

**AUTOMATIC NUMBER IDENTIFICATION
TYPE-D
NO. 1, 350A, 355A, OR 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 framework, equipment, and circuits to be used in the engineering, manufacture, and installation of the Automatic Number Identification-Type D (ANI-D) System frames in No. 1, 350A, 355A, or 35E97 step-by-step offices.

1.02 This specification is reissued to:

- (a) Change 1.15, 1.16, 1.26, 1.31, and add 1.42.
- (b) Change Notes B, C, and H under J38950A.
- (c) Change Notes B and H under J38950B.
- (d) Change J38950AB,L6.
- (e) Add J38950AC,L5 and L6, and change list 1 and Note E.
- (f) Add J38950BA Note G, rate list 7 Mfr Disc., change lists 1 and 2, and Notes B and F.
- (g) Add J38950BD,L8, Notes G, H, I, and J, and change lists 1, 2, 3, and 7.
- (h) Add J38950BE,L5 and L6, Notes G and H and change lists 2, 3, and 4 and Notes B, C, and E, and rate list 1 Mfr Disc.
- (i) Add information in Table A under J38950AC and J38950BE.
- (j) Change Fig. 2 and 3.
- (k) Add J99235AW to Table A.

CAPACITY

1.03 The ANI-D system is designed to provide automatic number identification (ANI) on direct distance dialed (DDD) calls in step-by-step offices.

DESCRIPTION

1.04 A block diagram of the ANI-D system is shown in Fig. 1.

1.05 The ANI-D system is designed to serve station, person, special toll, and also dial assistance types of calls. It provides a one-at-a-time identification of the calling customer directory number on CAMA calls from single party, 2-party lines on terminal per station (TPS), terminals per line (TPL) service, PBX trunks, and one-way originating lines. The following additional features are provided in the ANI-D system:

- (a) Indicates when a call originates on a multiparty line or any line requiring operator identification.
- (b) Indicates an ANI failure so that operator identification can be made.
- (c) Provides theoretical 3-digit office codes.
- (d) Provides listed number billing for PBX trunks when required.
- (e) Provides ANI service marks.
- (f) Interfaces with AMARS when provided in an office.

NOTICE

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

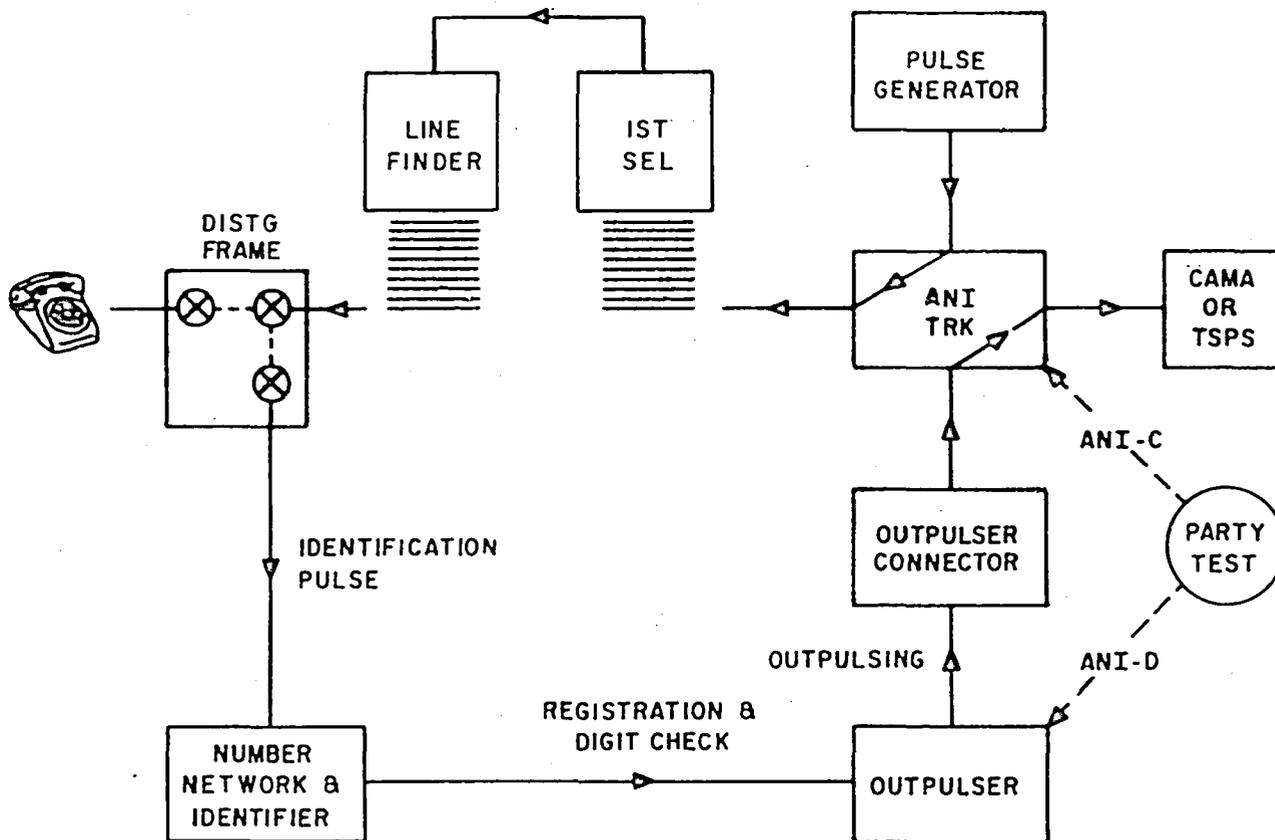


Fig. 1 — ANI-D System

(g) Provides for local directory assistance.

(h) Provides for automatic intercept service (AIS).

1.06 Whenever a customer originates a call requiring automatic number identification, an ANI-D system outgoing trunk is seized by the central office equipment, and a connection is set up to the CAMA office.

1.07 After dialing is completed and the called number digits have been received by CAMA, the call is partially switched through the CAMA equipment. Completion of the connection is delayed until the necessary calling number information has been registered. The CAMA office then signals the ANI trunk to initiate calling number identification. The trunk, through its appearance in a trunk connector, seizes the outputpulsor. The outputpulsor connects to the identifier portion of the number network circuit.

1.08 The outputpulsor, upon seizure by the trunk, directs the pulse generator to apply the gate pulse and to apply an identification pulse through the ANI trunk and switchtrain to the sleeve of the customer line circuit. The output of the pulse generator is a 340-volt pulse of approximately 150 ms duration.

1.09 The applied identification pulse passes through the local switchtrain to the terminal of the calling customer number on the distributing frame, which is wired by switchboard cable to the corresponding customer number network on the number network unit. The identification pulse fires the associated glow lamp network and sets the identifier networks. The output of the number network, together with a service mark pulse, is applied to the detectors, which in turn operate register relays in the outputpulsor. When the service mark detector has been operated, it also causes the outputpulsor to supply the appropriate 3-digit calling office code necessary to complete the registration of all digits required by the AMA recording equipment at the CAMA office. The

outpulser checks for complete registration and outpulses this information to the CAMA office over the trunk on a multifrequency basis.

1.10 If the calling customer is an individual party or message rate line, the outpulser will check the digits and start pulsing to CAMA/TSPS. If the customer is on a 2-party line, the initial identification will register the calling number and cause a party test to be made. When the customer is a ring party, the outpulsing is started immediately. If a tip party is detected, the registered digits are canceled and a second identification is done to register the tip party directory number.

1.11 When a call is recognized as a 4-party or multiparty line or if the trouble was encountered during identification, the call is automatically routed to the operator for identification.

1.12 When ANI-D is to function with AIS, additional equipment, per J33029, Section 814-526-150, is required. An explanation of the system can be found in J32008, Section 814-415-151.

1.13 When the local directory assistance feature is required, it may be furnished one of two ways, as follows:

- (a) Provide a subgroup of six ANI-D trunks per J38950BA-() direct to the CAMA-D or TSPS office. A maximum of two subgroups per system may be provided.
- (b) Provide an access arrangement per J33030, Section 814-527-150.

Equipment Arrangement

1.14 ANI-D is arranged on standard bulb-angle, single-bay frames, 2-feet 0-5/8 inch wide and available in both 9-foot 0-inch and 11-foot 6-inch frame heights. There are two major parts to the system, the basic frame and the supplementary frame.

Basic 9-Foot 0-Inch Frame

1.15 The basic 9-foot 0-inch frame (Fig. 2) is always furnished with one outpulser, test equipment, an identifier, a pulse generator, a resistor matrix, and one number network unit arranged for 600 number networks. The frame also provides bay space for AMARS equipment, one additional number network unit, plus any one of the following: one addi-

tional outpulser, ten 1+ noncoin trunks, seven 1+, 0± noncoin trunks, or three 1+, 0± combined coin and noncoin trunks. The frame also has a location for two multifrequency signal generators which are to be furnished when a multifrequency current supply circuit is not available. The addition of the multifrequency signal generator reduces the number of 1+ noncoin trunks by two.

Basic 11-Foot 6-Inch Frame

1.16 The basic 11-foot 6-inch frame (Fig. 3) is always furnished with one outpulser, test equipment, an identifier, a pulse generator, a resistor matrix, and one number network unit arranged for 600 number networks. The frame also provides bay space for AMARS equipment, one additional number network unit, one additional outpulser and any one of the following: ten 1+ noncoin trunks, ten 1+, 0± noncoin trunks, or five 1+, 0± combined coin and noncoin trunks. The frame also has a location for two multifrequency signal generators, which are to be furnished when a multifrequency current supply circuit is not available. The addition of the multifrequency signal generator reduced the number of 1+, 0± noncoin or 1+, 0± combined coin and nontrunks by one.

Supplementary 9-Foot 0-Inch or 11-Foot 6-Inch Frame

1.17 The supplementary frames provide for additional growth of number networks and trunk equipment. These frames, when required, may be arranged with trunk equipment only or a combination of number networks and trunk equipment. A maximum of seven number network units per supplementary frame may be furnished. (See 1.44.)

Trunk Preference Unit

1.18 This single 2- by 23-inch, local cabled mounting plate unit is arranged for one trunk subgroup of ten trunks (ten TP relays). The unit is arranged with D-type terminal strips to which all leads requiring external connection are made. This unit shall always be furnished directly below the first trunk of the subgroup with which it is associated.

Trunk Connector Unit—Regular ANI

1.19 This single, 2- by 23-inch, surface-wired mounting plate unit is arranged for four trunk

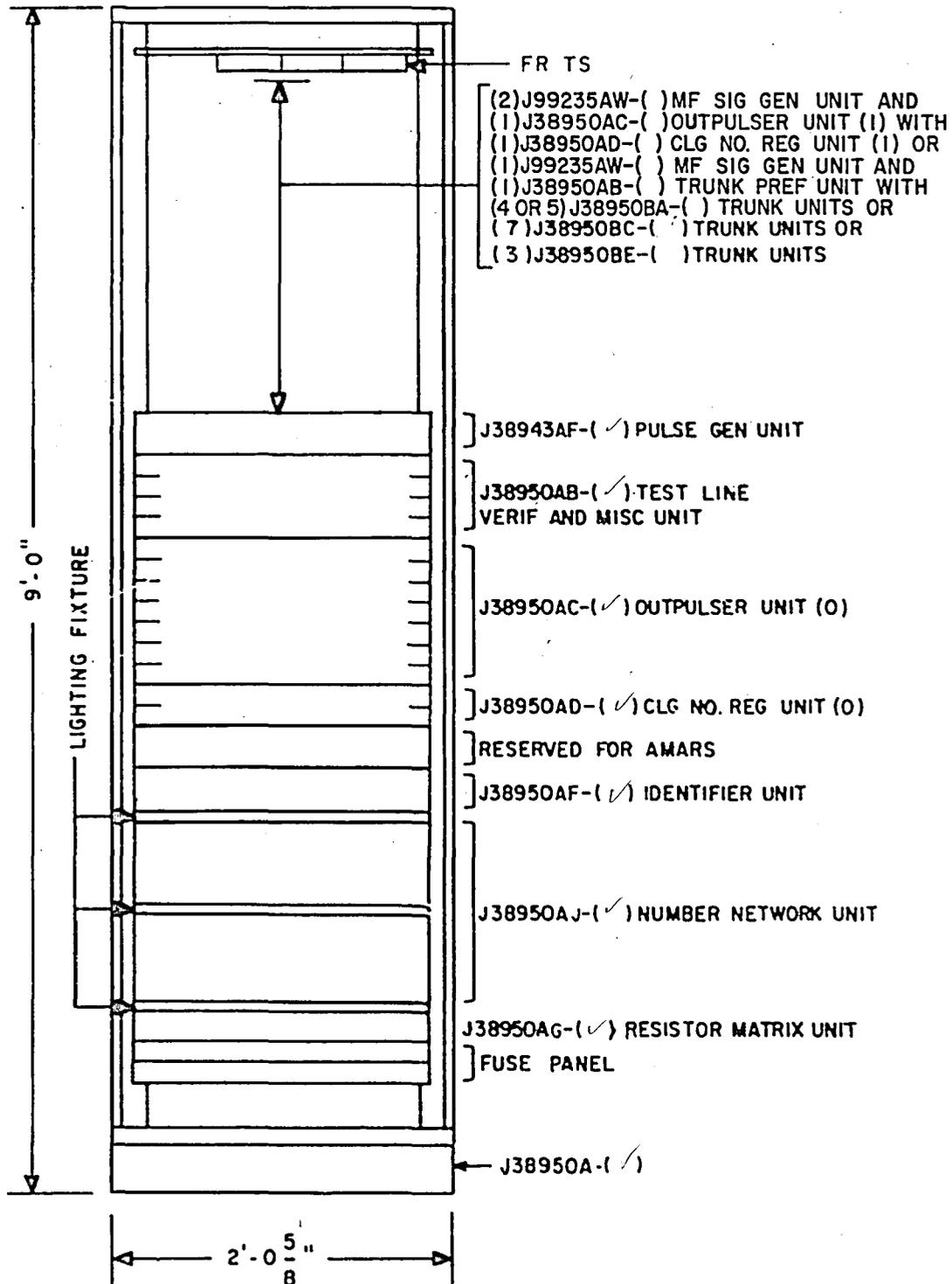


Fig. 2—ANI-D Basic Frame (9 Feet 0 Inch)

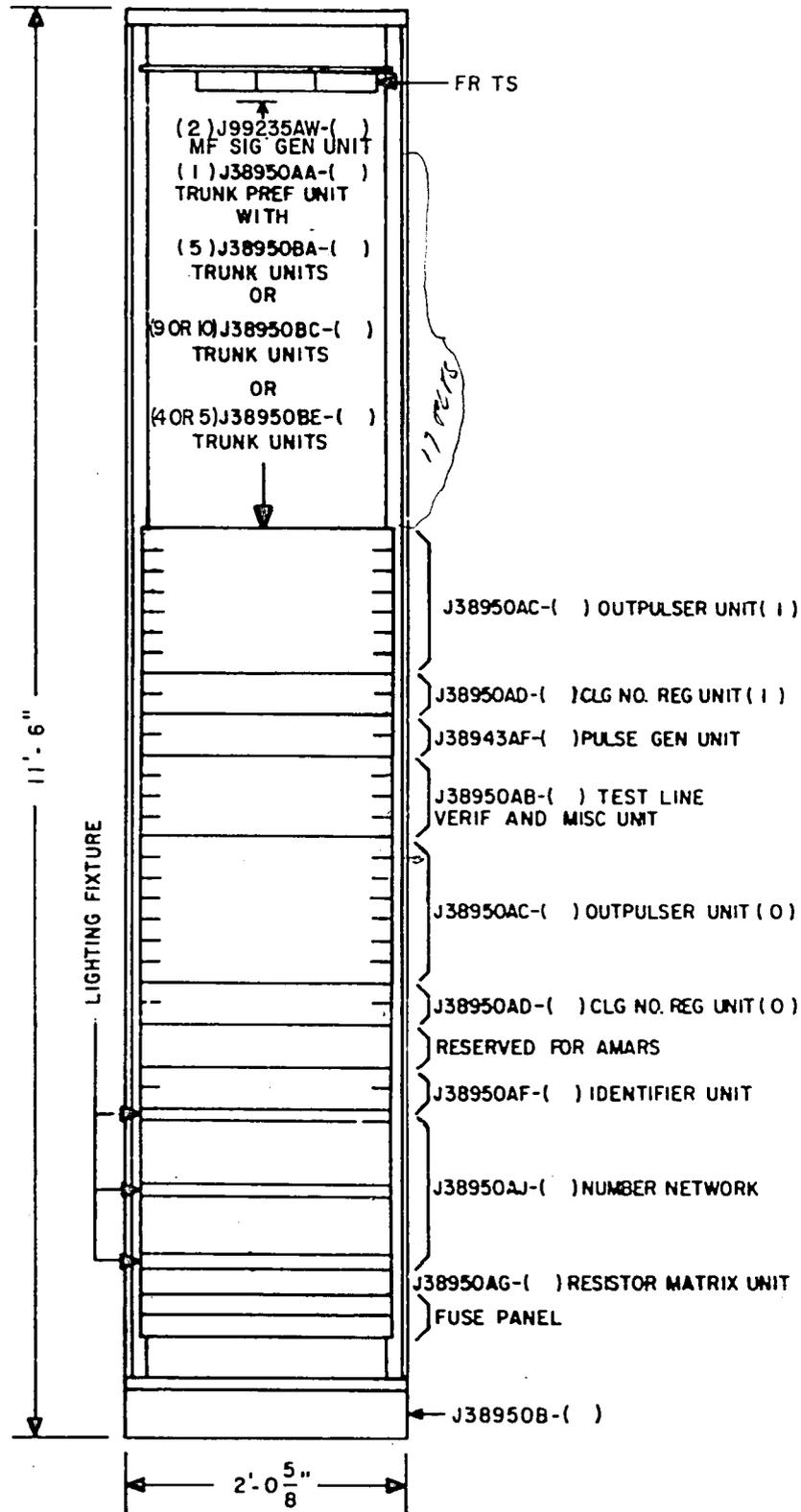


Fig. 3—ANI-D Basic Frame (11 Feet 6 Inches)

subgroups (ten trunks per subgroup). A maximum of three trunk connector units per outpulser per system may be furnished. The unit is arranged with D-type terminal strips to which all leads requiring external connection are made. This unit shall be furnished once per outpulser when two outpulsers are furnished and/or more than one subgroup (ten trunks) are furnished. When required, this unit shall be furnished on supplementary frames only.

1.20 When the basic frame in an office is initially equipped with ten or fewer trunks and one outpulser only, three additional relays are provided on the outpulser to serve the function of the trunk connector. Under these conditions, a separate trunk connector unit need not be provided. This arrangement is applicable for small offices where a single frame system is desired. When a trunk connector is required at a later date due to the increase in the trunks or the addition of the second outpulser, the connecting leads to the trunk connector relays provided in the outpulser unit from the trunk preference unit shall be disconnected and recabled to the trunk connector unit located in the supplementary frame.

Trunk Connector Unit—Directory Assistance (Direct Trunks)

1.21 This surface-wired unit is comprised of two 2-by 23-inch mounting plates and is arranged for one trunk subgroup (6 trunks per subgroup). A maximum of two trunk connector units per system may be furnished. The unit is arranged with D-type terminal strips, to which all leads requiring external connection are made.

1.22 When AIS or directory assistance trunk connectors are required, they must interface with the regular ANI trunk connectors, and shall have the lowest preference to the outpulser. When possible, these trunk connectors shall mount in the same supplementary frame as the regular ANI trunk connectors.

Test and Line Verification and Miscellaneous Unit

1.23 This surface-wired unit is comprised of four 2-by 23-inch mounting plates and is furnished once per system. The unit consists of jacks, keys, lamps, and other associated relays to provide general tests and line verification.

Outpulser Unit

1.24 This surface-wired unit is comprised of seven 2-by 23-inch mounting plates, and may be furnished twice per system. The unit is arranged with D-type terminal strips, to which all leads requiring external connections are made.

1.25 When a second outpulser is required on the 9-foot 0-inch basic frame at a later date due to the growth in the system, and trunk equipment had been placed on the basic frame initially, the trunk equipment must be relocated to a supplementary frame. The space vacated shall be used to mount the second outpulser.

Calling Number Registration Unit

1.26 This surface-wired unit is comprised of two 2-by 23-inch mounting plates and is required once per outpulser. The unit is arranged with D-type terminal strips, to which all leads requiring external connection are made. This unit is always located directly above the outpulser. (See 1.25.)

1.27 Provision is made in this unit to provide for PBX automatic identified outward dialing (AIOD), when required. Equipment required for testing the PBX-AIOD calls through this system is provided in the test and line verification and miscellaneous unit.

Number and Isolation Network Unit

1.28 The number and isolation network unit consists of a sheet metal tray assembly, occupying the space of three 2-by 23-inch mounting plates, equipped with 33 connectors (916-type). The unit is surface-wired to provide for 600 directory numbers. A space of 1 inch shall be left between two adjacent, above the highest and below the lowest, number and isolation networks units to provide for a lighting fixture assembly. A partial view of the tray assembly with the number network and isolation network cards is shown in Fig. 4.

Number Network Card

1.29 One number network, consisting of three neon glow lamps and a resistor, is required for each directory number. Each number network card is arranged for 20 number networks and a cross-connect field. Five such cards are provided to make up 100 consecutive directory numbers.

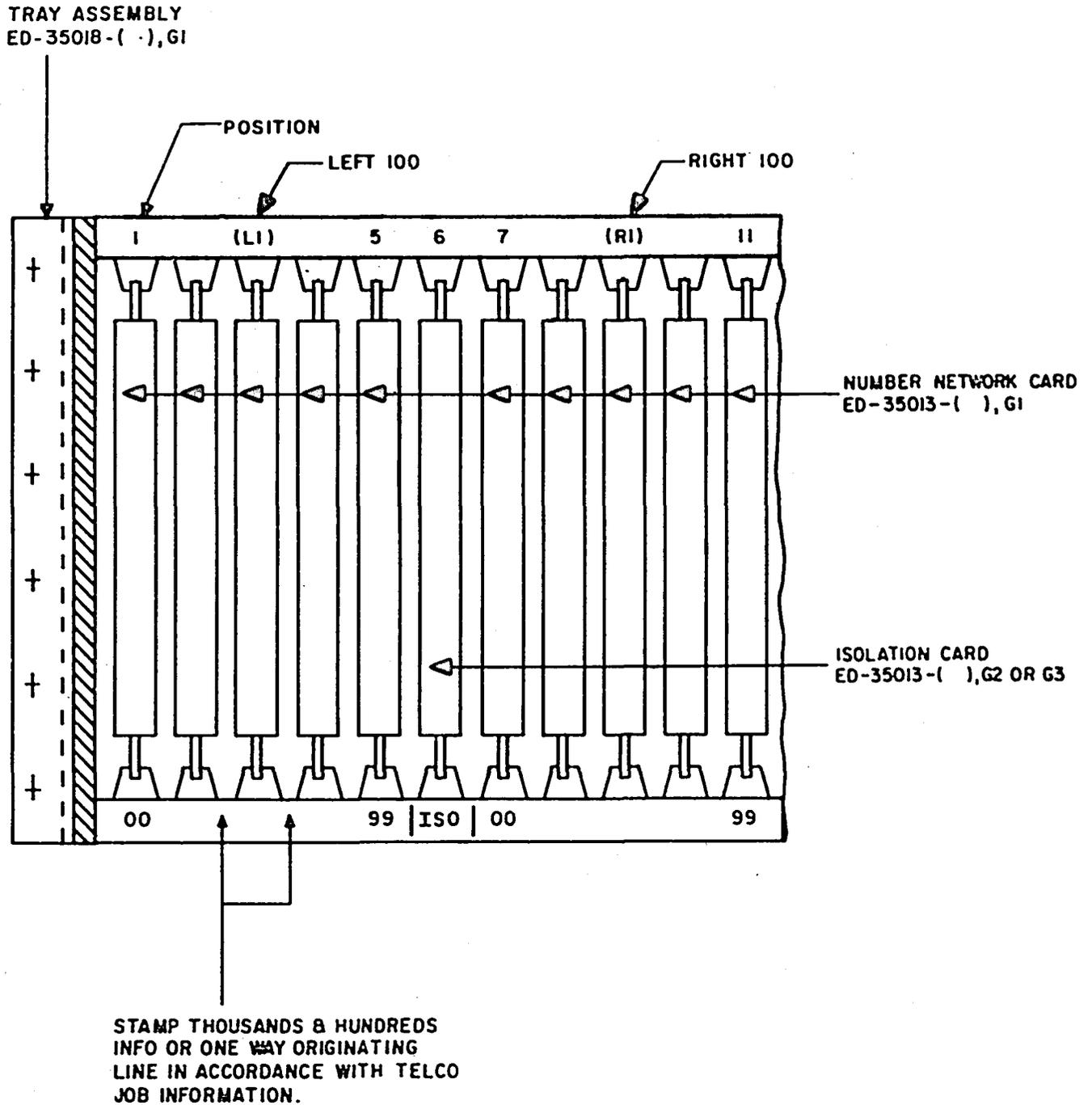


Fig. 4—Number and Isolation Network Tray Assembly

1.30 The units, tens, and class-of-service leads common to all the number network cards are connected by means of surface wire on the connector terminals. The first number and isolation network unit on the basic frame is connected to the resistor matrix and party discrimination unit through the frame terminal strip by the frame local cable. The subsequent number and isolation network units are connected to each other by means of a vertical connecting cable.

1.31 Each number network card contains a cross-connect field (Fig. 5). This aids programming of the number treatment (NT-) leads by the installation force to meet the telephone company requirements. The NT- terminals are prestrapped to the individual party (IP) class-of-service terminals to aid the testing of the number network card. These straps may be omitted upon telephone company request. The strapping shall always be of the solderless-wrap type.

Isolation Network Card

1.32 The isolation network card consists of a 2-diode matrix array and a cross-connect field. The diodes isolate and divide the NT- terminal outputs to provide thousands, hundreds, and service mark information. The desired thousands, hundreds, and service mark information is obtained by means of the cross-connect field.

1.33 Two types of diode isolation network cards are available, as follows:

- (a) ED-35013-(),G2 provides programming for two special treatments (Fig. 6A).
- (b) ED-35013-(),G3 provides programming for five special treatments (Fig. 6B).

1.34 Each isolation card is arranged to serve 200 number networks. The isolation network card is positioned between one 100-number network to the left and one 100-number network to the right.

1.35 Pilot number billing is handled as an accounting function. No provision is made within the system for the pilot number billing feature.

1.36 One-way originating lines are served by the same number and isolation network cards. Blocks of 100-number networks with the associated isolation networks shall be assigned exclusively for

this purpose and stamped accordingly. A special terminal strip should be provided at the main distributing frame (MDF) for cross-connection to the one-way originating line sleeves.

1.37 Customers on multiparty lines are arranged for operator identification by cross-connection of the NT- lead associated with the multiparty line to an operator identification (OI) punching on the number network card.

1.38 The operator identification takes place automatically when an isolation card is removed for programming or during an identification failure.

Resistor Matrix and Party Discrimination Unit

1.39 The resistor matrix and party discrimination unit consists of one 2- by 23-inch mounting plate. The unit is always provided in the basic frame and also in every supplementary frame that is equipped with a number and isolation network unit. Due to the lead restriction between the resistor matrix unit and the identifier unit, the supplementary frame with number and isolation network unit shall be located such that the lead length does not exceed 100 feet.

Identifier Unit

1.40 The identifier unit is always located in the basic frame and consists of two 2- by 23-inch mounting plates containing 24 component assemblies (detectors) with a provision for an additional 10 detectors to be added as required by the telephone company.

ANI Trunks

1.41 The trunk units vary in size from 2-circuit, 3-mounting plate units (1+ noncoin) to single-circuit 4-mounting plate units (1+, 0± combined coin and noncoin). The trunks are surface-wired and arranged with D-type terminal strips, to which all leads requiring external connections are made.

Multifrequency Signal Generator

1.42 A multifrequency signal generator is to be furnished on a one per output basis when a multifrequency current supply is not available in the office. When the generators are required they are to be equipped in the basic ANI-D frame.

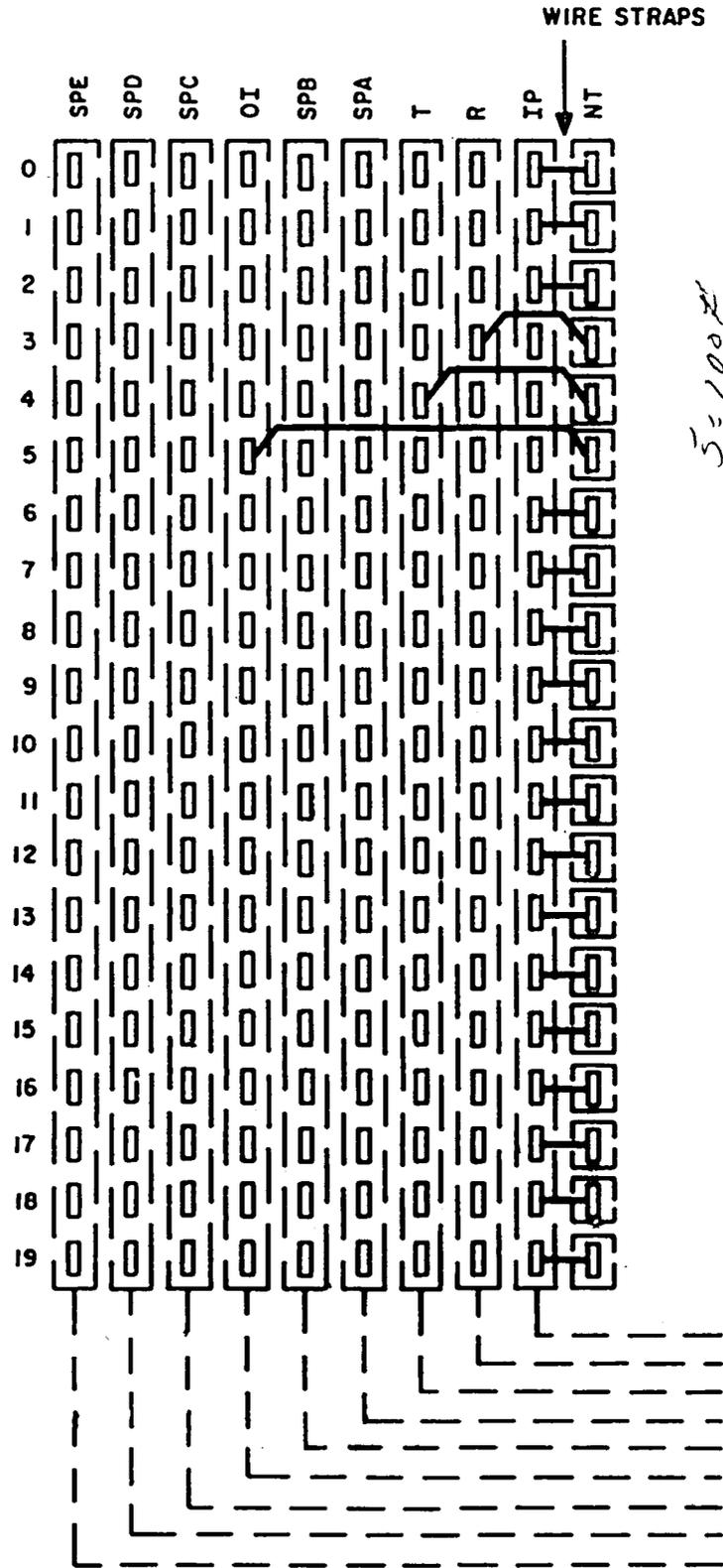
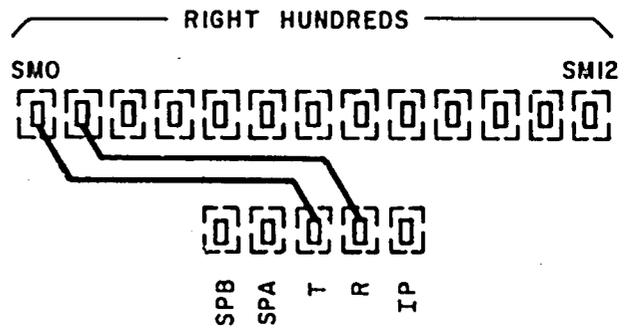
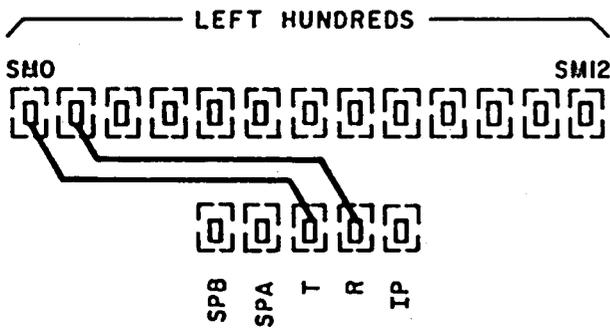
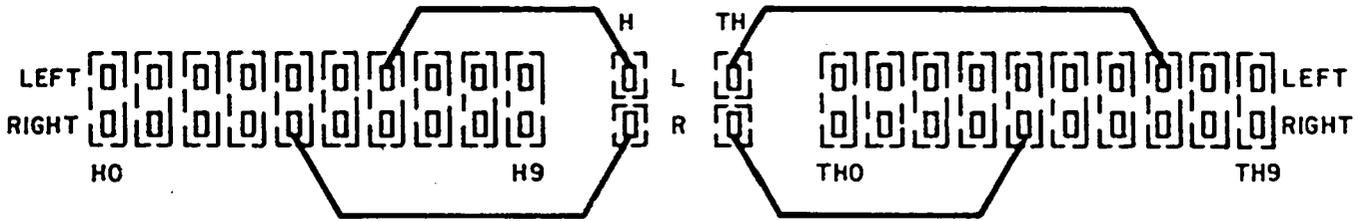
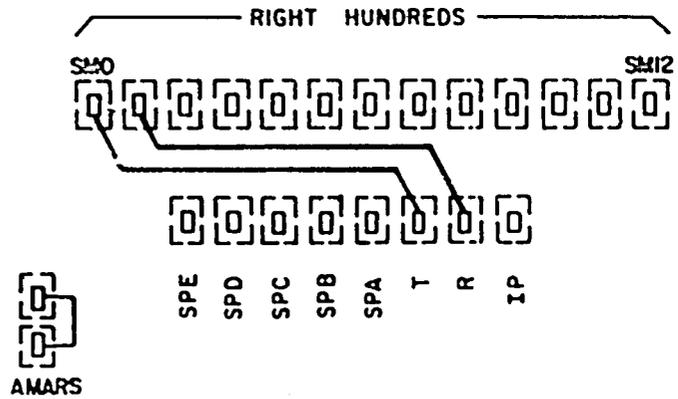
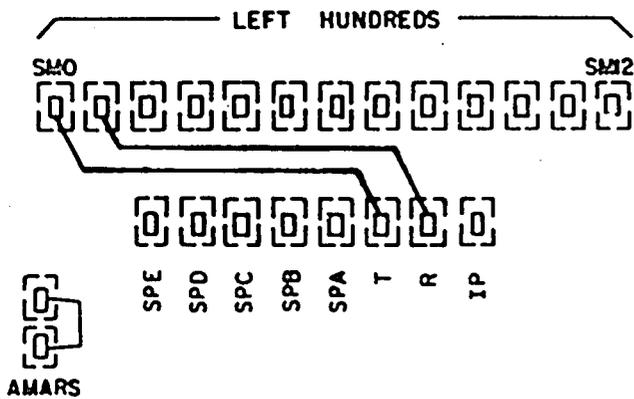
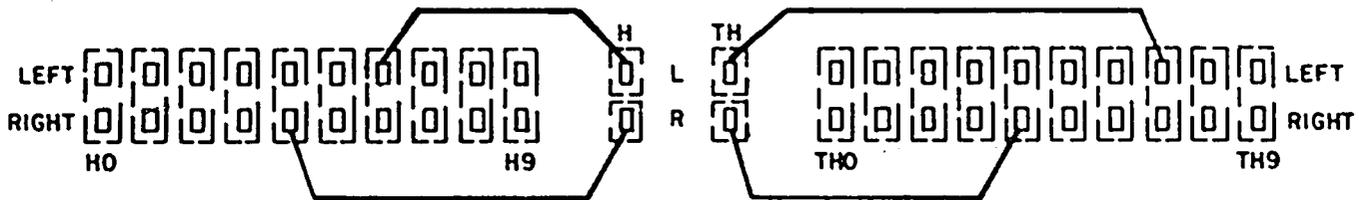


Fig. 5—Cross-Connect Field Number Network Card



A-2—Special Treatments—ED-35013-(),G2



B-5—Special Treatments—ED-35013-(),G3

Fig. 6—Cross-Connect Field Isolation Card

Spare Parts

1.43 It is advisable to maintain the following spare equipment to guard against unforeseen failure situations:

- (a) Five number network cards, ED-35013-().
- (b) Two isolation network cards, ED-35013-(). (See 1.33.)
- (c) One party test detector board, ED-35015-().
- (d) One reversal test detector board, ED-35017-().
- (e) Five detector boards, ED-32317-().
- (f) Twenty-five lamps, M1.

Floor Plan Arrangement

1.44 The ANI-D basic frame should be so located that the length of sleeve lead cabled from the distributing frames does not exceed 200 feet. Circuit restrictions, regarding cable length between the basic and the supplementary frame equipped with number and isolation network unit, make it advisable that space be reserved in the immediate vicinity of the basic frame for any foreseeable additions.

1.45 When supplementary frames are furnished with number network units, 2-inch frame spacers and a base filler are required. This equipment, per ED-91837-71,G5 shall be affixed between the left upright of the supplementary frame and the right upright of the adjacent frame or end guard as viewed from the front.

2. SUPPLEMENTARY INFORMATION

- 814-000-000—Numerical Index—Step-by-Step System
- 800-020-001—Checking List—Equipment Design Requirements
- 800-600-000—Checking List—General Equipment Requirements
- J32008—814-415-151—Intercept Equipment
- J33029—814-526-150—Intercept Trunk Frame to AIS—For ANI-Type C or D
- J33030—814-527-150—Local Directory Assistance Trunk Frame For 411 Service ANI-Type B, C, and D

J98609—801-620-151—Multifrequency Current Supply

J99235—801-026-166—Multifrequency Signal Generator Unit, Relay Rack Mounted, Common Systems

Floor Plan Data—Section 5.2, Sheet 82

Current Drain Data—SD-31359-02— No. 1 Step-by-Step

SD-31364-02—No. 350A Step-by-Step

SD-31780-02—No. 355A Step-by-Step

SD-32325-02—No. 35E97 Step-by-Step

3. DRAWINGS

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

Keysheets

SD-31359-01—No. 1 Step-by-Step

SD-31364-01—No. 350A Step-by-Step

SD-31780-01—No. 355A Step-by-Step

SD-32325-01—No. 35E97 Step-by-Step

Circuits

SD-32378-01—Pulse Generator Circuit

SD-35038-01—ANI-D Trunk Test Circuit

SD-80728-01—Battery Distributing Circuit

Equipment

ED-32317-30—Amplas Component Assemblies for Use With ANI-Type C and D

ED-35013-()—Number Network and Isolation Network Cards for Use With ANI-D

ED-35015-()—Party Test Detector Printed Circuit Wiring Board for Use With ANI-D

ED-35017-()—Reversal Test Detector Printed Circuit Wiring Board for Use With ANI-D

ED-35018-()—Switchboard Cabling Plan and Details for Basic and Supplementary Frame—ANI-D

ED-35019-()—ANI-Type D Lighting Fixture Details

ED-35054-()—Detector for Use With ANI-D

ED-35088-()—Card Extender for Use With ANI-D.

ED-35137-()—Electronic Multiwink Receiver

ED-91837-71—Relay Rack Assembly—Angle Type—1-0 Sheet Metal Base—7-0, 9-0, and 11-6 High

ED-92173-71—Filters Assembly and Equipment—10,
15, 25, and 50 Amperes—Relay Rack,
Cable Rack, or Fuse Bay Mounted
J99235AW-()—MF Signal Generator

4. EQUIPMENT

**J38950A—AT&TCo Std—Basic Frame—ANI-D, 9
Feet 0 Inch High**

List 2—Wiring and equipment required in addition to list 1 or 6 to provide a supplementary local cable and fuse panel when a second outpulser is required.

	WIRE	EQUIP	NOTES
OP Ckt, SD-35017-01:			
App Fig. 3, 4, & 5 and 9 through 18, & Options B & K	1	0	F,G
App Fig. 6	4	0	
App Fig. 7, 8	2	0	
Misc Ckt, SD-35018-01:			
App Fig. 7	1	0	
App Fig. 9	14	0	

List 3—Framework, wiring, and equipment per SD-35016-01, App Fig. 8 and 10; two App Fig. 7 (wiring only); SD-35019-01, App Fig. 6, required in addition to list 1 or 6 when AMARS is required.

List 4—Equipment per SD-35016-01, App Fig. 7, required in addition to list 3 to provide an AMARS isolation and programming card. Provide one list 4 for each number network unit furnished on the frame.

List 5—Wiring and equipment required in addition to list 1 or 6 to provide a ground indication to CSACS per SD-35018-01, option F.

List 6—Framework, assembly, wiring, and common equipment for one 9-foot 0-inch basic frame. (See Notes A, B, D, and H.)

	WIRE	EQUIP	NOTES
Number Net. & Ident Ckt, SD-35016-01:			
App Fig. 1	6	0	
App Fig. 2	3	0	
App Fig. 3 & 4	1	0	
App Fig. 5, Opt Z,Y	31	0	E
App Fig. 5, Opt Z	3	0	

	WIRE	EQUIP	NOTES
OP Ckt, SD-35017-01:			
App Fig. 3, 4, 5, 9, 10, 11, 12, 13, 114, 16, 17 & 18, Options B & K	1	0	F,G
App Fig. 6	4	0	
App Fig. 7 & 8	2	0	
Misc Ckt, SD-35018-01:			
App Fig. 1, 3, 4 & 10	1	0	
App Fig. 2	1	0	
App Fig. 5	1	0	
App Fig. 6, Option T	1	1	C
App Fig. 7	1	1	
App Fig. 8	1	0	
App Fig. 9	33	33	
App Fig. 18	1	0	
Test and Line Verif Ckt, SD-35019-01:			
App Fig. 1	1	0	
App Fig. 2	1	0	
App Fig. 4	1	0	
App Fig. 5 & 6	1	0	
Pulse Gen Ckt, SD-32378-01:			
App Fig. 2 (ANI)	1	0	
App Fig. 2 (AMARS)	2	0	
App Fig. 3 & 4	1	0	

Notes

- A. See Table A for equipping this frame.
- B. When this frame is furnished in a No. 355A office, omit ED-91837-71,G9, framework assembly furnished in list 1 or 6, and provide ED-91837-71,G11, framework assembly.
- C. When used in No. 35E97 offices, omit option T, furnished in list 1 or 6, and provide option V.
- D. When the office is not equipped with centralized filtered -48V battery, provide one ED-92173-71,G10, filter panel assembly for a maximum of 35 trunks, or ED-92173-71,G11, for a maximum of 60 trunks. One filter panel assembly shall be provided for trunks in the same lineup or one for each isolated frame. Use the typical mounting arrangement shown, per ED-92173-71,G31 or G32.
- E. Wiring per SD-35016-01, option Y, to be connected when AMARS feature is required (omit option Z).
- F. Wiring per SD-35017-01, Fig. 18, shall be connected when AIS feature is required.

- G. Wiring per SD-35017-01, option K, to be connected when AMARS display control is provided.
- H. Two 3P7A cords, 6 feet long, equipped at both ends, with type 310 plugs, per SD-35019-01, option V, shall be furnished per list 1 or 6. These cords are used for patching the test and line verification unit (J38950AB) to ANI-D trunks (J38950BA through BE).

J38950B—AT&T Co Std—Basic Frame—ANI-D, 11 Feet 6 Inches High

List 2—Wiring and equipment required in addition to list 1 or 6 provide a supplementary local cable and fuse panel when a second outpulser is required.

	WIRE	EQUIP	NOTES
OP Ckt, SD-35017-01: App Fig. 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17 & 18, and Options B & K	1	0	E,F
App Fig. 6	4	0	
App Fig. 7 & 8	2	0	
Misc Ckt, SD-35018-01: App Fig. 7	1	0	
App Fig. 9	14	0	

List 3—Framework, wiring, and equipment per SD-35016-01, App Fig. 8 and 10; two App Fig. 7 (wiring only); SD-35019-01, App Fig. 6, required in addition to list 1 or 6 when AMARS is required.

List 4—Equipment per SD-35016-01, App Fig. 7, required in addition to list 3 to provide an AMARS isolation and programming card. Provide one list 4 for each number network unit furnished on the frame.

List 5—Wiring and equipment required in addition to list 1 or 6 to provide a ground indication to CSACS, per SD-35018-01, option F.

List 6—Framework, assembly, wiring, and common equipment for one 11-foot 6-inch basic frame. (See Notes A, C, and G.)

	WIRE	EQUIP	NOTES
Number Net. and Ident Ckt, SD-35016-01: App Fig. 1	6	0	

	WIRE	EQUIP	NOTES
App Fig. 2	3	0	
App Fig. 3 & 4	1	0	
App Fig. 5, Options Y & Z	31	0	D
App Fig. 5, Option Z	3	0	
OP Ckt, SD-35017-01: App Fig. 3, 4, 5, 9, 10, 11, 12, 13, 14, 16, 17, & 18, Options B & K	1	0	E,F
App Fig. 6	4	0	
App Fig. 7 & 8	2	0	
Misc Ckt, SD-35018-01: App Fig. 1, 3, 4 & 10	1	0	
App Fig. 2	1	0	
App Fig. 5	1	0	
App Fig 6 and Option T	1	1	B
App Fig. 7	1	1	
App Fig. 8	1	0	
App Fig. 9	33	33	
App Fig. 18	1	0	
Test and Line Veri Ckt, SD-35019-01: App Fig. 1	1	0	
App Fig. 2	1	0	
App Fig. 4	1	0	
App Fig. 5 & 6	1	0	
Pulse Gen Ckt SD-32378-01: App Fig. 2 (ANI)	1	0	
App Fig. 2 (AMARS)	2	0	
App Fig. 3 & 4	1	0	

Notes

- A. See Table A for equipping this frame.
- B. When used in No. 35E97 offices, omit option T, furnished in list 1 or 6; and provide option V.
- C. When the office is not equipped with centralized filtered -48V battery, provide one ED-92173-71,G10, filter panel assembly for a maximum of 35 trunks, or ED-92173-71,G11, filter panel assembly for a maximum of 60 trunks. One filter panel assembly shall be provided for trunks in the same lineup or one for each isolated frame. Use the typical mounting arrangement shown, per ED-92173-71,G31 or G32.
- D. Wiring per SD-35016-01, option Y, to be connected when AMARS is required. (Omit option Z.)
- E. Wiring per SD-35017-01, Fig. 18 shall be connected when the AIS feature is required.

- F. Wiring per SD-35017-01, option K, to be connected when AMARS display control is provided.
- G. Two 3P7A cords, 6 feet long, equipped at both ends with 310 plugs, per SD-35019-01, option V, shall be furnished per list 1 or 6. These cords are used for patching the test and line verification unit (J38950AB) to ANI-D trunks (J38950BA through BE).

J38950C—AT&TCo Std—Supplementary Frame—ANI-D, 9 Feet 0 Inch High

List 1—Framework, assembly, wiring, and common equipment for one 9-foot, 0-inch supplementary frame, per SD-35018-01, Fig. 6 and option T. (See Notes A, B, and C.)

List 2—Framework, wiring, and equipment per SD-35016-01, App Fig. 8; seven App Fig. 7 (wiring only); required in addition to list 1 when AMARS is required and frame is equipped with number network units.

List 3—Equipment per SD-35016-01, App Fig. 7, required in addition to list 2 to provide an AMARS isolation and programming card. Provide one list 3 for each number network unit furnished on the frame.

List 4—Wiring and equipment required in addition to list 1 to provide a ground indication to CSACS per SD-35018-01, option F.

Notes

A. This frame, when required, shall provide additional trunk equipment only or a combination of trunk equipment and number network units.

1. **Trunk equipment only** —Trunks shall be equipped from the bottom toward the top of the frame.
2. Combinations of trunk equipment and number network units are as follows:
 - a. A maximum of seven number network units may be furnished.
 - b. The frame shall be arranged as follows from the bottom toward the top: frame fuse panel; a 4-inch space reserved for AMARS equipment; a resistor matrix and party discrimination unit; number network units; and trunk equipment.

c. A continually operating light fixture per ED-35019-30 must be furnished above and below each number network unit.

d. The frame shall be located such that the cable length to the basic frame will not exceed 100 feet.

B. When this frame is furnished in a No. 355A office, omit ED-91837-71,G9, framework assembly, furnished in list 1, and provide ED-91837-71,G11 framework assembly.

C. When this frame is arranged with ANI-D trunks, and the office is not equipped with centralized filter —48V battery, provide one ED-92173-71,G10 for a maximum of 35 trunks or one ED-92173-71,G11 for a maximum of 60 trunks. One filter panel assembly is provided for the trunks in the same lineup or one for each isolated frame. Use typical mounting arrangement shown per ED-92173-71,G31 or G32.

J38950D—AT&TCo Std—Supplementary Frame—ANI-D, 11 Feet 6 Inches

List 1—Framework, assembly, wiring, and common equipment for one 11-foot 6-inch supplementary frame per SD-35018-01, Fig. 6 and option T. (See Notes A and B.)

List 2—Framework, wiring, and equipment per SD-35016-01, App Fig. 8; seven App Fig. 7 (wiring only); required in addition to list 1 when AMARS is required and frame is equipped with number network units.

List 3—Equipment per SD-35016-01, App Fig. 7, required in addition to list 2 to provide an AMARS isolation and programming card. Provide one list 3 for each number network unit furnished on the frame.

List 4—Wiring and equipment required in addition to list 1 to provide a ground indication to CSACS, per SD-35018-01, option F.

Notes

A. This frame, when required, shall provide additional trunk equipment only or a combination of trunk equipment and number network units.

1. **Trunk equipment only**—Trunks shall be equipped from the bottom toward the top of the frame.

2. Combination of trunk equipment and number network units.

- a. A maximum of seven number network units may be furnished.
- b. The frame shall be arranged as follows from the bottom toward the top: frame fuse panel; a 4-inch space reserved for AMARS equipment; a resistor matrix and party discrimination unit; number network units; and trunk equipment.
- c. A continually operating light fixture, per ED-35019-30, must be furnished above and below each number network unit.
- d. The frame shall be located such that the cable length to the basic frame will not exceed 100 feet.

- B. When this frame is arranged with ANI-D trunks, and the office is not equipped with centralized filtered -48V battery, provide one ED-92173-71,G10 for a maximum of 35 trunks, or one ED-92173-71,G11 for a maximum of 60 trunks. One filter panel assembly is provided for the trunks in the same lineup or one for each isolated frame. Use typical mounting arrangement shown per ED-92173-71,G31 or G32.

J38950AA—AT&TCo Std—ANI-Type D—Trunk Preference Unit

- List 1**—Assembly, wiring, and equipment for one trunk preference unit arranged for one trunk subgroup of ten trunks per SD-35017-01, ten App Fig. 1, and App Fig. 17.

Note

- A. One trunk preference unit shall be provided for every subgroup of ten trunks and shall be located below the trunk (0) of the associated subgroup.

J38950AB—AT&TCo Std—ANI-Type D—Test and Line Verification and Miscellaneous Unit

- List 1**—Assembly, wiring, and equipment for one test and line verification and miscellaneous unit per SD-35018-01, App Fig. 1, 2, 3, 4, and 5 and option Y, and SD-35019-01, App Fig. 1 and 4.

- List 2**—Wiring and equipment per SD-35019-01, App Fig. 2, required in addition to list 1 when PBX-AIOD is required.

- List 3**—Wiring and equipment per SD-35018-01, App Fig. 8 and option W, required in addition to list 1 when two outpulsers are required.

- List 4**—Equipment per SD-35018-01, option Z, required in addition to list 1 when used in No. 35E97 office. (Omit option Y.)

- List 5**—Equipment per SD-35018-01, option X, required in addition to list 3 when used in No. 35E97 office. (Omit option W.)

- List 6**—Wiring and equipment per SD-35018-01, Fig. 18, options B and G, and ZC, and SD-35019-01, Fig. 5, required in addition to list 1 when AMARS is required.

- List 7**—Wiring and equipment per SD-35018-01, option J, required in addition to list 6 when used in No. 35E97 office. (Omit option G.)

- List 8**—Wiring and equipment required in addition to list 1 to provide a ground indication to CSACS per SD-35018-01, option F. (Omit option E.)

- List 9**—Wiring and equipment required in addition to list 3 when a ground indication to CSACS is required per SD-35018-01, option F.

- List 10**—Wiring and apparatus required in addition to list 1 when this unit serves an adjacent supplementary frame equipped with direct trunks for local directory assistance charging, per SD-35018-01, App Fig. 19.

J38950AC—AT&TCo Std—ANI-Type D—Outpulser Unit

- List 1**—Assembly, wiring, and equipment for one outpulser unit per SD-35017-01, App Fig. 3, 4, 5, 9, 11, 12, and 13, and options B, F, J, ZG, ZH, ZJ, ZM, and ZN, four App Fig. 6, two App Fig. 7, and SD-35018-01, Fig. 10 and 22. (See Note A.)

- List 2**—Wiring and equipment per SD-35017-01, App Fig. 8, required in addition to list 1, when special treatment feature (such as PBX-AIOD) is required. (Maximum two lists 2.)

- List 3**—Wiring and equipment per SD-35017-01, App Fig. 15, required in addition to list 1 when two outpulsers are required.

- List 4**—Wiring and equipment per SD-35017-01, App Fig. 2 and 17 and option ZD, required in addition to list 1 for offices where the basic frame is equipped with one outpulser and 10 trunks or less and no trunks are equipped on supplementary frames. (See Notes B and D.)

List 5—Wiring and equipment per SD-35017-01, option ZK, required in addition to list 1 when party test prior to identification is required. (See Note E.)

List 6—Wiring and equipment per SD-35017-01, Fig. 18 and option ZO required in addition to list 1 when hotel-motel identification digit 6 is required (Omit option ZN.)

Notes

A. When the PBX-AIOD feature is not provided, option Z shall be furnished.

B. When the system is provided in offices with two outpulsers and/or more than ten trunks, or when trunks are mounted in a supplementary frame, a trunk connector unit (J38950AK) shall be provided in the supplementary frame and list 4 shall not be specified.

C. Wiring per SD-35017-01, option K, required in addition to list 1 when AMARS is required.

D. Wiring per SD-35017-01, option ZE, required in addition to list 4 when an office is equipped with AIS and/or a directory assistance feature. (Omit option ZD.)

E. When list 5 is furnished, omit SD-35017-01, App Fig. 7 and option ZJ.

J38950AD—AT&TCo Std—ANI-Type D—Calling Number Registration Unit

List 1—Assembly, wiring, and equipment for one calling number registration unit per SD-35017-01, App Fig. 10. (See Note A.)

List 2—Wiring and equipment per SD-35017-01, App Fig. 14, required in addition to list 1 when PBX-AIOD feature is required.

Note

A. Provide option Z when the PBX-AIOD feature is not required.

J38950AE—AT&TCo Std—ANI-Type D—Miscellaneous Unit

List 1—Assembly, wiring, and equipment for one miscellaneous unit per SD-35018-01, App Fig. 3, 4, and 5, and SD-35019-01, App Fig. 4.

List 2—Wiring and equipment required in addition to list 1 for test(s) jack when frame or adjacent

frame contains trunks which are used as a direct trunk group for directory assistance, per SD-35018-01, App Fig. 19.

Note

A. This unit shall be located on every other supplementary frame (J38950C or D) in the same lineup or isolated supplementary frame.

J38950AF—AT&TCo Std—ANI-Type D—Identifier Unit

List 1—Assembly, wiring, and equipment for one identifier unit arranged for 34 and equipped with 24 detector component assemblies per SD-35016-01, 24 App Fig. 5.

List 2—Wiring and equipment per SD-35016-01, App Fig. 5, required in addition to list 1 to provide one detector component assembly. (Maximum ten lists 2.)

List 3—Equipment and wiring per SD-35016-01, option Y, required in addition to list 1 when AMARS is required. (See Note A.)

List 4—Equipment and wiring per SD-35016-01, option Y, required in addition to list 2 when AMARS is required. (Maximum eight lists 4). (See Note A.)

Note

A. Option Y is not applicable to detectors OI, SM11 and 12.

J38950AG—AT&TCo Std—ANI-Type D—Resistor Matrix and Party Discrimination Unit

List 1—Assembly, wiring, and equipment for one resistor matrix and party discrimination unit per SD-35016-01, App Fig. 3 and 4, and option Z.

List 2—Equipment and wiring per SD-35016-01, Fig. 9, option Y, required in addition to list 1 when AMARS is required. (Omit option Z.)

Note

A. When a supplementary frame is equipped with a number and isolation network unit (J38950AJ), a resistor matrix and party discrimination unit shall be provided in the supplementary frame.

J38950AJ—AT&TCo Std—ANI-Type D—Number and Isolation Network Unit

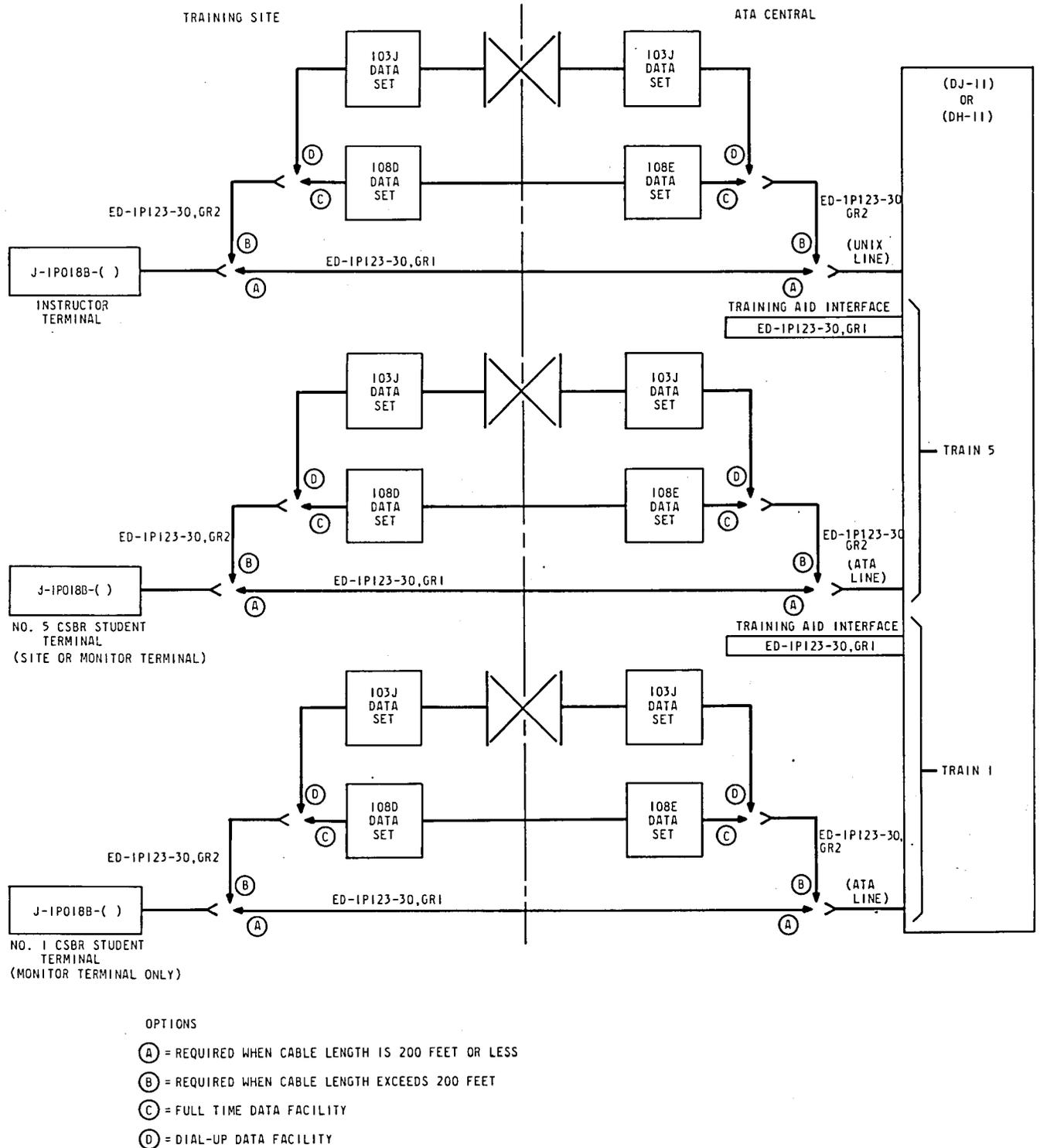


Fig. 6—Equipment and Cabling for ATA Training Site

with direct trunking, arranged for two outpulsers, one trunk subgroup, and six trunk preference relays, and equipped for one outpulser, one trunk subgroup, and six trunk preference relays, per SD-35043-01, six Fig. 6, one Fig. 3, one Fig. 5, and one Fig. 7, and options V, W, and Y. (See Note A.)

List 2—Wiring and equipment required in addition to list 1 per SD-35043-01, one Fig. 3 and 7, and options W and Y for the second outpulser. (See Note A.)

Note

A. Wiring per SD-35043-01, option X, required in addition to list 1 or 2 when the first circuit of the unit has a preceding subgroup in the outpulser preference chain. (Omit option W.)

J38950BA—AT&TCo Std—ANI-Type D—Outgoing Trunk Unit—Noncoin Station Toll—Loop or E and M Signaling

List 1—Assembly, wiring, and equipment for two trunk circuits arranged for E and M signaling, per SD-35020-01, Fig. 1, options K, T, and ZA. (See Notes A, C, and E.)

List 2—Assembly, wiring, and equipment for two trunk circuits arranged for loop signaling per SD-35020-01, App Fig. 3, options F, Q, and ZB. (See Notes A, B, D, E, and F.)

List 3—Wiring and equipment per SD-35020-01, App Fig. 2, required in addition to list 1 or 2 when timed disconnect on partial dial calls is furnished by this circuit in No. 1 or 350A office.

List 4—Wiring and equipment per SD-35020-01, option Z, required in addition to list 1 or 2 when timed disconnect on partial dial calls is furnished by this circuit in No. 355A or 35E97 office.

List 5—Transformer, per SD-35020-01, option Y, required in addition to list 2 for use with trunks having an impedance of less than 1100 ohms at 1000 Hz.

List 6—Transformer, per SD-35020-01, option X, required in addition to list 2 for use with trunks having an impedance of 1100 ohms or greater at 1000 Hz.

Notes

A. This trunk unit is arranged to be mounted on ANI-D basic or supplementary frames.

B. Wiring per SD-35020-01, option E, required in addition to list 2 when trunk is connected to a PBX. (Omit option F.)

C. Wiring per SD-35020-01, option R, required in addition to list 1 when operation with 2-party machine ringing (MR) trunk is required.

D. Wiring per SD-35020-01, option M, required in addition to list 2 when operation with 2-party MR trunk is required.

E. When this trunk is arranged for direct trunk arrangement for local directory assistance calls (411), it shall be assigned to a separate trunk subgroup, which will have its own trunk connector unit, per J38950AM-().

F. Wiring per SD-35020-01, option A, required in addition to list 1 when a direct trunk arrangement for local directory assistance calls (411) is required.

G. Wiring per SD-35020-01, option B required in addition to list 2 when a direct trunk arrangement for local directory assistance calls (411) is required.

o level **J38950BB—AT&TCo Std—ANI-Type D—Outgoing Trunk Unit—Noncoin—Special Toll, or Operator Assistance—Loop or E and M Signaling**

List 1—Assembly, wiring, and equipment for one outgoing trunk circuit, per SD-35021-01, App Fig. 1 and options B and ZB.

List 2—Wiring and equipment per SD-35021-01, App Fig. 2 and option A, required in addition to list 1 when the trunk is arranged for loop signaling.

List 3—Wiring and equipment per SD-35021-01, App Fig. 3 and option ZA, required in addition to list 1 when the trunk is arranged for E and M signaling.

List 4—Repeat coil per SD-35021-01, option G, required in addition to list 2 for use with trunks having an impedance of less than 1100 ohms at 1000 Hz.

List 5—Repeat coil per SD-35021-01, option F, required in addition to list 2 for use with trunks having an impedance of 1100 ohms or greater at 1000 Hz.

Notes

- A. This trunk unit shall be located in the ANI-D supplementary frames. (J38950C and D.)
- B. The nonrecord options, H, J, K, M, N, R, S, T, V, W, X, Y, and Z, shall always be furnished as straps at the unit terminal strip and shall be omitted by the installation force per telephone company requirements.
- C. Wiring per SD-35021-01, option Q, required in addition to list 1, when the trunk is used for combined special toll and operator assistance traffic to TSPS No. 1 office.
- D. Wiring and equipment per SD-35021-01, App Fig. 4, shall be furnished at the miscellaneous fuse bay.

041 level

J38950BC—AT&T Co Std—ANI-Type D Outgoing Trunk Unit—By-Link—Noncoin—Operator Assistance—Special Toll or Station Toll, E and M Lead Signaling Dial Pulsing

List 1—Assembly, wiring, and equipment for one outgoing trunk unit, per SD-35022-01, Fig. 1 and options S and V.

Notes

- A. This trunk unit is arranged to be mounted on ANI-D basic or supplementary frames.
- B. The nonrecord options, W, X, Y, and Z, shall always be furnished as straps at the unit terminal strip and shall be omitted by the installation force per telephone company requirements.
- C. Wiring and equipment per SD-35022-01, App Fig. 2, shall be furnished at the miscellaneous fuel bay.

J38950BD—AT&T Co Std—ANI-Type D—Outgoing Trunk Unit—Coin, Special Toll, Operator Assistance, or Station-to-Station Sent Paid Calls—Loop or E and M Lead Signaling

List 1—Assembly, wiring, and equipment for one outgoing coin trunk circuit per SD-35023-01, App Fig. 1 and options E, P, S, and ZS.

List 2—Assembly, wiring, and equipment required in addition to list 1 per SD-35023-01, App Fig. 2, options W, X, Y, Z, and ZY to equip the trunk for loop signaling. (See Note H.)

List 3—Assembly, wiring, and equipment required in addition to list 1 per SD-35023-01, App Fig. 3 and options B and ZZ, to equip the trunk for E and M lead signaling. (See Note I.)

List 4—Repeat coil per SD-35023-01, option H, required in addition to list 2 for use with trunks having an impedance of less than 1100 ohms at 1000 Hz.

List 5—Repeat coil per SD-35023-01, option G, required in addition to list 2 for use with trunks having an impedance of 1100 ohms or greater at 1000 Hz.

List 6—Wiring and equipment per SD-35023-01, option R, required in addition to list 1 when return of the initial coin deposit is required. (Omit option S.)

List 7—Wiring and equipment per SD-35023-01, options N and ZU, required in addition to list 1 and list 2 or list 3 when +48V battery is required toward the station on initial answer. (See Note J.) (Omit option P.)

List 8—Wiring and equipment per SD-35023-01, App Fig. 5, required in addition to list 1, to arrange trunk for multiwink coin control. (See Note G.) (Omit option ZS.)

Notes

- A. This trunk unit shall always be located on the ANI-D supplementary frames (J38950C or D).
- B. The straps across options W, X, Y, and resistors are provided on terminal strip (B) and shall be cut by the installation force as required.
- C. Wiring per SD-35023-01, option Q, required in addition to list 1 when number identification is not required and return of initial coin deposit is provided.
- D. Wiring per SD-35023-01, option V, required in addition to list 1 when number identification from the ANI equipment is required.
- E. Wiring and equipment per SD-35023-01, App Fig. 4, shall be furnished at the miscellaneous fuse bay.
- F. Dual channel receiver (HS-1) circuit pack shall be mounted behind the trunk unit and connected to the trunk by means of H-912-507,G1, connector cable assembly, when list 3 is specified.
- G. The electronic multiwink receiver [(ED-35137-())] shall be mounted behind the trunk unit and con-

ected to the trunk by means of a connector cable assembly when list 8 is specified.

- H. Wiring per SD-35023-01, option ZV, required in addition to list 2, when multiwink coin control is required. Omit option ZY.
- I. Wiring per SD-35023-01, option ZT, required in addition to list 3, when multiwink coin control is required. Omit option ZZ.
- J. Wiring per SD-35023-01, option ZX, required in addition to list 7, when multiwink coin control is required. Omit option ZU.

***J38950BE—AT&T Co Standard—ANI-Type D—
Outgoing Trunk Unit—By-Link—Coin
and Noncoin—Operator Assistance—
Special Toll, or Station Toll—E and
M Lead Signaling—Dial Pulsing***

List 2—Wiring and equipment per SD-35024-01, Fig. 2 and option K required in addition to list 1 or 5 when inband signaling is required and multiwink coin control is not required.

List 3—Wiring and equipment per SD-35024-01, option Z, required in addition to list 1 or 5 when return of the initial coin deposit is required.

List 4—Wiring and equipment per SD-35024-01, option X, required in addition to list 1 or 5, when +48V battery is required toward the station while connection to an operator (dial tone first) is provided. (Omit option W.)

List 5—Assembly, wiring, and equipment for one outgoing trunk circuit per SD-35024-01 Fig. 1, options G, M, N, S, and W.

List 6—Wiring and equipment per SD-35024-01, Fig. 4, required in addition to list 1 or 5 to arrange trunk for multiwink coin control. (See Notes G and H.)

Notes

- A. This trunk unit is arranged to be mounted on ANI-D basic or supplementary frames.
- B. The nonrecord options, F, Q and R, shall always be furnished as straps at the unit terminal strip and shall be omitted by the installation force per telephone company requirements.

C. Wiring per SD-35024-01, option T, required in addition to list 1 or 5 when ringback is required and no party lines are served for coin and noncoin lines against off-hook and on-hook. Omit option S.

D. The dual channel receiver (HS-1) circuit pack shall be shipped separately to be mounted on the rear of the trunk unit and shall be connected by means of the H-912-509,G1 cable.

E. Wiring per SD-35024-01, option Y, is required in addition to list 1 or 5 when return of initial coin deposit is not required.

F. Wiring and equipment per SD-35024-01, Fig. 3, shall be furnished at the miscellaneous fuse bay.

G. Furnish option E in addition to list 6 when +48V is required toward coin station.

H. The electronic multiwink receiver [ED-35137-()] shall be mounted behind the trunk unit and connected to the trunk by means of a connector cable assembly when list 6 is specified.

5. GENERAL NOTES AND INDEXES

5.01 The pulse generator unit shall be furnished in the basic frame. The output is multiplied to successive trunks on the same frame and via switch-board cable to the trunks in the supplementary frame.

5.02 The number and isolation network cards are arranged for solderless wrapped connections. All cross-connections made on those cards shall be of solderless wrap-type to aid installation and telephone company changes as required.

5.03 Power is supplied to the light fixture assembly from the miscellaneous fuse bay.

5.04 A portable box-type trunk test set (J34731A) is designed to test all of the ANI-D trunks except the noncoin 1+ trunk (J38950BA) for which the test facility is provided in the basic frame.

5.05 A 553D lamp extractor is available for the replacement of the lamps in the lighting fixtures mounted directly above and below the number network units.

5.06 An 811A circuit pack puller is available for the removal of the circuit packs from the number network units.

5.07 Codes J38950E through J38950Y are unassigned.

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 are those of the issue in which the rating was first applied.

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
J38950A,L1	Mfr Disc.	1	J38950A,L6
J38950B,L1	Mfr Disc.	1	J38950B,L6
J38950BA,L7	Mfr Disc.	1	—
J38950BE,L1	Mfr Disc.	2	J38950BE,L5

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	CKT PER UNIT
J38950A	Std	Basic Frame—ANI-D	J38950A-()	SD-32378-01 SD-35016-01 SD-35017-01 SD-35018-01 SD-35019-01	1
J38950B	Std	Basic Frame—ANI-D	J38950B-()	SD-32378-01 SD-35016-01 SD-35017-01 SD-35018-01 SD-35019-01	1
J38950C	Std	Supplementary Frame—ANI-D	J38950C-()	SD-35016-01	1
J38950D	Std	Supplementary Frame—ANI-D	J38950D-()	SD-35016-01	1
J38950AA	Std	ANI-Type D—Trunk Preference Unit	J38950AA-()	SD-35017-01	1
J38950AB	Std	ANI-Type D—Test and Line Verification and Miscellaneous Unit	J38950AB-()	SD-35018-01 SD-35019-01	1
J38950AC	Std	ANI-Type D—Outpulser Unit	J38950AC-()	SD-35017-01 SD-35018-01	1

EQUIPMENT CODE	AT&T RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING	CKT PER UNIT
J38950AD	Std	ANI-Type D—Calling Number Registration Unit	J38950AD-()	SD-35017-01	1
J38950AE	Std	ANI-Type D—Miscellaneous Unit	J38950AE-()	SD-35018-01 SD-35019-01	1
J38950AF	Std	ANI-Type D—Identifier Unit	J38950AF-()	SD-35016-01	1
J38950AG	Std	ANI-Type D—Resistor Matrix and Party Discrimination Unit	J38950AG-()	SD-35016-01	1
J38950AJ	Std	ANI-Type D—Number and Isolation Network Unit	J38950AJ-()	SD-35016-01	1
J38950AK	Std	ANI-Type D—Trunk Connector Unit	J38950AK-()	SD-35017-01	1
J38950AL	Std	ANI-Type D—Miscellaneous PBX-AIOD Unit	J38950AL-()	SD-35018-01	1
J38950AM	Std	ANI-Type D—Trunk Connector Unit for Directory Assistance With Direct Trunking	J38950AM-()	SD-35043-01	1
J38950BA	Std	ANI-Type D—Outgoing Trunk Unit—Noncoin Station Toll—Loop or E&M Signaling <i>A-I</i>	J38950BA-()	SD-35020-01	2
J38950BB	Std	ANI-Type D—Outgoing Trunk Unit—Noncoin, Special Toll or Operator Assistance—Loop or E&M Signaling <i>75PS 0+-</i>	J38950BB-()	SD-35021-01	1
J38950BC	Std	ANI-Type D—Outgoing Trunk Unit—By-Link Noncoin—Operator Assistance—Special Toll or Station Toll—E&M Signaling—Dial Pulsing	J38950BC-()	SD-35022-01	1

*NON COIN
FLAT RATE
LEVEL "0" only*

EQUIPMENT CODE	AT&T RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING	CKT PER UNIT
J38950BD	Std	ANI-Type D—Outgoing Trunk Unit—Coin—Special Toll, Operator Assistance, or Station-to-Station Sent Paid Calls—Loop or E&M Signaling	J38950BD-()	SD-35023-01	1
		<i>TSPS CN OT- IT</i>		<i>COIN LEVEL "1" & "0"</i>	
J38950BE	Std	ANI-Type D—Outgoing Trunk Unit By-Link Coin and Noncoin—Operator Assistance—Special Toll or Station Toll—E&M Lead Signaling—Dial Pulsing	J38950BE-()	SD-35024-01	1
		<i>SUPER COMBINELY 4 MTS PDS</i>		<i>FR E CN LEVEL 1 LEVEL 0</i>	

Circuit Schematic Index

CIRCUIT DRAWING	J38950 EQUIP CODE	CIRCUIT DRAWING	J38950 EQUIP CODE
SD-32378-01	A,B	SD-35021-01	BB
SD-35016-01	A,B,C,D,AF,AG,AJ	SD-35022-01	BC
SD-35017-01	A,B,AA,AC,AD,AK	SD-35023-01	BD
SD-35018-01	A,B,AB,AC,AE,AL	SD-35024-01	BE
SD-35019-01	A,B,AB,AE	SD-35043-01	AM
SD-35020-01	BA		

TABLE A

ANI-D FRAMES J38950A (9 FEET 0 INCH) AND J38950B (11 FEET 6 INCHES)

COMPONENT EQUIPMENT UNITS SHALL BE EQUIPPED AS FOLLOWS:					
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF UNIT	DESCRIPTION OF LIST
CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED		
J38950AA	1		1	Trunk Preference Unit	Reqd per 1 to 10 trunks (max 1 list 1 per basic frame) (see Note 1)
J38950AB	1	1		Test and Line Verification and Miscellaneous Unit	When PBX-AIOD is reqd When two outpulsers are reqd When used in 35E97 office When used in 35E97 office and two outpulsers are reqd When Automatic Message Accounting Recording System (AMARS) is required When list 6 is used in 35E97 office Indication to CSACS is reqd Indication to CSACS is required and two outpulsers are furnished
	2		1		
	3	1			
	4	1			
	5		1		
	6		1		
	7		1		
	8		1		
	9				
J38950AC	1	1	1	Outpulser Unit	When special treatment feature is reqd (such as PBX-AIOD) (max 2 lists 2 per list 1)
	2		2		

TABLE A (Cont)

ANI-D FRAMES J38950A (9 FEET 0 INCH) AND J38950B (11 FEET 6 INCHES)

COMPONENT EQUIPMENT UNITS SHALL BE EQUIPPED AS FOLLOWS:					
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF UNIT	DESCRIPTION OF LIST
CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED		
J38950AC (Cont)	3		1		When two outpulsers are reqd
	4		1		When 10 trunks or less are reqd in an office (see Note 2)
	5		1		When party test prior to identification is reqd
	6		1		When hotel-motel identification is reqd
J38950AD	1	1	1	Calling Number Registration Unit (max 1 per out-pulsers)	
	2		1		When PBX-AIOD is reqd
J38950AF	1	1		Identifier Unit (max 1 per system)	
	2		10		When additional service marks are reqd (max 10 lists 2)
	3		1		When AMARS is reqd
	4		8		Reqd in addition to list 3
J38950AG	1	1		Resistor Matrix and Party Discrimination Unit	
	2		1		When AMARS is reqd

TABLE A (Cont)

ANI-D FRAMES J38950A (9 FEET 0 INCH) AND J38950B (11 FEET 6 INCHES)

COMPONENT EQUIPMENT UNITS SHALL BE EQUIPPED AS FOLLOWS:					
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF UNIT	DESCRIPTION OF LIST
CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED		
J38950AJ	1	1	1	Number and Isolation Network Unit	5 number network cards (max 6 lists 2 per list 1) Isolation card, 2 special treatments (max 3 lists 3 per list 1) Isolation card, 5 special treatments (max 3 lists 4 per list 1)
	2		6		
	3		3		
	4		3		
J38950BA	1		5	Outgoing Trunk, Noncoin 1+ Dialing, E&M Signaling Unit	When time disconnect on partial dial call is reqd in No. 1 or 350A office When time disconnect on partial dial call is reqd in No. 355A or 35E97 office
	2		5	Outgoing Trunk, Noncoin 1+ Dialing, Loop Signaling Unit	
	3		5		
	4		5		
J38950BC	1		See Note 3	Outgoing Trunk, Noncoin Special or Station Toll E&M Signaling Unit	

TABLE A (Cont)

ANI-D FRAMES J38950A (9 FEET 0 INCH) AND J38950B (11 FEET 6 INCHES)

COMPONENT EQUIPMENT UNITS SHALL BE EQUIPPED AS FOLLOWS:					
UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF UNIT	DESCRIPTION OF LIST
CODE	LIST NO.	ALWAYS	FOR OPTION INDICATED		
J38950BE	2		See Note 3	Outgoing Trunk, Coin or Noncoin, Special Toll or Station Toll E&M Signaling	When inband signaling is reqd.
	3		See Note 3		When return of initial coin deposit is reqd.
	4		See Note 3		When +48V battery toward station while connection to operator (dial tone first) is provided
	5		See Note 3		
J38943AF	1	1		Pulse Generator	
	2		2		When AMARS is reqd
ED-35019-()	G1		See Note 4	Lighting Fixture Assembly	
J99235AW	1		1	Multifrequency Signal Generator	When multifrequency current supply is not furnished (one per outpulser)
	2		1		

Notes

1. The trunk preference unit shall be located in the basic frame when a second outpulser is not provided in an office.
2. Equipment per list 4 shall be specified when an office is equipped with 10 or fewer trunks and the trunk units are located in the basic frame.

Notes (Cont)

3. A maximum of seven (J38950BC) or three (J38950BE) trunks may be furnished on the J38950A-() 9-foot 0-inch basic frame, and a maximum of ten (J38950BC) or five (J38950BE) trunks may be furnished on the J38950B-() 11-foot 6-inch basic frame.
4. One lighting fixture assembly should be provided directly above and below each number and isolation network tray.

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