

**200-POINT LINE FINDERS
20- AND 30-CAPACITY LINE FINDER SHELVES
NO. 1, 350A, 355A, AND 35E97 OFFICES
EQUIPMENT DESIGN REQUIREMENTS
STEP-BY-STEP SYSTEMS**

1. GENERAL

SCOPE

1.01 This specification, together with the supplementary information listed herein, covers the equipment design requirements for the manufacture and installation of 200-point line finders and line finder frames for use in No. 1, 350A, 355A, and 35E97 offices.

1.02 This specification is reissued to:

- (a) Add J32007B, L7 through L10.
- (b) Add J32007C, L6 through L9.
- (c) Add J32007D, L6 through L8.
- (d) Add J32007E, L5 through L8.

CAPACITY

1.03 The capacities of the shelf units and frames are as follows:

Line Finders Per Shelf Unit

- 4-Wire—Nonlockout: 20
- 3-Wire—Nonlockout: 20 or 30
- 3-Wire—5 Percent to 100 Percent Lockout: 20

Subscriber Lines Per Shelf Unit: 200

Shelf Units Per 11-Foot 6-Inch Frame

- 30 Finders—Nonlockout: 2
- 20 Finders—Nonlockout: 3

Shelf Units Per 9-Foot 0-Inch Frame

- 20 Finders—Nonlockout: 2
- 20 Finders—5 Percent to 100 Percent Lockout: 1

Shelf Units Per 7-Foot 0-Inch Frame

- 20 Finders—Nonlockout: 1
- 20 Finders—5 Percent to 100 Percent Lockout: 1

DESCRIPTION

1.04 The line finder is a concentrating switch used in step-by-step dial systems to connect a larger number of lines to a smaller number of selectors or trunks. Its primary use is to find a calling line and connect it to a selector. Line finders are available as 3- or 4-wire types; the type refers to the number of bank terminals per line. A 3-wire line finder may be used with auxiliary message-rate line circuits or with an individual message-rate trunk arranged for booster battery register operation for message-rate service. Where a fourth wire is required for the operation of message registers, or for class-of-service indication, 4-wire line finders are employed. The latter finders are required for 2-party message-rate lines or for individual message-rate lines where a booster battery for the operation of the registers is not provided.

1.05 The four basic universal line finder units are the following:

- (a) 20-capacity, 3-wire line finders not arranged for lockout on any of the 200-line circuits.
- (b) 20-capacity, 4-wire line finders not arranged for lockout on any of the 200-line circuits.
- (c) 30-capacity, 3-wire line finders not arranged for lockout on any of the 200-line circuits.

NOTICE

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

(d) 20-capacity, 3-wire line finders arranged for from 5 percent to 100 percent lockout of the complement of 200-line circuits in steps of 5 percent.

The term lockout refers to the subscriber lines arranged to release and remove control of the line finder, when the first selector permanent signals are encountered. This operation prevents unnecessary tie-up of finders and selectors.

1.06 The 200-point line finder unit serves a group of 200 lines. The number of line finder switches required to serve a 200-line group depends upon the traffic density. All the line finders required for any one group are mounted with their line and cutoff relays and control equipment on shelf units which are available in sizes for 20 or 30 line finders. The units, in turn, are mounted on single-sided universal switch frames either 7 feet 0 inch, 9 feet 0 inch, or 11 feet 6 inches high.

1.07 Line finders may be provided with normal post springs, where required, for discriminating between classes of service, or for enabling postpay coin trunks to function on certain levels, or for other control functions. Switches with no normal post springs may be used for undivided line finder groups.

(a) Finders for high sleeve resistance operation are available in 3- or 4-wire types for large No. 1 offices. These switches are for use only where the office layout involves such long cable runs that the sleeve lead resistance exceeds the allowable limit for the regular types described above.

1.08 Each line finder in a group of flat-rate lines is connected directly to a selector, whereas those for message-rate lines and those for coin box lines are connected to selectors through message register trunks and coin box trunks, respectively. An exception to the above occurs where individual message-rate or postpay coin service is obtained by use of auxiliary line circuits. In this case, these trunks between the line finder and selector are not required.

1.09 The subscriber lines are suitable for any of the following types of service:

(a) **Flat Rate:** Individual lines, party lines, or PBX trunks.

(b) **Message Rate:** Individual lines or 2-party lines where suitable message-rate trunks are used, or individual lines where auxiliary message-rate circuits are employed.

(c) **Coin Box:** Dial prepayment or dial postpayment coin lines where suitable coin trunks are used, or dial postpayment coin lines where auxiliary coin line circuits are provided.

1.10 Flat-rate lines may be placed in a group for individual message-rate lines when this is found to be economical. However, all line finders in the group must be connected to message register trunks and the flat-rate lines operated with connections to message registers omitted.

1.11 **Combination Flat-Rate and Postpayment Coin Box Lines:** With the use of the discriminating line finder, flat-rate lines may be served by certain levels of a group with dial postpayment coin box trunks. In this case, all line finders in the group must be connected to postpayment coin box trunks.

1.12 **Association of Lines and Line Finder Bank Terminals for 3- and 4-Wire Line Finders:** The 200 lines of each unit are connected through the line and cutoff relays to the banks of the line finders. The T, R, and S (3-wire) or T, R, S, and A (4-wire) leads are associated with the levels and banks of the line finders as shown on the shelf unit equipment drawings.

1.13 A slip is provided in the bank-to-bank multiple to reduce the average hunting time. Because of this slip, lines 21 to 20 and 121 to 120 appear on the first level of line finders No. 2, 12, and 22; lines 31 to 30 and 131 to 130 appear on the first level of line finders No. 3, 13, and 23, etc. The last digit of a line finder is the same as the tens digit of the line appearing on the first level of its bank. Although any line finder can find any line, there is a start lead alternating arrangement whereby the first choice in serving a call shifts between those finders of each subgroup having the calling line on the first level. This prevents the complete blocking of a call in the event of certain trouble conditions in one of the finders or first selectors. If the first choice finders are busy, the call is served by the finders having the line on their second level. This procedure progresses throughout all the line feeders to the ones having the line on their tenth levels. In this way, the hunting time is minimized and is made more nearly uniform for all lines.

When an all-finders-busy condition is encountered, the control circuit releases all finders not serving a call.

1.14 Line Load Control Equipment: The purpose of the line load control equipment is to safeguard the service of certain lines by denying an overload. It provides a means for denying originating service in two steps, called class B and class C. Each step makes up about 40 percent of the total lines. The remaining 20 percent of the lines, called class A, will not be subject to denial of service and will therefore include those considered more important.

(a) Common control equipment consisting of keys, lamps, and relays is located at a central point in a wall cabinet with an associated relay rack unit. A class B and a class C lamp are provided per line finder unit in the wall cabinet, together with a master key and lamp for each class. Equipment is available for extending the common control equipment to a shelter area, and also a remote control unit for line load control.

(b) In each line finder unit, two relays, one lamp, and one key are furnished for class B and the same for class C. The purpose of the relays is to open the G leads corresponding to the line finder levels to be denied service.

1.15 Ten-Cent Initial Charge Coin Lines: The ten-cent initial charge coin collector, for use on prepayment coin lines only, is arranged for ground start or coin first operation of the line relay, in order to prevent the 95-ohm magnet in the coin collector from operating until the proper coin deposit has been made. It is necessary that a minor wiring change in the line circuit be made, together with a new adjustment of the line relay, to provide for ground start operation, as shown on the line circuits. In addition to these line circuit modifications required for ten-cent initial charge coin operation, modifications of the associated auxiliary line and coin long line circuits are covered in the appropriate specifications.

1.16 The call blocked alarm provides a minor alarm when all finders are busy because of a service condition. It also provides a major alarm when calls are blocked because of a trouble condition.

1.17 In offices where common control or noncompatible TOUCH-TONE® or TOUCH-TONE D calling is added, an auxiliary terminal strip shall be added to the jack of each line finder associated with flat-rate or 1-party message-rate lines. The connect-

ing information is shown on the converter trunk SD-32326-01, register trunk and link SD-32353-01, and converter trunk and link SD-35033-01 circuits.

2. SUPPLEMENTARY INFORMATION

814-000-000—Numerical Index—Step-by-Step Systems
 800-600-000—Checking List—General Equipment Requirements
 800-613-157—Specific Requirements for Apparatus and Equipment Frames and Packs
 J32006—814-411-150— 100- and 200-Point Line Finders—10-, 16-, and 20-Capacity Line Finder Shelves — Control and Lockout Features — No. 355A Offices
 J33017—814-050-151—Miscellaneous Relay Rack Units
 J34715—814-635-150—Line Finder Test Set
 J34718—814-635-151—Line Finder and Trunk Finder Test Set—50- and 200-Point Line Finders
 J34721—814-636-150—Line Finder and Outgoing Repeater Test Set
 J38304—814-675-150—Alarm Equipment No. 1 and 350A Offices
 J38805—814-005-151—355A Dial Office
 J39206—814-005-150—No. 1 and 350A Offices
 J39209—814-009-150—Line Load Control for Existing Offices
 J39210—814-008-150—Western Electric Company Equipment for 35E97 Offices
 J94710—804-910-150/814-637-151—Trunk Test Set
 KS-13614—Capacitor
 KS-20289—Resistor

3. DRAWINGS

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

Circuits

SD-32031-01—Switchman's Jack
 SD-32192-01—Miscellaneous Alarm Circuit
 SD-32326-01—No. 1, 350A, 355A, or 35E97 Converter Trunk Circuit—For Use With Line Groups Equipment With TOUCH-TONE Subsets
 SD-32353-01—No. 1, 350A, or 355A With Common Control Registers, Trunk and Link Circuits
 SD-35033-01—Converter Trunk and Link Circuit

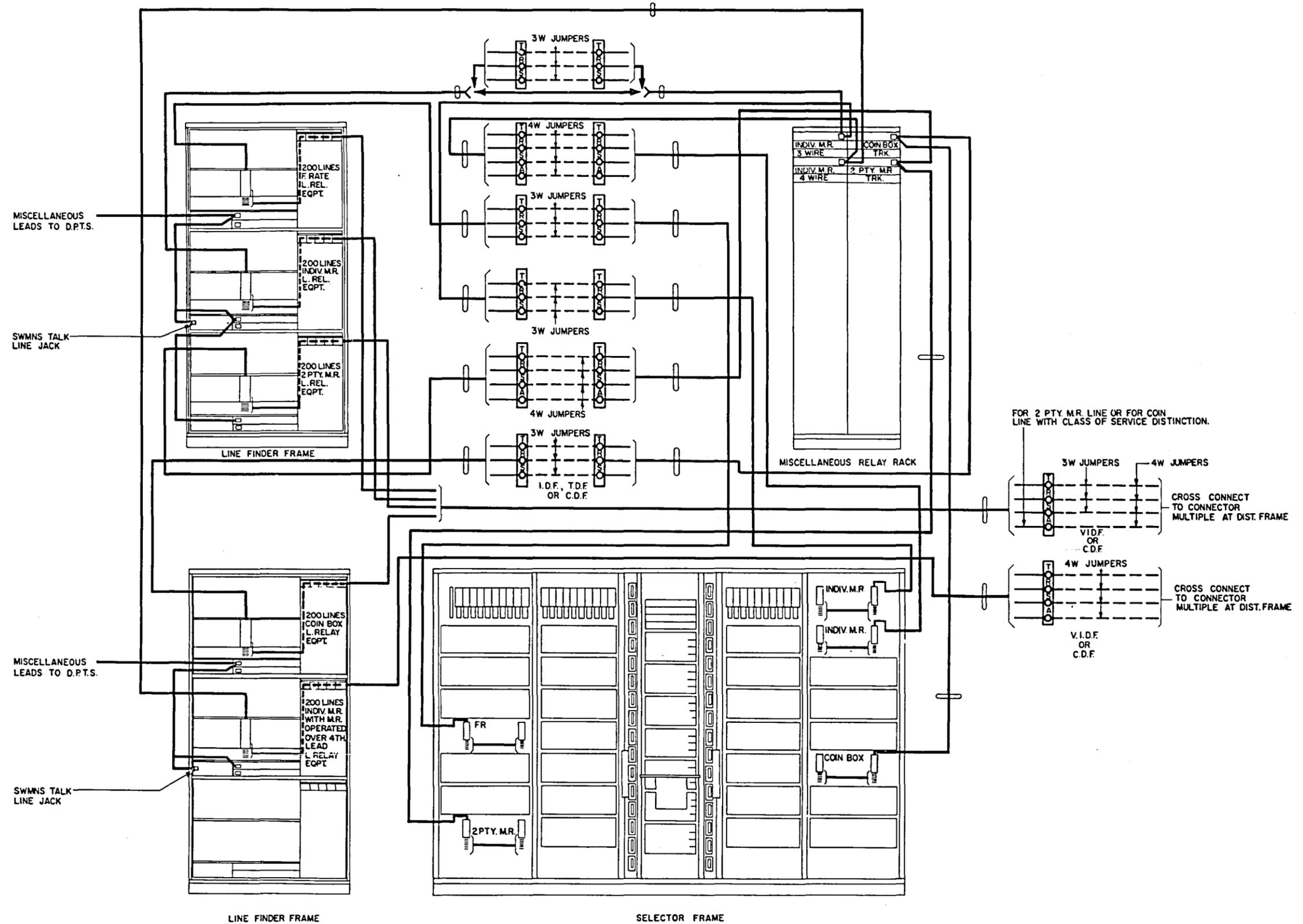


Fig. 1—Typical Cabling Schematic for No. 1 and 350A Offices

Keysheets

SD-31359-01—No. 1 Office
 SD-31364-01—350A Office
 SD-31780-01—355A Office

Equipment

ED-30283-01—Designation Cards Signal Mountings
 ED-30819-()—Line Load Control Wall-Mounted Cabinet
 ED-31240-01—Line Finder—Typical Frame Equipment
 ED-92857-01—Auxiliary Wall-Mounted Cabinet for Shelter Area
 ED-95131-10—Modular Fuse Blocks and Accessories for Fuse Panel Arrangements

Wiring and Cabling

ED-30025-01—Method of Cross-Connecting Line Finders and First Selectors
 ED-30278-01—M1R Tinsel Wiper Cords
 ED-30309-01—Traffic Diagram
 ED-30334-01—Cross-Connection of Line Circuits at CDF, Arranged for Cross-Connection of Protectors to Connector Terminals
 ED-30334-02—Cross-Connection of Line Circuits at CDF, Arranged for Cross-Connection of Protectors to Line Circuits
 ED-30411-01—Cross-Connection of Line Circuits Where HMDF Is Cabled to VIDF
 ED-30427-06—Cross-Connection of Line Circuit Where HMDF Is Cabled to HIDF
 ED-31133-01—Cross-Connection of Line Circuits Cabling for HMDF Terminating at HIDF—2-Party Message-Rate Lines
 ED-31133-04—Cross-Connection of Line Circuits—Cabling From HMDF Terminating at VIDF—2-Party Message-Rate Lines
 ED-31133-05—Cross-Connection of Line Circuits at CDF Arranged for Cross-Connection of Protectors to Connectors—2-Party Message-Rate Lines
 ED-31133-06—Cross-Connection of Line Circuits at CDF Arranged for Cross-Connection of Protectors to Line Circuits—2-Party Message-Rate Lines
 ED-31235-01—Method of Wiring Banks, 3- and 4-Wire
 ED-31251-()—Switchboard Cabling and Power Feeders for Line and Trunk Finder Frames

ED-31279-01—Method of Cross-Connecting Line Finders to First Selectors (No. 1 or 350A Offices)
 ED-31280-01—Method of Cross-Connecting Line Finders to First Selectors (355A)
 ED-32133-01—Line Circuit Wiring—Not Arranged for Lockout
 ED-32151-()—Local Cable—Line Finder Unit—20-Finder Capacity—3- or 4-Wire
 ED-32154-()—Local Cable—Line Finder Unit—30-Finder Capacity—3-Wire
 ED-32157-()—Local Cable—Line Finder Unit—20-Finder Capacity—3-Wire—5 Percent to 100 Percent Lockout
 ED-32216-01—Line Circuit Wiring—Arranged for Lockout

4. EQUIPMENT

ED-33012-01—4-Wire Line Finder—Arranged To Operate on High-Resistance Sleeve
ED-33013-01—3-Wire Line Finder
ED-33014-01—3-Wire Line Finder—Arranged To Operate on High-Resistance Sleeve
ED-33015-01—4-Wire Line Finder
ED-35021-()—Line Finder Relay Circuit Board
ED-35084-()—Line Finder Relay Circuit Board

J32007B—AT&TCo Std—Line Finder Shelf Unit Arranged for 20, 200-Point Line Finders — 4-Wire — With Multiple Banks — No. 1, 350A, 355A, or 35E97 Office

List 2—Equipment and wiring per SD-33015-01, Fig. 2, option N only, 20 circuits for line finder positions 1 to 20, required in addition to list 1 or 6 when class-of-service indication by lines over the fourth wire requires resistance ground for class-of-service tone B.

List 3—Equipment and wiring required in addition to list 1 or 6 per line finder circuit, SD-33015-01, Fig. 2, J equipment and wiring only, omit Q wiring, to change maximum busy sleeve potential working limit from -2.4 volts to -4.3 volts. (See 5.23.)

List 4—Equipment required in addition to list 1 or 6 to provide terminal strips when this shelf is used with common control flat-rate lines or noncommon control TOUCH-TONE or TOUCH-TONE D IND message-rate and/or flat-rate lines. (See Note A.)

List 5—Apparatus required in addition to list 1 or 6 per trunk circuit SD-35031-01, Fig. 1, when automatic message accounting recording

(AMAR) is required in an office equipped with ANI-B, C, or D. (See Notes B and C.)

List 6—Framework, assembly, wiring, and common equipment for one unit of 20, 200-point, 4-wire finders including 20 sets of 4-wire multiple banks and 9B commutators, but not including relays L and CO or the line finders.

	WIRE	EQUIP	NOTES
Frwk, ED-32150-01,GR1 Bk Mult Assy, 20 Sets of Bks & 20, 9B Comm, Wired per ED-31235-01, Fig. 2 & 2 A	1	1	
Line Fdr Ckt, SD-33015-01: Fig. 2, With Q Wrg or SD-33012-01, Fig. 2 Univ Shelf Jks Only	20	20	5.23
Line Ckts, SD-32133-01: Fig. 9 or 10 or Line Ckt, SD-35012-01	200	0	5.02
Fuses, Lamps, Jks & Keys Unit, J32007AB,L4	1	1	
Sw Tbl Alm, Gr & Alm, and Line Load Cont Unit, J32007AF,L1	1	1	5.18, 5.19

List 7—Apparatus required in addition to list 6 per trunk circuit SD-35031-01, Fig. 2 and option Z, for first and eleventh equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 8—Apparatus required in addition to list 6 per trunk circuit SD-35031-01, Fig. 2, for second to tenth, twelfth to twentieth equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 9—Equipment required in addition to list 6 when Centralized Status Alarm and Control System (CSACS) with audible and visual alarms is furnished, J32007AF, L2.

List 10—Apparatus required in addition to list 6 per SD-35031-01, App Fig. 3, when AMAR is provided in an office equipped with ANI and the ability to isolate the line group from the pulse generator is required.

Notes

A. The 309A terminal is not required in common control offices for coin, 2-party message-rate, or IND message-rate service, and is not required in non-common control TOUCH-TONE offices for coin or 2-party message-rate service.

B. If list 4 is not required with list 5, 7, or 8, one bracket P-46F154 and two P.H.T.T. screws P-42E429 must be ordered in addition to list 5, 7, or 8.

C. If list 4 is required with list 5, 7, or 8, the P-46F201 P.H.T.T. screws shall be discarded and replaced with two P-42E429 P.H.T.T. screws.

J32007C—AT&T Co Std—Line Finder Shelf Unit Arranged for 30, 200-Point Line Finders — 3-Wire — With Multiple Banks — No. 1 or 350A Office

List 2—Equipment and wiring required in addition to list 1 or 5 per line finder circuit SD-33013-01, Fig. 2, K equipment and wiring only, omit M wiring, to change the maximum busy sleeve potential working limit from -2.4 volts to -4.3 volts. (See 5.23.)

List 3—Equipment required in addition to list 1 or 5 to provide terminal strips when this shelf is used with common control flat-rate lines or noncommon control TOUCH-TONE or TOUCH-TONE D IND message-rate and/or flat-rate lines. (See Note A.)

List 4—Apparatus required in addition to list 1 or 5 per trunk circuit SD-35031-01, Fig. 1, when AMAR is required in an office equipped with ANI-B, C, or D. (See Notes B and C.)

List 5—Framework, assembly, wiring, and common equipment for one unit of 30, 200-point, 3-wire line finders including 30 sets of 3-wire multiple banks and 9B commutators, but not including relays L and CO or the line finders.

	WIRE	EQUIP	NOTES
Frwk, ED-32153-01,GR1 Bk Mult Assy, 30 Sets of Bks & 30, 9P Comm, Wired per ED-31235-01, Fig. 1 & 1A	1	1	

	WIRE	EQUIP	NOTES
Line Fdr Ckt, SD-33013-01: Fig. 2 With M Wrg or SD-33014-01, Fig. 2 Univ Shelf Jks Only	30	30	5.23
Line Ckts, SD-32133-01: Fig. 9 or 10 or Line Ckt, SD-35012-01	200	0	5.02
Fuses, Lamps, Jks & Keys Unit, J32007AB,L3	1	1	
Sw Tbl Alm, Gr & Alm, and Line Load Cont Unit, J32007AF,L1	1	1	5.18, 5.19

List 6—Apparatus required in addition to list 5 per trunk circuit SD-35031-01, Fig. 2 and option Z, for the first, eleventh, and twenty-first equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 7—Apparatus required in addition to list 5 per trunk circuit SD-35031-01, Fig. 2, for second to tenth, twelfth to twentieth, and twenty-second to thirtieth equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 8—Equipment required in addition to list 5 when CSACS with audible and visual alarms is furnished, J32007AF, L2.

List 9—Apparatus required in addition to list 5 per SD-35031-01, App Fig. 3, when AMAR is provided in an office equipped with ANI and the ability to isolate the line group from the pulse generator is required.

Notes

A. The 309A terminal is not required in common control offices for coin, 2-party message-rate, or IND message-rate service, and is not required in non-common control TOUCH-TONE offices for coin or 2-party message-rate service.

B. If list 3 is not required with list 4, 6, or 7, one bracket P-46F154 and two P.H.T.T. screws P-42E429 must be ordered in addition to list 4, 6, or 7.

C. If list 3 is required with list 4, 6, or 7, the P-46F201 P.H.T.T. screws shall be discarded and replaced with two P-42E429 P.H.T.T. screws.

J32007D—AT&TCo Std—Line Finder Shelf Unit Arranged for 20, 200-Point Line Finders — 3-Wire — With Multiple Banks — Arranged for 5 Percent to 100 Percent Lockout Lines — No. 355A or 35E97 Office

List 2—Equipment and wiring required in addition to list 1 or 5 per line finder circuit SD-33013-01, Fig. 2, K equipment and wiring only, omit M wiring, to change the maximum busy sleeve potential working limit from -2.4 volts to -4.3 volts. (See 5.23.)

List 3—Equipment required in addition to list 1 or 5 to provide terminal strips when this shelf is used with common control flat-rate lines or noncommon control TOUCH-TONE or TOUCH-TONE D IND message-rate and/or flat-rate lines. (See Note B.)

List 4—Apparatus required in addition to list 1 or 5 per trunk circuit SD-35031-01, Fig. 1, when AMAR is required in an office equipped with ANI-B, C, or D. (See Notes B and C.)

List 5—Framework, assembly, wiring, and common equipment for one unit of 20, 200-point, 3-wire line finders including 20 sets of 3-wire multiple banks and 9B commutators, but, not including the line relays or the line finders.

	WIRE	EQUIP	NOTES
Frwk, ED-32156-(),GR1			
Bk Mult Assy, 20 Sets of Bks & 20, 9B Comm, Wired per ED-31235-01, Fig. 3 & 3A		1	
Line Fdr Ckt, SD-33013-01: Fig. 2, With M Wrg Univ Shelf Jks Only	20	20	A,5.23
Line Ckts, SD-32216-01: Fig. 1 or SD-32133-01, Fig. 9 or 10	200	0	5.02
Fuses, Lamps, Jks & Keys Unit, J32007AC,L2	1	1	
Sw Tbl Alm, Gr & Alm, Perm Sig Alm, and Line Load Cont Unit J32007AH,L1	1	1	5.18, 5.19

List 6—Apparatus required in addition to list 5 per trunk circuit SD-35031-01, Fig. 2 and option Z, for first and eleventh equipped line finder

position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 7—Apparatus required in addition to list 5 per trunk circuit SD-35031-01, Fig. 2, for second to tenth, twelfth to twentieth equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 8—Apparatus required in addition to list 5 per SD-35031-01, App Fig. 3, when AMAR is provided in an office equipped with ANI and the ability to isolate the line group from the pulse generator is required.

Notes

A. When a permanent signal timed release unit per J32007AG is required, N wiring per SD-33013-01, Fig. 2, shall be furnished.

B. The 309A terminal is not required in common control offices for coin, 2-party message-rate, or IND message-rate service, and is not required in non-common control TOUCH-TONE offices for coin or 2-party message-rate service.

C. If list 3 is not required with list 4, 6, or 7, one bracket P-46F154 and two P.H.T.T. screws P-42E429 must be ordered in addition to list 4, 6, or 7.

D. If list 3 is required with list 4, 6, or 7, the P-46F201 P.H.T.T. screws shall be discarded and replaced with two P-42E429 P.H.T.T. screws.

J32007E—AT&T Co Std—Line Finder Shelf Unit Arranged for 20, 200-Point Line Finders — 3-Wire — With Multiple Banks — No. 1, 350A, 355A, or 35E97 Office

List 1—Framework, assembly, wiring, and common equipment for one unit of 20, 200-point, 3-wire line finders including 20 sets of 3-wire multiple banks and 9B commutators, but not including relays L and CO or the line finders.

	WIRE	EQUIP	NOTES
Frwk, ED-32150-(),GR4			
Bk Mult Assy, 20 Sets		1	
of Bks & 20, 9B Comm,			
Wired per ED-31235-01,			
Fig. 2 & 2A	1	1	
Line Fdr Ckt, SD-33013-01:			
Fig. 2 With M Wrg or			
SD-33014-01, Fig. 2,			
Univ Shelf Jks Only	20	20	5.23
Line Ckt, SD-35030-01:			
Fig. 1 or 2	200	0	5.02
Fuses, Lamps, Jks & Key			
Unit, J32007AB,L3	1	1	
Sw Tbl Alm,			
Gr & Alm and			
Line Load Cont Unit			
J32007AF,L1	1	1	5.18, 5.19

List 2—Equipment and wiring required in addition to list 1 per line finder circuit SD-33013-01, Fig. 2, K option only, to change the maximum busy sleeve potential working limit from -2.4 volts to -4.3 volts. Omit option M. (See 5.23.)

List 3—Equipment required in addition to list 1 to provide terminal strips when this shelf is used with common control flat-rate lines or noncommon control TOUCH-TONE or TOUCH-TONE D IND message-rate and/or flat-rate lines. (See Note A.)

List 4—Apparatus required in addition to list 1 per trunk circuit SD-35031-01, Fig. 1, when AMAR is required in an office equipped with ANI-B, C, or D. (See Notes B and C.)

List 5—Apparatus required in addition to list 1 per trunk circuit SD-35031-01, Fig. 2 and option Z, for first and eleventh equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 6—Apparatus required in addition to list 1 per trunk circuit SD-35031-01, Fig. 2, for second to tenth, twelfth to twentieth equipped line finder position when AMAR is required in an office equipped with ANI-E. (See Notes B and C.)

List 7—Equipment required in addition to list 1 when CSACS with audible and visual alarms is furnished, J32007AF, L2.

List 8—Apparatus required in addition to list 1 per SD-35031-01, App Fig. 3, when AMAR is provided in an office equipped with ANI and

the ability to isolate the line group from the pulse generator is required.

Notes

- A. The 309A terminal is not required in common control offices for coin, 2-party message-rate, or IND message-rate service, and is not required in non-common control TOUCH-TONE offices for coin or 2-party message-rate service.
- B. If list 3 is not required with list 4, 5, or 6, one bracket P-46F154 and two P.H.T.T. screws P-42E429 must be ordered in addition to list 4, 5, or 6.
- C. If list 3 is required with list 4, 5, or 6, the P-46F201 P.H.T.T. screws shall be discarded and replaced with two P-42E429 P.H.T.T. screws.

J32007F—Reserved

J32007G—Reserved

J32007H—Reserved

J32007J—AT&TCo Std—Subscriber Line Relay Unit, Nonlockout Lines—For Use With J32007B or J32007C—Line Finder Units

- List 1**—One mounting plate equipped with relays L and CO for ten subscriber lines per SD-32133-01, Fig. 9 or 10, and strapped per ED-32133-01.
- List 2**—One mounting plate equipped with relays L and CO for nine subscriber lines per SD-32133-01, Fig. 9 or 10, and strapped per ED-32133-01 (line 10 omitted).
- List 3—A&M Only**—Wire, 535FJ capacitor, and 210A terminal per SD-32133-01, Fig. 9 or 10, K apparatus only, required in addition to list 1 or 2 to arrange one line for class-of-service tone in 35E97 office. (See Note A.)

Note

- A. In 35E97 offices, lines that require class-of-service tone per SD-32133-01, Fig. 9 or 10, K apparatus, shall be equipped with a 535FJ capacitor by suspending the capacitor between the proper terminal of the line circuit relay and a 210A terminal located beneath the mounting screw of the relay. Condenser and terminal punching shall be

mounted and wired by the installer on lines designated by the telephone company.

J32007K—AT&TCo Std—Subscriber Line Relay Unit, Nonlockout Lines—For Use With J32007D—Line Finder Units Which Are Arranged for 5 Percent to 100 Percent Lockout—No. 355A Office

- List 1**—One mounting plate equipped with relays L and CO for ten subscriber lines per SD-32133-01, Fig. 9 or 10, and strapped per ED-32133-01.
- List 2**—One mounting plate equipped with relays L and CO for nine subscriber lines per SD-32133-01, Fig. 9 or 10, and strapped per ED-32133-01 (line 10 omitted).
- List 3—A&M Only**—Wire, 535FJ capacitor, and 210A terminal per SD-32133-01, Fig. 9 or 10, K apparatus only, required in addition to list 1 or 2 to arrange one line for class-of-service tone in 35E97 office. (See Note A.)

Note

- A. In 35E97 offices, lines that require class-of-service tone per SD-32133-01, Fig. 9 or 10, K apparatus, shall be equipped with a 535FJ capacitor by suspending the capacitor between the proper terminal of the line circuit relay and a 210A terminal located beneath the mounting screw of the relay. Condenser and terminal punching shall be mounted and wired by the installer on lines designated by the telephone company.

J32007L—AT&TCo Std—Subscriber Line Relay Unit, Lockout Lines—For Use With J32007D—Line Finder Units Which Are Arranged for 5 Percent to 100 Percent Lockout—No. 355A Office

- List 1**—One mounting plate equipped with relays L, LO, and CO for ten subscriber lines per SD-32216-01, Fig. 1, with Z wiring, and strapped per ED-32216-01. (See Note B.)
- List 2**—One mounting plate equipped with relays L, LO, and CO for nine subscriber lines per SD-32216-01, Fig. 1, with Z wiring, and strapped per ED-32216-01 (line 10 omitted). (See Note B.)
- List 3—A&M Only**—Wire, 535FJ capacitor, and 210A terminal per SD-32216-01, Fig. 1, V apparatus only, required in addition to list 1

or 2 to arrange one line for class-of-service tone in 35E97 offices. (See Note A.)

Notes

- A. In 35E97 offices, lines that require class-of-service tone per SD-32216-01, Fig. 1, V apparatus, shall be equipped with a 535FJ capacitor by suspending the capacitor between the proper terminal of the line circuit relay and a 210A terminal located beneath the mounting screw of the relay. Condenser and terminal punching shall be mounted and wired by the installer on lines designated by the telephone company.
- B. Line circuits to be arranged for connecting to dial selected PBX trunk circuit, or manually selected PBX trunk having equipment for reducing the unguarded interval when the party calling this line disconnects first, shall be modified as shown on ED-32216-01.

J32007AB—AT&TCo Std—Fuses, Lamps, Jacks, and Keys Unit for Line Finder Units J32007B, J32007C, or J32007E

List 3—Assembly, wiring, and equipment for one unit of fuses, lamps, jacks, and keys for use with 3-wire line finder unit J32007C or J32007E. (See Note C.)

	WIRE	EQUIP	NOTES
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Sw Tbl Alm Ckt, SD-32239-02:			
Fuse Alm, Fig. 2	1	1	
Alm Lamps, Fig. 3	1	1	A
Gr & Alm Rel Ckt, SD-32194-02:			
Tst Line Jk, Fig. 3	1	1	A
Lamps & Keys, Fig. 6	1	1	A
Line Load Cont Ckt, SD-32069-01:			
Key Ckt, Fig. 9	2	2	A,B
Lamp Ckt, Fig. 10	2	2	A,B

List 4—Assembly, wiring, and equipment for one unit of fuses, lamps, jacks, and keys for use with 4-wire line finder unit J32007B.

	WIRE	EQUIP	NOTES
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Sw Tbl Alm Ckt, SD-32239-02:			
Fuse Alm Fig. 2	1	1	
Alm Lamps, Fig. 3	1	1	A
Gr & Alm Rel Ckt, SD-32194-02:			
Tst Line Jk, Fig. 5	1	1	A
Lamps & Keys, Fig. 6	1	1	A
Line Load Cont Ckt, SD-32069-01:			
Key Ckt, Fig. 9	2	2	A
Lamp Ckt, Fig. 10	2	2	A

Notes

- A. The wiring for these circuits is run in as loose wire during assembly of the line finder unit.
- B. On additions to No. 355A offices where it is desired to maintain the practice of locating the line load control restoring keys and lamps in existing wall cabinets, arrangements have been provided for disabling the B and C restoring keys and lamps furnished on the unit, simply by removing the straps at the unit terminal strip. Appropriate restoring keys and lamps shall be added and wired to, in the wall cabinet on a job basis.
- C. Arrangements for mounting the switchman's jack, SD-32031-01, Fig. 2, with option E are provided on this unit. These jacks are to be installer mounted, with sufficient slack in the leads when relocation to a lower shelf will be desired.

J32007AC—AT&TCo Std—Fuses, Lamps, Jacks, and Keys Unit for 20-Capacity Line Finder Unit J32007D—No. 355A or 35E97 Office

List 2—Assembly, wiring, and equipment for one unit of fuses, lamps, jacks, and keys for use with 3-wire line finder unit J32007D. (See Note A.)

	WIRE	EQUIP	NOTES
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Sw Tbl Alm Ckt, SD-32239-02:			
Alm Lamps, Fig. 3	1	1	B
Fuse Alm, Fig. 2	1	1	

	WIRE	EQUIP	NOTES
Gr & Alm Rels Ckt, SD-32194-02:			
PS Lamp, Fig. 10	1	1	B
Lamps & Keys, Fig. 6	1	1	B
Line Load Cont Ckt, SD-32069-01:			
Key Ckt, Fig. 9	2	2	B,C
Lamp Ckt, Fig. 10	2	2	B,C
Misc Alm Ckt, SD-32192-04:			
Rls Tst Jk, Fig. 9	1	1	B

Notes

- A. This item provides two 3-ampere fuses for PSL1 and PSL2 battery supply. If PSL battery from the permanent signal alarm circuit is not provided, the installer shall run and connect leads from the two spare fuses on the fuse unit to the B terminal strip on the unit. These fuses shall be designated C1 and C2 as shown on SD-32194-02, Fig. 4.
- B. The wiring for these circuits is run in as loose wire during assembly of the line finder unit.
- C. On additions to No. 355A offices where it is desired to maintain the practice of locating the line load control restoring keys and lamps in existing wall cabinets, arrangements have been provided for disabling the B and C restoring keys and lamps furnished on the unit, simply by removing straps at the unit terminal strip. Appropriate restoring keys and lamps shall be added and wired to, in the wall cabinet on a job basis.

J32007AD—AT&TCo Std—Subscribers Line Relay Unit for Flat-Rate, Message-Rate, or Coin Lines—Arranged To Place Ground on Connector Sleeve Terminal Before the Line Finder Finds the Originating Line—Not Arranged for Lockout—No. 1 or 355A Office

- List 1**—Assembly, wiring, and equipment for one mounting plate equipped with line and cutoff relays for ten subscribers per SD-35012-01, ten Fig. 1, Z wiring.
- List 2**—Assembly, wiring, and equipment for one mounting plate equipped with line and cutoff relays for nine subscribers per SD-35012-01, nine Fig. 1, Z wiring.

Note

- A. Provide Y wiring for ground start operation. Omit Z wiring.

J32007AE—AT&TCo Std—Subscriber Line Relay Unit, Nonlockout Lines—For Use With J32007E—Line Finder Unit

- List 1**—Assembly, wiring, and equipment for one unit equipped with relays L and CO for ten subscriber lines per SD-35030-01, Fig. 1, with option Z. (See Notes A and C.)
- List 2**—Assembly, wiring, and equipment for one unit equipped with relays L and CO for nine subscriber lines per SD-35030-01, Fig. 1, with option Z. (See Notes A and C.)
- List 3**—Equipment and wiring required in addition to list 1 or 2 to arrange the first circuit of a unit for a PBX line circuit when immediate make-busy upon seizure and loop check are required. One SD-35030-01, Fig. 2 and 3, with options V and T. (Omit one Fig. 1.) (See Note C.)
- List 4**—Equipment and wiring required in addition to list 1 or 2 to arrange the first circuit of a unit for a PBX line circuit when an immediate make-busy upon seizure is required and loop check is not required. One SD-35030-01, Fig. 2, with option V. (Omit one Fig. 1.) (See Notes B and C.)

Notes

- A. Furnish option Y in addition to list 1 or 2 for each circuit requiring ground start. Omit option Z.
- B. When the first circuit of the unit is furnished per Fig. 2 with option V (list 4), and it is desired to assign it to a regular loop start line circuit, omit option V and provide option W.
- C. One 535FJ capacitor, option S, is required in addition to Fig. 1 or 2 to arrange one line for class-of-service tone in a 35E97 office. The capacitor is to be mounted behind relays L and CO by the installer.

J32007AF—AT&TCo Std—Switch Trouble Alarm, Group and Alarm, and Line Load Control Unit—For Use With Line Finder Units—J32007B, J32007C, or J32007E

List 1—Assembly, wiring, and equipment for one alarm and line load control unit.

	WIRE	EQUIP	NOTES
Gr & Alm Rel Ckt, SD-32194-01: Gr Alm, Fig. 1, With X App	1	1	B
Start Ckt, Fig. 2, With Z Wrg	1	1	
Start Ckt, Fig. 2	4	4	
Alt Ckt, Fig. 7	1	1	
Sw Tbl Alm Ckt, SD-32234-02: Fig. 1, With X & Z App and X Wrg	1	1	A,B
Line Load Cont Ckt, SD-32069-01: Line Fdr Load Cont Rels, Fig. 18	2	2	

List 2—Wiring and equipment required in addition to list 1 for connection to Centralized Status Alarm and Control System (CSACS) in No. 1 office with audible and visual alarm, per SD-32239-02, option T.

Notes

- A. This unit is universally wired and equipped per SD-32239-02, Fig. 1. By means of strapping on the unit terminal strip, this unit may be arranged for No. 1 or 350A offices or for 355A offices.
- B. When this unit is used in a 35E97 office, five KS-20289, L1B, 499-ohm resistors (Y apparatus) shall be ordered separately. Resistors AFB, CB, RLS, S, and C (KS-20289, L1B, 698 ohms) shall be removed by the installer and the KS-20289, L1B, 499-ohm resistors installed in their positions.

J32007AG—AT&TCo Std—Permanent Signal Timed Release Unit for Use on Line Finder Unit — J32007D — No. 355A Office

List 1—Assembly, wiring, and equipment for one permanent signal timed release unit equipped with 20 PS and PSA relays, SD-32194-02, Fig. 8.

J32007AH—AT&TCo Std—Switch Trouble Alarm, Group and Alarm, Permanent Signal Alarm, and Line Load Control Unit—For Use With Line Finder Unit—J32007D, No. 355, or 35E97 Office

List 1—Assembly, wiring, and equipment for one alarm and line load control unit.

	WIRE	EQUIP	NOTES
Gr & Alm Rel Ckt, SD-32194-02: Gr Alm, Fig. 1, With X App	1	1	A
Start Ckt, Fig. 2, With Z Wrg	1	1	
Start Ckt, Fig. 2	4	4	
Alt Ckt, Fig. 7	1	1	
Perm Sig Ckt, Fig. 4, With V App	1	1	A
Sw Tbl Alm Ckt, SD-32239-02: Fig. 1, With Z App	1	1	A
Line Load Cont Ckt, SD-32069-01: Line Fdr Load Cont Rels, Fig. 18	2	2	

Note

- A. When this unit is used in a 35E97 office, six KS-20289, L1B, 499-ohm resistors (T and Y apparatus) shall be ordered separately. Resistors AFB, CB, RLS, S, C, and PS (KS-20289, L1B, 698 ohms) shall be removed by the installer and the KS-20289, L1B 499-ohm resistors installed in their positions.

Miscellaneous Equipment

J33017BG—Line Load Control—Relay Rack Units J33017CM—Remote Control Line Load Control Unit

- 4.01 Universal switch frames per ED-31178-() shall be used for the mounting of the line finder units listed herein.

4.02 End guard assemblies per ED-31231-() shall be used for universal switch frames per ED-31178-().

5. GENERAL NOTES AND INDEXES

5.01 Line finders shall be numbered from one up on each unit, beginning with the line finder in the left position on the lower shelf and progressing left to right on that shelf. The numbering continues on the next higher shelf, left to right, for the upper shelf or shelves of the unit. When there are switches per shelf, this results in switch 11 being above switch 1, and switch 12 above switch 2, etc. In the case of 30-capacity units, switches 1, 11, and 21 are in vertical alignment. Switches 1 and 11, or 1, 11, and 21 constitute one line finder subgroup; switches 2 and 12, or 2, 12, and 22 constitute another subgroup, etc. In case of the line finder unit with seven switches per shelf, the switches are similarly numbered left to right, but the switches of each subgroup, such as 1 and 11, 2 and 12, are not in vertical alignment.

5.02 Line finder units are normally equipped before shipment with line finders and line relays, as specified.

No. 1, 350A, or 355A Offices

5.03 Partially equipped units are sometimes necessary for various reasons. When partially equipped units are required, the choice of lines or switches to be omitted from the unit should reflect the following considerations:

(a) Switches may be omitted when the traffic supplied by the 200 lines requires less than the full capacity of switches. In such cases, the switches shall be omitted from full equipment by sets of two finders in the following order:

20-Line Finder Unit—20, 15, 18, 13, 17, 12, 19,
14, 16, 11, 10, 5, 8, 3, 7, 2,
9, 4, 6, and 1

30-Line Finder Unit—30, 25, 28, 23, 27, 22, 29,
24, 26, 21, then 20 to 1
same as for 20-line finder
unit

The line finder to first selector trunking patterns per ED-31279-01 for No. 1 and 350A offices and

ED-31280-01 for No. 355A offices for 20-capacity line finder units are based on omitting finders in partially equipped units by sets of two in the above order; for example, 20 and 15, 18 and 13, 17 and 12, etc. However, recommendations are provided on these drawings utilizing these patterns for an odd number of line finders per group as an optional standard where specified. In the case of additions to existing partial divisions of line finders interconnected to first selectors in accordance with ED-30025-01, the number of finders per group ordinarily will be the same as in the existing groups. In No. 355A offices, it is not recommended that additions of line finder units per this specification be intermixed in the same divisions with existing finder units per J32006 because of the differences in circuit operation and interconnecting requirements.

(b) In some cases, lines may be omitted from a finder unit (in steps of ten lines) in order to reduce the traffic so as not to exceed the capacity of the full quota of switches. In such cases, the lines shall be omitted from the full equipment in reverse numerical sequence, that is, 191 to 190, 181 to 180, etc. On this basis, lines 101 to 100 always will be omitted before any lines are omitted from the first group of 100 lines on the unit.

5.04 In No. 1 and 350A offices, line finder frames are designated by a number prefixed by the letters LF. The frames shall be numbered consecutively from one up as LF-1, LF-2, etc, starting with the frame nearest the originating end of the IDF or CDF. When line finder frames are parallel to the distributing frame, the numbering should be in the same direction as growth of the distributing frame. Where floor plan layout does not permit locating line finder frames in the same building bays occupied by the distributing frame or where the distributing frame is located on another floor, the line finder frames may be numbered consecutively without reference to the location of the distributing frame. Economy in cabling, floor space, and visibility of alarm pilots generally will control the numbering of the growth of frames under these circumstances. When line finder frames are located on more than one floor in a central office building, a factor of 50 shall be allowed for numbering the frames on each floor; that is, the lowest floor of line finder frames shall be numbered LF-1, LF-2, etc, the next higher floor LF-51, LF-52, etc. The frame and class-of-service designations shall be stamped on the front of the frame uprights as shown on the frame equipment drawing.

5.05 In No. 355A offices, units shall be designated LG1, LG2, LG3, etc, in numerical sequence throughout the office. The designations shall be stamped on the right frame upright in accordance with Section 800-613-157.

5.06 A card holder is provided as a part of the switch into which the installer shall insert a card containing the maintenance information as shown on the equipment drawing.

5.07 A bank support shall be provided for each unequipped line finder position.

5.08 No ground lead shall be run from the fuse panel on the unit to the ground terminal strip on the unit.

5.09 It is not necessary to provide a wire connected to ground for the line finder frames. The cable rack connection to the frame will provide a satisfactory ground.

5.10 The line finder frames shall be equipped from the top down where two or more units mount on one frame. Where connector units are mounted on the same frame with a line finder unit, as in No. 355A offices, the line finder unit shall be below the connector units to facilitate switchboard cabling.

5.11 For indicating the frames in a lineup in No. 1 or 350A offices, information shall be stamped on the end guard at one end of each line of frames in the main cross aisle where the aisle pilot lamps are located. The requirements for the aisle pilot equipment are covered in the office alarms specification.

5.12 A distributing power terminal strip (DPTS) (see Fig. 1) of the required capacity shall be mounted in the end guard for each row of line finder frames in No. 1 or 350A offices. It shall be located at the end of the row of frames at the cross aisle in which the aisle pilot lamps are located in central offices, and it shall always be located at the end adjacent to the main cross aisle in offices having no aisle pilots. Incoming cables and straps are placed on the side of the DPTS that faces away from the frame lineup, and the frame switchboard power cables are connected on the side that faces the frame lineup.

5.13 The alarm and switchman talking line jack leads shall be run in a switchboard cable from the DPTS to each line finder frame in No. 1 or 350A offices. The talking line jack leads are run directly to

the talking jack terminals, and all other leads are terminated on the terminal strip of each unit. This cable shall be butted at the top of the frame and run loose to the succeeding units.

5.14 The equipment for the coin box trunk and message register trunk circuits is mounted on relay racks.

5.15 The requirements for cross-connecting and cabling of line circuits are covered on the cross-connection drawings listed in 3., instead of on the line circuit drawings.

5.16 Line finders in coin box and 2-party message-rate groups are cabled to the IDF or CDF for cross-connection to the coin box trunks or message registers. Line finders in individual message-rate groups may be cabled directly, or through an IDF or CDF, to message-rate trunks. Cabling and frame space for individual message-rate units shall be furnished on the basis of fully equipped line finder units in all cases. Message-rate trunks corresponding to unequipped line finders may be omitted from the trunk units as initially installed.

5.17 Where line finders arranged for discrimination between two different classes of lines are provided, it will be necessary to ensure that the normal post springs operate on the proper level for each finder. In this case, line finders cannot be moved from one position to another on a unit without a readjustment of the normal post springs, because of the slip in the bank wiring.

5.18 The wall cabinet for line load control should be located in a prominent place in the office where the lamps can be readily seen at all times and at a convenient height for operating the keys.

5.19 *Auxiliary Line Load Control Cabinet for Shelter Area:* The equipment shown on ED-92857-01 provides for extending the master control key operation to a shelter area in the building. A wall-mounted steel cabinet encloses a panel on which appear multiples of the class B and C master keys and lamps and the alarm release key. Where an office load meter is provided in the switch room, a multiple appearance of such a meter also may be furnished in the shelter area. Under this plan, time groups can be taken out of service on a selective basis before retiring to the shelter area by operating the class B and class C keys in the regular control cabinet in the switch room to the lock manual operated

relay position and then by manually operating the desired line control relays. The class B and class C keys should then be restored to normal. After retiring to the shelter area, the operation of the class B and class C keys in the auxiliary cabinet will remove the remaining line groups from service. This final control may be made in accordance with readings observed on the office load meter.

5.20 Wiring of Unit: All apparatus components are arranged for solderless wrapped connections. With the exception of the battery and ground leads for each subgroup of line finder switches and battery and ground leads for the line circuits on the 5-percent to 100-percent lockout, unit which are No. 22 gauge, all wiring on the unit shall be No. 24 gauge.

5.21 Switchboard cables with No. 24 gauge conductors shall be used for the main cable runs between line finder units and distributing frame and between distributing frame and connector bank terminals, for all offices where the resistance of the sleeve conductor between the line circuit cutoff relay and the associated terminal in the connector bank does not exceed 10 ohms. Otherwise, the cables mentioned above shall consist of No. 22 gauge conductors.

5.22 The W1AL cord (2 feet long) shall be used for placing ground from the ground punching to the sleeve terminal of subscriber lines at the unit terminal strip.

5.23 When the resistance of the sleeve lead, between the line finder and the holding ground (connector or trunk), causes a minus voltage in excess of -2.4 volts at the line finder sleeve terminal of a busy line, another line finder in the same group may, when attempting to pass over the busy terminal, stop and not proceed to the calling line terminal. This line finder will not cut through, and the calling line will not receive a dial tone. List 2 or 3 of J32007B, C, D, or E

provides for standard or field modification of line finder circuits SD-33013-01 or SD-33015-01 to permit satisfactory operation with a negative voltage as high as -4.3 volts at the line finder sleeve terminal by adding a resistor on the ground lead of each line finder jack position. The line finders will not have to be removed from their jacks for this modification.

List of A&M Only and Mfr Disc. Equipment

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
J32007A	Mfr Disc.	6	J32007E
J32007B,L1	Mfr Disc.	6	J32007B,L6
J32007C,L1	Mfr Disc.	6	J32007C,L5
J32007D,L1	Mfr Disc.	6	J32007D,L5
J32007J,L3	A&M Only	1	—
J32007K,L3	A&M Only	1	—
J32007L,L3	A&M Only	1	—
J32007M	Mfr Disc.	5	J32007AB
J32007N	Mfr Disc.	2	—
J32007P	Mfr Disc.	6	J32007AF
J32007R	Mfr Disc.	6	J32007AF
J32007S	Mfr Disc.	2	—
J32007T	Mfr Disc.	2	—
J32007U	Mfr Disc.	6	J32007AH
J32007W	Mfr Disc.	6	J32007AH
J32007Y	Mfr Disc.	5	J32007AC
J32007AA	Mfr Disc.	6	J32007AG
J32007AB, L1&L2	Mfr Disc.	6	J32007AB, L3&L4
J32007AC, L1	Mfr Disc.	6	J32007AC, L2
J32007AH, L2	Mfr Disc.	7	—
J32007AH,L2	Mfr Disc.	7	—

The above 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.

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	AT&T RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING
ED-33012-01		4-Wire Line Finder— Arranged To Operate on High-Resistance Sleeve	ED-33012-01	
ED-33013-01		3-Wire Line Finder	ED-33013-01	
ED-33014-01		3-Wire Line Finder— Arranged To Operate on High-Resistance Sleeve	ED-33014-01	
ED-33015-01		4-Wire Line Finder	ED-33015-01	
ED-35021-()		Line Finder Relay Circuit Board	ED-35021-()	SD-35031-01
ED-35084-()		Line Finder Relay Circuit Board	ED-35084-()	SD-35031-01.
J32007B	Std	Line Finder Shelf Unit Arranged for 20, 200-Point Line Finders—4-Wire— With Multiple Banks Capacity—No. 1, 350A, 355A, or 35E97 Office	J32007B-()	SD-32133-01 SD-33015-01 SD-35012-01 SD-35031-01
J32007C	Std	Line Finder Shelf Unit Arranged for 30, 200-Point Line Finders—3-Wire— With Multiple Banks—No. 1 or 350A Office	J32007C-()	SD-32133-01 SD-33013-01 SD-33014-01 SD-35012-01 SD-35031-01
J32007D	Std	Line Finder Shelf Unit Arranged for 20, 200-Point Line Finders—3-Wire— With Multiple Banks— Arranged for 5 Percent to 100 Percent Lockout Lines—No. 355A or 35E97 Office	J32007D-()	SD-32133-01 SD-32216-01 SD-33013-01 SD-35031-01
J32007E	Std	Line Finder Shelf Unit Arranged for 20, 200-Point Line Finders—3-Wire— With Multiple Banks—No. 1, 350A, 355A, or 35E97 Office	J32007E-()	SD-35030-01 SD-35031-01 SD-33013-01 SD-33014-01
J32007J	Std	Subscriber Line Relay Unit, Non-lockout Lines— For Use With J32007B or J32007C—Line Finder Units	J32007J-()	SD-32133-01
J32007K	Std	Subscriber Line Relay Unit, Nonlockout Lines— For Use With J32007D—Line Finder Units Which Are Arranged for 5 Percent to 100 Percent Lockout—No. 355A Office	J32007K-()	SD-32133-01

EQUIPMENT CODE	AT&T RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING
J32007L	Std	Subscriber Line Relay Unit, Lockout Lines—For Use With J32007D—Line Finder Units Which Are Arranged for 5 Percent to 100 Percent Lockout—No. 355A Office	J32007L-()	SD-32216-01
J32007AB	Std	Fuses, Lamps, Jacks, and Keys Unit for Line Finder Units J32007B, J32007C, or J32007E	J32007AB-()	SD-32069-01 SD-32194-02 SD-32239-02
J32007AC	Std	Fuses, Lamps, Jacks, and Keys Unit for 20-Capacity Line Finder Unit J32007D—No. 355A or 35E97 Office	J32007AC-()	SD-32069-01 SD-32192-04 SD-32194-02 SD-32239-02
J32007AD	Std	Subscribers Line Relay Unit for Flat-Rate, Message-Rate, or Coin Lines—Arranged To Place Ground on Connector Sleeve Terminal Before the Line Finder Finds the Originating Line—Not Arranged for Lockout—No. 1 or 355A Office	J32007AD-()	SD-35012-01
J32007AE	Std	Subscriber Line Relay Unit, Nonlockout Lines—For Use With J32007E—Line Finder Unit	J32007AE-()	SD-35030-01
J32007AF	Std	Switch Trouble Alarm, Group and Alarm, and Line Load Control Unit—For Use With Line Finder Units—J32007B, J32007C, or J32007E	J32007AF-()	SD-32069-01 SD-32194-02 SD-32234-02 SD-32239-02
J32007AG	Std	Permanent Signal Timed Release Unit for Use on Line Finder Unit—J32007D—No. 355A Office	J32007AG-()	SD-32194-02
J32007AH	Std	Switch Trouble Alarm, Group and Alarm, Permanent Signal Alarm, and Line Load Control Unit—For Use With Line Finder Unit—J32007D, No. 355A, or 35E97 Office	J32007AH-()	SD-32069-01 SD-32194-02 SD-32239-02
J32007F—Reserved				
J32007G—Reserved				
J32007H—Reserved				

Circuit Schematic Index

CIRCUIT DRAWING	J32007 EQPT CODE
SD-32069-01	AB, AC, AF, AH
SD-32133-01	B, C, D, J, K
SD-32192-04	AC
SD-32194-02	AB, AC, AF, AG, AH
SD-32216-01	D, L
SD-32234-02	AF
SD-32239-02	AB, AC, AF, AH
SD-33013-01	C, D, E
SD-33014-01	C, E
SD-33015-01	B
SD-35012-01	B, C, AD
SD-35030-01	E, AE
SD-35031-01	B, C, D, E,
	ED-35021-(), ED-35084-()

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