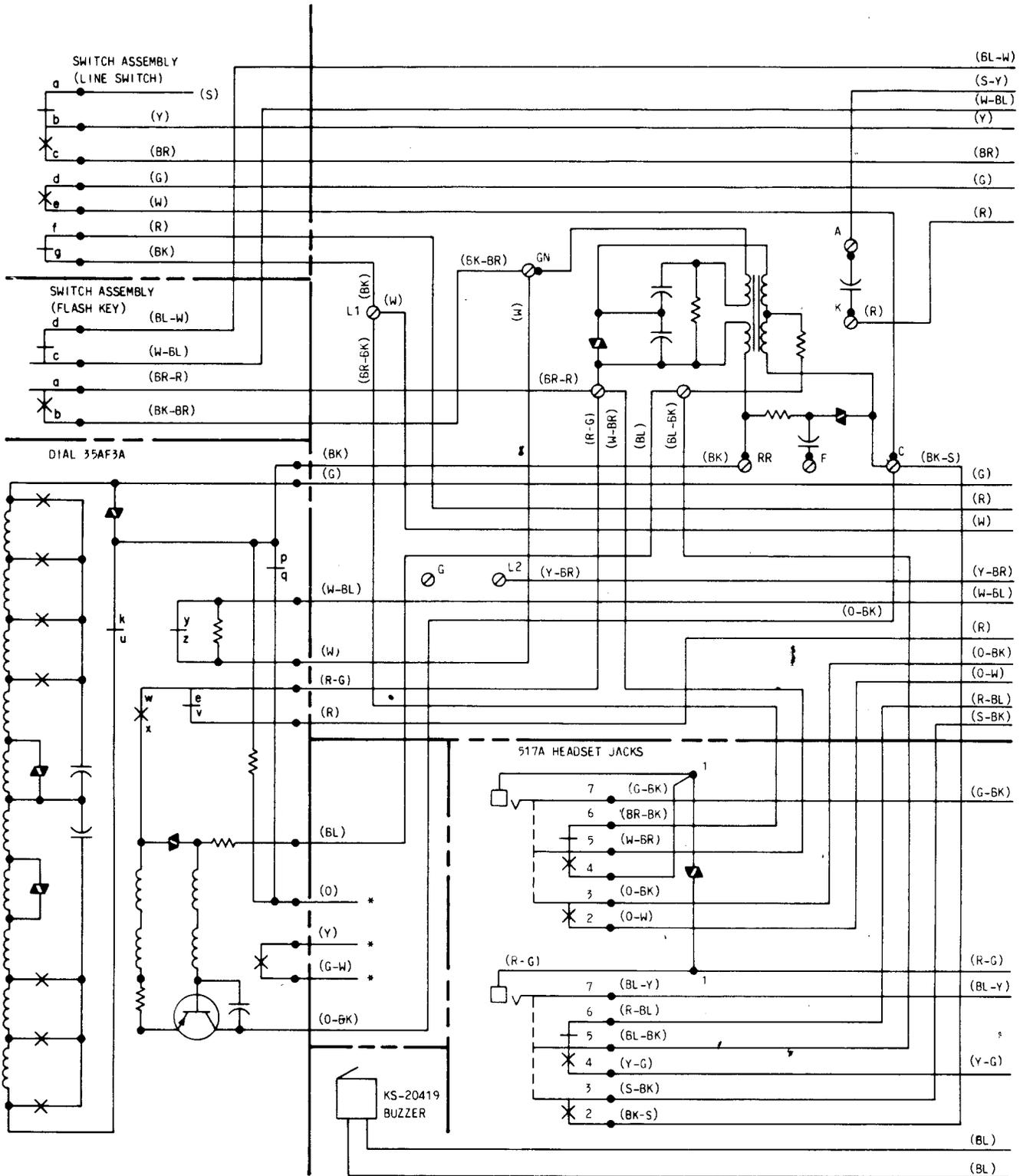


Fig. 1—2636CA (MD), CAM (MD) and 2637DA (MD), DAM (MD) Telephone Set, Connections (Sheet 1 of 2) (Note)

NOTES FOR FIG. 3:

1. THE 635AD5C KEY IS SUPPLIED WITH AN ADAPTER FOR THE CUTOFF KEY POSITION. THE SLATE MOUNTING CORD PLUG CONNECTS TO THE ADAPTER. CONNECT (BL-Y) AND (Y-BL) ADAPTER LEADS TO TERMINALS 1 AND 2, RESPECTIVELY. BALANCE OF PLUGS CONNECT DIRECTLY TO KEY ON S CODED TELEPHONES (FIG. 3) CONNECT THE BL-Y ADAPTER LEAD TO THE STORED (BL-Y) MOUNTING CORD LEAD USING A D161488 CONNECTOR OR SPARE PUNCHING.
2. IN SETS EQUIPPED WITH A 658C KEY, THE (G) CONTACT STRIP LEAD OR PLUG BUS LEAD IS TERMINATED ON 17 AND (R) ON 18. IF A 658C KEY IS ADDED IN THE FIELD, LEADS MUST BE MOVED FROM THE FACTORY WIRED TERMINALS TO TERMINALS 17 AND 18.
3. PROVISIONS ARE MADE FOR MECHANICALLY STORING THE LIGHT BEIGE PLUG ON THE 658A KEY. NO ELECTRICAL CONNECTION IS MADE.
4. WHEN THE 658A KEY IS REQUIRED AS A DUAL PURPOSE KEY, REMOVE STRAP BETWEEN TERMINALS 17 AND 18. USE M1W CORD OR EQUIVALENT TO CONNECT TERMINAL 17 TO A GROUND OTHER THAN SIGNAL GROUND.
5. TO SUPPLY "I" HOLD FEATURE, TERMINATE (O-Y) MOUNTING CORD LEAD FROM FIRST MODULE ON TERMINAL 24. LEAD BECOMES SP LEAD AT EQUIPMENT.
6. IF HOLD POSITION LAMP IS REQUIRED, CONNECT (G-Y) LAMP GROUND LEAD AND (Y-G) LAMP LEAD (PINK PLUG LEADS) TO (G-Y) AND (Y-G) MOUNTING CORD (BL BINDER) LEADS, RESPECTIVELY, USING SPARE TERMINAL OR D-161488 CONNECTOR. LAMP MUST BE SEPARATELY ORDERED AND INSTALLED.
7. THESE CONTACT STRIPS ARE REQUIRED WHEN TELEPHONE SET IS EQUIPPED WITH THE D120K (MD) OR THE D200S (MD) MOUNTING CORD.
8. THE (BL-Y) LEAD ON TERMINAL 1 IS INSULATED AND STORED IN 2636CAMS1 AND 2637DAMS1 TELEPHONE SETS.

* INSULATED AND STORED.
† DEAD DRESSED.

Fig. 3—Notes

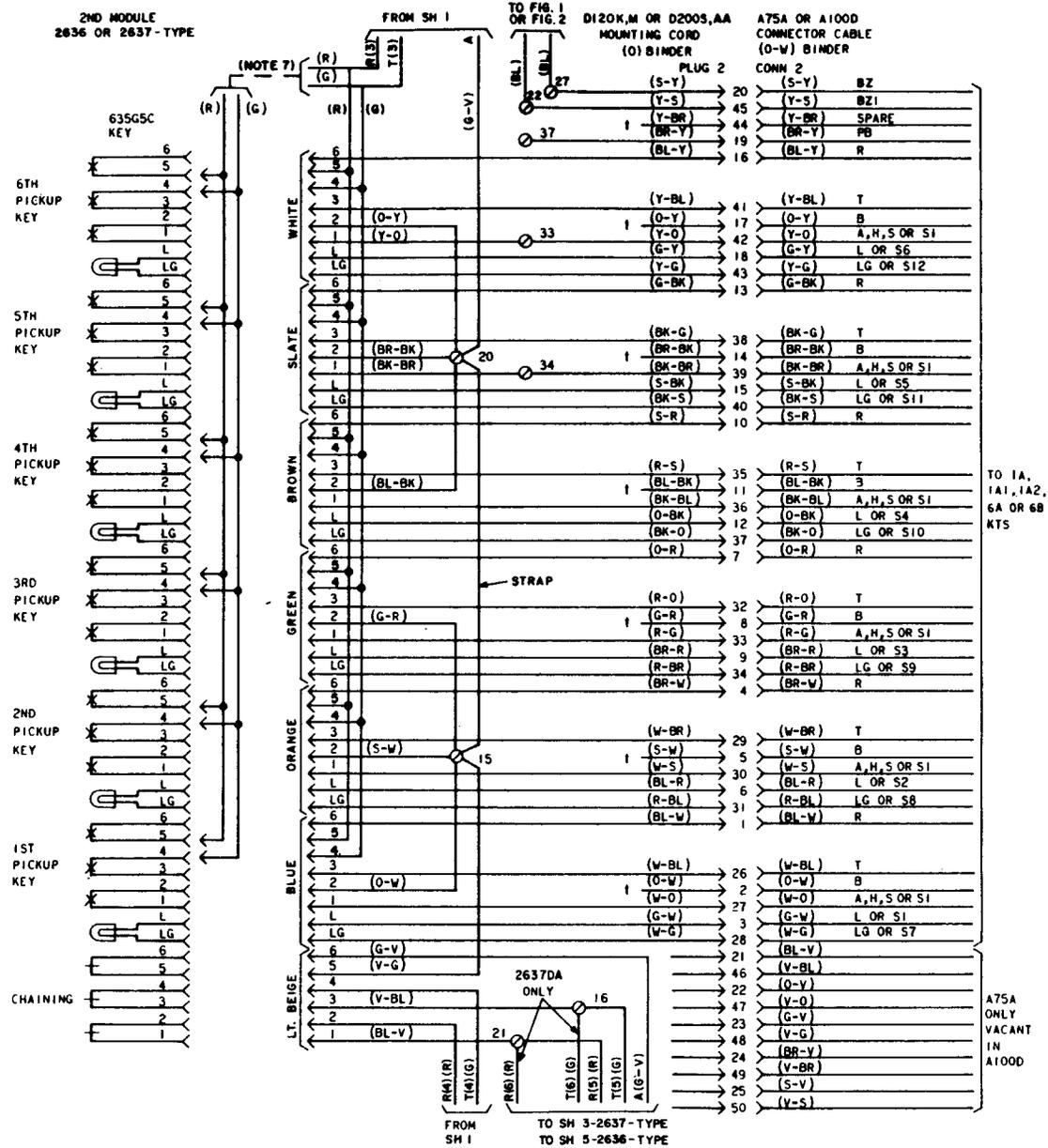


Fig. 3—Module and Connector Cable Arrangements (Sheet 2 of 5)

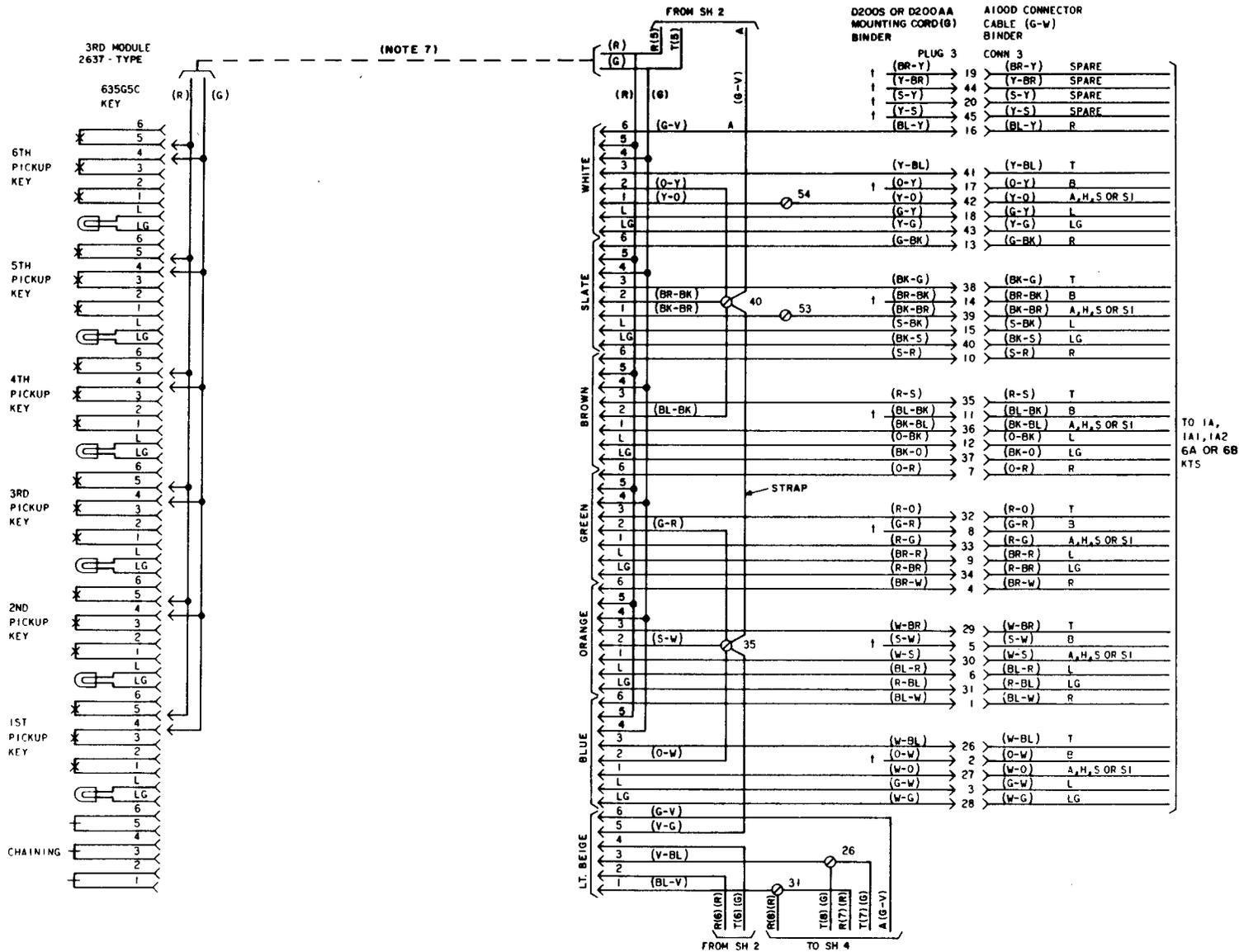


Fig. 3—Module and Connector Cable Arrangements (Sheet 3 of 5)

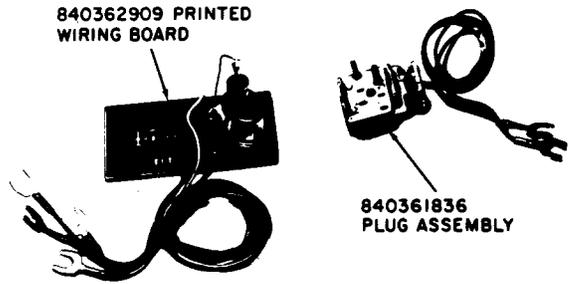
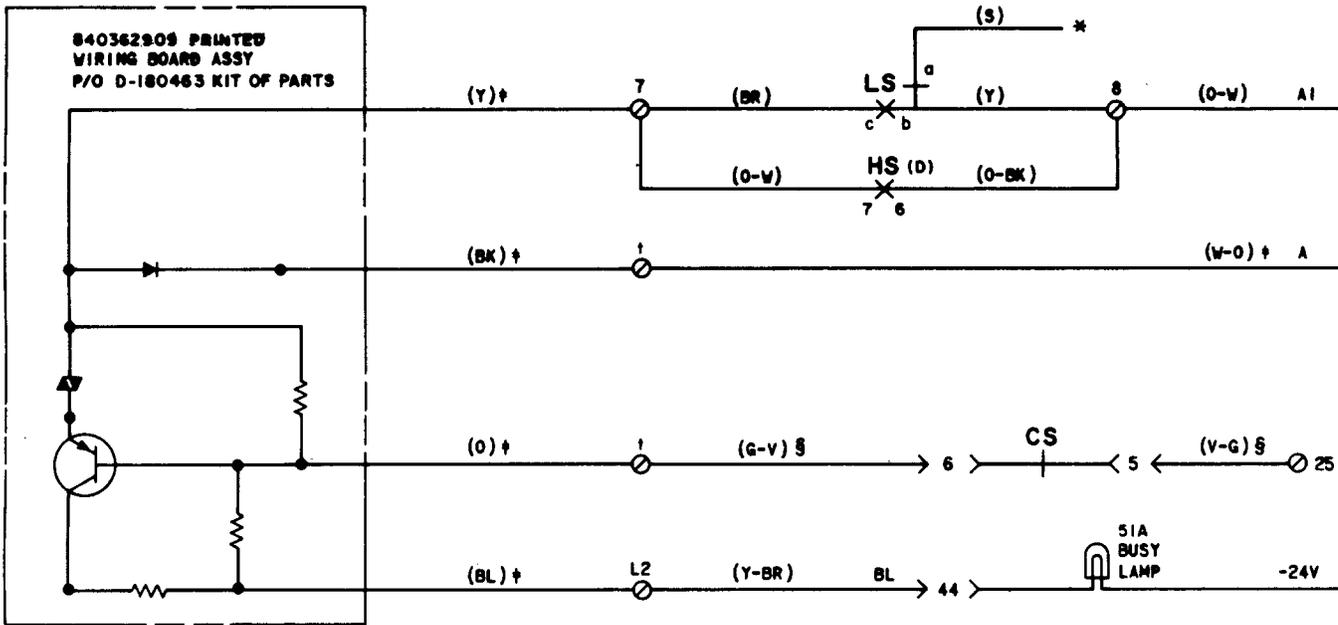


Fig. 4—D-180463 Kit of Parts—Station Busy Lamp Feature



LEGEND:

- LS-LINE SWITCH
- HS-HEADSET JACKS
- CS-CHAINING SWITCH
- * INSULATED AND STORED
- † USE D-161488 CONNECTOR OR SPARE TERMINAL
- ‡ LEADS INVOLVED IN MODIFICATION
- § 840361836 PLUG ASSEMBLY LEADS, P/O D-180463 KIT OF PARTS

Fig. 5—Single Busy Lamp Circuit Using Printed Wiring Board Assembly

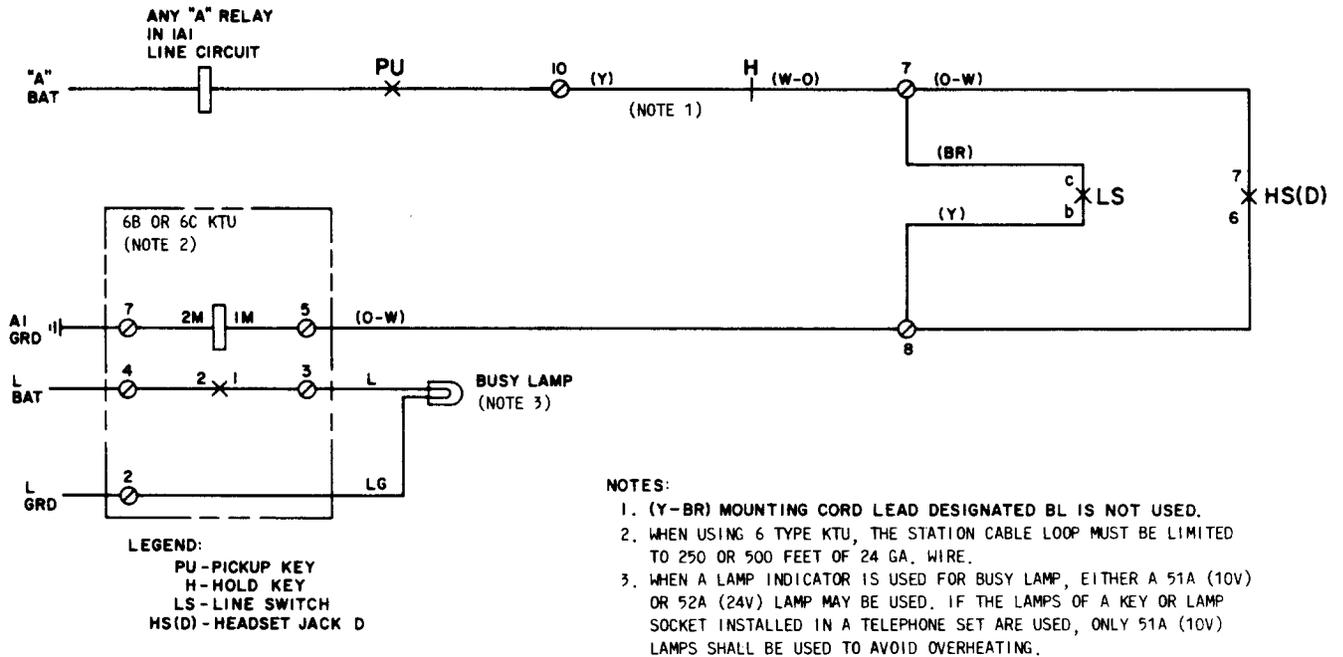
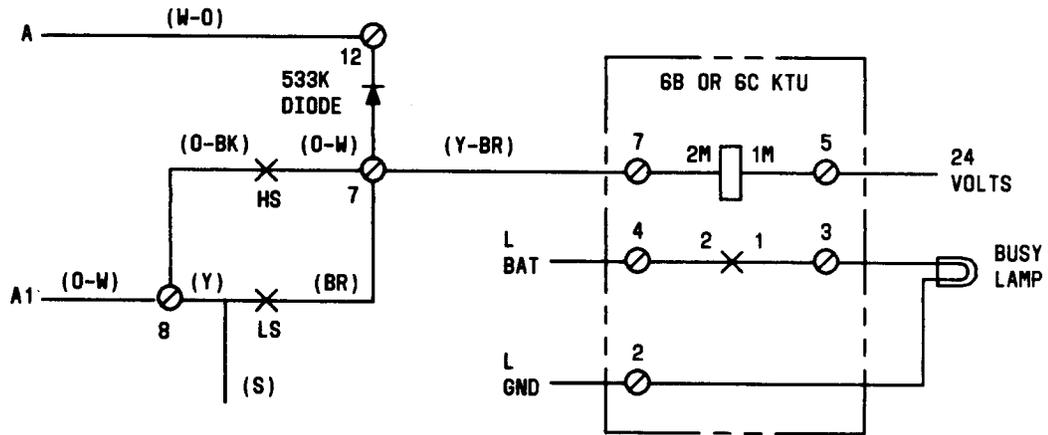


Fig. 6—Busy Lamp Control Circuit Associated With 1A1 KTS



| MODIFICATION | | |
|--------------|------|------|
| LEAD | FROM | TO |
| Y-BR | L2 | 7 |
| W-O | 7 | 12 |
| 533K DIODE | | 7-12 |

Fig. 7—Busy Lamp Control Circuit Associated With 1A2 KTS

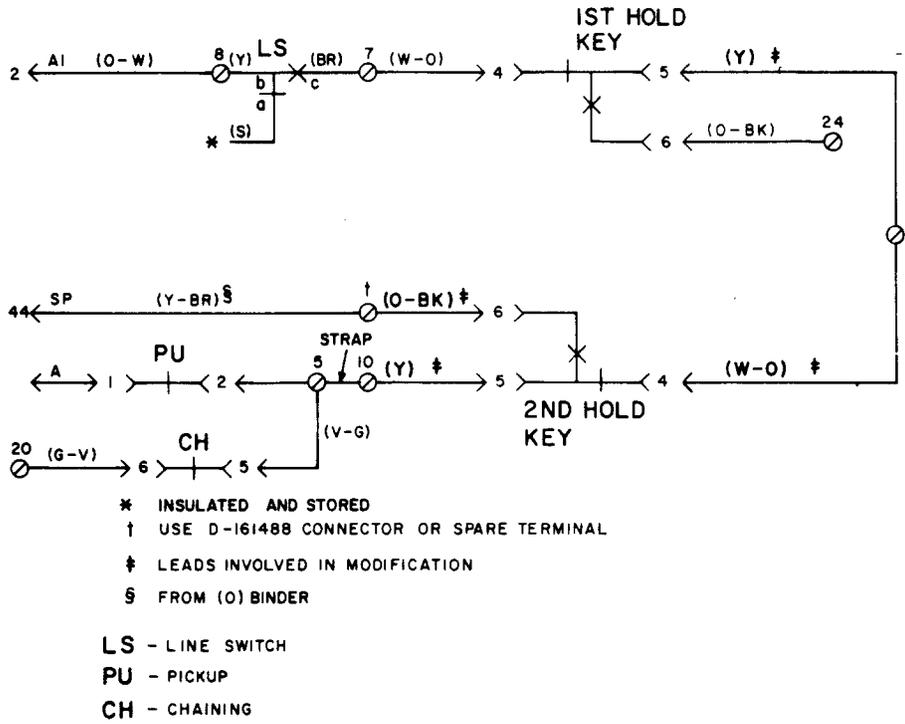


Fig. 8—Modification for Priority Hold

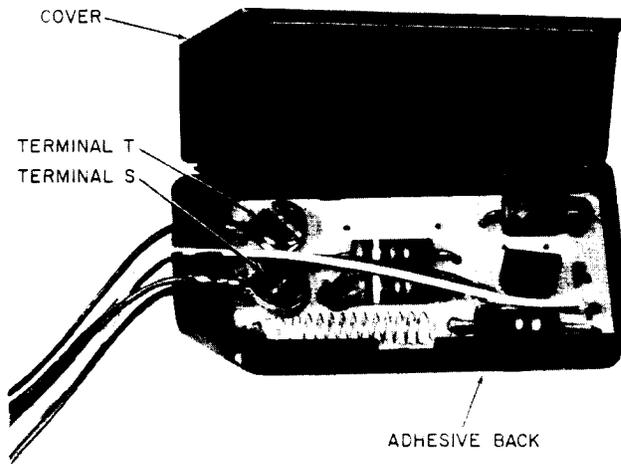


Fig. 9—840364376 Polarity Guard

TABLE B

1A, 1A1, AND 1A2 CONVERSION—2637-TYPE TELEPHONE SET

| KEY MODULE ARRANGE- MENT | LEAD | | | | | | | | | | | | | | | | | |
|--|----------|----|------|------|-------------------|-------------------|-------------------|-------------------|-----------------|-----------------|-----------------|-----------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-------------|
| | HOLD KEY | | | | CHAINING PLUG | | | | | | | | CONTACT STRIP OR PLUG | | | | | LINE SW. |
| | Y | G | BR-V | V-BR | V-G 1ST MOD | V-G 2ND MOD | V-G 3RD MOD | V-G 4TH MOD | R 1ST MOD | R 2ND MOD | R 3RD MOD | R 4TH MOD | R 1ST MOD | R 2ND MOD | R 3RD MOD | R 4TH MOD | R 5TH MOD | Y |
| 1A1/1A2 Only | 10 | 10 | * | * | 5 | 15 | 35 | 45 | 9 | 11 | 21 | 31 | 9 | 11 | 21 | 31 | 41 | 8 |
| 1A1/1A2- 1st, 2nd, 3rd, 4th, Mod 1A-5th Mod | 10 | 12 | 41 | 14 | 5 | 15 | 35 | 12 | 9 | 11 | 21 | 31 | 9 | 11 | 21 | 31 | 14 | 8 |
| 1A1/1A2- 1st, 2nd, 3rd Mod 1A-4th, 5th Mod | 10 | 12 | 31 | 14 | 5 | 15 | 12 | 45 | 9 | 11 | 21 | 14 | 9 | 11 | 21 | 14 | 41 | 8 |
| 1A1/1A2-1st, 2nd, Mod 1A-3rd, 4th, 5th Mod | 10 | 12 | 21 | 14 | 5 | 12 | 35 | 45 | 9 | 11 | 14 | 31 | 9 | 11 | 14 | 31 | 41 | 8 |
| 1A1/1A2- 1st Mod 1A-2nd, 3rd 4th, 5th Mod | 10 | 12 | 11 | 14 | 12 | 15 | 35 | 45 | 9 | 14 | 21 | 31 | 9 | 14 | 21 | 31 | 41 | 8 |
| 1A Only | * | 10 | 37† | 13 | 5 | 15 | 35 | 45 | 37 | 11 | 21 | 31 | 37 | 11 | 21 | 31 | 41 | 8 |

* Insulated and stored.

† Remove (BR-Y) mounting cord lead. Insulate and store.

TABLE C

CUT OFF KEY (635AD5C) CONNECTIONS

| FEATURE | 635AD5C KEY ADAPTER | | MOUNTING CORD (BL) BINDER | | CONNECTOR CABLE (BL-W) BINDER | | | RINGER | PLACE STRAP |
|--|---------------------------|-------|---------------------------------|-------|----------------------------------|---------------------|--------------------|-------------------|----------------------------|
| | BL-Y | Y-BL | BL-Y | Y-BL | G-BK | BK-G | BK-BR | BK | |
| Cutoff Ringer in Set (Note 1) | TB1-1 (Note 5) | TB1-2 | * | * | Note 2 | | | TB1-1 (Note 5) | A (Net.) to TB1-2 |
| Cutoff Ext Ringer or Buzzer (Note 1) | TB1-1 (Note 5) | TB1-2 | TB1-1 (Note 5) | Tb1-2 | Note 2 and 3 | | | | |
| Cutoff Ext Station (Note 4) | * | * | | | | To Aux. Relay | To Relay Grd | | |

Note 1: Remove (BR-BK) and (BK-BR) slate plug leads from terminals 10 and 29, insulate and store.

Note 2: To individual line or common ringer circuit at equipment.

Note 3: To external ringer or buzzer. Connect ringer or buzzer circuit to (BL-Y) (Y-BL) connector cable leads at equipment.

Note 4: Connect T, R, and A leads from equipment and station to be cut off through contacts of auxiliary relay. Connect battery to relay winding. Use 227B or 427B or 421A KTU.

Note 5: On 2636CAMS1 and 2637DAMS1 sets use spare terminal or D-161488 connector to the leads together.

* Insulate and store.

TABLE D
PICKUP-SIGNAL KEY CONVERSION
3RD (2636-TYPE) OR 5TH (2637-TYPE) MODULE

| NO. OF SIGNAL KEYS | NO. OF PVT OR INTER-COM LINES (COM. SIG) (NOTE 1) | KEY PLUG LEADS AND TERMINALS (NOTE 2) | | | | | | |
|--------------------|---|---------------------------------------|-----|-----|-------|-------|-----|-----|
| | | O-W | S-W | G-R | BL-BK | BR-BK | O-Y | Y-O |
| 1 | | 25 | 25 | 25 | 30 | 30 | 18 | 39 |
| 2 | | 25 | 25 | 25 | 30 | 18 | 18 | 39 |
| 3 | | 25 | 25 | 25 | 18 | 18 | 18 | 39 |
| 4 | | 25 | 25 | 18 | 18 | 18 | 18 | 39 |
| 5 | | 25 | 18 | 18 | 18 | 18 | 18 | 39 |
| 6 | | 18 | 18 | 18 | 18 | 18 | 18 | 39 |
| | 2 | 25 | 25 | 25 | 39 | 39 | 30 | 39 |
| | 3 | 25 | 25 | 39 | 39 | 39 | 30 | 39 |
| | 4 | 25 | 39 | 39 | 39 | 39 | 30 | 39 |
| | 5 | 39 | 39 | 39 | 39 | 39 | 30 | 39 |

Note 1: When using converted 6th pickup button as common signaling key, remove, insulate and store (Y-O) mounting cord lead from terminal 39.

Note 2: If more than six signal keys are required, replace 635G5C key with a 658A key. If more than five private or intercom lines are required, convert keys in 2nd (2636-type) or 4th (2637-type) module in same order. Connect plug leads to terminal 39 to utilize common signal key. If additional terminals are required, use any spare terminal and strap to 39.

TABLE E
819041971 (P-90D197) (MD) OR 840364376
GUARD ASSEMBLY CONNECTIONS
(NOTES 1, 2, AND 3)

| WIRE OR LEAD | COLOR | REMOVE FROM | CONNECT TO | |
|----------------|-------|-------------|-------------|------|
| | | NET. | GUARD ASSY. | NET. |
| Dial | BK | RR | T | |
| Headset Jack | BK-S | C | S | |
| Line Switch | W | C | S | |
| Guard Assembly | G | | | RR |
| | W | | | C |

Note 1: For use when specified by local instructions for end-to-end signaling installations.

Note 2: The 840364376 polarity guard comes in the D-181006 kit of parts.

Note 3: The polarity guard is to be installed on any surface having an area equivalent to the adhesive backing.