

IDENTIFIER FRAME
AUTOMATIC NUMBER IDENTIFICATION—TYPE B
EQUIPMENT DESIGN REQUIREMENTS
NO. 1 CROSSBAR, PANEL, AND STEP-BY-STEP SYSTEMS

1. GENERAL

SCOPE

1.01 This specification, together with the supplementary information listed herein, covers the equipment design requirements for the framework, equipment, and circuits to be used in the engineering, manufacture, and installation of the identifier frame used as part of the automatic number identification (ANI-TYPE B) equipment in decoder panel, No. 1 crossbar, and No. 1, 350A, and 355A step-by-step offices.

1.02 This specification is reissued:

- (a) To add requirements for the 9-foot 0-inch high identifier frame for use in step-by-step offices.
- (b) To change the frame fuse panels to the modular type.

CAPACITY

1.03 An ANI-B System may consist of frameworks 11 feet 6 inches high for installation in Common Systems offices or 9 feet 0 inch high for installation only in step-by-step offices. An identifier group consists of a maximum of two identifier frames.

1.04 An 11-foot 6-inch high identifier frame functions with a maximum of six groups of 10,000 numbers. (See Fig. 1.) Any one of the six may be used to provide PBX-AIOD service. Where PBX-AIOD service is required and the six groups are already in operation, a seventh office (10,000 numbers) may be installed on the second identifier frame (ID1) but is limited to AIOD service only.

1.05 A 9-foot 0-inch high identifier frame functions with one group of 10,000 numbers. (See Fig. 2.) Where PBX-AIOD service is required, a second office (10,000 numbers) may be installed on a second identifier frame (ID1) but is limited to AIOD service only.

1.06 Each group of 10,000 numbers employs a primary and secondary number network which is common to the identifier group. The secondary network is located on the identifier frame. Each 11-foot 6-inch high identifier frame can accommodate a maximum of three secondary network units. Each 9-foot 0-inch high identifier frame can accommodate one secondary network unit.

DESCRIPTION

1.07 On CAMA calls from individual, PBX, and 2-party customer, ANI identifies the calling directory number and MF outpulses it to the CAMA office. Numbers, such as those for 4-party or multiparty customers, which are not automatically identifiable, are routed to an attendant for identification at the CAMA office. The identifier frame performs the identification function.

1.08 CAMA calls use outgoing ANI trunks in the local office. When the called number has been registered at the CAMA office, the latter signals for calling number identification. The ANI trunk seizes an outpulser, and the outpulser seizes an identifier. The identifier causes a 5800-Hz tone to be connected to the sleeve of the trunks, the tone finding its way back through the local switch train to the calling line circuit. Through the associated directory number cross-connection, the tone enters the ANI number network whose function it is to split this signal for convenient use in identifying the calling number. The number

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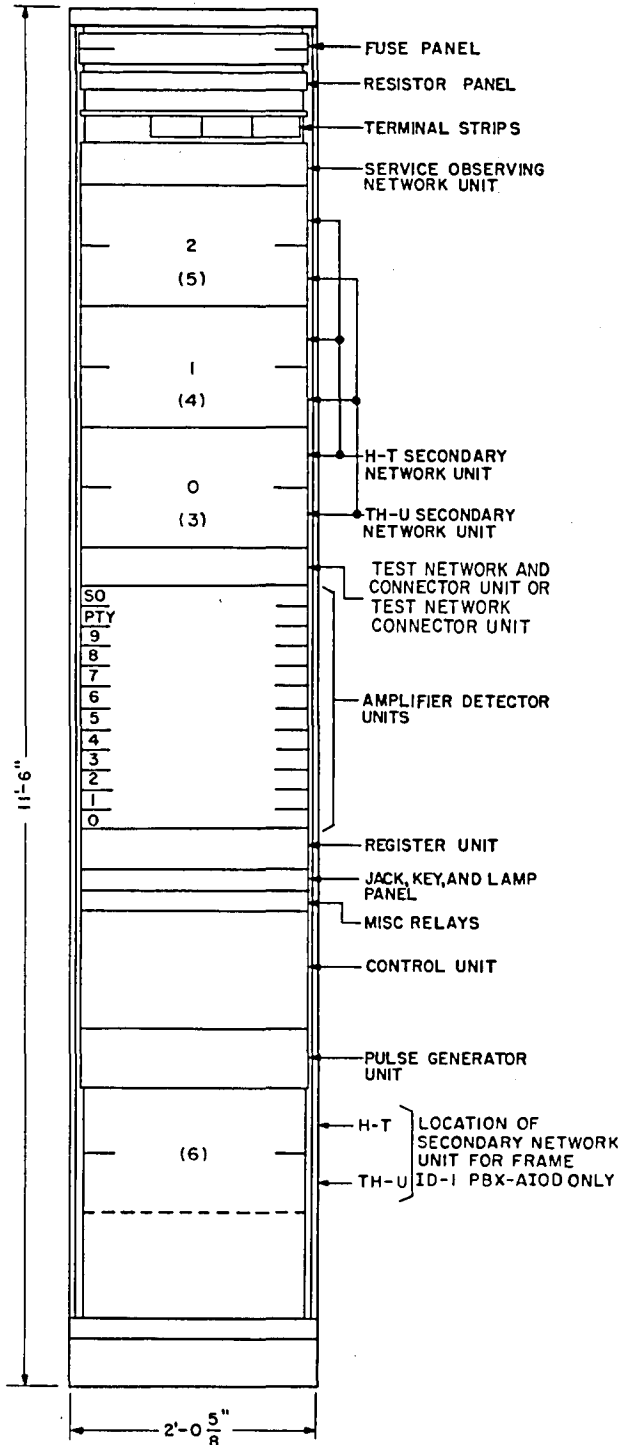


Fig. 1—Identifier Frame 0 and 1—Typical 11 Feet 6 Inches High

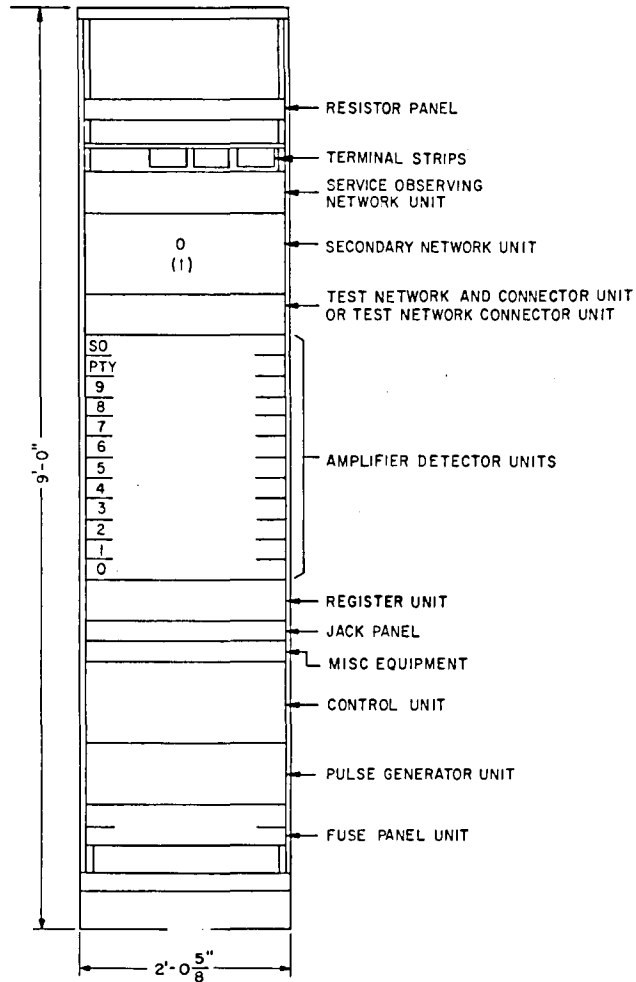


Fig. 2—Identifier Frame 9 Feet 0 Inch High

network for each group of 10,000 numbers, 0000 to 9999, consists of two major parts, primary and secondary. The primary portion, which is mounted on separate number network frames, accommodates a network per directory number that divides the signal two ways.

1.09 Consider each primary network to be one of a square array of 100 by 100, so numbered that the thousands and units digits for all networks in each vertical row are alike, and that the hundreds and tens digits for all networks in each horizontal row are alike.

(0990 0999) (. <u>10x10</u> .) (0900 0909)	(9990 9999) (. <u>10x10</u> .) (9900 9909)
100x100	
(0090 0099) (. <u>10x10</u> .) (0000 0009)	(9090 9099) (. <u>10x10</u> .) (9000 9009)

With the two branches of each network connected, respectively, into a vertical and a horizontal multiple, a signal in any network will produce a unique combination of signals on one of the 100 vertical multiples and one of the 100 horizontal multiples. For convenience in identification, these signals are divided further in the secondary portion of the number network, which is mounted on the identifier frames.

1.10 Each secondary system consists of 100 networks in a square array of 10 by 10, numbered 00 to 99, and so arranged that the first digit in each vertical row and the second digit in each horizontal row are alike. With the two branches of each network connected, respectively, into vertical and horizontal multiples, a signal in any network produces a unique combination of signals on one of the 10 vertical multiples and one of the 10 horizontal multiples. As a secondary system is provided for each of the two sets of 100 outputs of the primary system, the end result of a signal in a primary network is a signal on the appropriate 4 of 40 output leads of the secondary portion of the network: thousands 0-9, hundreds 0-9, tens 0-9, and units 0-9. One secondary network, with corresponding output leads, is furnished per office.

1.11 The identifier connects its 0-9 electron tube detectors to the 0-9 thousands leads of each office in turn. When the tone is found on one of these leads, both the office and the thousands digit are determined in the identifier and registered in the output. In three additional steps, the identifier similarly examines the 0-9 hundreds, 0-9 tens, and 0-9 units leads of the calling office. On completion of identification and registration of the calling number, it is MF outputted to the CAMA office.

1.12 The foregoing description applies to the identification of individual, PBX, and ring party numbers on 2-party lines. The tip party customers on 2-party lines are segregated in their treatment in the number network. The primary system is actually provided with three sets of outputs to which the branches of the networks may be connected. One set is used for individual and PBX numbers and for ring party numbers of 2-party lines. The second set is used for tip party numbers of 2-party lines except in the case of step-by-step 2-party message rate lines, where differentiation between the parties in the ANI equipment is unnecessary. Both parties are connected into the ring field and the 2-party message rate trunk selects the calling sleeve, causing the tone to appear on only that sleeve and not on both, as is the usual case. The third set is used for other customers. When there are 2-party lines in an office, its secondary network units are provided with transfer relays permitting the association of the secondary networks with the proper primary outputs, as controlled by party determination elsewhere in the ANI equipment. When there are 4-party or multiparty lines, a separate termination is provided on the secondary network units for the third set of primary outputs. These are used with a separate identification channel in the identifier, a signal here causing operator identification at the CAMA office.

1.13 PBX-AIOD operates in the same manner as the previously discussed individual, PBX, and ring party numbers on 2-party lines. Arrangements for detecting multiparty and tip party lines are not required, and AIOD secondary networks are cabled directly and permanently connected for ring party operation.

1.14 A separate identification channel is available to provide supplementary information to the effect that calls are service-observed when this is the case. This results in distinctive records of the calls at the CAMA office. A separate detector is required for this purpose.

1.15 *The identifier frame* uses a single-bay bulb-angle framework, 11 feet 6 inches high and 2 feet 5/8 inch long, as shown in Fig. 1, or 9 feet 0 inch high and 2 feet 5/8 inch long, as shown in Fig. 2, and arranged for 2- by 23-inch mounting plates. Equipment on the frame consists of a fuse panel, a 2-inch high resistor mounting plate, and one row of frame terminal strips. There is a jack,

key, and lamp mounting at a convenient height from the floor with a 2-inch high miscellaneous relay mounting immediately below it.

1.16 *The register unit* is a 2-plate, surface-wired unit accommodating wire spring steering relays and reed-type register relays. It is located immediately above the jack, key, and lamp mounting.

1.17 *The amplifier-detector unit* is a one-plate unit of 2-deck construction accommodating five electron tubes and associated transformers, capacitors, resistors, etc. The tubes are mounted on a separate deck to provide adequate cooling. The ten detectors, 0 to 9, that are always required, are located immediately above the register unit, followed by the party and service-observing detectors. When omitted, the latter are replaced by dummy panels accommodating terminals used to eliminate variations in the series parallel filament circuit wiring.

1.18 *The test network and connector unit* is a 2-plate, surface-wired unit accommodating the attenuating networks of the outpulser identifier test circuit and the relays which connect these networks to identifier 0. Only one unit is needed per identifier group and it is mounted above the detectors on identifier 0.

1.19 *The test network connector unit* is a one-plate unit that contains the relays which connect the attenuating networks on identifier 0 to identifier 1. Only one unit is needed per identifier group consisting of two identifiers, and it is mounted above the detectors on identifier 1.

1.20 *The secondary network unit* is a surface-wired unit, six mounting plate spaces high and is divided into two sections. One section is for hundreds-tens digits and one section for thousands-units digits. The lower plate of each section is a 4- by 23-inch plate accommodating 100 network circuits, 50 on each of two 25-row terminal strips designed for the purpose. These are centrally located and are flanked on each side by reed-type connector relays used to connect the network outputs to identifiers, respectively. The upper plate of each section accommodates wire spring relays used to transfer the secondary network input between the ring and tip outputs of the primary network. the multiparty networks are mounted at the ends of this plate on the thousands-units section. A secondary network unit is required for each group

of 10,000 numbers. A maximum of three units may be mounted on one 11-foot 6-inch high identifier frame. They are mounted in numerical order from the bottom up with units 0-2 mounted on the first identifier frame (ID0) and units 3-5 mounted on the second identifier frame (ID1). When PBX-AIOD service is required and all six secondary network units have been furnished for regular service, a fourth network unit may be added to identifier frame (ID1). Only one secondary network unit may be mounted on one 9-foot 0-inch high identifier frame. When PBX-AIOD service is required a second network unit is furnished and mounted on identifier frame (ID1) and is restricted to PBX-AIOD service only.

1.21 *The service-observing network unit* is a surface-wired relay rack unit using one 4- by 23-inch mounting plate. When required, only one is needed per identifier group and it is mounted above the secondary network units on identifier 0.

1.22 *The control unit* is a 6-plate, surface-wired unit accommodating the relays and miscellaneous apparatus involved in the general control, steering, and checking functions of the identifier. This unit is located below the miscellaneous relay mounting.

1.23 *The pulse generator unit* is a 3-plate, surface-wired unit accommodating three condenser-timed mercury relay interrupters. It is used to regulate the progress of identification. This unit is located immediately below the control unit.

1.24 *The frame wiring* consists of a main local cable, a "low level" interunit local cable, an interframe local cable, and frame loose wiring. The main local cable contains all of the interunit wiring on a frame, except that from the secondary network connectors and the test network connectors to the detector inputs, which must be segregated to prevent crossfire. These segregated leads are multiplied between secondary networks by frame loose wiring, between the test connector relays and the detector units by an interunit local cable opposite the main local cable, and between frames by the interframe local cable across the middle of the frame.

1.25 *A No. 6 ground lead* is furnished to provide the low impedance ground required for the networks and the detectors.

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1.26 *On the floor plan layout*, the identifier frames shall be located with the associated number network frames. When furnished, identifier frame 1 must be located adjacent to and to the right of identifier 0, as viewed from the front.

As ANI equipment will frequently be located in available space in existing offices, the frames may be located adjacent to others with guard rails of different widths. This will necessitate provision of appropriate junction details.

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	RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING
J95105A	AT&TCO Std	Identifier Frame — 11 Feet 6 Inches High	J95105A-()	SD-95810-01 SD-95814-01 SD-95819-01
J95105C	AT&TCO Std	Amplifier-Detector Unit	J95105C-()	SD-95810-01
J95105D	AT&TCO Std	Control Unit	J95105D-()	SD-95810-01
J95105E	AT&TCO Std	Pulse Generator Unit	J95105E-()	SD-95810-01
J95105F	AT&TCO Std	Register Unit	J95105F-()	SD-95810-01
J95105G	AT&TCO Std	Secondary Network Unit	J95105G-()	SD-95814-01
J95105H	AT&TCO Std	Service Observing Network Unit	J95105H-()	SD-95829-01
J95105J	AT&TCO Std	Test Network and Connector	J95105J-()	SD-95810-01 SD-95815-01
J95105K	AT&TCO Std	Test Network Connector Unit	J95105K-()	SD-95810-01
J95105L	AT&TCO Std	Identifier Frame — 9-Foot 0-Inch High Frames for Use in Step-by-Step Offices	J95105L-()	SD-95810-01 SD-95814-01 SD-95819-01
J95105M	AT&TCO Std	Identifier Frame Fuse Panel	J95105M-()	SD-95819-01
J95105N	AT&TCO Special	Identifier Connector and Verification Entry Network Unit	J95105N-()	SD-95829-01

Circuit Schematic Index

CIRCUIT DRAWING	J95105 EQPT CODE
SD-95810-01	A, C, D, E, F, J, K, L
SD-95814-01	A, G, L
SD-95815-01	J
SD-95819-01	A, L, M
SD-95829-01	H, N

2. SUPPLEMENTARY INFORMATION

814-000-000—Step-by-Step Systems Index
815-000-000—Panel Systems Index
816-000-000—No. 1 Crossbar System Index
800-600-000—List of General Equipment Requirements
Sections
Floor Plan Data—Section 7.1, Sheet 45
Current Drain Data—
SD-21300-01—Panel System—Battery Cutoff (not

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available for ground cutoff)
SD-25000-02—Crossbar No. 1
SD-31359-02—Step-by-Step System No. 1
SD-31364-02—Step-by-Step Systems No. 350A
SD-31780-02—Step-by-Step Systems No. 355A

3. DRAWINGS

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

Keysheets

SD-21300-01—Panel System—Battery Cutoff Relay Office
SD-21680-01—Panel System—Ground Cutoff Relay Office
SD-25000-01—No. 1 Crossbar System
SD-31359-01—Step-by-Step Systems—No. 1
SD-31364-01—Step-by-Step Systems— No. 350A
SD-31780-01—Step-by-Step Systems— No. 355A

Equipment, Wiring, and Cabling

ED-25278-30—Assembly—Jack, Key, and Lamp Panel

ED-25346-14 } Method of Running Power Feeders
ED-25346-15 } — No. 1 Crossbar System
ED-25346-16 }
ED-25529-70—Guard Rail Junction Details
ED-27114-01—Table of Wire Gauges and Types of Insulation
ED-31351-10—Method of Running Power Feeders, Step-by-Step Offices
ED-91210-51—Common Systems—Grounding Details
ED-91837-71—Bulb-Angle Frame Assembly
ED-94898-73—Bulb-Angle Frame Assembly
ED-95087-10—Identifier Frame—Switchboard Cabling Details
ED-95131-10—Fuse Panel Assembly
ED-99431-10—Method of Running Power Feeders—Common Systems

SD-80728-01—Battery Distribution Circuit—Step-by-Step Systems

4. EQUIPMENT

J95105A—AT&TCo Std—Identifier Frame— 11 Feet 6 Inches High

Equipment—J95105A-()

List 1—Assembly, wiring, and common equipment for one identifier frame. (See Notes A, B, and C.)

	WIRE	EQUIP	NOTES
ID Ckt, SD-95810-01:			
Fig. 1	1	0	
Fig. 2	4	0	
Fig. 3	12	0	
Fig. 5	1	0	
Fig. 6	12	0	
Fig. 7, 8, & 9	1	0	
SN Ckt, SD-95814-01:			
Fig. 1	6	0	
Fig. 2, 3, & 4	3	0	
Misc Ckt, SD-95819-01:			
Fig. 1	1	1	
Fig. 3	1	0	D
Fig. 4	31	0	
Fig. 5	2	0	
Fig. 6	10	0	
Fig. 7	1	1	D
Fig. 8 & 9	1	0	D
Fig. 10	1	0	
Fig. 11	2	0	

List 2—Local cable required in addition to list 1 on identifier 1 for segregated wiring between identifier frames 0 and 1. (See Notes E and F.)

List 5—Apparatus required in addition to list 1 to equip one identifier frame for use in panel and/or No. 1 crossbar offices SD-95819-01, Fig. 8.

List 6—Apparatus required in addition to list 1 to equip one identifier frame for use in step-by-step offices, SD-95819-01, Fig. 3 and 9.

List 7—Apparatus required in addition to list 1 to equip identifier frame 0 with electron tube pin straighteners.

List 8—Apparatus required in addition to list 1 to equip one identifier frame for a secondary network fuse alarm in step-by-step offices, SD-95819-01, Fig. 10 and Y option only.

List 9—Apparatus required in addition to list 1 to equip one identifier frame for a secondary network fuse alarm in panel and No. 1 crossbar offices, SD-95819-01, Fig. 10 and Z option.

List 10—Apparatus per SD-95810-01, Fig. 5, J option, required in addition to list 1 to

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provide a filament supply when the identifier frame is not equipped with SO amplifier detector.

List 11—Apparatus per SD-95810-01, Fig. 5, M option, required in addition to list 1 to provide a filament supply when the identifier frame is equipped with SO amplifier detector.

List 12—Apparatus per SD-95810-01, Fig. 5, K option, required in addition to list 1 to provide a filament supply when the identifier frame is not equipped with PTY amplifier detector.

List 13—Apparatus per SD-95810-01, Fig. 5, N option, required in addition to list 1 to provide a filament supply when the identifier frame is equipped with PTY amplifier detector.

Notes

- A. The identifier frame is physically arranged for three groups of 10,000 numbers. An additional 10,000 number capacity can be provided for PBX-AIOD on frame ID1 when the identifier group is already at the maximum capacity of 60,000 numbers. The control unit, which is wired for six groups, has access to the groups on the other identifier frame, as well as its own.
- B. J95105C detector units, J95105G secondary network units, a J95105H service-observing network unit, and a J95105J or K test network unit as required, a J95105B fuse panel, a J95105D control unit, a J95105E pulse generator unit, and a J95105F register unit are ordered separately and are mounted on the frame and connected in the shop, as shown on the frame equipment layout. Components identified by figure numbers are part of list 1, except for dummy detectors per Fig. C, which are furnished, as required, for the unequipped detectors.
- C. List 1 includes two frame local cables, A and B, containing that wiring for the specified apparatus figures which is not furnished as surface wiring in the coded units. Local cable B contains only the input leads to the detectors, it being desirable to isolate these leads from other wiring.
- D. Universal wiring is provided for variables involved in the adaptation of the identifier frame for use in panel and/or No. 1 crossbar offices and in step-by-step offices.
- E. List 2 local cable provides the wiring that is required for the multiple of network connector relays between adjacent identifier frames. It is shop-connected to identifier 1.
- F. Wiring considerations require that the No. 1 identifier frame be located adjacent to the identifier frame 0. Identifier 0 is at the left of identifier 1, as viewed from the front.
- G. The X and Y identifier circuit wiring options, Y and Z, secondary network ten circuit wiring options, and variables involved in the bus connector check leads are administered at the frame terminal strips.
- H. Switchboard cables from the number networks on the number network frames terminate directly at the TP relay contacts or at the secondary networks, as required.
- I. A frame ground wire is provided for grounding the secondary, multiparty, and test networks and the amplifier detector units.
- J. Loose wire is used for the multiple between secondary network units of the identifier connector relay contacts on each identifier frame.
- K. Supplementary local cable D is required in addition to list 1 on ID frame 1 for segregated wiring between ID frame 0 and ID frame 1 when the seventh office is provided for AIOD. This cable includes the wiring from the secondary network unit (OFF 6) to the amplifier-detector units on ID frames 0 and 1.

J95105C—AT&T Co Std—Amplifier-Detector Unit

Equipment—J95105C-()

List 1—Assembly, equipment, and wiring for one amplifier-detector unit per SD-95810-01, Fig. 3. (See Notes A, B, and 5.01 and 5.02.)

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Notes

A. The amplifier-detector is partially surface wired. It is of 2-deck construction, the electron tubes being mounted on a separate deck for proper ventilation. As this deck is movable for maintenance access to components in the other deck, stranded point-to-point wiring is used between decks.

B. The identifier frame uses amplifier-detectors, as follows:

10—Digit detectors

1—Party detector, when required

1—Service-observing detector, when required

J95105D—AT&TCo Std—Control Unit

Equipment—J95105D-()

List 1—Assembly, wiring, and common equipment for one identifier frame control unit with capacity for six groups of 10,000 numbers, wired and equipped for two groups of 10,000 numbers, SD-95810-01, Fig. 1, less options.

List 2—Apparatus and wiring required in addition to list 1 to equip one control unit for use with each additional group of 10,000 numbers, SD-95810-01, Fig. 2.

List 3—Apparatus and wiring required in addition to list 1 to equip one control unit for use where two identifiers constitute the identifier group, SD-95810-01, Fig. 1, T option. (See Note A.)

List 4—Apparatus and wiring per SD-95810-01, Fig. 10, required in addition to list 2 when seventh office unit is equipped.

Note

A. Wiring is required in addition to list 3 on identifier frame 1 to provide identifier preference, S option.

J95105E—AT&TCo Std—Pulse Generator Unit

Equipment—J95105E-()

List 1—Assembly, wiring, and common equipment for one identifier frame pulse generator unit.

	WIRE	EQUIP	NOTES
Identifier Ckt, SD-95810-01:			
Fig. 6		12	B
Fig. 8	1	1	

Notes

A. The pulse generator unit is surface wired.

B. Figure 6 consists of a pigtail resistor which is furnished in the quantities specified, even though several may be unnecessary.

J95105F—AT&TCo Std—Register Unit

Equipment—J95105F-()

List 1—Assembly, wiring, and equipment for one identifier frame register unit, SD-95810-01, Fig. 7.

Note

A. The register unit is surface wired.

J95105G—AT&TCo Std—Secondary Network Unit

Equipment—J95105G-()

List 1—Assembly, wiring, and equipment for one secondary network unit equipped for identification in one group of 10,000 numbers and for use with one identifier frame.

	WIRE	EQUIP	NOTES
Secondary Network and Bus Connector Ckt, SD-95814-01:			
Fig. 1	2	2	
Fig. 2	1	1	

List 2—Apparatus and wiring required in addition to list 1 when two ID frames are equipped in one ID group.

List 3—Apparatus and wiring required in addition

to list 1 to equip one secondary network unit for use in panel and/or crossbar offices with 2-party lines or in step-by-step offices with 2-party flat rate lines per SD-95814-01, Fig. 4. (See Note F.)

List 4—Apparatus and wiring required in addition to list 1 to equip one secondary network unit for use in offices with lines having more than two parties per SD-95814-01, Fig. 3.

Notes

- A. The secondary network units are surface wired.
- B. List 4 includes the H. B. Jones No. 2005 terminal strips shown on the unit equipment layout.
- C. Wiring and connections to other parts of the identifier frame are included in the frame wiring furnished under J95105A or J95105L.
- D. Network grounds are run, one per unit, directly to the No. 6 ground wire on the frame.
- E. When this unit is used for AIOD service it may be mounted in any position on 11-foot 6-inch high identifier frame (ID0) or (ID1). On 9-foot 0-inch high frames it may be mounted only on identifier frame (ID1). It is cabled to the cross-connection field on a network frame and connected permanently for ring party. List 3 is not required for this arrangement.
- F. Provide Z option when service observing is furnished; otherwise, provide Y option.

J95105H—AT&TCo Std—Service-Observing Network Unit

Equipment—J95105H-()

List 1—Assembly, wiring, and common equipment for one service-observing network unit arranged for a maximum of ten complaint and ten traffic-observing lines. (See Notes A and D.)

	WIRE	EQUIP	NOTES
Service-Observing Network Ckt, SD-95829-01:			
Fig. 1 & 2	10	0	B
Fig. 3, Less Z Option	1	1	C

List 2—Apparatus and wiring required in addition to list 1 to arrange one service-observing network unit for tip party observing, SD-95829-01, Fig. 3, Z option only.

List 3—Apparatus and wiring required in addition to list 1 to arrange one service-observing network unit to accommodate five complaint-observing circuits 0 to 4, or 5 to 9, SD-95829-01, five Fig. 1, less Z option.

List 4—Apparatus and wiring required in addition to lists 1 and 3 to arrange complaint-observing circuits 0 to 4, or 5 to 9 for tip party observing, SD-95829-01, five Fig. 1, Z option only.

Notes

- A. The service-observing network unit is surface wired.
- B. That wiring which consists of strapping and surface wiring on terminal strips is always furnished for the full complement of equipment.
- C. The wiring alternative to Fig. 3, Z option, (bridging to relay contacts) and multiples between identifiers are administered at the identifier frame terminal strips.
- D. The service-observing network unit is located in spare space on identifier frame 0.

J95105J—AT&TCo Std—Test Network and Connector

Equipment—J95105J-()

List 1—Framework, equipment, assembly, and wiring for one test network and connector unit for identifier frame 0, SD-95810-01, Fig. 9, SD-95815-01, Fig. 7.

Notes

- A. The test network and connector unit is surface wired.
- B. Connections from the OITT frame are run in switchboard cable directly to the test network.
- C. Connections to other parts of the identifier frames are included in the frame wiring furnished therewith.

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D. Network grounds are run, 1 per unit, directly to the No. 6 ground wire on the frame.

J95105K—AT&TCo Std—Test Network Connector Unit

Equipment—J95105K-()

List 1—Assembly, equipment, and wiring for one test network connector unit for identifier frame 1, SD-95810-01, Fig. 9.

Notes

- A. The test network connector unit is surface wired.
- B. Connections to other parts of the identifier frames are included in the frame wiring furnished therewith.

J95105L—AT&TCo Std—Identifier Frame—9-Foot 0-Inch High Frames For Use in Step-by-Step Offices

Equipment—J95105L-()

List 1—Framework, assembly, wiring, and common equipment for one identifier frame without 5-inch cable rack. (See Notes A, B, C, and D.)

	WIRE	EQUIP	NOTES
Identifier Ckt, SD-95810-01:			
Fig. 1 & 2	1	0	
Fig. 3	12	0	
Fig. 5	1	0	
Fig. 6	12	0	
Fig. 7, 8, & 9	1	0	
Secondary Net. Ckt, SD-95814-01:			
Fig. 1	2	0	
Fig. 2, 3, & 4	1	0	
Misc Ckt, SD-95819-01:			
Fig. 1 with Y Option	1	1	
Fig. 2	1	0	
Fig. 3	1	1	
Fig. 4	21	0	
Fig. 5	2	0	
Fig. 6	10	0	
Fig. 7 & 9	1	1	
Fig. 10	1	1	
Fig. 11	2	0	

List 2—Framework, assembly, wiring, and common equipment for one identifier frame with 5-inch cable rack. (See Notes A, B, C, and D.)

	WIRE	EQUIP	NOTES
Identifier Ckt, SD-95810-01:			
Fig. 1,2,5,7,8, & 9	1	0	
Fig. 3 & 6	12	0	
Secondary Net. Ckt, SD-95814-01:			
Fig. 1	2	0	
Fig. 2, 3, & 4	1	0	
Misc Ckt, SD-95819-01:			
Fig. 1 with Y Option, 3, 7, 9, & 10	1	1	
Fig. 2	1	0	
Fig. 4	21	0	
Fig. 5	2	0	
Fig. 6	10	0	
Fig. 11	2	0	

List 3—Apparatus required in addition to list 1 or 2 to equip identifier frame 0 with electron tube pin straighteners.

List 4—Apparatus and wiring per SD-95810-01, Fig. 5, with J option, required in addition to list 1 or 2 to provide a filament supply when the identifier frame is not equipped with a service-observing amplifier detector.

List 5—Apparatus and wiring per SD-95810-01, Fig. 5, with M option, required in addition to list 1 or 2 to provide a filament supply when the identifier frame is equipped with a service-observing amplifier detector.

List 6—Apparatus and wiring per SD-95810-01, Fig. 5, with K option, required in addition to list 1 or 2 to provide a filament supply when the identifier frame is not equipped with a party amplifier detector.

List 7—Apparatus and wiring per SD-95810-01, Fig. 5, with N option, required in addition to list 1 or 2 to provide a filament supply when the identifier frame is equipped with a party amplifier detector.

Notes

- A. The identifier frame is arranged for a capacity of one group of 10,000 numbers. When PBX-AIOD service is required the associated

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secondary network unit shall be mounted on identifier frame 1. The control unit on one frame has access to the group of numbers on the other frame as well as its own frame.

- B. The detector units, secondary network unit, service-observing network unit, test network unit, control unit, pulse generator unit, and register unit are ordered separately and are mounted on the frame and connected in the shop as shown on the frame equipment layout. Components identified by figure numbers are part of list 1 or 2 except for dummy detectors per Fig. C which are furnished as required for the unequipped detectors.
- C. Lists 1 and 2 include frame local cables A and B. Cable A contains the wiring for apparatus figures which is not furnished as surface wiring in the coded units. Cable B contains only the input leads to the detectors, it being desirable to isolate these leads from other wiring.
- D. A local cable is required on identifier frame 1 in addition to list 1 or 2 to provide the segregated multiple of network connector relays between adjacent identifier frames 0 and 1. It is shop connected to identifier frame 1. Identifier frame 1 must be located to the right of identifier frame 0 as viewed from the front.
- E. Identifier circuit wiring options X and Y, secondary network circuit wiring options Y and Z, and variable wiring of the bus connector check leads are administered at frame terminal strip D.
- F. Switchboard cables from the number networks on the number network frames terminate directly at the TP relay contacts or at the secondary networks as required.
- G. A No. 6 frame ground wire is provided for grounding the secondary, multiparty, and test network units and the amplifier detector units.
- H. Loose wire is used for the multiple between the H- and U- relays of the secondary network.

J95105M—AT&TCo Std—Identifier Frame Fuse Panel

Equipment—J95105M-()

List 1—Equipment, assembly, and wiring for one identifier frame fuse panel.

	WIRE	EQUIP	NOTES
Misc Ckt,			
SD-95819-01:			
Fig. 2	1	1	
Fig. 4	—	31	
Fig. 5	—	2	
Fig. 6	—	10	
Fig. 11	—	2	

List 2—Equipment required in addition to list 1 for one 11-foot 6-inch high identifier frame. (See Note A.)

List 3—Equipment per SD-95819-01, Fig. 4, required in addition to list 2 on identifier 1 when the seventh group of 10,000 numbers is provided.

Note

- A. List 2 provides for replacing the modular fuse block used for secondary network units on 9-foot 0-inch frames with two modular fuse blocks which may be required for additional secondary network units equipped on 11-foot 6-inch frames.

J95105N—AT&TCo Special—Identifier Connector and Verification Entry Network Unit

Equipment—J95105N-()

List 1—Equipment required for one identifier connector and verification unit arranged for one identifier connector circuit and 80 verification circuits. (Max four list 1 per identifier group.)

List 2—Equipment and wiring required in addition to list 1 to equip one identifier connector circuit per SD-95829-01, Fig. 5. (Max one list 2 per identifier group on first unit only.)

List 3—Equipment and wiring required in addition to list 1 to equip four verification circuits per SD-95829-01, Fig. 4. (Max 20 list 3 per unit.)

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5. GENERAL NOTES

Equipment

5.01 Electron tubes are not furnished as part of the identifier frame or amplifier-detectors. They should be ordered separately by the telephone company. Each frame uses the electron tubes as follows:

CODE	QUANTITY	NOTE
313CC	1	Timing Circuit
2D21	1	Per Amplifier-Detector
6AL5	1	
407A	2	
408A	1	

5.02 Spare J95105C amplifier-detectors are furnished as ordered by the telephone company.

List of A&M Only and Mfr Disc. Equipment

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
J95105A,L3 & L4	Mfr Disc.	1	—
J95105B	Mfr Disc.	5	J95105M
J95105H,L5 & L6	Mfr Disc.	5	—

The above equipment has been replaced as indicated. Where A&M Only items appear, the issue numbers shown are those of the issue in which the rating was first applied.

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