

**6A KEY TELEPHONE SYSTEM**  
**SELECTOR ONLY**  
**CONNECTIONS**

**1. GENERAL**

**1.01** This section is reissued to:

- Show 207B, 217A, and 226A KTUs MD.
- Add connections for TOUCH-TONE® off-premise stations.
- Add CD and SD references.

**1.02** Identification and installation information for this arrangement is covered in Section 518-410-100.

**2. CONNECTIONS**

**2.01** The connection diagrams serve as a guide to the installer in connecting the 6A system key telephone units to provide the desired features.

**2.02** When using a 247A (MD) KTU to provide TOUCH-TONE dialing, adjust H and L relays before placing unit in service. See Section 518-310-113 for adjustment.

**2.03 Connection Index:**

Table A—Selector Only Wiring Options

Fig. 1—Connections for Selector Circuit [207B (MD) or 207C] to Transfer Circuit (216A KTU)

Fig. 2—Addition of Add-On Conference Circuit [226A (MD) or 226B KTU]

Fig. 3—Addition of Preset Conference Circuit [217A (MD) or 217B KTU]

Fig. 4—Addition of Long Line Circuit (225A KTU)

Fig. 5—Addition of Auxiliary Relay Busy Lamp Circuit [227A (MD) or 227B KTU]

Fig. 6—Addition of TOUCH-TONE Adapter Circuit [247A (MD) KTU]

Fig. 7—Addition of TOUCH-TONE Adapter Circuit (247B KTU)

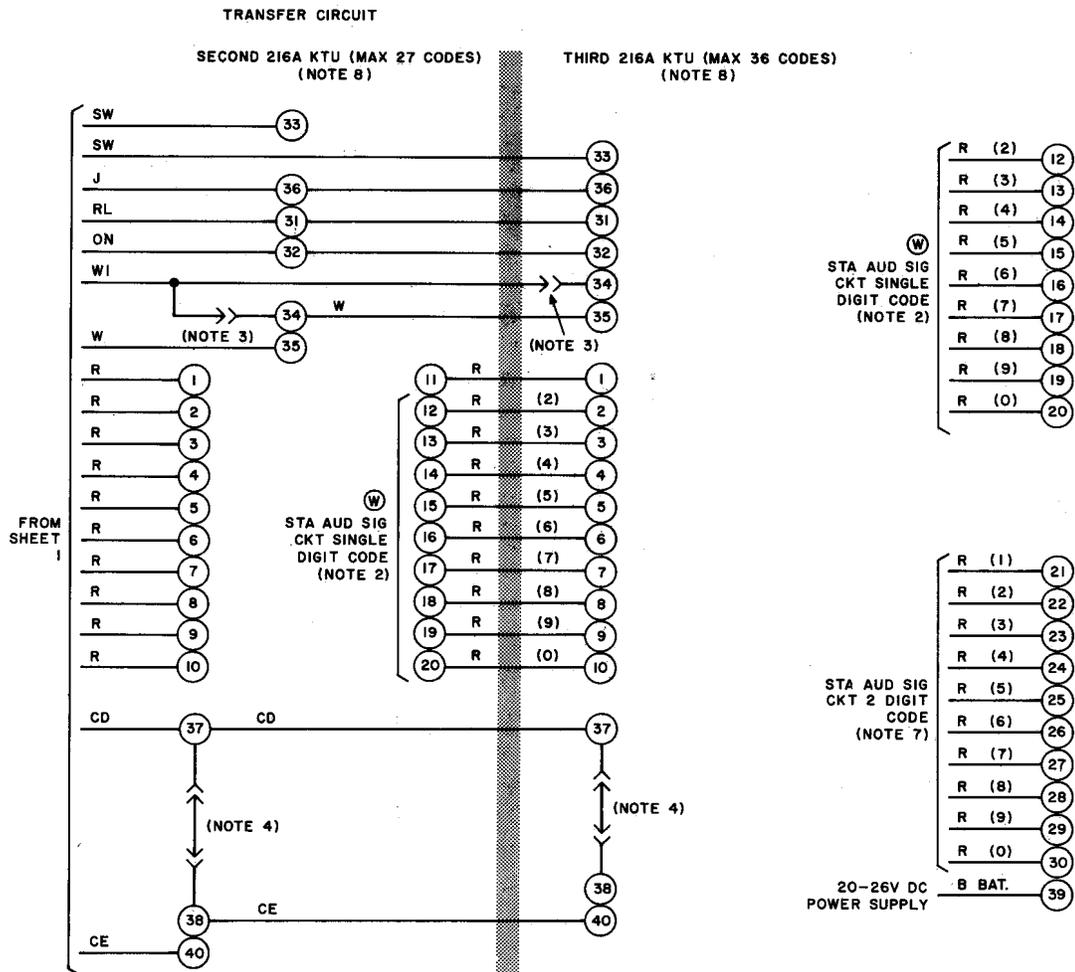
**2.04** For additional information refer to the following:

- CD- and SD-69286—6A Key Telephone System
- CD- and SD-69447—247A (MD) KTU
- CD- and SD-69529—247B KTU.

**TABLE A**  
**SELECTOR ONLY WIRING OPTIONS**

WIRING	OPTION
X	Without Transfer Circuit (Max Nine Codes)
W	With Transfer Circuit (over Nine Codes)
K	System with Preset Conference Circuit
H	Under 40 Lamps on System (without Aux Rel Busy Lamp Ckt)
M	Over 40 Lamps on System (with Aux Rel Busy Lamp Ckt)
R	Long Line Ckt Associated with Preset Conference Ckt





**NOTES:**

1. ANY DIGIT OTHER THAN 1 MAY BE ASSIGNED AS THE INITIAL DIGIT OF A 2-DIGIT CODE. THE NUMBER SO ASSIGNED MAY NOT BE USED FOR A STATION CODE. ANY THREE SW LEADS, 2 THROUGH 0, CONNECT TO A MAXIMUM OF THREE TRANSFER CIRCUITS (ONE LEAD PER TRANSFER CIRCUIT). THE OTHER LEADS CAN BE USED AS C LEADS TO OPERATE OFF-PREMISE AND PRESET CONFERENCE CIRCUITS.
  2. R LEADS ASSIGNED TO SINGLE DIGIT CODES FOR W OPTION MUST BE WIRED FROM THE LAST TRANSFER CIRCUIT PROVIDED.
  3. CONNECT WI LEAD (W OPT) FROM TERMINAL 17B (207B(MD) OR C) TO THE LAST TRANSFER CIRCUIT PROVIDED.
  4. PLACE STRAP ONLY ON LAST TRANSFER CIRCUIT PROVIDED.
  5. A TOTAL OF 40 LAMPS CAN BE PROVIDED BY THIS CIRCUIT. IF MORE LAMPS ARE NEEDED, USE THE AUXILIARY RELAY BUSY LAMP CIRCUIT.
  6. THE CO LEAD IS REQUIRED WHEN THE SELECTOR ONLY ARRANGEMENT IS ASSOCIATED WITH KTS IA OR IA1.
  7. SELECTED SW LEAD TO EACH 216A KTU DETERMINES 1ST DIGIT OF 2-DIGIT CODES.
  8. WIRING CHANGES AND ADDITIONAL STRAPS OTHER THAN THOSE SHOWN ARE REQUIRED WHEN ADDING A 216A KTU TO AN EXISTING SYSTEM EQUIPPED FOR TOUCH-TONE SERVICE. FOR THESE CHANGES SEE FIG. 6 OR FIG. 7 WHICHEVER APPLIES.
- \* INTERNALLY STRAPPED AT FACTORY.

◆ Fig. 1—Connections for Selector Circuit [207B (MD) or 207C KTU] to Transfer Circuit (216A KTU) (Sheet 2) ◆

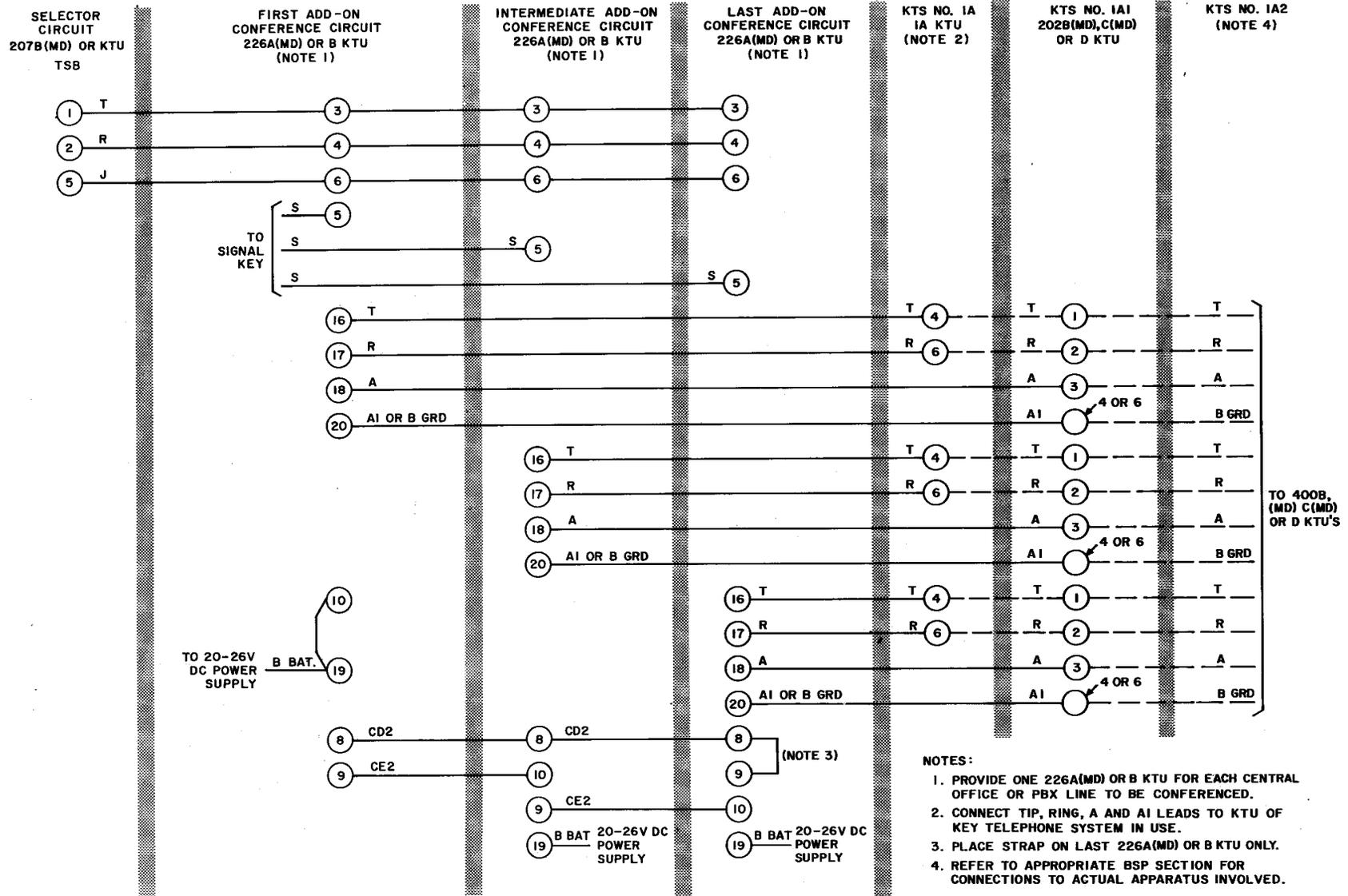


Fig. 2—Addition of Add-On Conference Circuit [226A (MD) or 226B KTU]

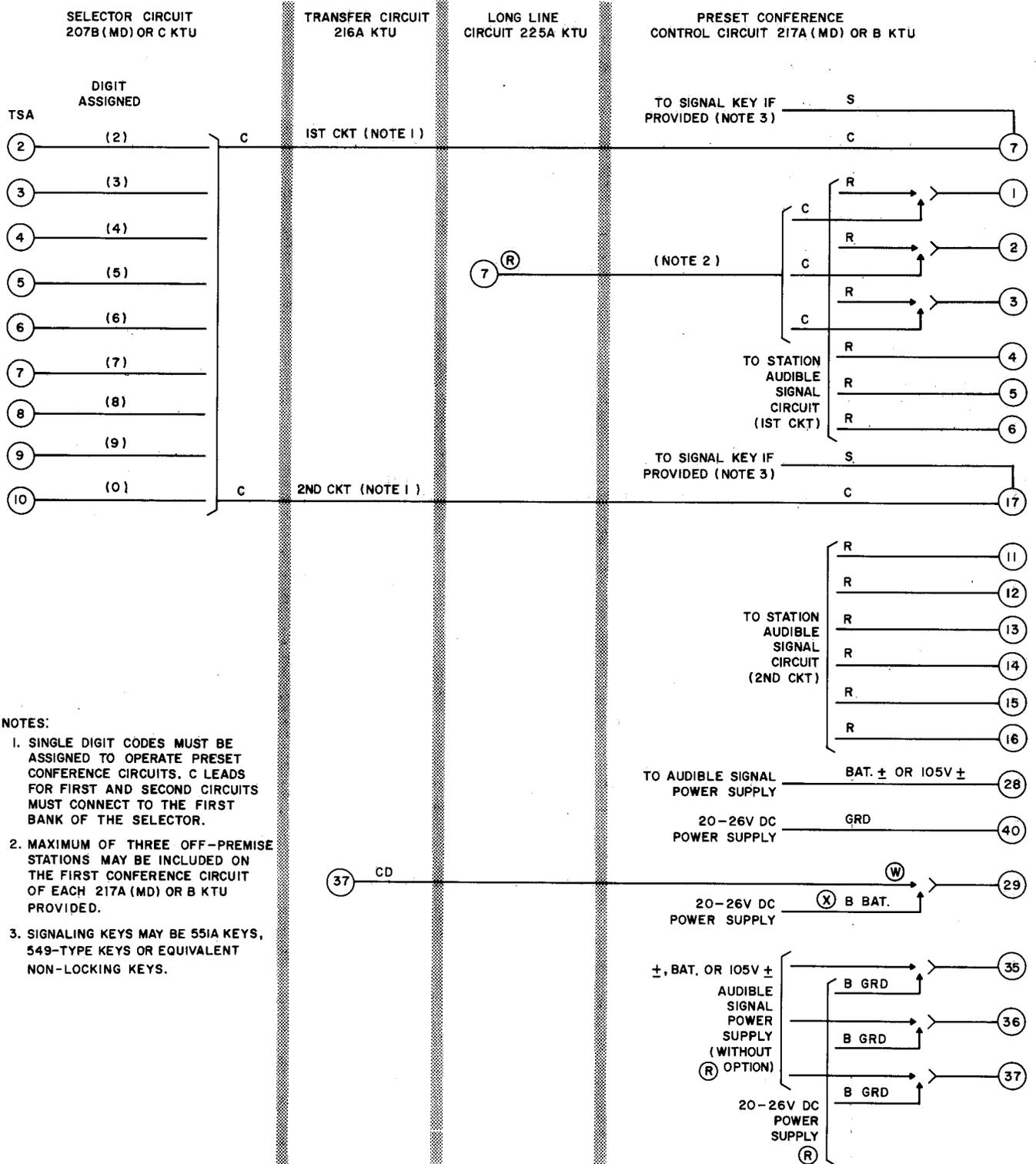
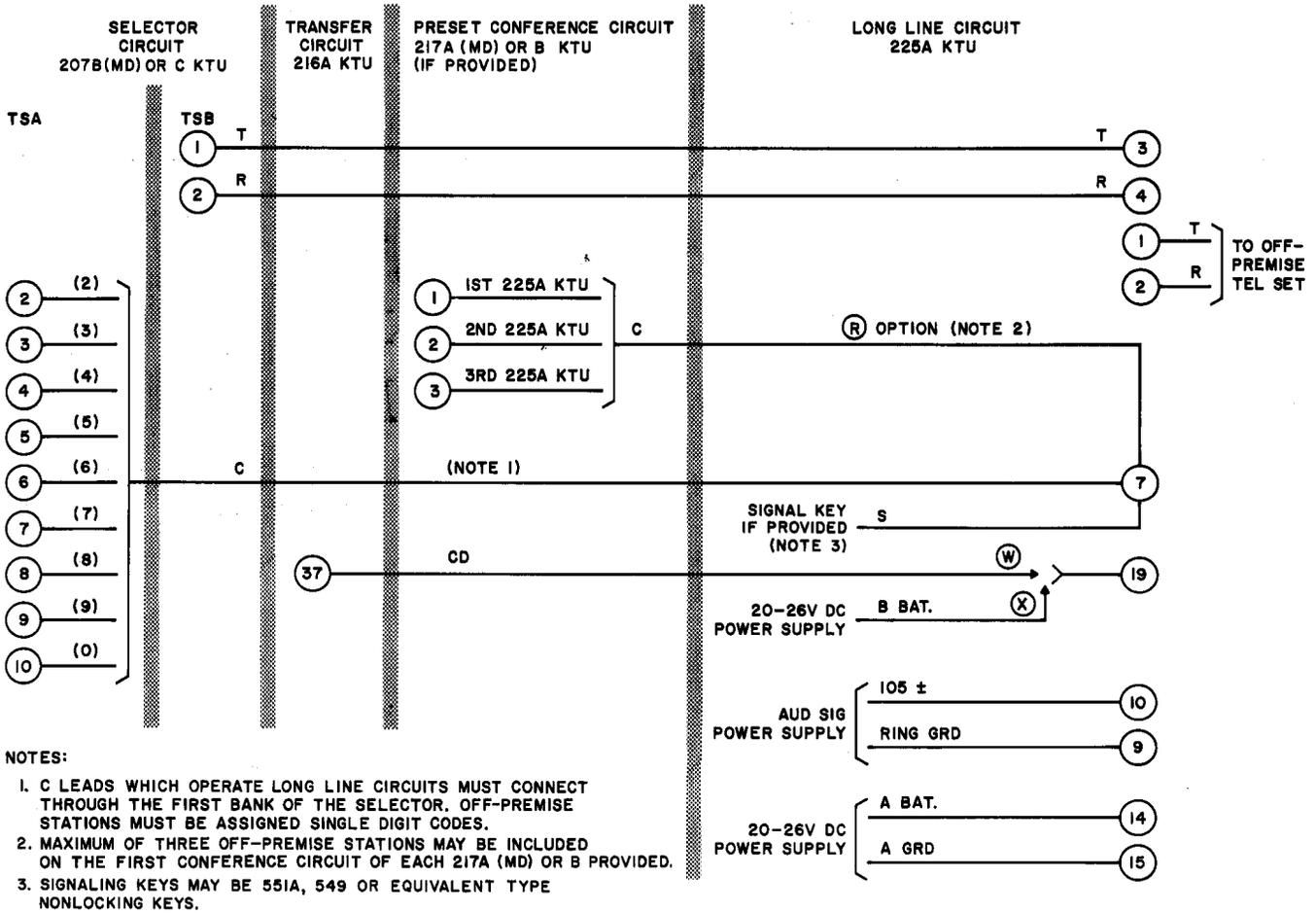
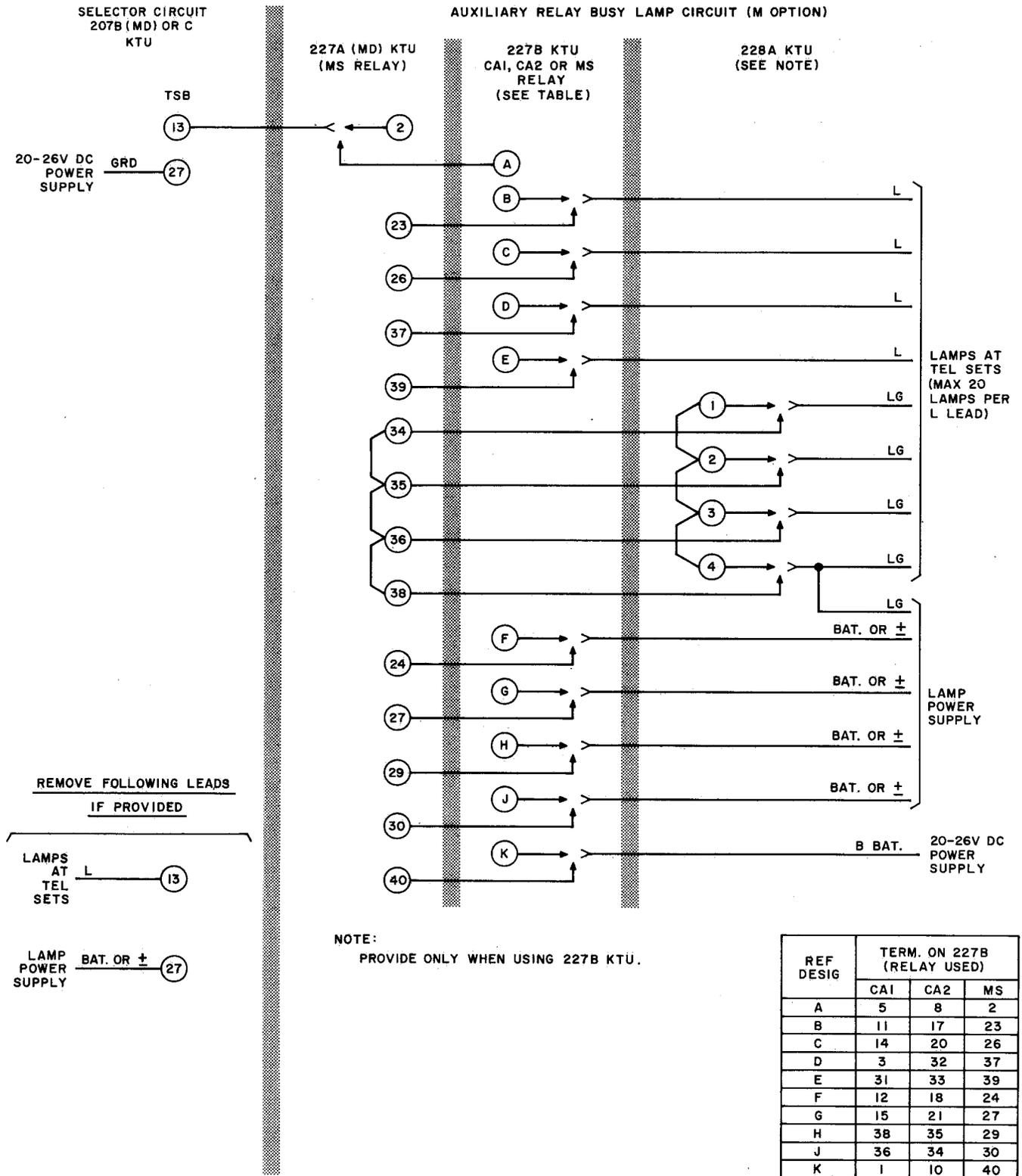


Fig. 3—Addition of Preset Conference Circuit [217A (MD) or 217B KTU]

SECTION 518-410-400



◆ Fig. 4—Addition of Long Line Circuit (225A KTU) ◆



▶ Fig. 5—Addition of Auxiliary Relay Busy Lamp Circuit [227A (MD) or 227B KTU] ◀

SECTION 518-410-400

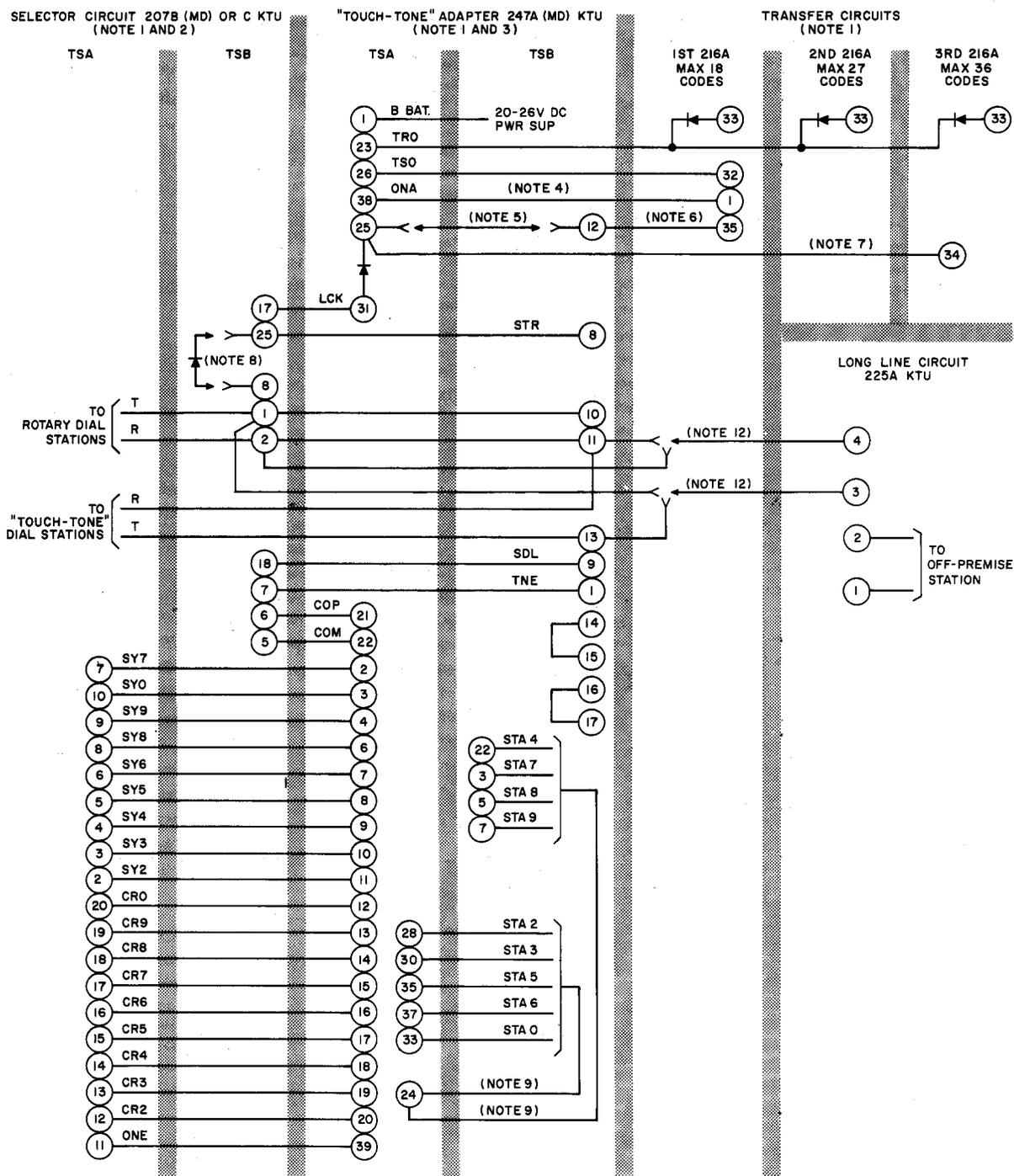
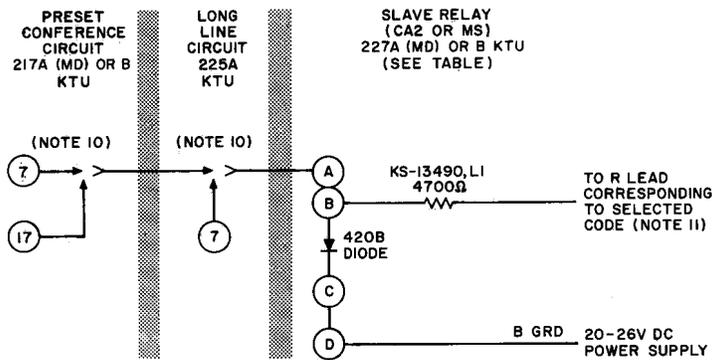
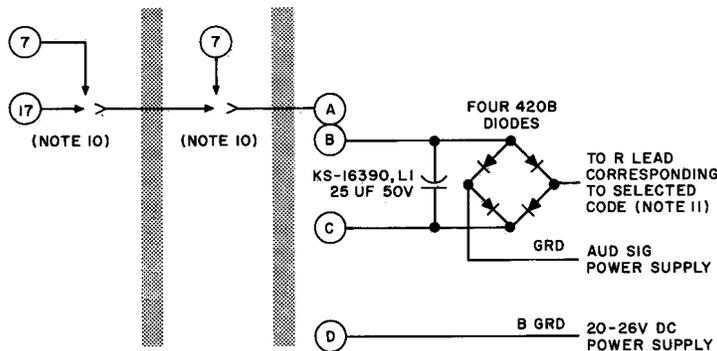


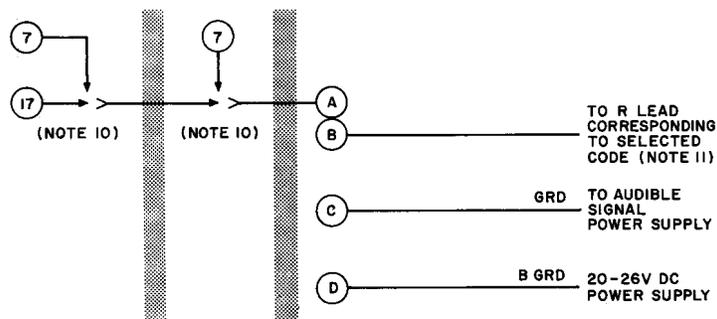
Fig. 6—Addition of TOUCH-TONE Adapter Circuit [247A(MD) KTU] Sheet 1



6A- 105V± USED TO OPERATE AUDIBLE SIGNALS OF 6A KTS



6B- 18V± USED TO OPERATE AUDIBLE SIGNALS OF 6A KTS



6C- BAT. USED TO OPERATE AUDIBLE SIGNALS OF 6A KTS

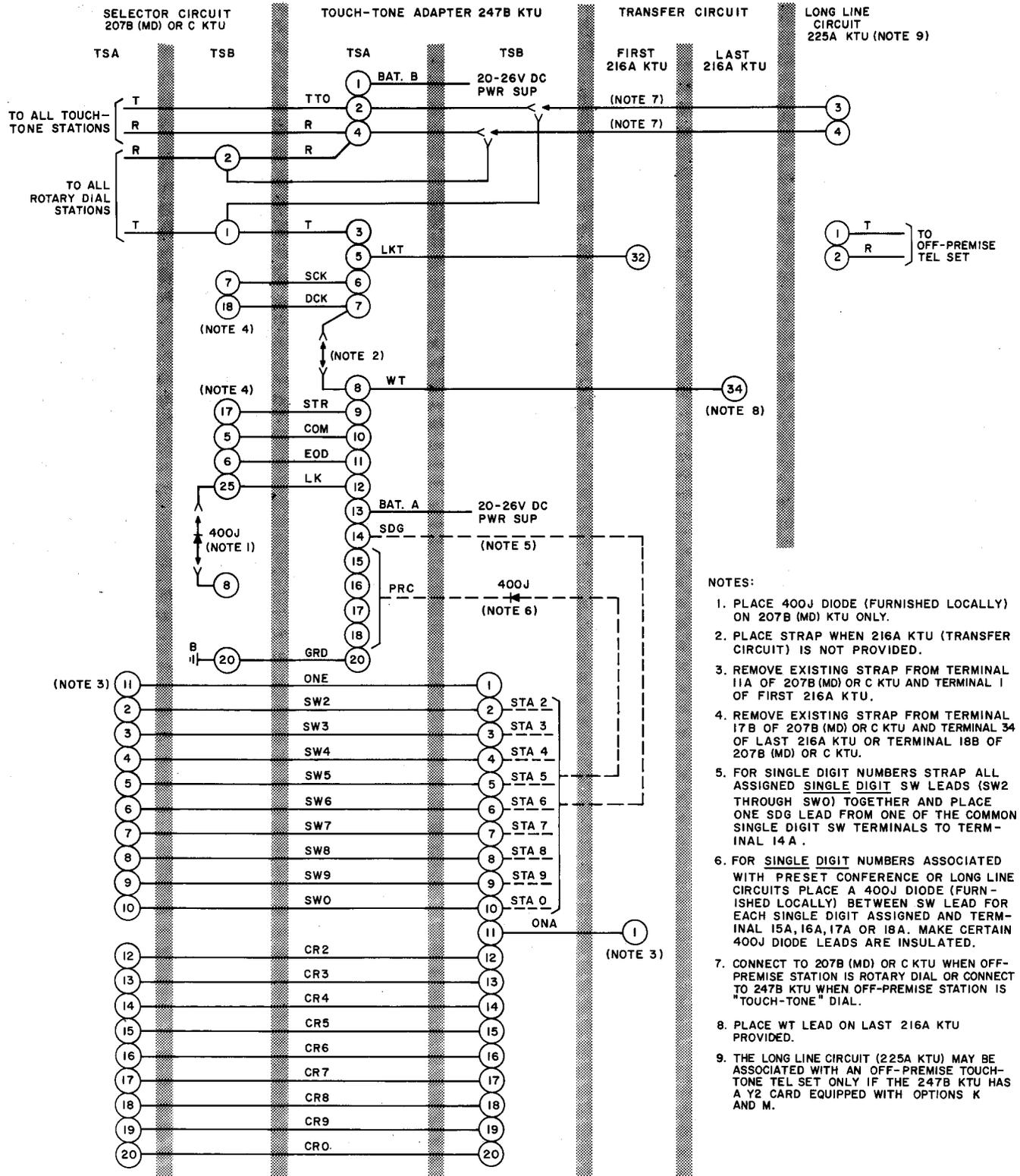
NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL DIODES SHOWN ARE 400J OR EQUIVALENT AND MUST BE PROVIDED LOCALLY.
2. EACH LONG LINE (225A KTU) OR PRESET CONFERENCE (217A (MD) OR B KTU) CIRCUIT ON THE 6A KTS REQUIRES A SLAVE RELAY. USE THE CA2 OR MS RELAY OF THE 227A (MD) OR B KTU AND CONNECT AS SHOWN IN FIG. 6A, B, OR C, WHICHEVER APPLIES.
3. BEFORE PLACING 247A (MD) KTU IN SERVICE ADJUST "H" AND "L" RELAY OPERATION. SEE SECTION 518-310-113 FOR ADJUSTMENT.
4. REMOVE EXISTING STRAP BETWEEN TERMINAL 11A OF 207B (MD) OR C KTU AND TERMINAL 1 OF THE FIRST 216A KTU IF PROVIDED.
5. PLACE STRAP WHEN 216A KTU NOT PROVIDED. REMOVE EXISTING STRAP BETWEEN TERMINALS 17B AND 18B OF 207B (MD) OR C KTU.
6. WHEN A 216A KTU IS PROVIDED, REMOVE EXISTING STRAP BETWEEN TERMINALS 35 OF FIRST 216A KTU AND 18B OF 207B (MD) OR C KTU.
7. PLACE STRAP TO TERMINAL 34 OF LAST 216A KTU PROVIDED. REMOVE EXISTING STRAP BETWEEN TERMINALS 34 OF LAST 216A KTU AND 17B OF 207B (MD) OR C KTU.
8. PROVIDE DIODE ON 207B (MD) KTU ONLY.
9. PROVIDE STRAP FOR EACH SINGLE DIGIT NUMBER APPEARING ON THE 6A KTS.
10. REMOVE EXISTING STRAP BETWEEN TERMINAL 7 OR 17 OF THE 217A (MD) OR B KTU OR 7 OF THE 225A KTU AND THE SELECTED C LEAD TERMINAL (TERMINAL 2A-10A) OF THE 207B (MD) OR C KTU.
11. PLACE STRAP FOR CORRESPONDING CODE TO THE SELECTED R LEAD TERMINAL (TERMINAL 12-20) OF THE LAST TRANSFER CIRCUIT PROVIDED OR TO THE SELECTED R LEAD TERMINAL (TERMINAL 12A-20A) ON THE 207B (MD) OR C KTU WHEN NO TRANSFER CIRCUITS ARE PROVIDED.
12. CONNECT TO 207B (MD) OR C KTU WHEN OFF-PREMISE STATION IS ROTARY DIAL STATION OR CONNECT TO 247A (MD) OR B KTU WHEN OFF-PREMISE STATION IS "TOUCH-TONE" DIAL STATION.

REF DESIG	TERMINAL ON 227A (MD) OR B KTU FOR	
	CA2 RELAY	MS RELAY
A	20	26
B	10	40
C	8	2
D	21	27

▶ Fig. 6—Addition of TOUCH-TONE Adapter Circuit [247A (MD) KTU] Sheet 2 ◀

SECTION 518-410-400



◆ Fig. 7—Addition of TOUCH-TONE Adapter Circuit (248B KTU) ◆