

**TEST ACCESS FRAME
FOR AUTOMATIC CALL DISTRIBUTION
EQUIPMENT DESIGN REQUIREMENTS
NO. 5 CROSSBAR SYSTEM**

1. GENERAL

Scope

1.01 This specification, together with the supplementary information listed herein, covers the framework, equipment, and circuits to be used in the engineering, manufacture, and installation of the following wire-spring relay test access frame for automatic call distribution used in the No. 5 Crossbar System.

1.02 This specification is issued to provide equipment design requirements for the test access frame which is used in testing incoming lines in a No. 5 Crossbar System arranged for automatic call distribution. This is in accordance with SD-27828-01, Issue 1 and SD-27862-01, Issue 1.

Capacity

1.03 A No. 5 Crossbar System arranged for automatic call distribution requires one test access frame which has a capacity of ten test access trunks, ten TOUCH-TONE® and test line connector units, one digit transfer unit, one test line appearance unit, two TOUCH-TONE receivers, two 100-type test lines, two 101-type test lines, two 102-type test lines, and one 106-type test line.

1.04 The test line appearance unit provides fourteen appearances for seven types of test lines in the following maximum quantities:

100 type (balance test termination) test line — 2

101 type (jack ended) test line — 2

102 type (milliwatt test termination) test line — 2

103 type test line — 1

104 type test line — 2 or 4

105 type test line — 2 or 4

106 type (loop around test termination) test line — 1

1.05 When 104 and 105 type test lines are provided one type has a maximum quantity of four, and the other type has a maximum quantity of two.

Description

1.06 The test access frame is used to complete a test connection from the trunk link frame to a test line of the proper type.

1.07 When a test call identified by a special test-tone is incoming to a marker group arranged for automatic call distribution, the call will be routed to this frame. When a test access trunk is seized, it will connect to a TOUCH-TONE receiver through the TOUCH-TONE connector portion of the trunk's associated TOUCH-TONE and test line connector unit. On completion of this connection, dial tone will be sent to the originating end. If both TOUCH-TONE receivers are busy, no dial tone will be heard until one becomes idle and connection is made to it.

1.08 When the testman at the originating end hears dial tone, he keys a single digit corresponding to the type of test line he desires connection to. The TOUCH-TONE receiver upon recognizing the test digit causes a start signal to be sent from the digit transfer unit through the TOUCH-TONE connector portion to the test line connector portion of the TOUCH-TONE and test line connector. If a test line of the type desired is idle, connection to it will be made through the test line connector portion of the TOUCH-TONE and test line connector unit and the test line appearance unit. If no test line is available, overflow tone will be sent to the originating end.

Equipment Description

1.09 The test access frame for automatic call distribution is an 11-foot 6-inch high single-bay sheetmetal frame, 2-feet 2-1/16 inches wide to accommodate 23-inch mounting plates. The frame is equipped as shown in Fig. 1 and Table A. One fuse panel is located just above the frame base; a fuse alarm lamp assembly and front appliance outlet are located in the frame base; and miscellaneous circuit test posts, jacks, and lamps are located in the front of the right-hand frame upright.

1.10 The frame is provided with a frame designation card located in a card holder on the left upright. This card is provided for maintenance reasons and shows the associated trunk link assignments for the test access trunks and the locations of the 104 type and 105 type test line units.

Numbering

1.11 The test access trunks are numbered from left to right and from bottom to top. The TOUCH-TONE and test line connector units are numbered zero up. Test access trunk 0 is associated with TOUCH-TONE and test line connector unit 0, etc. The digit registers on the digit register unit are numbered from left to right. The TOUCH-TONE receivers are numbered from left to right. Digit register 0 is asso-

ciated with TOUCH-TONE receiver 0, etc. The 100, 101 and 102 type test lines are numbered zero up.

Cross-Connections

1.12 The frame terminal strip contains a cross-connection field where:

- (a) The "STA" lead from the test access trunk is cross-connected to either the "RS0" or "RS1" lead of the trunk's associated TOUCH-TONE connector in order to equalize circuit wear of the TOUCH-TONE receivers, and
- (b) The "ST-" leads from the TOUCH-TONE connector are cross-connected to the "LS-" leads of the associated test line connector in order to equalize circuit wear of the same type of test lines.

Wiring and Cabling

1.13 The frame local cable contains all inter-unit wiring, battery and ground leads, wiring for frame miscellaneous circuit and frame terminal strips.

1.14 The multiples associated with the trunk line frames are loose wired.

1.15 The coded units are surface wired.

Subdivisions of Equipment and Detailed Index

WECo 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	CKTS. PER UNIT	MTG PLTS PER UNIT
J23262A	AT&TCo Std	Test Access Frame for Automatic Call Distribution	J23262A-()	SD-25574-01 SD-27828-01 SD-27862-01 SD-98148-01	—	—
J23262AA	AT&TCo Std	Test Access Trunk Unit	J23262AA-()	SD-27828-01	2	3
J23262AB	AT&TCo Std	Test Access TOUCH-TONE and Test Line Conn Unit	J23262AB-()	SD-27828-01	1	1
J23262AC	AT&TCo Std	Test Access Digit Register Unit	J23262AC-()	SD-27828-01	2	3

EQUIPMENT CODE	RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING	CKTS. PER UNIT	MTG PLTS PER UNIT
J23262AD	AT&TCo Std	Test Access Test Line Appearance Unit	J23262AD-()	SD-27828-01	1	2
J23262AE	AT&TCo Std	100 Type (Balance Termination) Test Line Unit	J23262AE-()	SD-27862-01	1	1
J23262AF	AT&TCo Std	101 Type (Jack Ended) Test Line Unit	J23262AF-()	SD-27862-01	1	1
J23262AG	AT&TCo Std	102 Type (Milliwatt) Test Line Unit	J23262AG-()	SD-27862-01	1	2
J23262AH	AT&TCo Std	106 Type (Loop Around) Test Line Unit	J23262AH-()	SD-27862-01	1	2

2. SUPPLEMENTARY INFORMATION

819-000-000 — No. 5 Crossbar System Index
 AA128.006 — List of General Equipment Requirements Sections
 J29259 (819-005-150) — General Outline — No. 5 Crossbar System
 J23252 (819-700-150) — No. 5 Crossbar System Master Test Frame
 J93020 (AA387.045) — Common Systems Transmission Measuring and Noise Checking System and Automatic Transmission Measuring System
 J99289 (AA388.153) — Common Systems TOUCH-TONE Calling Receiver Signaling
 Floor Plan Data — Section 11.1, Sheet 8 — Test Access Frame for Automatic Call Distribution

SD-27862-01 — Transmission Test Line Circuits for Automatic Call Distribution

Framework

ED-26524-01 — Sheet Metal Frames — Single Bay

Equipment

ED-25886-01 — Designation Cards for Frames
 ED-25889-01 — Fuse Alarm Lamps and Test Points
 ED-26528-01 — Frame Appliance Outlets and Connections
 ED-27511-01 — Fuse Panel Assemblies
 ED-27543-10 — Frame Battery, Ground, Fuse Alarms and Miscellaneous Connections

3. DRAWINGS

For additional drawings forming a part of this specification, see listings under Subdivisions of Equipment and Detailed Index.

Keysheet

SD-25760-01 — Crossbar System No. 5
 SD-25760-02 — Current Drain

Circuits

SD-25574-01 — Miscellaneous Circuits for All Frames
 SD-27828-01 — Test Access Circuit for Automatic Call Distribution

Wiring and Cabling

ED-27690-10 — Local Cable-Test Access Frame for Automatic Call Distribution
 ED-27691-10 — Switchboard Cable Details — Test Access Frame for Automatic Call Distribution

4. EQUIPMENT

J23262A (AT&TCo Std) — Test Access Frame for Automatic Call Distributor

Equipment — J23262A-()

List 1 — Framework, assembly, wiring and common equipment for one test access frame for automatic call distribution.

	WIRE	EQUIP
Test Access Ckt for Automatic Call Distribution SD-27828-01:		
Test Access Trk Ckt, Fig. 1	10	0
TOUCH-TONE Conn Ckt, Fig. 2	10	0
Digit Transfer Ckt, Fig. 3	2	0
Test Line Conn Ckt, Fig. 4	10	0
Test Line Ckt Appearances, Fig. 5	1	0
Transmission Test Line Circuits for Automatic Call Distribution, SD-27862-01:		
Supervision and Busy Control Ckt, Fig. 1	8	0
Code 100 — Balance Termination Test Line Ckt, Fig. 2	2	0
Code 101 — Jack Ended Test Line Ckt, Fig. 3	2	0

Code 102 — Milliwatt Test Line
Ckt, Fig. 4

WIRE EQUIP

2 0

Code 106 — Loop Around Test Line
Ckt, Fig. 5

1 0

J23262AA (AT&TCo Std) — Test Access Trunk Unit

Equipment — J23262AA-()

List 1 — Assembly, equipment, and wiring for two test access trunks per SD-27828-01, two Figs. 1.

J23262AB (AT&TCo Std) — Test Access TOUCH-TONE and Test Line Connector Unit

Equipment — J23262AB-()

List 1 — Assembly, equipment, and wiring for one test access TOUCH-TONE and test line connector unit per SD-27828-01, Fig. 2 and 4.

TABLE A

Units shall be equipped and connected in the mounting plate positions specified in this table to make up one test access frame J23262A.

MOUNTING PLATE POSITION	UNIT CODE	QUANTITY ALWAYS REQUIRED	MAXIMUM QUANTITY	DESCRIPTION	REMARKS
2,5,8,11,14	J23262AA,L1	2	5	Test Access Trunk Unit	One Unit Provides 2 Trks
17	J23262AC,L1	1	1	Test Access Digit Transfer Unit	
20	J99289A,L1	1	1	TOUCH-TONE Receiver Mtg Shelf	
20L	J99289B,L2	1	1	TOUCH-TONE Receiver	
20R	J99289B,L2	1	1	TOUCH-TONE Receiver	
23,24,25, 26,27,28,29, 30,31,32	J23262AB,L1	4	10	Test Access TOUCH-TONE and Test Line Conn Unit	
33	J23262AD,L1	1	1	Test Access Test Line Appearance Unit	
35,36	J23262AE,L1	0	2	100 Type Test Line Unit	
37,38	J23262AF,L1	0	2	101 Type Test Line Unit	
39,41	J23262AG,L1	0	2	102 Type Test Line Unit	
43	J23262AH,L1	0	1	106 Type Test Line Unit	

J23262AC (AT&TCo Std) — Test Access Digit Transfer Unit

Equipment — J23262AC-()

List 1 — Assembly, equipment, and wiring for one test access digit transfer unit per SD-27828-01, two Figs. 3.

J23262AD (AT&TCo Std) — Test Access Test Line Appearance Unit

Equipment — J23262AD-()

List 1 — Assembly, equipment, and wiring for one test access test line appearance unit per SD-27828-01, Fig. 5.

J23262AE (AT&TCo Std) — 100 Type (Balance Termination) Test Line Unit

Equipment — J23262AE-()

List 1 — Assembly, equipment, and wiring for one 100 type test line unit per SD-27862-01, Fig. 1 and 2.

Notes

- A. In addition, there are options involving wiring only as follows:
1. Wiring required in addition to list 1 when office impedance is 600Ω per SD-27862-01, "V" option.

J23262AF (AT&TCo Std) — 101 Type (Jack Ended) Test Line Unit

Equipment — J23262AF-()

List 1 — Assembly, equipment, and wiring for one 101 type test line unit per SD-27862-01, Fig. 1 and 3.

Notes

- A. In addition there are options involving wiring only as follows:
1. Wiring required in addition to list 1 when office impedance is 600Ω per SD-27862-01, "V" option.

J23262AG (AT&TCo Std) — 102 Type (Milli-watt) Test Line Unit

Equipment — J23262AG-()

List 1 — Assembly, equipment, and wiring for one 102 type test line unit per SD-27862-01, Fig. 1 and 4.

Notes

- A. In addition there are options involving wiring only as follows:
1. Wiring required in addition to list 1 when office impedance is 600Ω per SD-27862-01, "V" option.

J23262AH (AT&TCo Std) — 106 Type (Loop Around) Test Line Unit

Equipment — J23262AH-()

List 1 — Assembly, equipment, and wiring for one 106 type test line unit per SD-27862-01, two Fig. 1 and Fig. 5.

Notes

- A. In addition there are options involving wiring only as follows:
1. Wiring required in addition to list 1 when office impedance is 600Ω per SD-27862-01, "V" option.
 2. Wiring required in addition to list 1 when connection to a 60A control unit is not required per SD-27862-01, "W" option.

5. GENERAL NOTES

5.01 The gauge and code of wire used on this frame shall be in accordance with ED-27042-01.

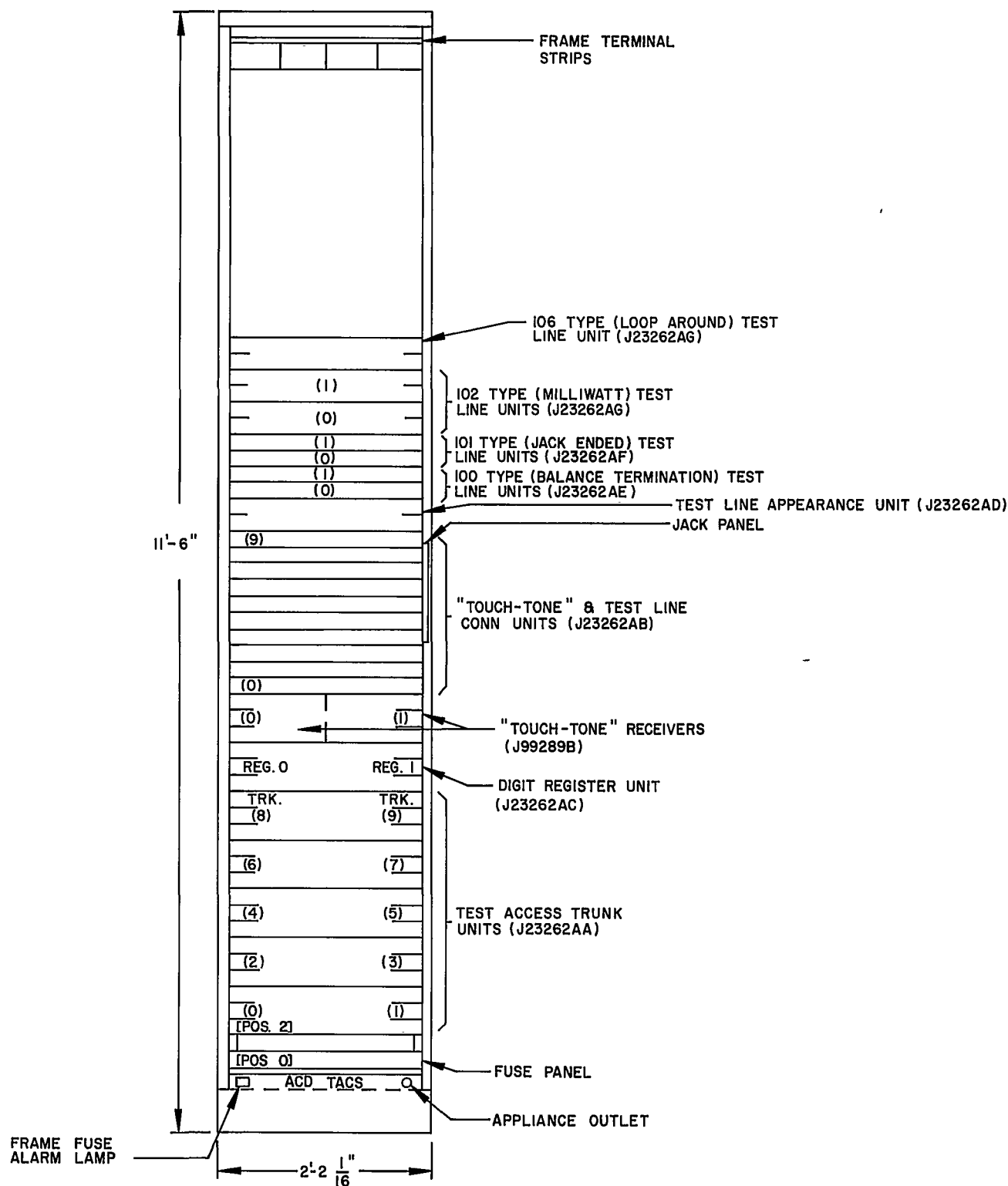


Fig. 1 - Test Access Frame for Automatic Call Distribution

Bell Telephone Laboratories, Incorporated

Dept 5614