

**PBX AIOD TRANSLATOR  
AND CONNECTOR EQUIPMENT  
AUTOMATIC MESSAGE ACCOUNTING  
OR AUTOMATIC NUMBER IDENTIFICATION  
EQUIPMENT DESIGN REQUIREMENTS  
NO. 1, AND 5 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 framework, equipment, and circuits to be used in the engineering, manufacture, and installation of PBX automatic identified outward dialing translator and connector equipment in No. 1 and No. 5 crossbar, panel and step-by-step local offices arranged with AMA facilities or automatic number identification ANI facilities which connect to a No. 101 electronic switching system or a conventional type of PBX. In addition to the equipment contained herein it will be necessary to provide the type A1 or type A2 station identification equipment listed under Supplementary Information when connecting to a conventional type of PBX.

**1.02** This specification is reissued to:

- (a) Add a feature arranging the translator connector circuit to function with number identification (central office) request test calls from the new PBX AIOD-A2 station identification frame.
- (b) Add a feature permitting operation of plant registers under AIOD translator control to count number identification requests and failures to properly make number identification requests.

(c) Prevent false indications from occurring when two different office units or office tens are connected to the same cross-connection terminal and a test call is placed from the master test frame.

(d) Reduce the susceptibility to inductive pickup by indicating 24-gauge tight-twisted pair, switchboard cable on all leads interconnecting with a No. 101 ESS or station identification frame.

**Capacity**

**1.03** The capacity of the units is as follows when used with:

- No. 1 Crossbar (AMA) Type Office—2 Transverter Groups (8 Tv/Gr)
- No. 5 Crossbar (AMA) Type Office—2 Transverter Groups (10 Tv/Gr)
- No. 5 Crossbar (ANI) Type Office—2 Transverter Groups (2 Tv/Gr)
- ANI Type—2 Outpulser Groups (10 Op/Gr)

Any combination of these offices, not to exceed a maximum of two, may be served by a single translator-connector unit. A translator will serve one station identification frame type A1 or A2 or one No. 101 ESS.

**Description**

**1.04** The units covered in this specification form a part of the automatic identified outward dialing equipment for No. 1 and 5

(AMA) and No. 1 and 5 crossbar, panel, or local step-by-step (ANI) offices. The major function of the translator and connector unit is to provide an interface between the central office AMA or ANI equipments and the equipment of, or associated with, a PBX.

**1.05** The translator and connector provide the means by which AMA transverters, ANI transverters, and ANI outputers can obtain an identification of a PBX station associated with a particular incoming PBX trunk circuit. The PBX station number thus obtained is registered in the transverter or outputer and is used for entry on the AMA tape at a local or CAMA office.

**1.06** When operating with transverters, the translator translates a PBX trunk equipment location number to a 4-digit trunk number in the two-out-of-five code form which is transferred to equipments associated with or of a particular PBX. The PBX or an associated

equipment identifies the calling station connected to the particular trunk and transfers the station number in two-out-of-five code to the translator. The number of the calling station is registered by the translator which then translates that number into a one-out-of-ten code acceptable to the transverter.

**1.07** Operation of the translator with ANI outputers is similar except that an input-output translation is not necessary. The information which the outputer supplies to the translator is a trunk number in two-out-of-five form and therefore translation is not required. The outputer can also accept the station number information directly from the translator in code form.

**1.08** The units are mounted on a relay rack framework in a central office using 23-inch mounting plates; they vary in height depending on the type of office and the number of outputer or transverter groups served.

#### SUBDIVISIONS OF EQUIPMENT AND DETAILED INDEX

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

| EQUIPMENT<br>CODE | RATING<br>OF UNIT | TITLE                                                                                                             | EQUIPMENT<br>DRAWING | CIRCUIT<br>DRAWING | CIRCUITS<br>PER UNIT | NO. OF<br>2- BY 23-INCH<br>MTG PLTS |
|-------------------|-------------------|-------------------------------------------------------------------------------------------------------------------|----------------------|--------------------|----------------------|-------------------------------------|
| ED-99363-10       |                   | Transistor and Diode Unit for Translator, Register, and Control Unit for PBX Automatic Identified Outward Dialing | ED-99363-10( )       | SD-99319-01        | 1                    | —                                   |
| ED-99560-30       |                   | Component Assembly for Translator Register and Control Unit for PBX Automatic Identified Outward Dialing          | ED-99560-30( )       | SD-99319-01        | 1                    | —                                   |
| J99301A           | AT&TCo<br>Std     | Translator Register and Control Unit for PBX Automatic Identified Outward Dialing                                 | J99301A-( )          | SD-99319-01        | 1                    | 7                                   |

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| EQUIPMENT<br>CODE | RATING<br>OF UNIT | TITLE                                                                                                                                                                         | EQUIPMENT<br>DRAWING | CIRCUIT<br>DRAWING         | CIRCUITS<br>PER UNIT | NO. OF<br>2- BY 23-INCH<br>MTG PLTS |
|-------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|----------------------|-------------------------------------|
| J99301B           | AT&TCo<br>Std     | Translator Unit for<br>PBX Automatic<br>Identified Outward<br>Dialing for Use With<br>ANI or AMA Transverters                                                                 | J99301B-()           | SD-99319-01                | 1                    | 3                                   |
| J99301C           | AT&TCo<br>Std     | Translator Connector<br>Preference and Con-<br>trol Unit for PBX<br>Automatic Identified<br>Outward Dialing for<br>Use With ANI Out-<br>pulsers or ANI or<br>AMA Transverters | J99301C-()           | SD-99320-01                | 1                    | 6                                   |
| J99301D           | AT&TCo<br>Std     | Translator Connector<br>Unit for PBX Auto-<br>matic Identified Out-<br>ward Dialing for Use<br>With ANI Outpulsers<br>or ANI or AMA<br>Transverters                           | J99301D-()           | SD-99320-01                | 1                    | 6                                   |
| J99301E           | AT&TCo<br>Std     | Auxiliary Translator<br>Connector Unit for<br>PBX Automatic Iden-<br>tified Outward Dialing<br>for Use With ANI or<br>AMA Transverters                                        | J99301E-()           | SD-99320-01                | 1                    | 6                                   |
| J99301F           | AT&TCo<br>Std     | PBX Automatic Iden-<br>tified Outward Dialing<br>Translator and Con-<br>nector Unit for Use<br>With a Single Group of<br>No. 1 or No. 5 Cross-<br>bar AMA Transverters        | J99301F-()           | SD-99319-01<br>SD-99320-01 | 1                    | 29                                  |
| J99301G           | AT&TCo<br>Std     | PBX Automatic Iden-<br>tified Outward Dialing<br>Translator and Con-<br>nector Unit for Use<br>With Two Groups of<br>No. 1 or No. 5 Cross-<br>bar Transverters                | J99301G-()           | SD-99319-01<br>SD-99320-01 | 1                    | 42                                  |
| J99301H           | AT&TCo<br>Std     | PBX Automatic Iden-<br>tified Outward Dialing<br>Translator and Con-<br>nector Unit for Use<br>With a Single Group<br>of ANI Outpulsers                                       | J99301H-()           | SD-99319-01<br>SD-99320-01 | 1                    | 20                                  |

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| EQUIPMENT<br>CODE | RATING<br>OF UNIT | TITLE                                                                                                                                                                                                                                                          | EQUIPMENT<br>DRAWING | CIRCUIT<br>DRAWING         | CIRCUITS<br>PER UNIT | NO. OF<br>2- BY 23-INCH<br>MTG PLTS |
|-------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|----------------------|-------------------------------------|
| J99301J           | AT&TCo<br>Std     | PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With Two Groups of ANI Outpulsers                                                                                                                                               | J99301J-()           | SD-99319-01<br>SD-99320-01 | 1                    | 26                                  |
| J99301K           | AT&TCo<br>Std     | PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With One Group of ANI Outpulsers and One Group of No. 1 or No. 5 Crossbar AMA Transverters or One Group of No. 5 Crossbar ANI Transverters Where Second Group Is ANI Outpulsers | J99301K-()           | SD-99319-01<br>SD-99320-01 | 1                    | 36                                  |
| J99301L           | AT&TCo<br>Std     | PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With One or Two Groups of No. 5 Crossbar ANI Transverters                                                                                                                       | J99301L-()           | SD-99319-01<br>SD-99320-01 | 1                    | 29                                  |
| J99301N           | AT&TCo<br>Std     | PBX AIOD Translator Connector Unit B for One or Two Groups of No. 5 Crossbar ANI Transverters—Common Systems                                                                                                                                                   | J99301N-()           | SD-99320-01                | 1                    | 12                                  |

**Circuit Schematic Index**

| CIRCUIT<br>DRAWING | J99301<br>EQUIP.<br>CODE                        |
|--------------------|-------------------------------------------------|
| SD-99319-01        | A,B,F,G,H,J,K,L,<br>ED-99363-10,<br>ED-99560-30 |
| SD-99320-01        | C,D,E,F,G,H,J,K,L,N                             |

**2. SUPPLEMENTARY INFORMATION**

AA128.006—Checking List—General Equipment Requirements

814-000-000—Step-by-Step Systems Index  
815-000-000—Panel Systems Index  
816-000-000—No. 1 Crossbar System Index  
819-000-000—No. 5 Crossbar System Index  
J1C000 (AA381.346)—Station Identification Frame for PBX AIOD-Type A1—Common Systems  
J1C037 (AA381.349)—Station Identification Frame for PBX AIOD-Type A2—Common Systems  
J22457 (816-104-100)—Automatic Message Accounting—General—Crossbar System No. 1

#### **Current Drain Data**

SD-21300-01,-02—Panel Systems—BCO Office  
SD-25000-02—Crossbar System No. 1  
SD-25760-02—Crossbar System No. 5  
SD-31359-02—Step-by-Step Systems No. 1  
SD-31364-02—Step-by-Step Systems No. 350A  
SD-31780-02—Step-by-Step Systems No. 355A  
SD-32230-02—Step-by-Step Systems No. 1 (With  
AMA)  
SD-32325-02—Step-by-Step Systems No. 35E97

#### **3. DRAWINGS**

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

#### **Keysheets**

SD-21300-01—Panel Systems—BCO Office  
SD-21680-01—Panel Systems—GCO Office  
SD-25000-01—Crossbar System No. 1  
SD-25760-01—Crossbar System No. 5  
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  
SD-32230-01—Step-by-Step Systems No. 1  
(With AMA)  
SD-32325-02—Step-by-Step Systems No. 35E97

#### **Equipment**

ED-99362-( )—Typical Equipment Arrangement  
for Translator and Translator  
Connector

#### **Wiring and Cabling**

ED-92224-01—Switchboard Cable Details—Com-  
mon Systems

#### **4. EQUIPMENT**

*ED-99363-10—Transistor and Diode Unit for Trans-  
lator, Register, and Control Unit for  
PBX Automatic Identified Outward  
Dialing*

*Group 1—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 4, for one GA0 diode  
unit (GA and GT diodes only).*

*Group 2—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 4, for one GA1 diode  
unit (GA and GT diodes only).*

*Group 3—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 4, for one GB0 diode  
unit (GB and GT diodes only).*

*Group 4—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 4, for one GB1 diode  
unit (GB and GT diodes only).*

*Group 5—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 4, for one TT diode  
unit.*

*Group 6—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 1, for one SU transis-  
tor unit.*

*Group 7—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 1, for one ST transis-  
tor unit.*

*Group 8—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 1, for one SH transis-  
tor unit.*

*Group 9—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 1, for one STH trans-  
istor unit.*

*Group 10—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 1, for one OF trans-  
istor unit.*

*Group 11—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 4, for one TNH  
diode unit.*

*Group 12—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 1, R option only for  
one OFU transistor unit.*

*ED-99560-30—Component Assembly for Translator  
Register and Control Unit for PBX  
Automatic Identified Outward  
Dialing*

*Group 1—Assembly, equipment, and wiring per  
SD-99319-01, Fig. 7, for one plug-in  
component assembly (CA1).*

**Group 2**—Assembly, equipment, and wiring per SD-99319-01, Fig. 8, for one plug-in component assembly (CA2).

**J99301A (AT&TCo Std)—Translator Register and Control Unit for PBX Automatic Identified Outward Dialing**

Equipment—J99301A-( )

**List 2**—Equipment and wiring per SD-99319-01, Fig. 1, R option only, required in addition to list 4 when translator is associated with station identification frame.

**List 3**—Equipment and wiring per SD-99319-01, Fig. 1, T option only, required in addition to list 4 for operation with ANI outputers.

**List 4**—Framework, assembly, equipment, and wiring per SD-99319-01, Fig. 1, for one translator register and control unit for PBX AIOD arranged for operation with ANI outputers, and ANI or AMA transverters for use with No. 101 ESS or station identification frame (see Notes A and B).

**List 5**—Equipment and wiring per SD-99319-01, Fig. 6, required in addition to list 4 when translator is associated with No. 101 ESS.

**List 6**—Equipment and wiring per SD-99319-01, Fig. 7, required in addition to list 4 arranged for use with two groups of ANI outputers and/or transverters when associated with No. 101 ESS.

**List 7**—Equipment and wiring per SD-99319-01, Fig. 8, required in addition to list 4 when office tens is required for use with transverters (maximum 1).

**List 8**—Equipment and wiring per SD-99319-01, Fig. 9, required in addition to lists 4 and 5 for operation with two No. 1 or 5 transverter groups, in any combination.

**List 9**—Equipment and wiring per SD-99319-01, Fig. 9 and 10, required in addition to lists

2 and 4 for operation with two No. 1 or 5 transverter groups, in any combination.

**Notes**

- A. List 4 includes only that wiring internal to this unit.
- B. See ED-99362-( ) for typical relay rack arrangement and associated major J codes.
- C. Furnish A, G, and S wiring when translator is associated with No. 101 ESS.
- D. Furnish J wiring in addition to lists 4 and 6 for use with two groups of ANI outputers.
- E. Furnish K wiring in addition to lists 4 and 6 for use with two transverter groups, or one ANI outputer group and one transverter group.
- F. Furnish M wiring in addition to lists 4 and 6 for use with one or two transverter groups only.
- G. Furnish N wiring in addition to lists 4 and 6 for use with one or two ANI outputer groups, or one ANI outputer group and one transverter group.
- H. Furnish E wiring for station identification frame or F wiring for No. 101 ESS for use with a single transverter or outputer group.
- I. Furnish B and ZA wiring when translator is associated with a station identification frame.
- J. Furnish ZC wiring in addition to list 2 when translator is associated with PBX AIOD-type A1, and in addition to list 5 when translator is associated with No. 101 ESS.
- K. Furnish ZD wiring in addition to list 2 when translator is associated with PBX AIOD-type A2.

**J99301B (AT&TCo Std)—Translator Unit for PBX Automatic Identified Outward Dialing for Use With ANI or AMA Transverters**

Equipment—J99301B-( )

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**List 1**—Framework, assembly, common equipment, and wiring for one translator unit for PBX automatic identified outward dialing for operation with ANI or AMA transverters.

|                                              | WIRE | EQUIP | SEE<br>NOTES          |
|----------------------------------------------|------|-------|-----------------------|
| Trnsl Ckt,<br>SD-99319-01:                   |      |       |                       |
| Fig. 2, With V,<br>W, X, Y, Z,<br>ZF Options | 1    | 1     | A,B,C,<br>D,E,F,<br>G |
| Fig. 3                                       | 2    | 0     |                       |
| Fig. 4                                       | 1    | 1     |                       |
| Fig. 5, With V,<br>W & X Options             | 1    | 0     | C,D,G                 |

**List 2**—Equipment and wiring to be connected per SD-99319-01, Fig. 3, required in addition to list 1 for each transverter group (maximum 2).

**List 3**—Equipment and wiring to be connected per SD-99319-01, Fig. 5, required in addition to list 1 when two transverter groups (No. 1 or No. 5 crossbar) are provided.

**Notes**

- A. Connect Z wiring for operation with a single No. 5 crossbar AMA or ANI transverter group only.
- B. Connect Y wiring for operation with a single No. 1 crossbar AMA transverter group only.
- C. Connect X wiring for operation with two No. 5 crossbar transverter groups (both groups AMA or ANI or one of each).
- D. Connect W wiring for operation with two No. 1 crossbar transverter groups.
- E. List 1 includes only that wiring internal to this unit.
- F. See ED-99362-( ) for typical relay rack arrangement and associated major J codes.

- G. Connect V wiring for operation with No. 5 crossbar, AMA or ANI, and one No. 1 crossbar AMA transverter group.

**J99301C (AT&TCo Std)—Translator Connector Preference and Control Unit for PBX Automatic Identified Outward Dialing for Use With ANI Outpulsers or ANI or AMA Transverters**

Equipment—J99301C-( )

**List 1**—Framework, assembly, common equipment, and wiring for one translator connector preference and control unit for PBX automatic identified outward dialing for use with ANI outpulsers or ANI or AMA transverters.

|                                 | WIRE | EQUIP | SEE<br>NOTES |
|---------------------------------|------|-------|--------------|
| Trnsl Conn Ckt,<br>SD-99320-01: |      |       |              |
| Fig. 1, With B Option           | 1    | 1     | A,B          |
| Fig. 1, ZB Option Only          | 1    | 0     |              |
| Fig. 2                          | 20   | 0     |              |
| Fig. 2, ZA Wiring Only          | 1    | 0     | C            |

**List 2**—Equipment and wiring to be connected per SD-99320-01, Fig. 2, required in addition to list 1 for each transverter or outpulsers for translator (maximum 20).

**List 3**—Equipment and wiring to be connected per SD-99320-01, Fig. 1, ZB option only, required in addition to list 1 when the translator connector is associated with PBX AIODA-type A2 station identification frame.

**Notes**

- A. List 1 includes only that wiring internal to this unit.
- B. See ED-99362-( ) for typical relay rack arrangement and associated major J codes.
- C. Connect ZA wiring when translator connector is associated with PBX AIODA-type A1 or A2 station identification frame.

**J99301D (AT&TCo Std) – Translator Connector Unit for PBX Automatic Identified Outward Dialing for Use With ANI Outpulsers or ANI or AMA Transverters**

Equipment – J99301D-( )

**List 1** – Framework, assembly, wiring, and common equipment for one translator connector unit of ten circuits for PBX automatic identified outward dialing arranged for use with ANI outpulsers or ANI or AMA transverters equipped for one circuit.

|  | WIRE | EQUIP | SEE NOTES |
|--|------|-------|-----------|
|--|------|-------|-----------|

Trnsl Conn Ckt,  
SD-99320-01:

|        |   |   |     |
|--------|---|---|-----|
| Fig. 3 | 1 | 1 | A,B |
|--------|---|---|-----|

**List 2** – Equipment and wiring required in addition to list 1 for each transverter or each outpulser (maximum 9).

|  | WIRE | EQUIP | SEE NOTES |
|--|------|-------|-----------|
|--|------|-------|-----------|

Trnsl Conn Ckt,  
SD-99320-01:

|        |   |   |     |
|--------|---|---|-----|
| Fig. 3 | 1 | 1 | A,B |
|--------|---|---|-----|

**Notes**

A. Lists 1 and 2 include only that wiring internal to this unit.

B. See ED-99362-( ) for typical relay rack arrangement and associated major J codes.

**J99301E (AT&TCo Std) – Auxiliary Translator Connector Unit for PBX Automatic Identified Outward Dialing for Use With ANI or AMA Transverters**

Equipment – J99301E-( )

**List 1** – Framework, assembly, wiring, and common equipment for one auxiliary translator connector unit of ten circuits for PBX automatic identified outward dialing arranged for use with ANI or AMA transverters equipped for one circuit.

Trnsl Conn Ckt,  
SD-99320-01:

|        |   |   |     |
|--------|---|---|-----|
| Fig. 4 | 1 | 1 | A,B |
|--------|---|---|-----|

**List 2** – Equipment and wiring required in addition to list 1 for each transverter (maximum 9).

|  | WIRE | EQUIP | SEE NOTES |
|--|------|-------|-----------|
|--|------|-------|-----------|

Trnsl Conn Ckt,  
SD-99320-01:

|        |   |   |     |
|--------|---|---|-----|
| Fig. 4 | 1 | 1 | A,B |
|--------|---|---|-----|

**Notes**

A. Lists 1 and 2 include only that wiring internal to this unit.

B. See ED-99362-( ) for typical relay rack arrangement and associated major J codes.

**J99301F (AT&TCo Std) – PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With a Single Group of No. 1 or No. 5 Crossbar AMA Transverters**

Equipment – J99301F-( )

**List 1** – Assembly, wiring, and equipment for one PBX AIOD translator and connector unit for a single group of No. 1 or No. 5 crossbar AMA transverters.

|  | WIRE | EQUIP | SEE NOTES |
|--|------|-------|-----------|
|--|------|-------|-----------|

Trnsl Ckt, SD-99319-01:

|                                            |   |   |         |
|--------------------------------------------|---|---|---------|
| Fig. 1, 2 & 4 With R, S, Y, Z & ZF Options | 1 | 0 | D,E,G,H |
| Fig. 3                                     | 1 | 0 |         |

Trnsl Conn Ckt, SD-99320-01:

|                                           |    |   |            |
|-------------------------------------------|----|---|------------|
| Fig. 1                                    | 1  | 0 |            |
| Fig. 3 & 4 With G, H, J, T, V & X Options | 10 | 0 | A,B, C,G,H |

Trnsl Reg & Cont Unit,

|         |   |  |   |
|---------|---|--|---|
| J99301A | 1 |  | F |
|---------|---|--|---|

Trnsl Unit, J99301B

|   |  |   |
|---|--|---|
| 1 |  | F |
|---|--|---|

Trnsl Conn Pref and

|                    |   |  |   |
|--------------------|---|--|---|
| Cont Unit, J99301C | 1 |  | F |
|--------------------|---|--|---|

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|                              | WIRE | EQUIP |
|------------------------------|------|-------|
| Trnsl Conn Unit, J99301D     | 1    | F     |
| Aux Trnsl Conn Unit, J99301E | 1    | F     |

**Notes**

- A. Connect SD-99320-01 V wiring for use with No. 5 crossbar office.
- B. Connect SD-99320-01 T wiring for use with No. 1 crossbar office.
- C. Connect SD-99320-01 J and X wiring for use with No. 1 or No. 5 crossbar AMA transverters.
- D. Connect SD-99319-01 Y wiring for use with No. 1 crossbar AMA transverter group.
- E. Connect SD-99319-01 Z wiring for use with No. 5 crossbar AMA transverter group.
- F. Wiring internal to these units is provided on respective units.
- G. Connect SD-99319-01 S wiring and SD-99320-01 H wiring for use with No. 101 ESS.
- H. Connect SD-99319-01 R wiring and SD-99320-01 G wiring for use with station identification frame for PBX AIOD.

**J99301G (AT&TCO Std)—PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With Two Groups of No. 1 or No. 5 Crossbar Transverters**

Equipment—J99301G-( )

**List 1**—Assembly, wiring, and common equipment for one PBX AIOD translator and connector unit for two groups of No. 1 crossbar or No. 5 crossbar AMA transverters, one group of No. 1 and one group of No. 5 crossbar AMA transverters, one group of No. 1 AMA and one group of No. 5 ANI transverters, or one group of No. 5 AMA and one group of No. 5 ANI transverters.

|                                                                                | WIRE | EQUIP | SEE NOTES              |
|--------------------------------------------------------------------------------|------|-------|------------------------|
| Trnsl Ckt, SD-99319-01:<br>Fig. 1,2,3,4 & 5 With<br>R,S,V,W,<br>X & ZF Options | 1    | 0     | A,B,C,<br>I,J          |
| Fig. 3                                                                         | 2    | 0     |                        |
| Trnsl Conn Ckt,<br>SD-99320-01:<br>Fig. 1                                      | 1    | 0     |                        |
| Fig. 3 & 4 With F<br>G, H, J, T, V,<br>W & X Options                           | 20   | 0     | D,E,<br>F,G,<br>I,J,K, |
| Trnsl Reg & Cont Unit,<br>J99301A                                              |      | 1     | H                      |
| Trnsl Unit, J99301B                                                            |      | 1     | H                      |
| Trnsl Conn Pref & Cont<br>Unit, J99301C                                        |      | 1     | H                      |
| Trnsl Conn Unit, J99301D                                                       |      | 2     | H                      |
| Aux Trnsl Conn Unit,<br>J99301E                                                |      | 2     | H                      |

**Notes**

- A. Connect SD-99319-01 V wiring for use with one No. 5 crossbar AMA or ANI and one No. 1 crossbar AMA transverter group.
- B. Connect SD-99319-01 W wiring for use with two No. 1 crossbar transverter groups.
- C. Connect SD-99319-01 X wiring for use with two No. 5 crossbar transverter groups.
- D. Connect SD-99320-01 W wiring for use with No. 5 crossbar ANI transverters.
- E. Connect SD-99320-01 V wiring for use with No. 5 crossbar office.
- F. Connect SD-99320-01 T wiring for use with No. 1 crossbar office.
- G. Connect SD-99320-01 J and X wiring for use with No. 1 or No. 5 crossbar AMA transverters.
- H. Wiring internal to these units is provided on respective units.
- I. Connect SD-99319-01 S wiring and SD-99320-01 H wiring for use with No. 101 ESS.

J. Connect SD-99319-01 R wiring and SD-99320-01 G wiring for use with station identification frame for PBX AIOD.

K. Connect SD-99320-01 F wiring for use with station identification frame for PBX AIOD when serving two No. 5 crossbar transverter groups.

***J99301H (AT&TCo Std)–PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With a Single Group of ANI Outpulsers***

Equipment–J99301H-( )

**List 1**–Assembly, wiring, and common equipment for one PBX AIOD translator and connector unit for a single group of ANI outpulsers.

|                                                                              | WIRE | EQUIP | SEE<br>NOTES |
|------------------------------------------------------------------------------|------|-------|--------------|
| Trnsl Ckt, SD-99319-01:<br>Fig. 1 With R &<br>S Options                      | 1    | 0     | B,C          |
| Trnsl Conn Ckt, SD-99320-01:<br>Fig. 1<br>Fig. 3 With G, H, J<br>& Y Options | 1    | 0     | B,C          |
| Trnsl Reg & Cont Unit,<br>J99301A                                            |      | 1     | A            |
| Trnsl Conn Pref & Cont<br>Unit, J99301C                                      |      | 1     | A            |
| Trnsl Conn Unit, J99301D                                                     |      | 1     | A            |

**Notes**

- Wiring internal to these units is provided on respective units.
- Connect SD-99319-01 S wiring and SD-99320-01 H wiring for use with No. 101 ESS.
- Connect SD-99319-01 R wiring and SD-99320-01 G wiring for use with station identification frame for PBX AIOD.

***J99301J (AT&TCo Std)–PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With Two Groups of ANI Outpulsers***

Equipment–J99301J-( )

**List 1**–Assembly, wiring, and common equipment for one PBX AIOD translator and connector unit for two groups of ANI outpulsers.

|                                                                              | WIRE | EQUIP | SEE<br>NOTES |
|------------------------------------------------------------------------------|------|-------|--------------|
| Trnsl Ckt, SD-99319-01:<br>Fig. 1 With R &<br>S Options                      | 1    | 0     | B,C          |
| Trnsl Conn Ckt, SD-99320-01:<br>Fig. 1<br>Fig. 3 With F, H, J<br>& Y Options | 1    | 0     | B,C          |
| Trnsl Reg & Cont Unit,<br>J99301A                                            |      | 1     | A            |
| Trnsl Conn Pref & Cont<br>Unit, J99301C                                      |      | 1     | A            |
| Trnsl Conn Unit, J99301D                                                     |      | 2     | A            |

**Notes**

- Wiring internal to these units is provided on respective units.
- Connect SD-99319-01 S wiring and SD-99320-01 H wiring for use with No. 101 ESS.
- Connect SD-99319-01 R wiring and SD-99320-01 G wiring for use with station identification frame for PBX AIOD.

***J99301K (AT&TCo Std)–PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With One Group of ANI Outpulsers and One Group of No. 1 or No. 5 Crossbar AMA Transverters or One Group of No. 5 Crossbar ANI Transverters Where Second Group Is ANI Outpulsers***

Equipment–J99301K-( )

**J99301, ISSUE 5**  
**SECTION 814-106-151, 815-305-150, 816-109-151, 819-106-150**

**List 1**—Assembly, wiring, and common equipment for one PBX AIOD translator and connector unit for use with one group of ANI outpulsers and one group of No. 1 or No. 5 crossbar AMA transverters or one group of No. 5 crossbar ANI transverters where the second group is ANI outpulsers.

|                                                               | WIRE | EQUIP | SEE<br>NOTES    |
|---------------------------------------------------------------|------|-------|-----------------|
| Trnsl Ckt, SD-99319-01:                                       |      |       |                 |
| Fig. 1 With R & S Options                                     | 1    | 0     | H,I             |
| Fig. 2 & 4 With ZF Option                                     | 1    | 0     |                 |
| Fig. 3                                                        | 1    | 0     |                 |
| Trnsl Conn Ckt,<br>SD-99320-01:                               |      |       |                 |
| Fig. 1                                                        | 1    | 0     |                 |
| Fig. 3 With G, H, J, &<br>Y Options (Ckts 10-19)              | 10   | 0     | B,H,I           |
| Fig. 3 & 4 With G, H,<br>J, T, V, W & X<br>Options (Ckts 0-9) | 10   | 0     | C,D,<br>E,F,H,I |
| Trnsl Reg & Cont Unit,<br>J99301A                             |      | 1     | A               |
| Trnsl Unit, J99301B                                           |      | 1     | A               |
| Trnsl Conn Pref & Cont<br>Unit, J99301C                       |      | 1     | A               |
| Trnsl Conn Unit, J99301D                                      |      | 2     | A               |
| Aux Trnsl Conn Unit,<br>J99301E                               |      | 1     | A               |

**Notes**

- A. Wiring internal to these units is provided on respective units.
- B. Connect SD-99320-01 Y and J wiring for use with ANI outpulsers.
- C. Connect SD-99320-01 J wiring for use with AMA transverters.
- D. Connect SD-99320-01 T wiring for use with No. 1 crossbar office.
- E. Connect SD-99320-01 V wiring for use with No. 5 crossbar office.
- F. Connect SD-99320-01 W wiring for use with No. 5 crossbar ANI transverters.

- G. Connect SD-99320-01 X wiring for use with No. 5 crossbar AMA transverters.
- H. Connect SD-99319-01 S wiring and SD-99320-01 H wiring for use with No. 101 ESS.
- I. Connect SD-99319-01 R wiring and SD-99320-01 G wiring for use with station identification frame for PBX AIOD.

**J99301L (AT&TCO Std)—PBX Automatic Identified Outward Dialing Translator and Connector Unit for Use With One or Two Groups of No. 5 Crossbar ANI Transverters**

Equipment—J99301L-( )

**List 1**—Assembly, wiring, and common equipment for one PBX AIOD translator and connector unit for two groups of No. 5 crossbar ANI transverters.

|                                                 | WIRE | EQUIP | SEE<br>NOTES |
|-------------------------------------------------|------|-------|--------------|
| Trnsl Ckt, SD-99319-01:                         |      |       |              |
| Fig. 1, 2 & 5 With R,<br>S, X & ZF Options      | 1    | 0     | B,C          |
| Fig. 3                                          | 1    | 0     |              |
| Trnsl Conn Ckt,<br>SD-99320-01:                 |      |       |              |
| Fig. 1                                          | 1    | 0     |              |
| Fig. 3 & 4 With F,<br>G, H, V, W &<br>X Options | 4    | 0     | B,C,D        |
| Trnsl Reg & Cont Unit,<br>J99301A               |      | 1     | A            |
| Trnsl Unit, J99301B                             |      | 1     | A            |
| Trnsl Conn Pref & Cont<br>Unit, J99301C         |      | 1     | A            |

**Notes**

- A. Wiring internal to these units is provided on respective units.
- B. Connect SD-99319-01 S wiring and SD-99320-01 H wiring for use with No. 101 ESS.
- C. Connect SD-99319-01 R wiring and SD-99320-01 G wiring for use with station identification frame for PBX AIOD.

- D. Connect SD-99320-01 F wiring for use with station identification frame for PBX AIOD when serving two transverter groups.

**J99301N (AT&TCo Std) - PBX AIOD Translator Connector Unit B for One or Two Groups of No. 5 Crossbar ANI Transverters - Common Systems**

Equipment - J99301N-( )

- List 1** - Assembly, wiring, and common equipment for one PBX AIOD translator connector unit for two groups of No. 5 crossbar ANI transverters with first circuit of first group equipped.

|                                                                     | WIRE | EQUIP | SEE<br>NOTES |
|---------------------------------------------------------------------|------|-------|--------------|
| Trnsl Conn Ckt, SD-99320-01:<br>Fig. 3 & 4 With V, W<br>& X Options | 1    | 1     | A            |

- List 2** - Equipment and wiring required in addition to list 1 for each additional transverter (first or second group) (maximum 3).

|                                                                     | WIRE | EQUIP |
|---------------------------------------------------------------------|------|-------|
| Trnsl Conn Ckt, SD-99320-01:<br>Fig. 3 & 4 With V, W<br>& X Options | 1    | 1     |

**Note**

- A. Terminal strips TA-, TB-, TC-, and TD-associated with the second transverter group shall be furnished at all times.

**5. GENERAL NOTES**

**Wiring**

- 5.01** Surface wiring shall be 24 gauge BW-type wire.
- 5.02** All local cable wiring shall be 24 gauge BU-type wire.

**Cabling**

- 5.03** Switchboard cable shall be 24 gauge A-type cable.

- 5.04** Switchboard cable to station identification frame or No. 101 ESS shall be 24 gauge tight-twisted pair.

**Equipment**

- 5.05** ED-99362-01 shows the relay rack arrangement for subunits J99301A through E and N assembled as major units J99301F through L.

- 5.06** For ease of maintenance it is desirable, wherever possible, to mount this equipment at a height of no less than 2 feet from the floor.

- 5.07** Units J99301G, J, and K are arranged to serve two groups of transverters, two groups of outpulsers, or one group each of transverters and outpulsers, respectively. These units shall be furnished at all times for jobs where the second group is not initially required but is anticipated at a later date. In these cases it is necessary to furnish the basic list of the J99301D and J99301E codes as required. This permits the future addition of supplementary lists to these codes depending on the number of transverters or outpulsers to be served in the second group.

- 5.08** It is recommended that whenever possible, the major units J99301F through L be equipped on a relay rack bay in the shop to facilitate wiring and handling. Otherwise the subunits J99301A through E and N should be ordered separately and wired together in the field.

**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 first applied.

| EQUIPMENT         | RATING    | DETAILS<br>LAST<br>SHOWN<br>IN<br>ISSUE | REPLACING<br>EQUIPMENT |
|-------------------|-----------|-----------------------------------------|------------------------|
| J99301A,L1        | Mfr Disc. | 4                                       | J99301A,L4             |
| J99301L,L2,<br>L3 | Mfr Disc. | 1                                       | J99301N                |
| J99301M           | Mfr Disc. | 1                                       | —                      |

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