

CONNECTORS AND CONNECTOR SHELVES
NO. 1, 350A, 355A, 35E97 AND 702A PBX OFFICES
EQUIPMENT DESIGN REQUIREMENTS
STEP-BY-STEP AND PBX 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 local, toll, and combination connector outgoing trunks to PBX shelves for use in No. 1, 350A, 355A, and 35E97 offices and 702A PBXs.

1.02 This specification is reissued to:

- (a) Reinstate code J32311F Lists 5, 6, and 7 to an A&M Only rating to facilitate the addition of supplementary shelves to use banks and associated local cable for connection with solder-type terminal strips.
- (b) Remove all reference to switches ED-30215-02 and ED-31656-01 since these switches are presently rated Mfr Disc.

CAPACITY

1.03 The capacity of the connector shelves and the frame space required for each is indicated in the following table.

TYPE OF SHELF	CONNECTORS OR TRUNKS PER SHELF	UNIVERSAL FRAME MTG SPACES PER SHELF
Initial shelf	11	Shown in parentheses after each connector switch and trunk listed under Subdivisions of Equipment
Overflow shelf		
Rotary hunting — 1 ring	10	
10 code	10	
All others	11	
Supplementary shelf (To 11-capacity initial shelves and not for com- bined connectors)	5	
OGT to PBX	12	

DESCRIPTION

1.04 This specification covers the shelf equipment for all shelves which mount local, toll, and combination connectors of whatever variety in No. 1, 350A, 355A, and 35E97 offices and in 702A PBXs. It also covers the shelf equipment for outgoing trunks to PBXs sometimes used with level hunting connectors in the larger No. 1 offices. The association of these equipments with other equipment in an office is covered in the general specification for that office.

1.05 The connector shelves in this specification use shelf frameworks of universal construction 6 feet 0-1/2 inch long, except the supplementary shelf which is sometimes required and is 2 feet 6-7/8 inches long.

1.06 The types of connectors which are available for each office or PBX are listed in Table A.

TABLE A
TYPES OF CONNECTORS

L, T, and C Denote Local, Toll, and Combination, Respectively*			
Nonhunting	NO. 1 & 350A	702A PBX	355A
100 Point			
1 ring	C	L	L,C
2 ring	C	L	L,C
8-party TPS	C†	-	L,C
5-code TPS	C†	-	L,C
200 Point			
8-party TPS	L,C	-	L,C
10-party TPS	L,C	-	L,C
Rotary Hunting			
100 Point			
1 ring	L,T,C‡	L	L,C‡
200 Point			
8-party TPS	L,C	-	L,C
10-party TPS	L,C	-	L,C
Level Hunting			
100 Point			
1 ring	L,T	-	-
Test			
100 Point			
1-ring, 2-ring, 8-party TPS, 5-code TPS	✓	-	-
200 Point			
8-party TPS	✓	-	✓
10-party TPS	✓	-	✓
Coin			
100 Point			
1 ring	L	-	L
* Indications are for present standards. A&M Only arrangements are indicated in Table B.			
† Indicates that these connectors require ringing interrupter and alarm units per J33017 or J32312.			
‡ Combination rotary hunting connectors used only in hundreds groups of not more than ten connectors.			
✓ Indicates use in office.			

1.07 There are three general classes of shelves for use in No. 1, 350A, and 355A offices and in 702A PBXs.

- (a) 11-capacity initial shelves, and 11-capacity overflow shelves except for rotary hunting connectors.
- (b) 10-capacity overflow shelves for rotary hunting connectors.
- (c) 5-capacity supplementary shelves to 11-capacity shelves for local or toll connectors only.

In addition, there is a 12-capacity shelf for outgoing trunks to PBXs for use in No. 1 offices only. The association of these shelves with bank multiple equipment is shown in Table B which is at the end of this specification.

1.08 **100-Point Connector Shelves:** Usually, one shelf of eleven 100-point connectors will serve 100 line terminals, but lines with heavy traffic, such as the PBX groups, will require more. Any number of overflow shelves of 10- or 11-switch capacity may be multiplied to an initial shelf of 11 capacity to provide the necessary number of connectors to serve a group of 100 terminals. The overflow shelf will, in all cases, provide for 11 connectors, except for one-ring rotary hunting groups (where the capacity is always limited to ten because of the need in some cases for an auxiliary bank terminal strip, as described later). Where more than ten but fewer than 16 connectors are required for the one-ring nonhunting connector groups, supplementary shelves of five connectors may be added on adjacent frames to build out initial shelves serving these connectors of either the nonhunting or rotary hunting varieties. Since the present practice is to provide local and toll connectors rather than combination connectors in groups requiring more than ten subscriber connectors, the 5-capacity shelf is intended only for mounting local or toll connectors. There are no bank terminal strips on supplementary shelves. Instead, the banks are provided with a stub local cable long enough to reach the bank terminal strip of the initial shelf to which the supplementary banks are multiplied by the installer. Similarly, the multiple shelf jack wiring is extended to that of the initial shelf by the installer. One test connector is available for every group of 100 lines, and it is always located in the first switch position of the initial shelf serving the group. On overflow shelves of 11-switch

capacity, the first switch position is used for a connector other than test.

1.09 200-Point Connector Shelves: Normally, TPS service results in less efficient use of connectors since fewer stations are served by a connector group. This inefficiency is greatly reduced by providing the 200-terminal bank. One shelf of ten switches is usually adequate for 200 stations. Where heavier traffic demands dictate, the 200 stations may be reduced and the number of shelves increased.

1.10 The 11- and 10-capacity shelves are arranged to mount 11 or 10 connectors between alarm and miscellaneous equipment at the left and 1 or 2 bank terminal strips, respectively, at the right. The 5-capacity shelves are arranged to mount only switches and a fuse panel. The 12-capacity shelf for outgoing trunks to a PBX is similar to the 11 capacity, but the shelf mounts switch-plate-mounted relay equipment units which require no banks, and the omission of a bank terminal strip affords space for the twelfth unit.

1.11 All miscellaneous equipment at the left end of a 10-, 11-, or 12-capacity shelf is arranged on horizontal mounting plates or panels, either 1 or 2 inches wide, below which a fuse panel is located. A terminal strip is provided as part of the miscellaneous equipment for interconnecting alarm and miscellaneous shelf wiring to associated switchboard cable.

1.12 *All shelves are normally equipped before shipment* with connectors or other switch-plate-mounted units, depending on the type of shelf, and with switch jacks, banks, terminal strips, and miscellaneous and alarm equipment.

1.13 With the exception of the usual bank multiple, all local shelf wiring including wiring from switch jacks and from miscellaneous alarm equipment to the miscellaneous terminal strip is run as loose wiring. This wiring is contained within fanning rings behind each switch position and behind the mounting plate support bars.

1.14 *Location of Connectors on a Shelf*

(a) When only one kind of connector is mounted on a shelf, that is, local, toll, or combination, the growth of the connectors shall be from left to right.

(b) When both local and toll connectors serving the same hundreds group are located on the same shelf, the growth of the local connectors shall be from right to left, and the growth of the toll connectors shall be from left to right. The combination of these types of connectors on the same shelf will be of advantage if it results in saving a shelf, or if it provides a means of balancing the traffic between shelves in rotary hunting groups having PBX groups of more than ten trunks.

1.15 *Arrangements for Trunks to PBXs:* The number of trunks required from a central office to a PBX varies considerably for different PBXs. There are four different connector equipment arrangements available to serve such trunk groups: (a) rotary hunting connectors, (b) level hunting connectors, (c) outgoing trunk units used in connection with level hunting connectors, and (d) rotary out trunk switches used in conjunction with outgoing trunk units. These arrangements are described in 1.16 to 1.19 and 1.21.

1.16 Rotary hunting 100-point connectors are used for small PBX trunk groups. These connectors hunt only over the ten terminals of the level dialed. They require 400-point banks to provide S and H terminals, which are strapped to continue the hunting past busy terminals, as required. The number of connectors required may or may not necessitate the use of one or more overflow shelves. When overflow shelves are required, they will be arranged in either of two ways.

(a) For a connector group serving PBXs having not more than ten trunks to any one PBX, the overflow shelf has one bank terminal strip only. This is located adjacent to the tenth connector position. This bank terminal strip is used to terminate both the bank local cable and the switchboard cable to preceding and succeeding shelves.

(b) For a connector group serving PBXs having more than ten trunks to (one or more) PBXs, the overflow shelf has two bank terminal strips. The bank terminal strip (adjacent to the tenth connector position) is used to terminate the bank multiple and the other (auxiliary) terminal strip (adjacent to the end of the shelf) is used to terminate the switchboard cable to preceding and succeeding overflow shelves. These two terminal strips, with cross-connections between

them, afford a means of equalizing traffic and grading the multiple between the connector shelves for PBX trunk groups of more than ten trunks each. For a PBX requiring from 11 to 39 trunks, two to four levels are assigned on each shelf in the connector group. The directory listing for the PBX will route all connectors to a particular level and, in order to distribute this traffic over all the trunks available, the multiple is slipped between shelves as shown on ED-31270-10. With resultant graded multiple arrangements, some trunks appear on the listed level only before the first shelf of connectors, other trunks appear on higher levels before the second, third, etc, shelves of connectors, and the remaining trunks on the listed level appear before the connectors on all shelves. The trunks which appear on one shelf, but not on other, are known as individual trunks. The trunks which appear on the connectors of all shelves are known as common trunks. In case the number of incoming trunks to a PBX should be the same as the number of connectors, the same interlevel slip is employed but, since all of the trunks from each shelf will be individual to that shelf, there will be no graded multiple.

1.17 Rotary hunting 200-point connectors are used for small PBX trunk groups. These connectors hunt only the eight terminals of the level dialed. They require 800-point banks to provide S and H terminals which are strapped to continue the hunting past busy terminals, as required.

1.18 Level hunting connectors are used to serve large PBX trunk groups. These connectors use 300-point banks and hunt successively over the terminals of as many levels as may be required to serve a group of trunks. All trunks on a level serve the same PBX. The hunting from level to level is controlled by a commutator on the connector. The number of connectors required necessitates the use of one or more overflow shelves, which are the same as the initial shelf except that a level hunting connector is equipped in the test connector position, as well as in the other ten positions.

1.19 Outgoing trunk circuits may be used in conjunction with level hunting 100-point connectors for central offices which have unusually large groups of trunks to PBXs. These trunks and connectors provide a primary-secondary access arrangement whereby some of the PBX trunks in

a group are reached directly from local selector levels and the remaining trunks are reached through the local level hunting connectors. This arrangement reduces the number of local level hunting connectors which would otherwise be required for unusually large groups of PBX trunks and avoids the relatively high maintenance of heavily loaded switches. With this arrangement, the majority of calls to PBXs will not involve a connector. The outgoing trunk circuits of this arrangement provide the transmission, ringing, and supervisory features which would otherwise be provided by level hunting connectors. Primary access to some of the trunks of a group is obtained by connecting the lower-numbered terminals of a local selector level through these outgoing trunk circuits to the PBX trunks. Secondary to access to the trunks of the group is obtained by connecting the other terminals of the local selector level through level hunting connectors to the PBX trunks. In order that all trunks in the PBX group may be reached by a testman through a test connector, all the trunks appear on the bank terminals of the level hunting connectors. This arrangement may be used in either of the following ways, depending upon the PBX traffic requirements.

(a) The outgoing trunk circuits and level hunting 100-point connectors may appear on the regular hundreds level of a local selector, in which case, each such level may be used to serve only one PBX trunk group having a maximum nominal capacity of 100 trunks. When so arranged, the hundreds digit of the PBX number will cause the selector to connect either to the outgoing trunk circuits or the level hunting connectors on the level dialed. If the outgoing trunk circuits are not busy, connection to a PBX trunk will be made through one of these circuits, and the tens and units digits of the PBX number will be absorbed by the trunk. If these primary access circuits are busy, the selector will hunt to one of the terminals connected to an idle level hunting connector, and the tens digit of the PBX number will cause this connector to hunt for an idle PBX trunk. The units digit will then be absorbed by the level hunting connector. By subgrouping the secondary access trunks and connecting them to additional level hunting subgroups, the PBX trunk group may be expanded to as many trunks beyond 100 as is desired.

(b) The outgoing trunk circuits and level hunting 100-point connectors may appear on the

levels of additional selectors in the train, in which case, each of the ten regular hundreds selector levels may be used to serve separate additional selectors which will have access to a maximum of ten PBXs, as described under (a). When so arranged, the tens digit of the PBX number will cause one of the additional selectors to connect either to an outgoing trunk circuit or to a level hunting connector, as described under (a) and the units digit will either be absorbed by the outgoing trunk or will cause the level hunting connector to hunt for an idle trunk.

1.20 Trunks to PBXs from toll selectors are relatively few and will in all cases connect through toll level hunting connectors. These connectors should start hunting only after dialing is completed, which is usually after two digits. To provide for the expansion of a group beyond 100 trunks by the insertion of a selector, as described in 1.19(b), alternative wiring is provided to enable the toll connectors to start hunting after one digit.

1.21 The outgoing trunk to PBX shelf equipment comprises 12 relay equipment units on connector-type switch plates, one circuit per plate, with the miscellaneous alarm and fuse panel equipment mounted at the left of the shelf. An alternative arrangement comprises a shelf framework per ED-30754-01, arranged for mounting on a 23-inch relay rack. This has a capacity of four trunk units and has its miscellaneous equipment installer wired on the frame uprights, as shown on ED-30651-01.

1.22 As an option to the arrangements covered in 1.19 for cases where it was found uneconomical to install level hunting connectors initially, outgoing trunks circuits may be used with rotary-out trunk switches. As covered in the rotary-out trunk switch specification listed in Part 2, this equipment provides a primary-secondary access arrangement whereby some of the PBX trunks in a group are reached directly from local selector levels and the remaining trunks are reached through the ROTS equipment. The switching arrangements discussed in 1.18 and 1.19 may also be provided, substituting rotary-out trunk switches for level hunting connectors in each case.

SUBDIVISIONS OF EQUIPMENT

Switches

Note: The figure in parentheses after switch title is the number of 2-1/2 inch vertical spaces required to mount a shelf with such connectors on the universal frame.

For No. 1 and 350A Offices

- ED-30220-02—Combination Connector—2 Ring—Nonhunting—Semiselective Ringing (7)
- ED-30228-02—Combination Connector—1 Ring—Nonhunting—Full or Semiselective Ringing (7)
- ED-30243-02—Test Connector—For One-Ring, 2-Ring, 8-Party TPS, and 5-Code TPS Connectors (7)
- ED-30862-01—Combination Connector—8-Party TPS—Semiselective Ringing (8)
- ED-30950-01—Combination Connector—1 Ring—Rotary Hunting (8)
- ED-31088-02—Local Connector—1 Ring—Level Hunting—Full or Semiselective Ringing (7)
- ED-31114-02—Toll Connector—1 Ring—Rotary Hunting—Full or Semiselective Ringing (7)
- ED-31170-02—Toll Connector—2 Ring—Nonhunting—Semiselective Ringing (7)
- ED-31171-02—Toll Connector—1 Ring—Nonhunting—Full or Semiselective Ringing (7)
- ED-31300-02—Toll Connector—5-Code TPS—Nonhunting—Code Ringing (7)
- ED-31326-02—Local Connector—8-Party TPS—Nonhunting—Semiselective Ringing (7)
- ED-31327-02—Toll Connector—8-Party TPS—Nonhunting—Semiselective Ringing (7)
- ED-31526-01—Local Connector—5-Code TPS—Nonhunting—Code Ringing (7)
- ED-31527-01—Toll Connector—1 Ring—Level Hunting—Full or Semiselective Ringing (8)
- ED-31657-01—Combination Connector—1 Ring—Nonhunting—Full or Semiselective Ringing—Reverse Battery Supervision of Specified Levels Only (7)
- ED-31737-01—Local Connector—1 Ring—Nonhunting—Full or Semiselective Ringing (7)
- ED-31738-01—Local Connector—1 Ring—Rotary Hunting—Full or Semiselective Ringing (7)
- ED-31739-01—Combination Connector—1 Ring—Nonhunting—Full or Semiselective

- Ringling (7)
ED-31757-01—Outgoing Trunk to PBX Unit (7)
ED-31805-01—Local Connector—8-Party TPS—
Nonhunting—Semiselective Ringing
(7)
ED-31810-01—Local Connector—5-Code TPS—
Nonhunting—Code Ringing (8)
ED-31811-01—Combination Connector—5-Code
TPS—Nonhunting—Code Ringing (8)
ED-31832-01—Local Connector—2-Ring—Nonhunting
—Semiselective Ringing (7)
ED-31833-01—Combination Connector—2 Ring—
Nonhunting—Semiselective Ringing
(7)
ED-33005-01—Local Connector—200 Point—
Multiparty—AC-DC Ringing—TPS—
Arranged for Reverting Calls (11)
ED-33006-01—Local Connector—200 Point Rotary
Hunting—Multiparty AC-DC Ringing
—TPS—Arranged for Reverting Calls
(11)
ED-33007-01—Local Connector—200 Point Multiparty
—Superimposed Ringing—TPS (11)
ED-33008-01—Local Connector—200 Point Rotary
Hunting—Multiparty—Superimposed
Ringing—TPS (11)
ED-33009-01—Combination Connector—200 Point—
Multiparty AC-DC Ringing—TPS—
Arranged for Reverting Calls (11)
ED-33010-01—Combination Connector—200 Point—
Multiparty—Superimposed Ringing—
TPS (11)
ED-33011-01—Test Connector—200 Point—For
Testing Subscriber Lines and for
Verification Service (11)
ED-33022-01—Local Connector—1 Ring—Coin—Full
or Semiselective Ringing (7)

For 702A PBXs

- ED-31737-01—Local Connector—1 Ring—Nonhunting
—Full or Semiselective Ringing (7)
ED-31832-01—Local Connector—2 Ring—Nonhunting
—Semiselective Ringing (7)

For 355A Offices

- ED-30243-02—Test Connector—For All Connector
Shelves Except Multiparty One- or
2-TPL (7)
ED-30862-01—Combination Connector—8-Party
TPS—Semiselective Ringing (8)
ED-30950-01—Combination Connector—1 Ring—Rotary
Hunting (8)

- ED-30954-01—Test Connector—Multiparty—1 or 2
Terminals per Line Service Arranged
To Cut Through After Third Digit
ED-31737-01—Local Connector—1 Ring—Nonhunting
—Full or Semiselective Ringing (7)
ED-31738-01—Local Connector—1 Ring—Rotary
Hunting—Full or Semiselective Ringing
(7)
ED-31739-01—Combination Connector—1 Ring—
Nonhunting—Full or Semiselective
Ringing (7)
ED-31773-01—Test Connector—Multiparty—One- or
2-TPL
ED-31805-01—Local Connector—8-Party TPS—
Nonhunting—Semiselective Ringing
(7)
ED-31810-01—Local Connector—5 Code TPS—
Nonhunting—Code Ringing (8)
ED-31811-01—Combination Connector—5-Code
TPS—Nonhunting—Code Ringing (8)
ED-31832-01—Local Connector—2 Ring—Nonhunting
—Semiselective Ringing (7)
ED-31833-01—Combination Connector—2 Ring—
Nonhunting—Semiselective Ringing
(7)
ED-33005-01—Local Connector—200 Point—Multiparty
—AC-DC Ringing—TPS—Arranged
for Reverting Calls (11)
ED-33006-01—Local Connector—200 Point Rotary
Hunting—Multiparty AC-DC Ringing
—TPS—Arranged for Reverting Calls
(11)
ED-33007-01—Local Connector—200 Point Multi-
party—Superimposed Ringing—TPS (11)
ED-33008-01—Local Connector—200 Point—Rotary
Hunting—Multiparty—Superimposed
Ringing—TPS (11)
ED-33009-01—Combination Connector—200 Point—
Multiparty AC-DC Ringing—TPS—
Arranged for Reverting Calls (11)
ED-33010-01—Combination Connector—200 Point—
Multiparty—Superimposed Ringing—
TPS (11)
ED-33011-01—Test Connector—200 Point—For
Testing Subscriber Lines and for
Verification Service (11)
ED-33022-01—Local Connector—1 Ring—Coin—Full
or Semiselective Ringing (7)

Shelf Units

- J32311F—A&M Only—Connector Bank Multiple
Equipment (Clinched Multiple)
J32311G—AT&TCo Std—Shelves for Local, Toll, or

- Combination Connectors in No. 1, 350A, or 355A Offices and 702A PBXs or for the Outgoing Trunks to PBX in No. 1 Offices (Arranged for Solderless Wrapped Connections)
- J32311H—AT&TCo Std—Connector Bank Multiple Equipment (Solderless Banks and Terminal Strips)
- J32311J—AT&TCo Std—Shelves for 200-Point Local or Combination Connectors in No. 1, 350A, or 355A Offices (Arranged for Solderless Wrapped Connections)
- J32311K—AT&TCo Std—Connector Bank Multiple Equipment (Solderless Banks and Terminal Strips)

2. SUPPLEMENTARY INFORMATION

- 800-600-000—List of General Equipment Requirements Sections
- 809-000-000—PBX Systems Index
- 814-000-000—Step-by-Step System Index
- J33001—814-426-150—Rotary-Out Trunk Switch Equipment—No. 1 and 350A Offices
- J38805—814-005-151—General Specification for 355A Offices
- J39206—814-005-150—General Specification for No. 1 and 350A Offices
- J39210—814-008-150—No. 35E97 Dial Offices
- J58801—809-803-150—701A and 711A PBXs—PBX Systems (For Relay Rack Shelf Units)
- X-67142—Manufacturing Testing Requirements for Step-by-Step Selectors and Connectors
- Current Drain Data—
- SD-31359-02—No. 1 Office
- SD-31364-02—No. 350A Office
- SD-31780-02—No. 355A Office
- SD-32325-02—No. 35E97 Office
- SD-66382-01—No. 702A PBX Office

3. DRAWINGS

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

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

- ED-31265-10—Typical Shelf Wiring
- ED-31268-10—Typical Fuse Panel Wiring and Equipment Arrangements
- ED-31270-10—Method of Cross-Connecting Bank

- Terminal Strips on Connector Shelves With Rotary Hunting Connectors Serving PBXs With More Than Ten Trunks per Group
- ED-31275-()—Test, Talking Line, and Battery Jack Equipment for No. 1, 350A Offices, and 702A PBXs
- J32311F-()—Connector Bank Multiple Equipment (Clinched Multiple)
- J32311G-()—Shelves for Local, Toll, or Combination Connectors in No. 1, 350A, or 355A Offices and 702A PBXs or for Outgoing Trunks to PBX in No. 1 Offices (Arranged for Solderless Wrapped Connections)
- J32311H-()—Connector Bank Multiple Equipment (Solderless Banks and Terminal Strips)
- J32311J-()—Shelves for 200-Point Local or Combination Connectors in No. 1, 350A, or 355A Offices (Arranged for Solderless Wrapped Connections)
- J32311K-()—200-Point Connector Bank Multiple Equipment (Solderless Banks and Terminal Strips)
- J58801AG—Relay Mounted Equipment for Outgoing Trunks to PBX
- SD-31359-01—No.1 Office—Keysheet
- SD-31364-01—No. 350A Office—Keysheet
- SD-31780-01—No. 355A Office—Keysheet
- SD-32020-01—Combination Connector Circuit
- SD-32045-01—Alarm Circuit
- SD-32128-01—Connector Bank Multiple
- SD-32325-01—No. 35E97 Office—Keysheet
- SD-66382-01—No. 702A PBX Office—Keysheet

4. EQUIPMENT

Switches

- ED-30220-02—Combination Connector—2 Ring—Nonhunting—Semiselective Ringing—No. 1 and 350A Offices (A&M Only)*
- ED-30228-02—Combination Connector—1 Ring—Nonhunting—Full or Semiselective Ringing—No. 1 and 350A Offices (A&M Only)*
- ED-30243-02—Test Connector—For One-Ring, 2-Ring, 8-Party TPS, and 5-Code TPS Connectors—No. 1, 350A, and 355A Offices*
- ED-30862-01—Combination Connector—8-Party TPS—Semiselective Ringing—No. 1, 350A, and 355A Offices (A&M)*

Only)
ED-30950-01—Combination Connector—1 Ring—Rotary Hunting—No. 1, 350A, and 355A Offices (A&M Only)
ED-30954-01—Test Connector—Multiparty—1 or 2 Terminals per Line Service Arranged To Cut Through After Third Digit
ED-31088-02—Local Connector—1 Ring—Level Hunting—Full or Semiselective Ringing—No. 1 and 350A Offices
ED-31114-02—Toll Connector—1 Ring—Rotary Hunting—Full or Semiselective Ringing—No. 1 and 350A Offices
ED-31170-02—Toll Connector—2 Ring—Nonhunting—Semiselective Ringing—No. 1 and 350A Offices
ED-31171-02—Toll Connector—1 Ring—Nonhunting—Full or Semiselective Ringing—No. 1 and 350A Offices
ED-31300-02—Toll Connector—5-Code TPS—Nonhunting—Code Ringing—No. 1 and 350A Offices
ED-31326-02—Local Connector—8-Party TPS—Nonhunting—Semiselective Ringing—No. 1 and 350A Offices
ED-31327-02—Toll Connector—8-Party TPS—Nonhunting—Semiselective Ringing—No. 1 and 350A Offices
ED-31526-01—Local Connector—5-Code TPS—Nonhunting—Code Ringing—No. 1 and 350A Offices (A&M Only)
ED-31527-01—Toll Connector—1 Ring—Level Hunting—Full or Semiselective Ringing—No. 1 and 350A Offices
ED-31657-01—Combination Connector—1 Ring—Nonhunting—Full or Semiselective Ringing—Reverse Battery Supervision on Specified Levels Only—No. 1 and 350A Offices
ED-31737-01—Local Connector—1 Ring—Nonhunting—Full or Semiselective Ringing—No. 1 and 350A Offices and 702A PBX and 355A Offices
ED-31738-01—Local Connector—1 Ring—Rotary Hunting—Full or Semiselective Ringing—No. 1, 350A, and 355A Offices
ED-31739-01—Combination Connector—1 Ring—Nonhunting—Full or Semiselective Ringing—No. 1, 350A, or 355A

Offices
ED-31757-01—Outgoing Trunk to PBX Unit—No. 1 Offices
ED-31773-01—Test Connector—Multiparty—One or 2-TPL
ED-31805-01—Local Connector—8-Party TPS—Nonhunting—Semiselective Ringing—No. 1, 350A, or 355A Offices
ED-31810-01—Local Connector—5-Code TPS—Nonhunting—Code Ringing—No. 1, 350A, or 355A Offices
ED-31811-01—Combination Connector—5-Code TPS—Nonhunting—Code Ringing—No. 1, 350A, and 355A Offices (A&M Only)
ED-31832-01—Local Connector—2 Ring—Nonhunting—Semiselective Ringing—No. 1, 350A, and 355A Offices and 702A PBX
ED-31833-01—Combination Connector—2 Ring—Nonhunting—Semiselective Ringing—No. 1, 350A, and 355A Offices
ED-33005-01—Local Connector—200 Point Multiparty—AC-DC Ringing—TPS—Arranged for Reverting Calls—No. 1, 350A, and 355A Offices
ED-33006-01—Local Connector—200 Point—Rotary Hunting—Multiparty AC-DC Ringing—TPS—Arranged for Reverting Calls—No. 1, 350A, and 355A Offices
ED-33007-01—Local Connector—200 Point—Multiparty—Superimposed Ringing—TPS—No. 1, 350A, and 355A Offices
ED-33008-01—Local Connector—200 Point—Rotary Hunting—Multiparty—Superimposed Ringing—TPS—No. 1, 350A, and 355A Offices
ED-33009-01—Combination Connector—200 Point—Multiparty AC-DC Ringing—TPS—Arranged for Reverting Calls—No. 1, 350A, and 355A Offices
ED-33010-01—Combination Connector—200 Point—Multiparty—Superimposed Ringing—TPS—No. 1, 350A, and 355A Offices
ED-33011-01—Test Connector—200 Point—For Testing Subscriber Lines and for Verification Service—No. 1, 350A, and 355A Offices

**ED-33022-01—Local Connector—1 Ring—Coin—Full
or Semiselective Ringing—No. 1,
350A, and 355A Offices**

WIRE EQUIP NOTES

**J32311F—A&M Only—Connector Bank Multiple
(Clinched Multiple)**

Equipment—J32311F-()

List 5—A&M Only—Assembly, wiring, and equipment for five 300-point banks (41E upper and 42E lower) per SD-32128-01, Fig. 1, X and U options, with stub local cable for connection by installer to a terminal strip for use with nonhunting connectors on shelves supplementary to initial shelves having banks per list 1. (See Note A.)

List 6—A&M Only—Assembly, wiring, and equipment for five 400-point banks (52E upper and 42E lower) per SD-32128-01, Fig. 3, N and U options, with stub local cable for connection by installer to a terminal strip for use with rotary hunting connectors on shelves supplementary to initial shelves having banks per list 3. (See Note A.)

List 7—A&M Only—Assembly and equipment for one 6-point auxiliary terminal strip for use with rotary hunting connectors on overflow shelves for connector groups serving PBXs having more than ten trunks to any PBX.

Note

A. Supplementary bank assemblies for five banks shall not be provided for connector groups having overflow shelves, since this would result in serious wiring congestion at the bank terminal strip.

**J32311G—AT&T Co Std—Shelves for Local, Toll,
or Combination Connectors in No. 1,
350A, or 355A Offices and 702A PBXs
or for Outgoing Trunks to PBX in
No. 1 Offices (Arranged for Solderless
Wrapped Connections) (See 1.06 and
1.07)**

Equipment—J32311G-()
Shelf Wiring—ED-31265-10

List 3—Wiring and equipment required in addition to list 1 or 19 to provide for 2-ring connectors.

Connector Ckt (Jack Wiring Only for Jack Terminal 21)
SD-30220-01, SD-31170-01,
SD-31832-01, and SD-31833-01 11 0
Alarm Ckt, SD-32045-01,
Pickup Key, Fig. 4 (Designate
Ring Fuse R2 or R2 GEN
per SD-32045-01, Fig. 11) 1 1

List 5—Wiring and equipment in addition to list 1 or 19 to provide for 5-code terminal-per-station connectors.

WIRE EQUIP NOTES

Connector Ckt (Jack Wiring Only for Jack Terminals 3, 7, and 21) SD-31300-01,
SD-31526-01, SD-31810-01,
and SD-31811-01 11 0
Alarm Ckt, SD-32045-01,
Pickup Key, Fig. 4
(Designate Ring Fuse ±- or
ac-dc per Fig. 7) 1 1

List 9—Framework required in addition to list 8, 23, or 30 for mounting connector per SD-32020-01. (See Note E.)

List 10—Framework, assembly, wiring, and common equipment for one supplementary shelf of five local or toll, or five local or toll rotary hunting connectors (1 ring) less connectors and bank supplementary to initial shelves only in connector groups not having overflow shelves.

WIRE EQUIP NOTES

Connector Ckt, Jack Wiring
Universal for SD-31114-01,
SD-31171-01, SD-31737-01,
and SD-31738-01 5 5

List 11—Framework, assembly, wiring, and common equipment for one shelf of 12 outgoing trunks to PBX, less trunks.

	WIRE	EQUIP	NOTES
Jack Wiring for Trunk Ckt, SD-31757-01, With J Option Shelf Wiring	12	12	
Alarm Ckt, SD-32045-01: Busy-Tone Key, Fig. 2, With W App	1	1	
Fuse Alarm, Fig. 6	1	1	
Ringling Fuse, Fig. 8 or 10	1	1	
Ringling Ground, Fig. 14	1	0	
Guard Lamp, Fig. 15	1	1	

Fig. 1, required in addition to list 1, 2, 4, 7, 8, 11, 19, 20, 21, 22, 23, 29, or 30 for permanent signal alarm when automatic disconnect of connectors on calling party holds is not required or when shelf is equipped with outgoing trunks to PBX arranged for calling party control without automatic disconnect on calling party holds.

List 12—Wiring and equipment per SD-32045-01, Fig. 17, required in addition to list 1, 2, 19, or 20 when both toll and local rotary hunting connectors are mounted on the same shelf to permit separate toll peg-count registration.

List 13—Wiring and equipment per SD-32045-01, Fig. 18, required in addition to list 1, 11, or 19 for joint control on PBX trunk circuits and level hunting connectors in offices where other types of connectors are arranged for calling party control.

List 14—Wiring and equipment per SD-32045-01, Fig. 19, Q apparatus and N wiring, required in addition to list 1, 2, 4, 7, 8, 10, 11, 19, 20, 21, 22, 23, 29, or 30 for one busy tone resistor to provide for prevention of subscriber conferences over busy tone leads by removing or omitting the N wiring straps across the resistors for use in offices with other than tone alternator ringling machines where 2-volt levels of the drum-interrupted tone supply are furnished or in offices with ringling machines equipped with tone alternator. (See Note F.)

List 15—Wiring and equipment per SD-32045-01, Fig. 19, V apparatus and N wiring, required in addition to list 1, 2, 4, 7, 8, 10, 11, 19, 20, 21, 22, 23, 29, or 30 for one busy tone resistor to provide for the prevention of subscriber conferences over busy tone leads by removing or omitting the N wiring straps across the resistors for use in offices with other than tone alternator ringling machines where 1-volt levels of the drum-interrupted tone supply are furnished. (See Note F.)

List 16—Wiring and equipment per SD-32045-01,

List 19—Framework, assembly, wiring, and common equipment for one initial shelf of ten local, toll, or combination 1-ring connectors and one test connector; or for one overflow shelf of 11 such connectors (other than test and 1-ring rotary hunting), without busy tone or flash feature, less connectors and banks.

	WIRE	EQUIP	NOTES
Connector Ckt, Jack Wiring Universal for SD-30228-01, SD-30243-01, SD-30950-01, SD-30954-01, SD-31088-01, SD-31114-01, SD-31171-01, SD-31527-01, SD-31657-01, SD-31737-01, SD-31738-01, SD-31739-01, SD-31773-01, and SD-33022-01	11	11	
Alarm Ckt, SD-32045-01: Release Alarm, Fig. 5, With ZC App	1	1	
Fuse Alarm, Fig. 6	1	1	
Ringling Fuse, Fig. 7, 8, 9, 10, or 11		11	
Ringling Ground, Fig. 14	1	0	
Guard Lamp, Fig. 15	1	1	

List 20—Framework, assembly, wiring, and common equipment for one overflow shelf or ten local or toll one-ring rotary hunting connectors, without busy tone or flash feature, less connectors and banks.

	WIRE	EQUIP	NOTES
Connector Ckt, Jack Wiring Universal for SD-31114-01 and SD-31738-01	10	10	
Alarm Ckt, SD-32045-01: Release Alarm, Fig. 5, With ZC Option	1	1	
Fuse Alarm, Fig. 6	1	1	
Ringling Fuse, Fig. 8 or 10	1	1	
Ringling Ground, Fig. 14	1	0	
Guard Lamps, Fig. 15	1	1	

List 21—Framework, assembly, wiring, and common equipment for one initial shelf of ten local, toll, or combination semiselective ringing connectors and one test connector for 8-party terminal per station or for one overflow shelf of 11 such connectors, without busy tone or flash feature.

	WIRE	EQUIP	NOTES
Connector Ckt, Jack Wiring Universal for SD-30862-01, SD-31326-01, SD-31327-01, and SD-31805-01	11	11	
Alarm Ckt, SD-32045-01: Pickup Key, Fig. 4	1	1	
Release Alarm, Fig. 5, With ZC App	1	1	
Fuse Alarm, Fig. 6	1	1	
Ringling Fuse, Fig. 12	1	1	
Ringling Ground, Fig. 14	1	0	
Guard Lamp, Fig. 15	1	1	

List 24—Wiring and equipment per SD-32045-01, Fig. 22, less ZI and ZJ wiring, required in addition to list 19, 20, 21, 22, 23, 29, or 30 when automatic disconnect of connector on calling party holds is required for level and rotary hunting connectors and intercept trunks and/or trunks arranged to trip ringling without charging are provided for connector group. (See Notes I and J.)

List 25—Wiring and equipment per SD-32045-01, Fig. 25, less ZN and ZO wiring, required in addition to list 19, 21, 22, 23, 29, or 30 when automatic disconnect on calling party holds is required for connectors other than level and rotary hunting

connectors. (See Notes K and L.)

List 31—Wiring and equipment per SD-32045-01, Fig. 2, with W and D apparatus, required in addition to list 19, 20, 21, 29, or 30 for busy tone feature for shelves equipped with only local connectors.

List 32—Wiring and equipment per SD-32045-01, Fig. 2, with ZP and D apparatus, required in addition to list 19, 20, 21, 29, or 30 for busy tone feature for shelves equipped with combination, toll, or both local and toll connectors.

Notes

- A. To provide for negative battery superimposed on machine ringling for one-ring connectors only of lists 1, 2, 10, 19, and 20, strap jack terminals 5 and 8 to jack terminals 6 and 24, respectively.
- B. To provide for positive battery superimposed on machine ringling for one-ring connectors only of lists 1, 2, 10, 19, and 20, strap jack terminals 5 and 6 to jack terminals 8 and 24, respectively.
- C. For one- and 2-ring connector shelves in No. 355A offices, furnish wiring in addition to list 1, 2, 4, 10, 19, 20, or 21 to provide for MS (machine start) lead.
- D. The ringling fuse designation shall be stamped as indicated on the shelf equipment drawing in accordance with job requirements.
- E. The supplementary framework per list 9 comprises a selector-type shelf but is arranged for mounting 11 switches instead of ten. As indicated on the connector shelf equipment drawing, this shelf framework is mounted above the connector shelf of list 8, 23, or 30, three 2-1/2 inch frame mounting spaces higher on the frame.
- F. All new shelves shall be furnished with list 14 or 15 as required in all switch positions except the test connector position. The N wiring straps across the resistors shall be omitted on all shelves for new offices, and these shelves shall be supplied by LT5 60 IPM BR2, LT6 60 IMP BR2, LT5 60 IPM BT busy tone leads. The N wiring straps shall also be omitted on shelves for existing offices where the existing

equipment is arranged for the prevention of subscriber conferences over the busy tone leads. Otherwise, furnish list 14 or 15 with N wiring strap.

- G. Provide Y wiring per SD-32045-01, Fig. 12, in addition to list 4 or 21 for superimposed ringing supply for 8-party terminal-per-station connectors when tripping battery supply is 48 volts.
- H. Provide Z wiring per SD-32045-01, Fig. 12, in addition to list 4 or 21 for superimposed ringing supply for 8-party terminal-per-station connectors when tripping battery supply is 60 volts.
- I. Provide ZI wiring when plugging-up line circuits are used.
- J. Provide ZJ wiring when plugging-up line circuits are not used.
- K. Provide ZO wiring when intercept trunks, or trunks arranged to trip ringing without charging, are not provided for connector group or when intercept trunks and/or trunks arranged to trip ringing without charging are provided but plugging-up line circuits are not used.
- L. Provide ZN wiring when intercept trunks and/or trunks arranged to trip ringing without charging are provided and plugging-up line circuits are used.
- M. When this shelf is equipped with SD-33022-01 connector of list 19 which is not to be connected to a coin control trunk, strap jack terminals 9 and 16 to 20 and 18, respectively, in those switch positions occupied by the connector switch.

J32311H—AT&T Co Std—Connector Bank Multiple Equipment (Solderless Banks and Terminal Strips)

Equipment and Local Cable—J32311H-()

List 1—Assembly, wiring, and equipment for eleven 300-point banks (41E upper and 42E lower) per SD-32128-01, Fig. 1, X and U options, with one 300-point bank multiple terminal strip (264A upper and 264C lower) and support for use with nonhunting connectors,

except code ringing and 8-party semiselector terminal-per-station, or level hunting connectors on initial or overflow shelves or on coin control selectors or coin control connectors. (See Note B.)

List 2—Assembly, wiring, and equipment for eleven 400-point banks (51E upper and 42E lower) per SD-32128-01, Fig. 2, R and U options, with one 400-point bank multiple terminal strip (264B upper and 264C lower) and support for use with code ringing and 8-party semiselective terminal-per-station connectors on initial or overflow shelves.

List 3—Assembly, wiring, and equipment for eleven 400-point banks (52E upper and 42E lower) per SD-32128-01, Fig. 3, N and U options, with one 400-point bank multiple terminal strip (264B upper and 264C lower) and support for use with one-ring rotary hunting connectors on initial shelves only.

List 4—Assembly, wiring, and equipment for ten 400-point banks (52E upper and 42E lower) per SD-32128-01, Fig. 3, N and U options, with one 400-point bank multiple terminal strip (264B upper and 264C lower) and support for use with one-ring rotary hunting connectors or overflow shelves.

List 5—Assembly, wiring, and equipment for five 300-point banks (41E upper and 42E lower) per SD-32128-01, Fig. 1, X and U options, and J32311H, Fig. 3, with a stub local cable for connection by installer to bank multiple terminal strip for use with nonhunting connectors on shelves supplementary to initial shelves having banks and terminal strip per list 1. (See Note A.)

List 6—Assembly, wiring, and equipment for five 400-point banks (52E upper and 42E lower) per SD-32128-01, Fig. 3, N and U options, and J32311H, Fig. 3, with stub local cable for connection by installer to bank multiple terminal strip for use with rotary hunting connectors on shelves supplementary to initial shelves having banks and terminal strip per list 3. (See Note A.)

List 7—Assembly and equipment for one 8-point auxiliary terminal strip and support per J32311H, Fig. 1 and C.

Notes

- A. Supplementary bank assemblies for five banks shall not be provided for connector groups having overflow shelves since this would result

in serious wiring congestion at the bank terminal strip. Also, the supplementary shelves are not applicable to combination connectors since combination connectors are not recommended with more than ten connectors per hundred group.

- B. This bank multiple equipment when used on coin control selectors or coin control connectors mounts on J32312S.

J32311J—AT&T Co Std—Shelves for 200-Point Local or Combination Connectors in No. 1, 350A, or 355A Offices (Arranged for Solderless Wrapped Connections)

Equipment—J32311J-()
Shelf Wiring—ED-31265-10

List 3—Wiring and equipment per SD-32045-01, Fig. 19, Q apparatus and N wiring, required in addition to list 1, 2, 8, 9, 13, or 14 for ten busy tone resistors to provide for prevention of subscriber conferences over busy tone leads by removing or omitting the N wiring straps across the resistors for use in offices with other than tone alternator ringing machines where 2-volt levels of the drum-interrupted tone supply are furnished or in offices with ringing machines equipped with tone alternator. (See Note A.)

List 4—Wiring and equipment per SD-32045-01, Fig. 19, V apparatus and N wiring, required in addition to list 1, 2, 8, 9, 13, or 14 for ten busy tone resistors to provide for the prevention of subscriber conferences over busy tone leads by removing or omitting the N wiring straps across the resistors for use in offices with other than tone alternator ringing machines where 1-volt levels of the drum-interrupted tone supply are furnished. (See Note A.)

List 5—Wiring and equipment per SD-32045-01, Fig. 1, required in addition to list 1, 2, 8, 9, 13, or 14 for permanent signal alarm when automatic disconnect of connectors on calling party holds is not required.

List 10—Wiring and equipment per SD-32045-01, Fig. 22, less ZI and ZJ wiring, required in addition to list 8, 9, 13, or 14 when automatic disconnect of connector on calling party holds is required for rotary hunting

connectors and intercept trunks and/or trunks arranged to trip ringing without charging are provided. (See Notes B and C.)

List 11—Wiring and equipment per SD-32045-01, Fig. 25, less ZN and ZO wiring, required in addition to list 8, 9, 13, or 14 when automatic disconnect of connector on calling party holds is required for connectors other than rotary hunting connectors. (See Notes D and E.)

List 13—Framework, assembly, wiring, and common equipment for one shelf to accommodate ten local or combination multiparty superimposed terminal-per-station connectors and one test connector, less connectors and banks.

WIRE EQUIP NOTES

Connector Ckt, Jack Wiring Universal for SD-33007-01, SD-33008-01, SD-33010-01, and SD-33011-01	11	11
Alarm Ckt, SD-32045-01, Pickup Key, Fig. 4 With D App & Wrg Release Alarm, Fig. 5 With AC App	1	1
Fuse Alarm, Fig. 6 Supplementary Ringing Supply and Tripping Battery Supply With Y and H Wiring, Fig. 12	1	1
Ringing Ground, Fig. 14	1	0
Guard Lamp, Fig. 15	1	1

List 14—Framework, assembly, wiring, and common equipment for one shelf to accommodate ten local or combination multiparty ac-dc terminal-per-line station connectors and one test connector, less connectors and banks.

	WIRE	EQUIP	NOTES
Connector Ckt, Jack Wiring Universal for SD-33005-01, SD-33006-01, SD-33009-01, and SD-33011-01	11	11	
Alarm Ckt, SD-32045-01, Pickup Key, Fig. 4 With D App & Wrg Release Alarm, Fig. 5 With ZC App	1	1	
Fuse Alarm, Fig. 6	1	1	
Ringing Fuse, Fig. 7	1	1	
Ringing Ground, Fig. 14	1	0	
Guard Lamp, Fig. 15	1	1	

List 15—Wiring and equipment per SD-32045-01, Fig. 2 with W apparatus, required in addition to list 13 or 14 for busy tone feature for shelves equipped with only local connectors.

List 16—Wiring and equipment per SD-32045-01, Fig. 2 with ZP apparatus, required in addition to list 13 or 14 for busy tone feature for combination connectors.

Notes

- A. Furnish list 3 or 4 as required in all switch positions except the test connector position. The N wiring straps across the resistors shall be omitted on all shelves for new offices and these shelves shall be supplied by LT5 60 IPM BR2, LT6 60 IPM BR2, or LT5 60 IPM BT busy tone leads. The N wiring shall also be omitted on shelves for existing offices where the existing equipment is arranged for the prevention of subscriber conferences over the busy tone leads. Otherwise, furnish list 3 or 4 with N wiring strap.
- B. Provide ZI wiring when plugging-up line circuits are used.
- C. Provide ZJ wiring when plugging-up line circuits are not used.

D. Provide ZO wiring when intercept trunks or trunks arranged to trip ringing without charging are not provided for connector group, or when intercept trunks and/or trunks arranged to trip ringing without charging are provided but plugging-up line circuits are not used.

E. Provide ZN wiring when intercept trunks and/or trunks arranged to trip ringing without charging are provided and plugging-up line circuits are used.

J32311K—AT&T Co Std—200-Point Connector Bank Multiple Equipment (Solderless Banks and Terminal Strips)

Equipment—J32311K-()

List 1—Assembly, wiring, and equipment for eleven 800-point banks (42E bottom and third from bottom, 51E second from bottom and fourth from bottom) per SD-32128-01, Fig. 65 and 66, with one 800-point bank multiple terminal strip (269C bottom, 269B second and third from bottom, and 269A fourth from bottom), and support per J32311K, Fig. 1 and A, for use with multiparty superimposed and ac-dc terminal-per-station **nonrotary hunting** connectors.

List 2—Assembly, wiring, and equipment for eleven 800-point banks (42E bottom and third from bottom, 53E, equipped with wider terminals to permit bridging brushes for H terminals on ninth level, second from bottom and fourth from bottom) per SD-32128-01, Fig. 67, with one 800-point bank multiple terminal strip (269C bottom, 269B second and third from bottom, and 269A fourth from bottom) and support per J32311K, Fig. 1 and A, for use with multiparty superimposed and ac-dc terminal-per-station **rotary hunting** connectors.

Miscellaneous Equipment

J58801AC—Connector Shelf Unit—Arranged To Mount on 23-Inch Relay Rack—Capacity Three Nonhunting Connectors

J58801AE—Connector Shelf Unit—Arranged To Mount on 23-Inch Relay Rack—Capacity Three Rotary Hunting Connectors

J58801AG—Trunk Shelf Unit—Arranged To Mount on 23-Inch Relay Rack—Capacity for Four Connector-Type Switch Plate Trunk Units—Associated Alarm Equipment

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
L5			J32311E,L4
& L6	Mfr Disc.	3	& L5
L8,			J32311E,L1
L9,			—
L10,			J32311E,L8
& LWA	Mfr Disc.	3	J32311E,LWA
J32311E	Mfr Disc.	7	J32311G
L1			J32311E,L17
& L5	Mfr Disc.	6	& L22
L7	A&M Only	6	—
L8,			J32311E,L18,
L9, L10,			L19, L20,
& L12	Mfr Disc.	6	& L21
L19			L18
& L22	A&M Only	6	& L13
J32311F	Mfr Disc.	7	J32311H
L8			
to L19	Mfr Disc.	5	—
J32311F	A&M Only	13	—
L5			
to L7	A&M Only	13	—
J32311G,L1			J32311G,L19
L2, L4,			L20, L21
L7, L8	Mfr Disc.	9	L22, L23
L6	Mfr Disc.	10	—
L17			L19
& L18	Mfr Disc.	9	to L23
L22	Mfr Disc.	10	J32311G,L29
L23	Mfr Disc.	10	L30
L26	Mfr Disc.	10	—
L27	Mfr Disc.	10	—
L28	Mfr Disc.	10	—
L29	Mfr Disc.	10	—
L30	Mfr Disc.	10	—
J32311J,L1			J32311J,L8
& L2	Mfr Disc.	9	& L9
L6 & L7	Mfr Disc.	9	L8 & L9
L8	Mfr Disc.	10	J32311J,L13
L9	Mfr Disc.	10	L14
L12	Mfr Disc.	10	—

5. GENERAL NOTES

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
J32311A	Mfr Disc.	1	J32311D,L1 & L9
J32311B	Mfr Disc.	1	J32311D,L6 & L9
J32311C	Mfr Disc.	5	J32311F
L2	Mfr Disc.	3	J32311C,L4 & LWA
LWA	Mfr Disc.	4	J32311F,L4
J32311D	Mfr Disc.	5	—
L1	Mfr Disc.	3	J32311E,L1, L10, & LWC
L2	Mfr Disc.	3	J32311E,L2 & LWC
L3			J32311E,L3
& L4	Mfr Disc.	3	& L6 or L7, LWA, or LWB

DESCRIPTION	CONNECTORS	RATINGS FOR USE IN				LOCAL TOLL COMB.	INITIAL SHELF*		OVERFLOW SHELF		SUPPLEMENTARY SHELF**								
		NO. 1	350A	355A	702A		SHELF J32311G†† LIST & NOTE	BANKS J32311H LIST	SHELF J32311G LIST & NOTE	BANKS J32311H LIST	SHELF J32311G LIST & NOTE	BANKS J32311H LIST							
One-Ring Connector	Coin	ED-33022-01	AT&TCo Std	A&M Only	AT&TCo Std	—	L	19 & A or B & 14 or 15 & C if reqd#	1	19 & A or B & 14 or 15 & C if reqd#	1	10 & A or B & 14 or 15 & C if reqd	5						
	Nonhunting	ED-30228-02	A&M Only	A&M Only	—	—	C	19 & A or B & 14 or 15 & C if reqd#	1	19 & A or B & 14 or 15 & C if reqd#	1	10 & A or B & 14 or 15 & C if reqd	5						
		ED-31171-02	A&M Only	A&M Only	—	—	T												
		ED-31657-01	A&M Only	A&M Only	—	—	C												
		ED-31737-01	AT&TCo Std	A&M Only	AT&TCo Std	A&M Only	L												
ED-31739-01	AT&TCo Std	A&M Only	AT&TCo Std	—	C														
Rotary hunting serving PBX groups of more than ten trunks	ED-30950-01	A&M Only†	A&M Only†	A&M Only†	—	C	19 & A or B & 14 or 15 & C if reqd#	3	20 & A or B & 14 or 15 & C if reqd (except for ED-30950-01)#	4,7	10, A or B, 14 or 15 & C if reqd (except for ED-30950-01)	6							
	ED-31114-02	A&M Only	A&M Only	—	—	T													
ED-31738-01	AT&TCo Std	A&M Only	AT&TCo Std	—	L														
Rotary hunting serving PBX groups of not more than ten trunks	ED-30950-01	A&M Only†	A&M Only†	A&M Only†	—	C							19 & A or B & 14 or 15#	1	19 & A or B & 14 or 15#	1			
	ED-31114-02	AT&TCo Std	A&M Only	—	—	T													
ED-31738-01	AT&TCo Std	A&M Only	AT&TCo Std	—	L														
Level hunting	ED-31088-02	AT&TCo Std	A&M Only	—	—	L	19 & A or B & 14 or 15#	1	19 & A or B & 14 or 15#	1									
	ED-31527-01	A&M Only	A&M Only	—	—	T													
2-Ring Connector	Nonhunting	ED-30220-02	A&M Only	A&M Only	—	—							C	19 & 3, & 14 or 15 & C if reqd#	1	19 & 3, 14 or 15 & C if reqd#	1		
		ED-31170-02	A&M Only	A&M Only	—	—							T						
		ED-31832-01	AT&TCo Std	A&M Only	AT&TCo Std	A&M Only							L						
		ED-31833-01	AT&TCo Std	A&M Only	AT&TCo Std	—	C												
8-Party TPS Connector	Nonhunting	ED-30862-01	A&M Only	A&M Only	A&M Only	—	C	21, & H or J & 14 or 15#	2	21, & H or J & 14 or 15#	2								
		ED-31326-02	A&M Only	A&M Only	—	—	L												
		ED-31327-02	A&M Only	A&M Only	—	—	T												
		ED-31805-01	AT&TCo Std	A&M Only	AT&TCo Std	—	L												
5-Code TPS Connector	Nonhunting	ED-31300-02	A&M Only	A&M Only	—	—	T	19 & 5 & 14 or 15#	2	19 & 5 & 14 or 15#	2								
		ED-31526-01	A&M Only	A&M Only	—	—	L												
		ED-31810-01	AT&TCo Std	A&M Only	AT&TCo Std	—	L												
		ED-31811-01	A&M Only	A&M Only	AT&TCo Std	—	C												
Outgoing Trunk to PBX	ED-31757-01	AT&TCo Std	—	—	—	L	11 & 14 or 15												

* Position 1 of these shelves is arranged to mount test connectors as indicated under Subdivisions of Equipment.
 ** Supplementary shelves shall not be provided for connector groups having overflow shelves.
 † For connector groups of not more than ten connectors.
 †† List information for automatic disconnect of connector feature not included in table.
 # List information for busy tone and busy flash features not included.

Table B—Index of Switches and Shelves and Banks Required for Mounting

Bell Telephone Laboratories, Incorporated

Dept 5225