

**SELECTOR TRUNK FRAME
FOR BUSY LINE VERIFICATION
NO. 1 OR 350A OFFICE
EQUIPMENT DESIGN REQUIREMENTS
STEP-BY-STEP SYSTEMS**

SEP 10 1979

1. GENERAL

SCOPE

1.01 This specification together with the supplementary information listed herein, covers the equipment design requirements for the framework, equipment, and circuits to be used in the engineering, manufacture, and installation of selector trunk frame for busy line verification for a No. 1 or 350A office.

1.02 Whenever this section is reissued, the reason for reissue will be specified in this paragraph.

DESCRIPTION

1.03 The purpose of the selector trunk frame for busy line verification is to establish a 1- or 2- stage switch train for a busy line verification network in a step-by-step toll tandem office. This network will allow a TSPS operator to route to a terminating end office and via a test distributor and connector, connect to and/or interrupt a busy line. This connection and/or interruption will be made at the request of a customer who has repeatedly failed to reach this line due to a busy condition.

1.04 The selector trunk frame has two different arrangements. The difference between these two arrangements is the input to the busy line verification first selectors. In one case the frame is arranged for incoming pulse correcting repeaters (see Fig. 2 and Table A) and in the other incoming trunks (see Fig. 3 and Table B). The remainder of the equipment in the two frames is identical.

1.05 Depending upon traffic requirements the frame may be arranged with first and second selectors or only first selectors. Each rank of selectors in turn can be equipped with anywhere from two to six selectors. The selectors may be of the regular or digit absorbing type, so as to fulfill the necessary routing requirements as specified by the telephone company. One or two switch trouble alarm units are required, depending if the frame is equipped with only first or both first and second selectors.

1.06 The frames are always equipped with the two loop around test lines, a 60A control unit, a milliwatt balance test termination unit and a milliwatt reference generator.

1.07 The selector bank terminals are assigned to test line appearances and outgoing trunks or carrier facilities or test distributors as portrayed in Fig. 1. The unassigned terminals on used levels and all of the terminals on unused levels have their sleeve lead connected to ground.

1.08 When the busy line verification selectors is to be accessed directly from carrier facilities, thereby making the incoming pulse correcting repeater or the incoming trunk superfluous, a third approach should be used. In this arrangement the selector trunk frame is to be disregarded and a miscellaneous relay rack frame is to be used for housing the necessary equipment. The relay rack should be laid out similar to the selector trunk frame; by furnishing the necessary shelves, switch trouble alarm units, and common equipment as outlined in Table C.

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

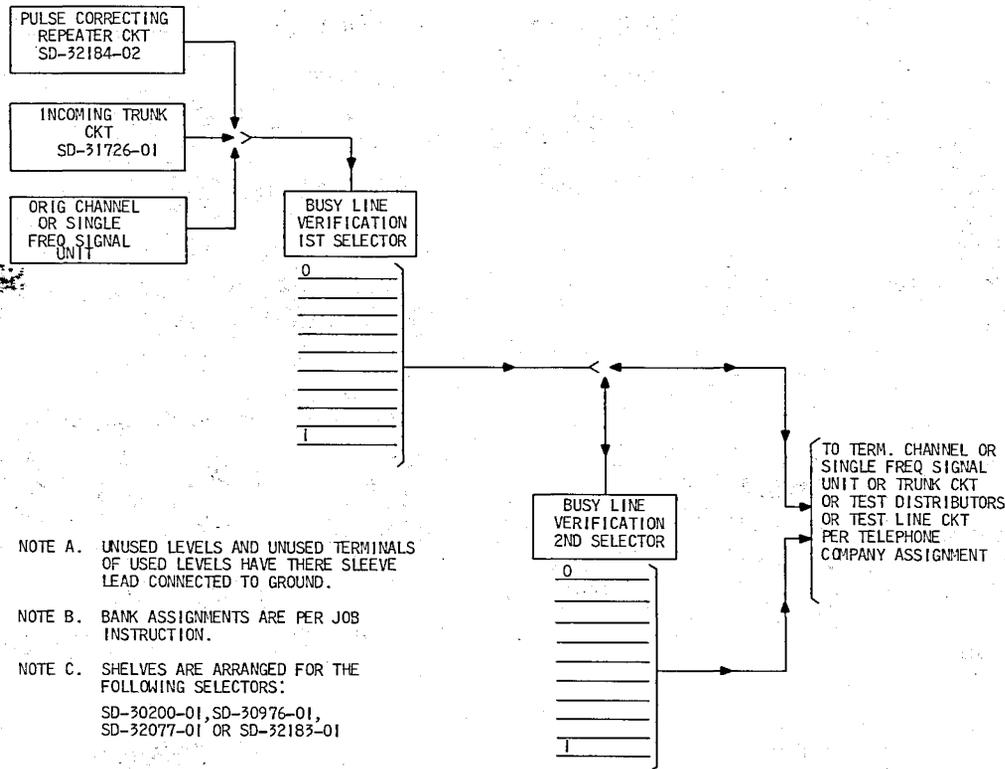


Fig. 1 — Block Diagram

2. SUPPLEMENTARY INFORMATION

814-000-000—Numerical Index — Step-By-Step Systems
 800-600-000—Checking List — General Equipment Requirements
 J33019—814-540-150—Repeater and Incoming Trunk
 J93026—801-026-168—Transmission Test Termination
 J94071—801-250-165—MW Reference Generator
 J99329—801-388-205—60A Control Unit
 Floor Plan Data—FPD 814-528-150-1
 Current Drain Data—
 SD-31359-02—No. 1 Step-By-Step
 SD-31364-02—No. 350A Step-By-Step

3. DRAWINGS

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

Keysheets

SD-31359-01—No. 1 Step-By-Step
 SD-31364-01—350A Step-By-Step

Circuits

SD-1C400-01—Transmission Test Termination Circuit
 SD-30200-01—Local, Incoming, or Repeated Dialing Toll Train Selector No. 1 or 350A Office
 SD-30976-01—Digit-Absorbing Selector—Arranged To Absorb Digits Once or Repeatedly And To Return Overflow Signal on Specified Levels—No. 1 or 350A Office
 SD-31726-01—Incoming Trunk Circuit
 SD-32043-01—Switch Trouble Alarm Circuit
 SD-32077-01—Local or Incoming Selector—Repeated Dialing Toll Preceding Selector or 2-Party Message-Rate Selector — Arranged for Digit Absorbing— No. 1 or 350A Office

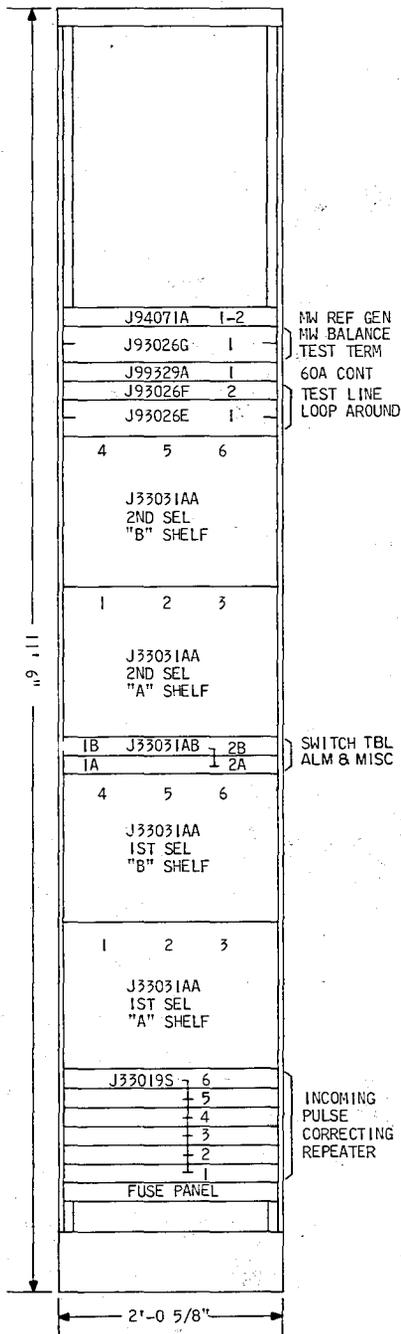


Fig. 2—Frame Layout for J33031A

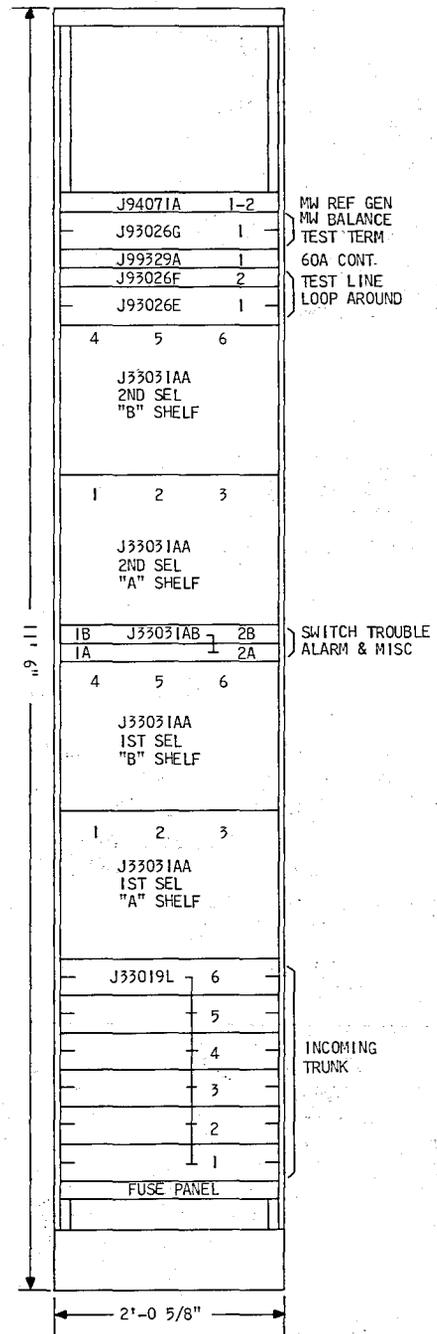


Fig. 3—Frame Layout for J33031B

SD-32123-01—Selector Bank Mult Circuit
 SD-32153-01—Miscellaneous Circuit
 SD-32183-01—Digit-Absorbing Selector—Local
 or Incoming—Arranged to Absorb
 One or Two Digits—No. 1 or
 350A Office
 SD-32184-02—Incoming Pulse Correcting Re-
 peater Circuit
 SD-95277-01—MW Reference Generator Circuit
 SD-99331-01—60A Control Circuit

Equipment

ED-30200-()—Local Incoming or Repeated Di-
 aling Toll Train Selector
 ED-30976-()—Digit Absorbing Selector—Ar-
 ranged to Absorb Digits Once or
 Repeatedly and To Return
 Overflow Signal on Specified
 Levels
 ED-32077-()—Local or Incoming Selector— Re-
 peated Dialing Toll Preceding
 Selector or 2-Party Message-
 Rate Selector
 ED-32183-()—Digit-Absorbing Selector-Local
 or Incoming-Arranged to Absorb
 One or Two Digits-No. 1 or 350A
 Office
 ED-35142-()—Switchboard Cable Connect and
 Details-Selector Trunk Frame
 ED-91183-30—Bulb Angle Framework 10-Inch
 Base
 ED-91837-71—Bulb Angle Framework 12-Inch
 Base
 ED-92173-71—48-Volt Filter
 J33019L-()—Incoming Trunk Unit
 J33019S-()—Incoming Pulse Connecting Re-
 peater Unit
 J33031A-()—Selector Trunk Frame for Busy
 Line Verification Equipped With
 Incoming Pulse Correcting Re-
 peaters
 J33031B-()—Selector Trunk Frame for Busy
 Line Verification Equipped With
 Incoming Trunks
 J33031AA-()—Single Selector Shelf—Three
 Capacity — For Busy Line
 Verification
 J33031AB-()—Switch Trouble Alarm and Mis-
 cellaneous Unit for Busy Line
 Verification Shelves
 J93026E-()—MW Test Termination Unit

J93026F-()—Second Termination Unit
 J93026G-()—MW Balance Test Termination
 Unit
 J94371A-()—MW Reference Generator Unit
 J99329A-()—60A Control Unit

4. EQUIPMENT

*J33031A—AT&T Co Std — Selector Trunk
 Frame for Busy Line Verification
 Equipped With Incoming Pulse
 Correcting Repeaters*

*List 1—Framework, assembly, wiring, and com-
 mon equipment for a 11-foot 6-inch (12-
 inch base) selector trunk frame.*

	WIRE	EQUIP	NOTES
Inc Pulse Correcting Rept Ckt, SD-32184-02: Fig. 1; Option Z	6	-	A&B
Sw Tbl Alm Ckt, SD-32043-01: Fig. 1,4,5,8,20,21	4	-	
B and D; Option J, N, Q, and V			
Fig. 25	1	1	
Fig. 26	8	8	
Fig. 27	23	20	
Fig. 28, Option A and B	1	-	
Misc Ckt, SD-32153-01: Fig. 5 and 13; Option W	1	-	
Sel Bk Mult, SD-32123-01: Fig. 1, A and C	As reqd		
Trans Test Term Ckt, SD-1C400-01; Fig. 3 and 50; Option T, E, R, U, W, Z	1	-	
Fig. 4 and 50; Option R, U, Z, ZN	1	-	
Fig. 5 and 50; Option E, P, R, S, U, Z, ZQ, ZY	1	-	
60A Cont Ckt, SD-99331-01; Fig. 5	1	-	
MW Ref Gen Ckt, SD-95277-01: Fig. 1; Option F, N, and Q	1	-	
Fig. 7, Option K	2	-	

Notes

- A. Framework per ED-91183-30, GR2 shall be specified in addition to list 1 for offices requiring a 10-inch base. (Omit ED-91837-71, GR 7.)
- B. Job specification shall order one filter panel assembly per ED-92173-71, GR10 and 31 for the 48-volt talk supply required with this frame.

J33031B—AT&TCo Std — Selector Trunk Frame for Busy Line Verification Equipped With Incoming Trunks

List 1—Framework, assembly, wiring, and common equipment for a 11-foot 6-inch (12-inch base) selector trunk frame.

	WIRE	EQUIP	NOTES
Inc Trk Ckt, SD-31726-01: Fig. 1, A, B, C, and E; Option B, C, D E, G, H, M, N, T, X, Y, ZB, ZD, ZE, ZJ, ZL, and ZM	6	-	A&B
Sw Tbl Alm Ckt, SD-32043-01: Fig. 1, 4, 5, 8, 20, 21, B and D; Option J, N, Q, and V	4	-	
Fig. 25	1	1	
Fig. 26	8	2	
Fig. 27	31	26	
Fig. 28, Option A and B	1	-	
Misc Ckt, SD-32153-01: Fig. 5 and 13, Option W	1	-	
Sel Bk Mult, SD-32123-01: Fig. 1, A, and C	As Req'd		
Trans Test Term Ckt, SD-1C400-01: Fig. 3 and 50, Option E, R, U, W, Z	1	-	
Fig. 4 and 50; Option R, U, Z, ZN	1	-	
Fig. 5 and 50; Option E, P, R, S, U, Z, ZQ, ZY	1	-	

WIRE EQUIP NOTES

60A Cont Ckt, SD-99331-01: Fig. 5	1	-	
MW Ref Gen Ckt, SD-95277-01: Fig. 1; Option F, N, and Q	1	-	
Fig. 7; Option K	2	-	

Notes

- A. Framework per ED-91183-30, GR2 shall be specified in addition to list 1 for offices requiring a 10-inch base. (Omit ED-91837-01, GR7.)
- B. Job specification shall order one filter panel assembly per ED-92173-71, GR10 and GR 31 for the 48-volt talk supply required with this frame.

J33031AA—AT&TCo Std — Single Selector Shelf—Three Capacity — For Use With Busy Line Verification—Arranged for Solderless Wrapped Connections

List 1—Framework, assembly, wiring and equipment for one shelf of three local or incoming selectors for use with busy line verification. (See Notes A, B, and C.)

	WIRE	EQUIP	NOTES
Sel Ckt Jk Wiring Universal for SD-30200-01 SD-30976-01 SD-32077-01 SD-32183-01	3	3	
DT Lead SD-32043-01: Fig. 21	3	3	

Notes

- A. A mult local cable is furnished to mult the A- shelf to the B- shelf when more than three selectors (maximum 6) are required.
- B. When second selectors are required, the connection between the bank terminal strip of

the first selectors and the jacks of the second selectors are run as loose wire. This assignment is dependent on job information furnished by the telephone company.

- C. The test lines of SD-1C400-01 per items (2) 353 and (1) 357 can be assigned either to the first or the second selectors. The connection to the selector bank terminal strip is made with loose wire. This assignment is dependent on job information furnished by the telephone company.

J33031AB—AT&TCo Std — Switch Trouble Alarm and Miscellaneous Unit Arranged for Use With Busy Line Verification Selector Shelves

- List 1—Assembly, wiring, and equipment for one switch trouble alarm and miscellane-

ous unit arranged for use with busy line verification selector shelves per SD-32043-01, two Fig. 1, 4, 5, 8, 20, and B and options J, N, Q, and V.

- List 2—Wiring and equipment per SD-32043-01, Fig. 38, option A and SD-32153-01, Fig. 5 and 13, option W for first unit required for busy line verification. (See Note A.)

Note

- A. When alarms are arranged for loop closure furnish option B and omit option A of SD-32043-01.

5. GENERAL NOTES AND INDEXES

None.

**TABLE A
SELECTOR TRUNK FRAME—J33031A**

EQUIPMENT UNITS SHALL BE FURNISHED AS FOLLOWS:				
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF OPTION
J CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED	
J33019S	2	2	4	Provide One Per Selector
J33031AA	1	1*	3	Provide One Per Three Selectors
J33031AB	1	1	1	Provide One Per Rank of Selectors
	2	1		
J93026E	1,5,10,19	1		
J93026F	1,2,6,12,WC	1		
J93026G	1,5,6,7,16,WA,WD	1		
J94071A	10	1		
J99329A	2	1		

* Two or more selector switch circuits from the following list are required for each rank of selectors:

- SD-30200-01
- SD-30976-01
- SD-32077-01
- SD-32183-01

TABLE B
SELECTOR TRUNK FRAME—J33031B

EQUIPMENT UNITS SHALL BE FURNISHED AS FOLLOWS:				
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF OPTION
J CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED	
J33019L	1,3,6,7, WB, WH WD, or WE or WF	2	4	Provide one per Selector with Pulse Correction
	OR 2,3,6,7, WB, WD or WE or WF			Provide one per Selector Without Pulse Correction
J33031AA	1	1*	3	Provide one per three selectors
J33031AB	1	1	1	Provide one per rank of selectors
	2	1		
J93026E	1,5,10,19	1		
J93026F	1,2,6,12, WC	1		
J93026G	1,5,6,7,16, WA, WD	1		
J94071A	10	1		
J99329A	2	1		

* Two or more selector switch circuits from the following list are required for each rank of selectors:

SD-30200-01
SD-30976-01
SD-32077-01
SD-32183-01

TABLE C
MISCELLANEOUS RELAY RACK REQUIREMENT
WHEN J33019L OR J33019S IS NOT REQUIRED

EQUIPMENT UNITS SHALL BE FURNISHED AS FOLLOWS:				
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF OPTION
J CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED	
J33031AA	1	1	3	Provide one per Three Selectors
J33031AB	1	1*	1	Provide one per Rank of Selectors
J99329A	2	1		
J93026E	1,5,10 19	1		
J93026F	1,2,6,12 WC	1		
J93026G	1,5,6,7 16,WA,WD	1		
J94071A	10	1		

* Two or more selector switch circuits from the following list are required for each rank of selectors.

SD-30200-01
SD-30976-01
SD-32077-01
SD-32183-01

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