

## VOICE CONNECTING ARRANGEMENT DCT

### J58827E RECORDED TELEPHONE DICTATION TRUNK UNIT

#### 1. GENERAL

**1.01** This section provides identification, installation, operation, maintenance, and connection information for Voice Connecting Arrangement DCT (Fig. 1 and 2) when used with the 701A, B; 711A, B; 740A, AX, B, C, E; 755A, 756A, 757A, 800A PBX Systems, No. 5 Crossbar CENTREX, No. 101 Electronic Switching System, and Electronic Switching System CENTREX, and the No. 400 Switching System, to provide interface connections between Bell System and customer-provided (CP) equipment. The equipment used to implement Voice Connecting Arrangement DCT is determined by the specific installation (See Table A and Part 2, ORDERING GUIDE).

**1.02** Voice Connecting Arrangement DCT is designed to function with a variety of CP dictation machines which have different operational and playback features. Table B shows the various Operational Features and Table C shows the various Playback Feature Groups. The various switching system options are shown in Table D.

**1.03** This section provides information formerly contained in Sections 473-131-201 and 473-131-501, which are hereby cancelled.

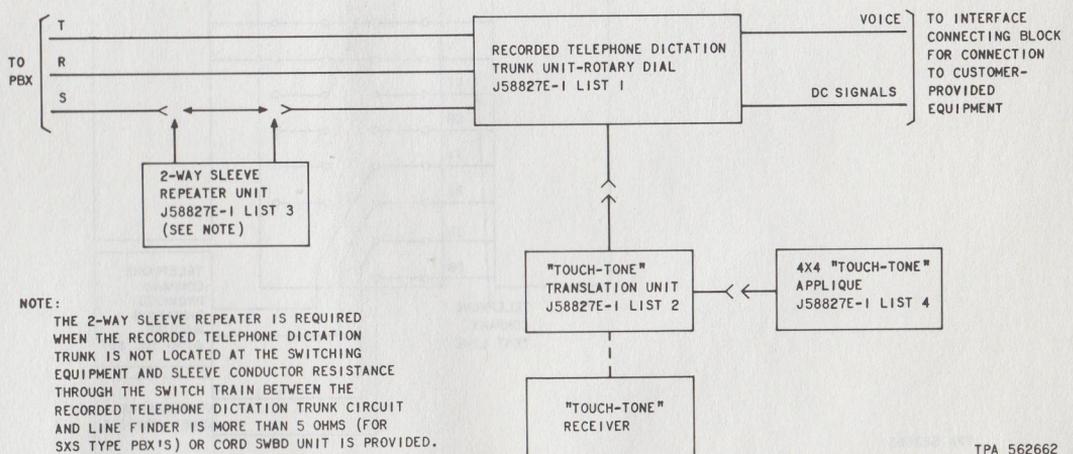
**1.04** This issue of the section is based on the following drawings:

CD-5E038-01 Issue 2B

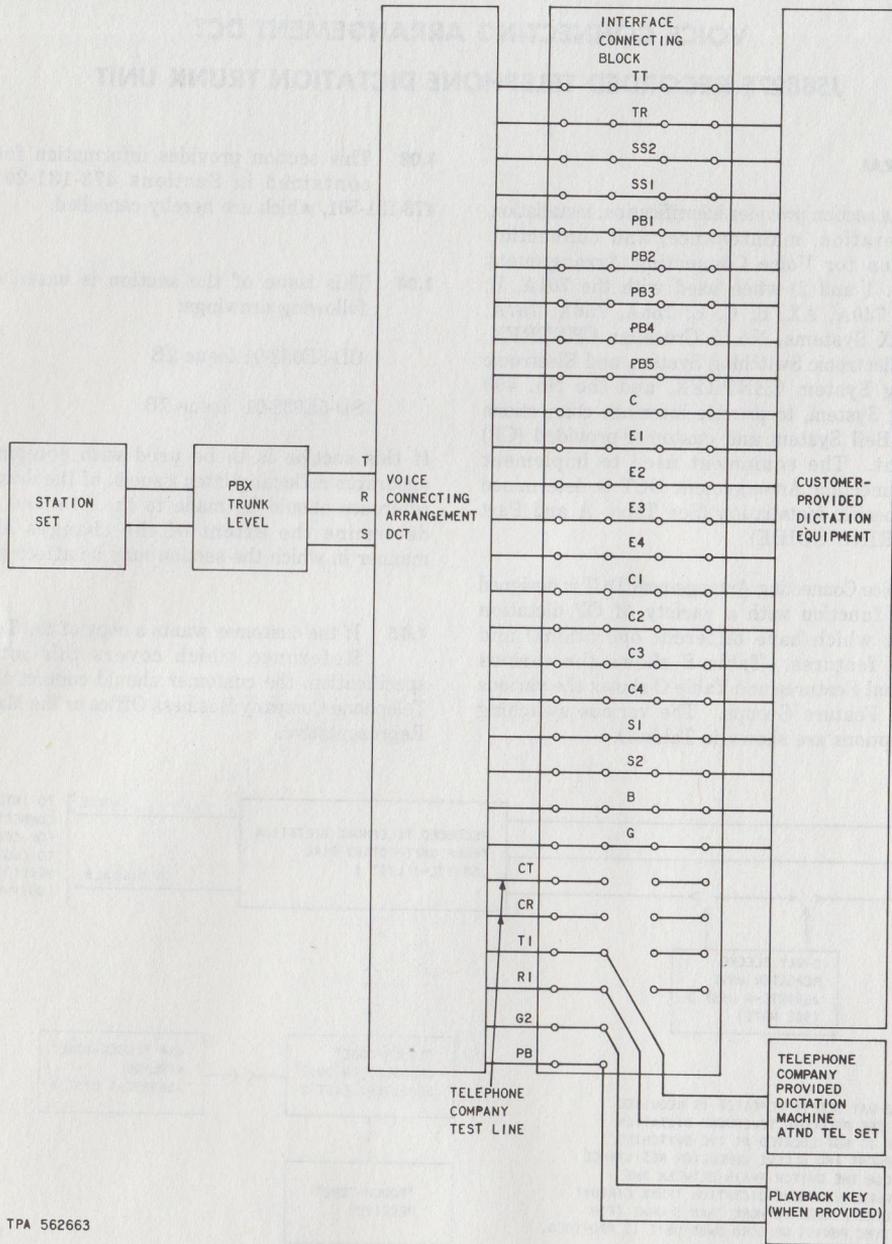
SD-5E038-01 Issue 7B

If this section is to be used with equipment or apparatus reflecting later issue(s) of the drawing(s), reference should be made to the CDs and SDs to determine the extent of the changes and the manner in which the section may be affected.

**1.05** If the customer wants a copy of the Technical Reference which covers this interface specification, the customer should contact the local Telephone Company Business Office or the Marketing Representative.



**Fig. 1—Typical Equipment Configuration-Voice Connecting Arrangement DCT**



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Fig. 2—Block Diagram—Voice Connecting Arrangement DCT

TABLE A  
EQUIPMENT SUMMARY

EQUIPMENT CODE	DESCRIPTION AND FUNCTION	SCHEMATIC
J58827E List 1	Basic dictation trunk unit to provide for connection between CP equipment and Bell System PBX	SD-5E038-01 Fig. 1
J58827E List 2	Equipment required in addition to List 1 to provide for TOUCH-TONE® operation.	SD-5E038-01 Fig. 4
J58827E List 3	Equipment required in addition to List 1 to provide for one 2-way sleeve repeater when the dictation trunk unit is not located at the switching equipment, or cord switch-board unit is provided.	SD-5E038-01 Fig. 3
J58827E List 4	Required in addition to List 2 to provide 4 x 4 TOUCH-TONE operation.	SD-5E038-01 Fig. 4
J58827E List 5	Required in addition to List 1 to provide a connector cable ED-1E073-10, Group 5 when dictation trunk is used with the 800A PBX and rotary dial operation is required.	SD-5E038-01 Fig. 5
J58827E List 6	Required in addition to List 1 to provide connector cables ED-1E073-10, Group 5 and Group 4, when dictation trunk is used with the 800A PBX and TOUCH-TONE operation is required.	SD-5E038-01 Fig. 6

## 2. IDENTIFICATION

### PURPOSE

- To provide access from a Bell System PBX to CP dictation equipment via a dial access code (e.g., dial "7")
- To provide voice-only transmission to and from the CP equipment
- To provide rotary dial or TOUCH-TONE® dial (optional) control signals to voice controlled or dial controlled CP equipment
- To provide a means of calling in the CP dictation equipment attendant for assistance (Telephone Company-provided telephone set)
- To limit abnormally high voice and supervisory tone levels to the Bell System PBX
- To provide longitudinal isolation
- To protect Telephone Company personnel and facilities from hazardous voltages.

### ORDERING GUIDE

- J58827E, List 1 Recorded Telephone Dictation Trunk Unit (Fig. 3)—basic dictation trunk

TABLE B

## OPERATIONAL FEATURES

OPERATION DESCRIPTION		FEATURE	SWITCHING SYSTEM	PROVIDE OPTION (See Note 1)	
Dictation Machine Start-Stop Controlled By (Choose one)	Dial "1"	A	ESS 101-1A SW Unit	ZW, W	
			ESS 101-2A 3A, 4A SW Unit	K, ZH	
			All Others (See Note 2)	TOUCH-TONE DIAL	M, W, ZG
	Voice	B		Rotary Dial	G, W
			ESS 101-1A SW Unit	ZW, V	
			ESS 101-2A, 3A, 4A SW Unit	K, ZI	
		All Others	M, V		
Machine Attendant Playback Control Key		C	All Systems	Provide Key, 551A	
Playback Reduced by Dialing 2 (Choose one)	Yes	D	All Systems	F	
	No	E		E	
When Dictation Machine Becomes Unavailable to Record (Choose one)	Makes Circuit Busy and Signals Attendant	F	All Systems	B	
	Makes Circuit Busy	G		ZA	

unit for connection between CP equipment and Bell System equipment

- J58827E, List 2 TOUCH-TONE Translation Unit (Fig. 4)—required in addition to List 1 for TOUCH-TONE operation
- J58827E, List 3 2-Way Sleeve Repeater Unit (Fig. 4)—required when the recorded telephone dictation trunk unit is not located at the switching equipment and sleeve conductor resistance through the switch train between the trunk circuit and line finder is greater than 5 ohms (for SXS type PBX) *or* a cord switchboard unit is provided
- J58827E, List 2, 4 TOUCH-TONE translation unit—wired and equipped to provide 4 X 4 (16-button) TOUCH-TONE operation (ZD option)
- J58827E, List 5 ED-1E073-10, Group 5 Connector Cable—required when dictation trunk (J58827E, L1) is used with 800A PBX

- J58827E, List 6 ED-1E073-10, Group 5 Connector Cable and ED-1E073-10, Group 6 Connector Cable—required when dictation trunk (J58827E, L1) is used with 800A PBX and TOUCH-TONE translation unit (J58827E, L2) is provided.

**Associated Apparatus (Order Separately)**

- J99289A TOUCH-TONE Receiver Cabinet (Fig. 4)—arranged to mount two receiver assemblies
- J99289B TOUCH-TONE Receiver Assembly (Fig. 4)—A-Type TOUCH-TONE receiver unit; one required per dictation trunk when TOUCH-TONE operation is provided
- J58866A Auxiliary Power Unit—required when the connecting arrangement is not located at the PBX and local power is required; must also be provided when the connecting arrangement is used with a 755A PBX

TABLE C  
PLAYBACK FEATURES

PLAYBACK DESCRIPTION		FEATURE GROUP (CHOOSE ONE)	SWITCHING SYSTEM	PROVIDE OPTION (SEE NOTE 1)
Machine Provides End-of-Playback Sig.	No	1	ALL	R
Dial 3 Extends Playback	No			
Dial 1 Ends Playback	Yes			
Machine Provides End-of-Playback Sig.	Yes	2	ALL	N
Dial 3 Extends Playback	Yes			
Dial 1 Ends Playback	No			
Machine Provides End-of-Playback Sig.	Yes	3	ALL	Q
Dial 3 Extends Playback	No			
Dial 1 Ends Playback	Yes			
Machine Provides End-of-Playback Sig.	Yes	4	ALL	A
Dial 3 Extends Playback	Yes			
Dial 1 Ends Playback	Yes			

NOTES 1 — See Table G for installer provided straps required to implement options.

2 — If both Rotary and TOUCH-TONE<sup>®</sup> dial stations access this circuit, use options specified for TOUCH-TONE operation.

**Note:** This power unit meets acceptable noise requirements as explained under Power Supplies in Section 332-104-102. Other power units may be used when specified by local engineering.

- Key, 551A or equivalent—Attendant Playback Key, provided when requested by the customer and installed as directed by the customer
- Cable, Wiring, "D" inside, or equivalent (for cabling from connecting arrangement to interface connecting block)
- Cable, Connector, A25B, or equivalent (for cabling from connecting arrangement to J58849C quick-connect field when dictation trunk is used with 800A PBX)
- Block, Connecting, 66M1-50 (Fig. 5)

**Note:** Other types of blocks may be used when specified by local engineering.

- Clip, Bridging, B (25 per pkg).

#### DESIGN FEATURES

##### J58827E, List 1 Recorded Telephone Dictation Trunk Unit

- Mounts on standard 23-inch relay rack
- Size—4 by 23 inches
- Provides basic circuit for connection between CP equipment and Bell System equipment
- Provides Test and MB jack for test purposes.

##### J58827E, List 2 TOUCH-TONE Translation Unit

- Mounts on standard 23-inch relay rack
- Size—2 by 23 inches
- Provides basic circuitry for use with dictation trunk unit when 4 X 3 (12-button) TOUCH-TONE operation is required

**TABLE D**  
**SWITCHING SYSTEM OPTIONS**

FEATURE OR OPTION (See Note 1)			PROVIDE		
			LIST	OPTION	
TRK CKT	Trunk located at Switching System	With switch- boards having station line jacks — using SWBD sleeve circuit (See Note 2.)	701 or 740 PBX's using SEL CONNS or 2-Digit Rotary Selectors	1&3	Z,ZF
			756A PBX		
			All other Switching Systems		ZF
		No switchboards or switchboards without station line jacks	701 or 740 PBX's using SEL CONNS or 2-Digit Rotary Selectors	1	Y,S
			All other Switching Systems		S
	For SXS PBX's only — Trunk not located at Switching Equipment — Using 2-Way Sleeve Repeater (See Note 3.)		SXS PBX's using SEL CONNS or 2-Digit Rotary Selectors	1&3	Z,ZF
			SXS PBX's using Regular Selectors		ZF
	ESS No. 1 CENTREX		Yes	1	ZK
			No		ZJ
	740E PBX (in addition to above options)				ZE
800A PBX (in addition to above options)				ZQ	
Loop resistance to attendant telephone set		Less than 300 OHMS		ZL	
		More than 300 OHMS		ZM	
TOUCH-TONE operation	Required with	4X3 TOUCH-TONE REC	2	ZC	
		4X4 TOUCH-TONE REC	2,4	ZC,ZD	
	Not required			ZB	
Ringing machine not provided (740-Type PBX or 755A PBX)				J	

*Notes* 1. See Table G for installer provided straps required to implement options.

2. List 3 is used as a sleeve circuit and is located with the dictation trunk.

3. List 3 is used as a two-way sleeve repeater and is located at the PBX.



Fig. 3—Voice Connecting Arrangement DCT-Basic Unit

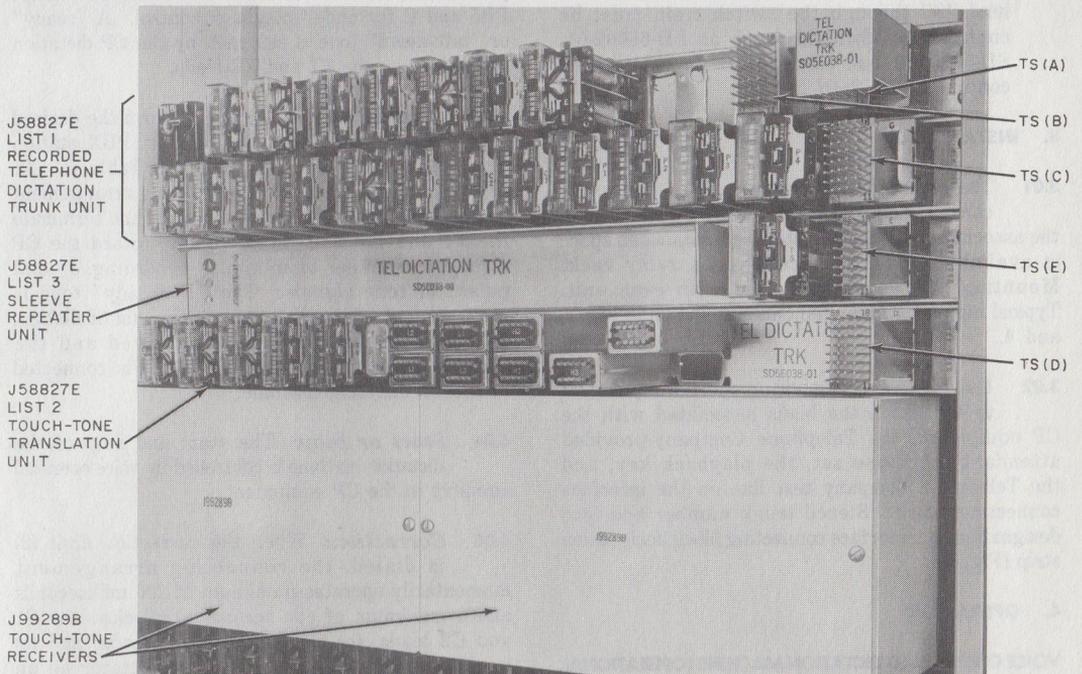


Fig. 4—Voice Connecting Arrangement DCT-Basic Unit with TOUCH-TONE® Translation Unit, TOUCH-TONE Receivers, and Sleeve Repeater Unit

- May be used for 4 X 4 (16-button) TOUCH-TONE operation when equipped with List 4.

### J58827E, List 3 2-Way Sleeve Repeater

- Mounts on standard 23-inch relay rack
- Size—2 by 23 inches
- Provides circuitry to extend sleeve lead function when the sleeve conductor resistance between the dictation trunk and line finder is greater than 5 ohms or when a cord switchboard unit is provided.

**Note:** When a cord switchboard is provided, lead "S" through the switch train must be continuous. Switches such as SD-66002-01, SD-66005-01 and SD-66142-01 do not provide continuous "S" lead.

### 3. INSTALLATION

**3.01** The recorded telephone dictation trunk units can be mounted on a 23-inch relay rack in the associated switching system cabinets when space is available or on a miscellaneous relay rack. Mounting screws are provided with each unit. Typical mounting arrangements are shown in Fig. 3 and 4.

**3.02** Use the "D" inside wiring cable or equivalent to terminate the leads associated with the CP equipment, the Telephone Company-provided attendant telephone set, the playback key, and the Telephone Company test line on the interface connecting block. Stencil trunk number and lead designations on interface connecting block designation strip (Fig. 5).

### 4. OPERATION

#### VOICE CONTROLLED DICTATION MACHINE (OPERATIONAL FEATURE A)

**4.01 Idle Condition:** When the CP dictation machine is available for use (idle condition), a closure is provided by the CP dictation machine across leads B and G to hold up a supervisory relay (S relay) in Voice Connecting Arrangement DCT which provides an indication toward the associated PBX that the circuit is available for use (Fig. 6). When there is trouble in the CP dictation machine (machine unable to record), leads B and G are

opened by the CP dictation machine and the circuit is made busy toward the PBX (Operational Feature G). In addition, if Operational Feature F is provided, this open causes the connecting arrangement to pass ringing to the dictation machine attendant telephone set.

**4.02 Seizure:** When Voice Connecting Arrangement DCT is seized by a PBX station user dialing the assigned circuit access or service code (e.g., dial "7"), a 600-ohm termination is removed from the TT and TR leads and the CP dictation machine is connected to the transmission path of the connecting arrangement. Leads S1 and S2 are closed toward the CP dictation machine and with Playback Feature Groups 2, 3, and 4, a closure is provided by the CP dictation machine across leads PB5 and C for end-of-playback control. A "ready" or "talk-down" tone is returned by the CP dictation equipment on the TT and TR leads.

**4.03 Control Functions:** To perform the desired control functions, the dictator (PBX station user) must dial the digits listed in Table E. At the beginning of dialing, the connecting arrangement operates to open the transmission path and terminate the TT and TR leads in 600 ohms toward the CP dictation machine to minimize recording of dial pulses or tone signals. The CP "ready" tone is removed toward the dictator. At the end of dialing, the 600-ohm termination is removed and the transmission path (TT and TR leads) is connected to the CP dictating machine.

**4.04 Start or Stop:** The start and stop of the dictation machine is controlled by voice-operated circuitry in the CP equipment.

**4.05 Correction:** When the correction digit (2) is dialed, the connecting arrangement momentarily operates (minimum of 200 milliseconds and a maximum of one second) to (a) close the C1 and C2 leads, (b) close C3 and C4 leads, and (c) apply a burst of dial tone to the dictator as an acknowledgment. The connecting arrangement then returns to the dictate condition by the application of the CP "talk-down" tone on the TT and TR leads.

**4.06 Playback:** When the playback digit (3) is dialed, the connecting arrangement performs the following sequential operations:

- Feature Group 1:** Closes the PB1 and PB2 leads. After a minimum of 200 milliseconds,

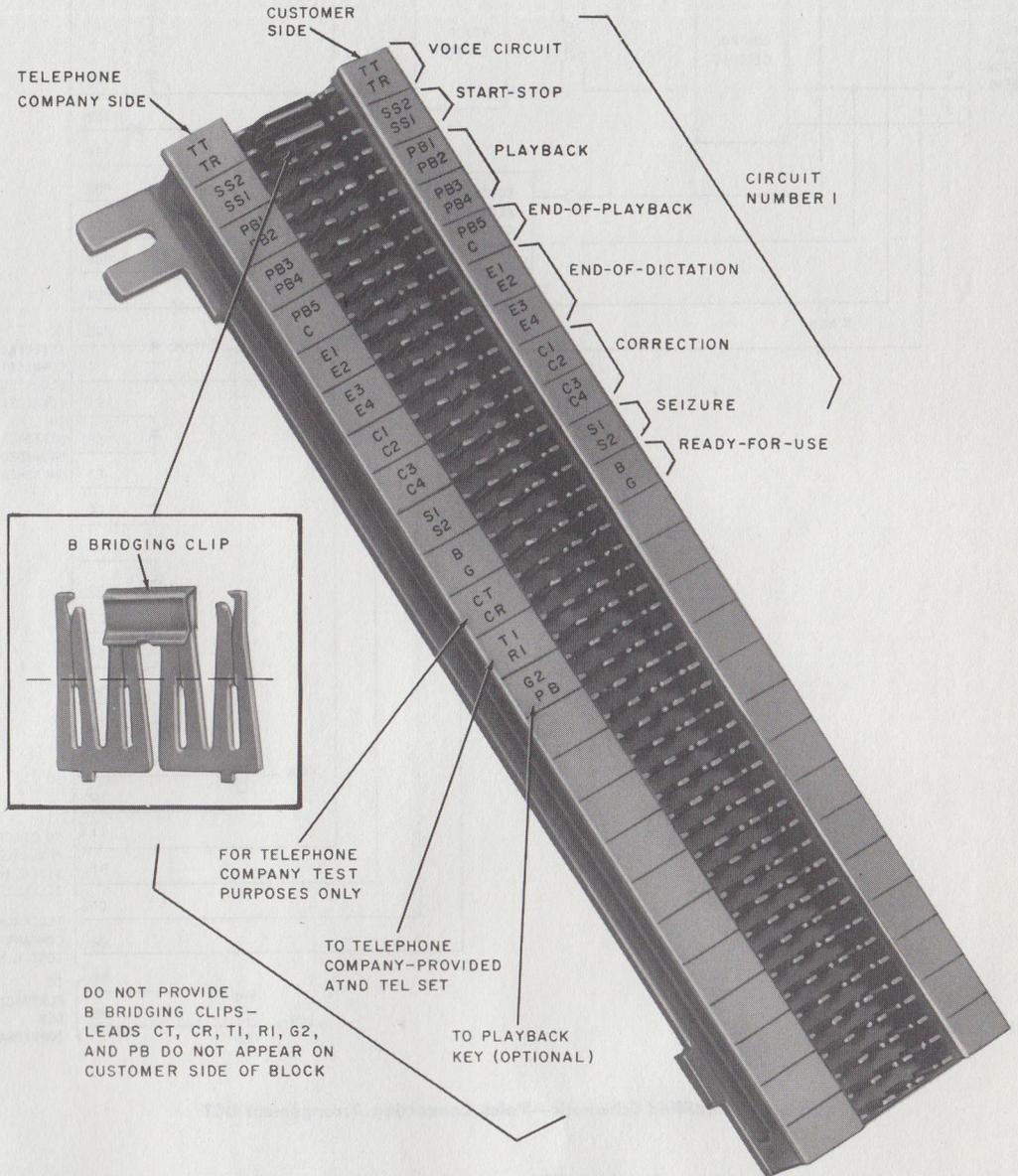
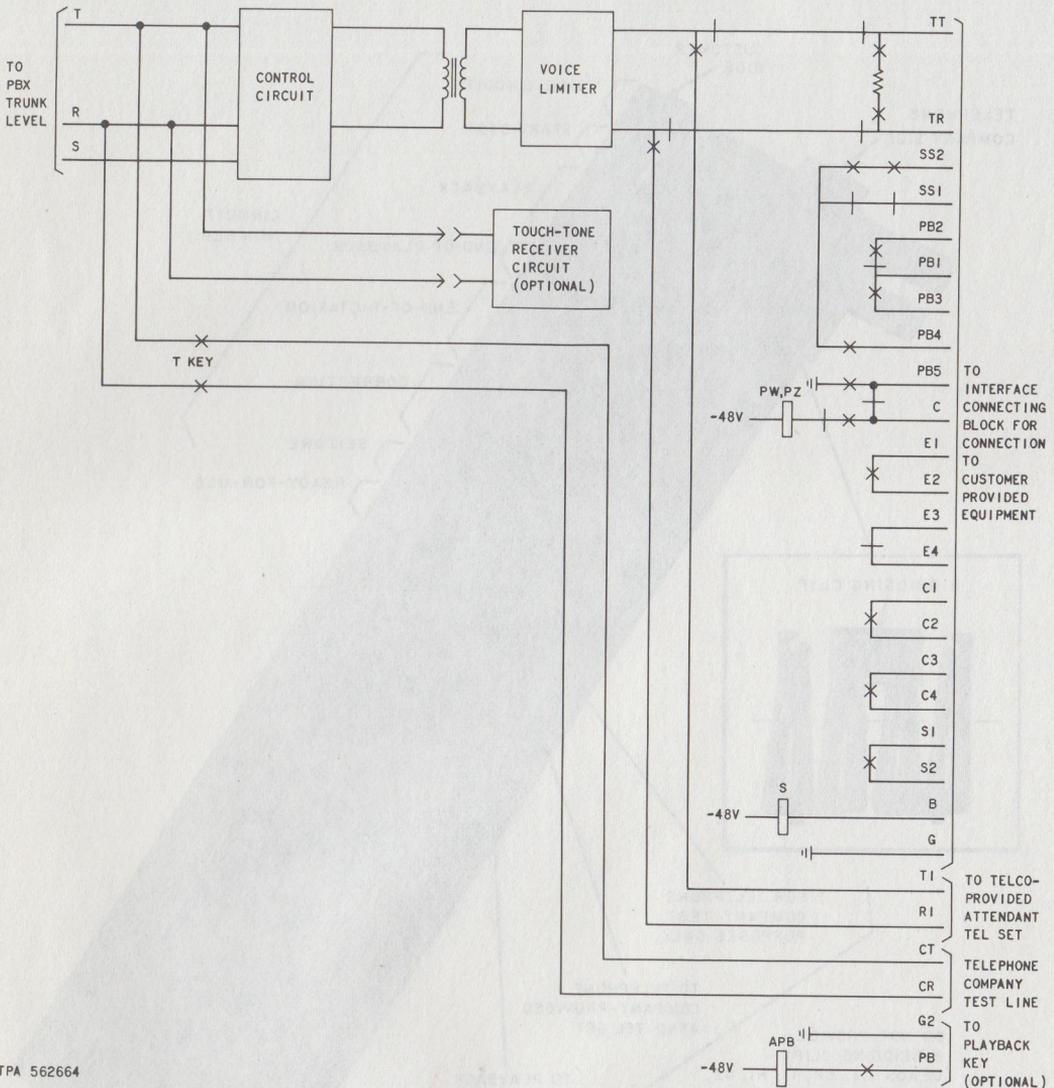


Fig. 5—Typical Interface Connecting Block



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Fig. 6—Simplified Schematic—Voice Connecting Arrangement DCT

the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3 and closes the PB4 lead to the SS1 lead.

(b) **Feature Group 2:** Closes the PB1 and PB2 leads. After a minimum of 200 milliseconds,

the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3, closes the PB4 lead to the SS1 lead, and locks in the playback mode over the C and PB5 leads under control of the CP dictation machine. The playback digit (3) may be dialed repeatedly to reclose the PB1

TABLE E

## DICTATION TRUNK CONTROL FUNCTIONS

DIGIT DIALED	DIAL CONTROLLED MACHINE	VOICE CONTROLLED MACHINE
1	Start-Stop	Cancel remainder of playback
	Stop ringing of attendant telephone set when attendant does not answer.	Stop ringing of attendant telephone set when attendant does not answer.
	End or cancel of playback	
2	Correction	Correction
		Reduce extended playback
3	Playback	Playback
4	End of dictation	End of dictation
0	Dictation machine attendant	Dictation machine attendant

and PB2 leads, each time for a minimum of 200 milliseconds, to allow the CP dictation machine to extend playback time.

(c) **Feature Group 3:** Closes the PB1 and PB2 leads. After a minimum of 200 milliseconds, the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3, closes the PB4 and SS1 leads, and locks in the playback mode over the C and PB5 leads under control of the CP dictation machine.

(d) **Feature Group 4:** Closes the PB1 and PB2 leads. After a minimum of 200 milliseconds, the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3, closes the PB4 to the SS1 lead, and locks in the playback mode over the C and PB5 leads under control of the CP dictation machine. The playback digit (3) may be dialed repeatedly to reclose the PB1 and PB2 leads, each time for a minimum of 200 milliseconds, to allow the CP dictation machine to extend playback time.

**4.07 End of Playback or Cancel Remainder of Playback:** The digit (1) may be dialed at the end of playback or to cancel playback, according to the provided playback feature group as follows:

(a) **Feature Group 1:** The dictation machine does not indicate that playback is in progress

within feature group. The dictator must dial (1) to end the playback. This action opens the PB1 and PB3 leads and opens the PB4 and SS1 leads. The connecting arrangement returns to the dictate condition indicated by the return of CP "talk-down" tone to the dictator.

(b) **Feature Group 2:** At the end of playback, the CP dictation machine automatically removes ground from the C lead for a minimum of 25 milliseconds. Subsequently, the connecting arrangement returns to the dictate condition, indicated by the return of CP "talk-down" tone to the dictator.

(c) **Feature Groups 3 and 4:** The dictator may cancel playback by dialing the digit (1). Alternately, at the normal end of playback, the dictation machine automatically removes ground from the C lead for a minimum of 25 milliseconds. In either case, the circuit opens the PB1 and PB3 leads and opens the PB4 and SS1 leads. The connecting arrangement returns to the dictate condition, indicated by the return of CP "talk-down" tone to the dictator.

**4.08 End of Dictation:** At the end of dictation, digit (4) is dialed. When digit (4) is dialed, the connecting arrangement opens the E3 and E4 leads, closes the E1 and E2 leads, and returns dial tone as an acknowledgment tone. After a short

duration, the connecting arrangement closes the E3 and E4 leads, opens the E1 and E2 leads, and returns to the dictate condition, indicated by a return of CP "talk-down" tone to the dictator.

#### 4.09 Attendant Assistance

(a) **Assistance Before Playback:** When the dictator dials the digit (0), the connecting arrangement operates to terminate leads TT and TR in 600 ohms and rings the attendant station. When the attendant answers, the connecting arrangement connects the dictator to the attendant and disconnects the TT and TR leads from the CP dictation machine.

(b) **Assistance During Playback:** If the dictator dials the attendant after playback has been initiated, the connecting arrangement operates as in (a) "Assistance Before Playback" with the exception that the TT and TR leads are reconnected to the CP dictation machine so that both the dictator and the attendant may hear the playback. Any playback in progress is cancelled by the connecting arrangement as described for Playback Feature Groups 1 and 3.

(c) **Attendant Controlled Playback (Operational Feature C):** If playback is desired while attendant and dictator are connected, the attendant momentarily operates the optional playback key. With the connecting arrangement in manual playback, the TT and TR leads are cut through to connect the dictator and attendant to the CP dictation machine and the connecting arrangement functions as described in 4.06 (Playback). The attendant may cancel playback with Feature Groups 1 or 3 by momentarily operating the optional playback key which causes the arrangement to function as described in 4.07 (End of Playback or Cancel Remainder of Playback).

(d) **Attendant Does Not Answer:** If the access digit (0) is dialed and the attendant does not answer, the dictator may stop ringing of the attendant line by dialing (1) during the silent interval of the ringing signal. This causes a closure on the TT and TR leads which connects the dictator to the transmission path, stops ringing on the attendant line, and restores the connecting arrangement to the dictate condition, indicated by the return of CP "talk-down" to the dictator.

#### 4.10 Disconnect

(a) **Dictator Only:** When the dictator hangs up, the TT and TR leads are terminated in 600 ohms toward the CP dictation machine; the E1 and E2 leads close momentarily (200 milliseconds minimum); the E3 and E4 leads open momentarily (200 milliseconds minimum); the S1 and S2 leads open; and the connecting arrangement is released toward the PBX.

(b) **Dictator Connected to Attendant:** When the attendant hangs up after a call for assistance, the dictator is disconnected from the attendant line and reconnected to the transmission path; the 600-ohm termination is removed from the TT and TR leads; and the TT and TR leads are reconnected to the CP dictation machine. The arrangement returns to the dictate condition, indicated by a return of CP "talk-down" tone to the dictator. If the dictator disconnects first, the procedure is the same as in (a) "Dictator Only" except that the connecting arrangement is not released until the attendant hangs up.

#### DIAL CONTROLLED DICTATION MACHINE (OPERATIONAL FEATURE B)

4.11 **Idle Condition:** When the CP dictation machine is available for use (idle condition), a closure is provided by the CP dictation machine across leads B and G to hold up a supervisory relay (S relay) in Voice Connecting Arrangement DCT, which provides an indication toward the associated PBX that the circuit is available for use (Fig. 6). When there is trouble in the CP dictation machine (machine unable to record), leads B and G are opened by the CP dictation machine and the circuit is made busy toward the PBX (Operational Feature G). In addition, if Operation Feature F is provided, this open causes the connecting arrangement to pass ringing to the CP dictation machine attendant telephone set.

4.12 **Seizure:** When Voice Connecting Arrangement DCT is seized by a PBX station user dialing the assigned circuit access or service code (e.g., dial "7"), a 600-ohm termination is removed from the TT and TR leads and the CP dictation machine is connected to the transmission path of the connecting arrangement. Leads S1 and S2 are closed toward the CP dictation machine; and with Playback Feature Groups 2, 3, and 4, a closure is provided by the CP dictation machine across leads

PB5 and C for end-of-playback control. A "ready" tone consisting of continuous audible ringing or dial tone (according to type of PBX) is returned to the calling station.

**4.13 Control Functions:** To perform the desired control functions, the dictator (PBX station user) must dial the digits listed in Table E. At the beginning of dialing, the circuit operates to open the transmission path and terminate the TT and TR leads in 600 ohms toward the CP dictation machine to minimize recording of dial pulses or tone signals. "Ready" tone is removed toward the dictator. At the end of dialing, the 600-ohm termination is removed and the transmission path (TT and TR leads) is connected to the CP dictation machine.

**4.14 Start or Stop:** When the first start-stop digit (1) is dialed, with the connecting arrangement in the "ready" or stop condition, the SS1 and SS2 leads are closed and the connecting arrangement is conditioned for the dictate or start mode. The next time digit (1) is dialed for stop, the SS1 and SS2 leads are opened and dial tone or ringing is returned to the dictator as a ready signal.

**4.15 Correction:** When the correction digit (2) is dialed, the connecting arrangement momentarily operates (minimum of 200 milliseconds and a maximum of one second) to (a) close the C1 and C2 leads, (b) close the C3 and C4 leads, (c) open the SS1 and SS2 leads, and (d) apply a burst of dial tone to the dictator as an acknowledgment. The connecting arrangement then returns to the dictate condition.

**4.16 Playback:** When the playback digit (3) is dialed, the connecting arrangement performs the following sequential operations:

- (a) **Feature Group 1:** Opens the SS1 and SS2 leads and closes the PB1 and the PB2 leads. After a minimum of 200 milliseconds, the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3 and closes the PB4 lead to the SS1 lead.
- (b) **Feature Group 2:** Closes the PB1 and PB2 leads and within 150 milliseconds opens the SS1 and SS2 leads. After a minimum of 200 milliseconds, the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3, closes the

PB4 lead to the SS1 lead, and locks in the playback mode over the C and PB5 leads under control of the CP dictation machine. The playback digit (3) may be dialed repeatedly to reclose the PB1 and PB2 leads, each time for a minimum of 200 milliseconds, to allow the CP dictation machine to extend playback time.

(c) **Feature Group 3:** Opens the SS1 and SS2 leads and closes the PB1 and PB2 leads. After a minimum of 200 milliseconds, the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3, closes the PB4 and SS1 leads, and locks in the playback mode over the C and PB5 leads under control of the CP dictation machine.

(d) **Feature Group 4:** Closes the PB1 and PB2 leads and within 150 milliseconds opens the SS1 and SS2 leads. After a minimum of 200 milliseconds, the connecting arrangement transfers lead PB1 from lead PB2 to lead PB3, closes the PB4 to the SS1 lead, and locks in the playback mode over the C and PB5 leads under control of the CP dictation machine. The playback digit (3) may be dialed repeatedly to reclose the PB1 and PB2 leads, each time for a minimum of 200 milliseconds, to allow the CP dictation machine to extend playback time.

**4.17 End of Playback or Cancel Remainder of Playback:** The digit (1) may be dialed at the end of playback or to cancel playback, according to the provided playback feature group as follows:

- (a) **Feature Group 1:** The CP dictation machine does not indicate that playback is in progress with this feature group. The dictator must dial (1) to end playback. This action closes the SS1 and SS2 leads, opens the PB1 and PB3 leads, opens the PB4 and SS1 leads, and returns the connecting arrangement to the dictate condition.
- (b) **Feature Group 2:** At the end of playback, the CP dictation machine automatically removes ground from the C lead for a minimum of 25 milliseconds. Subsequently, the connecting arrangement opens the PB1 and PB3 leads, opens the PB4 and SS1 leads, and sends a "ready" tone to the dictator. Digit (1) must be dialed to restore the connecting arrangement to the dictate condition which provides a closure on the SS1 and SS2 leads toward the CP dictation machine.

(c) **Feature Groups 3 and 4:** The dictator may cancel playback by dialing digit (1). In this case, the connecting arrangement closes the SS1 and SS2 leads, opens the PB1 and PB3 leads, opens the PB4 and SS1 leads, and returns the connecting arrangement to the dictate condition. Alternately, at the normal end of playback, the CP dictation machine automatically removes ground from the C lead for a minimum of 25 milliseconds. In this case the arrangement opens the PB1 and PB3 leads, opens the PB4 and SS1 leads, and sends a "ready" tone to the dictator. The digit (1) must be dialed again to provide a closure on the SS1 and SS2 leads to restore the connecting arrangement to the dictate condition.

**4.18 End of Dictation:** At the end of dictation, digit (4) is dialed. The connecting arrangement opens the SS1 and SS2 leads, opens the E3 and E4 leads, closes the E1 and E2 leads, and returns dial tone as an acknowledgment tone. After a short duration the connecting arrangement closes the E3 and E4 leads, opens the E1 and E2 leads, and sends the "ready" tone to the dictator indicating that the dictator should now hang-up (see 4.10—Disconnect).

#### 4.19 Attendant Assistance

(a) **Assistance Before Playback:** When the dictator dials the digit (0), the connecting arrangement operates to terminate the TT and TR leads in 600 ohms, opens the SS1 and SS2 leads, and rings the attendant station. When the attendant answers, the connecting arrangement connects the dictator to the attendant and disconnects the TT and TR leads from the CP dictation machine.

(b) **Assistance During Playback:** If the dictator dials the attendant after playback has been initiated, the connecting arrangement operates as in (a) "Assistance Before Playback" with the exception that the TT and TR leads are reconnected to the CP dictation machine so that both the dictator and attendant may hear the playback. Any playback in progress is cancelled by the connecting arrangement as described for Playback Feature Groups 1 and 3.

(c) **Attendant Controlled Playback (Operational Feature C):** If playback is desired while attendant and dictator are connected, the attendant momentarily operates the optional playback key.

With the connecting arrangement in this manual playback condition, the TT and TR leads are cut through to connect the dictator and attendant to the CP dictation machine and the connecting arrangement functions as described in 4.16 (Playback). The attendant may cancel playback in progress with Feature Groups 1 and 3 by momentarily operating the optional playback key which causes the circuit to open the PB1 and PB3 leads, open the PB4 and SS1 leads, and terminates the TT and TR leads in 600 ohms. The dictator must dial (1) to resume dictation.

(d) **Attendant Does Not Answer:** If the access digit (0) is dialed and the attendant does not answer, the dictator may stop ringing of the attendant line by dialing a digit (1) during the silent interval of the ringing signal. This causes a closure on the TT and TR leads to connect the dictator to the transmission path, disconnects the attendant, and closes the SS1 and SS2 leads, restoring the connecting arrangement to the dictate condition.

#### 4.20 Disconnect

(a) **Dictator Only:** When the dictator hangs up, the TT and TR leads are connected to 600 ohms toward the CP dictation machine; the E1 and E2 leads close momentarily (200 milliseconds minimum); the E3 and E4 leads open momentarily (200 milliseconds minimum); the S1 and S2 leads open; the SS1 and SS2 leads open; and the connecting arrangement is released toward the PBX.

(b) **Dictator Connected to Attendant:** When the attendant hangs up after a call for assistance, the dictator is disconnected from the attendant line and reconnected to the transmission path; the 600-ohm termination is removed from the TT and TR leads; the TT and TR leads are reconnected to the CP dictation machine; and "ready" tone is sent to the dictator. If the dictator disconnects first, the procedure is the same as in (a) (Dictator Only) except that the circuit is not released until the attendant hangs up.

### 5. MAINTENANCE

**5.01** Where there is an indication of trouble in the connecting arrangement(s), the circuit at fault must be opened at the interface connecting

block to verify in which direction the trouble exists. The circuit can be opened at the connecting block by removing the B bridging clip associated with each lead.

**5.02** Precautions should be taken when performing tests to avoid adversely affecting service to the customer. Local instructions should be followed with reference to notifying the customer before performing the test.

**5.03** This part describes a method of testing the operating features of recorded telephone dictation trunk circuit SD-5E038-01 when connected to dial controlled or voice controlled dictation machines using either rotary dial or TOUCH-TONE calling stations.

**5.04** The tests covered are:

**A. Dial Controlled Dictation Machine Using Either Rotary Dial or TOUCH-TONE Stations:**

This test checks the operating features of the dictation trunk when connected to a dial controlled dictation machine using rotary dial or TOUCH-TONE station sets.

**B. Voice Controlled Dictation Machine Using Either Rotary Dial or TOUCH-TONE Stations:**

This test checks the operating features of the dictation trunk when connected to a voice controlled dictation machine using rotary dial or TOUCH-TONE station sets.

**C. Continuity Check of Trunk Operation at Telephone Company Connecting Block:**

This test verifies the relay contact operations associated with dialed or keyed digits independent of the customer-owned dictation equipment and wiring.

**5.05** The digits dialed or keyed by the dictator (station user) and functions performed at the dictation machine are shown in Table E.

**5.06** The dictation trunk lead designations and functions are shown in Table F.

**5.07 Lettered Steps:** A letter a, b, c, etc, added to a step number in Part 5 of this section indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series

TABLE F

DICTATION TRUNK LEAD  
DESIGNATION AND FUNCTION

LEAD DESIGNATION	FUNCTION
T1, R1	Attendant telephone
CT, CR	Telephone Company Test Line
TT, TR	Two Way Voice Circuit
S1, S2	Seizure
SS1, SS2	Start-Stop
C1, C2, C3, C4	Correction
PB1, PB2, PB3, PB4	Playback
PB5, C	End-of-playback from machine
E1, E2, E3, E4	End of message
B, G	Ready-for-use
PB, G2	Playback Key

of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

**APPARATUS REQUIRED TO PERFORM TESTS**

**All Tests**

**5.08** 1011G handset (dial hand test set) equipped with a 2W38A cord assembly consisting of one W2CK cord, one 471A jack and one 310 plug.

**5.09** 2500-Type TOUCH-TONE telephone set, or equivalent, equipped with one 310 plug.

**5.10** Blocking and insulating tools, as required.  
Use tools and apply, as covered in Section 069-020-801.

No. 30 cord tips, and two P360690 fiber sliding sleeves.

**Test C**

**5.11** 81A test set equipped with a W2BA cord, two No. 2 test clips per Spec AT6928, two

**METHOD**

<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
<b>A. Dial Controlled Dictation Machine Using Either Rotary Dial or TOUCH-TONE Stations</b>		
1	At dictation machine associated with dictation trunk selected for test— Request dictation machine attendant to prepare the machine for operation. This should include the provision of a new recording medium.	
2	At dictation trunk unit selected for test— Observe B1 relay.	If B1 relay nonoperated— Trunk unit idle. If B1 relay operated— Trunk unit busy.
3a	If dictation trunk is equipped for rotary dial operation— At idle dictation trunk unit selected for test— Insert plug of handset into TEST & MB jack.	
4a	At handset— Operate switch to TALK.	If option G provided— Continuous audible ringing tone heard in handset receiver. If option J, ZW, or ZG provided— Dial tone heard in handset receiver.
5b	If dictation trunk is equipped for TOUCH-TONE dial operation— At idle dictation trunk unit selected for test— Connect TOUCH-TONE station set to TEST & MB jack.	
6b	At TOUCH-TONE station set— Remove handset from switchhook.	If option G provided— Continuous audible ringing tone heard in handset receiver. If option J, ZW, or ZG provided— Dial tone heard in handset receiver.
7	Dial or key START digit 1.	If option G provided— Continuous audible ringing tone silenced. If option J, ZW, or ZG provided— Dial tone silenced.

STEP	ACTION	VERIFICATION
		At dictation machine associated with dictation trunk under test— Machine starts.
8	At handset— Speaking plainly into handset transmitter, count from 1 to 10 at a rate of about one number per second.	
9	Dial or key PLAYBACK digit 3.	Recorded numbers from about 6 to 10 should be heard, depending upon playback adjustment of the dictation machine.
10	Dial or key digit 1.	Playback terminated. Dictation machine now ready to record.
11	Speaking plainly into handset transmitter, count from 1 to 10 at a rate of about one number per second.	
12	Dial or key PLAYBACK digit 3 three times.	If options Q and R are provided— Recorded numbers from about 6 to 10 should be heard, depending upon playback adjustment of dictation machine. If options A and N are provided— Recorded numbers from about 1 to 10 should be heard depending upon playback adjustment of the dictation machine.
13	Dial or key digit 1.	Playback terminated. Machine now ready to record.
14	Dial or key CORRECTION digit 2.	At dictation machine— Correction indication marked on recording medium by machine. At handset— Momentarily burst of dial tone heard as an acknowledgment indicating that correction mark has been made.
15	Dial or key dictation machine attendant assistance digit 0.	At handset— Audible ringing tone heard. At dictation machine attendant telephone set— Ringer sounds.
16	At dictation machine attendant telephone set— Answer call.	Ringer tripped. At handset— Audible ringing tone silenced. Conversation satisfactory.
17	Repeat Steps 15 and 16 for digit 5.	

STEP	ACTION	VERIFICATION
18	Repeat Steps 15 and 16 for digit 6.	
19	Repeat Steps 15 and 16 for digit 7.	
20	Repeat Steps 15 and 16 for digit 8.	
21	Repeat Steps 15 and 16 for digit 9.	
22b	If dictation trunk is equipped for TOUCH-TONE dial operation— Repeat Steps 15 and 16 for digit #.	
23b	Repeat Steps 15 and 16 for digit *.	
24c	If attendant PLAYBACK (PB) key is provided— At dictation machine attendant telephone set— Operate (PB) key.	Approximately last 30 seconds of recording heard at handset and dictation machine attendant telephone set.
25	At dictation machine attendant telephone set— Disconnect.	
26	Dial or key digit 1.	Machine now ready to record.
27	At dictation trunk unit under test— Insulate contact 3B of F relay.	
28	Dial or key dictation machine attendant assistance digit 0.	At handset— Audible ringing tone heard.
29	Dial or key digit 1.	Audible ringing tone silenced, machine now ready to record.
30	At dictation trunk unit under test— Remove insulating tool from F relay.	
31	At interface connecting block— Remove B bridging clip from B lead.	At dictation trunk under test— S relay released. If trunk is arranged to call in dictation machine attendant and make trunk busy when dictation machine becomes unavailable to record (option B)— At handset— Audible ringing tone heard. At dictation machine attendant telephone set— Ringer sounds.
32d	If option B is provided— Dial or key digit 1.	Audible ringing tone still heard.
33	At interface connecting block— Replace B bridging clip on B lead.	At dictation trunk unit under test— S relay operated. At handset—

STEP	ACTION	VERIFICATION
		Audible ringing tone silenced. At dictation machine attendant telephone set— Ringer silenced.
34	Dial or key END OF DICTATION digit 4.	Reduced level dial tone is heard. At dictation machine— End of dictation indication marked on recording medium by dictation machine.
35	Dial or key STOP digit 1.	Reduced level dial tone is removed.
36a	If dictation trunk is equipped for rotary dial operation— Remove plug of handset for TEST & MB jack.	
37b	If dictation trunk is equipped for TOUCH-TONE dial operation— At dictation trunk— Remove TOUCH-TONE station set from TEST & MB jack.	
38	Advise dictation machine attendant that testing has been completed.	
<b>B. Voice Controlled Dictation Machine Using Either Rotary Dial or TOUCH-TONE Stations</b>		
1	At voice controlled dictation machine associated with dictation trunk selected for test— Request dictation machine attendant to prepare the machine for operation. This should include the provision of a new recording medium.	
2	At dictation trunk unit selected for test— Observe B1 relay.	If B1 relay nonoperated— Trunk unit idle. If B1 relay operated— Trunk unit busy.
3a	If dictation trunk is equipped for rotary dial operation— At idle dictation trunk unit selected for test— Insert plug of handset into TEST & MB jack.	
4a	At handset— Operate switch to TALK.	"Ready" tone heard in handset as indication machine is ready to record.
5b	If dictation trunk is equipped for TOUCH-TONE dial operation— At idle dictation trunk unit selected for test— Connect TOUCH-TONE station set to TEST & MB jack.	

STEP	ACTION	VERIFICATION
6b	At TOUCH-TONE station set— Remove handset from switchhook.	"Ready" tone heard in handset as indication machine is ready to record.
7	At handset— Speaking plainly into handset transmitter, count from 1 to 10 at a rate of about one number per second.	"Ready" tone removed during counting. At end of counting— "Ready" tone heard in handset receiver.
8	Dial or key PLAYBACK digit 3.	"Ready" tone removed. Recorded numbers from about 6 to 10 should be heard, depending upon playback adjustment of the dictation machine. "Ready" tone heard.
9	Speaking plainly into handset transmitter, count from 1 to 10 at a rate of about one number per second.	"Ready" tone removed during counting. At end of counting— "Ready" tone heard in handset receiver.
10	Dial or key PLAYBACK digit 3 three times.	If options Q and R are provided— Recorded numbers from about 6 to 10 should be heard, depending upon playback adjustment of the dictation machine. If options A and N are provided— Recorded numbers from about 1 to 10 should be heard depending upon playback adjustment of the dictation machine. At end of playback— "Ready" tone heard in handset receiver.
11	Dial or key CORRECTION digit 2.	At dictation machine— Correction indication marked on recording medium by machine. At handset— Momentary burst of dial tone heard as acknowledgment indicating that correction mark has been made. After acknowledgment tone is heard— Uninterrupted "ready" tone heard in handset receiver.
12	Dial or key dictation machine attendant assistance digit 0.	At handset— "Ready" tone removed. Audible ringing tone heard. At dictation machine attendant telephone set— Ringer sounds.
13	At dictation machine attendant telephone set— Answer call.	Ringer tripped. At handset— Audible ringing tone silenced. Conversation satisfactory.

STEP	ACTION	VERIFICATION
14c	If attendant PLAYBACK (PB) key is provided— At dictation machine attendant telephone set— Operate (PB) key.	Approximately last 30 seconds of recording heard at handset and dictation machine attendant telephone set.
15	At dictation machine attendant telephone set— Disconnect.	At handset— "Ready" tone heard in handset receiver.
16	At dictation trunk unit under test— Insulate contact 3B of F relay.	
17	Dial or key dictation machine attendant assistance digit 0.	At handset— "Ready" tone removed. Audible ringing tone heard.
18	Dial or key digit 1.	Audible ringing tone silenced. "Ready" tone heard in handset receiver.
19	At dictation trunk unit under test— Remove insulating tool from F relay.	
20	At interface connecting block— Remove B bridging clip from B lead.	At dictation trunk unit under test— S relay released. If trunk is arranged to call in dictation machine attendant and make trunk busy when dictation machine becomes unavailable to record (option B)— At handset— "Ready" tone removed. Audible ringing tone heard. At dictation machine attendant telephone set— Ringer sounds.
21d	If option B is provided— Dial or key digit 1.	Audible ringing tone still heard.
22	At interface connecting block— Replace B bridging clip on B lead.	At dictation trunk unit under test— S relay operated. At handset— Audible ringing tone silenced. "Ready" tone heard in handset receiver. At dictation machine attendant telephone set— Ringer silenced.
23	Dial or key END OF DICTATION digit 4.	Momentary burst of dial tone heard in handset receiver as an acknowledgment tone. At dictation machine— End of dictation marked on recording medium by dictation machine. "Ready" tone heard in handset receiver.

STEP	ACTION	VERIFICATION
24a	If dictation trunk is equipped for rotary dial operation— Remove handset plug from TEST & MB jack.	
25b	If dictation trunk is equipped for TOUCH-TONE dial operation— At dictation trunk— Remove TOUCH-TONE station set from TEST & MB jack.	
26	Advise dictation machine attendant that testing has been completed.	
<b>C. Continuity Check of Trunk Operation At Telephone Company Connecting Block</b>		
1	At dictation trunk unit selected for test— Observe B1 relay.	If B1 relay nonoperated— Trunk unit idle. If B1 relay operated— Trunk unit busy.
2a	If dictation trunk unit selected for test is equipped for rotary dial operation— At interface connecting block— Remove B bridging clips from B and G leads. Provide strap across B and G leads at B and G terminals on Telephone Company side of interface connecting block. Connect handset to CT, CR terminals.	At dictation trunk unit selected for test— S relay operated.
3b	If dictation trunk unit selected for test is equipped for TOUCH-TONE dial operation— At interface connecting block— Remove B bridging clips from B and G leads. Provide strap across B and G leads at B and G terminals on Telephone Company side of interface connecting block. Connect TOUCH-TONE station set to CT, CR terminals.	
4	At dictation trunk unit under test— Operate T key.	
5	At dictation machine associated with dictation trunk unit under test— Disconnect dictation machine from ac power source.	
6a	If dictation trunk unit selected for test is equipped for rotary dial operation— Operate switch to TALK.	

STEP	ACTION	VERIFICATION
7b	If dictation trunk unit selected for test is equipped for TOUCH-TONE dial operation— Remove handset from switchhook.	
<b>Seizure</b>		
8	At interface connecting block— Remove B bridging clips from leads S1 and S2.	
9	At 81A test set— Operate switch to position C.	
10	Connect 81A set across S1 and S2 leads.	At 81A test set— Buzzer sounds.
11	Disconnect 81A test set from S1 and S2 leads.	81A test set— Buzzer silenced.
12	At interface connecting block— Replace B bridging clips on S1 and S2 leads.	
<b>Start—Stop (dial control provided only)</b>		
13	Remove B bridging clips from SS1 and SS2 leads at interface connecting block.	
14	Connect 81A test set across SS1 and SS2 leads.	
15	Dial or key START digit 1.	At 81A test set— Buzzer sounds.
16	Dial or key STOP digit 1.	At 81A test set— Buzzer silenced.
17	Disconnect 81A test set from SS1 and SS2 leads.	
18	Replace B bridging clips on SS1 and SS2 leads at interface connecting block.	
<b>Correction or Dial 2 to Reduce Playback</b>		
19	Remove B bridging clips from C1 and C2 leads at interface connecting block.	
20	Remove B bridging clips from C3 and C4 leads at interface connecting block.	
21	Connect 81A test set across C1 and C2 leads.	

STEP	ACTION	VERIFICATION
22	Dial or key digit 2.	At 81A test set— Buzzer sounds momentarily.
23	Disconnect 81A test set from C1 and C2 leads.	
24	Replace B bridging clips on C1 and C2 leads at interface connecting block.	
25	Connect 81A test set across C3 and C4 leads.	
26	Dial or key digit 2.	At 81A test set— Buzzer sounds momentarily.
27	Disconnect 81A test set from C3 and C4 leads.	
28	Replace B bridging clips on C3 and C4 leads at interface connecting block.	

**End of Dictation**

29	Remove B bridging clips from E1 and E2 leads at interface connecting block.	
30	Remove B bridging clips from E3 and E4 leads at interface connecting block.	
31	Connect 81A test set across E1 and E2 leads.	
32	Dial or key END OF DICTATION digit 4.	At 81A test set— Buzzer sounds momentarily.
33	Disconnect 81A test set from E1 and E2 leads.	
34	Replace B bridging clips on E1 and E2 leads at interface connecting block.	
35	Connect 81A test set across E3 and E4 leads.	At 81A test set— Buzzer sounds.
36	Dial or key END OF DICTATION digit 4.	At 81A test set— Buzzer silenced momentarily.
37	Disconnect 81A test set from E3 and E4 leads.	
38	Replace B bridging clips on E3 and E4 leads at interface connecting block.	

**Playback**

39	Remove B bridging clips from C lead at interface connecting block.	
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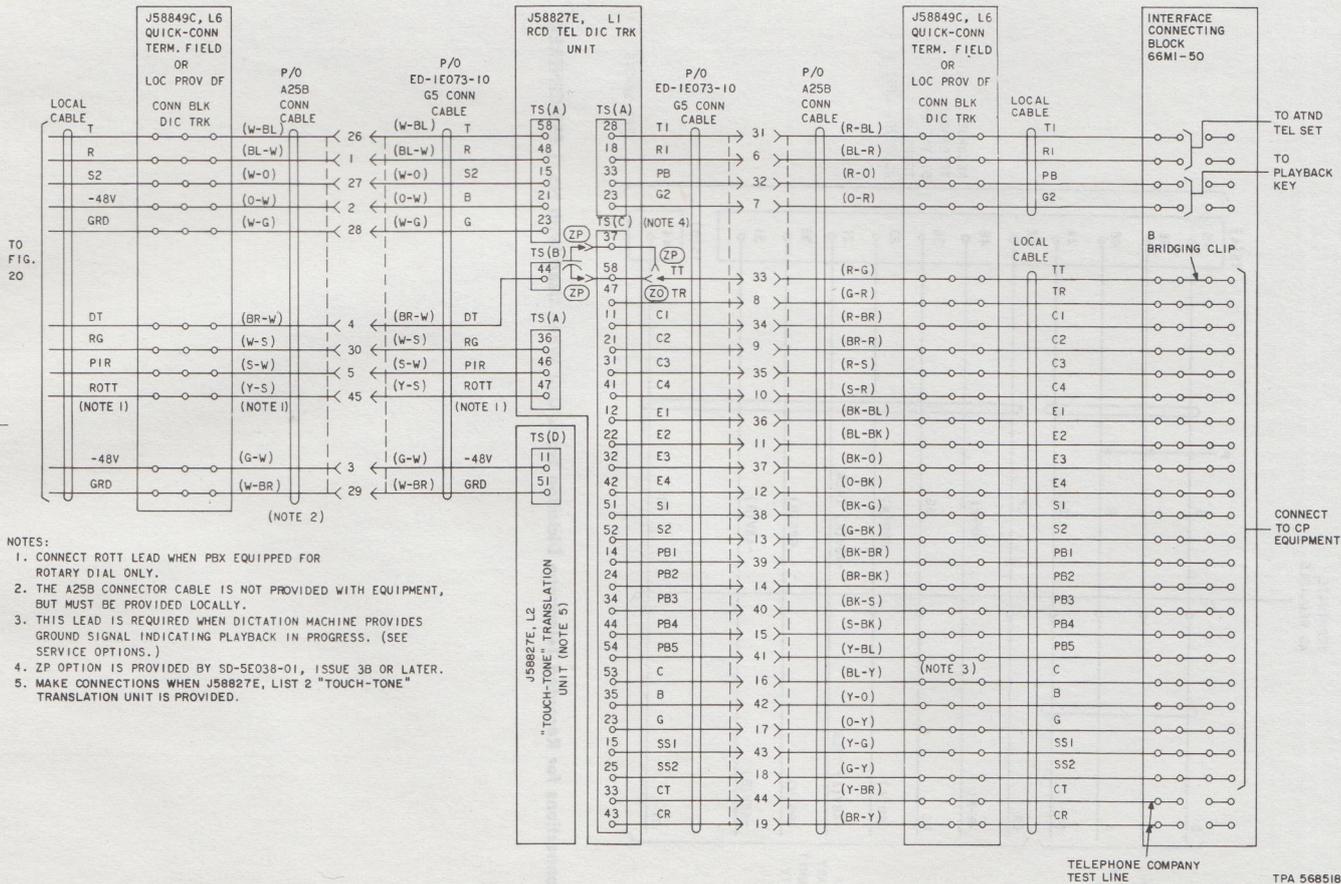
STEP	ACTION	VERIFICATION
40	Provide strap across C and G leads at interface connecting block.	
41	Remove B bridging clips from PB1 and PB2 leads at interface connecting block.	
42	Connect 81A test set across PB1 and PB2 leads.	
43	Dial or key PLAYBACK digit 3.	At 81A test set— Buzzer sounds momentarily.
44	Disconnect 81A test set from PB1 and PB2 leads.	
45	Replace B bridging clips on PB1 and PB2 leads at interface connecting block.	
46c	If dial control is provided— Remove B bridging clips from SS1 and SS2 leads at interface connecting block.	
47	Connect 81A test set across SS1 and SS2 leads.	
48	Dial or key START-STOP digit 1.	At 81A test set— Buzzer sounds.
49	Dial or key PLAYBACK digit 3.	At 81A test set— Buzzer silenced.
50	Disconnect 81A test set from SS1 and SS2 leads.	
51	Replace B bridging clips on SS1 and SS2 leads at interface connecting block.	
52d	If option A, Q, or R is provided— Dial or key digit 1.	
53e	If option N is provided— Momentarily remove strap across leads C and G at interface connecting block.	
54	Remove B bridging clips from PB1 and PB3 leads at interface connecting block.	
55	Connect 81A test set across PB1 and PB3 leads.	
56	Dial or key PLAYBACK digit 3.	At 81A test set— Buzzer sounds.

STEP	ACTION	VERIFICATION
57	Disconnect 81A test set from PB1 and PB3 leads.	At 81A test set— Buzzer silenced.
58	Replace B bridging clips on PB1 and PB3 leads at interface connecting block.	
59d	If option A, Q, or R is provided— Dial or key digit 1.	
60e	If option N is provided— Momentarily remove strap across leads C and G at interface connecting block.	
61	Remove B bridging clips from SS1 and PB4 leads at interface connecting block.	
62	Connect 81A test set across SS1 and PB4 leads.	
63	Dial or key PLAYBACK digit 3.	At 81A test set— Buzzer sounds.
64	Disconnect 81A test set from SS1 and PB4 leads.	At 81A test set— Buzzer silenced.
65	Replace B bridging clips on SS1 and PB4 leads at interface connecting block.	
66	Remove strap across C and G leads at interface connecting block.	
67	Replace B bridging clips on C lead at interface connecting block.	
<b>Idle Condition</b>		
68	Remove strap across G and B leads at interface connecting block.	At dictation trunk unit— S relay released.
69	Replace B bridging clips on G and B leads at interface connecting block.	
70a	If dictation trunk unit selected for test is equipped for rotary dial operation— Disconnect handset from CT, CR terminals.	
71b	If dictation trunk unit selected for test is equipped for TOUCH-TONE dial operation— Disconnect TOUCH-TONE station set from CT, CR terminals.	

STEP	ACTION	VERIFICATION
72	At dictation trunk unit— Restore T key.	
<b>6. CONNECTIONS</b>		
6.01	Operational Features are shown in Table B, Playback Feature Groups are shown in Table C, and switching system options are shown in Table D.	
6.02	Table G shows the installer provided straps required to implement the features and options.	
6.03	Connections for Recorded Telephone Dictation Trunk Units when used with an 800A PBX are shown in Fig. 7 and 20.	
6.04		Connections between the Recorded Telephone Dictation Trunk Units and all other switching systems are shown in Fig. 8 through 19.
6.05		Connections between the Recorded Telephone Dictation Trunk Unit and the interface connecting block are shown in Fig. 21.
6.06		Connections between the TOUCH-TONE Translation Unit and the TOUCH-TONE receiver are shown in Fig. 22.
6.07		Interconnections between the Recorded Telephone Dictation Trunk Unit and the TOUCH-TONE Translation Unit are shown in Fig. 23.

TABLE G  
STRAPS REQUIRED TO PROVIDE OPTIONS

TO PROVIDE OPTION	ADD STRAPS ON J58827E				TO PROVIDE OPTION	ADD STRAPS ON J58827E				
	LIST 1			LIST 3		LIST 1			LIST 3	
	TS(A)	TS(B)	TS(C)	TS(E)		TS(A)	TS(B)	TS(C)	TS(E)	
A		46-56	13-14		W	11-21	18-57			
B	13-23	26-36					37-47			
E & ZB		45-55 35-55	48-58 28-38 18-57 47-57				17-27			
E & ZC		45-55 35-55	18-28		Y	21-31				
F & ZB		42-52 35-55 45-55	48-58 28-38 18-57 47-57		Z				11-21	
					ZA	13-23				
					ZD	NO STRAP REQUIRED				
					ZE	21-41				
F & ZC		42-52 35-55 45-55	18-28		ZF				16-26	
					ZG	45-57				
					ZH	11-21	37-47 18-57 17-27 14-53			
G	46-56				ZI	47-57 15-25 14-24 14-43				
J	47-57									
K	NO STRAP REQUIRED									
M	46-56				ZJ	24-34		17-27		
N		38-28 46-56	13-14							
Q		48-58								
R		48-58			ZK	15-54 34-44				
S	35-45									
V		15-54 47-57 34-44 24-34 23-33			ZL	NO STRAP REQUIRED				
					ZM	25-55 14-24				
					ZQ	STRAPS SHOP INSTALLED				
					ZW	57-47				



- NOTES:
1. CONNECT ROTT LEAD WHEN PBX EQUIPPED FOR ROTARY DIAL ONLY.
  2. THE A25B CONNECTOR CABLE IS NOT PROVIDED WITH EQUIPMENT, BUT MUST BE PROVIDED LOCALLY.
  3. THIS LEAD IS REQUIRED WHEN DICTATION MACHINE PROVIDES GROUND SIGNAL INDICATING PLAYBACK IN PROGRESS. (SEE SERVICE OPTIONS.)
  4. ZP OPTION IS PROVIDED BY SD-5E038-01, ISSUE 3B OR LATER.
  5. MAKE CONNECTIONS WHEN J58827E, LIST 2 "TOUCH-TONE" TRANSLATION UNIT IS PROVIDED.

Fig. 7—Connections for Recorded Telephone Dictation Trunk Circuit When Used With 800A PBX

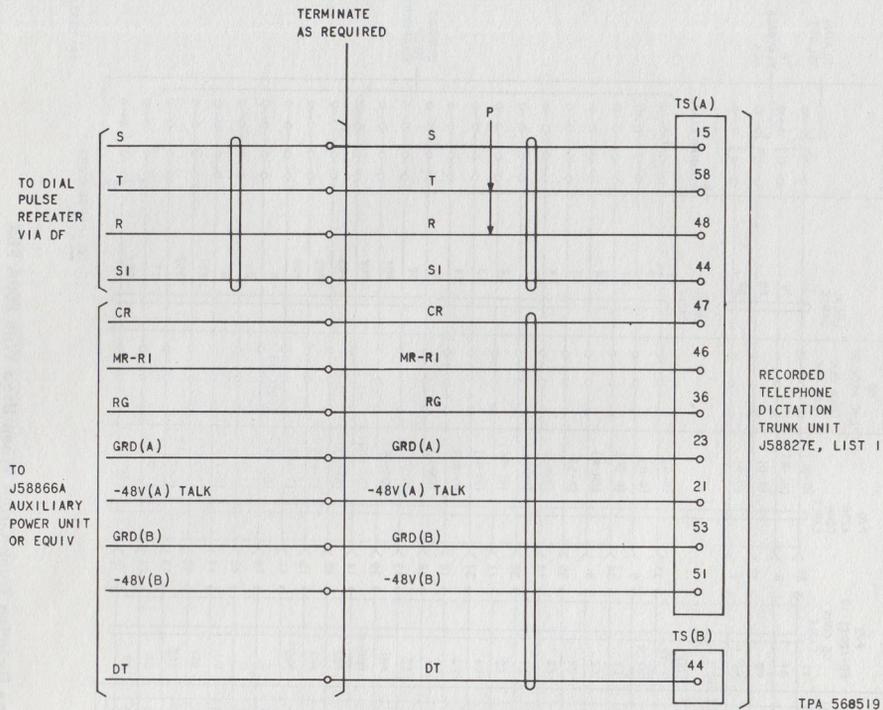
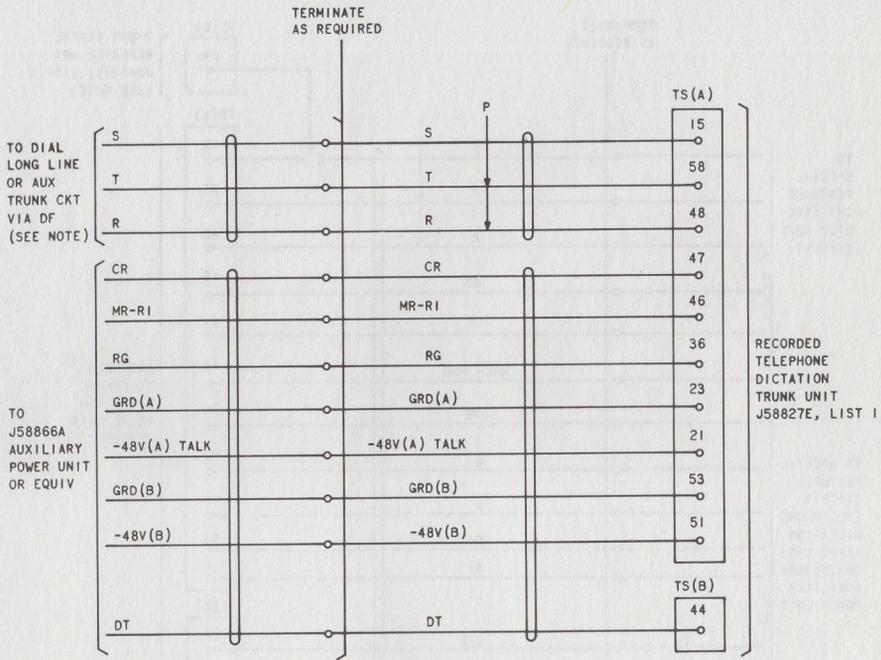


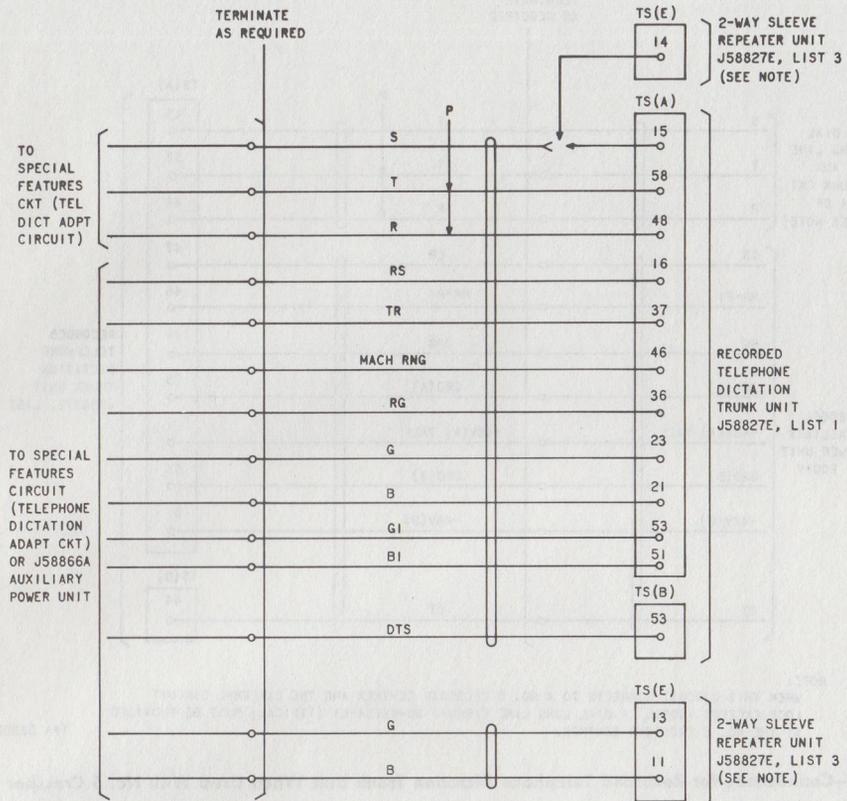
Fig. 8—Connections for Recorded Telephone Dictation Trunk Unit When Used With No. 1 ESS CENTREX



NOTE:  
WHEN THIS CIRCUIT CONNECTS TO A NO. 5 CROSSBAR CENTREX AND THE EXTERNAL CIRCUIT LOOP EXCEEDS 1500Ω, A DIAL LONG LINE CIRCUIT SD-96234-01 (TYPICAL) MUST BE PROVIDED AT THE NO. 5 CROSSBAR CENTREX.

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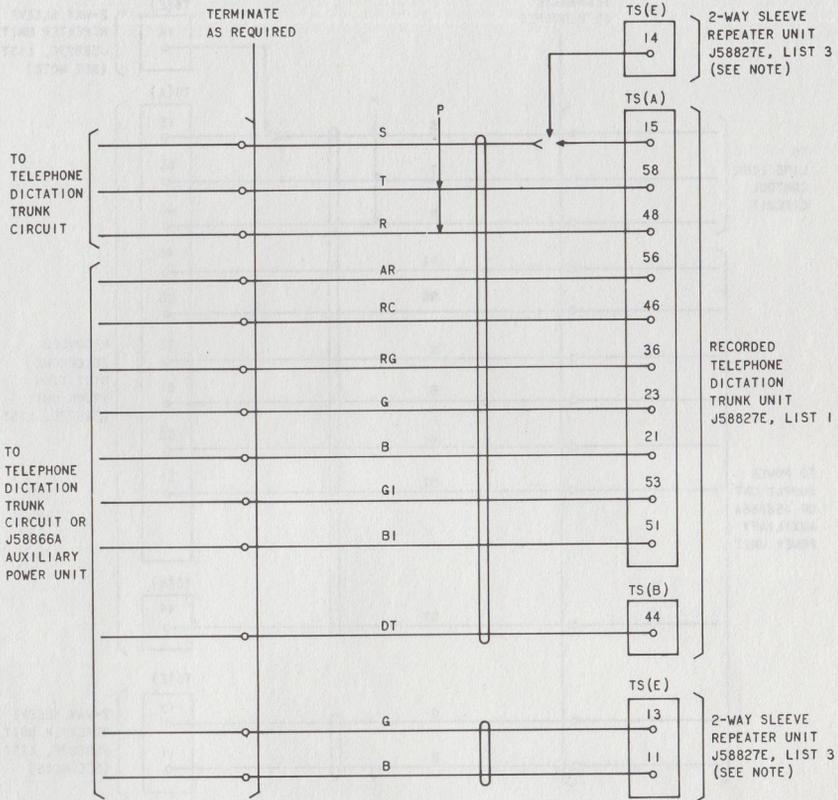
Fig. 9—Connections for Recorded Telephone Dictation Trunk Unit When Used With No. 5 Crossbar CENTREX



NOTE:  
 CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

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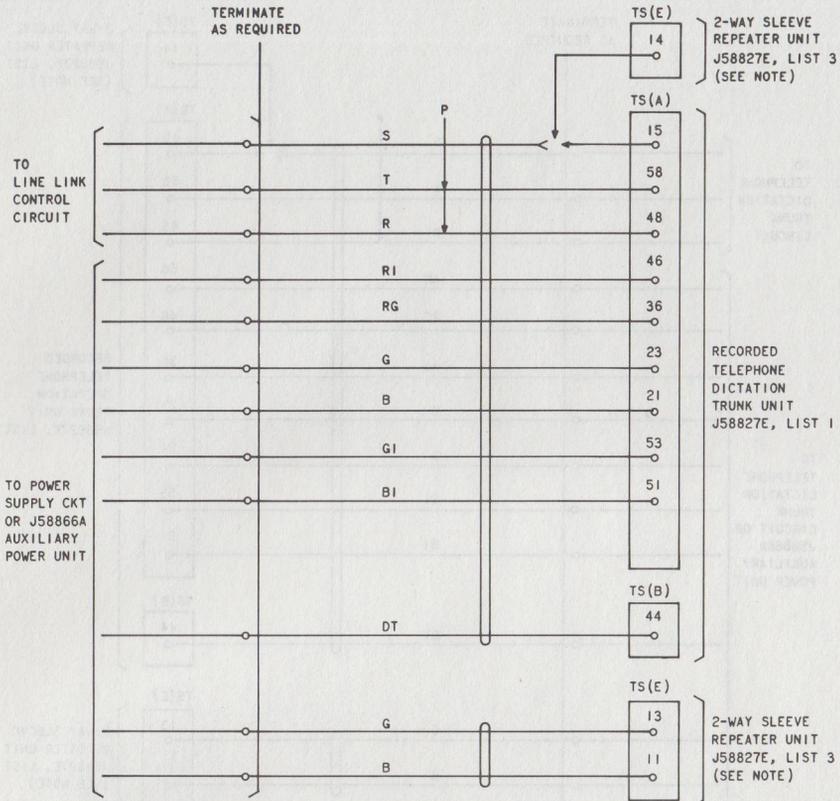
Fig. 10—Connections Between Recorded Telephone Dictation Trunk Circuit and No. 101, 2A, 3A, 4A Electronic Switching System



NOTE:  
 CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED  
 WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING  
 EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE  
 RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR  
 SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

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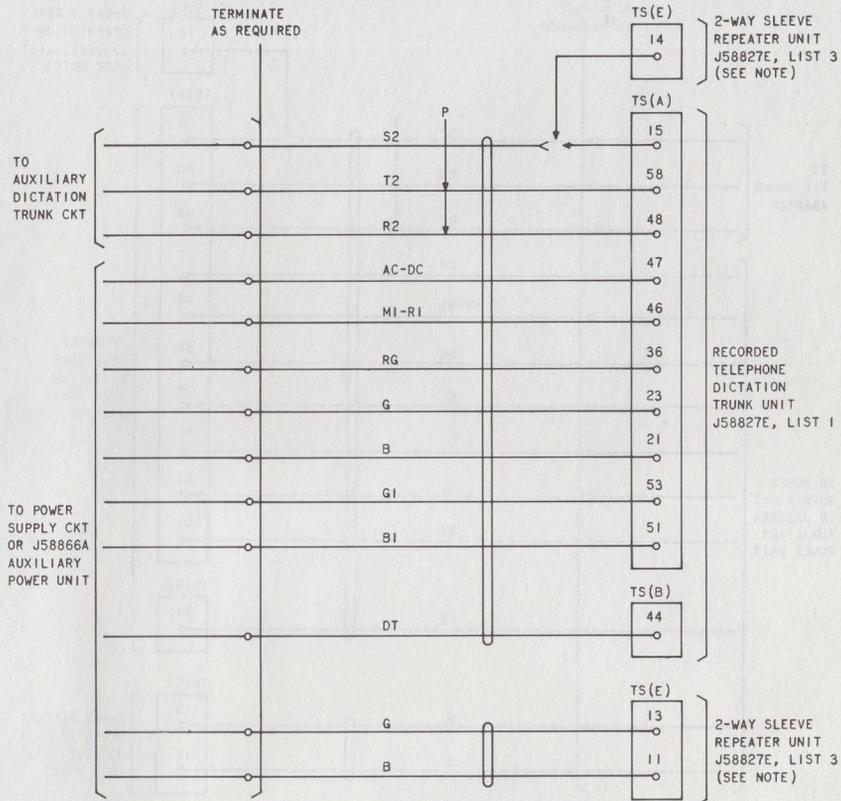
Fig. 11—Connections Between Recorded Telephone Dictation Trunk Circuit and No. 101, 1A Electronic Switching System



NOTE:  
 CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

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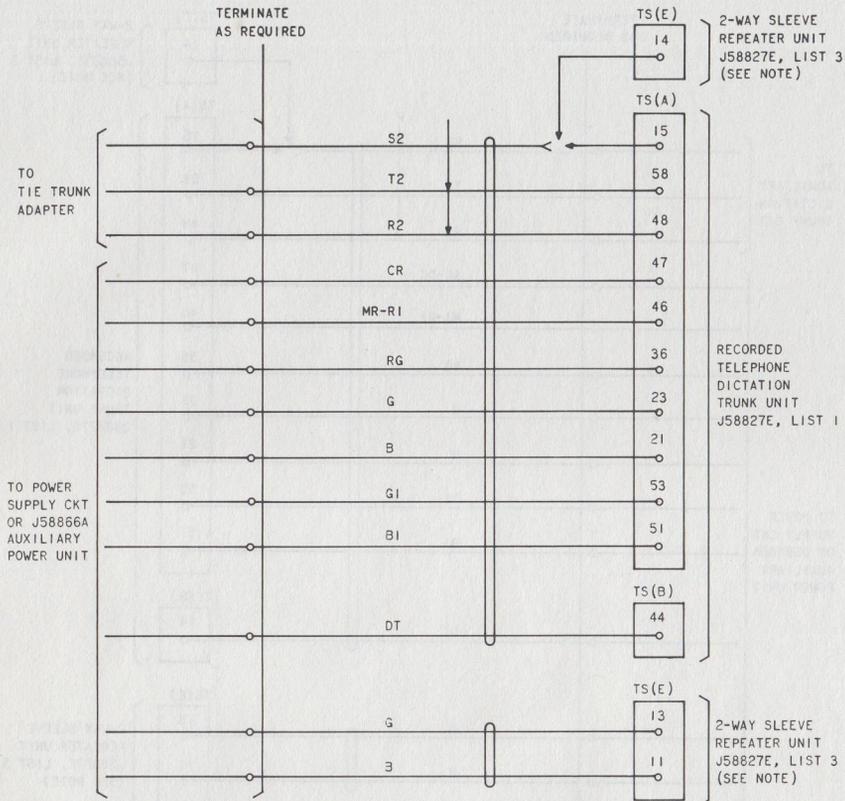
Fig. 12—Connections Between Recorded Telephone Dictation Trunk Circuit and No. 400 Switching System



NOTE:  
 CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

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Fig. 13—Connections Between Recorded Telephone Dictation Trunk Circuit and 757A PBX



NOTE:  
 CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

TPA 568525

Fig. 14—Connections Between Recorded Telephone Dictation Trunk Circuit and 756A PBX

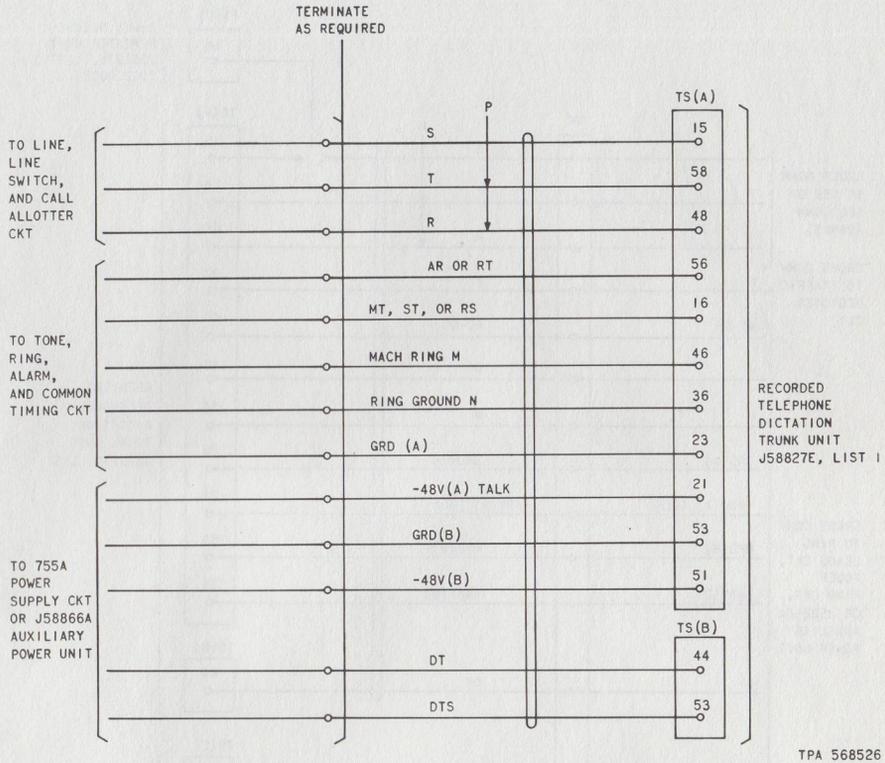
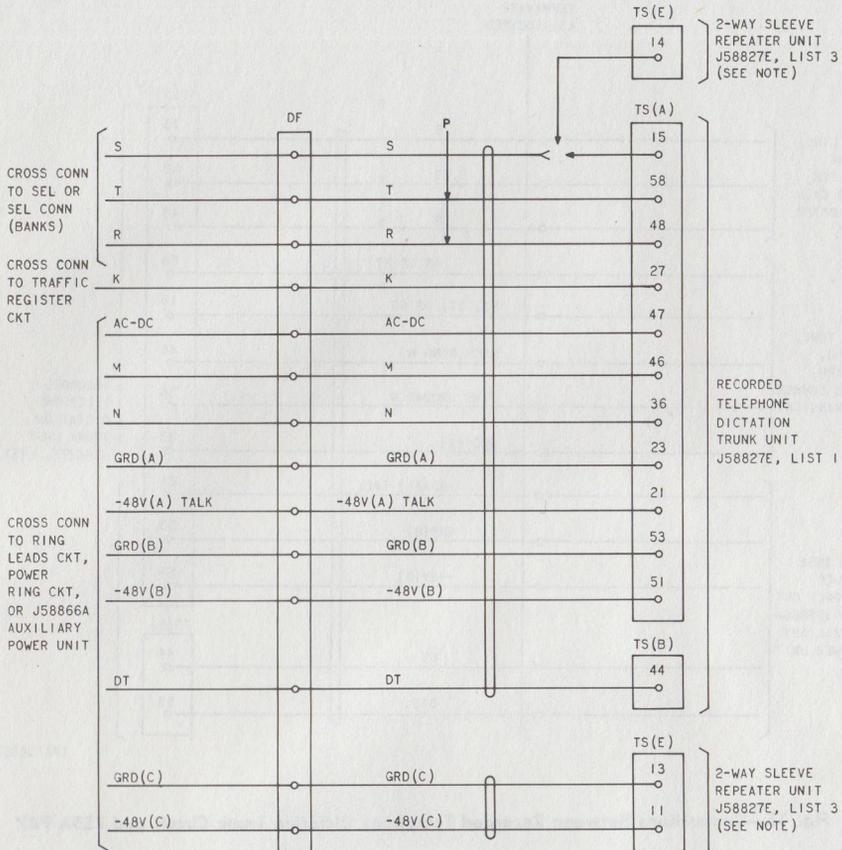


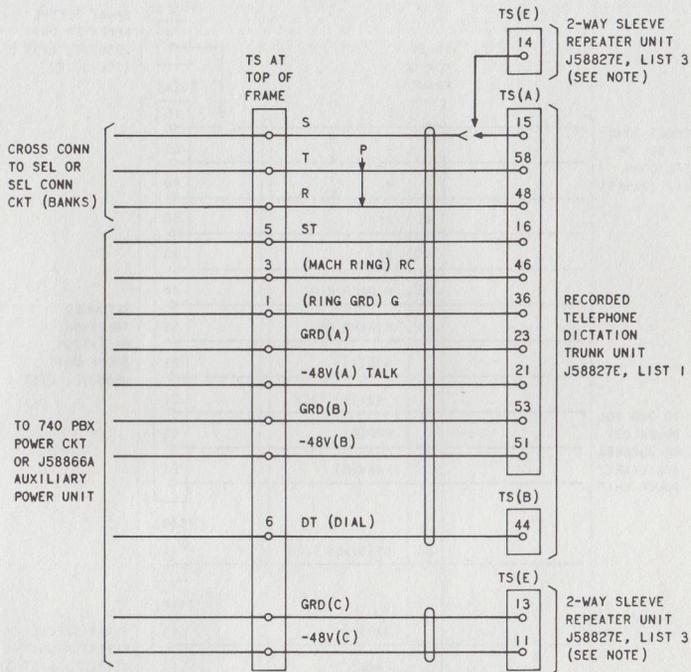
Fig. 15—Connections Between Recorded Telephone Dictation Trunk Circuit and 755A PBX



NOTE:  
 CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

TPA 568527

Fig. 16—Connections Between Recorded Telephone Dictation Trunk Circuit and 701A, 701B, 711A, and 711B PBXs

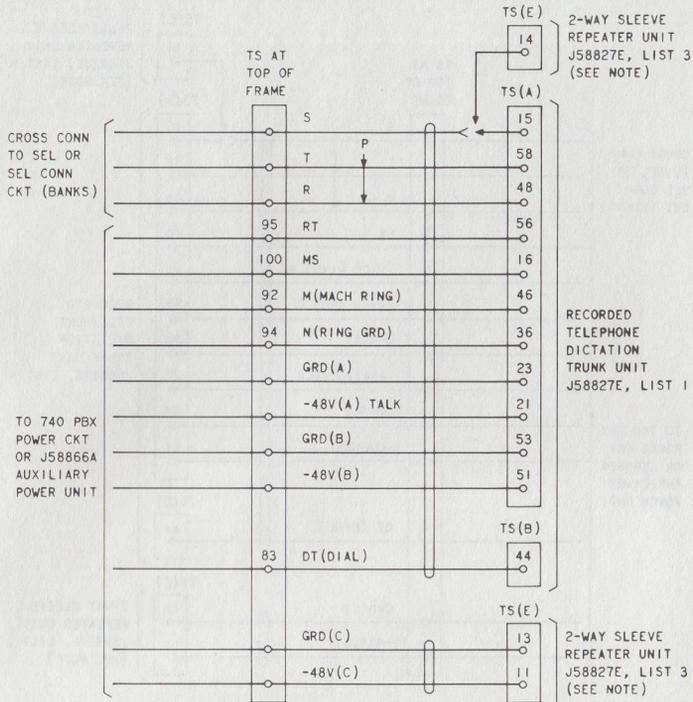


NOTE:

CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

TPA 568528

Fig. 17—Connections Between Recorded Telephone Dictation Trunk Circuit and 740A, 740B, and 740C PBXs

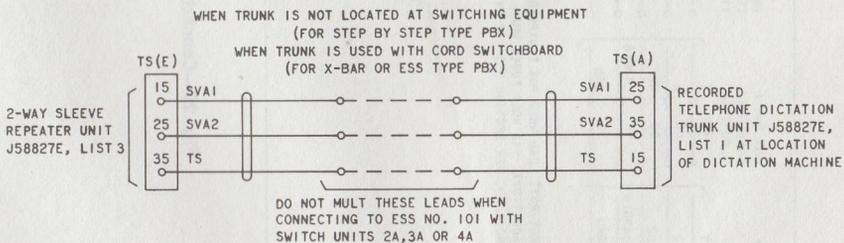
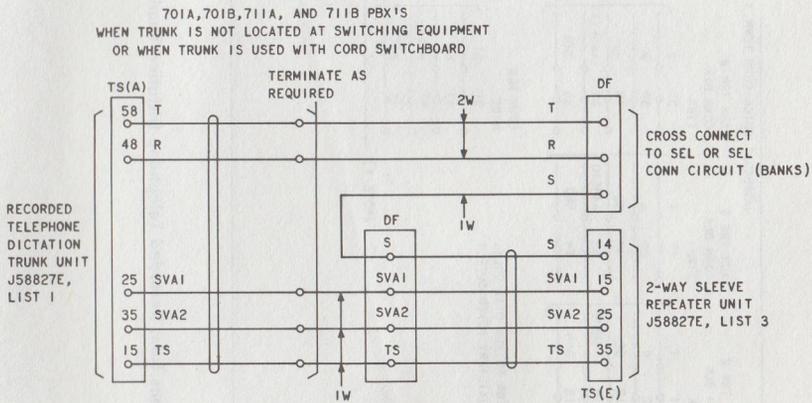
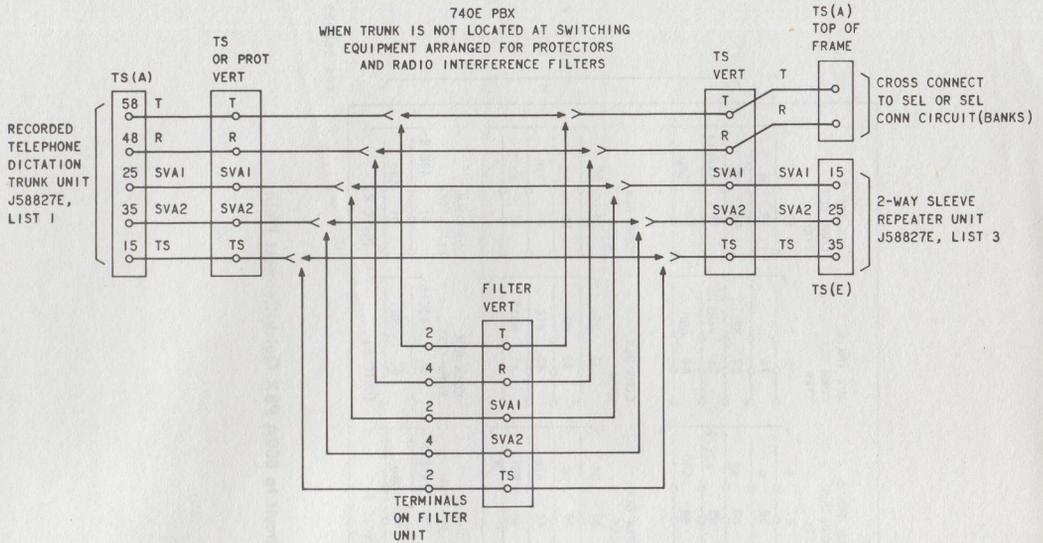


NOTE:

CONNECTION TO THE J58827E, LIST 3 2-WAY SLEEVE REPEATER IS REQUIRED WHEN THE RECORDED TELEPHONE DICTATION TRUNK IS NOT LOCATED AT THE SWITCHING EQUIPMENT AND SLEEVE CONDUCTOR RESISTANCE THROUGH THE SWITCH TRAIN BETWEEN THE RECORDED TELEPHONE DICTATION TRUNK CIRCUIT AND LINE FINDER IS MORE THAN 5 OHMS (FOR SXS TYPE PBX'S) OR CORD SWBD UNIT IS PROVIDED (SEE FIG. 19).

TPA 568530

Fig. 18—Connections Between Recorded Telephone Dictation Trunk Circuit and 740E PBX



TPA 568531

Fig. 19—Connection of SVA1, SVA2, and TS Leads When J58827E, List 3 2-Way Sleeve Repeater Unit is Provided

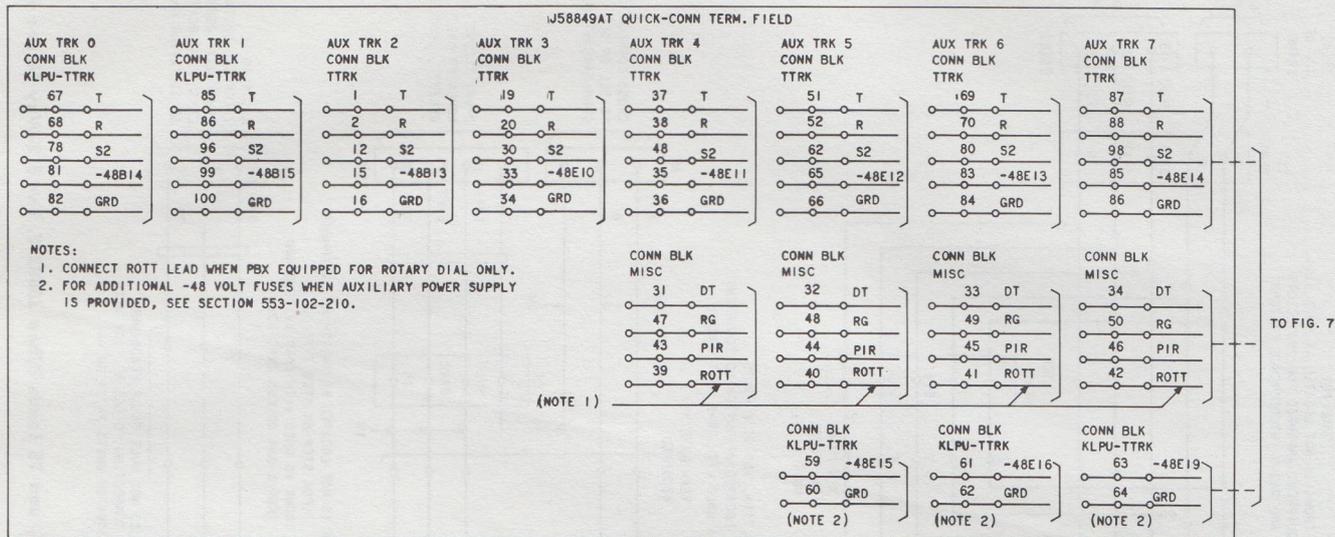
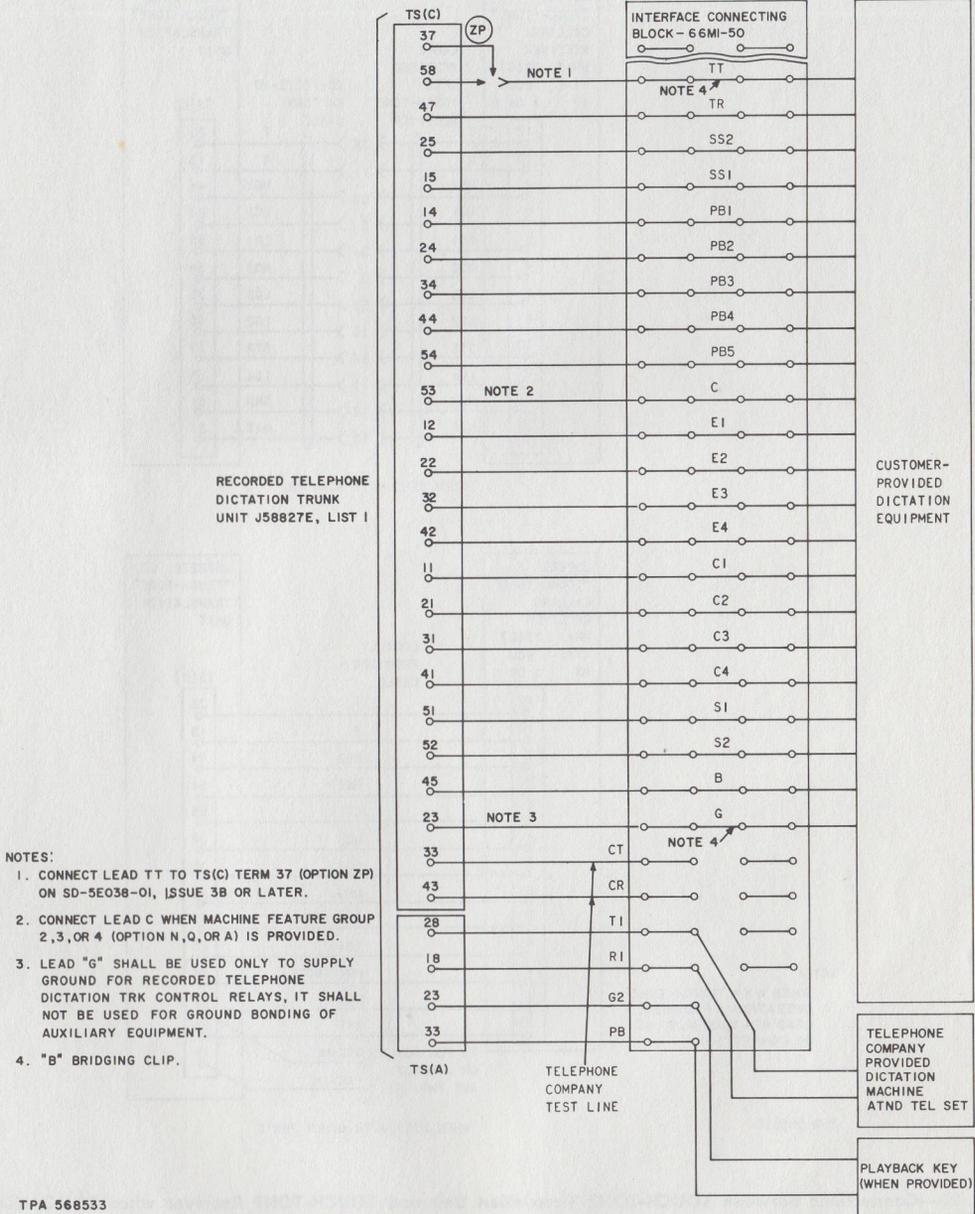
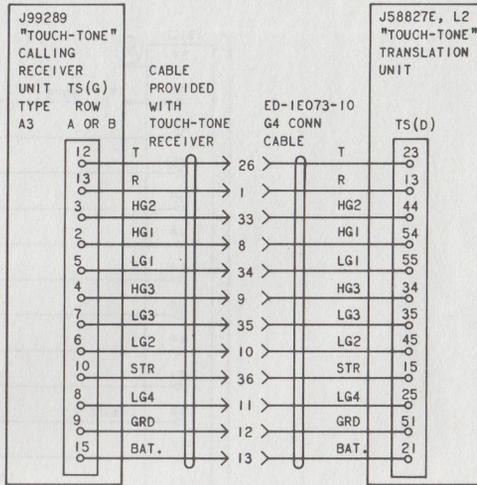


Fig. 20—Connections from Recorded Telephone Dictation Trunk Circuit to 800A PBX Quick-Connect Field

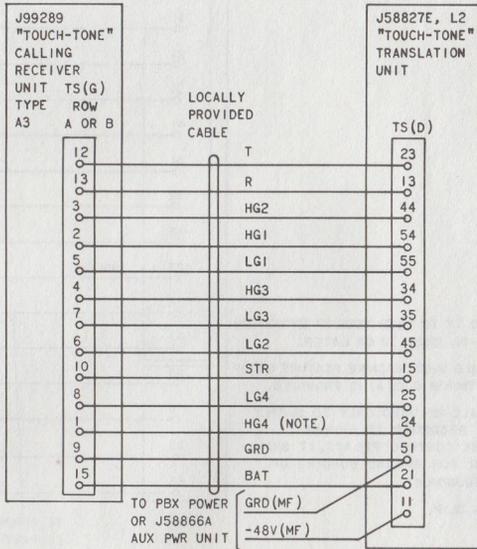


TPA 568533

Fig. 21—Connections from Recorded Telephone Dictation Trunk Unit to Interface Connecting Block for Connection to CP Equipment, Telephone Company-Provided Atnd Tel Set, and Playback Key



WHEN USED WITH 800A PBX

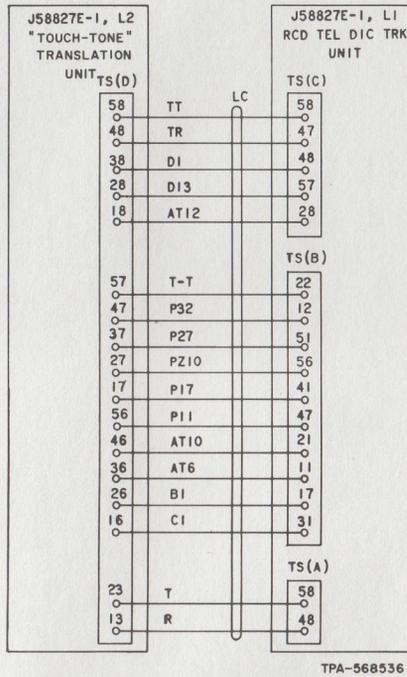


WHEN USED WITH OTHER PBX'S

NOTE:  
WHEN 4 x 4 "TOUCH-TONE" OPERATION IS PROVIDED, LEAD HG4 MUST ALSO BE CONNECTED.

TPA 568535

Fig. 22—Connections Between TOUCH-TONE Translation Unit and TOUCH-TONE Receiver when TOUCH-TONE Operation is Provided



**Fig. 23—Interconnections Between Recorded Telephone Dictation Trunk Unit and TOUCH-TONE Translation Unit when TOUCH-TONE Operation is Provided**