

JUN 14 1968

MISCELLANEOUS EQUIPMENT  
(TIE TRUNKS, LOUDSPEAKER PAGING TRUNK,  
RECORDED TELEPHONE DICTATION TRUNK, 3A CODE CALL UNIT,  
BUSY VERIFICATION AUXILIARY TRUNK, AND AUXILIARY POSITION  
CIRCUIT FOR REMOTE TRUNK ANSWERING)

INSTALLATION INFORMATION

756A PBX

1. GENERAL

1.01 This section covers miscellaneous equipment which may be provided with a 756A PBX on an optional basis.

1.02 This section is reissued to provide installation information for dial repeating tie trunks with pad control. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

2. RINGDOWN TIE TRUNKS

2.01 A maximum of four ringdown tie trunks may be provided. The trunks are arranged for 2-way operation and employ ringdown signaling in both directions. For outgoing calls, a trunk can be dial selected by a station or a dial repeating tie trunk or can be manually selected by an attendant. Incoming calls must be answered and completed by an attendant.

2.02 When ringdown tie trunks are provided, the dial pulse register must be wired to provide 2-digit code 9 operation. Refer to Section 551-147-210.

2.03 The J58829T-1 unit consists of wiring and equipment for one ringdown tie trunk. Each tie trunk requires the space of two 2- by 23-inch mounting plate positions. (See Fig. 1.)

2.04 The tie trunks occupy space on slide 5 which may be used for either ringdown tie trunks or 2-way central office trunks. The capacity of

the PBX for 2-way central office trunks is reduced by one for each ringdown tie trunk used.

2.05 Install trunk units at slide 5 mounting plate positions G, H (trunk circuit 3); K, L (trunk circuit 4); T, U (trunk circuit 8); and W, X (trunk circuit 9).

2.06 Extend the connector-ended cable from each tie trunk to the position circuit at mounting plate position J or V. Plug in cable connectors at position circuits. (See Table A.)

3. DIAL REPEATING TIE TRUNKS

3.01 Tie trunks applicable for use with the 756A PBX are provided in accordance with local requirements.

3.02 Each dial repeating tie trunk (whether 2-way dial repeating or dial repeating incoming and dial selected outgoing) uses one of the ten universal line circuits. The station line capacity of the PBX is reduced by one for each tie trunk.

3.03 The universal line circuit used for a tie trunk must be renumbered from the 20 through 29 series to a number in the 80 through 89 series. Also, the dial pulse register must be wired to provide code 8 operation. Refer to Section 551-147-210.

TIE TRUNKS WITHOUT PAD CONTROL

3.04 Space is provided for trunk circuits on slide 2 at mounting plate positions R through AB

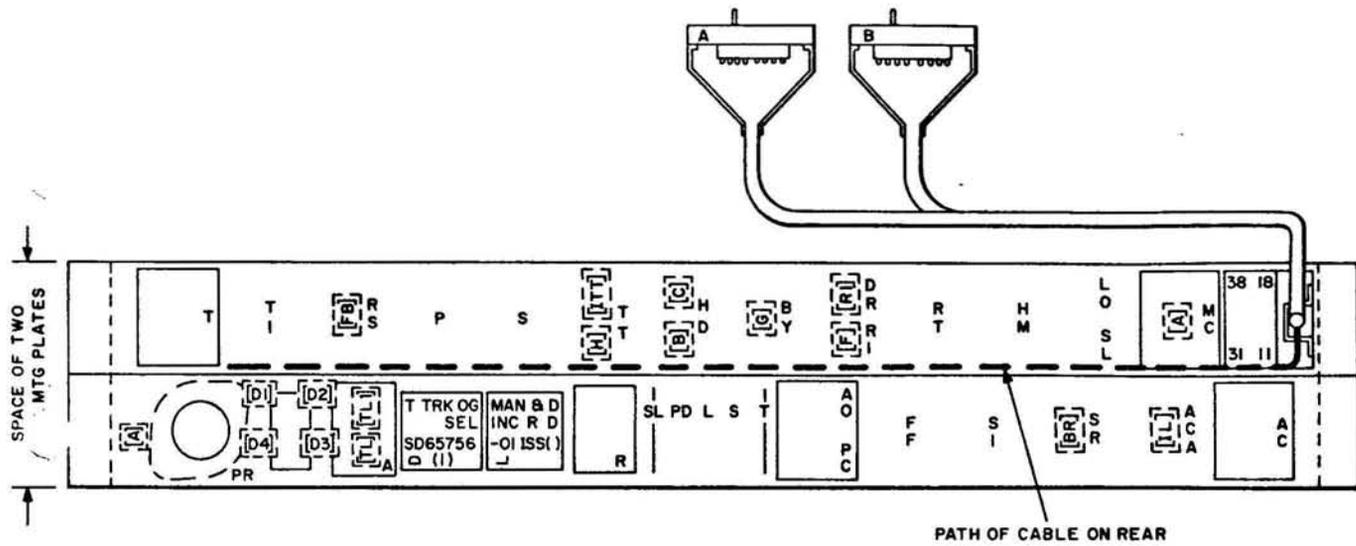


Fig. 1—Ringdown Tie Trunk J58829T-1

TABLE A  
CONNECTION OF RINGDOWN TIE TRUNKS  
TO POSITION CIRCUIT

CONNECT TIE TRUNK			TO POSITION CIRCUIT		
MOUNTING PLATE POSITION	CIRCUIT	CONNECTORS	MOUNTING PLATE POSITION	CIRCUIT	CONNECTORS
H-G	TRK 3	A,B	J	TRK 3	A,B
K-L	TRK 4	A,B	J	TRK 4	A,B
T-U	TRK 8	A,B	V	TRK 8	A,B
W-X	TRK 9	A,B	V	TRK 9	A,B

are on slide 3 at mounting plate positions X through A. Trunks for circuits 80 through 84 are mounted on slide 2. Trunks for circuits 85 through 89 can be mounted on either slide 2 or slide 3. The assignment of circuit numbers and mounting locations is made locally.

**3.05** Using locally furnished wire, connect tie trunk units mounted on slide 2 to the tie trunk adapter unit at slide 2 mounting plate position (N through P). Connect tie trunk units mounted on slide 3 to the select magnet control unit at slide 3 mounting plate position V. (See table B.)

**TIE TRUNKS WITH PAD CONTROL**

**3.06** Tie trunks arranged for pad control require the J58829AS, List 1 applique unit for use

with the 756A PBX. The trunk unit and the applique unit are mounted on locally provided 2-by 23-inch mounting plate positions which are external to the PBX modules. The applique unit occupies one mounting plate position. A J58829AS List 2 connector-ended cable is required for connections from the crown of the PBX modules to the trunk and applique units.

**3.07** The applique unit is equipped for use with one or two trunk units. The applique unit mounting plate is drilled for two additional circuits which may be added to the unit in accordance with local instructions.

**3.08** At slide 2, crown connector AL2 and at slide 6, crown connector AA6, connect plug ends of J58829AS, List 2 cable. Extend the cable to

**TABLE B**  
**CONNECTION OF DIAL REPEATING TIE TRUNKS**  
**MOUNTED ON SLIDE 2 OR SLIDE 3**

CONNECT TIE TRUNK UNIT		TO TIE TRUNK ADAPTER UNIT OR SELECT MAGNET CONTROL UNIT		
PUNCHING	LEAD DESIG	TERMINAL STRIP	PUNCHING	NOTE
1	T	B	T	1
2	R	B	R	1
3	T2	B	T2	1
4	R2	B	R2	1
5	S2	B	S2	1
10	BAT	A	BAT	1
11	T1	B or C	T1	1,2
12	R1	B or C	R1	1,2
13	S1	B	S1	1
20	GRD	A	GRD	1

**Notes:**

1. Use punchings associated with circuit (80 through 89) that is locally assigned to the tie trunk.
2. Connect T1 and R1 leads to terminal strip C if the tie trunk is mounted on slide 2. Connect T1 and R1 leads to terminal strip B if tie trunk is mounted on slide 3.

the tie trunk unit(s) and to the applique unit. Make connections at applique unit, tie trunk unit, and at tie trunk adapter unit. (See Fig. 2.)

**4. RINGDOWN TIE TRUNKS USED WITH SWITCHBOARDS**

**4.01** Installation information covering tie trunks used with switchboards is given in the applicable switchboard installation section.

**5. LOUDSPEAKER PAGING TRUNK**

**5.01** The loudspeaker paging trunk may be dial selected and/or it may appear on a line pickup button at the attendant console equipment.

**5.02** The paging trunk uses one of the universal line circuits. The station line capacity of the PBX is reduced by one for each paging trunk provided.

**5.03** The universal line circuit used for the paging trunk must be renumbered from the 20 through 29 series to a number in the 80 through 89 series. Also, the dial pulse register must be

wired for code 8 operation. Refer to Section 551-147-210.

**5.04** *The J58829W unit* consists of assembly, wiring, and equipment for one loudspeaker paging trunk. The unit requires one 2- by 23-inch mounting plate position on slide 2 or slide 3. (See Fig. 3.)

**5.05** Space is provided on slides 2 and 3 for mounting the paging trunk. If the paging trunk is to be manually selected at the attendant equipment, the paging trunk must be mounted on slide 2. If the trunk is to be dial selected and not manually selected, the trunk can be mounted on either slide 2 or slide 3. Mounting plate position AA or AB is preferred to minimize the effect of power induction. If the preferred mounting plate position is not available, the effect of power induction can be reduced by adding 19A146 shield to the relay in the trunk circuit.

**5.06** *If the paging trunk is mounted on slide 2*, connect the paging trunk terminal strip to terminal strips on the tie trunk adapter at mounting plate positions N and P. At the house

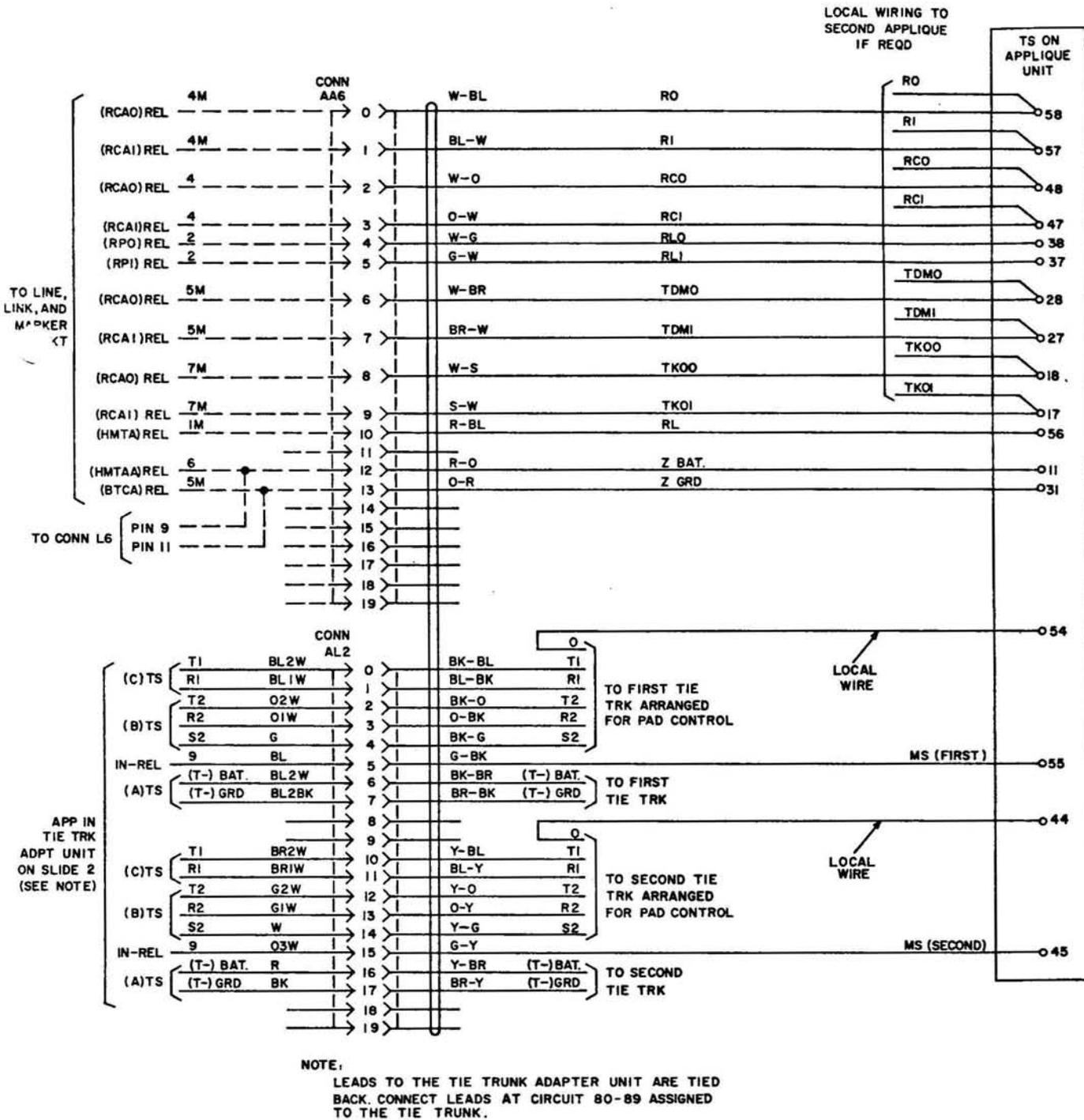
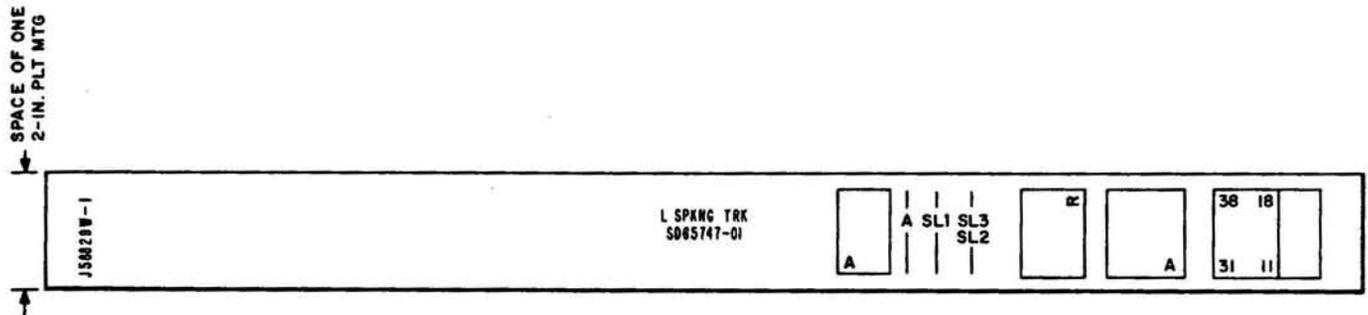


Fig. 2—Connections for Dial Repeating Tie Trunks With Pad Control Applique Unit



**Fig. 3—Loudspeaker Paging Trunk Unit J58829W**

cross-connection terminals or prewired cable terminal section, provide connections to externally mounted equipment as required. (See Fig. 4.)

**5.07** *If the paging trunk is mounted on slide 3*, connect the paging trunk terminal strip to terminal strips on the select magnet control unit at mounting plate position V. At the house cross-connection terminals or prewired cable terminal section, provide connections to externally mounted equipment as required. (See Fig. 5.)

## 6. TELEPHONE DICTATION TRUNK

**6.01** The recorded telephone dictation trunk provides a means for connecting the PBX to a customer provided dictation machine and for translating dial pulses from the PBX for the purpose of controlling the dictating machine.

**6.02** Each dictation trunk uses one of the universal line circuits. The number of trunks that may be provided is limited by the number of universal line circuits available. The station line capacity of the PBX is reduced by one for each dictation trunk provided.

**6.03** The universal line circuit used for the telephone dictation trunk circuit must be renumbered from the 20 through 29 series to a number in the 80 through 89 series. Also, the dial pulse register must be wired for code 8 operation. Refer to Section 551-147-210.

**6.04** *J58827C-1, List 1* consists of assembly, wiring, and equipment required for one telephone dictation trunk unit. It requires three 2- by 23-inch mounting plate positions. (See Fig. 6.)

**6.05** *J58827C-1, List 2* consists of assembly, wiring, and apparatus for one 2-way sleeve repeater unit. It is available on an optional basis to provide satisfactory signals when the dictation trunk unit is not located near the switching equipment. The sleeve repeater unit requires one 2- by 23-inch mounting plate position.

**6.06** *The J58827D-1, List 1* consists of assembly, wiring, and equipment for one TOUCH-TONE<sup>®</sup> recorded telephone dictation trunk unit for use with TOUCH-TONE operation. (See Fig. 7.)

**6.07** The telephone dictation trunk unit should be mounted in an apparatus cabinet at the vicinity of the PBX or the dictating machine. Refer to Section 473-130-201 for installation of the trunk unit and connection of the trunk unit to the dictating machine.

**6.08** The sleeve repeater unit, when required, should be mounted in a locally provided apparatus cabinet at the vicinity of the PBX.

**6.09** *If sleeve repeater unit is provided*, see Fig. 8 or 9 for connecting information.

**6.10** *If sleeve repeater unit is not provided*, see Fig. 10 or 11 for connecting information.

## 7. 3A CODE CALL

**7.01** The 3A code call circuit provides a means for a PBX station or attendant to dial a number in the 80 through 89 series and a code to activate signaling arrangements which attract the attention of an individual who is away from his phone. By dialing a number in the 20 through 29 series at any nearby station, the individual can

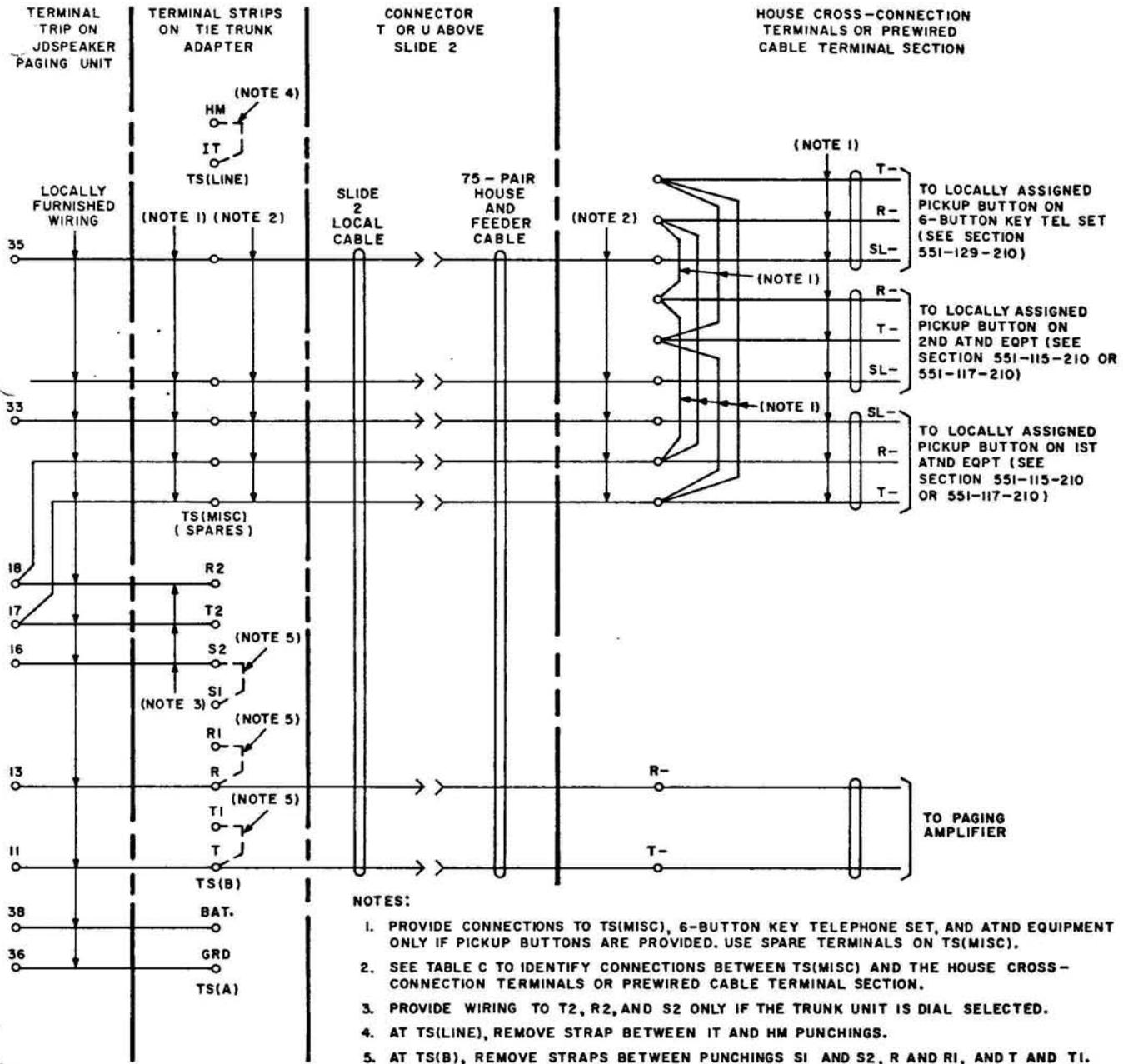


Fig. 4—Connections for Loudspeaker Paging Trunk Mounted on Slide 2

retire the signal and establish a talking connection with the calling station.

**7.02** Each 3A code call channel uses two of the universal line circuits, one for the calling end and one for the called end or answer port of the circuit. The station line capacity of the PBX

is reduced by two for each code call channel provided.

**7.03** The universal line circuit used for the calling end of the code call circuit must be renumbered from the 20 through 29 series to a number in the 80 through 89 series. Also, the dial pulse register

TABLE C

**APPEARANCE OF TIE TRUNK ADAPTER TS(MISC) SPARE TERMINALS  
AT HOUSE CROSS-CONNECTION TERMINALS OR PREWIRED  
CABLE TERMINAL SECTION**

PUNCHING TS(MISC) ON TIE TRUNK ADAPTER UNIT	APPEARANCE AT HOUSE CROSS-CONNECTION TERMINAL FOR 75-PAIR HOUSE AND FEEDER CABLE		OR	CABLE TERMINAL	
	PAIR	COLOR		BLOCK	TERM.
41	52R	OIW		D1	4T
16	61T	BKIBL		D1	8R
26	61R	BLIBK		D1	9T
36	62T	BKIO		D1	9R
46	62R	OIBK		D1	10T
17	63T	BLIG		D1	10R
27	63R	GIBK		D1	11T
37	64T	BKIBR		D1	11R
47	64R	BRIBK		D1	12T
18	65T	BKIS		D1	12R
28	65R	SIBK		D1	13T
38	66T	YIBL		D1	13R
48	66R	BLIY		D1	14T
51	67T	YIO		D1	14R
52	67R	OIY		D1	15T

must be wired for code 8 operation. Refer to Section 551-147-210.

**7.04** Code call equipment available is as follows:

(a) **J58822B-2, List 1** includes framework, assembly, wiring, and equipment for one 3A code call unit arranged for 5 cycles of code call; 3-digit dialing, and signals on one-second cycles. One List 1, 8, 9, or 10 is required for each PBX. List 1, 8, 9, or 10 requires five 2- by 23-inch mounting plate positions in an apparatus cabinet mounted external to the PBX. (See Fig. 12.)

(b) **J58822B-2, List 2** includes equipment required in addition to List 1, 8, 9, or 10 if signals on 2-second cycles are required. List 2 equipment, when provided, is mounted on List 1, 8, 9, or 10.

(c) **J58822B-2, List 4** includes framework, assembly, wiring, and equipment required in addition to List 1, 8, 9, or 10 to add one

code terminal circuit and one jack circuit. Either one List 4 or one List 5 is required for each code call channel. List 4 requires two 2- by 23-inch mounting plate positions directly above the List 1, 8, 9, or 10 equipment. (See Fig. 12.)

(d) **J48822B-2, List 5** includes framework, assembly, wiring, and equipment required in addition to List 1, 8, 9, or 10 to add one code terminal without jack circuit. Either one List 4 or one List 5 is required for each code call channel. List 5 requires one 2- by 23-inch mounting plate position directly above the List 1, 8, 9, or 10 equipment. (See Fig. 12.)

(e) **J58822B-2, List 7** includes equipment required in addition to List 1, 8, 9, or 10 if signals on 1/2-second cycles are required. List 7 equipment, when provided, is mounted on List 1, 8, 9, or 10.

(f) **J58822B-2, List 8** includes framework, assembly, wiring, and equipment for one 3A code call unit arranged for 5 cycles of code call,

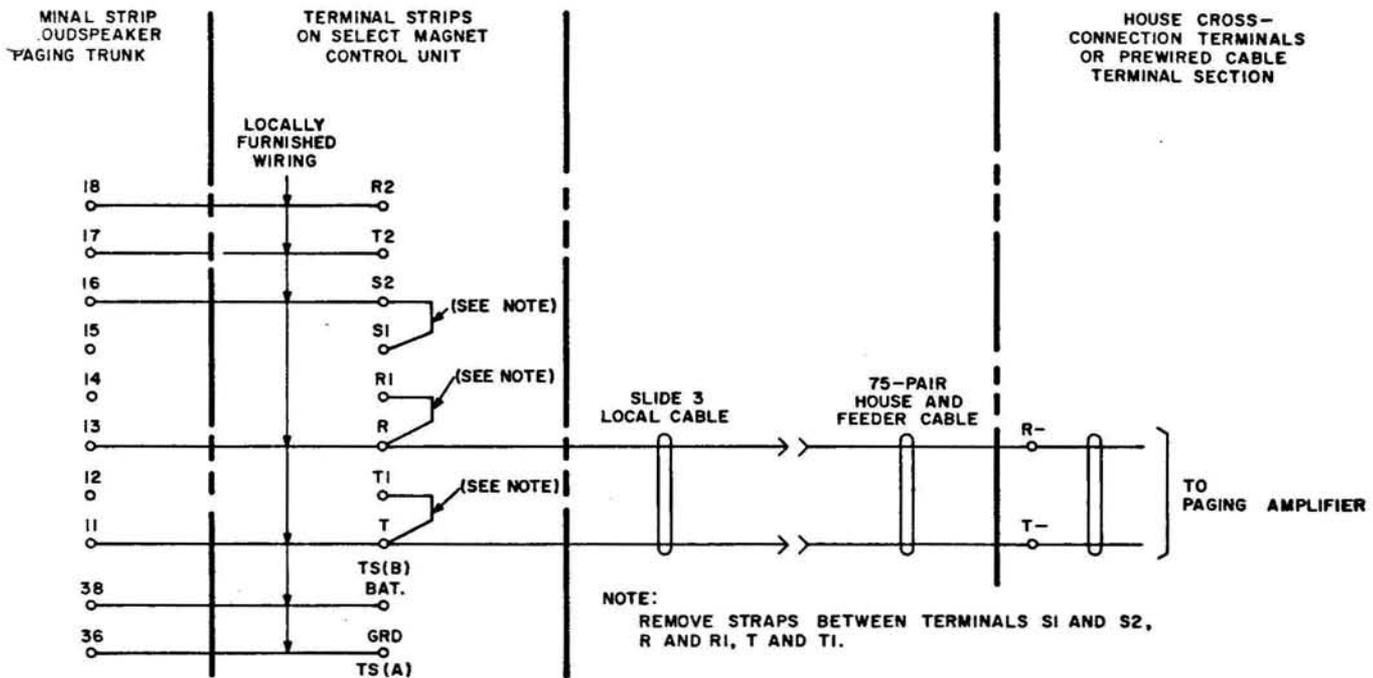


Fig. 5—Connections for Loudspeaker Paging Trunk Mounted on Slide 3

2-digit dialing, with signals on one-second cycles. (See Fig. 12.)

(g) **J58822B-2, List 9** includes framework, assembly, wiring, and equipment for one 3A code call unit arranged for 3 cycles of code call, 3-digit dialing, with signals on one-second cycles. (See Fig. 12.)

(h) **J58822B, List 10** includes framework, assembly, wiring, and equipment for one 3A code call unit arranged for 3 cycles of code call, 2-digit dialing, with signals on one-second cycles. (See Fig. 12.)

(i) **J58822B, List 11** includes wiring and equipment required in addition to List 1, 8, 9, or 10 when rotary dial with dial tone is required. (See Fig. 12.)

(j) **J58822B, List 14** includes assembly, wiring, and equipment required in addition to List 1 or 9 for use with type C1 TOUCH-TONE receiver. (See Fig. 12.)

(k) **J58822B, List 15** includes assembly, wiring, and equipment required in addition to List

8 or 10 for use with type C1 TOUCH-TONE receiver. (See Fig. 12.)

(l) **J58822B, List 16** includes wiring and equipment required in addition to List 14 or 15 for use with type A3 TOUCH-TONE receiver. (See Fig. 12.)

**7.05** Install J58822B-2, List 1, 8, 9, or 10 equipment in locally provided apparatus cabinet. Install List 4 or List 5 at mounting plate positions directly above List 1, 8, 9, or 10.

**7.06** Cross connections between terminal strips on code call equipment are made by locally provided wiring and will be covered in Section 473-121-201. Cabling from the code call equipment terminal strips to the 756A PBX is provided locally and connected to spare leads in the 75-pair house and feeder cable at the house cross-connecting terminal or prewired cable terminal section. The 75-pair house and feeder cable provides connections from the house box or prewired cable terminal section to TS(MISC) on the tie trunk adapter unit on slide 2. The spare terminals at TS(MISC) are cross-connected locally to the line or universal line circuits assigned for code call use. (See Fig. 13.)

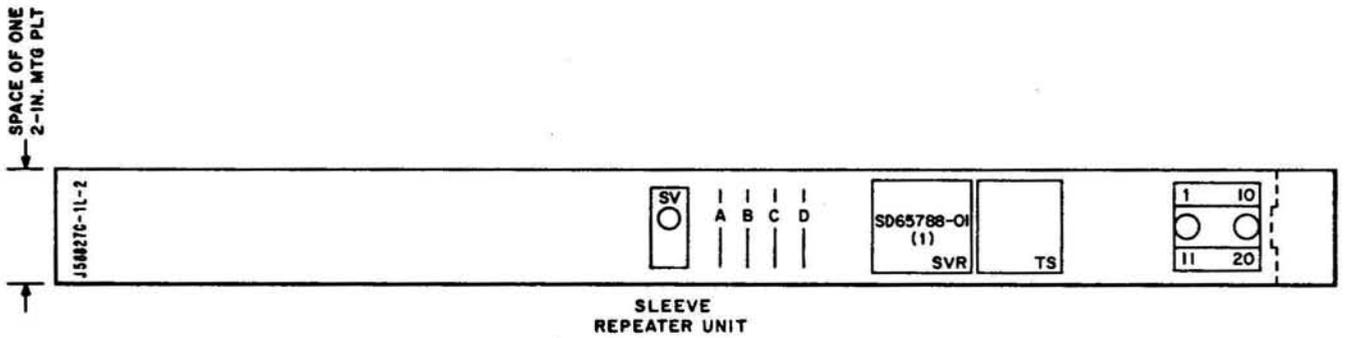
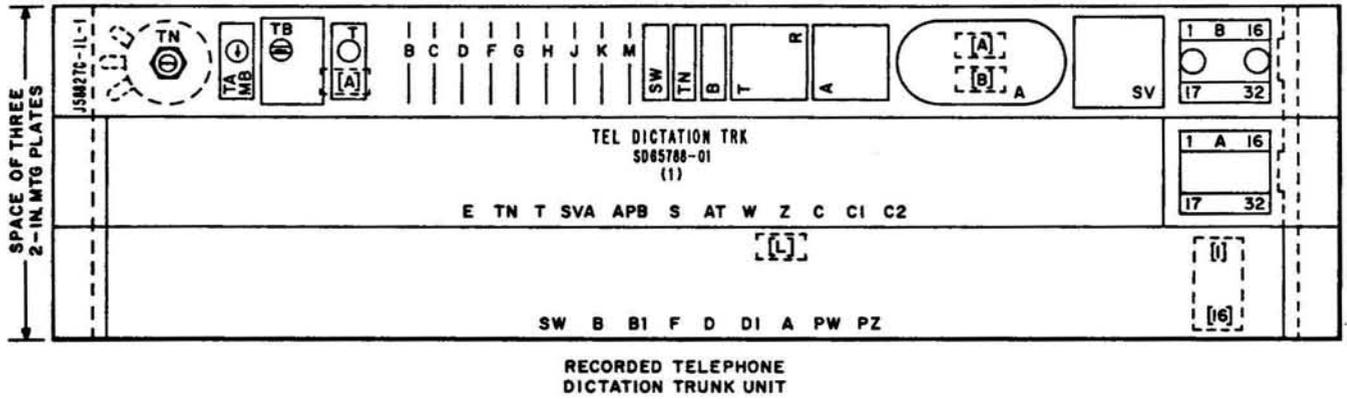


Fig. 6—Recorded Telephone Dictation Trunk and 2-Way Sleeve Repeater Unit J58827C-1

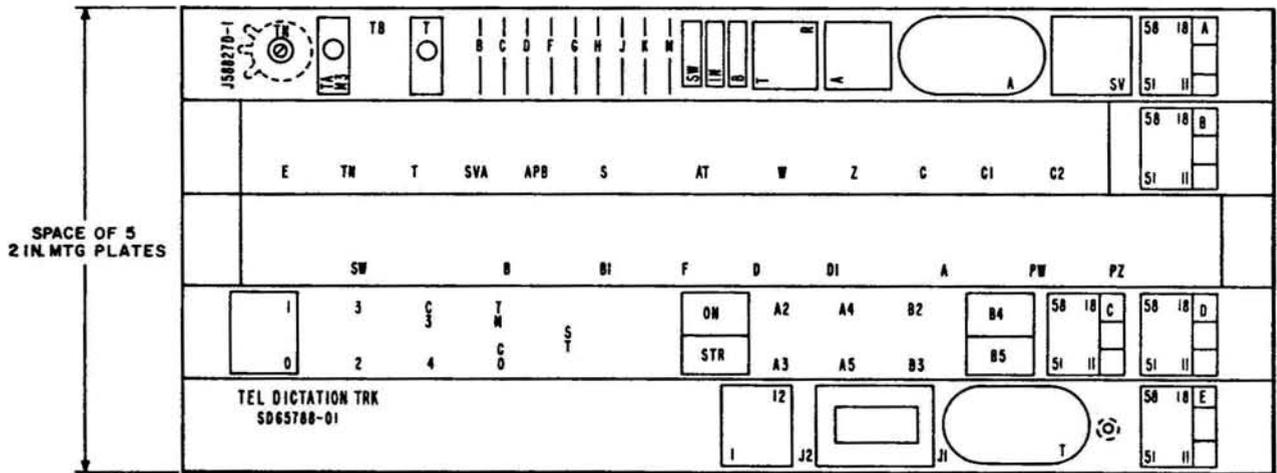
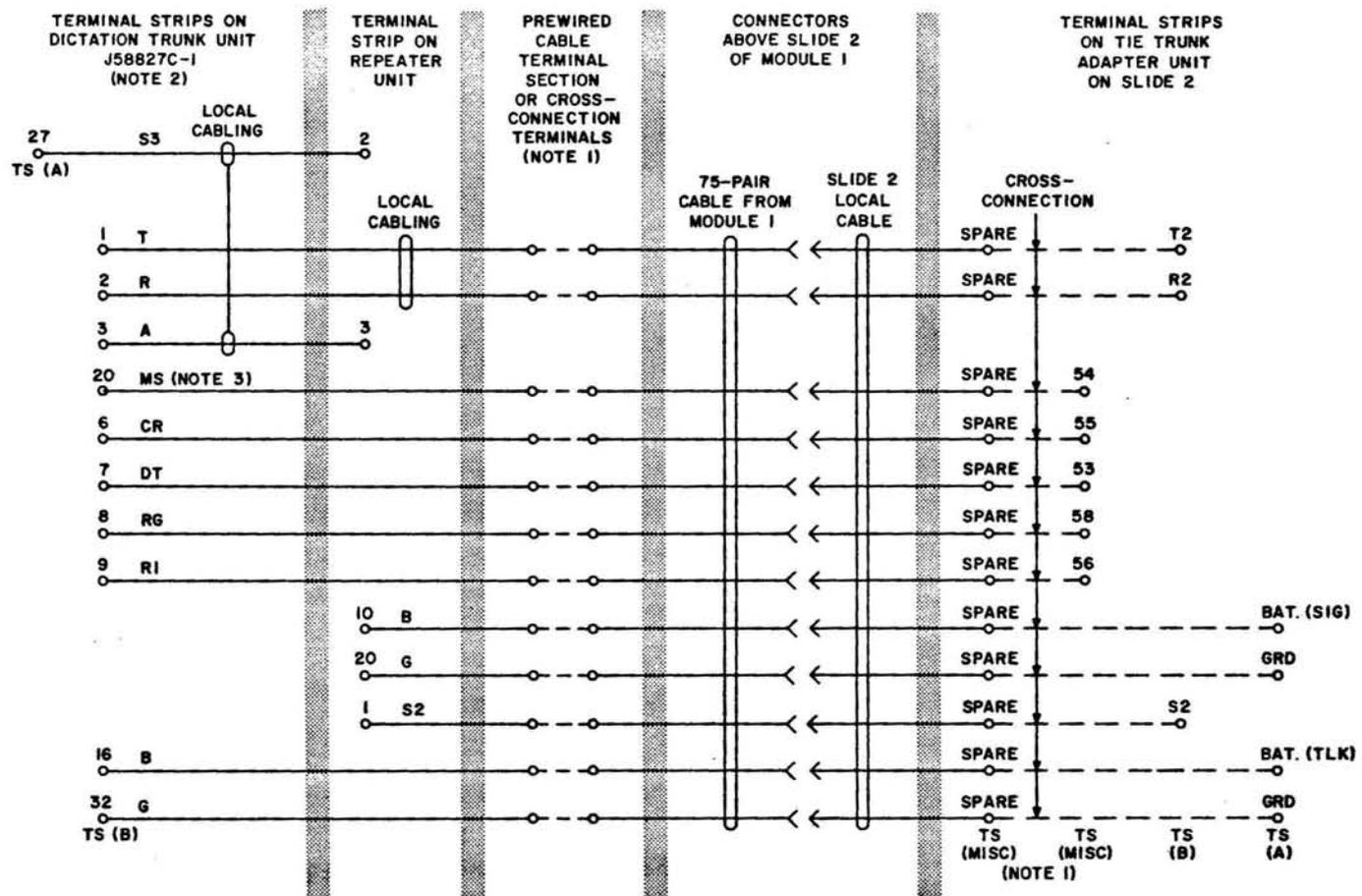


Fig. 7—Recorded Telephone Dictation Trunk J58827D-1—TOUCH-TONE



## NOTES:

1. ASSIGN SPARE TERMINALS ON TS (MISC) LOCALLY. REFER TO TABLE C FOR IDENTIFICATION OF LEADS FROM TS (MISC) TO THE PREWIRED CABLE TERMINAL SECTION OR HOUSE CROSS-CONNECTION TERMINALS.
2. REFER TO SECTION 473-130-201 FOR CONNECTIONS FROM THE TELEPHONE DICTATION TRUNK TO THE DICTATING MACHINE.
3. LEAD MS WAS RATED MD ON ISSUE 6D OF SD-65788-01.

Fig. 8—Connections for Telephone Dictation Trunk Unit J58827C-1 When Sleeve Repeater Unit is Provided

## 8. BUSY VERIFICATION AUXILIARY TRUNK CIRCUIT

**8.01** The busy verification auxiliary trunk circuit permits the PBX attendant at an attendant console to establish a talking connection to any idle, busy, or busy and camped-on station. The trunk is auxiliary-to-attendant trunk 2.

**8.02** The J58829AJ-1, List 1 unit consists of assembly, wiring, and equipment for one busy verification auxiliary trunk unit. List 1 requires one 2- by 23-inch mounting plate position. List 2 is provided in addition to List 1 on an

optional basis when a warning tone generator is required. List 2, when provided, is mounted on List 1. (See Fig. 14.)

**8.03** The busy verification unit should be mounted at slide 4 mounting plate position AB.

**8.04** Connections to the busy verification unit are made at connector J1 by slide 4 local cable plug P1. Shorting plugs on plug P1 should be removed before P1 is installed.

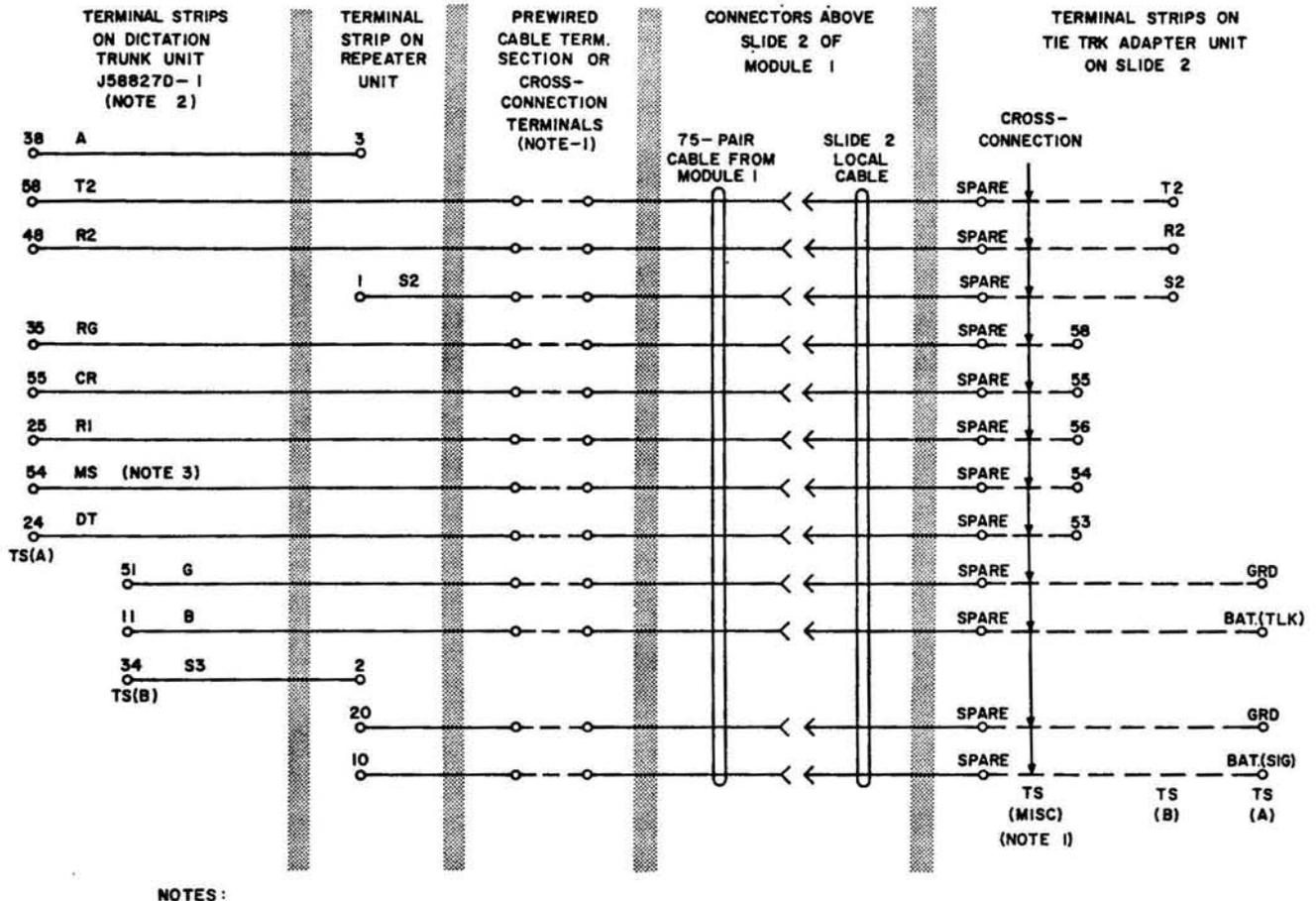


Fig. 9—Connections for Telephone Dictation Trunk Unit J58827D-1 When Sleeve Repeater Unit is Provided

## 9. AUXILIARY POSITION CIRCUIT FOR REMOTE TRUNK ANSWERING

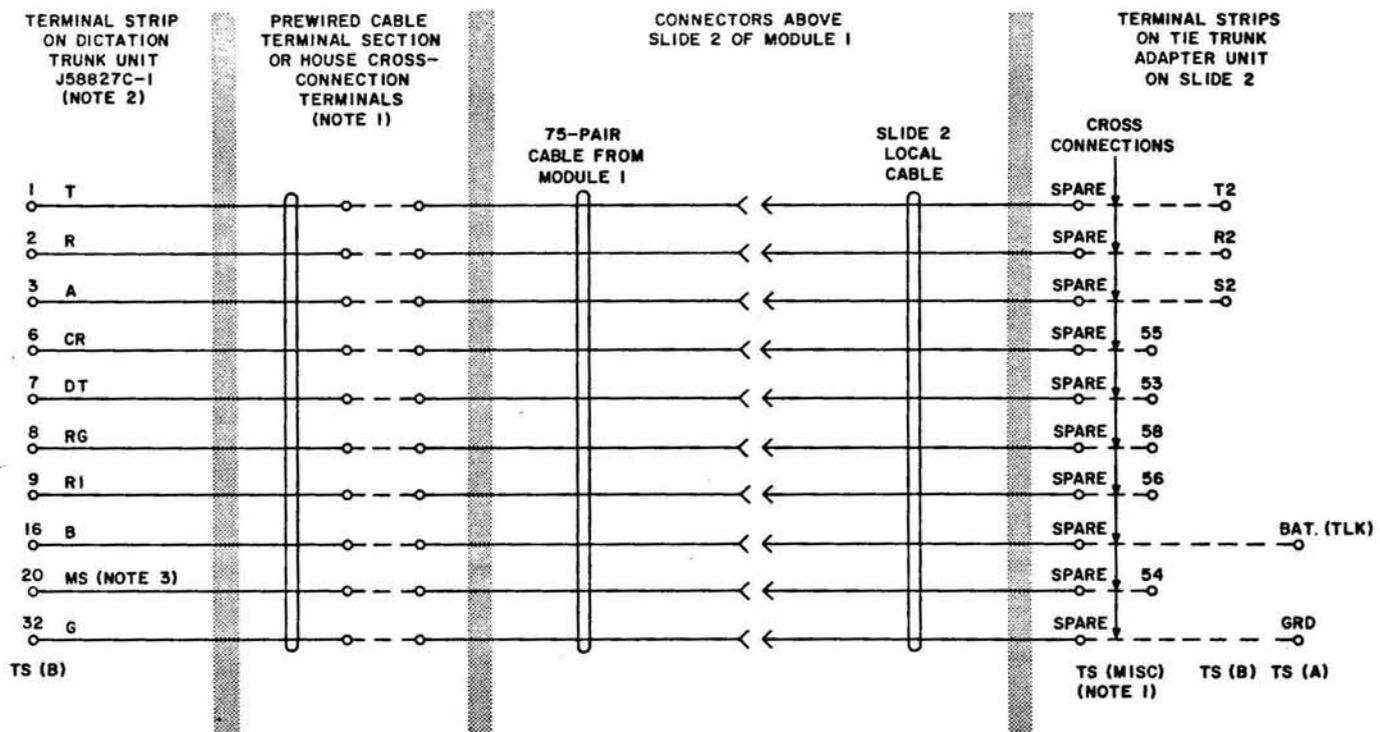
**9.01** The auxiliary position circuit for remote trunk answering permits any PBX station to answer any incoming central office trunk call. This feature is activated by removing the headset at consoles and/or operating the remote answer key at the 6-button key telephone set when provided. An incoming central office call to the PBX activates a visual and/or audible signal. Anyone aware of the signal may go to the nearest idle PBX station set and dial the trunk answering code. This action retires the audible and/or visual signal and connects the PBX station and the incoming central office

trunk. The PBX station can then transfer the call once to another PBX station.

**9.02** The remote trunk answering circuit uses one of the universal line circuits. The station line capacity of the PBX is reduced by one when the remote trunk answering feature is provided.

**9.03** The universal line circuit used by the remote trunk answering circuit must be renumbered from the 20 through 29 series to the 80 through 89 series. Also, the dial pulse register must be wired for code 8 operation. Refer to Section 551-147-210.

SECTION 551-144-210



NOTES:

1. ASSIGN SPARE TERMINALS ON TS (MISC) LOCALLY. REFER TO TABLE C FOR IDENTIFICATION OF LEADS FROM TS (MISC) TO THE PREWIRED CABLE TERMINAL SECTION OR HOUSE CROSS-CONNECTION TERMINALS.
2. REFER TO SECTION 473-130-201 FOR CONNECTIONS FROM THE TELEPHONE DICTATION TRUNK TO THE DICTATING MACHINE.
3. LEAD MS WAS RATED MD ON ISSUE 6D OF SD-65788-01.

Fig. 10—Connections for Telephone Dictation Trunk Unit J58827C-1 When Sleeve Repeater Unit is not Provided

9.04 *J58829AH-1, List 1* consists of assembly, wiring, and equipment for one auxiliary position unit for remote trunk answering. The auxiliary position unit occupies three adjacent 2-23-inch mounting plate positions.

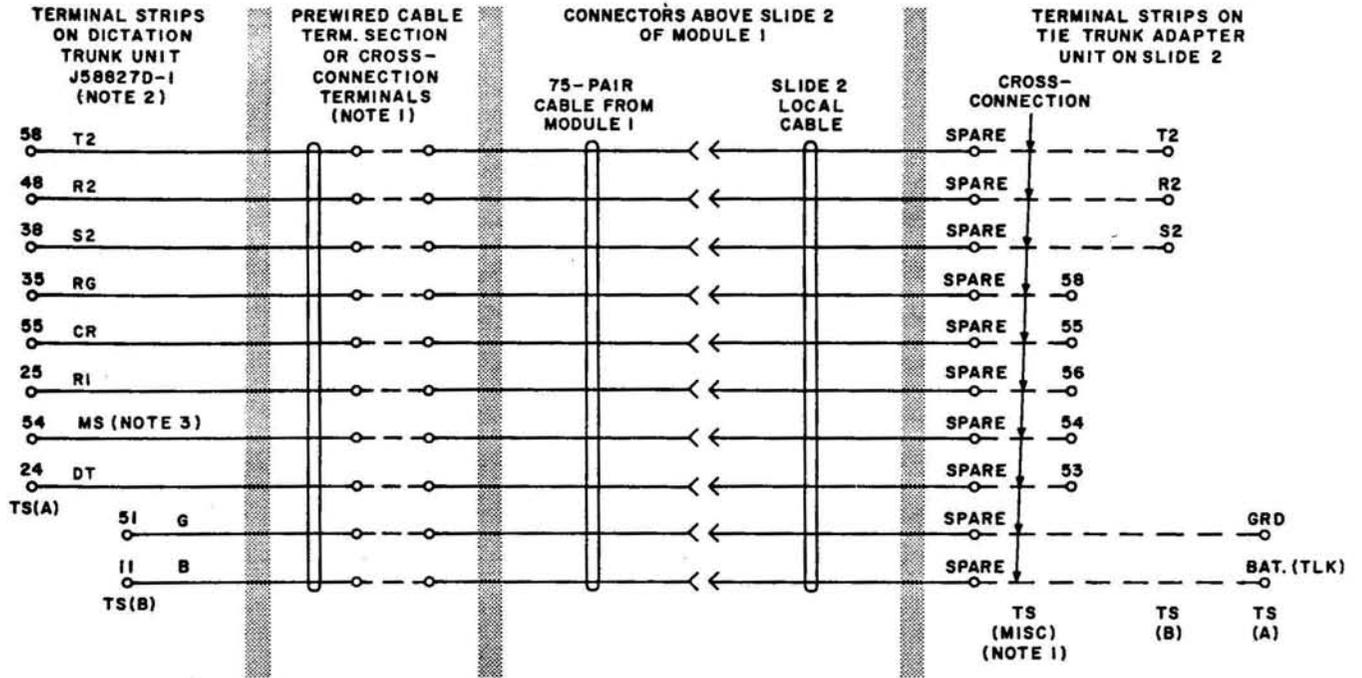
9.05 *J58829AH-1, List 2* consists of a 30-foot connector-ended cable for interconnecting the PBX and the auxiliary position unit. (See Fig. 15.)

9.06 Mount the auxiliary position unit in an apparatus cabinet external to the PBX.

9.07 At crown section of PBX above slide 5, remove KS-14173 shorting plugs from connectors AS5 and AT5. Connect the cable at the PBX. Refer to Section 551-100-211.

9.08 Extend the cable from the PBX to the auxiliary position unit and plug in plugs 1 and 2.

9.09 At slide 2, connect slide local cable leads at the tie trunk adapter unit. (See Fig. 16.)

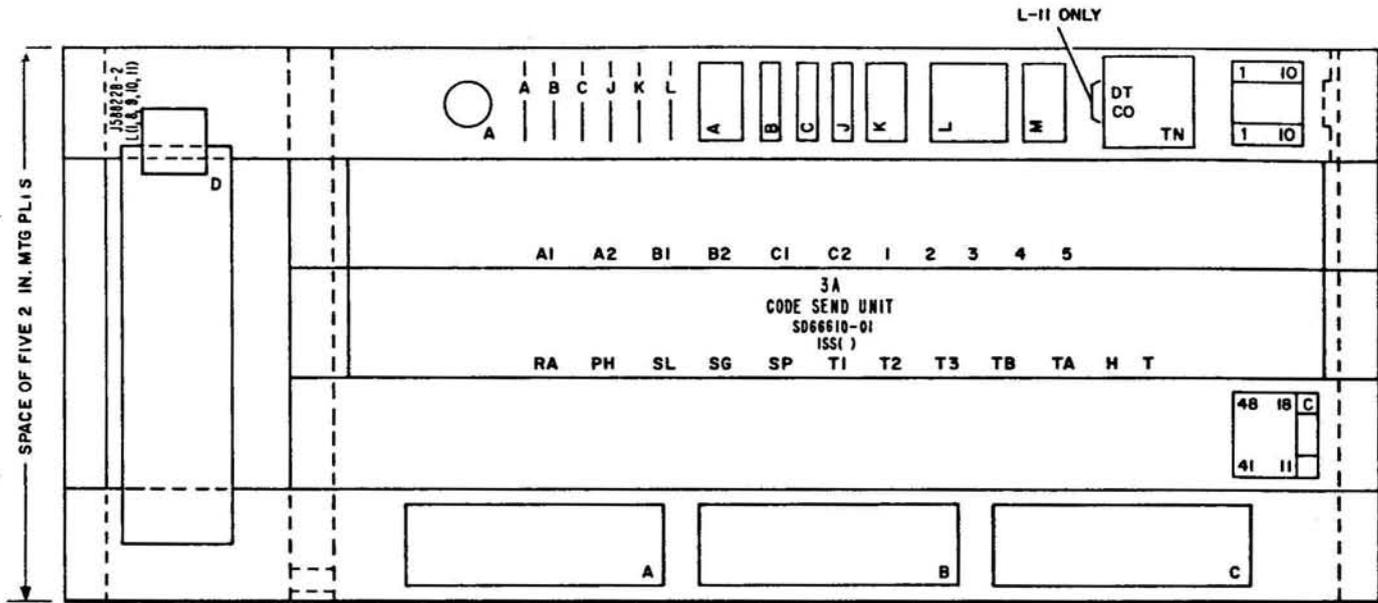


**NOTES:**

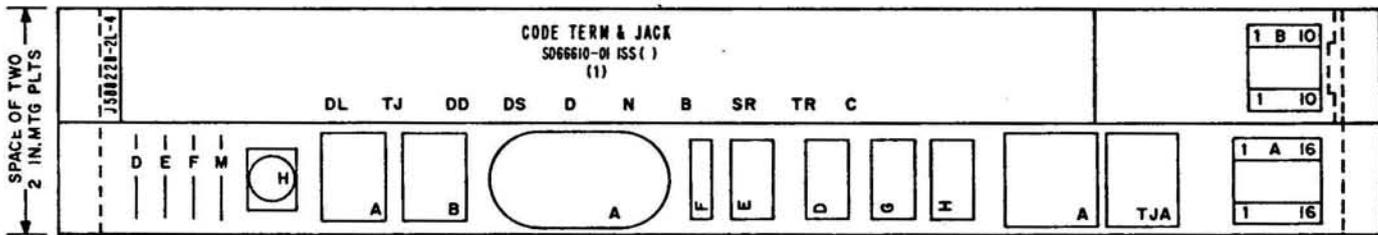
1. ASSIGN SPARE TERMINALS ON TS (MISC) LOCALLY. REFER TO TABLE C FOR IDENTIFICATION OF LEADS FROM TS (MISC) TO THE PREWIRED CABLE TERMINAL SECTION OR HOUSE CROSS-CONNECTION TERMINALS.
2. REFER TO SECTION 473-130-201 FOR CONNECTIONS FROM THE TELEPHONE DICTATION TRUNK TO THE DICTATING MACHINE.
3. LEAD MS WAS RATED MD ON ISSUE 6D OF SD-65788-01.

**Fig. 11—Connections for Telephone Dictation Trunk Unit J58827D-1 When Sleeve Repeater Unit is not Provided**

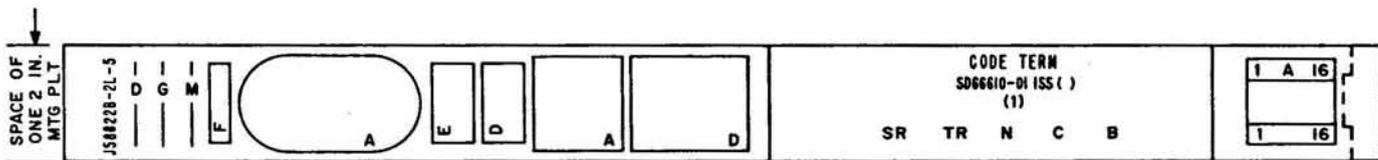
SECTION 551-144-210



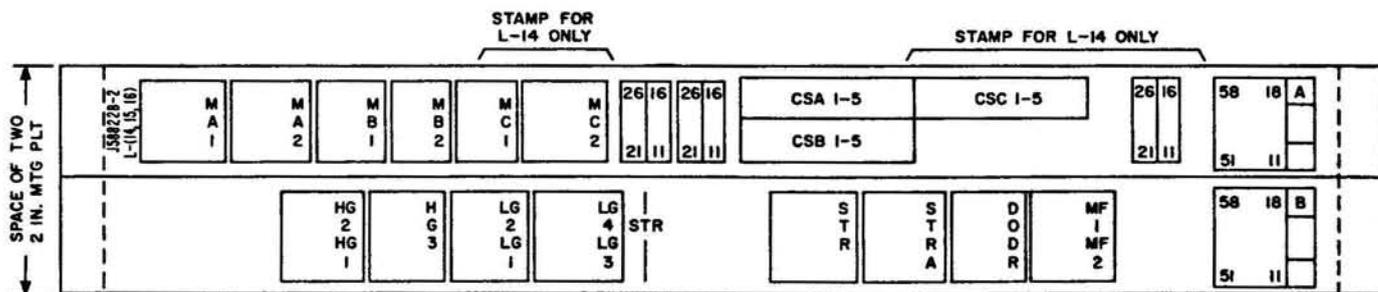
LIST 1, 8, 9, 10, 11



LIST 4



LIST 5



LIST 14, 15, 16

Fig. 12-3A Code Call Unit Equipment J58822B-2

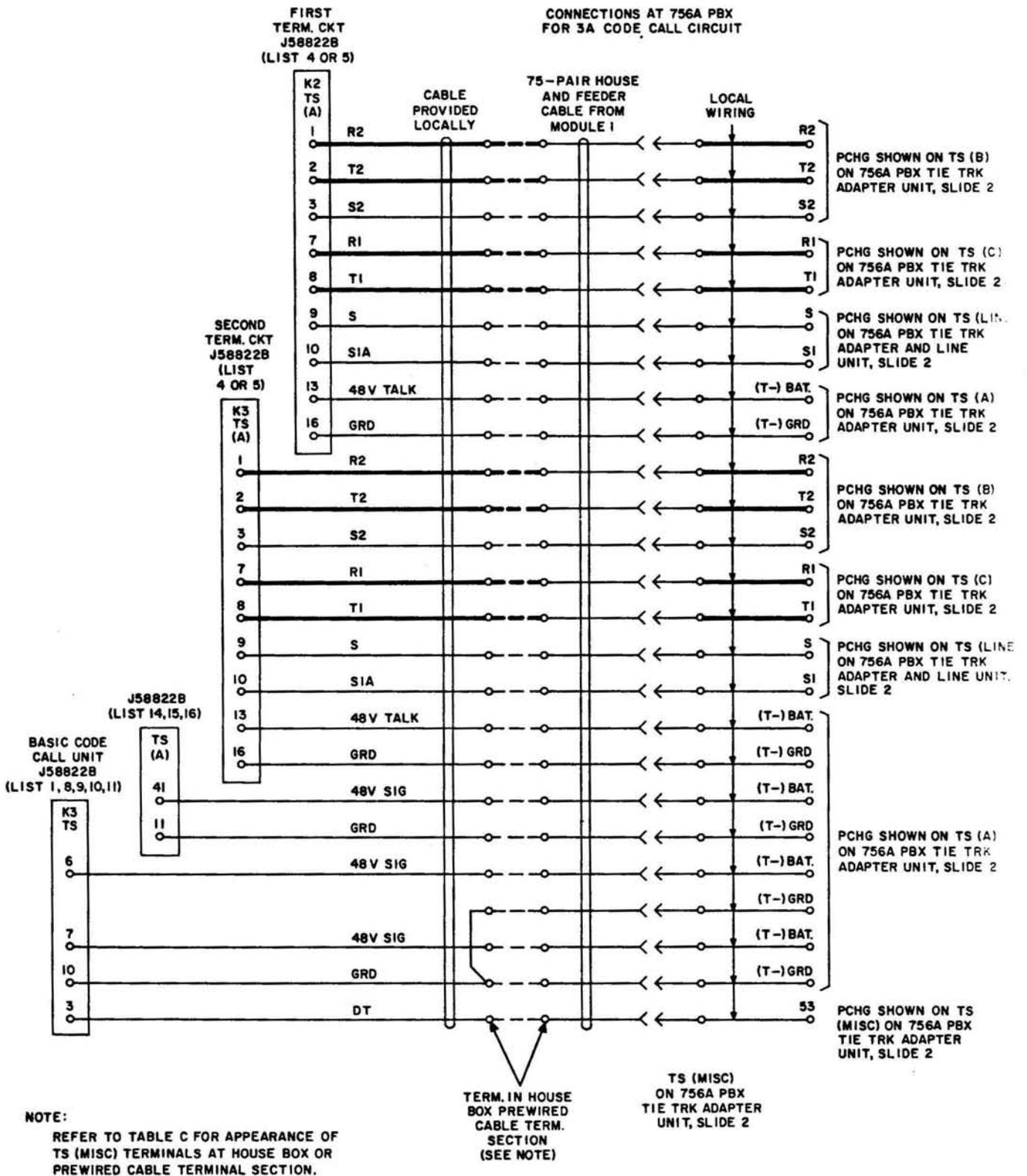


Fig. 13—Connections for 3A Code Call Circuit

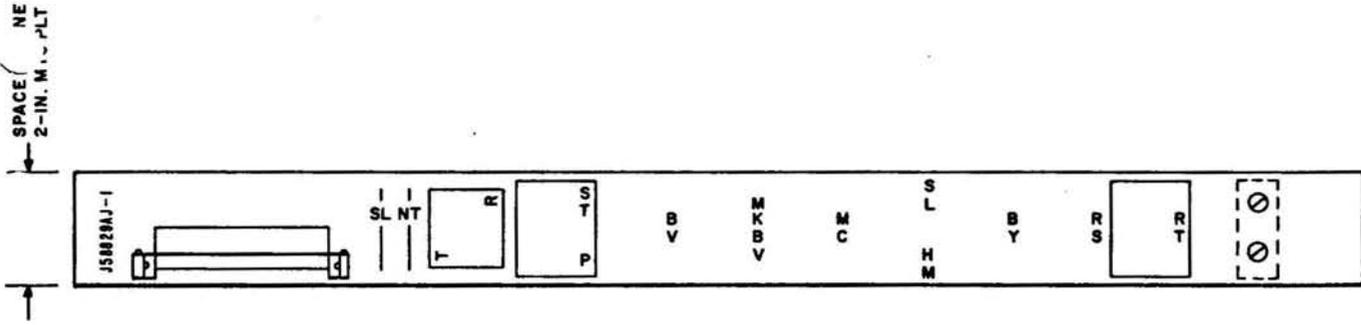


Fig. 14—Busy Verification Auxiliary Trunk Unit J58829AJ-1

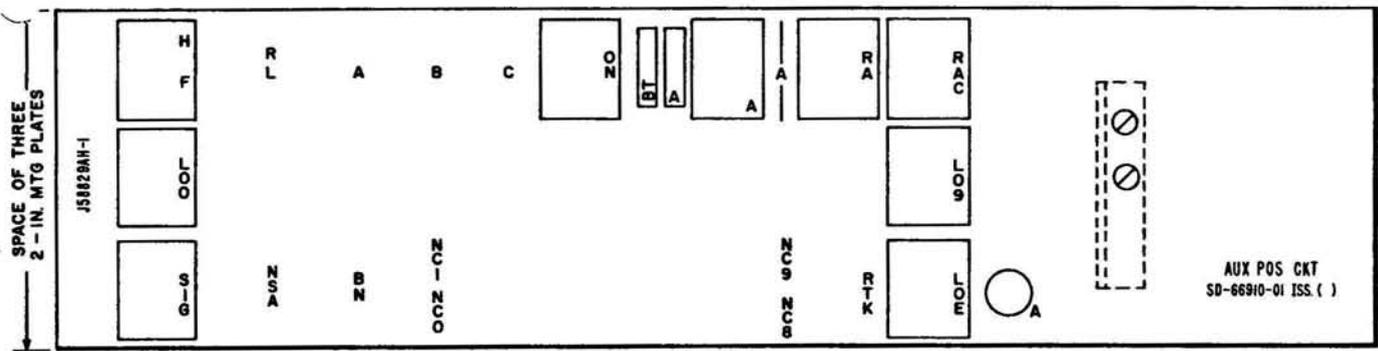


Fig. 15—Auxiliary Position Unit for Remote Trunk Answering J58829AH-1

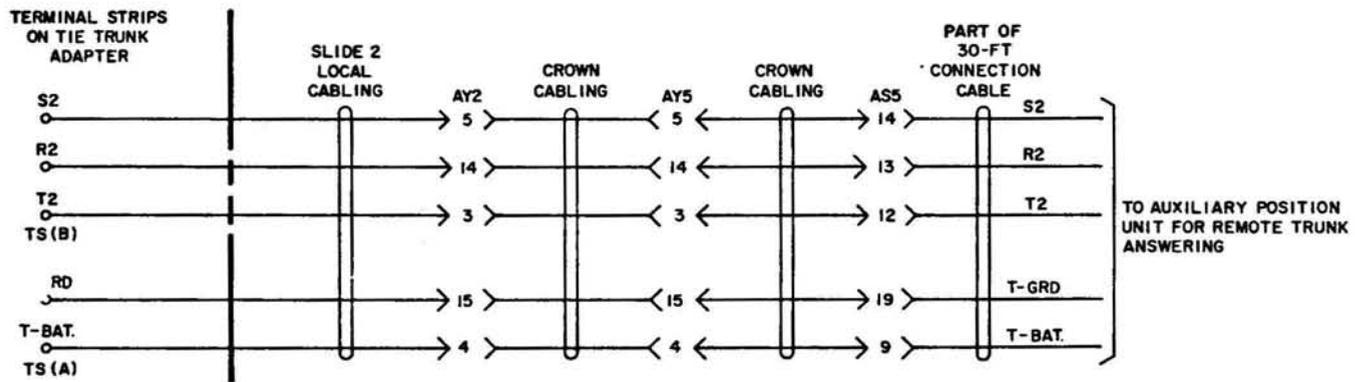


Fig. 16—Identification of Leads From Auxiliary Position Unit to Tie Trunk Adapter