INCOMING TRUNK TEST FRAME AND INCOMING TRUNK TEST CONNECTOR FRAME EQUIPMENT DESIGN REQUIREMENTS NO. 1 CROSSBAR AND CROSSBAR TANDEM SYSTEMS

1. GENERAL

SCOPE

1.01 This specification, together with the supplementary information listed here, covers the equipment design requirements for the framework, equipment, and circuits to be used in the engineering, manufacture, and installation of the incoming trunk test and the incoming trunk test connector frames.

1.02 This specification is reissued:

(a) To incorporate all information on addenda Issues 1 and 2 of Issue 11.

(b) To coordinate list information with WE manufacturing drawings in accordance with SD-25161-01, Issues 60D, 61D, 62A, 63B, 64B, and 66B; SD-28101-01, Issue 1; and SD-28103-01, Issue 1.

CAPACITY

1.03 The capacities of the frames and units for tandem and No. 1 crossbar are as follows.

Incoming Trunk Test Frame	8000 Trunks
Incoming Trunk Test Connector Frame	5 Connector Units
Incoming Trunk Test Connector Unit	200 Trunks

1.04 In a No. 1 crossbar office, the line load control key and lamp equipment for 100 line link frames together with dial tone speed indicating equipment, and an office load meter may be located on the incoming trunk test frame at the option of the telephone company.

DESCRIPTION

1.05 The incoming test circuit is arranged for automatic tests of incoming trunks to distant and local offices and home office overflow (120 IPM), line-busy (60 IPM), master busy (30 IPM), announcement trunks, and centrex trunks connected to the office frames. Access to the trunks under test is obtained by means of connectors located on a separate frame known as the incoming trunk test connector frame. These connections are made to the office link multiple with each connector serving ten marker test groups of 200 trunks on a pair of office link and extension frames. The test circuit, after checking a trunk, is automatically connected to the next, and so on, until a trouble is encountered which will stop the test circuit and bring in an alarm, or until all trunks have been tested. When desired, particular trunks may be selected for test, and the test repeated for as many times as are necessary to locate trouble.

1.06 In tandem offices, the incoming trunk test frame may be arranged to operate with a supplementary automatic transmission test and control frame (J67447AA) to perform 2-way transmission and noise tests on intertoll trunks. These tests are made by means of a test line, in a distant office obtained by a 104 code, pulsed out from the trunk test frame after most of the operational tests have been completed. A supplementary teletypewriter frame (J67447AF) may also be provided to work in conjunction with the trunk test frame for automatically printing records of transmission troubles. When automatic operational testing of trunks without the transmission and noise testing features is desired, it may be used to print trouble indications on both initial and repeat tests, thereby allowing the trunk test frame to advance and test the next trunk without requiring the services of an attendant. A supplementary incoming trunk test frame, (J27753P)

11 feet 6 inches high and 2 feet 8-1/8 inches long (see Fig. 2) is also provided in tandem offices, arranged for 7-digit MF outpulsing and nonstandard 4, 5, or 7-digit test line codes.

1.07 The incoming trunk test frame is a single-bay framework, 11 feet 6 inches high and 2 feet 8-1/8 inches long. (See Fig. 1.) The upper front casing encloses equipment for the common portion of the circuit and that part used for testing trunks arranged for revertive pulsing. The lower casing contains multifrequency and dial pulsing equipment, when required. The wiring side of the frame is protected by rear covers.

1.08 The incoming trunk test connector frame is a single-bay framework mounting 4-wire or 6-wire 200-point crossbar switch connector units. The 4-wire switches are used in No. 1 crossbar offices on a 2 feet 8-1/8 inches wide frame, and the 6-wire switches in tandem crossbar offices on a 3 feet 0-1/4 inch wide frame. The connector units include the cut-in relays and the cross-connection terminal strips which provide test class information for the trunks under test.

No. 1 Crossbar Only

Line Load Control

1.09 The common equipment for the line load control, when furnished, shall be located on the jack, key, and lamp panel of the incoming trunk test frame. It provides two lamps and two keys per line link frame for denying originating service to a portion of lines on each frame, an overload lamp per line link frame, and master keys and lamps for controlling simultaneously originating traffic on groups of line link frames. Supplementing this equipment are control relays and resistances which may occupy the three mounting plates below the writing shelf when the frame is arranged for testing only RP trunks. Wiring to this equipment may be superimposed on the frame local cable. When the test frame is arranged for testing MF trunks, this equipment shall be located on a relay rack, and direct cabling run between it and the test frame.

Dial Tone Speed Indicating

1.10 The dial tone speed indicating circuit, when provided, serves as an applique to the dial tone speed register circuit to indicate visually the number of dial tone intervals exceeding 3 seconds on each test cycle of the associated dial tone speed register circuit, and to give an alarm if a predetermined number of such intervals occurs on any cycle. It thus indicates an overload condition on originating dial equipment and serves as an aid in the administration of the line load control equipment. The key, lamp, and buzzer equipment for dial tone speed indicating may be located on this frame at the option of the telephone company, as shown on J27753D-( ), and the wiring included in the frame local cable.

Office Load Meter

1.11 An office load meter, arranged to indicate the total office drain on the 48-volt storage battery and thus provide an indication of the total office traffic load, may be furnished as a further aid in administering the line load control feature. This is a flush-mounted millivolt meter with scale reading from 0 to 100 and adjusted to read 100 at 50 millivolts. This meter is applicable in any office where an ammeter on the power board indicates the total 48-volt office load, and where this ammeter is provided with an external shunt having a 50-millivolt drop at the full-scale reading. Each millivolt meter will be calibrated for a particular length of shunt leads, which leads will be equipped with 20-ampere fuses to be inserted at the point of connection with the shunt. Provision is made for locating this meter in the jack, key, and lamp panel of this frame at the option of the telephone company.

Floor Plan Arrangement

1.12 The preferable location for the incoming trunk test connector frames is near their associated office link frames.

1.13 The incoming trunk test frame may be arranged to operate with a TTY control circuit to provide for automatially starting the test circuits, printing records of busy and trouble indications, advancing the test circuit to test next trunk, and to restore the test frame to normal at the end of the cycle. Provision is also made for printing tickets when the test frame is manually started and restored to normal.

1.14 The preferred location for the incoming trunk test frame is in the local maintenance centers and, if required, in the toll test center.

Crossbar Tandem Only

1.15 ***Trunk Identifier Testing:*** This circuit will make an automatic or a manual test of the trunk identifier and the glow lamps attached to the sleeve of the outgoing trunk. The voltage available for testing the glow lamps can be varied in accordance with instructions from the operating company.

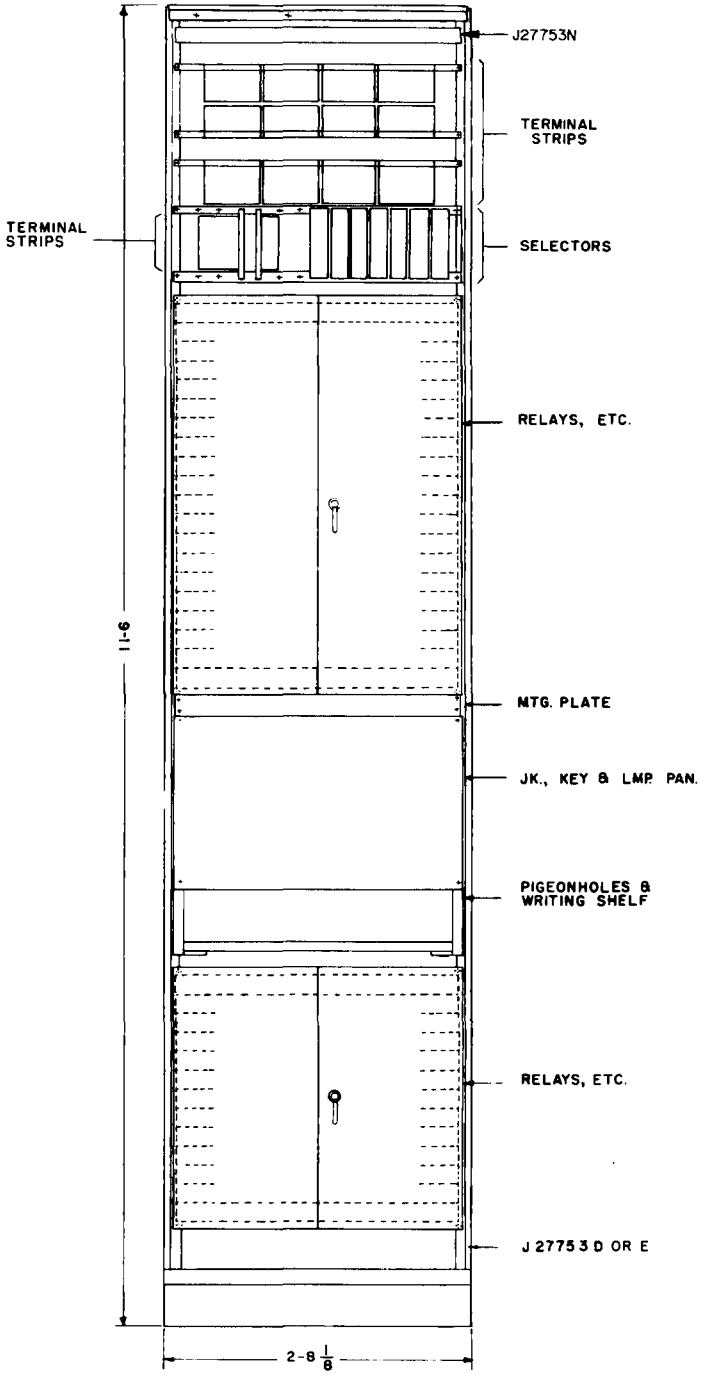

Fig. 1—No. 1 and Tandem Offices Incoming Trunk Test Frame

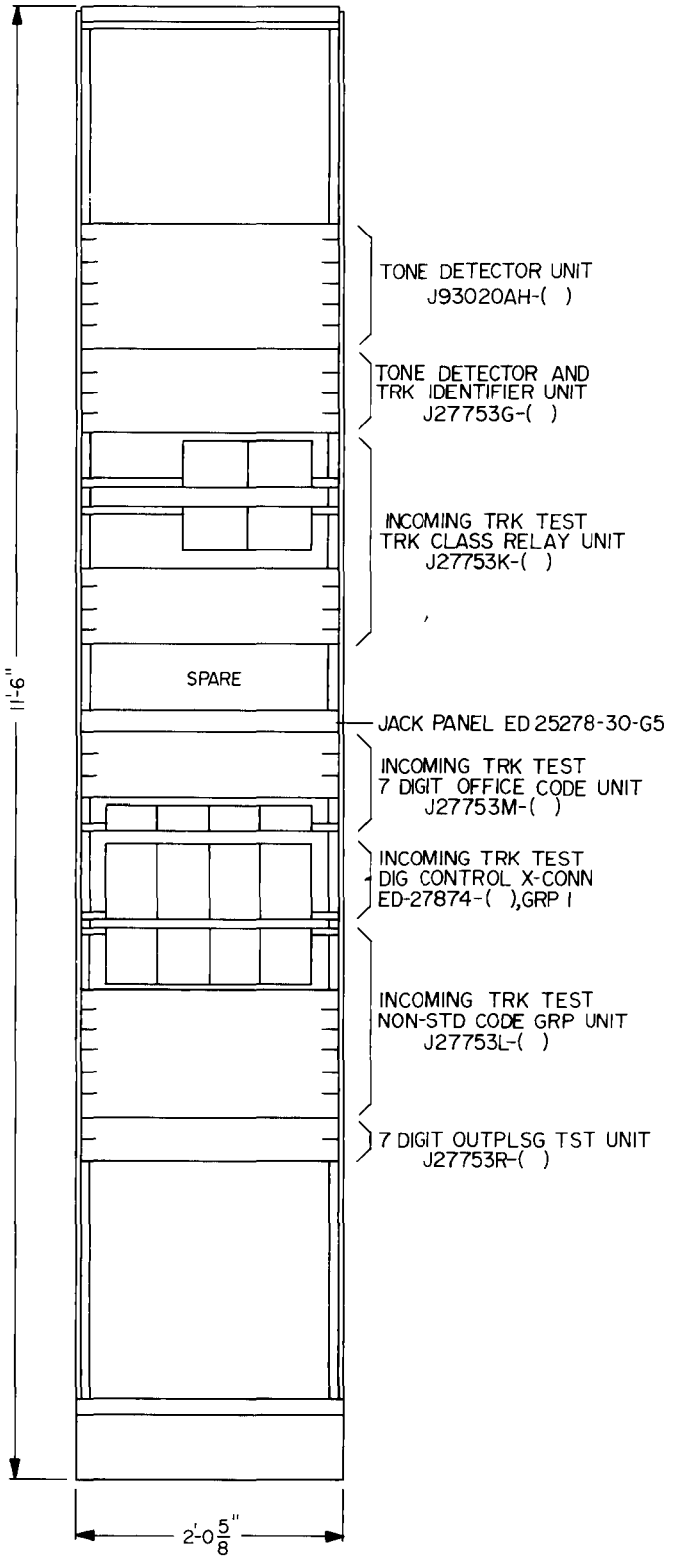

Fig. 2—Tandem Offices Supplementary Incoming Trunk Test Frame

SUBDIVISIONS OF EQUIPMENT AND DETAILED INDEX

WE J drawings should be ordered by referring to the prefix and base number and requesting the current dash (—) number.

EQUIPMENT CODE	RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING
ED-27874-( )		Equipment for Incoming Trunk Test Extension of Digit Control Cross Connection Field	ED-27874-( )	SD-25161-01
ED-27879-( )		Crossbar Systems No. 1 Printer Assembly Unit for Stuck Sender Trunk Identification (SSTI)	ED-27879-( )	SD-28103-01
ED-91710-70		Framework for Incoming Trunk Test Connector Frame for No. 1 Crossbar	ED-91710-70	SD-25262-01
J27753B	AT&TCo Atd	Incoming Trunk Test Connector Unit — 4-Wire Switch — For No. 1 Crossbar	J27753B-( )	SD-25161-01
J27753C	AT&TCo Std	Incoming Trunk Test Connector Unit — 6-Wire Switch — For Crossbar Tandem	J27753C-( )	SD-25161-01
J27753D	AT&TCo Std	Incoming Trunk Test Frame for No. 1 Crossbar	J27753D-( )	SD-25161-01
J27753E	AT&TCo Std	Incoming Trunk Test Frame — for Crossbar Tandem	J27753E-( )	SD-25161-01
J27753F	AT&TCo Std	Tone Detector Application Unit (No. 1 Crossbar Only)	J27753F-( )	SD-25161-01
J27753G	AT&TCo Std	Tone Detector and Trunk Identifier Application Unit (Crossbar Tandem Only)	J27753G-( )	SD-25161-01
J27753H	AT&TCo Std	Incoming Trunk Test Connector Frame for Crossbar Tandem	J27753H-( )	SD-25161-01
J27753J	- Reserved			
J27753K	AT&TCo Std	Incoming Trunk Test Trunk Class Relay Unit	J27753K-( )	SD-25161-01
J27753L	AT&TCo Std	Incoming Trunk Test Nonstandard Code Group Unit	J27753L-( )	SD-25161-01
J27753M	AT&TCo Std	Incoming Trunk Test 7-Digit Office Code Unit	J27753M-( )	SD-25161-01
J27753N	AT&TCo Std	Incoming Trunk Test Frame Fuse Panel	J27753N-( )	SD-25161-01

EQUIPMENT CODE	RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING
J27753P	AT&TCo Std	Supplementary Incoming Trunk Test Frame for Crossbar Tandem	J27753P-( )	SD-25161-01
J27753R	AT&TCo Std	PCI Outpulsing Test Unit	J27753R-( )	SD-25161-01
J27753S	AT&TCo Std	ROTL Access Unit for Crossbar No. 1 and Crossbar Tandem	J27753S-( )	SD-25161-01
J27753T	AT&TCo Std	ROTL Connector Unit for Crossbar No. 1 and Crossbar Tandem	J27753T-( )	SD-25161-01
J27753U	AT&TCo Std	Trunk Hold Control Unit (No. 1 Crossbar Only) Incoming Trunk Connector Control for SSTI	J27753U-( )	SD-28101-01
J27753V	AT&TCo Std	Trunk Select Control Unit (No. 1 Crossbar Only) Incoming Trunk Connector Control for SSTI	J27753V-( )	SD-28101-01
J27753W	AT&TCo Std	Crossbar Systems No. 1 Printer Control Unit	J27753W-( )	SD-28103-01

2. SUPPLEMENTARY INFORMATION

816-000-000—No. 1 Crossbar System Index
817-000-000—Crossbar Tandem System Index
J29253—817-010-100—General Outline—Crossbar Tandem System
J67447—817-706-150—Automatic Transmission Test and Control Frame and Teletypewriter Frame
Floor Plan Data Section 9.3, Sheets 2 and 6

3. DRAWINGS

WE J drawings listed should be ordered by referring to the prefix and base number and requesting the current dash (—) number.

Keysheets

SD-25000-01—Crossbar Office No. 1
SD-25161-01—Incoming Trunk Test Circuit
SD-25435-01—Crossbar Tandem Office

Framework

ED-91710-70 & 71—Frame Assembly
ED-92925-01—Fuse Panels—Assembly

Equipment

ED-25280-01—Test Frame Designation Cards
J27753B-( )—Incoming Trunk Test Connector Unit—4-Wire Switch—For No. 1 Crossbar
J27753C-( )—Incoming Trunk Test Connector Unit—6-Wire Switch—For Crossbar Tandem
J27753D-( )—Incoming Trunk Test Frame—For No. 1 Crossbar
J27753E-( )—Incoming Trunk Test Frame—For Crossbar Tandem
J27753F-( )—Tone Detector Application Unit (No. 1 Crossbar only)
J27753G-( )—Tone Detector Application Unit (Crossbar Tandem Only)

Wiring and Cabling

ED-25272-10—Switchboard Cabling Details—Incoming Trunk Test Connector Frame
ED-25273-10—Switchboard Cabling Details—Incoming Trunk Test Frame
ED-25410-10—Arrangement of Connections to Office Link Frames
ED-27127-01—Wiring Gauges and Types of Insulation

4. EQUIPMENT

ED-27874-( )—Equipment for Incoming Trunk Test Extension of Digit Control Cross-Connection Field

Group 1—Equipment required for one incoming trunk test digit control cross-connection field required in addition to nonstandard code group unit or 7-digit office code unit per SD-25161-01, RE option. (See Note A.)

Note

A. This cross-connection field is to be mounted on miscellaneous relay rack when located on No. 1 crossbar office and provisions should be made to facilitate cross-connection to J27753L and/or J27753M units as required.

ED-27879-( )—Crossbar Systems No. 1 Printer Assembly Unit for Stuck Sender Trunk Identification (SSTI)

Group 1—Equipment and apparatus required for one printer assembly unit per SD-28103-01, Fig. 3. (See Notes A and B.)

Notes

A. This unit requires a 120-volt ac outlet approved 3-wire with ground receptacle.

B. Mount this unit directly below the associated printer control unit per J27753W-( ).

ED-91710-70—Framework For Incoming Trunk Test Connector Frame For No. 1 Crossbar

Group 1—Framework for incoming trunk test connector frame, 4-wire switches. (See Notes A and B.)

Notes

A. Each incoming trunk test connector frame shall be equipped with one pair of TEL jacks per Fig. 1, one battery test jack per Fig. 4, one spare jack per Fig. 5, and one set of test terminals per Fig. 6 on SD-25262-01.

B. There is no local cable on these frames, all wiring to the test connector units and to the miscellaneous jack panel being carried directly to the apparatus in switchboard cable.

J27753B—AT&TCo Std—Incoming Trunk Test Connector Unit—4-Wire Switch—For No. 1 Crossbar

Equipment—J27753B-( )

List 1—A&M Only—Framework, assembly, wiring, and equipment for one incoming trunk test connector unit, 4-wire switch, arranged for 70 class relays. (See Note A and 5.05.)

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Conn Ckt, Fig. 1	1	1	
Conn Cut-in Ckt, Fig. 2	1	1	

List 2—Framework, assembly, wiring, and equipment for one incoming trunk test connector unit, 4-wire switch, arranged for 100 class relays. (See Note A and 5.06.)

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Conn Ckt, Fig. 1	1	1	
Conn Cut-in Ckt, Fig. 2	1	1	

List 3—Equipment and wiring per SD-25161-01, Fig. 76 required in addition to list 1 or 2 for stuck sender trunk identification (SSTI) access.

Notes

A. These units shall be surface wired.

B. Fig. 37, SW wiring is required for TTY operation.

J27753C—AT&TCo Std—Incoming Trunk Test Connector Unit—6-Wire Switch—For Crossbar Tandem

Equipment—J27753C-( )

List 1—Framework, assembly, wiring, and equipment for one incoming trunk test connector unit, 6-wire switch. (See Note A and 5.05.)

	WIRE	EQUIP	NOTES
Inc Trk Tst, SD-25161-01:			
Conn Ckt, Fig. 22	1	1	
Conn Cut-in Ckt, Fig. 2	1	1	

Notes

A. This unit shall be surface wired.

B. This unit shall mount on the J27753H frame.

J27753D—AT&TCo Std—Incoming Trunk Test Frame for No. 1 Crossbar

Equipment—J27753D-( )

List 1—Framework, assembly, wiring, and common equipment for one incoming trunk test frame. (See Notes A, B, D, E, G, H, and J.)

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Conn Cont Ckt, Fig. 3 & A "Z" Option, Less "UH" & "XT" App	1	1	
Supv Rel Tst Ckt, Fig. 6	1	1	
Busy Tst and Continuity Reversal Ckt, Fig. 9	1	1	
Jack, Lamp, and Key Ckt, Fig. 25	1	1	
Class Rel, Fig. 52 & 53	100	0	
Tmg Ckt for 2-way Trk, Fig. 28	1	1	
Automatic Retest, Fig. 33 Less "XT" App	1	1	
Trans-Test Ln Code Tel Ckt, Fig. 35	1	1	
Transfer Ckt for Recording 2 Grp of Trk, Fig. 38	1	1	
Centrex Test Ckt, Fig. 48	1	0	
Cancel Fr Blockages, Fig. 55 TL & TQ Options	1	0	
Automatic Start Ckt, Fig. 56 TM Option	1	0	
ANI Test, Fig. 62, RX Option	1	0	
PCI Outpulsing Test Ckt, Fig. 70, RW Option	1	0	
ANI Outpulsing Test Ckt, Fig. 66	1	0	
Nonstd 4-, 5-, or 7-Digit Test Line Codes or 7-Digit MF Outpulsing, Fig. 67	1	0	
Misc Frame Ckt, SD-25261-01:			
Fig. 2, 5, 6, 9, 11, & 12	1	1	
Fig. 10	4	0	
TTY Cont Ckt, SD-68456-01:			
Code Rel Ckt, XCR Lamp Only, Fig. 3	1	0	
Fuse Panel J27753N, L1	1	1	

List 2—Equipment and wiring required in addition to list 1 for testing trunks arranged for revertive pulsing. (See Note A.)

	WIRE	EQUIP	NOTES
Inc Trk Ckt, SD-25161-01:			
RP Tst Ckt, Fig. 5 & P	1	1	
RP Tst Ckt, Fig. 5 and VP Option	1	0	
Trk Cross-conn Ckt, Fig. 10	1	1	
Rep Inc Tst Ckt, Fig. 27, C & D	1	0	
2-Digit Code, Fig. 54	1	0	
Office Sel Tdm Ckt, Fig. 64	1	0	

List 3—Equipment and wiring required in addition to list 1 for testing trunks arranged for multifrequency pulsing. (See Notes A, D, and G.)

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Tst Conn Ckt, Fig. 12	1	1	
Digit Steering Ckt, Fig. 13	1	1	
Digit Steering Ckt, Fig. 13 "RC" and "VF" Options	1	0	
Supv Rel Ckt, Fig. 14 & "RC" Option	1	1	
Digit Cont Ckt, Fig. 15 & "RC" Option	1	1	
Pulse Generator Ckt, Fig. 16	1	1	
Checking Pulse Res, Fig. H	1	0	
MF Conn Ckt, Fig. 17	1	0	
3-Digit Cont Ckt, Nonrering, Fig. 20	2	0	
3-Digit Cont Ckt, Rering, Fig. 39	1	1	
4-Digit Cont Ckt, Fig. 23	3	0	
5-Digit Cont Ckt, Fig. 24	10	0	
Ringing and Supv Tst Ckt, Fig. 32	1	1	
Alarm Ckt, Fig. 34	1	1	

List 4—A&M Only—Apparatus and wiring per SD-25161-01, Fig. 11 required in addition to list 1 for one revertive pulsing class relay. (See Note B.)

List 5—A&M Only—Apparatus and wiring per SD-25161-01, Fig. 26 required in addition to list 1 for one multifrequency or dial pulsing class relay. (See Note B.)

List 6—Apparatus per SD-25161-01, Fig. 17 required in addition to list 3 for testing trunks arranged for MFP.

List 8—Apparatus per SD-25161-01, Fig. 20 required in addition to list 3 for each 3-digit nonrering test line code (maximum 2).

List 9—Apparatus per SD-25161-01, Fig. 23 required in addition to list 3 for each 4-digit test line code (maximum 3).

List 10—Apparatus per SD-25161-01, Fig. 24 required in addition to list 3 for each office indicating digit of a 5-digit test line code (maximum 10).

List 11—Apparatus and wiring per SD-25161-01, Fig. E required in addition to list 2 when frame is equipped for testing trunks arranged for RP only.

List 12—Apparatus and wiring per SD-25161-01, Fig. F required in addition to list 3 when frame is equipped for testing trunks arranged for MFP.

List 13—Apparatus and wiring per SD-25161-01, Fig. G required in addition to lists 2 and 3 when frame is equipped for testing trunks arranged for RP and MFP.

List 14—Apparatus per SD-25161-01, Fig. H required in addition to lists 2, 3, 12, and 13, when frame is equipped for testing trunks arranged for MFP, or RP and MFP.

List 15—Apparatus per SD-25161-01, Fig. 27 with D wiring, required in addition to list 2 for testing repeating ground cutoff panel incoming selectors.

List 16—Apparatus per Miscellaneous Circuit SD-25261-01, Fig. 10 required in addition to list 1 for each test frame having its TA lamp multipled at the incoming trunk test frame.

List 17—Apparatus and wiring per SD-25161-01, Fig. B required in addition to list 1 when frame is arranged for testing 4001 to 8000 trunks.

List 18—A&M Only—Wiring and equipment per SD-96387-01, Fig. 1, 2, and 3, and equipment per Fig. 4 G lamps only, and Fig. 6 required in addition to list 1 when the common equipment for line load control for 100 line link frame maximum is located on the incoming trunk test frame. (See Notes C, F, and J.)

List 24—Line load control common equipment and wiring per SD-96387-01, Fig. 1, Fig. 3 AR key and CLB and CLC keys and lamps only, and Fig. 4, G lamps only, and Fig. 6 required in addition to list 1 when frame is equipped for testing trunks arranged for multifrequency. (See Notes C, F, and J.)

List 25—Equipment and wiring required in addition to list 1 for application of tone detector SD-94800-01 per SD-25161-01, Fig. 45 less VV Option.

List 26—Equipment required in addition to list 2 for tone detection on RP trunks per SD-25161-01, Fig. 5 VP and UB apparatus only.

List 27—Equipment required in addition to list 3 for tone detection on MF trunks per SD-25161-01, Fig. 13 VF apparatus only.

List 29—Apparatus and wiring, per SD-25161-01, Fig. 52, required in addition to list 1 for one revertive pulsing class relay. (See Note B.)

List 30—Apparatus and wiring, per SD-25161-01, Fig. 53, required in addition to list 1 for one multifrequency or dial pulsing class relay. (See Note B.)

List 31—Apparatus, per SD-25161-01, Fig. 54, required in addition to list 2 for a 2-digit code for test to a synchronous test line.

List 32—Apparatus and wiring per SD-25161-01, Fig. 6, UP apparatus and Fig. 48, required in addition to list 1 to provide for tests of the centrex trunks.

List 33—Equipment per SD-96387-01, Fig. 10 required in addition to lists 1 and 18 or 24 for one office load meter. (See Note K.)

List 34—Apparatus and wiring per SD-25161-01, Fig. 60, SV only required in addition to list 1 when trunks are divided into eight testing groups.

List 35—Equipment and wiring required in addition to list 2 for testing to No. 1 ESS on trunks arranged for RP per SD-25161-01, Fig. 5, SX option only.

List 36—Apparatus and wiring required in addition to list 1 when a teletypewriter printer is provided for one TTY frame.

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Conn Cont Ckt Fig. 3 "UH" & "XT" App Only	0	1	
Automatic Retest Ckt, Fig. 33, "XT" App Only	0	1	
Cancel Fr Blockages, Fig. 55, "TL" & TQ Options	0	1	
VM, WB, WH & XR Options	1	0	
TTY Cont Ckt, SD-68456-01:			
Code Rel Ckt XCR Lamp Only on Fig. 3	0	1	

List 37—Reserved.

List 38—Reserved.

List 39—Apparatus and wiring required in addition to list 36 for automatic start of ITT frame per SD-25161-01, Fig. 56 with TM option.

List 40—Apparatus and wiring required in addition to list 1 to provide for testing of ANI trunks per SD-25161-01, Fig. 62 and RX option.

List 41—Equipment required in addition to list 2 for testing to a panel office selector tandem per SD-25161-01, Fig. 64.

List 42—Apparatus per SD-25161-01, UM option required in addition to list 1 to provide for test of home office 30, 60, 120 IPM, and announcement trunks.

List 43—Apparatus per SD-25161-01, Fig. 66 required in addition to list 1 without list 40 when test of 7-digit MF outpulsing is provided and ANI outpulsing is required. (See Notes L and M.)

List 44—Apparatus per SD-25161-01, Fig. 70, required in addition to list 1 when test of 7-digit MF outpulsing is required. (See Notes L and M.)

List 45—Apparatus per SD-25161-01, Fig. 67 required in addition to list 1 for nonstandard 4-, 5-, or 7-digit test line codes. (See Notes L and M.)

List 46—Equipment required in addition to list 1 for key selection of busy timing intervals per SD-25161-01, Fig. 9, TJ apparatus and TI wiring only.

List 47—Equipment per SD-25161-01, Fig. 3, QK and QM option only required in addition to list 1 when frame is arranged for ROTL.

List 48—Equipment and wiring per SD-25161-01, Fig. 75 and QQ and QP options required in addition to list 1 for SSTI.

Notes

A. All new frames after SD-25161-01, Issue 63B shall be arranged for MFP by always providing equipment ordered in list 3 with list 1. Frames can also be arranged for RP by providing list 2 and supplementary lists in addition to list 1 as required.

B. The frame is arranged for 100 class relays per Fig. 52 or 53 of the circuit. One such relay, designated G for revertive pulsing and DM for multifrequency pulsing, is required for each group of incoming trunks having identical test frame cross-connections. The relay code is the same for both conditions, and the wiring between the individual contacts and the cross-connecting terminal strips is the same, the only difference is the functional designation and the strapping on the common side of the relays. Arranged in this way, the frame can be equipped with a maximum of 100 G relays for RP trunks, 100 DM relays for MF trunks, or any combination of the two. Frames arranged for RP only and MF only, will have their class relays assigned 0 up and designated G and DM, respectively. On frames arranged for RP and MF, it is recommended that the G relays be assigned 0 up and the DM relays 99 down. As an aid in applying the strapping on the fixed side of the relays, it is further recommended that the assignments be made in multiples of fully equipped mounting plates.

C. List 18 includes wiring for line load control for inclusion in the frame local cable when specified by the telephone company. List 18 is not furnished when the frame is equipped per list 3.

D. On frames not wired for MFP, the bottom front casing is omitted.

E. Included in list 1 are a R2DB cord, a 47A plug with red shell, and a 716E receiver as shown on SD-25161-01, Fig. 25.

F. When frame is arranged to test MF per list 3, line load equipment per list 24 shall be furnished in place of list 18 and directly cabled to connecting apparatus of SD-96387-01 which shall be mounted on a relay rack as covered on J99235B.

G. All wiring options shown in the circuit figures specified shall be provided in the frame local cable and shall be connected as required for each job.

H. J27753F required in addition to J27753D for application of Tone Detector, SD-94800-01 and is located on the miscellaneous relay rack.

J. The C resistor of Fig. 4 and the G- relay of Fig. 5 on SD-96387-01 shall be provided as required per J99235B-( ) relay rack unit.

K. Office load meters that require shunt loads of 200 feet or less provide G1H meter; with 200-300 feet provide G1J meter, and greater than 300 feet provide G1( ) type meter on a job basis.

L. J27753K, J27753L, J27753M, and J27753R are to be miscellaneous relay rack mounted when they are required in addition to J27753D.

M. Equipment required for testing MF 7-digit office codes is outlined on J27753M-( ); for testing MF nonstandard groups on J27753L-( ); and for auxiliary class relays on J27753K-( ).

J27753E—AT&TCo Std—Incoming Trunk Test Frame—For Crossbar Tandem

Equipment—J27753E-( )

List 1—Framework, assembly, and wiring for one incoming trunk test frame for testing trunks arranged for multifrequency, dial or revertive pulsing. (See Notes A, B, C, D, and E.)

	WIRE	EQUIP	NOTES
Fuse Panel, J27753N List 1	1	1	
Inc Trk Tst Ckt, SD-25161-01:			
Conn Cont Ckt, Fig. 3 Less "QK" & "QM" & A, "Z", "UJ", "SN" & "TT" Options Less UH and UM App	1	1	
Supv Rel Tst Ckt Fig. 6 Less "UP" App	1	1	
Busy Tst & Cont Reversal Ckt, Fig. 9	1	1	
Class Rel, Fig. 52 & 53	100	0	
Tst Conn Ckt, Fig. 12	1	1	
Digit Steering Ckt, Fig. 13 & "RC" Option	1	1	
Supv Rel Ckt, Fig. 14 & "RC" Option	1	1	
Digit Cont Ckt, Fig. 15 & "RC" Option	1	1	
Pulse Generator Ckt, Fig. 16	1	1	
Checking Pulse Res, Fig. H	1	1	
MF Conn Ckt, Fig. 17 and "RQ" Option	1	1	
DP Conn Ckt, Fig. 18	1	1	
Bat. and Grd and Loop Res DP Ckt, Fig. 19	1	1	
Fig. F and G	1	0	
3-digit Cont Ckt, Nonrering, Fig. 20	2	0	
4-digit Cont Ckt, Fig. 23	3	0	
5-digit Cont Ckt, Fig. 24	10	0	
Jack, Lamp, and Key Ckt, Fig. 25	1	1	
Tmg Ckt for 2-way Trk, Fig. 28	1	1	
Aux CL Ckt for 2-way Trk, Delay DP Supv, Fig. 29	1	0	
Aux CL Ckt for 2-way Trk, "Go" Supv, Fig. 30	1	0	
Rep 2 Tst Ckt, DP or RB Fig. 31	1	0	
Fig. P	1	1	
Ringing & Supv Tst Ckt, Fig. 32	1	1	
Automatic Retest Ckt, Fig. 33	1	1	
Alarm Ckt, Fig. 34	1	1	
Transmission Tst Line Code Select Ckt, Fig. 35, "VG", "VH", and "VJ" Options	1	0	
Tst Line Pad Ckt, Fig. 36	1	0	
Trk Grp Ident Ckt, Fig. 37	1	0	
Transfer Ckt for Recording 2 Grp of Trk, Fig. 38, Less WG Option	1	1	
3-digit Cont Rering, Fig. 39	1	1	
Straightforward Tst for Verification of Transmission Tst Equipment, Fig. 40	1	1	
Automatic Testing of 2-way Trk Release Time, Fig. 41	1	0	
Trunk Identifier Rering Test Ckt, Fig. 47	1	0	
Centrex Test Ckt, Fig. 48	1	0	
Verification, Fig. 49	1	0	
Auto Testing, Fig. 50	1	0	
One-Way Trans Tests, Fig. 51	1	0	
Cancel Frame Blockages, Fig. 55	1	0	
Automatic Start, Fig. 56	1	0	
Misc Frame Ckt, SD-25261-01:			
Fig. 2, 5, 6, 9, 11, & 12	1	1	
Fig. 10	4	4	
Automatic Transmission Tst & Cont Ckt, SD-68446-01:			
Class Lamps, Fig. 1 and "E" Option	1	0	
Deviation, Computer, Lamps, & Keys Only, Fig. 2	1	0	
Misc Lamps, Fig. 8	1	0	
First Deviation Totalizer, Fig. 11, ZI Option (Switch Only)	1	0	
Digit Steering Ckt, Fig. 13 "VF" Option	1	0	
One-Way Transmission Measurement, Fig. 14 (Lamps Only)	1	0	
Ringing and Supv Tst Ckt, Fig. 32, "VE" Option	1	0	

	WIRE	EQUIP	NOTES
Teletypewriter Cont Ckt, SD-68456-01:			
Code Rel Ckt, Lamp Only, Fig. 3	1	0	
Nonstandard 4-, 5-, or 7-Digit Test Line Codes for 7-Digit MF Outpulsing, Fig. 67	1	0	
PCI Outpulsing, Fig. 70	1	0	

List 2—Equipment and wiring required in addition to list 1 for testing trunks arranged for revertive pulsing. (See Note A.)

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt; SD-25161-01:			
RP Tst Ckt, Fig. 5	1	1	
RP Tst Ckt, Fig. 5 "VP" Option	1	0	
Trk Cross-Conn Ckt, Fig. 10	1	1	
Rep Inc Tst Ckt, Fig. 27, C & D	1	0	

List 3—A&M Only—Apparatus and wiring per SD-25161-01, Fig. 11 required in addition to list 1 for one revertive pulsing class relay. (See Note B.)

List 4—A&M Only—Apparatus and wiring per SD-25161-01, Fig. 26 required in addition to list 1 for one multifrequency or dial pulsing class relay. (See Note B.)

List 5—Apparatus per SD-25161-01, Fig. 20 required in addition to list 1 for each 3-digit nonrering test line code (maximum 2).

List 6—Apparatus per SD-25161-01, Fig. 23 required in addition to list 1 for each 4-digit test line code (maximum 3).

List 7—Apparatus per SD-25161-01, Fig. 24 required in addition to list 1 for each office indicating digit of a 5-digit test line code (maximum 10).

List 8—Apparatus and wiring per SD-25161-01, Fig. B required in addition to list 1 when frame is arranged for testing 4001 to 8000 trunks.

List 9—Apparatus per SD-25161-01, Fig. 29 and YQ option required in addition to list 1 for testing delay pulse supervision 2-way trunks and one-way trunks.

List 10—Apparatus per SD-25161-01, Fig. 29 and 30 and YM option required in addition to list 1 for testing delay pulse supervision 2-way trunks, "go" supervision 2-way trunks and one-way trunks.

List 11—Apparatus per SD-25161-01, Fig. 30 and YP option required in addition to list 1 for testing "go" supervision 2-way trunks and one-way trunks.

List 12—Apparatus per SD-25161-01, Fig. 31 required in addition to list 1 to provide a repeat 2 test of DP trunks.

List 13—Apparatus per SD-25161-01, Fig. F required in addition to list 1 when frame is equipped for testing trunks arranged for MFP, DP, or MFP and DP.

List 14—Apparatus per SD-25161-01, Fig. G required in addition to lists 1 and 2 when frame is equipped for testing trunks arranged for RP and DP, RP and MFP, or RP, MFP and DP.

List 15—Apparatus per SD-25161-01, Fig. 27 with D wiring, required in addition to list 2 for testing repeating ground cutoff panel incoming selectors.

List 16—Equipment required in addition to list 1 when automatic transmission test and control is provided for one incoming trunk test frame.

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Ringing and Supv Tst Ckt, Fig. 32, "WA" App Only		1	
Transmission Tst Line Transfer Ckt, Fig. 35		1	
Tst Line Pad Ckt, Fig. 36		1	
Automatic Transmission Tst & Cont Ckt, SD-68446-01:			
Class Lamps, Fig. 1 and "E" Option		1	
Deviation, Computer, Lamps, & Keys Only, Fig. 2		1	
Misc Lamps, Fig. 8		1	
First Deviation Totalizer, Fig. 11, ZI Option (Switch Only)		1	

List 17—Equipment required in addition to list 1 when a teletypewriter printer is provided for one incoming trunk test frame.

	WIRE	EQUIP	NOTES
Inc Trk Tst Ckt, SD-25161-01:			
Conn Cont Ckt, Fig. 3, "XT" App Only		1	
Automatic Retest Ckt, Fig. 33 XT App Only		1	
Trk Grp Ident Ckt, Fig. 37		1	
Teletypewriter Cont Ckt, SD-68456-01:			
Code Rel Ckt, Fig. 3		1	

List 18—Equipment per SD-25161-01, Fig. 38, WG option only, and Fig. 61 required in addition to lists 1 and 16 or 17 when two trunk testing groups are provided and teletypewriter printers and/or deviation totalizers are provided at two locations.

List 19—Apparatus per SD-25161-01, Fig. 41 required in addition to list 1 when automatic testing of 2-way trunk release time is required.

List 20—Equipment required in addition to list 1 for transmission tests and tone detection on MF or DP trunks per SD-25161-01, Fig. 13, VF apparatus only.

List 21—Equipment required in addition to list 1 for transmission tests on trunks per SD-25161-01, Fig. 32, VE apparatus only.

List 22—Equipment required in addition to list 1 for transmission tests on trunks requiring 3-digit DP or MF outpulsing per SD-25161-01, Fig. 35, VG apparatus only.

List 23—Equipment required in addition to list 1 for transmission tests on trunks requiring 4 digit revertive outpulsing per SD-25161-01, Fig. 35, VH apparatus only.

List 24—Equipment required in addition to list 1 for transmission tests on trunks requiring 4 digit DP and MF outpulsing per SD-25161-01, Fig. 35, VJ apparatus only.

List 25—Equipment required in addition to list 2 for transmission tests and tone detection on RP trunks per SD-25161-01, Fig. 5, VP apparatus only.

List 26—Apparatus and wiring required in addition to lists 1 and 20 or 25 for application of tone detector SD-94800-01 per SD-25161-01, Fig. 45, less VV option.

List 27—Apparatus and wiring required in addition to list 26 for 2225-Hz tone detection during transmission testing per SD-25161-01, Fig. 45, VV option.

List 28—Equipment required in addition to lists 1 and 26 to provide for trunk identifier verification per SD-25161-01, Fig. 50. (See Note E.)

List 29—Apparatus and wiring required in addition to list 17 to provide for stopping the teletypewriter at the end of the test cycle per SD-25161-01, Fig. 3, UH option.

List 30—Wiring and apparatus per SD-25161-01, Fig. 47 required in addition to list 1 to provide for testing of the home office rering test circuits.

List 31—Wiring and apparatus per SD-25161-01, Fig. 3, UM option, required in addition to list 1 to provide for testing the home office reorder, line-busy, master busy, and announcement trunks.

List 32—Wiring and apparatus per SD-25161-01, Fig. 6, UP apparatus and Fig. 48 required in addition to list 26 to provide for tests of the centrex trunks.

List 33—Equipment required in addition to lists 1 and 26 for trunk identifier automatic testing per SD-25161-01, Fig. 49. (See Note E.)

List 34—Apparatus and wiring, per SD-25161-01, Fig. 52, required in addition to list 1 for one revertive pulsing class relay. (See Note B.)

List 35—Apparatus and wiring, per SD-25161-01, Fig. 53, required in addition to list 1 for one multifrequency of dial pulsing class relay. (See Note B.)

List 36—Apparatus and wiring, per SD-25161-01, Fig. 51 and SD-68446-01, Fig. 14 (lamps only), required in addition to list 16 for one-way transmission test on 2-wire completing trunks.

List 37—Equipment required in addition to list 1 for key selection of busy timing intervals per SD-25161-01, Fig. 9, TJ apparatus only.

List 38—Equipment required in addition to list 17 to cancel frame blockages on nonprint and stick troubles under key control per SD-25161-01, Fig. 55.

List 39—Equipment required in addition to list 1

for automatic start of ITT frame, per SD-25161-01, Fig. 56.

List 40—Equipment and wiring required in addition to list 2 for testing to No. 1 ESS on trunks arranged for RP per SD-25161-01, Fig. 5, SX option only.

List 41—Equipment and wiring required in addition to list 1 when eight testing groups are provided per SD-25161-01, Fig. 60, less SV option.

List 42—Equipment and wiring required in addition to lists 41 and 16 or 17, when trunks divided into eight testing groups are provided and teletypewriter printers and/or deviation totalizers are provided at two locations per SD-25161-01, Fig. 60, SV option only and Fig. 61.

List 43—Equipment required in addition to list 2 for tone detection in RP trunks per SD-25161-01, Fig. 5 UB apparatus only.

List 44—Apparatus per SD-25161-01, Fig. 70, required in addition to list 1 when test of 7-digit MF outpulsing is provided and PCI outpulsing is required. (See Note F.)

List 45—Apparatus per SD-25161-01, Fig. 67 required in addition to list 1 for nonstandard 4-, 5-, or 7-digit test line codes and/or 7-digit MF outpulsing. (See Notes G and H.)

List 46—Equipment per SD-25161-01, Fig. 3, QK and QM options only, required in addition to list 1 when frame is arranged for ROTL.

List 47—Equipment and wiring required in addition to list 1 when testing of 2-way trunks is required per SD-25161-01, Fig. 29 and 30.

Notes

A. Specify list 1 and supplementary lists as required for frames arranged for DP or MFP. For frames arranged for RP, DP, and MFP, specify lists 1 and 2 plus supplementary lists as required. Frames equipped for DP are wired for MFP also.

B. The frame is arranged for 100 class relays per Fig. 52 or 53 of the circuit. One such relay, designated G for revertive pulsing and DM for dial pulsing or multifrequency pulsing, is required for each group of incoming trunks having identical test frame cross-connections. The relay is the same for both conditions, and the wiring between the individual contacts and the cross-connecting terminal strips is the same, the only difference being the functional designation and the strapping on the common side of the relays. Arranged this way the frame can be equipped with any combination of G or DP relays. Frames arranged for DP and/or MFP only will have their class relays assigned 0 up, and designated DM. On frames arranged for RP, DP, and/or MFP, it is recommended that the G relays be assigned 0 up, and the DM relays 99 down. As an aid in applying the strapping on the fixed side of the relays, it is further recommended that the assignments be made in multiples of fully equipped mounting plates.

C. Included in list 1 are a R2DB cord, a No. 47A plug with red shell, and a No. 716A receiver as shown on SD-25161-01, Fig. 25.

D. All wiring options shown in the circuit figures specified shall be provided in the frame local cable and shall be connected as required for each job.

E. The J27753G unit is required in addition to the tandem incoming test frame for application of tone detector and trunk identifier and is located on the miscellaneous relay rack.

F. See J27753M-( ) for equipment required for testing MF 7-digit office codes.

G. See J27753L-( ) for equipment required for testing MF nonstandard code groups.

H. See J27753K-( ) for equipment required for auxiliary trunk class relays.

J27753F—AT&TCo Std—Tone Detector Application Unit (No. 1 Crossbar Only)

Equipment—J27753F-( )

List 1—Framework, assembly, wiring, and common equipment for one tone detector application unit required to detect various signal tones and announcements, per SD-25161-01, Fig. 42 less TN, VT, VU, and VW apparatus and Fig. 43. (See Notes A and B.)

List 2—Equipment required in addition to list 1 for testing MF or DP trunks per SD-25161-01, Fig. 42, VT apparatus only.

List 3—Equipment required in addition to list 1 for testing RP trunks per SD-25161-01, Fig. 42, VU apparatus only.

List 5—Equipment required in addition to list 1 for detecting voice announcements or master busy per SD-25161-01, Fig. 42, VW apparatus only. (See Note B.)

Notes

A. The J27753F unit is to be mounted on a miscellaneous basis and used with the No. 1 incoming trunk test frame.

B. Provide VX wiring for TTY operation.

J27753G—AT&TCo Std—Tone Detector and Trunk Identifier Application Unit (Crossbar Tandem Only)

Equipment—J27753G-( )

List 1—Framework, assembly, wiring, and common equipment for one tone detector application unit required to detect various signal tones and announcements, per SD-25161-01, Fig. 42 less TN, VT, VU, and VW apparatus and Fig. 43.

List 2—Equipment required in addition to list 1 for testing MF or DP trunks per SD-25161-01, Fig. 42, VT apparatus only.

List 3—Equipment required in addition to list 1 for testing RP trunks per SD-25161-01, Fig. 42, VU apparatus only.

List 4—Equipment and wiring required in addition to list 1 for detecting 2225-Hz tone supervision during transmission testing and/or for verification of home office synchronous test lines per SD-25161-01, Fig. 44 less UL apparatus.

List 5—Equipment required in addition to list 4 for verification of home office synchronous test lines per SD-25161-01, Fig. 44 UL apparatus only.

List 6—Equipment required in addition to list 1 for detecting voice announcements or master busy or for operational tests of trunks per SD-25161-01, Fig. 42, VW apparatus only.

List 7—Equipment and wiring required in addition to list 1 for trunk identifier basic apparatus per SD-25161-01, Fig. 46 less UK apparatus.

List 8—Equipment required in addition to list 7 for trunk identifier verification per SD-25161-01, Fig. 46 UK apparatus only.

Notes

A. Provide VS and VX wiring options when required in accordance with Note 102 per SD-25161-01.

B. The J27753G unit is to be mounted on a miscellaneous basis and used with the tandem incoming trunk test frame.

J27753H—AT&TCo Std—Incoming Trunk Test Connector Frame For Crossbar Tandem

Equipment—J27753H-( )

List 1—Framework, assembly, wiring and equipment for one incoming trunk test connector frame arranged to mount five test connector units.

	WIRE	EQUIP	NOTES
Local Cable per Inc Trk Test Fr, SD-25161-01: Fig. 2, 3, & 22	1	0	A, B
Misc Frame Ckt, SD-25262-01: Fig. 1, 4, 5, & 6	1	1	

Notes

A. The J27753C test connector unit shall mount on this frame. The connector units shall be equipped from bottom up.

B. Each connector shall be equipped with a unit local cable connecting it with the unit below.

J27753K—AT&TCo Std—Incoming Trunk Test Trunk Class Relay Unit

Equipment—J27753K-( )

List 1—Assembly, wiring, and common equipment for one incoming trunk test trunk class relay unit required with 7-digit MF outpulsing or 4-, 5-, or 7-digit nonstandard codes provides first 28 trunk class circuits (00-27) per SD-25161-01, 14 Fig. 68. (See Note A.)

List 2—Equipment and wiring required in addition to list 1 for second 28 trunk class circuits (28-55) per SD-25161-01, 14 Fig. 68.

List 3—Equipment and wiring required in addition to list 1 for third 28 trunk class circuits (56-83) per SD-25161-01, 14 Fig. 68.

List 4—Equipment and wiring required in addition to list 1 for last 16 trunk class circuits (84-99) per SD-25161-01, Fig. 68.

Note

A. When the unit is mounted on a miscellaneous relay rack it is recommended that ED-27874-( ), Grp 1 be mounted on the same or adjacent rack.

J27753L—AT&TCo Std—Incoming Trunk Test Nonstandard Code Group Unit

Equipment—J27753L-( )

List 1—Assembly, wiring, and common equipment for one incoming trunk test nonstandard code group unit required for 4-, 5-, or 7-digit test line codes when testing MF trunks provides first 14 SD-25161-01, Fig. 69 (COD relays 00 through 13). (See Note A.)

List 2—Equipment and wiring required in addition to list 1 for second 14 SD-25161-01, Fig. 69 (COD relays 14 through 27).

List 3—Equipment and wiring required in addition to list 1 for third 14 SD-25161-01, Fig. 69 (COD relays 28 through 41).

List 4—Equipment and wiring required in addition to list 1 for fourth 14 SD-25161-01, Fig. 69 (COD relays 42 through 55).

List 5—Equipment and wiring required in addition to list 1 for fifth 14 SD-25161-01, Fig. 69 (COD relays 56 through 69).

List 6—Equipment and wiring required in addition to list 1 for last ten SD-25161-01, Fig. 69 (COD relays 70 through 79).

Note

A. Locate this unit adjacent to and below ED-27874-( ), Grp 1 cross-connection field when mounted on miscellaneous relay rack frame.

J27753M—AT&TCo Std—Incoming Trunk Test 7-Digit Office Code Unit

Equipment—J27753M-( )

List 1—Assembly, wiring, and common equipment for one incoming trunk test 7-digit office code unit required with 7-digit MF outpulsing, provides first 14 SD-25161-01, Fig. 65 (ABC codes 00 through 27). (See Note A.)

List 2—Equipment and wiring required in addition to list 1 for second 14 SD-25161-01, Fig. 65 (ABC codes 28 through 55).

List 3—Equipment and wiring required in addition to list 1 for last 12 SD-25161-01, Fig. 65 (ABC codes 56 through 79).

Note

A. Locate this unit adjacent to and above ED-27874-( ), Grp 1 cross-connection field when mounted on miscellaneous relay rack frame.

J27753N—AT&TCo Std—Incoming Trunk Test Frame Fuse Panel

Equipment—J27753N-( )

List 1—Assembly, wiring, and common equipment for one incoming trunk test frame fuse panel per SD-25161-01, Fig. 11, less fuses. (See Note A.)

Note

A. Unit shall be mounted on J27753D and E frames.

J27753P—AT&TCo Std—Supplementary Incoming Trunk Test Frame for Crossbar Tandem

Equipment—J27753P-( )

List 1—Framework, assembly, and wiring for one supplementary incoming trunk test frame arranged for 7-digit MF outpulsing and nonstandard 4-, 5-, or 7-digit test line codes. (See Notes A and B.)

Notes

A. All units to be mounted on this frame shall be provided per Table A.

B. The frame wiring shall be loose wired and shall be run down the rear of the right upright (viewed from the front) and shall terminate

on the unit terminal strips where provided or directly on the apparatus involved.

J27753R—AT&TCo Std—PCI Outpulsing Test Unit

Equipment—J27753R-( )

List 1—Assembly, wiring, and equipment per SD-25161-01, Fig. 63, with RW option, for one unit for testing trunks with PCI outpulsing. (See Notes A and B.)

Notes

A. Provide RV wiring option for heavy final positive pulse per Note 102, SD-25161-01.

B. For mounting of this unit see J27753P, Table A. In No. 1 crossbar this unit shall be miscellaneous relay rack mounted.

J27753S—AT&TCo Std—ROTL Access Unit for Crossbar No. 1 and Crossbar Tandem

Equipment—J27753S-( )

List 1—Assembly, surface wiring, and equipment for one ROTL access unit in accordance with SD-25161-01, App Fig. 72 and 73, less QN option. (See Note A.)

List 2—Wiring and equipment per SD-25161-01, Fig. 73, QN option required in addition to list 1 when tandem office is arranged for ROTL.

List 3—Wiring and equipment per SD-25161-01, Fig. 73, QR option required in addition to list 1 when No. 1 office is arranged for SSTI.

Note

A. In tandem offices mount unit on supplementary ITT frame, J27753P, if provided, or on miscellaneous relay rack. In No. 1 offices mount unit on miscellaneous relay racks.

J27753T—AT&TCo Std—ROTL Connector Unit for Crossbar No. 1 and Crossbar Tandem

Equipment—J27753T-( )

List 1—Assembly, surface wiring, and equipment per SD-25161-01, Fig. 74, five required, to provide a ROTL connector unit serving a maximum of five connectors on a frame. (See Notes A, B, and C.)

Notes

A. This unit requires adapters when used in tandem offices because of a difference in connector frame width, and should be mounted on J27753H frame if provided. Unit shall be located directly adjacent and above the fifth connector position on frame.

B. Connectors for No. 1 crossbar are located on framework per ED-91710-70, Gr 1. In tandem the connectors are located on ED-91710-71, Gr 9 or J27753H.

C. All leads from ROTL connector unit to associated connector are terminated directly on relays.

J27753U—AT&TCo Std—Trunk Hold Control Unit (No. 1 Crossbar Only) Incoming Trunk Connector Control for SSTI

Equipment—J27753U-( )

List 1—Assembly, wiring, and equipment for one trunk hold control unit required for stuck sender trunk identification per SD-28101-01, Fig. 1. [See J27753V-( ) Unit.]

J27753V—AT&TCo Std—Trunk Select Control Unit (No. 1 Crossbar Only) Incoming Trunk Connector Control for SSTI

Equipment—J27753V-( )

List 1—Assembly, wiring, and equipment for one trunk select control unit required for stuck sender trunk identification per SD-28101-01, Fig. 2. [See J27753U-( ) Unit.]

J27753W—AT&TCo Std—Crossbar Systems No. 1 Printer Control Unit

Equipment—J27753W-( )

List 1—Assembly, wiring, and equipment for one printer control unit per SD-28103-01, Fig. 1 and 2. (See Notes A and B.)

TABLE A

SUPPLEMENTARY INCOMING TRUNK TEST FRAME – J27753P

COMPONENT EQUIPMENT UNITS SHALL BE EQUIPPED AS FOLLOWS:				
UNIT		QUANTITY TO BE PROVIDED		
CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED	TITLE OF UNIT – DESCRIPTION FEATURE OR OPTION
J27753G	1		1	Tone detector & trunk identifier unit-common eqpt (see Note 1)
	2		1	For testing MF or DP trks
	6		1	For detecting voice announcements
J27753K	1	1		Inc trk tst-trk class rel unit to provide 1st-28, trk class ckts
	2		1	For 2nd 28, trk class ckts
	3		1	For 3rd 28, trk class ckts
	4		1	For remaining 16 trk, class ckts
J27753L	1	1		Inc trk tst nonstd code group unit-to provide common eqpt and 1st 14 COD relays
	2		1	For 2nd 14 COD relays
	3		1	For 3rd 14 COD relays
	4		1	For 4th 14 COD relays
	5		1	For 5th 14 COD relays
	6		1	For last 10 COD relays
J27753M	1	1		Inc trk tst 7-digit off.code unit-to provide common eqpt and 1st 14 ABC codes
	2		1	For 2nd 14, ABC codes
	3		1	For last 12, ABC codes
J27753R	1	1		7-digit MF-PCI outpulsing test unit-common equipment
ED-27874	G1	1		Equipment for inc trk tst extension of digit control X-conn field
J93020AH	1		1	Tone detector unit-common equipment (see Note 2)

Notes:

1. When the J27753P supplementary trunk test frame is furnished, the tone detector and trunk identification application unit J27753G, shall be mounted on this supplementary frame (J27753P). It is recommended that whenever a supplementary trunk test frame is furnished, tone detector and trunk identifier application units already existing in the office, be relocated to mount on the new supplementary trunk test frame.

2. Tone detector unit equipment shall be ordered per specification J93020AH. This unit should be mounted in conjunction with the tone detector and trunk identifier unit J27753G, per instructions above, (see Note 1).

Notes

A. Mount this unit directly above the associated printer assembly unit per ED-27879-( ).

B. This unit should also be mounted as near as possible to the trunk scan control units per J27753U and V and the sender test connector control units per J27952M, N, P, Q, and R.

5. GENERAL NOTES

Incoming Trunk Test Frame

5.01 A No. 32A test set is required for remote control of the test circuit from the incoming trunk frames. It is furnished independent of this specification when ordered by the telephone company.

5.02 Designation charts in accordance with ED-25280-01 shall be furnished for the incoming trunks.

5.03 Incoming trunk test frames per J27753A may be modified to test MFP and DP incoming trunks. The plan outlined below results in the modified frame agreeing closely with frames per J27753D.

(a) Replace and rewire the terminal strips at the top of the frame to conform with the layout shown on J27753D-( ).

(b) Install the relays required for the MFP and DP functions below the writing shelf in accordance with J27753D-( ).

(c) Make the necessary changes in the upper relay casing without disturbing the class relays and the top plate of resistances and capacitors. When more than 70 G or DM relays are required, they shall be located in position 16 on present class relay mounting plates and on the top plate below the writing shelf and wired to the class relay terminal strips at the top of the frame.

(d) Make necessary additions and changes in the jack, key, and lamp panel.

5.04 Incoming trunk test frames per J27753D-( ) may be modified to provide transmission testing facilities and improved circuit operational tests in tandem offices. The plan outlined below results in the modified frame agreeing closely with frames per J27753E-( ).

(a) Add the terminal strips near the top of the frame to conform to the layout shown on J27753E-( ).

(b) Install the relays required for the transmission testing and improved operational testing facilities in accordance with J27753E-( ).

(c) Make the necessary additions and changes in the jack, key, and lamp panel.

Test Connector Units

5.05 Test connector unit J27753B is equipped with a 4-wire, 200-point crossbar switch. List 1 is specified for additions in offices where the test frame is limited to 70 class relays. List 2 is for use with test frames arranged for 100 class relays, and uses circuit Fig. 27 for testing panel repeating incoming selectors. Test connector unit J27753C, List 1 is equipped with a 6-wire, 200-point crossbar switch and is specified for tandem offices. The 6-wire switch provides an S contact in addition to

T, R, and S1 contacts required for testing trunks connected to outgoing repeaters such as SD-25634-01. The 6-wire switch also makes available a contact for use in making transmission tests on incoming trunks.

5.06 Two test connector units shall be provided for each pair of office link or office link and extension frames arranged for a combined capacity of 400 or less outgoing trunks and three units for each pair of office link and extension frames arranged for a capacity of 600 outgoing trunks.

5.07 When the office link or office link and extension frames are arranged for a capacity of 400 or less outgoing trunks per pair, the 200 trunks comprising marker test groups TL0, 2, 4, 6, and 8 are assigned to the first of a pair of associated connector units. To the second are assigned the remaining 200 trunks which comprise marker test groups TL1, 3, 5, 7, and 9 in the case of split levels, or TL10 to 14 when extension frames are used. Where a given marker test group is not equipped, the corresponding levels of the connector switch are left vacant.

5.08 When one pair of extension frames are used in addition to split levels to obtain a capacity of 600 outgoing trunks per pair of office frames, 400 of the outgoing trunks comprising marker test groups TL0, 2, 4, 6, and 8, and TL10 to 14 are arranged in accordance with 5.07. The remaining 200 of the 600 outgoing trunks per pair of frames comprising marker test groups TL1, 3, 5, 7, and 9, created by splitting the office frame secondary switch levels, are assigned to a third connector unit. This and similarly assigned units, amounting to five in all, are located in the last of three frames. Thus, in the event that an office should grow beyond the limitation of ten office frames so arranged, the elimination of split levels would involve changes only in the third connector frame.

5.09 When a tandem office exceeds the limitation of ten office frames, a second pair of extension frames shall be provided to obtain a capacity of 600 outgoing trunks per pair of office frames. Of these, 400 of the 600 trunks are still assigned per 5.08, but the office frame secondary switches are not split; instead, the remaining 200 of the 600 outgoing trunks per pair comprising test groups TL1, 3, 5, 7, and 9 are now run to this second pair of extension frames, and these are now assigned to a third connector unit.

5.10 Incoming trunk test connector units shall be equipped from bottom up on each frame, and shall be numbered consecutively through all incoming trunk test connector frames.

Wiring and Cabling

5.11 Types and gauges of wire to be used for all local cable and cross-connection wiring shall be in accordance with ED-27127-01.

5.12 The office outgoing trunks shall be connected to terminals on the incoming trunk test connector switches as shown on ED-25410-10.

5.13 In offices where incoming trunk test frames are provided in two locations, that is, at a local maintenance center and a toll test center, a separate group of incoming trunk test connector frames must be provided for each test frame. Cabling from each connector group shall be multipled at the office link and/or extension frames where these trunks appear.

Office Load Meter

5.14 The office load meter, when provided, shall be furnished as follows, depending on the length of the shunt leads required.

G1H shunt leads 200 feet long

G1J shunt leads 300 feet long

Note: Meter codes G1F, G1G, G1K, and GIL previously listed are rated Mfr Disc. Meters with shunt leads other than 200 or 300 feet in length, when required, shall be furnished on a job basis.

5.15 The meter shunt leads, if too long, shall be stored on the cable rack. In no case shall they be cut to length since this would affect the accuracy of the meter readings. The shunt equipment is furnished per ED-81147-01.

EQUIPMENT ARRANGEMENTS

5.16 When two incoming trunk test frames are provided in an office, only the incoming

trunk test frame at the maintenance center will be associated with the trunk identifier.

5.17 When one incoming trunk test frame serves two marker groups, with one trunk identifier, one trouble recorder is required.

5.18 When the capacity of existing fuse panels in either No. 1 or crossbar tandem offices is exceeded, modular fuse panel per J27753N must be specified per SD-25161-01, Issue 63B or later.

List of A&M Only and Mfr Disc. Equipment

The following equipment has been replaced as indicated. Where A&M Only items appear, the issue numbers shown are those of the issue in which the rating was first applied.

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
J27753A	Mfr Disc.	5	J27753D
J27753B, L1	A&M Only	6	J27753B,L2
J27753D, L7	Mfr Disc.	8	—
L19 to L23	Mfr Disc.	8	—
L4	A&M Only	11	J27753D,L2
L5	A&M Only	11	L3
L18	A&M Only	11	—
L28	Mfr Disc.	11	—
J27753E, L3	A&M Only	11	J27753E, L34
L4	A&M Only	11	L35
J27753F, L4	Mfr Disc.	10	J27753G,L4

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