

REPLACING PAGE ADDENDUM

Filing Instructions:

1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
3. PLACE THIS PINK SHEET AHEAD OF PAGE 1 OF THE SECTION.

ADDENDUM 518-610-401
Issue 1, July 1967
AT&TCo Standard

**KEY TELEPHONE SYSTEMS
STATION ARRANGEMENTS FOR 2- AND 4-WIRE
PRIVATE LINE SERVICE
CONNECTIONS**

1. GENERAL

1.001 This addendum supplements Section 518-610-401, Issue 3. The attached page must be inserted in the section in accordance with the filing instruction above.

1.002 This addendum is issued to correct strapping of 248B KTU shown in Fig. 1.

Attached:

Page 3 dated July 1967, revised
Page 4 dated July 1967, reissued

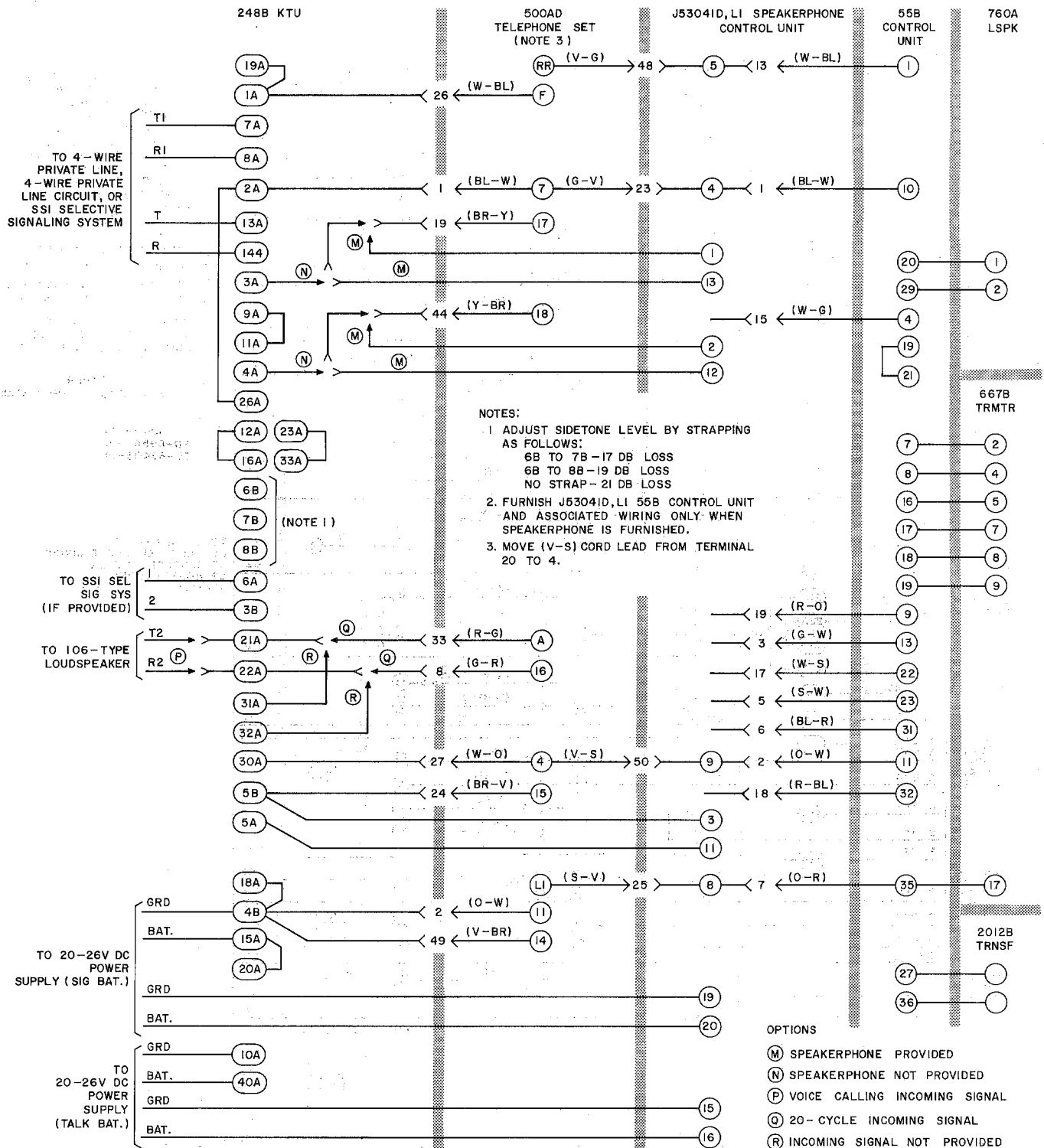
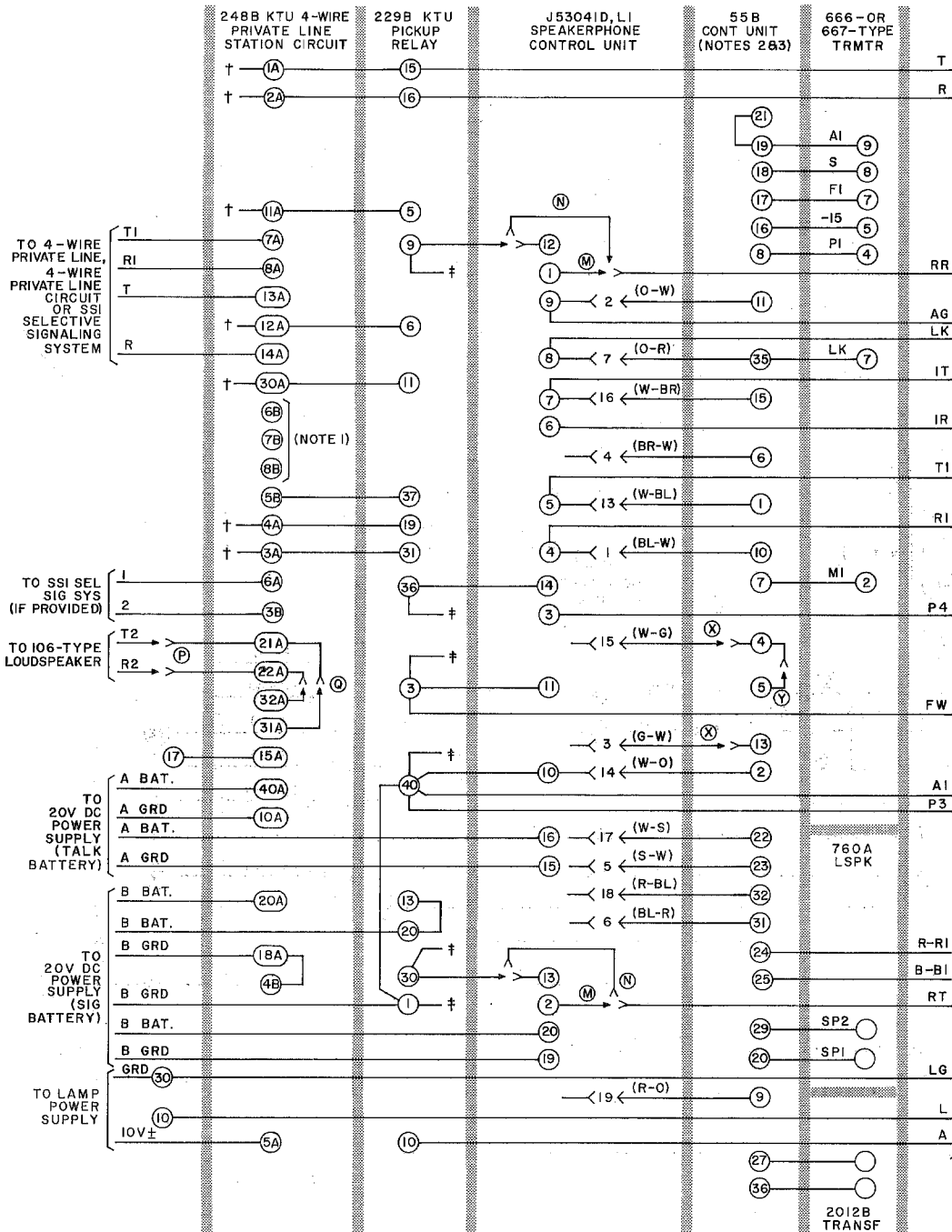


Fig. 1 — Connections for 4-Wire Service — Single Line Telephone Set



NOTES:

1. ADJUST SIDETONE LEVEL BY STRAPPING AS FOLLOWS:
6B TO 7B-17DB LOSS
6B TO 8B-19DB LOSS
NO STRAP-21DB LOSS
2. FURNISH J5304ID, LI 55B CONTROL UNIT AND ASSOCIATED WIRING ONLY WHEN SPEAKERPHONE OPTION IS FURNISHED.
3. MODIFY 55B CONTROL UNIT AS SHOWN IN FIGURE 10.
- (Y) TOUCH-TONE DIAL
- (X) ROTARY DIAL
- (M) SPEAKERPHONE PROVIDED
- (N) SPEAKERPHONE NOT PROVIDED
- (P) VOICE CALLING INCOMING SIGNAL
- (Q) VOICE CALLING NOT PROVIDED
- † MULTIPLE TO OTHER PICKUP RELAYS FOR NON-EXCLUDED STATIONS ASSOCIATED WITH SAME LINE.
- ‡ MULTIPLE TO OTHER LINES ASSOCIATED WITH SAME STATION.

REF:

SD-69449-01
SD-69542-01
SD-69403-01

TO 2- OR 4-WIRE KEY AND TELEPHONE CIRCUIT OF CONTROL STATION OR NONEXCLUDED STATION

Fig. 2 — Connections for Control Station or Nonexcluded Station Using 248B KTU

KEY TELEPHONE SYSTEMS **STATION ARRANGEMENT FOR 2- AND 4-WIRE** **PRIVATE LINE SERVICE** **CONNECTIONS**

1. GENERAL

1.01 This section is reissued to:

- Show connections for the 500AD telephone set, to be used in single line station arrangements.
- Show connections for the J53041D, L1 speakerphone control unit in place of the 261A KTU, none of which were manufactured and which is rated Manufacture Discontinued (MD).

1.02 Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

2. CONNECTIONS

(a) Connection Index

Fig. 1 — Connections for 4-Wire Service — Single Line Telephone Set

Fig. 2 — Connections for Control Station or Nonexcluded Station Using 248B KTU

Fig. 3 — Connections for Control Station or Nonexcluded Station Using 248A KTU

Fig. 4 — Connections for Excluded Stations

Fig. 5 — Connections for Line Transfer Circuit

Fig. 6 — Connections for Auxiliary Line Transfer Circuit

Fig. 7 — Incoming Signal Arrangements

Fig. 8 — Connections for 106B Loudspeaker Set

Fig. 9 — Connections to Provide Interchange of Busy Signals With Other Switching Systems

Fig. 10 — Modification of 55B Control Unit.

Table A — Fuse Requirements

Table B — 89-Type Plug-In Resistors for Use With 245A KTU

(b) References

SD-69449-01
SD-69542-01
SD-69422-01

TABLE A
FUSE REQUIREMENTS*

FUSE AMP	POTENTIAL	ONE PER
2	—24V Talk	Station line circuit (248-type)
2	—24V Signal	All pickup relay (229B KTU) and exclusion relay (229B) associated with same station.
2	—24V Signal	CA, CA1, or MS relay (227-type KTU)
2	—24V Signal	240B KTU or 244A KTU and associated 241A KTU

* Fuse holder may be a 201-type KTU or equivalent.

TABLE B
89-TYPE PLUG-IN RESISTORS
FOR USE WITH 245A KTU*

RESISTOR CODE	PAD LOSS IN DB
89A	0
89E	1
89J	2
89N	3
89T	4
89AA	5
89AE	6
89AJ	7
89AN	8
89AT	9
89BA	10
89BC	11
89BE	12
89BG	13
89BJ	14
89BL	15
89BN	16
89BR	17
89BT	18
89BW	19
89CA	20

* Resistors must be ordered separately, two per 245A KTU.

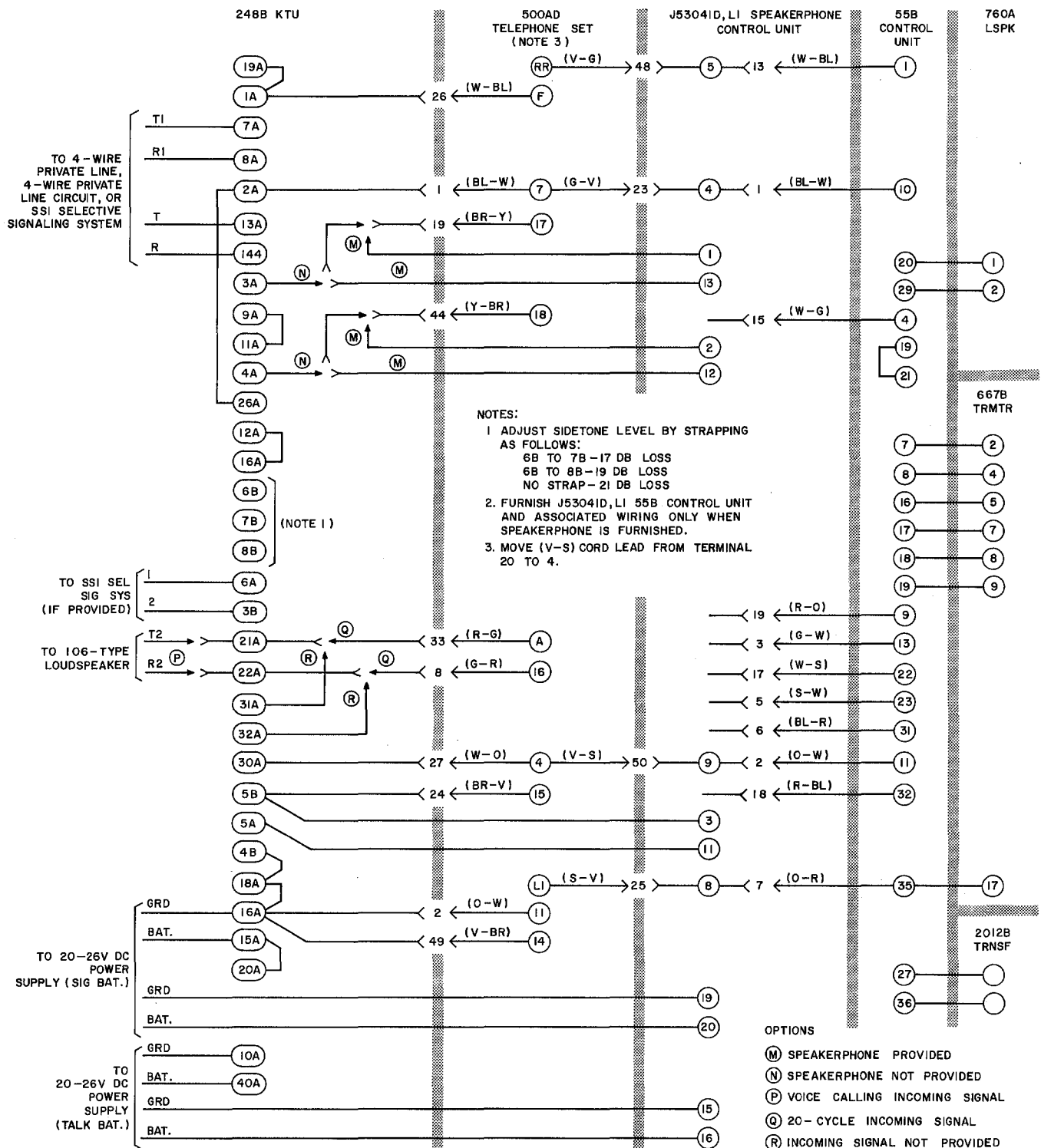


Fig. 1 — Connections for 4-Wire Service — Single Line Telephone Set

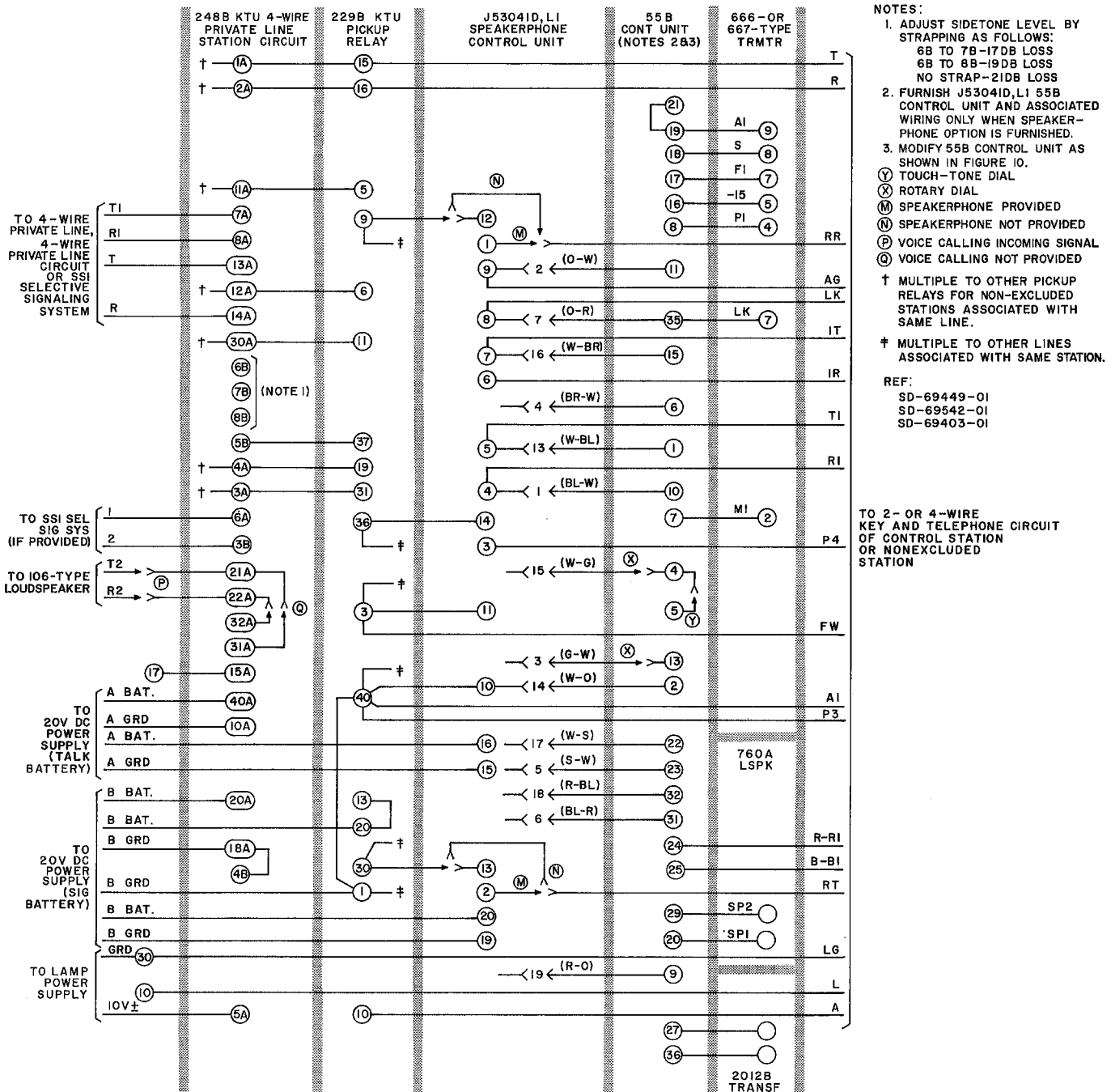
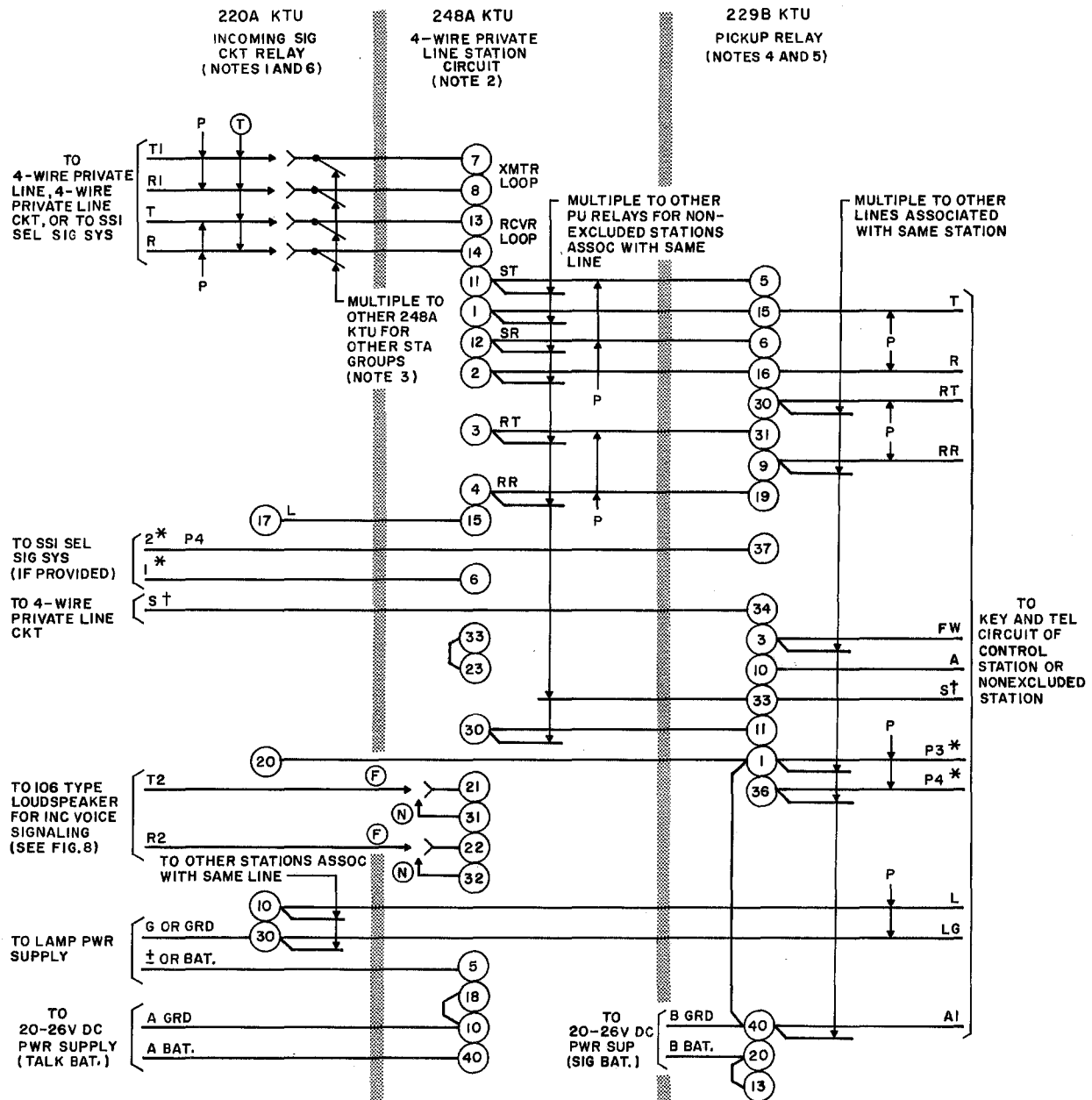


Fig. 2 — Connections for Control Station or Nonexcluded Station Using 248B KTU



* PROVIDE THESE LEADS WHEN LINE CONNECTS TO SSI SEL SIG SYSTEM.

† PROVIDE THESE LEADS WHEN MANUAL SIGNALING IS REQUIRED. NO LEADS IN THE TELEPHONE SET NEED TO BE CHANGED AS SIGNALING KEY UTILIZES A1 GROUND.

REF: SD-69449-01

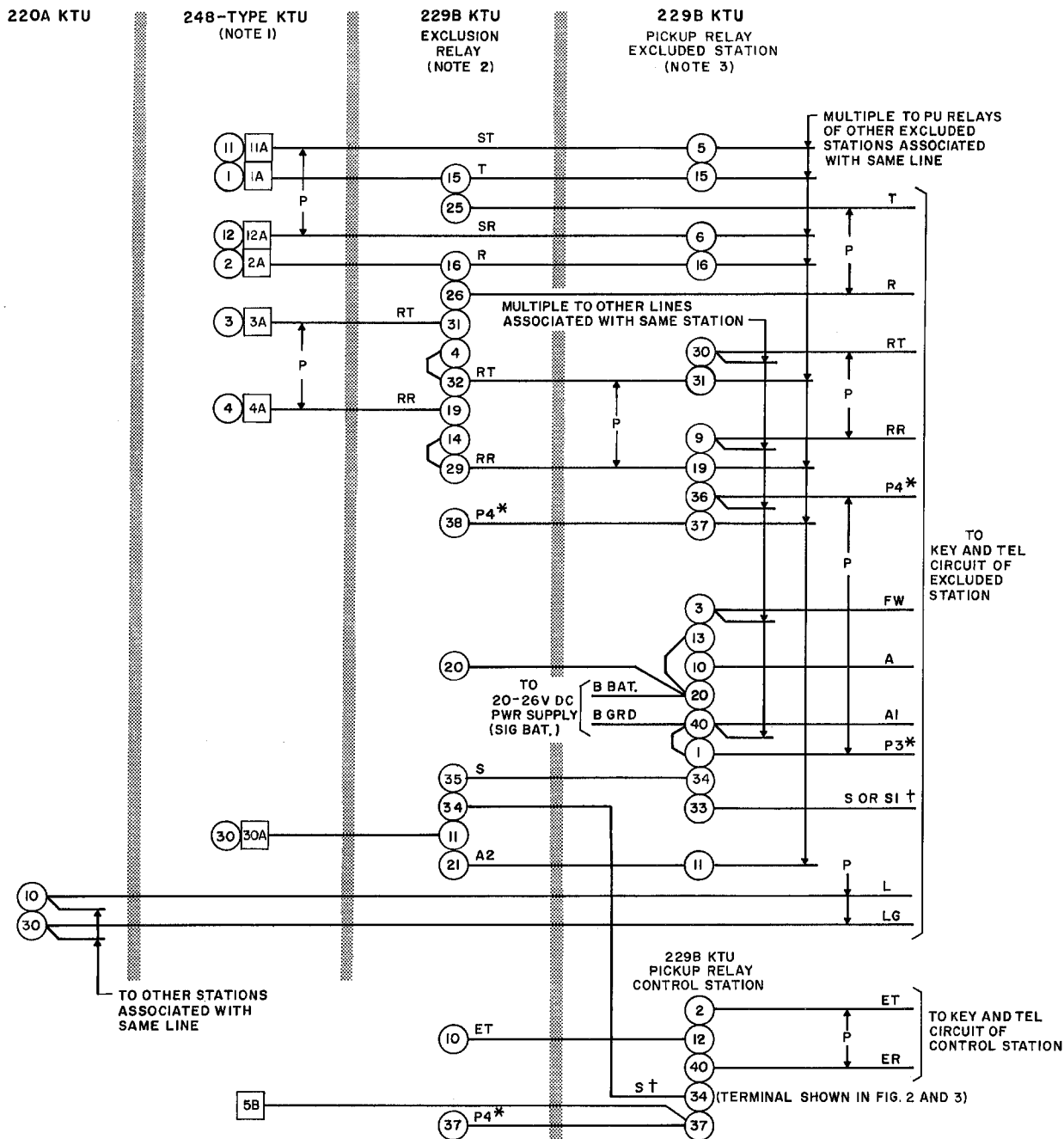
OPTIONS:

- (T) 4-WIRE PRIVATE LINE USED WITHOUT LINE TRANSFER CIRCUIT.
- (F) VOICE CALLING PROVIDED.
- (N) VOICE CALLING NOT PROVIDED.

NOTES:

1. PROVIDE ONE 220A KTU PER LINE.
2. PROVIDE ONE 248A KTU PER STATION GROUP.
3. PROVIDE INDIVIDUAL LEADS FOR EACH STATION GROUP WHEN SSI SEL SIG SYSTEM PRIVACY OR ON-PREMISE DIALING IS REQUIRED. WHEN CONNECTING DIRECTLY TO A 4-WIRE PRIVATE LINE, ONLY ONE STATION GROUP IS PERMITTED.
4. PROVIDE ONE PICKUP RELAY (229B KTU) PER STATION.
5. ADDITIONAL CONNECTIONS SHOWN ON FIG. 4 WHEN THIS FIGURE IS USED AS A CONTROL STATION TO EXCLUDE OTHER STATIONS.
6. REFER TO FIG. 7 FOR INCOMING SIGNAL ARRANGEMENTS.

Fig. 3 — Connections for Control Station or Nonexcluded Station Using 248A KTU



○ 248A KTU

□ 248B KTU

* PROVIDE THESE LEADS WHEN LINE CONNECTS TO SSI SEL SIG SYSTEM.

† PROVIDE THESE LEADS WHEN MANUAL SIGNALING IS REQUIRED. NO LEADS IN TELEPHONE SET NEED TO BE CHANGED AS SIGNALING KEY UTILIZES THE AI GROUND.

NOTES:

1. THESE CONNECTIONS ARE IN ADDITION TO THOSE SHOWN IN FIG. 2 AND 3.
2. PROVIDE ONE EXCLUSION RELAY (229B KTU) PER LINE.
3. PROVIDE ONE PICKUP RELAY (229B KTU) PER STATION.

REF:
SD-69449-01

Fig. 4 — Connections for Excluded Stations

NOTES:

1. REMOVE ① WIRING ON FIG. 3 IF PROVIDED, AND CONNECT AS SHOWN HERE.
2. A 232-TYPE INTERRUPTER AND WIRING (FIG. 7) IS REQUIRED WHEN ADDING 240B OR 244A KTU TO A 4-WIRE PRIVATE LINE. REARRANGE CO LEAD CONNECTION SHOWN ON FIG. 7.
3. STRAPPING REQUIRED ONLY ON 244A KTU TO PROVIDE SPECIFIED RATIO BETWEEN 4-WIRE LINE AND CUSTOMER-OWNED EQUIPMENT. 240B KEY TELEPHONE UNITS ARE WIRED AT FACTORY TO PROVIDE A 1:1 RATIO.
4. WHEN CONVERTING PICKUP KEY TO TRANSFER KEY REMOVE SCREW DETAIL FROM PLUNGER. NO LEADS HAVE TO BE CHANGED IN TELEPHONE SET AS THE TRANSFER KEY UTILIZES THE AI LEAD GROUND.
5. USE LAMP ASSOCIATED WITH TRANSFER KEY IN TELEPHONE SET.

○ 248A KTU

□ 248B KTU

REF:
SD-69449-01
SD-69422-01

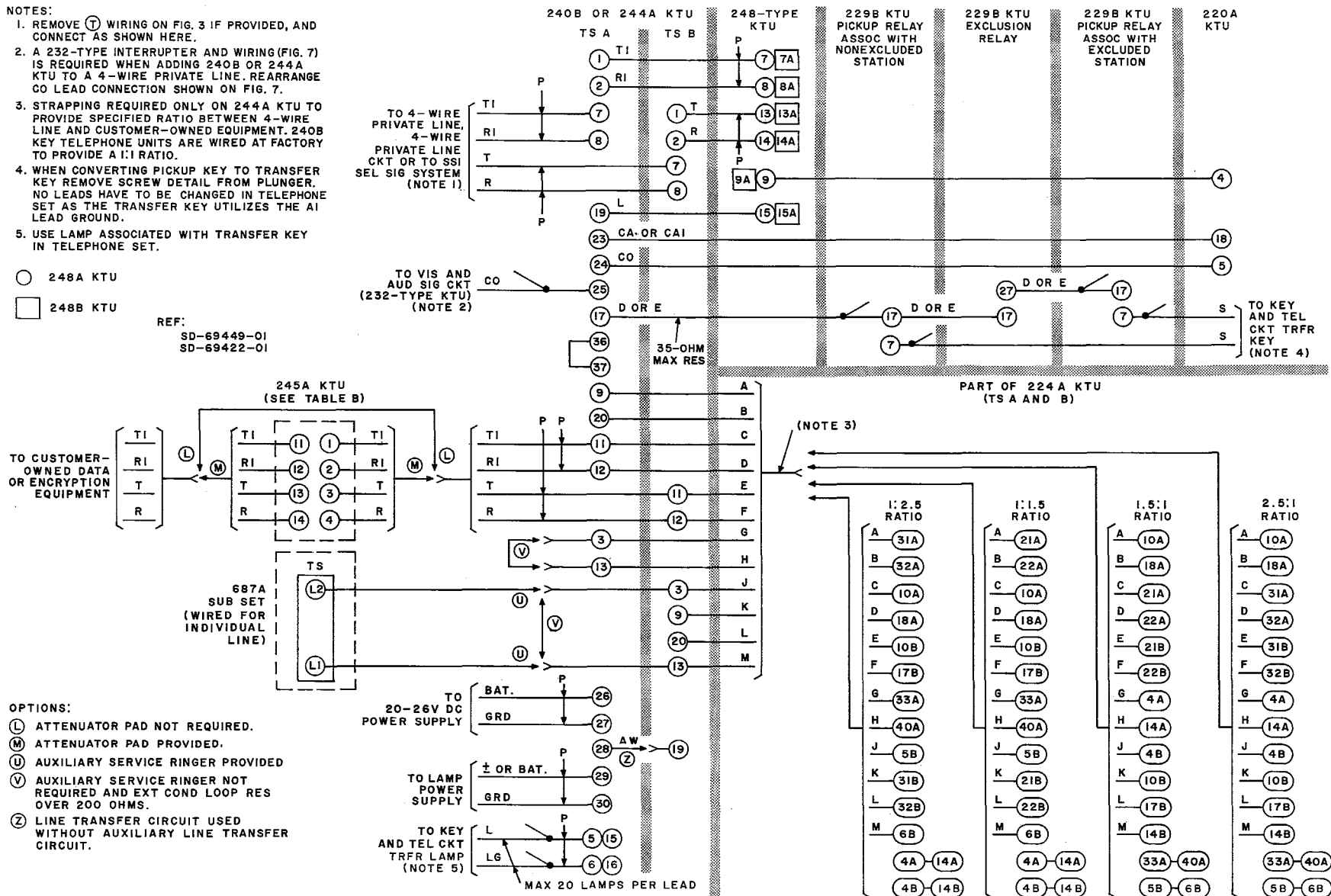


Fig. 5 — Connections for Line Transfer Circuit

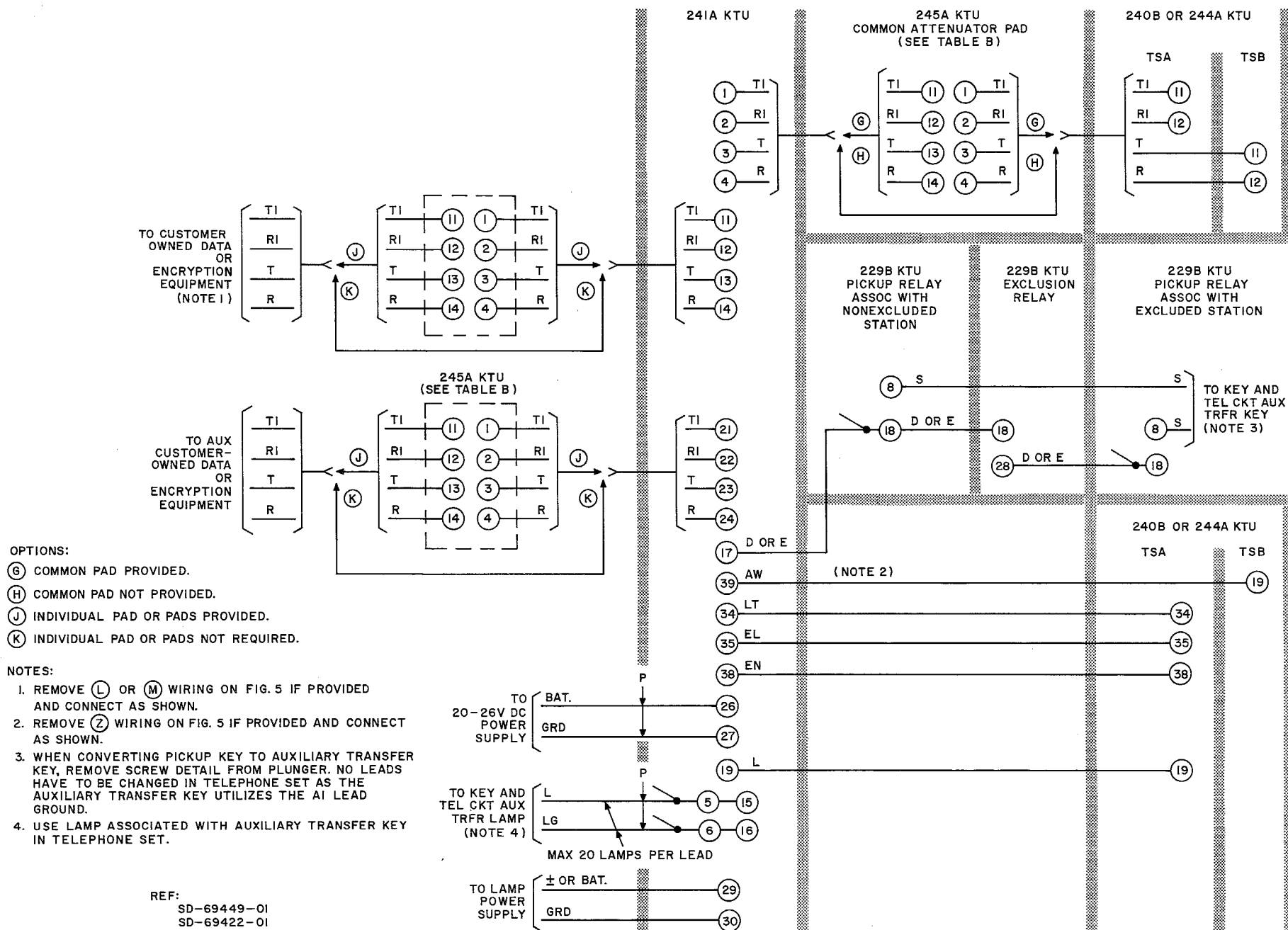
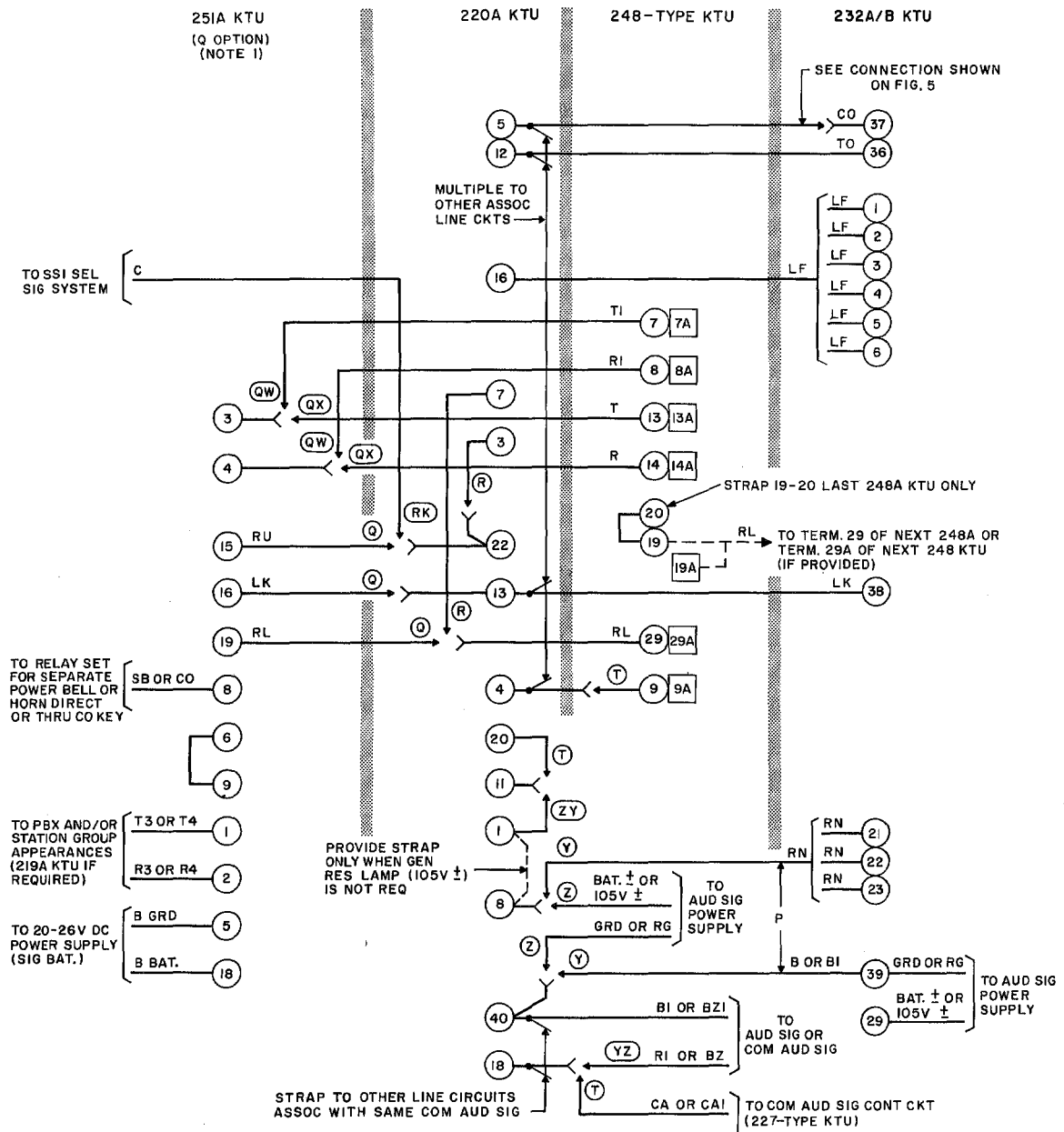


Fig. 6 — Connections for Auxiliary Line Transfer Circuit



OPTIONS:

- (K) JOINT OPERATION WITH PBX NOT PROVIDED.
- (Q) INCOMING SIGNAL PROVIDED BY 251A KTU (20 CYCLE SIG).
- (R) INCOMING SIGNAL PROVIDED BY SSI SEL SIGNALING SYSTEM.
- (T) INTERRUPTED COM AUD SIG USING RELAY CONTROL CIRCUIT (227A KTU).
- (W) INCOMING SIG VIA XMTR LOOP.
- (X) INCOMING SIG VIA RCVR LOOP.
- (Y) INTERRUPTED AUD SIG USING ELECTROMECHANICAL-INTERRUPTER 232A/B KTU.
- (Z) STEADY AUD SIG.

NOTE:

THESE CONNECTIONS ARE IN ADDITION TO THOSE SHOWN IN FIG. 2 AND FIG. 3.

○ 248A KTU

□ 248B KTU

REF:

SD-69410-01
SD-69449-01

Fig. 7 — Incoming Signal Arrangements

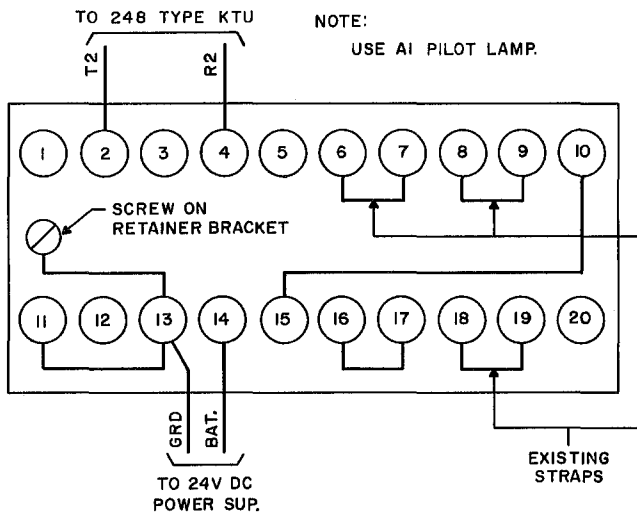


Fig. 8 — Connections for 106B Loudspeaker Set

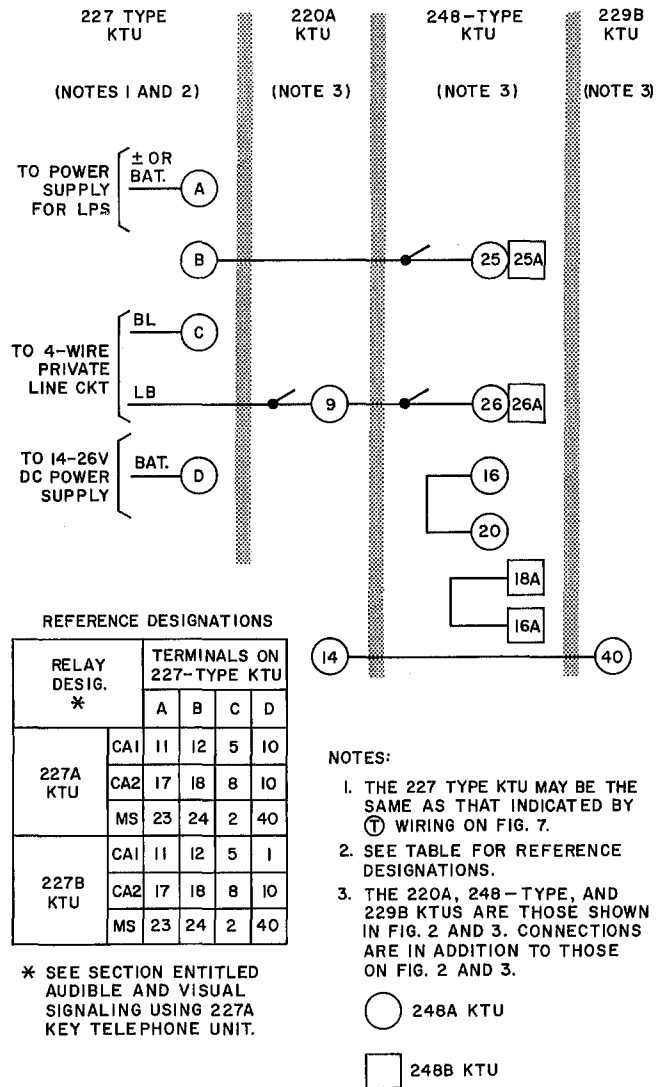
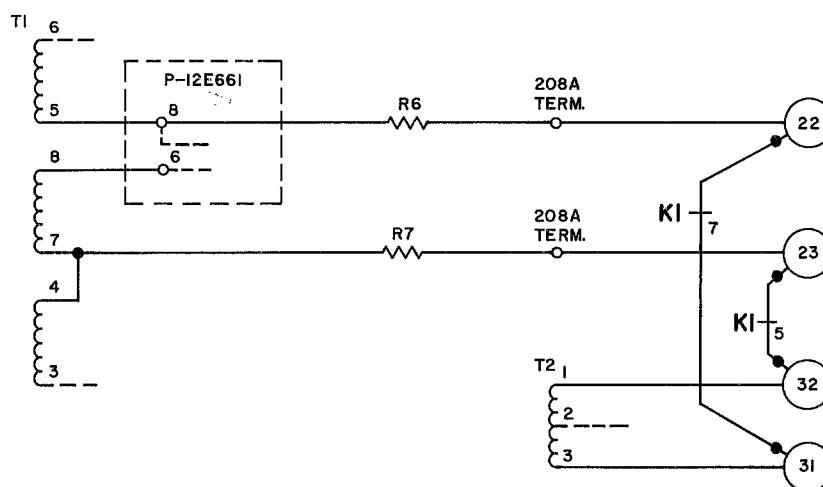


Fig. 9 — Connections to Provide Interchange of Busy Signals With Other Switching Systems



NOTES:

1. MODIFY CONTROL UNIT AS FOLLOWS:
 1. UNSOLDER R6 FROM TERMINAL 3 OF T2.
 2. UNSOLDER R7 FROM TERMINAL 1 OF T2
 3. INSTALL A 208A TERMINAL OR EQUIVALENT UNDER THE MOUNTING NUT OF TRANSFORMERS T1 AND T2. TERMINALS SHOULD NOT INTERFERE WITH ADJACENT EQUIPMENT.
 4. SOLDER FREE END OF R6 TO ONE 208A TERMINAL AND FREE END OF R7 TO OTHER 208A TERMINAL.
 5. REMOVE FOUR SCREWS HOLDING TERMINAL BOARD TO EXPOSE CONNECTIONS ON REAR OF TERMINAL BOARD.
 6. PLACE AND SOLDER FOUR STRAPS FROM TERMINAL BOARD AS FOLLOWS:
 - (A) TERMINAL 22 TO 208A TERMINAL ASSOCIATED WITH R6.
 - (B) TERMINAL 23 TO 208A TERMINAL ASSOCIATED WITH R7.
 - (C) TERMINAL 31 TO TERMINAL 3 OF T2.
 - (D) TERMINAL 32 TO TERMINAL 1 OF T2.
 7. REPLACE TERMINAL BOARD AND SCREWS.
 8. STENCIL COVER "MODIFIED PER SD-69487-01".
2. CONNECT TO J5304ID, LI SPEAKERPHONE CONTROL UNIT WITH CABLE SUPPLIED WITH J-SPEC. MOUNT UNITS AS CLOSE TOGETHER AS POSSIBLE, NOT EXCEEDING 4 FT., WITH 55B CONTROL UNIT TO RIGHT OF J5304ID, LI UNIT.

Fig. 10 — Modification of 55B Control Unit

