

## TUR CONNECTION VERIFIER TEST SET H-400-430

### METHOD OF OPERATION

#### 1. GENERAL

**1.01** The TUR connection verifier test set permits verification of the 4A TUR (SD-95738-01) or the 3B TUR (SD 99359-01) without assistance. The following conditions can be verified:

- (a) All input connections to TUR
- (b) All output connections of TUR
- (c) The operation of the traffic registers associated with the TUR
- (d) The operation of the traffic data converter circuit SD-95968-01.

**1.02** This section is reissued for the following reasons:

- (a) To add references to Section 252-124-302 for verification of test set operation prior to performing any tests
- (b) To recode A-type circuit packs with CTP\_ designations
- (c) To add notation that circuit packs obtained from factory are not preadjusted and that these packs must be adjusted before using test set
- (d) To expand Part 4
- (e) To make minor corrections throughout this section.

**1.03** The verifier is composed of three portable units plus all necessary cords and accessories. The three units are the TUR UNIT, the REMOTE UNIT, and the CONTROL UNIT as shown in Fig. 1.

**1.04** The TUR UNIT is connected to the TUR frame during testing. The REMOTE UNIT is carried to central office equipment (COE) to be verified. The CONTROL UNIT is connected to the REMOTE UNIT by one or two 25-foot cords

and is carried by the tester during testing. The size of the CONTROL UNIT and the length of the cord allow the tester freedom of movement. Communication between the TUR UNIT at the TUR frame and the REMOTE UNIT at the COE is done by TOUCH-TONE® frequencies over the central office local frame line "talk" circuit which must meet normal talking requirements.

#### 1.05 Features

- Remotely steps the TUR through its scan cycle.
- Remotely resets the TUR.
- Detects the presence of a "busy" condition on the usage lead at the time the TUR connects to an input. This is when a crosspoint is closed (4A TUR) or when a selector switch connects to a terminal (arc) 3B TUR. Hereafter referred to as an input connection.
- Detects the application of a "busy" signal after the TUR connects to an input.
- Detects the existence of a cross between the observed detector input and the inputs of other detectors associated with the same input connection.
- Tests the cross-connection between the detector outputs and the traffic registers or the traffic data converter (TDC) circuit.
- Tests for crosses between traffic registers.
- Tests the ability of the traffic registers to operate at the rate of 20 PPS.
- Finds nonverifying usage leads.

**1.06 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

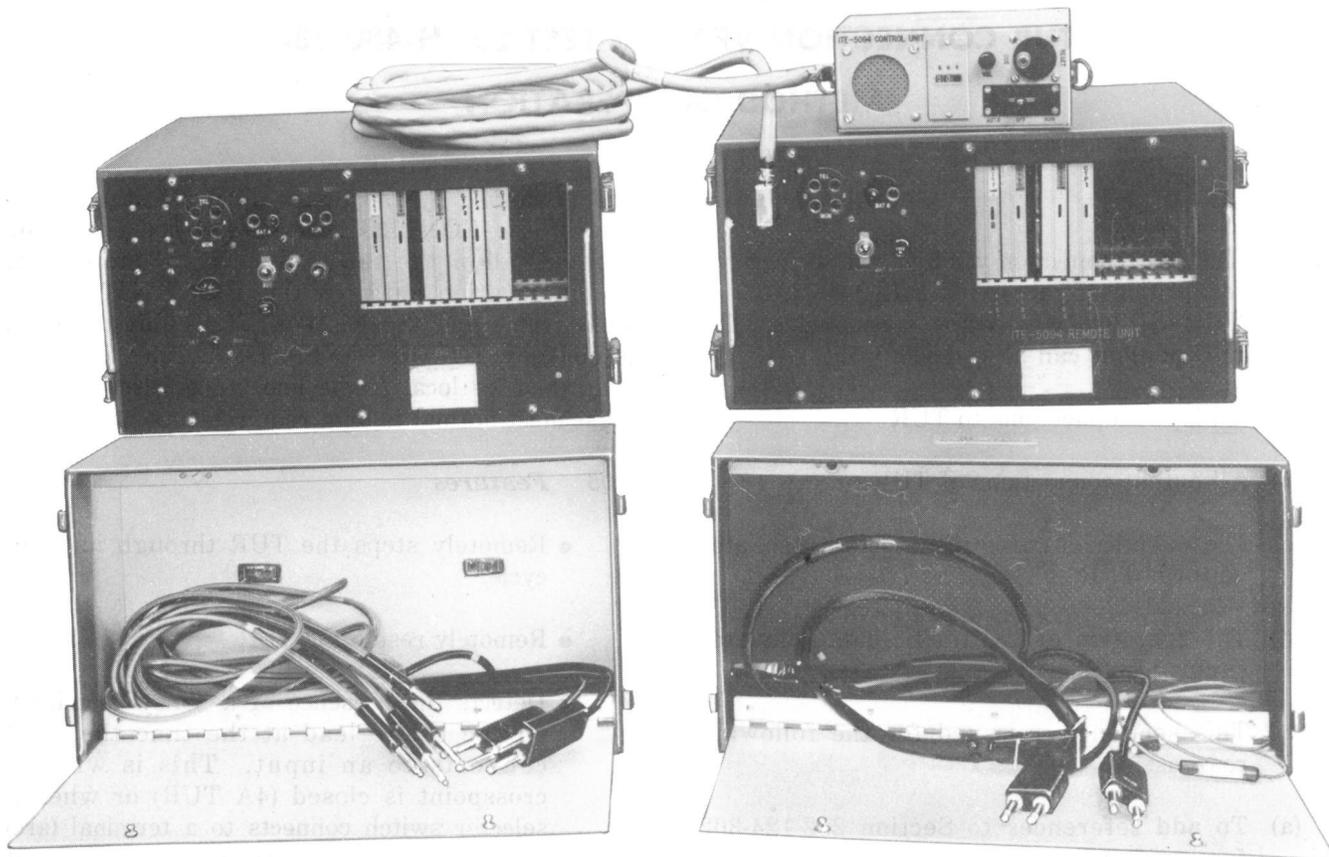


Fig. 1—TUR Connection Verifier Test Set

condition under which a lettered step or a series 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 procedure. Where a condition does not apply, all steps designated by that letter should be omitted.

## 2. FUNCTION OF JACKS, KEYS, AND LAMPS

### 2.01 Jacks and Connectors—TUR UNIT

- TST—The test jack is used with the H-400-430 DET. 32 cord to connect to the TUR frame TST jack.
- RST—The reset jack is used with the H-400-430 DET. 32 cord to connect to the TUR frame RST jack.
- BAT A—The battery A jack is used with the H-400-430 DET. 32 cord to connect to the -48 volts office supply.
- BB—The battery-busy connector is used with the H-400-430 DET. 35 cord to connect to battery-busy detectors on the TUR frame for scan lead verification test.
- GB—The ground-busy connector is used with the H-400-430 DET. 35 cord to connect to ground-busy and ground-idle detectors on the TUR frame for scan lead verification test.
- COE 1 and 2—The central office equipment connectors are used with the H-400-430 DET. 35 cord to connect to all assigned detectors in any order on the TUR frame for terminal finder test.

- REG-TDC—The register-traffic data converter jack is used with the H-400-430 DET. 34 cord to connect to TUR frame for the traffic register test and the TDC test.
- TEL—The telephone jacks are used with H-400-430 DET. 31 cord to connect to the central office local frame line "talk" circuit.
- MON—The monitor jacks are used to monitor "talk" circuit.

**2.02 Jacks and Connectors—REMOTE UNIT**

- BAT B—The battery B jack is used with the H-400-430 DET. 32 cord to connect to the -48 volts office supply.
- CU—The control unit connector is used with the H-400-430 DET. 33 to connect to the control unit.
- TEL—The telephone jacks are used with H-400-430 DET. 31 cord to connect to the central office local frame line "talk" circuit.
- MON—The monitor jacks are used to monitor "talk" circuit.

**2.03 Jacks and Connectors—CONTROL UNIT**

- RU—The remote unit connector is used with the H-400-430 DET. 33 cord to connect to the remote unit.
- COE—The central office equipment jack is used with the H-400-430 DET. 34 cord to connect to the central office equipment being verified.

**2.04 Keys and Switches—TUR UNIT**

- REG-OFF-TDC—This key controls the pulse rate for testing traffic registers and TUR converters.

**4. PRELIMINARY OPERATIONAL CHECK 4A TUR ONLY**

STEP	ACTION	VERIFICATION
1	At TUR frame— Block EC relay nonoperated.	

- BAT A—This key furnishes -48 volts and ground to unit.
- DET—This switch selects detector inputs.

**2.05 Keys and Switches—REMOTE UNIT**

- BAT B—This key furnishes -48 volts and ground to unit.

**2.06 Keys and Switches—CONTROL UNIT**

- MAN-OFF-AUTO—This key controls the stepping of the TUR.
- RESET—This key controls resetting the TUR frame and CU register.

**2.07 Lamps**

- DET BSY—This lamp indicates that detector under test is busy—TUR UNIT.
- BAT A—This lamp indicates that the BAT A key is operated—TUR UNIT.
- BAT B—This lamp indicates that the BAT B key is operated—REMOTE UNIT.

**3. PRELIMINARY OPERATIONAL CHECK**

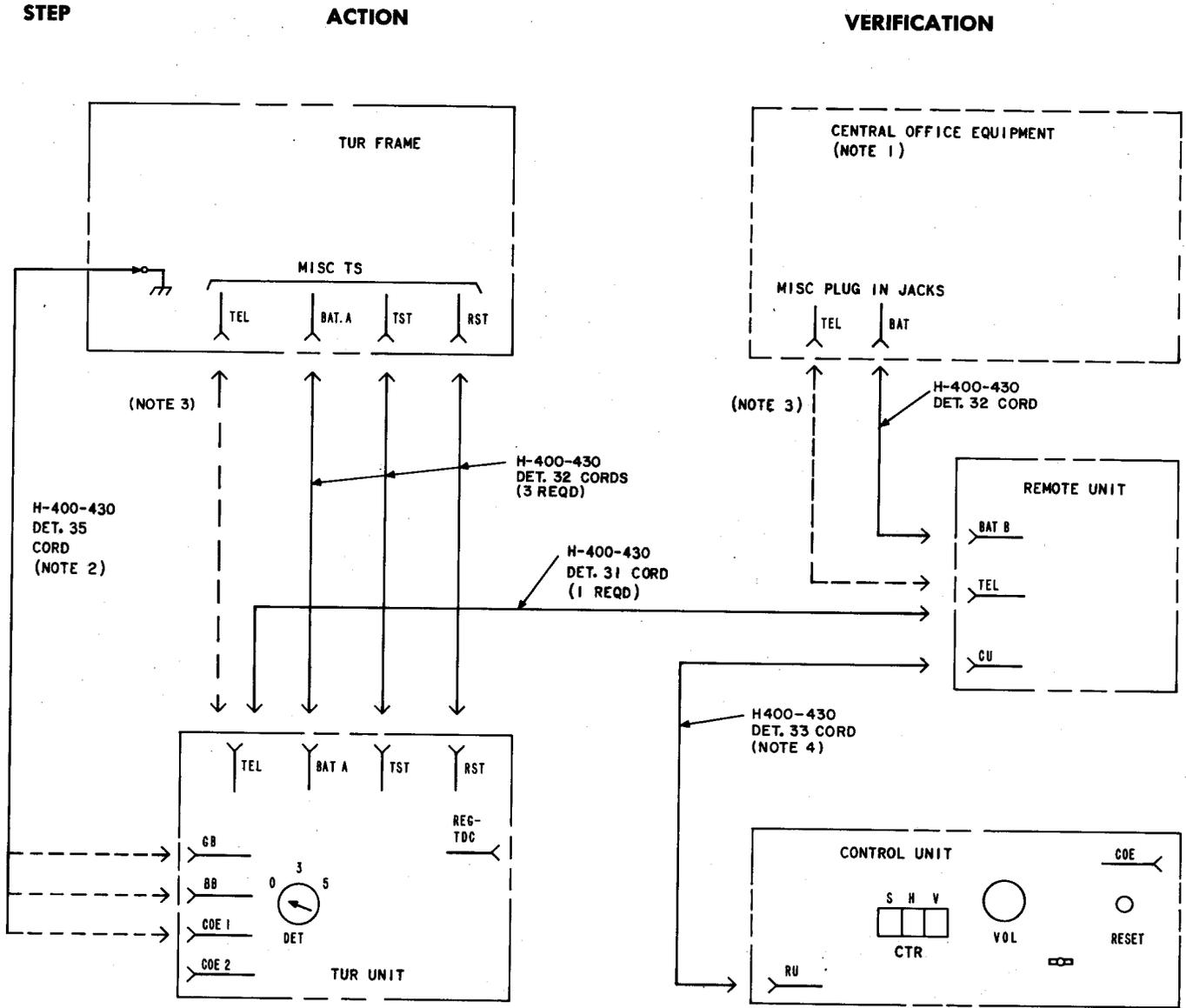
**3.01** A preliminary operational check of the TUR-CV test set provides assurance that the units are functioning properly before they are used over the central office "talk" circuit.

◆ Refer to Section 252-124-302 for verification of test set operations.

**Note:** If new circuit packs have been obtained from the factory and installed in the test set, these packs must be adjusted prior to attempting any test. Refer to Section 252-124-302 for circuit pack replacement and adjustment procedures.◆

**SECTION 252-124-301**

STEP	ACTION	VERIFICATION
	<p><i>Note:</i> Prevents TUR from entering an "END-OF-CYCLE" condition which would require returning to the TUR to restore the frame to normal.</p>	
2	<p>Block H0 and H1 relay nonoperated (options ZO, ZN) or remove GA relay from socket.</p>	
	<p><i>Note:</i> Prevents detectors from operating during all tests. An operated detector would prevent testing the registers and TDC and would generate a false busy signal to the verifier when the inputs are being tested.</p>	
3	<p>◆At master TUR frame— Remove CTC relay.◆</p>	
4	<p>Make connections as shown in Fig. 2.</p>	
5	<p>At TUR UNIT— Operate BAT A key to ON.</p>	<p>BAT A lamp lighted.</p>
6	<p>At REMOTE UNIT— Operate BAT B key to ON.</p>	<p>BAT B lamp lighted.</p>
7	<p>At CONTROL UNIT— Depress RESET key.</p>	<p>CU register reset. TUR frame reset.</p>
8	<p>Operate AUTO-OFF-MAN key to MAN three times.</p>	<p>CONTROL UNIT register indicates 002. TUR scan switch 0, horizontal 0, vertical 2 operated.</p>
9	<p>Operate AUTO-OFF-MAN key to AUTO and then MAN until CU register indicates 099.</p>	<p>TUR scan switch 0, horizontal 9, vertical 9 operated.</p>
	<p><i>Note:</i> An off-level step pulse is required by the scan switch to step from vertical 9 of one level to vertical 0 of the next level. The off-level indication will be shown on the CU register by a blank in the units position 00 . An off-level indication on the CU register indicates that the TUR is not on a crosspoint.</p>	
10	<p>Operate RESET key.</p>	<p>CU register reset. TUR frame reset.</p>
<p><b>Check of Scan Lead Verification Using Ground-Busy Detector</b></p>		
11	<p>At TUR UNIT— Set DET switch to 0.</p>	



- NOTES:
1. CONNECT TO -48 VOLT JACK NEAR TUR FRAME.
  2. EQUIP ITE 246I SOCKETS ON DET. 35 CORD WITH SIX ITE-4085 PUSH-ON CLIPS.
  3. USE 2 H400-430-DET. 31 CORDS FOR OFFICE TEL CIRCUIT CHECK CONNECTED AS SHOWN BY DASHED LINES.
  4. A SECOND DET. 33 CORD IS PROVIDED AND SHOULD BE USED WHEN ADDITIONAL LENGTH WILL FACILITATE TESTING.

Fig. 2—Preliminary Operation Test Preparation

- |    |  |  |
|----|--|--|
| 12 | Using H-400-430 DET. 35 cord, connect one end to GB connector on TUR UNIT and connect socket 0 equipped with an ITE-4085 push-on clip (624B tool) to TUR frame ground. | Clear and distinct 697-Hz tone heard.<br>Adjust volume control—(Control Unit). |
| 13 | Connect sockets 0 and 1 together and then connect to TUR frame ground.   | Dual tone of 697 Hz and 1447 Hz heard.   |

**SECTION 252-124-301**

<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
<b>Verification of TUR Scan With Detector Cross Tone Present</b>		
14	Operate AUTO-OFF-MAN key to AUTO.	TUR advances in synchronism with the CONTROL UNIT counter.
15	Restore AUTO-OFF-MAN key to OFF.	◆TUR restores to normal.◆

◆**Note 1:** If this test fails, either the CTP-8 or CTP-5 packs may be at fault. The amplitudes of the oscillators in the CTP-8 packs are preset at the factory, and the packs must *not* be substituted between the TUR and the REMOTE units. A (T) and (R) are stamped on these packs to identify the associated unit. However, as an aid in isolating the trouble, the CTP-5 packs may be substituted and the previous test rechecked. Refer to Section 252-124-302 for circuit pack replacement and adjustment procedures.

**Note 2:** If new packs have been obtained from the factory and installed in the test set, these packs must be adjusted before attempting any test. Refer to Section 252-124-302 for circuit pack replacement and adjustment procedures.◆

**Office TEL Circuit Check (Scan With Detector Cross Dual Tone Present)**

16	At the REMOTE UNIT— Remove the H-400-430 DET. 31 cord from the TEL jack and connect to an office TEL jack.	
17	Using another H-400-430 Det. 31 cord, connect the REMOTE UNIT TEL jack to an office TEL jack (Fig. 2).	
18	◆Operate AUTO-OFF-MAN key to AUTO.	TUR advances in synchronism with CONTROL UNIT counter.
19	Restore AUTO-OFF-MAN key to OFF.	TUR restores to normal.◆

**Note:** If this test fails ◆but TUR advances in synchronism with MAN-OFF-AUTO key to AUTO, without use of office TEL jacks,◆ office talk circuit is in trouble. Test the two sleeves of the office TEL circuit for false ground or battery potential.

STEP	ACTION	VERIFICATION
<b>Check of Scan Lead Verification Using Battery-Busy Detector</b>		
20	At TUR UNIT— Set DET switch to 0.	
21	Using H-400-430 DET. 35 cord, connect one end to BB connector on TUR UNIT and connect socket 0 equipped with ITE-4085 push-on clip to frame —48 volts.	Clear and distinct 697-Hz tone heard. Adjust volume control—(Control Unit).
22	Connect 0 and 1 together and then connect to —48 volts.	Dual tone of 697 Hz and 1447 Hz heard.
<b>Check of Terminal Finder Test Feature</b>		
23	At CONTROL UNIT— Operate AUTO-OFF-MAN key to AUTO.	TUR frame scans.
24	Using H-400-430 DET. 34 cord, connect COE jack on CONTROL UNIT to the sleeve of TEL jack on either the TUR or REMOTE UNIT.	TUR frame stops scanning when connection is made.
<b>Check of Register and Converter Test Feature</b>		
25	At TUR UNIT— Operate TDC-OFF-REG key to TDC.	TUR UNIT pulsing at 7 PPS can be felt with hand against side of TUR UNIT.
26	Operate TDC-OFF-REG key to REG.	TUR UNIT pulsing at 20 PPS can be felt with hand against side of TUR UNIT.
27	Remove patching cords and blocking tools, restore all keys, and replace CTC relay.	

#### 5. PRELIMINARY OPERATIONAL CHECK 3B TUR ONLY

STEP	ACTION	VERIFICATION
1a	If P relay is provided— At TUR frame— Block P relay nonoperated.	
2	Operate TUR OFF key to OFF.	
3b	If VER key is provided— Operate VER key to ON.	
4	Make connections as shown in Fig. 2.	

**SECTION 252-124-301**

STEP	ACTION	VERIFICATION
5	At TUR UNIT— Operate BAT A key to ON.	BAT A lamp lighted.
6	At REMOTE UNIT— Operate BAT B key to ON.	BAT B lamp lighted.
7	At CONTROL UNIT— Depress RESET key.	CONTROL UNIT register reset to 00_. TUR frame reset relays SC1, STZ, and STW operated.
8	Operate AUTO-OFF-MAN key to MAN three times.	CONTROL UNIT register indicates 002. TUR scan switch SW1 on Unit A on terminal 3.
	<p><i>Note:</i> A blank in the units position, ie (00_), on the CONTROL UNIT register indicates that the TUR is not on an input terminal.            (Does not apply for D unit).</p>	
9	Operate AUTO-OFF-MAN key to AUTO to step the TUR automatically until the CONTROL UNIT register reads about 35.	
10	Restore the AUTO-OFF-MAN key to OFF.	
11	Operate AUTO-OFF-MAN key to MAN to step the TUR until CONTROL UNIT register reads 39.	TUR scan switch SW2 is on terminal 21.
12	Operate MAN-OFF-AUTO key to MAN.	TUR scan switch SW2 advances to terminal 22. Units B and C (if provided) automatically scan their inputs.
13	After Units B and C complete their scans (10 seconds)— Operate RESET button.	CONTROL UNIT register indicates 00_. TUR relays SC1, STW, and ST2 are operated. All stepping switches are in position 22.

*Note:* Unit D, if provided, will not scan.

**Check of Scan Lead Verification Using Ground-Busy Detector**

14	At TUR unit— Set DET switch to 0.	
15	Using H-400-430 DET: 35 cord, connect one end to GB connector on TUR UNIT and connect socket 0 equipped with ITE-4085 push-on clip (624B tool) to TUR frame ground.	Clear and distinct 697-Hz tone heard. (Adjust volume control—Control Unit.)
16	Connect sockets 0 and 1 together and then connect to TUR frame ground.	Dual tone of 697 Hz and 1447 Hz heard.

STEP	ACTION	VERIFICATION
<b>Verification of TUR Scan With Detector Cross Dual Tone Present</b>		
17	Operate AUTO-OFF-MAN key to AUTO.	TUR advances in synchronism with the CONTROL UNIT counter.
18	Restore AUTO-OFF-MAN key to OFF.	TUR restores to normal.

◆**Note 1:** If this test fails, either the CTP-8 or CTP-5 circuit packs may be at fault. The amplitudes of the oscillators in the CTP-8 packs are preset at the factory, and the packs must *not* be substituted between the TUR and the REMOTE units. A (T) and (R) are stamped on these packs to indentify the associated unit. However, as an aid in isolating the trouble, the CTP-5 packs may be substituted and the previous test rechecked. Refer to Section 252-124-302 for circuit pack replacement and adjustment procedures.

**Note 2:** If new packs have been obtained from the factory and installed in the test set, these packs must be adjusted before attempting any test. Refer to Section 252-124-302 for circuit pack replacement and adjustment procedures.◆

**Office TEL Circuit Check (Scan With Detector Cross Dual Tone Present)**

19	At the REMOTE Unit— Remove the H-400-430 DET. 31 cord from the TEL jack and connect to an office TEL jack.	
20	Using another H-400-430 DET. 31 cord, connect the REMOTE UNIT TEL jack to an office TEL jack (Fig. 2).	
21	◆Operate AUTO-OFF-MAN key to AUTO.	TUR advances in synchronism with the CONTROL UNIT counter.
22	Restore AUTO-OFF-MAN key to OFF.	TUR restores to normal.◆

**Note:** If this test fails, office talk circuit is in trouble. Test the two sleeves of the office TEL circuit for false ground or battery potential.

**6. SCAN LEAD VERIFICATION**

**6.01** To use the verifier, the TUR UNIT of the verifier is connected to the TUR and office

“talk” circuit. The TUR UNIT of the verifier is set to observe the idle or busy condition of usage leads associated with the first detector. The REMOTE UNIT of the verifier is taken to the

COE connected to the first detector. The REMOTE UNIT is connected to the "talk" circuit at that location. From the REMOTE UNIT the TUR is stepped to the first input by sending a tone signal from the REMOTE UNIT to the TUR unit.

**6.02** If the circuit is idle when the TUR input connection is closed, no tone will be generated. When the circuit is made busy and the connection is correct, a tone will be heard at the CONTROL UNIT. The tone is generated at the TUR UNIT whenever the selected TUR input is busy. This tone is transmitted to the REMOTE UNIT over the office "talk" circuit. If the detector input is busy when the input connection is closed, it is an indication that the COE is "busy" and a steady busy tone will be heard. Visual inspection of the COE will reveal its true status (busy or idle). It is possible to intermittently apply a busy condition to the COE and listen for a corresponding intermittent busy tone in response. This procedure insures that the correct circuit has been identified and checked.

**6.03** Should no busy tone be received in response to the application of a busy condition on the COE, then either an open lead condition exists or the usage lead is wrongly connected. All COE circuits of this nature are listed and later rechecked using the COE terminal finder test feature of the verifier.

**6.04** If a cross exists between the observed detector input and any of the other detector inputs associated with the same input connection, a dual tone would be generated by the TUR UNIT rather than the single tone used for valid connections.

**6.05** After verification of the first input connection is made, the TUR is stepped to the second input connection and then the operation described previously is repeated. In this way all the connections to the first detector are verified. Next, the verifier is manually set to observe on the second detector to verify its inputs and so on until all inputs to all detectors are verified.

**6.06** The method of testing scan leads varies with circuit type. Some circuits can be tested at the test frame (eg, senders, markers, etc); others must be tested at the circuit itself (eg, line links, trunks, etc). Some testing details for the various office circuits are given in the following

paragraphs and in the attached Busy Test Tables A through H.

**6.07. Link Frames (Line, Trunk, Offices, Etc):**

Check with the Telephone Company to determine how many frames can be made busy at a time. Insert a make-busy plug in the make-busy jack on each frame for the channel being tested. In many instances it may be convenient to test all links on like-numbered channels even though they do not appear consecutively on the assignment sheet. For example, line link frames in No. 5 crossbar are best tested by doing the "0" channel of all link frames and then going back to do the "5" channel. All links should be tested by grounding the sleeve of the link from the *equipment* side of the frame. In addition to grounding the sleeve, some links such as line links must also have the same numbered horizontal made for the vertical being tested. As each channel on a frame is tested, remove the make-busy plug from the channel and insert it in the next channel to be tested. By the time all of the first channels are tested, the next channel will be idle and ready for testing. Links may be tested during normal working hours providing the equipment can be taken out of service.

**6.08 Trunks**—In some offices such as No. 5 crossbar, interoffice trunks can be tested at the test frame by setting up test calls. Whenever possible this method should be used since it also checks the test frame assignment as well as the trunk usage lead. Trunks are best tested during light traffic periods because of their long holding time.

**6.09 Markers, Decoders, Transverters, Etc**—All circuits that have a busy lamp appearance at a test frame can be tested using normal office traffic by observing the status of the busy lamp, ON or OFF. Maintenance usage can be checked by inserting make-busy plugs into the proper jacks at the test frame. These circuits can be tested during normal working hours. There is no need to remove this equipment from service unless there is trouble with the usage leads.

**6.10** Fast scan items must be checked for each appearance on the scan and register switches since there may be a break in the fast scan multiple. Total usage leads must be tested for both service and maintenance conditions for the first appearance on the scan switch. Thereafter, only the maintenance

condition needs to be verified for the other nine appearances.

## 7. TERMINAL FINDER TEST

**7.01** This test is performed after all inputs are tested and is made only on those inputs that did not respond to the application of a busy condition. This test determines whether an open lead condition exists or a wrong connection prevails and at what input connection the wrong connection appears.

**7.02** To perform this test, the connection verifier is set up for the terminal finder test. At the COE a tone is connected from the CONTROL UNIT to the usage lead of the COE. The CONTROL UNIT is then set to automatically scan all inputs on the TUR. If this lead is connected to the TUR, the TUR will automatically stop on the crosspoint where the lead is connected. If the TUR does not stop within one complete scan, then the COE lead is open. On the 3B TUR the TUR is set up to manually scan the inputs. While scanning the TUR, the COE tone will be heard when the TUR connects to the arc where the lead is connected. If no tone is heard for a complete scan, the lead is open. In this manner all nonverifying usage leads of this type are rechecked using this test to determine their actual status; ie, wrongly connected or open.

## 8. TRAFFIC REGISTER VERIFICATIONS

**8.01** A simple test feature is available on the verifier for testing connections between the TUR detector outputs and the traffic registers. This test provides a 25-millisecond ground pulse at the rate of 20 PPS to the output of the detector under test.

**8.02** At the traffic register cabinet, the REMOTE UNIT is connected to the office "talk" circuit

and to battery and ground. The TUR is remotely stepped to the first input connection. The register associated with this input connection and any other register that may be in parallel with it, either by choice such as a DGU (detector group usage) register, or by a wiring error, will operate at 20 PPS. A quick glance at the register field will find all registers that are being operated at this rate. Defective registers can easily be found by watching a pulsing register to see if it can follow this pulse rate.

**8.03** The TUR is stepped to the next input connection and its associated register verified. In this manner all registers connected to the TUR are verified.

## 9. TRAFFIC DATA CONVERTER VERIFICATIONS 4A TUR ONLY

**9.01** The traffic data converter (TDC) test set (SD-99313-01) is used in conjunction with the verifier for verifying connections from the TUR to the TDC circuit (SD-95968-01). The use of the TDC test set also permits testing the encoder and buffer register stages of the TDC as well as the proper TDC assignments.

**9.02** When verifying TDC connections, the TDC test set is connected to the TDC and set to receive the code associated with the input connection under observation. The code is produced each time a busy signal appears at the converter input. The TUR UNIT is connected to the TUR and is set to pulse the observed detector at the rate of 7 PPS. The relay associated with this detector operates at this rate and, in turn, applies a 7 PPS "detector-busy" signal to the converter.

**9.03** As each crosspoint is closed, the TDC test set is set to receive the expected code. The register on the test set should score each time the code is generated.

TABLE A

NO. 1 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Terminating Sender SD-25013	Unit Unit Unit	38 39 39	SBM SB SB	Maint Total Service	Plug Plug/Call Opr. RL Rel	Test Fr Test Fr Sender
SD-25455	SDR Unit SDR Unit SDR Unit	38 39 39	SBM SB SB	Maint Total Service	Plug Plug/Call Opr RL Rel	Test Fr Test Fr Sender
SD-25434	Unit Unit Unit	38 39 39	SBM SB SB	Maint Total Service	Plug Plug/Call Opr RL Rel	Test Fr Test Fr Sender
Dist. Junctor (Noncoin) SD-26201	MISC VERT Unit	2	DJ	Total	Plug/Call	Test Fr
Zone Registration Control SD-25320	Unit	35	ZR	Total	Plug/Call	Test Fr
Subscriber Sender SD-25012	Unit Unit Unit	01 02 02	SBM SB SB	Maint Total Service	Plug Plug/Call Opr. ON1 Rel	Test Fr Test Fr Sender
Originating Marker SD-25016	(MA) On Fr (MA) On Fr	4 5	MBM MB	Maint Service	Plug Call	Test Fr Test Fr
Terminating Marker SD-25283	(NC) MISC MISC	177 410 411	MBM MB MB	Maint Total Service	Plug Plug/Call Opr CK10 Rel	Test Fr Test Fr Marker
Auxiliary Sender SD-96479	(A) (A) (A)	19 19 10	SBM SB SB	Maint Total Service	Plug Plug/Call Opr. ON Rel	Test Fr Test Fr Sender
Office Links SD-25033	VERT NO. 2 PRI SW	RESP HALVES	0L0-9 2R0-9 5L0-9 7R0-9	Total	1. Insert MB plug in 0, 2, 5, & 7 pri sw MB jk 2. Grd SL lead	Office Link Fr
Incoming Links SD-25457			LL0 LL5 LR0 LL5	Total	1. Insert MB plug in 0 & 5 sec sw MB jk 2. Grd SL lead	Incoming Link Fr

TABLE A (Cont)

NO. 1 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Line Junctors SD-25553	—	—	LJ0, LJ5	Total	1. Insert MB plug in 0 & 5 sec sw SS jk 2. Grd SL lead	Line Link Fr
Line Links SD-25553	—	—	L0, L5	Total	1. Insert MB plug in 0 & 5 sec sw jk 2. Grd SL lead	Line Link Fr
Subscriber Line SD-25553	—	—	SL	Total	Grd SLU jk	LDF
Identifier SD-95810	(G) (G) (G)	36 46 46	IBM IB IB	Maint Service Service	Plug Call Opr ON2 Rel	Tbl Tkr Tbl Tkr Identifier
Outpulser SD-95811	(W) (B) (B)	9 7 7	OPBM- OPB- OPB-	Maint Service Service	Plug Call Opr. ON Rel	Tbl Tkr Tbl Tkr Outpulser
3-Digit Translator Connector SD-96529	(HC) (HC) (HC)	22 12 12	DTBM DTB DTB	Maint Total Service	Plug Plug / Call Opr. BY Rel	3 Dig Trnsl 3 Dig Trnsl 3 Dig Trnsl
Code Compressor SD-96527	(C) (B) (C)	44 37 44	CBM CB CBM	Total Service Maint	Opr CCB2 Rel Opr TM Rel Opr CCB2 Rel	Cd Compr Cd Compr Cd Compr
Transverter SD-25802	(MB) ON FR (MB) ON FR (MB) ON FR	45 44 44	TBM TB TB	Maint Total Service	Opr RB Rel Opr CBT Rel Opr CBT Rel	Test Fr Test Fr Transverter
Coin Supervisory SD-25061	(A) (A)	14 14	CS CS	Total Service	Plug / Call Opr RL Rel	CS CS
AMA Recorder SD-25873	UPPER (TRF)	1	TU	Service	Opr ON3 Rel	Recorder
Trunks	—	—	Typ:** PB,* Sl, TU	Total	Typ** opr: CO, CT, D, D2, SL, SL1, TL1	Trunk

\* Normally at ground potential

\*\* Typically

TABLE B

NO. 4 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Marker SD-68388	(MCA) (MCA) (MCA) (MCA)	91 101 91 91	MB MBM MB MB	Total Maint Service Service	Plug/Call Plug Call Opr CKG Rel	Test Fr Test Fr Test Fr Marker
Decoder SD-68340	(D) (D) (D) (D)	176 166 176 176	DB DBM DB DB	Total Maint Service Service	Plug/Call Plug Call Opr CAK Rel	Test Fr Test Fr Test Fr Decoder
Sender SD-68018	FR FR FR	SB 9 SB	SB SBM SB	Total Maint Service	Plug/Call Plug Opr S Rel	Test Fr Test Fr Total
SD-68423	FR FR FR	SB SBM SB	SB SBM SB	Total Maint Service	Plug/Call Plug Opr S Rel	Test Fr Test Fr Test Fr
SD-68221	MISC MISC MISC	SB0 129 SB0	SB SBM SB	Total Maint Service	Plug/Call Plug Opr S Rel	Test Fr Test Fr Total
SD-68222	MISC MISC MISC	SB0 129 SB0	SB SBM SB	Total Maint Service	Plug/Call Plug Opr S Rel	Test Fr Test Fr Total
SD-68424	(A) (A) (A)	25 32 25	SB SBM SB	Total Maint Service	Plug/Call Plug Opr S Rel	Test Fr Test Fr Total
SD-68489	MISC MISC MISC	204 205 204	SB SBM SB	Total Maint Service	Plug/Call Plug Opr S Rel	Test Fr Test Fr Total
Controller SD-68028	CONT & CONN CONT & CONN CONT & CONN CONT & CONN	128, 135 87, 134 128, 135 128, 135	CB CBM CB CB	Total Maint Service Service	Plug/Call Plug Opr MB Rel Call	Test Fr Test Fr Controller Test Fr
Foreign Area Translator SD-68342	MISC MISC MISC	138 148 138	FTB FTBM FTB	Total Maint Service	Plug/Call Plug 1. Insulate con- tacts 6-7T Rel TOS 2. Opr TOS Rel	Test Fr Test Fr Translator

TABLE B (Cont)

NO. 4 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Inc Lk Fr SD-68020	—	—	L0, R2, L5, R7	Total	1. Insert MB plug in 0, 2, 5, & 7 pri sw MB jk 2. Grd SL Lead	Link Fr
SD-68393	—	—	L0, R2, L5, R7	Total	1. Insert MB plug in 0, 2, 5, & 7 pri sw MB jk 2. Grd SL Lead	Link Fr
Out Lk Fr SD-68022	—	—	L0, R2, L5, R7	Total	1. Insert MB plug in 0, 2, 5, & 7 sec sw MB jk 2. Grd SL Lead	Link Fr
SD-68394	—	—	L0, R2, L5, R7	Total	1. Insert MB plug in 0, 2, 5, & 7 sec sw MB jk 2. Grd SL Lead	Link Fr
Transverter SD-68496	MISC MISC MISC MISC	5 15 5 5	TB TBM TB TB	Total Maint Service Service	Plug/Call Plug Call Rls TA1 Rel	Test Fr Test Fr Test Fr Transverter
CAMA Positions SD-25695			S	Total	Opr S Rel	Position
SD-27002 w/o ANI	(A)	27	S	Total	Opr S Rel Grd S Lead ON Pchg. 3 T.S. (B)	Position
With ANI	(A)	27	S	Total	Opr S Rel	Position
SD-95853	(B)	15	S	Total	Opr S Rel	Position
CAMA DP Registers SD-68487	(REG-) (REG-) (REG-) On Inc Reg & Lk Fr	15 16 15	RB RBM RM	Total Maint Service	Plug/Call Plug Opr RB Rel	Test Fr Test Fr Register

TABLE B (Cont)

NO. 4 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCNG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
OGT To CAMA Position SD-96481	(B)	15	S	Total	Opr S Rel	Trunk
INC Trk To CAMA Pos SD-96482	(B)	23	S	Total	Opr PB Rel	Trunk
Sender Lk SD-68023	—	—	SA00-19 SB00-19	Total	1. Insert MB plug in A & B jk of sw 2. Grd SL Lead	Link Fr
SD-68118	—	—	SA00-19 SB00-19	Total	1. Insert MB plug in A & B jk of sw 2. Grd SL lead	Link Fr
SD-68334	SC0 SC0 SC1 SC1 SC2 SC2 SC3 SC3 SC4 SC4 SC5 SC5 SC6 SC6 SC7 SC7 SC8 SC8 SC9 SC9 SC0 SC0 SC1 SC1 SC2	9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 6 5 6 5 6	SA00 SA01 SA02 SA03 SA04 SA05 SA06 SA07 SA08 SA09 SA10 SA11 SA12 SA13 SA14 SA15 SA16 SA17 SA18 SA19 SB00 SB01 SB02 SB03 SB04	Total	1. Insert MB plug in A & B jk of sw 2. Grd SL lead	Link Fr

TABLE B (Cont)

NO. 4 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
	SC2	5	SB05			
	SC3	6	SB06			
	SC3	5	SB07			
	SC4	6	SB08			
	SC4	5	SB09			
	SC5	6	SB10			
	SC5	5	SB11			
	SC6	6	SB12			
	SC6	5	SB13			
	SC7	6	SB14			
	SC7	5	SB15			
	SC8	6	SB16			
	SC8	5	SB17			
	SC9	6	SB18			
	SC9	5	SB19			
SD-68486	TUR	11	SA00	Total	1. Insert MB plug in A & B jk of sw 2. Grd SL lead	Link Fr
	TUR	12	SA01			
	TUR	13	SA02			
	TUR	14	SA03			
	TUR	15	SA04			
	TUR	16	SA05			
	RUR	17	SA06			
	TUR	18	SA07			
	TUR	21	SA08			
	TUR	22	SA09			
	TUR	23	SA10			
	TUR	24	SA11			
	TUR	25	SA12			
	TUR	26	SA13			
	TUR	27	SA14			
	TUR	28	SA15			
	TUR	31	SA16			
	TUR	32	SA17			
	TUR	33	SA18			
	TUR	34	SA19			
SD-68486	TUR	35	SB00			
	TUR	36	SB01			
	TUR	37	SB02			
	TUR	38	SB03			
	TUR	41	SB04			
	TUR	42	SB05			
	TUR	43	SB06			
	TUR	44	SB07			
	TUR	45	SB08			
	TUR	46	SB09			
	TUR	47	SB10			

TABLE B (Cont)

NO. 4 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
	TUR	48	SB11			
	TUR	51	SB12			
	TUR	52	SB13			
	TUR	53	SB14			
	TUR	54	SB15			
	TUR	55	SB16			
	TUR	56	SB17			
	TUR	57	SB18			
	TUR	58	SB19			
Trunks	—	—	Typ:** GB*, MS, S	Total	Typ:** Opr CO, IN, LO, PB, S, SL	Trunk
AMA Recorder SD-25872	TRF	1	TU	Service	Opr ON3 Rel	Recorder

\* Normally at ground potential

\*\* Typically

TABLE C

NO. 5 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Dial Tone Markers SD-26001	(B)	20	MB	Total	Plug/Call	MTF
	(B)	10	MBM	Maint	Plug	MTF
	(B)	20	MB	Service	Opr MCB1 Rel	Mkr
SD-25550	CB1	242	MB	Total	Plug/Call	MTF
	CB1	243	MBM	Maint	Plug	MTF
	CB1	242	MB	Service	Rls TUR Rel	Mkr
Completing Markers SD-26002	CA	20	MB	Total	Plug/Call	MTF
	CA	10	MBM	Maint	Plug	MTF
	CA	20	MB	Service	Opr MCB1 Rel	Mkr
SD-25550	CB1	242	MB	Total	Plug/Call	MTF
	CB1	243	MBM	Maint	Plug	MTF
	CB1	242	MB	Service	Rls TUR Rel	Mkr
Transverters SD-25591	TVC	137	TB	Total	Plug/Call	MTF
	TVC	138	TBM	Maint	Plug	MTF
	TVC	137	TB	Service	Test Call	MTF
	TVC	137	TB	Service	Rls CH1 Rel	TV
SD-26010	B†	13	TB	Total	Plug/Call	MTF
	B†	14	TBM	Maint	Plug	MTF
	B†	13	TB	Service	Test Call	MTF
	B†	13	TB	Service	Rls CH1 Rel	TV
SD-26161	D	9	TB	Total	Plug/Call	MTF
	D	10	TBM	Maint	Plug	MTF
	D	9	TB	Service	Opr CBR Rel	TV
Originating Registers SD-26040	C	45	RBM	Maint	Plug	MTF
	B	28	RB	Service	Test Call	MTF
	B	14	PBC	TT*	Test Call	MTF
	B	28	RB	Service	Opr. ON Rel	OR
SD-25551	(E)	18	RBM	Maint	Plug	MTF
	(E)	12	RB	Service	Test Call	MTF
	(C)	22	PBC	TT†	Test Call	MTF
	(E)	12	RB	Service	Opr ON 1 Rel	OR

† Top of CTV  
 †† TOUCH-TONE®

TABLE C (Cont)

NO. 5 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Outgoing Sdr MF SD-25580	(D) (D) (D)	28 5 28	SB SBM SB	Total Maint Service	Plug/Call MB Plug Opr SB Rel	MTF MTF Sender
SD-26051	(B) (B) (B)	14 15 14	SB SBM SB	Total Maint Service	Plug/Call MB Plug Opr SB Rel	MTF MTF Sender
RP SD-25732	(D) (D) (D)	28 5 28	SB SBM SB	Total Maint Service	Plug/Call MB Plug Opr SB Rel	MTF MTF Sender
SD-26052	(B) (B) (B)	14 15 14	SB SBM SB	Total Maint Service	Plug/Call MB Plug Opr SB Rel	MTF MTF Sender
DP SD-25779			SB SBM SB	Total Maint Service	Plug/Call MB Plug Opr SB Rel	MTF MTF Sender
IMG SD-25826	(K) (K) (K)	17 7 17	SB SBM SB	Total Maint Service	Plug/Call MB Plug Opr SB Rel	MTF MTF Sender
Incoming Registers DP SD-25729	(D) (C) (D)	22 5 22	RB RBM RB	Total Maint Service	Plug/Call Plug Opr MB Rel	MTF MTF IR
SD-26041	(B) (B) (B)	54 44 54	RB RBM RB	Total Maint Service	Plug/Call Plug Opr MB Rel	MTF MTF IR
MF SD-25730	(D) (C) (D)	22 5 22	RB RBM RB	Total Maint Service	Plug/Call Plug Opr MB Rel	MTF MTF IR
SD-26042	(D) (D) (D)	15 44 15	RB RBM RB	Total Maint Service	Plug/Call Plug Opr MB Rel	MTF MTF IR

TABLE C (Cont)

NO. 5 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
RP SD-25731	(D) (C) (D)	22/26 5/12 22/26	RB RBM RB	Total Maint Service	Plug/Call Plug Opr MB Rel	MTF MTF IR
SD-26043	(B) (B) (B)	45 35 45	RB RBM RB	Total Maint Service	Plug/Call Plug Opr MB Rel	MTF MRF IR
Subscriber Line Usage SD-25546	—	—	SL0-9	Total	Grd Corres SLU jk on last line Fr in SLU Multiple	SLU Fr
SD-26030	—	—	SL0-9	Total	Grd Corres SLU jk on last line Fr in SLU Multiple	SLU Fr
Coin Supervisory SD-25736	(D) (D)	5/26 5/26	CS CS	Total Service	MB Key/Call Opr RL1 Rel	CS CS
Line Links SD-25548	HG0 Rel HG0 Rel HG1 Rel HG1 Rel	LB0 LB5 LB0 LB5	L0, L5	Horiz Grp	1. Insert 349A plug in 0 & 5 juncter sw MB jk on Ln Lk Fr 2. Grd SL Lead at Ln Lk Fr	Ln Lk Fr
SD-26030	—	—	L0, L5	Horiz Grp	1. Insert 349A plug in 0 & 5 juncter sw MB jk on Ln Lk Fr 2. Grd SL Lead at Ln Lk Fr	Ln Lk Fr
Trunk Links SD-25549	TUR TUR TUR TUR	00-09 10-19 20-29 30-39	LL0 LL5 LL0 LR5	Horiz Grp	1. Insert 349A plug in 0 & 5 juncter sw MB jk on Tk Lk Fr 2. Grd SL Lead at Trk Lk Fr	Trk Lk Fr

TABLE C (Cont)

NO. 5 CROSSBAR TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
SD-26032	(C) or (A) (C) or (A) (C) or (A) (C) or (A)	00-09 10-19 20-29 30-39	LL0 LL5 LR0 LR5	Horiz Grp	1. Insert 349A plug in 0 & 5 junctor sw MB jk on Trp Lk Fr 2. Grd SL Lead on Trk Lk Fr	Trk Lk Fr
TOUCH-TONE To Dial Pulse Conv ES 26505	(C) (C) (C)	56 46 56	CB CBM CBM	Total Maint Service	Plug/Call Plug Opr ON1 Rel	MTF MTF Converter
Trunks	—	—	TYP:** C, CC, CO, G, S, TV, B1*	Total	TYP** OPR: B, D, CN, ON, S1 or S2 Rel	Trunk
AMA Recorder SD-25872	UPPER (TRF)	1	TU	Service	Opr ON3 Rel	Recorder

\* Normally at ground potential

\*\* Typically

TABLE D

CROSSBAR TANDEM TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Marker SD-25361	(MISC)	74	MB	Total	Plug/Call Plug Opr SPT Rel Call	Test Fr Test Fr Marker Test Fr
	(MISC)	75	MBM	Maint		
	(MISC)	74	MB	Service		
	(MISC)	74	MB	Service		
SD-27069	MISC(A)	73	MB	Total	Plug/Call Plug Opr SPT Rel Call	Test Fr Test Fr Marker Test Fr
	MISC(A)	74	MBM	Maint		
	MISC(A)	73	MB	Service		
	MISC(A)	73	MB	Service		
Transverter SD-25968	(MISC)	57	SB	Total	Plug/Call Plug Rls TA1 Rel Call	Test Fr Test Fr TV Test Fr
	(MISC)	67	MB	Maint		
	(MISC)	57	SB	Service		
	(MISC)	57	SB	Service		
Office Links SD-25033	VERT NO. 2 PRI SW	RESP HALVES	0L0-9 2R0-9 5L0-9 7R0-9	Total	1. Insert MB plug in 0, 2, 5, & 7 pri sw MB jk 2. Grd SL Lead	Off Ln Fr
Trunk Links SD-25362	—	—	0L0-9 2R0-9 5L0-9 7R0-9	Total	1. Insert MB plug in 0, 2, 5, & 7 pri sw MB jk 2. Grd SL Lead	Trk Lk Fr
Senders MF SD-27024	(G)	17	SB	Total	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
	(G)	27	SBM	Maint		
	(G)	17	SB	Service		
SD-25769	(A)	73	SB	Total	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
	(B)	56	SBM	Maint		
	(A)	73	SB	Service		
DP SD-25999	(G)	17	SB	Total	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
	(G)	27	SBM	Maint		
	(G)	17	SB	Service		
SD-25478	(A)	36	SB	Total	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
	(B)	26	SBM	Maint		
	(A)	36	SB	Service		

TABLE D (Cont)

CROSSBAR TANDEM TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
PCI SD-25961	(AA) (AA) (AA)	18 17 18	SB SBM SB	Total Maint Service	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
RP SD-25359	(MISC) (MISC) (MISC)	95-99 50-54 95-99	SB SBM SB	Total Maint Service	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
MF SD-25978	(A) (B) (A)	73 56 73	SB SBM SB	Total Maint Service	Plug/Call Plug Opr ON1 Rel	Test Fr Test Fr Sender
3D Register SD-25534	(MISC) (MISC) (MISC)	180-189 190-199 180-189	RB RBM RB	Total Maint Service	Plug/Call Plug Opr H2 Rel	Test Fr Test Fr Register
2-Way Interoffice Trk SD-27000	(A)	32	S2	Service	Opr A Rel	Trunk
Sender Link & Controller SD-25358	—	—	S	Total	Plug	Controller
OGT to CAMA Position SD-96481	(B)	15	S	Service	Opr S Rel	Trunk
CAMA Positions SD-95853	(B)	15	S	Total	Opr S Rel	Positions Circuit
SD-27002 With ANI	(A)	27	S	Total	Opr S Rel	Positions Circuit
W O ANI	(B)	3	S	Total	Grd S Lead	Positions Circuit
Incoming Trks SD-25356		10	TB	Total	Opr D Rel	Trunk
SD-25357	(C) On Trk Fr	10	TB	Total	Opr D1 Rel	Trunk
INC Trk to CAMA Pos SD-27036	(A)	58	PB*	Total	Opr A. Rel	Trunk

TABLE D (Cont)

CROSSBAR TANDEM TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
SD-27061	(A)	58	PB*	Total	Opr T Rel	Trunk
SD-96482	(B)	23	S	Total	Opr PB Rel	Trunk
AMA Recorder SD-25872	UPPER(TRF)	1	TU	Service	Opr ON3 Rel	Recorder
INC Trk MF Pulsing SD-25909	—	9	PB*	Total	Opr T Rel	Trunk

\* Normally at ground potential

TABLE E

PANEL TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Subscriber Sender SD-21193	SDR Unit SDR Unit SDR Unit	SB MB SB	SB SBM SB	Service Maint Service	Call Plug Opr SB Rel	Test Fr Test Fr Sender
SD-21194	SDR Unit SDR Unit SDR Unit	SB MB SB	SB SBM SB	Service Maint Service	Call Plug Opr SB Rel	Test Fr Test Fr Sender
Auxiliary Sender SD-96479	(A) (A) (A)	19 19 10	SB SBM SB	Total Maint Service	Plug/Call Plug Opr ON Rel	Test Fr Test Fr Sender
Subscriber Link SD-21714	(TUR)	LB	LB	Total	Grd Link sw D4 Spring	Link
SD-21460	(TUR)	LB	AU	Total	Grd Link sw D4 Spring	Link
Decoder SD-21277	(ST) Rel (ST) Rel (ST) Rel	1L 1L 1L	MB MBM MB	Service Maint Service	Call Plug Opr ST Rel	Test Fr Test Fr Decoder
Identifier SD-95810	(G) (G) (G)	46 36 46	IB IBM IB	Service Maint Service	Call Plug Opr ON2 Rel	Test Fr Test Fr Identifier
Outpulser SD-95811	(B) (W) (B)	7 9 7	OPB OPBM OPB	Service Maint Service	Call Plug Opr ON Rel	Test Fr Test Fr Outpulser
3D Translator SD-96529	(HC) (HC) (HC)	12 22 12	DTB DTBM DTB	Total Maint Service	Plug/Call Plug Opr BY Rel	Translator Translator Translator
Code Compressor SD-96527	(C) (C) (B)	44 44 37	CBM CBM CB	Total Maint Service	Plug/Call Opr TM Rel Call	CC CC CC
Subscriber Line SD-21273	(TU) Jacks	00-19	S	Total	Grd SLU Lead	IDF

TABLE E (Cont)

PANEL TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Line Finder & Dist. Sel. SD-21627	T.S. on Dist. Fr	BR	TU	Total	Grd Dist. sw S4 Spring	Line Finder
SD-21077	T.S. on Dist Fr	13	TU	Total	Grd Dist sw S4 Spring	Line Finder
ES-21030	—	—	TU	Total	Grd Dist sw S4 Spring	Line Finder
ES-21031	—	—	TU	Total	Grd Dist sw S4 Spring	Line Finder
Coin Control SD-21631	T.S. on Dist Fr	TU	TU	Total	Grd TU Lead	CC
District Selector SD-21784	T.S. on Dist Fr	BR Lead on Seq sw	PB*	Total	Opr SL Rel	Selector
Incoming Selector SD-21115	T.S. on Inc Fr	PB	PB*	Total	Recycle Selector	Selector

\* Normally at ground potential

TABLE F

SXS TUR BUSY TEST TABLE						
CIRCUIT	TERM STRIP	PCHG	USAGE LEAD	USAGE TYPE	MAKE-BUSY METHOD	MAKE-BUSY LOCATION
Line Finders SD-31530	—	9	S	Total	Grd SL Lead	Line Finder
SD-33013	—	9	S	Total	Grd SL Lead	Line Finder
Selectors SD-30200	—	9	S	Total	Grd SL Lead	Selector
SD-31745	—	9	S	Total	Grd SL Lead	Selector
Connectors SD-30228	—	—	S	Total	Grd SL Lead	Connector
Identifier SD-95810	(G) (G) (G)	46 36 46	IB IBM IB	Service Maint Service	Call Plug Opr ON 2 Rel	Test Fr Test Fr Identifier
Outpulser SD-95811	(B) (W) (B)	7 9 7	OPB OPBM OPB	Service Maint Service	Call Plug Opr ON Rel	Test Fr Test Fr Outpulser
Subscriber Line Usage T-95738-34	—	—	S	Total	Grd SLU jk	VIDE/ HIDE
AMA Sender SD-32207	(TF)	24	SB	Service	Opr ON1 Rel	Sender
Identifier SD-31957	(MISC-A) (MISC-A) (MISC-A)	38 37 38	IB IBM IB	Service Maint Service	Call Plug Opr DNT2 Rel	Test Fr Test Fr Identifier
Transverter SD-32203	MISC MISC MISC MISC	111 110 111 111	TB TBM TB TB	Total Maint Service Service	Plug/ Call Plug Call Rls CH1 Rel	Test Fr Test Fr Test Fr Transverter
AMA Recorder SD-25872	Upper T.S.	1	TU	Service	Opr ON3 Rel	Recorder

TABLE G

TUR CONVERTER ENCODER CONVERSION TABLE					
ENCODER P LEAD NUMBERS	ENCODER G TERMINAL NUMBERS	ENCODER P LEAD NUMBERS	ENCODER G TERMINAL NUMBERS	ENCODER P LEAD NUMBERS	ENCODER G TERMINAL NUMBERS
2 THRU	2 THRU	810	852	853	938
768	768	811	854	854	940
769	770	812	856	855	942
770	772	813	858	856	944
771	774	814	860	857	946
772	776	815	862	858	948
773	778	816	864	859	950
774	780	817	866	860	952
775	782	818	868	861	954
776	784	819	870	862	956
777	786	820	872	863	958
778	788	821	874	864	960
779	790	822	876	865	962
780	792	823	878	866	964
781	794	824	880	867	966
782	796	825	882	868	968
783	798	826	884	869	970
784	800	827	886	870	972
785	802	828	888	871	974
786	804	829	890	872	976
787	806	830	892	873	978
788	808	831	894	874	980
789	810	832	896	875	982
790	812	833	898	876	984
791	814	834	900	877	986
792	816	835	902	878	988
793	818	836	904	879	990
794	820	837	906	880	992
795	822	838	908	881	994
796	824	839	910	882	996
797	826	840	912	883	998
798	828	841	914	884	1000
799	830	842	916	885	1002
800	832	843	918	886	1004
801	834	844	920	887	1006
802	836	845	922		
803	838	846	924		
804	840	847	926		
805	842	848	928		
806	844	849	930		
807	846	850	932		
808	848	851	934		
809	850	852	936		

