Who ordered?

BELL SYSTEM PRACTICES Equipment Engineering Equipment Design Requirements J58829, ISSUE 7 AT&TCo Standard

SECTION AA355.020 Issue 7, December, 1964 AT&TCo Standard

See B.S.P. 809-120-150 FOR MISC EQUIPT

756A PBX

#### MANUFACTURING CODES

#### PBX SYSTEMS

#### 1. GENERAL

#### Scope

- 1.01 This specification, together with the supplementary information listed herein, covers the equipment design requirements for the manufacture of the 756A private branch exchange.
- 1.02 Summarizing specification J58830 provides the ordering codes for groups of coded equipments for the 756A PBX on a standarized basis.
- 1.03 Extensive changes were required and reasons for reissue are covered at the end of the specification.

#### Capacity

1.04 The 756A PBX is provided in two sizes, as a 40-line or a 60-line system. The capacity is as follows:

	40-Line	60-Line
Station Lines	30	50
Universal Lines*	10	10
Central Office Trunks	6	6
Plug-in Trunkst	4	4
Attendant Trunks	3	3
Junctors	6	6

- \* A universal line may be used for a station line, a dial repeating type tie trunk, a dial conference trunk, or a miscellaneous dial-type circuit.
- † Plug-in trunks may be central office trunks and/or ringdown type tie trunks.

#### Operating Ranges

1.05 Station conductor loop: maximum 1295 ohms. Trunk conductor loop: maximum 1200 ohms. Trunk plus station loop shall not exceed range of connected central office.

#### Description

1.06 The 756A PBX is a 2-digit crossbar system with a batteryless power plant and is primarily arranged for an attendant console position. However, it may also be used with a manual attendant switchboard or a 6-button key telephone set, or combinations of these attendant facilities. Also, a battery reserve may be provided on an

optional basis. This PBX is provided on a package basis in 40- and 60-line sizes per summarizing specification J58830.

1.07 The switching equipment and batteryless power plant are arranged in
modular cabinets, shown in Fig. 1, designed
to be located in general office space on the
customer premises. To achieve maximum
compactness and to facilitate handling, the
system is provided in two modules, each with
three slides, on which the equipment units
and the batteryless power plant are mounted.
The slides are supported on telescoping
tracks and may be withdrawn through the
front of the modules. The cabinets are
bolted together at the site of installation
and may be located directly against a wall



Fig. 1 - 756A Switching Cabinet

© American Telephone and Telegraph Company, 1964 Printed in U.S.A. with no sacrifice in accessibility for maintenance. The slides are interconnected by means of a plug-in crown cable and a plug-in feature cable. Where reserve battery is required, a third module is added to the system.

- 1.08 Three types of attendant positions may be provided for the 756A PBX:
  - (a) The 3C or 4B type telephone consoles shown in Fig. 2 and 3, respectively.
  - (b) The 565GBRW 6-button illuminated key telephone set.
  - (c) The 556A PBX cord switchboard.

A detailed description of the equipment is given in specification J58830.

- Numbering Plan: Station lines are numbered from 20 through 59 on the 40-line PBX, and from 20 through 79 on the 60-line size. Tie trunks or miscellaneous circuits are numbered 80 through 89, and the crossbar switch verticals assigned to these codes are the same as those for lines 20 through 29. Central office trunks are normally coded with the single digit 9. If foreign exchange lines are desired, 2-digit codes 90 through 99 may be obtained for the trunks by changing wiring straps. The attendant trunks are coded 0.
- 1.10 Three classes of service are available for station lines. Optional strapping determines the classes of service to be given.



Dial



TOUCH-TONE

Fig. 2 - 3C Type Telephone Console







· TOUCH-TONE

Fig. 3 - 4B Type Telephone Console

- (a) Restricted: The station must place outgoing calls by way of the attendant. If the extension dials the central office code 9, the call is intercepted by the attendant.
- (b) <u>Toll Allowed</u>: The station may dial central office calls including toll calls.
- (c) Toll Denied: The station may dial central office calls but will be directed to busy tone if an attempt is made to dial a toll call or the toll operator. This option may be used only in areas where the central office is arranged for toll diversion.

#### Basic Features of the 756A PBX

- 1.11 Tie Trunk Service: The tie trunk circuits listed in J58830, Table B, have been adapted for use with the 756A PBX. Tie trunk units must be ordered separately, and, when provided, those involving dial selection or termination should be mounted within the 756A PBX in space available for miscellaneous relay units. (Spaces for seventeen 2- by 23-inch mounting plates are available.) The three classes of service available to station lines are also available to tie trunks. The manual-type tie trunk circuits listed in J58830, Table B, should be mounted externally to the 756A PBX, but the battery supply may be obtained from the 756A power plant, as shown on the tie trunk drawings. Plug-in tie trunks (J58829T) require assignment of one central office trunk terminal per tie trunk, thus decreasing the number of central office trunks which may be used. Dial repeating tie trunks are assigned to universal line circuits that are arranged as trunks and numbered 80 through 89. These universal trunk circuits are also used for the conference services. The conference units each require the assignment of either five (attendant controlled conference) or six (station controlled conference) universal lines and thus reduce from ten to four or five the number of dial repeating tie trunks which may be used.
- 1.12 Camp-On and Indication of Camp-On:
   On an incoming trunk call, there are
  visual and audible signals at the PBX attendant console. The call is picked up by
  depressing the corresponding trunk key. The
  attendant then operates the hold key and
  dials the requested station line number or
  operates the proper direct station selection
  key and the trunk is automatically connected.
  If the station line is busy, the trunk camps
  on the line and indicates by a momentary
  signal to the busy party that another central office trunk is waiting. This signal
  is transmitted to the busy line after the
  calling party has camped on and the attendant has released. The camped on trunk
  will cut through as soon as the line is
  idle. Subsequent calls from other trunks

- to the busy line will not camp on until the first camped on trunk has cut through.
- 1.13 One- or 2-way, consecutive or nonconsecutive line hunting with a tens group. This is obtained by strapping punchings on the line unit terminal strips.
- 1.14 <u>Vacant Terminal Intercept</u>: This is obtained by removing a strap on line unit terminal strip for each vacant line.
- 1.15 Emergency Central Office Connection: In case of power failure, automatic operation of a transfer relay bridges three predetermined stations (30, 31, and 32) directly across three of the central office trunks (0, 1, and 2). A start key is required at each of these stations to enable the caller to obtain dial tone before dialing the central office. A central office connection is established by lifting the receiver and operating the start key momentarily.
- 1.16 Flexible night connections may be established by attendant action between any station and any central office trunk. Six to ten connections may be made, depending on the number of central office trunks provided.
- 1.17 Machine ringing is used on calls completed by way of the attendant, as well as on station-to-station calls.
- 1.18 Line splitting allows the attendant to talk to a station while a trunk is being held.
- 1.19 Alarm lamps sectionalize trouble indications.
- 1.20 Message registers, arranged to be cross-connected as required, record various traffic data or troubles.

#### Optional Features of the 756A PBX

- 1.21 Conference Services: There are three conference units available which provide the variations in conference service described below. Only one of these types of conference service can be used with a 756A PBX, since the conference units all use the universal lines arranged as trunk circuits.
  - (a) "Meet Me" Conference: An optional conference unit (J588298) may be provided which permits conference connections between a maximum of five station lines, or between three station lines and two trunks. This service is provided on a "meet me" basis. When a conference is desired, the conferees are called individually and requested to dial the conference code number. In the case of trunks, conferees must be on trunks incoming to the attendant and the attendant must dial a conference code specifically

assigned for trunk connection to the conference. The meet me conference unit requires the assignment of five universal line circuits arranged as trunks. This decreases from ten to five the number of universal line circuits available for station use, dial repeating tie trunks, or other special services.

Station Controlled Conference: A plug-in optional conference unit (J58829AD) may be provided which permits any station, without assistance from the PBX attendant, to set up a conference connection with any five other stations. Upon request from the conference controller, the PBX attendant may connect a central office trunk to the conference in place of the fifth conferee station. The station desiring a conference dials the conference code number, receives second dial tone, and dials the code of the first conferee station. When the station answers, it is connected via a conference amplifier with the controlling station. The controlling station may, by a switchhook flash, again receive dial tone and call another station. This process is repeated until all desired conferees have been connected. If a central office trunk connection is desired, the controlling station obtains dial tone in the same manner, dials zero, and requests the attendant to make the trunk call and to connect the trunk to the conference by a dial back procedure.

The station controlled conference unit requires the assignment of six universal line circuits arranged as trunks. This decreases from ten to four the number of universal line circuits available for station use, dial repeating tie trunks, or other special services.

Attendant Controlled Conference: A plug-in optional conference unit (J58829AE) may be provided which permits the PBX attendant to set up a conference between any five stations or between any four stations and a central office trunk. The conference circuit may be seized and controlled by the attendant only. It is activated by a key on the attendant console. A second key on the attendant console provides the control functions needed for calling in stations and for adding a central office trunk. After setting up a conference, the attendant may release herself from the conference. Any conferee station may recall the attendant by a switchhook flash. Two optional features are available for this conference unit. One of these provides for lockout of the attendant from the conference after she has released from it. Any conferee can recall the attendant from the lockout condition by a switchhook flash.

The other optional feature provides for attendant release of a conference in

progress by depressing the control key for approximately 5 seconds. The attendant controlled conference unit requires the assignment of five universal line circuits arranged as trunks. This decreases from ten to five the number of universal line circuits available for station use, dial repeating tie trunks, or other special services.

The assignment of trunk terminals to the universal line circuits used for conference units is per customer specification. If no trunk terminals are specified, the following trunk groupings shall be used:

Conference Service	Trunk Terminals
"Meet Me" Conference	80 through 84 or 85 through 89
Station Controlled Attendant Controlled	84 through 89 85 through 89

- 1.22 Station Dial Transfer With Add-On Conference: A plug-in optional feature unit (J58829AG) may be provided which permits any station, without attendant assistance, to transfer a trunk call to any other station. The transfer procedure, which is controlled by switchhook flashes, proceeds as follows:
  - (a) A switchhook flash places a hold on the incoming trunk and returns dial tone to the controlling station.
  - (b) Dialing a station number connects the two stations for private consultation.
  - (c) A switchhook flash connects the trunk to the two stations for a 3-way conference.
  - (d) Disconnect (hangup) by either station leaves the trunk connected to the other station.

Transfer back to the attendant is accomplished by flashing the switchhook to obtain dial tone and then dialing zero.

Remote Trunk Answering From Stations:
An optional plug-in auxiliary position unit (J58829AH) may be provided which permits any PBX station to answer an incoming call on any central office trunk.
This feature is activated by removing the headset or handset cords from the attendant consoles and/or operating the remote answer key at the 6-button key telephone set when provided. An incoming call to the PBX activates an alerting system (audible or visual or both). Any person who is aware of the alerting signal may go to the nearest PBX station set, lift the handset, obtain dial tone, and dial the specified trunk answering code. This action connects the PBX station to whichever trunk is in

the ringing condition and causes the alerting system to be cut off. The answering station may complete the trunk call to another PBX station, but further transfer cannot be made unless the station dial transfer feature is also provided.

- 1.24 Busy Verification: An optional plugin unit (J58829AJ) may be provided
  which permits establishing a talking connection, auxiliary to attendant trunk 2,
  between a PBX attendant and any idle, busy,
  or busy and camped on station. The attendant first operates the pick up key for
  attendant trunk 2 and then operates the
  associated dial back key. The attendant
  receives dial tone and dials the number of
  the station to be verified. Because of the
  trunk class indication and disregard of
  camp-on stop signals, the attendant is connected to the station regardless of an idle,
  busy, or busy and camped on condition. An
  optional addition to the busy verification
  unit provides a warning tone to indicate
  that the attendant is on the line.
- 1.25 Message-Waiting Service: Available on an optional basis, this provides a means of indicating that a message awaits someone at a predesignated point, such as a reception desk, a hotel message center, or with a secretary.
- 1.26 Central Office Trunks may be arranged for jack appearances at a cord switchboard on an optional basis.
- 1.27 Direct Station Selection (DSS) service is available on an optional basis for either the attendant or individual stations or both. For the attendant, a 4B console and a 10-volt ac supply are required. For each station arranged for DSS, an auxiliary register relay unit, common to the PEX, and one auxiliary station relay unit per four station lines having this feature are required. Each station so equipped may select, by key button operation, any one of ten other stations. The necessary key button telephone sets, boxes, or other facilities shall be ordered or provided separately by the customer.
- 1.28 Single-Digit Dialing service for hotel or motel use is available on an optional basis. This feature permits a guest to dial a single digit to obtain room service, valet service, etc. For this purpose, diodes for addition to each register must be ordered separately or provided locally by the telephone company.
- 1.29 TOUCH-TONE Service: Two methods of providing TOUCH-TONE service are available:
  - (a) Equipment mounted externally to the PBX to be used when the PBX is equipped with off-premise extensions. An externally mounted TOUCH-TONE calling translation unit (J58829AC, List 1) and a supplementary

- cable (J58829AC, List 2) are required, in addition to the TOUCH-TONE calling receiver mounting shelf (J99289A) and two TOUCH-TONE calling receiver units (J99289B). The units are mounted in a separate cabinet furnished by the telephone company.
- (b) Equipment mounted on slide No. 1 to be used when the PBX is not equipped with off-premise extensions. Two TOUCH-TONE calling receiver units (J58844A) and a supplementary cable (J58829A, List 26) are required.
- 1.30 Cord Switchboard Auxiliary Trunk: An optional unit (J58829AF) may be provided to permit operation with a 556A cord switchboard.

#### Equipment Features

- 1.31 The 756A PBX equipment is arranged in twin cabinets known as module 1 (left) and module 2 (right), shown in Fig. 4. Each module contains three slides consisting of vertical racks supported by telescoping tracks that permit withdrawal through the front of the module. Each slide has a capacity for twenty-six 2- by 23-inch mounting plates. By means of an interlocking arrangement, only one slide in a module may be withdrawn at a time, thus eliminating the need for anchoring the cabinet to the floor to prevent tipping Provisions are also made to lock the slides in an open or closed position. The twin modules are bolted together at the installation site to form a cabinet assembly approximately 5-feet 8-inches high, 4-feet 6-inches wide, and 2-feet 6-inches deep. Removable clip-on type panels are used to enclose the front and ends; slide-off covers, to enclose cabinet tops. The exterior has a two-tone textured vinyl finish of light olive and dark covert gray.
- 1.32 A soundproofing kit is provided on an optional basis for the front and end panels, to be installed locally (Telco or distributing house) on a job basis as required. This kit may be obtained by ordering ED-99300-70, Group 6.
- 1.33 The 756A PBX equipment is arranged as follows:
  - (a) Module 1 contains apparatus basic to both the 40- and 60-line size PBX. The No. 1 slide contains the power plant, fuses, alarm lamps, and traffic and trouble registers. When required, the TOUCH-TONE receiver is mounted on the No. 1 slide when no off-premise extensions are served by the PBX. The No. 2 slide contains the line relays for lines 20 through 39 and the crossbar switches for lines 20 through 39 or tie trunks 80 through 89. Space is available on No. 2 slide for mounting eleven 2- by 23-inch mounting plates, which may be

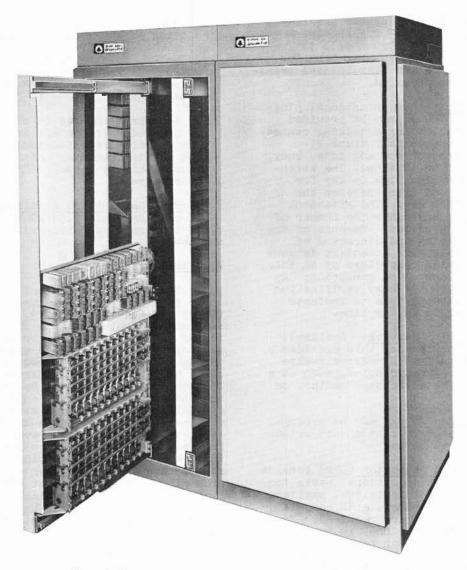


Fig. 4 - 756 PBX Switching Cabinets with Slide No. 2 Open

used for tie trunk units, conference units, or other miscellaneous circuit units. The No. 3 slide contains crossbar switches and line relays for lines 40 through 59, four junctor circuits, a crossbar switch for junctors and a dial pulse register. Space for mounting six 2- by 23-inch mounting plates is also available on the No. 3 slide. This space may be used for tie trunk units and loudspeaker paging trunk units, as required.

(b) Module 2 contains the No. 4, 5, and 6 slides and is provided in two sizes, one for 40- and one for 60-station lines. The No. 4 slide contains the busy tone trunk, two junctor circuits, and two crossbar switches for trunks. For the 60-line size, the line relays and crossbar switches for lines 60 through 79 are also mounted on the No. 4 slide. The

No. 5 slide contains three attendant trunks, a position circuit, and six central office trunk circuits. Space is reserved for mounting four additional central office trunks J58829M or tie trunks J58829T. These are connected on a plug-in basis in the field. The No. 6 slide contains the marker circuit and two dial pulse register units.

(c) Some of the optional features are mounted externally to the PBX. A third modular cabinet may be desired for mounting external equipment and can be obtained by ordering the appropriate groups shown on ED-99300-70.

#### Cabling and Wiring

1.34 The wiring between apparatus on each relay unit is on a surface wiring basis. A local cable is connected directly

to terminals of the relays and other apparatus to interconnect units on the same slide. In the same form are included the leads running off the slide and through a flexible arm terminating in a set of connectors in the roof of the modules. Leads between slides are provided in a plug-in crown cable. Leads to the house box are provided in two plug-in cables which are provided in 30-foot lengths, stub ended. These house and feeder cables contain station line pairs, trunk pairs, leads to the attendant position, and spare pairs. When a manual switchboard is used as an attendant position, a supplementary plug-in cable is also required for connection to the manual switchboard by way of the house box. Additional supplementary plug-in house cables are required for message-waiting service, central office trunk appearances at the cord switchboard, and direct station selection for both attendants and stations when these features are provided.

- 1.35 A feature cable is provided with connectors mounted in the crown to permit various features to be plugged into the systems on an optional basis. A local cable in each slide is used to interconnect the associated circuits in the same slide and is terminated in crown connectors. A plug-ended interslide cable is provided to interconnect the associated circuits in different slides. Strapped plug assemblies are used when features are not desired. Supplementary plug-in connector cables are required for remote trunk answering and for station dial transfer when these externally-mounted optional features are provided.
- 1.36 As an easy means of wiring for various options, such as classes of service, hunting, and intercept, terminal strips are provided on the units so that the desired feature may be obtained by strapping.

#### Power Equipment

1.37 A batteryless power plant per J86464L is provided as an integral part of the PBX. This is a new and smaller power plant

than the J86464A power plant formerly furnished with the 756A PBX and includes a rectifier, capacitor panel, and ac-dc ringing panel. In addition to its smaller size, the new power plant has been designed to supply +48 volts dc and 10 volts ac, the voltages required by the DSS feature. existing 756A PBXs equipped with the J86464A power plant, the +48 volt dc and the 10 volt ac supplies required for DSS may be provided by ordering an applique unit, J86464K. Through the use of large capacitors, the power plant is capable of holding PBX circuits operated during momentary failures of the commercial power. For locations where PBX service must be maintained during commercial power failures, a third console module with batteries per J58829U may be provided. However, since the J86464L power plant is not arranged for use with batteries, the 756APBX must be ordered equipped with the J86464A power plant when battery reserve operation is required. In PBXs having battery reserve and arranged for the DSS feature, the J86464K applique unit must be provided. It should be noted, however, that in the event of a power failure the DSS feature becomes inoperative.

#### Floor Space Requirements

1.34 The design and decor of the 756A PBX permit it to be located with the office furniture and business machines. The modular cabinets may be located with their backs to a wall. The two modular cabinets occupy a space 4-feet 6-inches wide by 2-feet 6-inches deep. Maintenance space of approximately 2-feet 6-inches deep by 9-feet 6-inches wide is required in front of the cabinets as indicated on the floor plan data sheet; however, this may be an office aisle. Additional space of 2-feet 3-inches wide by 2-feet 6-inches deep will be occupied by the battery module when it is provided with a corresponding increase in the front maintenance space required.

#### 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 Code	Rating of Unit	<u>Title</u>	Equipment Drawing	Circuit Drawing
J58829A	AT&TCo Std	756A PBX - Equipment Arranged for Flexible Night Connections, Attendant Inward Key Pulsing, and Optional Features, Including Plugin House and Feeder Cables, and Plug-in Interslide Feature Cable	j5882 <b>9</b> A-( )	SD-65746-01 SD-66920-01
J58829B*	AT&TCo Std	756A PBX - No. 1 Slide Equipment	j588 <b>2</b> 9B-( )	SD-65746-01 SD-66796-01 SD-66920-01 SD-81719-01

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Equipment Code	Rating of Unit	<u> Title</u>	Equipment Drawing	Circuit Drawing
J58829C*	AT&TCo Std	756A PBX - No. 2 Slide Equipment	J58829C-( )	SD-65741-01 SD-65746-01 SD-66796-01 SD-66920-01
J58829D*	AT&TCo Std	756A PBX - No. 3 Slide Equipment	J58829D-( )	SD-65741-01 SD-65746-01 SD-66796-01
J58829E*	AT&TCo Std	756A PBX - No. 4 Slide Equipment	J58829E-( )	SD-65741-01 SD-65746-01 SD-66796-01 SD-66920-01
J58829F*	AT&TCo Std	756A PBX - No. 5 Slide Equipment	J58829F-( )	SD-66796-01 SD-66920-01
J58829 <b>G*</b>	AT&TCo Std	756A PBX - No. 6 Slide Equipment	J58829G-( )	SD-66796-01 SD-66920-01
J58829н <b>∗</b>	AT&TCo Std	756A PBX - Line and Marker Units	J58829H-( )	SD-65741-01 SD-65742-01 SD-65754-01 SD-66796-01
J58829J*	AT&TCo Std	756A PBX - Dial Pulse Register Unit	J58829J-( )	SD-65742-01
j58829L*	AT&TCo Std	756A PBX - Position Circuit, Trunk Patch, and Transfer Unit Arranged for Flexible Night Connections	J58829L-( )	SD-65746-01 SD-65751-01 SD-65757-01 SD-66796-01
J58829M†	AT&TCo Std	756A PBX - 2-Way Central Office Trunk Unit Arranged for Flexible Night Connections	J58829M-( )	SD-65652-01 SD-65746-01
J58829N	AT&TCo Std	756A PBX - Attendant Trunk Unit	J58829N-()	SD-65753-01
J58829P*	AT&TCo Std	756A PBX - Junctor Unit	J58829P-( )	SD-65750-01
J58829R*	AT&TCo Std	756A PBX - Fuse Panel, Alarm, and Register Unit	J58829R-( )	SD-65744-01 SD-66796-01
J58829S	AT&TCo Std	756A PBX - Dial Conference Unit	j58829s-( )	SD-65745-01
Ј58829Т	AT&TCo Std	Tie Trunk Unit - Outgoing: Manual and Dial Selected with 2-Second Ringing Signal; Incoming: Ringdown	J58829T-( )	SD-65756-01
J58829U	AT&TCo Std	756A PBX - Battery Module	J58829U-( )	SD-81326-01
J58829W	AT&TCo Std	756A PBX - Loudspeaker Paging Trunk Unit	J58829W-( )	SD-65747-01
J58829AA	AT&TCo Std	756A PBX - Direct Station Selection - Auxiliary Register Relay Unit	J58829AA-( )	SD-65746-01 SD-65942-01
J58829AB	AT&TCo Std	Direct Station Selection Auxiliary Station Relay Unit	J58829AB-( )	SD-65942-01
J58829AC	AT&TCo Std	TOUCH-TONE Calling Translation Unit	J58829AC-( )	SD-65742-01 SD-65746-01
J58829AD	AT&TCo Std	756A PBX - Dial Conference Trunk Unit - Station Controlled	J58829AD-( )	SD-66902-01
J58829AE	AT&TCo Std	756A PBX - Dial Conference Trunk Unit - Attendant Controlled	J58829AE-( )	SD-66908-01

Equipment Code	Rating <u>of Unit</u>	<u>Title</u>	Equipment Drawing	Circuit Drawing
j58829Af	AT&TCo Std	756A PBX - Cord Switchboard Auxiliary Central Office Trunk Relay Unit	J58829AF-( )	SD-65046-01 SD-65752-01
J58829AG	AT&TCo Std	756A PBX - Station Dial Transfer Unit	J58829AG-( )	SD-66909-01 SD-66920-01 SD-66921-01
J58829AH	AT&TCo Std	756A PBX - Auxiliary Position Unit for Remote Trunk Answering and Inward Completion by Any Station	J58829AH-( )	SD-66910-01 SD-66920-01
J58829AJ	AT&TCo Std	756A PBX - Busy Verification Auxiliary Trunk Unit	j58829Aj-( )	SD-66911-01
j58829AK*	AT&TCo Std	756A PBX - Indication of Camp- On Unit	j58829AK-( )	SD-65752-01 SD-65757-01

<sup>\*</sup> These units are furnished as part of the basic PBX.

<sup>†</sup> Six units J58829M, List 3 furnished as part of the basic PBX.

Circuit Schematic In	dex	J99289 (AA388
Circuit	J58829	Receiv
Drawing	Equipment Code	981-660-100 -
SD-65741-01		Floor Plan Da Current Drain
SD-65742-01	C,D,E,H H,J,AC	current brain
SD-65744-01	R	
SD-65745-01	S	3. DRAWINGS
SD-65746-01	A,B,C,D,E,L,M,AA,AC,AF	
SD-65747-01	W	For additiona
SD-65750-C1	P	this specific
SD-65751-01	L	Subdivisions
SD-65752-01	M, AF, AK	
SD-65753-01	N	ED-65880-()
SD-65754-01	H	ED-65895-( )
SD-65756-01	T	ED-03093-( )
SD-65757-01	L, AK	SD-65910-01 -
SD-65942-01	AA, AB	ED-66715-( )
SD-66793-01	AD D C D E E C H I B	ED-95173-70'-
SD-66796-01 SD-66902-01	B,C,D,E,F,G,H,L,R AD	
SD-66908-01	AD AE	ED-99300-( )
SD-66909-01	AG	
SD-66910-01	AH	4. EQUIPMENT
SD-66911-01	AJ	10 110011111111
SD-66920-01	A,B,C,E,F,G,AG,AH	21010 000
SD-66921 <b>-</b> 01	AG	н919 <b>-</b> 209
SD-81326-01	Ū	
SD-81719-01	В	<u> Group 1</u> - Bou
		200

#### 2. SUPPLEMENTARY INFORMATION

Equipments

AA128.006 - List of General Equipment Requirements Sections J58830 (AA355.023) - Summarizing Specification tion
J58844 (AA355.032) - TOUCH-TONE Calling
Receiver - PBX Systems
J86464 (AA367.117) - Power Supply
J99219 (AA381.315) - Steel Equipment
Cabinets for Housing Miscellaneous

8.153) - TOUCH-TONE Callingver Signalling - Common Systems - 756A PBX - General Description ata - Section 6.2, Sheet 27 n Data - SD-65910-02

al drawings forming a part of cation, see listings under of Equipment and Detailed Index.

- 756A PBX Cabling - 756A PBX Equipment Diagram and Index - 756A PBX Keysheet - Relay Time Delay Plug-In Unit - Common System Fuse Panel Assembly - Cabinet Assembly

und book containing schematic, cabling, and equipment diagrams for basic equipment only. Circuit and equipment information for optional units should be ordered separately.

#### <u>Note</u>

A. One copy of this book is included with every 756A PBX. Additional copies may be ordered by the above code. Envelope holder assemblies for storing the book

inside the front or end panels of the PBX cabinets may be obtained by ordering ED-99300-70, Group 8 or Group 9. Group 8 accommodates a 1-1/2 inch thick folder inside a front panel, and Group 9 accommodates a 2-inch thick folder inside an end panel.

J58829A (AT&TCo Std) - 756A PBX - Equipment
Arranged for Flexible Night Connections, Attendant Inward Key Pulsing and Optional Features, Including Plug-In House and Feeder Cables, and Plug-In Interslide Feature Cable

Equipment - J58829A-( )

Cabling - ED-65880-()

- List 4 House and feeder cable, 30-feet long, for module 1 per SD-65746-01, CAD 1A.
- List 7 Supplementary house and feeder cable per SD-65746-01, CAD 13, 30-feet long from PBX to house box, required when a manual attendant switchboard is provided.
- <u>List 1C</u> House and feeder cable, 30-feet long, for use with module 2, wired per SD-65746-01, CAD 1A.
- List 17 (A&M Only) Wiring for message waiting service for PBXs having horizontally mounted crown connectors, consisting of one 75-pair supplementary house and feeder cable per SD-65746-01, CAD 20, 30-feet long from console to messagewaiting power supply, interrupter, and network unit and one KS-14532, List 1 power supply cord.
- List 26 (A&M Only) Module and slide interconnecting supplementary crown local cable per PBXs having horizontally mounted crown connectors per SD-65746-01, CAD 28, to be used when TOUCH-TONE calling by station is required.
- <u>List 29</u> (A&M Only) Equipment required for field addition of TOUCH-TONE calling.

TOUCH-TONE Receiver Plug,
SD-65746-01, CAD 29 2
Slide No. 1, Connectors,
SD-65746-01, CAD 28 2

Slide No. 6, Connectors,	
SD-65746-01, CAD 28	2
Slide No. 1 and 6, Connector Mounting	
Brackets	2
Dial Pulse Register Relay,	
SD-65742-01, "ZY" Option	2

Equip

- List 30 Module and slide interconnecting crown cable per SD-65746-01, CAD 1 and 2, for cabinets with hinged covers.
- List 31 Module and slide interconnecting feature cable per SD-66920-01, CAD 1, for optional plug-in features.
- List 32 Framework, assembly, wiring, and equipment for one basic module 1 for a 40- or 60-line 756A PBX for batteryless power plant operation and arranged for message-waiting service, direct station selection, TOUCH-TONE calling, busy verification, dial conference (station controlled or attendant controlled), remote trunk answering, station dial transfer.

						Equi	p.
No. No.	1 2 3	Slide, Slide, Slide,	J58829B-( J58829C-( J58829D-(	;	L7 L4 L3	1 1 1	

List 33 - Framework, assembly, wiring, and equipment for one basic module 1 for a 40- or 60-line 756A PBX, for battery reserve operation and arranged for message-waiting service, direct station selection, TOUCH-TONE calling, busy verification, dial conference (station controlled or attendant controlled), remote trunk answering, station dial transfer.

						<u>Equip</u>
No. No.	1 2 3	Slide, Slide, Slide,	J58829B-( J58829C-( J58829D-(	}, ,	L8 L4 L3	1 1 1

List 34 - Framework, assembly, wiring, and equipment for one module 2 for a 40-line 756A PBX arranged for flexible night connections, message-waiting service, central office trunk appearances at the cord switchboard, direct station selection, TOUCH-TONE calling, single-digit dialing, busy veri-

Eguip

fication, dial conference (station controlled or attendant controlled), remote trunk answering, and station dial transfer.

					Equi
No. 4 No. 5 No. 6	Slide, Slide, Slide,	J58829E-( J58829F-( J58829G-(	}, },	L5 L5 L7	1 1 1

List 35 - Framework, assembly, wiring and equipment for one module 2 for a 60-line 756A PBX, arranged for flexible night connections, message-waiting service, central office trunk appearances at the cord switchboard, direct station selection, TOUCH-TONE calling, single-digit dialing, busy verification, dial conference (station controlled or attendant controlled), remote trunk answering, and station dial transfer.

No. 4 Slide, J58829E-( ), L6 No. 5 Slide, J58829F-( ), L5 No. 6 Slide, J58829G-( ), L8	
No. 6 Slide, J58829G-( ). L8	1 1 1

- List 36 Wiring for message-waiting service for PBXs having all vertically mounted crown connectors, consisting of one 75-pair supplementary house and feeder cable per SD-65746-01, CAD 20, 30-feet long from console to message-waiting power supply, interrupter, and network unit and one KS-14532, List 1 power supply cord.
- List 37 Module and slide interconnecting supplementary crown local cable for PBXs having all vertically mounted crown connectors per SD-65746-01, CAD 28, to be used when TOUCH-TONE calling by station is required.

#### <u>Notes</u>

A. The PBX is arranged for the following features: message-waiting service, central office trunk appearances at the cord switchboard, direct station selection, single-digit dialing, TOUCH-TONE calling, busy verification, dial conference (station controlled or attendant controlled), remote trunk answering, and station dial transfer. For equipment and wiring arrangement of the basic PBX, see following notes.

- B. A complete 40-line PBX consists of one each of lists 4, 10, 24, 31, 34, and 32 or 33. A complete 60-line PBX consists of lists 4, 10, 24, 31, 35, and 32 or 33. The attendant cordless position apparatus or manual switchboard, together with the handset or head telephone set, is ordered separately. (See J58830.)
- C. All lines are wired for toll-allowed class of service. If restricted or toll-denied class of service is required, the installer should change the strapping on the line unit terminal strips.
- D. The basic 40- or 60-line PBX is equipped with six central office trunk units (circuits 0, 1, 2, 5, 6, and 7). A maximum of four additional plug-in central office trunk units per J58829M, List 4 or tie trunks J58829T, List 1 may be provided. When these tie trunks are added, the installer should change the straps on the trunk-hunting terminal strip on No. 4 slide so that the tie trunks form a separate hunting group. Also, the dial pulse register must be arranged for 1- or 2-digit selection of trunks in the "9" tensgroup, the 2-digit arrangement being required when both central office and tie trunks are used. Central office trunk units not used should be made busy by strapping the unit terminal strip.
- E. The central office trunk unit terminal strips are strapped for "Z", "Y", and "S" traffic options. These strips are also arranged for central office nominal talking battery voltage of 40 volts or more. Other circuit options may be obtained by changing straps on the trunk unit terminal strip.
- F. The attendant trunk units are wired for "W" and "Y" options to provide for operation with a cordless attendant position. For unattended operation, the installer should replace "W" option straps with "X" option straps on the unit terminal strip.
- G. The dial pulse register units on the 40-line PBX are wired for "Z" and "W" options to provide intercept of dial codes 6, 7, and 8. If any trunks or miscellaneous circuits are connected to the tie trunk adapter, the corresponding "W" option strappings on the dial pulse register terminal strips should be removed. Option "Y" straps should be added when station lines or dial repeating tie trunks with restricted class of service are to be denied access to 2-digit codes begin-

ning with 8, or one- or 2-digit codes beginning with 9. Option "X" straps should be provided when retricted lines or dial repeating tie trunks are to be denied access to CO trunks. Option "V" straps are provided on the dial pulse register terminal strip to permit one-digit codes for code 9 central office trunks. However, by changing straps, two-digit codes (9C to 99) may be used. On 6C-line PBXs, option "Z" is omitted.

- H. When TOUCH-TONE receivers are furnished, the installer should remove "ZW" wiring. The alarm circuit on the fuse panel, alarm, and register unit on No. 1 slide may be wired for "Z" option, which provides a central office marginal alarm, or "Y" option when a central office battery reversal alarm is required. The installer should add the "Z" strap wire or the "Y" strap wire on the unit terminal strip, as required.
- The following tools and spare apparatus may be required and should be ordered by the customer on a job basis.

426A Diodes
70A Fuses, 1-1/3 amperes
Al Switchboard Lamps
2Y Switchboard Lamps
WIAP Cords
KS-16492, List 1 Tool (wire unwrapping)
635A Tool (wire wrapping)
ABC Fuses, 10 amperes
ABC Fuses, 15 amperes
70B Fuses, 2 amperes
70G Fuses, 1/2 ampere

#### J58829B (AT&TCo Std) - 756A PBX - No. 1 Slide Equipment

Equipment - J58829B-()
Cabling - ED-65880-()

List 7 - Framework, assembly, wiring, and equipment for one 756A PBX No. 1 slide arranged for batteryless power plant operation and TOUCHTONE calling.

	Wire	Equip	See Note
Power Plant, J86464L-( ),		1	
Fuse Panel, Alarm, and Register Unit, J58829R-( ) $_{\rm T.4}$	,	1	
Marker Alarm Unit, J58829H-(), L13		1	
Connecting Block, SD-66796-01, Fig. 8 TOUCH-TONE Calling, Sup-	1	1	
plementary Cable, SD-65746-01, CAD 28 Feature Cabling.	1	1	В
SD-66920-01, CAD 1 404C Tone Generator.	1	1	
SD-81719-01, CAD 1	1	1	

List 8 - Framework, assembly, wiring, and equipment for one 756A PBX No. 1 slide arranged for battery reserve operation and TOUCH-TONE calling.

	<u>Wire</u>	Equip	See <u>Note</u>
Power Plant, J86464A-(), L2 Fuse Panel, Alarm, and Re-		1	
gister Unit, J58829R-( ), L4		1	А
Marker Alarm Unit, J58829H-(), L13.		1	
Connecting Block, SD-66796-01, Fig. 8	1	1	
TOUCH-TONE Calling, SD-65746-01, CAD 28	1	1	В
Feature Cabling, SD-66920-01, CAD 1 404C Tone Generator,	1	1	
SD-81719-01, CAD 1	l	1	

#### Notes

- A. Provide the necessary options in the fuse panel, alarm, and register unit for battery reserve operation.
- B. Two TOUCH-TONE calling receiver units J58844A are required in addition to the supplementary cable.

#### J58829C (AT&TCo Std) - 756A PBX - No. 2 Slide Equipment

Equipment - **J**58829C-( )

Cabling - ED-6588C-( )

<u>List 4</u> - Framework, assembly, wiring, and equipment for one 756A PBX No. 2 slide.

	<u>Wire</u>	Equip
Tie Trunk Adapter and Line Unit, J58829H-( ), L16 Line Switches, SD-65741-C1,		1
Fig. 14	1	1
Connecting Blocks SD-66796-01, Fig. 7 and 8 Feature Cabling SD-66920-C1,	1	1
CAD 1 and 3	1	1
<u> J58829D (AT&amp;TCo Std) - 756A PB</u>	< - No	. 3

### Slide Equipment

Equipment - J58829D-( )

Cabling - ED-65880-()

<u>List 3</u> - Framework, assembly, wiring, and equipment for one 756A PBX No. 3 slide.

	Wire Equip	List 5 - Framework, assembl	y, wiring, and
756A PBX, Line and Marker Units J58829H-( ): Station Line Unit, LlO Select Magnet Control Unit, Lll	1	equipment for one slide.	See Wire Equip Note
Junctor Unit, J58829P-(), L1 Trunk and Line Switches, SD-65741-01, Fig. 13 Connecting Block, SD-66796-01, Fig. 8	2 1 1 1 1	Position Circuit Transfer and Trunk Patch Units, J58829L-(), L4 & L6 Central Office Trunk Unit, J58829M-(), L3 Connecting Blocks,	1 6 A
J58829E (AT&TCo Std) - 756A PBX Slide Equipment  Equipment - J58829E-()		SD-66796-01, Fig. 8 Attendant Trunk Unit, J58829N-(), L1 Indication Camp-On Unit, J58829AK-(), L1	1 1 3 1
List 5 - Framework, assembly, wi equipment for one No. 4 a 40-line 756A PBX.		Feature Cabling, SD-66920-01, CAD 1, 4 & 5	1 1
Trunk Switches, SD-65741-01, Fig. 12 Junctor Unit, J58829P-(), L1 Busy Tone Trunk and Select	1 1	Note  A. Connect central office of for automatic transfer	
Magnet Control Unit, J58829H-(), L9 Trunk Connector Unit, J58829H-(), L8 Connecting Block, SD-66796-01, Fig. 8	1 1 1 1	J58829G (AT&TCo Std) - 756A Slide Equipment	PBX - No. 6
Feature Cabling, SD-66920-01, CAD 1, 2, & 5	1 1	Equipment - J58829G-( )  Cabling - ED-65880-( )	
List 6 - Framework, assembly, wi equipment for one No. 4 for a 60-line 756A PBX.	slide	List 7 - Framework, assemble equipment for No. 40-line 756A PBX.	
	Wire Equip		
Trunk and Line Switches SD-65741-01, Fig. 12,			<u>Wire</u> <u>Equip</u>
"V" Option Junctor Unit, J58829P-() Ll Busy Tone Trunk and Select Magnet Control Unit, J58829H-(), L14	1 1 1	756A PBX, Line and Marker Un J58829H-(): Tens Selector, and Prefere Unit, Ll Units Selector, Line and Trunk Hunting, Junctor	
Trunk Connector Unit, J58829H-(), L8 Station Line Unit, J58829H-(), L10	1	Hunting, Junctor Register and Sequence Control, L3 Route Control, Class of Service, and Down Check	e 1
Connecting Block, SD-66796-01, Fig. 8 Feature Cabling, SD-66920-01, CAD 1, 2, & 5	1 1 1 1	Unit, L4 Link Test, Select Magnet, Miscellaneous Control Unit, L5 Advance, Time-Out, and	and 1
J58829F (AT&TCo Std) - 756A PBX Slide Equipment	- No. 5	Release Unit, Lo Register Control Unit, Ll' Dial Pulse Register, J58829J-(), L3	7 1 2
Equipment - J58829F-( )		Connecting Block, SD-66796-C1, Fig. 9	1 1
Cabling - ED-65880-( )		Feature Cabling, SD-66920-01, CAD 1	1 1

List 8 - Framework, assembly, wiring, and equipment for one No. 6 slide for a 60-line 756A PBX [identical to List 5, except provide J58829H-(), List 2 in place of J58829H-(), List 1]. (See Note A.)

#### Note

- A. Remove "Z" wiring on the J58829J-(), List 2 dial pulse register unit for 60-line PBX.
- <u>J58829H (AT&TCo Std) 756A PBX Line and</u>
  <u>Marker Units</u>

Equipment - J58829H-( )

- <u>List 1</u> Assembly, wiring, and equipment for marker preference and tens selection unit for a 40-line PBX per SD-65741-C1, Fig. 4.
- <u>List 2</u> Assembly, wiring, and equipment for marker preference and tens selection unit for a 6C-line PBX per SD-65741-C1, Fig. 4, with "V" option.
- List 3 Assembly, wiring, and equipment for a marker units selection, line and trunk hunting junctor registration and sequence control unit per SD-65741-C1, Fig. 7.
- List 4 Assembly, wiring, and equipment for marker route control, class of service, and down check unit per SD-65741-Cl, Fig. 8.
- List 5 Assembly, wiring, and equipment for one marker link test control, select magnet (including select magnet connector relay associated with switches 2 and 3), and miscellaneous control unit per unit, per SD-65741-C1, Fig. 9 and SD-66796-C1, Fig. 6.
- <u>List 6</u> Assembly, wiring, and equipment for one marker advance, time-out, and release unit per SD-65741-C1, Fig. 1C.
- <u>List 8</u> Assembly, wiring, and equipment for one marker trunk connector unit per SD-65741-C1, Fig. 6. (See Note A.)
- <u>List 9</u> Assembly, wiring, and equipment for one busy tone trunk and marker select magnet connector relays associated with switches 0 and 8 unit, for a 40-line PBX per SD-65741-01, Fig. 16 and SD-65754-01, Fig. 1
- <u>List 10</u> Assembly, wiring, and equipment for a 2C-circuit station line and associated marker tens group

- equipment unit per SD-65741-C1, Fig. 2, with "S" wiring or the SD-65741-C1, Fig. 2, "V" and "E" apparatus only. (See Note B.)
- List 11 Assembly, wiring, and equipment for a marker select magnet connector relay associated with switches 1, 4, and 5 unit per SD-65741-C1, Fig. 15.
- <u>List 13</u> Assembly, wiring, and equipment for one marker alarm unit per SD-65741-C1, Fig. 11 and SD-66796-C1, Fig. 3.
- List 14 Assembly, wiring, and equipment for a busy tone trunk and marker select magnet connector relay associated with switches C, 6, 7, and 8 unit, for a 6C-line PBX per SD-65741-C1, Fig. 1 and 16, with "V" option.
- List 16 Assembly, wiring, and equipment for one tie trunk adapter unit equipped with ten station line circuits and ten circuits for lines or tie trunks, with associated marker tens group equipment per SD-65741-C1, Fig. 1 and 17, and SD-66796-C1, Fig. 1. (See Note C.)
- List 17 Assembly, wiring, and equipment for one marker register control unit per SD-65741-C1, Fig. 5, and SD-65742-C1, Fig. 4 and part of Fig. 5 with "ZS" option.

#### Notes

- A. The terminal strip on the trunk connector unit per list 8 is strapped for hunting all central office trunks in one group. If ringdown tie trunks are added to the PBX, the installer should change the strapping so that the added ringdown tie trunks form a separate hunting group.
- B. The station line unit terminal strips are strapped for toll-allowed class of service and with S and Sl terminals connected. One H diode is provided for each group of five lines. These are to be connected by the installer to the H terminals of lines for which one-way hunting is required within a tens group.
- C. The list 16 tie trunk adapter terminal strips are strapped for toll-allowed class of service on all lines and with the S and SIA terminals connected. Lines 30, 31, and 32 are wired with "R" option. The TRK terminal strips are provided with T strapped to Tl-l and R strapped to Rl-l. When tie trunks are added, the installer will be required to remove these straps.

#### <u>J58829J (AT&TCo Std) - 756A PBX - Dial</u> Pulse Register Unit

Equipment - J58829J-()

- List 4 One KS-15724, L2 diode per SD-65742-C1, Fig. 7, required in addition to list 5 when single-digit dialing is required. (See Note B.)
- List 5 Framework, assembly, wiring, and equipment for one dial pulse register unit arranged for direct station selection, single-digit dialing, and TOUCH-TONE calling SD-65742-Cl, Fig. 1, 2, 3, 6, and part of 5 with "Z", "W", "ZD", "ZT", and "ZW" wiring. (See Notes A and C.)

#### Notes

- A. All optional wiring is covered by strapping at the unit terminal strip. Strapping not provided by the shop shall be added by the installer to meet job conditions.
- B. A maximum of seven diodes may be required per dial pulse register.
- C. When TOUCH-TONE receivers are furnished, the installer should remove "ZW" wiring.

#### J58829L (AT&TCo Std) - 756A PBX - Position Circuit, Trunk Patch, and Transfer Unit Arranged for Flexible Night Connections

Equipment - J58829L-( )

- $\frac{\text{List 4}}{\text{for one position circuit and trunk}} = \frac{\text{List 4}}{\text{for one position circuit and trunk patch unit per SD-65757-Cl, Fig. 1}}{\text{and 3, and SD-65746-Cl, CAD 8.}}$
- List 6 Assembly, wiring, and equipment for one position circuit talking battery feed coil, transfer, and trunk patch unit arranged for flexible night connections per SD-66796-Cl, Fig. 2, SD-65746-Cl, CAD 8, and SD-65757-Cl, Fig. 3 and 8. (See Note A.)

#### Note

- A. For units manufactured prior to SD-65751-C1, Issue 12D or SD-65757-C1, Issue 2D, to provide ringer cut off for trunks not appearing on 6-button set, add BZ relays per "ZA" and "B" options, respectively.
- J58829M (AT&TCo Std) 756A PBX 2-Way

  Central Office Trunk Unit Arranged for Flexible Night Connections

Equipment - J58829M-()

- List 3 Assembly, wiring, and equipment for single circuit 2-way central office trunk unit arranged for flexible night connections per SD-65752-C1, Fig. 1, with "S", "Y", and "Z" wiring. (See Notes A and C.)
- List 4 Assembly, wiring, and equipment for a single-circuit plug-in 2-way central office trunk unit arranged for flexible night connections per SD-65746-Cl, CAD 8 and SD-65752-Cl, Fig. l, with "S", "V", "Y", and "Z" wiring. (See Notes A and C.)
- <u>List 6</u> Wiring and equipment for a false recall detector circuit per SD-65752-Cl, Fig. 5, required when trunk is connected to a panel central office. (See Note D.)

#### Notes

- A. Attendant service restricted per "X" option cannot be used if night service connections are required. Unrestricted service per "Y" option must be used when "E" or "ZJ" option covering flexible night service connection is utilized.
- B. When modifying units manufactured prior to SD-65752-Cl, Issue 1C for "ZH" option that do not have flexible night connections (option "E"), provide "ZL" option. When "ZH" option is provided with "ZJ" option, "ZK" option is used.
- C. To provide long distance service by single digit dialing, the installer shall provide straps in accordance with SD-65752-C1, Fig. 1, in a manner covered by SD-65746-O1, CAD 6 Sheet G53, as follows:

Condition		Option	
Trunks Trunks			"ZP" "ZN"

D. Equipment shall be ordered by telephone company engineer and mounted and wired locally by the installer.

#### <u>J58829N (AT&TCo Std) - 756A PBX - Attendant</u> Trunk Unit

Equipment - J58829N-( )

List 1 - Assembly, wiring, and equipment for one attendant trunk unit per SD-65753-01, Fig. 1, with "W" wiring.

### J58829P (AT&TCo Std) - 756A PBX - Junctor Unit

Equipment - J58829B-( )

<u>List 1</u> - Assembly, wiring, and equipment for a 2-circuit junctor unit per SD-65750-01, Fig. 1.

#### J58829R (AT&TCo Std) - 756A PBX - Fuse Panel, Alarm, and Register Unit

Equipment - J58829R-()

- List 2 (A&M Only) Assembly, wiring, and equipment for one 756A PBX fuse panel, alarm, and register unit per SD-66796-01, Fig. 4, with "S" wiring, and SD-65744-01, Fig. 1.
- List 3 (A&M Only) Assembly and equipment for one 756A PBX supplementary fuse panel consisting of ED-95173-70, Groups 1 and 3. May be used in addition to List 2 when L List 2 does not provide adequate fuse positions for new feature being added to an existing PBX.
- List 4 Assembly, wiring, and equipment for one 756A PBX fuse panel, alarm, and register unit per SD-66796-01, Fig. 4, and SD-65744-01, Fig. 1.

#### <u>J58829S (AT&TCo Std) - 756A PBX - Dial</u> <u>Conference Unit</u>

Equipment - J58829S-()

<u>List 2</u> - Assembly, wiring, and equipment for a 756A PBX "meet me" dial conference unit per SD-65745-Cl, Fig. 1, CAD 1, "W" option.

# J58829T (AT&TCo Std) - Tie Trunk Unit Outgoing: Manual and Dial Selected with 2-Second Ringing Signal: Incoming: Ringdown

Equipment - J58829T-()

<u>List 1</u> - Assembly, wiring, and equipment for one tie trunk unit per SD-65756-Ol, Fig. 1. (See Note A.)

#### Note

A. This unit requires an 89-type resistance to regulate line impedance and shall be ordered separately in accordance with circuit requirements for the particular installation.

#### <u>J58829U (AT&TCo Std) - 756A PBX - Battery</u> <u>Module</u>

Equipment - J58829U-( )

<u>List 2</u> - Framework, assembly, wiring, and equipment for one battery module.

See <u>Equip</u> <u>Notes</u>

Power Equipment and Cable J86464B, L1

A,B

#### Notes

- A. When a battery module is required, batteries per J86464B-(), List 2 or 3 shall be ordered separately.
- B. This power plant equipment is supplementary to the power plant common equipment furnished on No. 1 slide of module 1. The battery module equipment is provided with a cable suitable for interconnection with the power plant equipment in module 1. To minimize voltage drop, the battery module shall be located adjacent to module 1, on the left.

#### J58829W (AT&TCo Std) - 756A PBX - Loudspeaker Paging Trunk Unit

Equipment - J58829W-( )

<u>List 1</u> - Assembly, wiring, and equipment for one loudspeaker paging trunk unit per SD-65747-01, Fig. 1.

(No. of Mtg Plt Positions 1 - No. of Ckt 1)

## J58829AA (AT&TCo Std) - 756A PBX - Direct Station Selection - Auxiliary Register Relay Unit

Equipment - J58829AA-()

<u>List 1</u> - Assembly, wiring, and equipment for one DSS auxiliary register relay unit for 756A PBX per SD-65942-C1, Fig. 1.

(No. of Mtg Plt Positions 1 - No. of Ckt 1)

- List 2 One 50-pair supplementary house and feeder cable per SD-65746-01, CAD 23, 30-feet long from PBX to auxiliary relay unit for direct station selection by stations.
- List 3 One 100-pair supplementary house and feeder cable per SD-65746-01, CAD 24, 30-feet long from PBX to house box for direct station selection by attendant and single-digit dialing.

## J58829AB (AT&TCo Std) - Direct Station Selection Auxiliary Station Relay Unit

Equipment - J58829AB-( )

<u>List 1</u> - Assembly, wiring, and equipment for one DSS auxiliary station relay unit equipped for four station lines, per SD-65942-01, four Fig. 2 and two Fig. 3.

(No. of Mtg Plt Positions 2 - No. of Ckt 4)

List 2 - One diode assembly, arranged for ten DSS line pickup keys, required in addition to list 1 per station line arranged for DSS, in accordance with SD-65942-01, Fig. 4.

#### <u>J58829AC (AT&TCo Std) - TOUCH-TONE Calling</u> <u>Translation Unit</u>

Equipment - J58829AC-()

<u>List 1</u> - Assembly, wiring, and equipment for one TOUCH-TONE calling translation unit for 756A PBX per SD-65742-01, Fig. 8.

(No. of Mtg Plt Positions 1 - No. of Ckt 1)

List 2 - One 25-pair supplementary house and feeder cable per SD-65746-Cl, CAD 25, 30-feet long from PBX to TOUCH-TONE calling translation unit for TOUCH-TONE calling by stations.

#### J58829AD (AT&TCo Std) - 756A PBX - Dial Conference Trunk Unit - Station Controlled

Equipment - J58829AD-()

<u>List 1</u> - Assembly, wiring, and equipment for one station controlled dial conference trunk unit per SD-66902-01, Fig. 1. (See Notes A, B, and C.)

(No. of Mtg Plt Positions 4 - No. of Ckt 1)

#### Notes

- A. Option "XD" must be provided in line and marker unit J58829H.
- B. Conference ports 0-5 shall be crossconnected from the unit to trunk terminals in the tie trunk group as specified by the customer. If no trunk terminals are specified, a preferred group as provided in 1.21 shall be used.
- C. One ED-66715-( ) plug-in relay time delay unit is required and is furnished.

#### J58829AE (AT&TCo Std) - 756A PBX - Dial Conference Trunk Unit - Attendant Controlled

Equipment - J58829AE-()

List 1 - Assembly, wiring, and equipment for one attendant controlled dial conference trunk unit per SD-66908-Cl, Fig. 1, including options "X" and "Y". (See Notes A, B, C, and D.)

(No. of Mtg Plt Positions 4 - No. of Ckt 1)

List 2 - One ED-66715-( ) plug-in relay time delay unit required in addition to list 1 for the conference release feature in accordance with SD-66908-01, Fig. 1 "Z" option.

#### Notes

- A. Option "XC" must be provided in line and marker unit J58829H.
- B. Conference ports C-5 shall be crossconnected from the unit to trunk terminals in the tie trunk group as specified by the customer. If no trunk terminals are specified, a preferred group as provided in 1.21 shall be used.
- C. "X" and "Y" wiring is furnished by the shop. Two "Y" straps provided between the terminals of the cable connector mounted on the unit shall be cut by the installer when attendant lockout is required.
- D. Type 3C or type 4B telephone console must be provided and shall be ordered separately. Keys CONF and ST/RC shall be assigned and connected per SD-66908-01, Note 104.

#### J58829AF (AT&TCo Std) - 756A PBX - Cord Switchboard Auxiliary Central Office Trunk Relay Unit

Equipment - J58829AF

<u>List 1</u> - Assembly, wiring, and equipment required for central office trunk appearances at 556A cord switchboard per SD-65752-01, Fig. 2 with "ZE" option.

(No. of Mtg Plt Positions 1 - No. of  $\operatorname{Ckt} 1$ )

<u>List 2</u> - Assembly, wiring, and equipment required for central office trunk appearances at 608A cord switchboard per SD-65752-C1, Fig. 2 with "ZF" option.

(No. of Mtg Plt Positions 1 - No. of  $\operatorname{Ckt} 1$ )

- List 3 One 30-foot connector cable per SD-65746-Cl, CAD 30, required in addition to list 1 or list 2 with plugs on both ends to connect auxiliary switchboard unit located in apparatus cabinet with the 756A PBX.
- List 4 One 30-foot supplementary house and feeder cable per SD-65746-Cl, CAD 31, required in addition to list 1 or list 2 with plug going to switchboard unit in apparatus cabinet and stub end going to house box.

#### <u>J58829AG (AT&TCo Std) - 756A PBX - Station</u> <u>Dial Transfer Unit</u>

Equipment - J58829AG-()

- <u>List 1</u> Assembly, wiring, and equipment for one station dial transfer controller circuit per SD-66909-01, App Fig. 1. (See Note B.)
- <u>List 2</u> Wiring and apparatus required in addition to list 1 to provide for crossbar switch No. 9.
- List 3 Assembly, wiring, and equipment required in addition to list 1 and 2 to provide for two station dial transfer trunk circuits with add-on conference per SD-66921-01, App Fig. 1 and 2. (See Notes A and B.)
- List 4 Connector ended cables required in addition to list 1 for connecting to crown plugs of PBX (30-feet long) per SD-66920-01, CAD 5.

#### Notes

- A. Option "YQ" shall replace "YR" in line, link, and marker unit (J58829H), and option "ZX" shall replace "ZW" in the 2-way central office trunk unit (J58829M).
- B. (No. of Mtg Plt Positions 15 for list 1 plus list 3)

# J58829AH (AT&TCo Std) - 756A PBX - Auxiliary Position Unit for Remote Trunk Answering and Inward Completion by Any Station

Equipment - J58829AH-( )

List 1 - Assembly, wiring, and equipment for one auxiliary position unit for remote trunk answering per SD-66910-01, Fig. 1. (See Notes A and B.)

(No. of Mtg Plt Positions 3 - No. of Ckt 1)

List 2 - Connector cable per SD-66920-01
CAD 4, 30-feet long from crown of the switching module to auxiliary position unit required in addition to list 1 when remote trunk answering is provided. (See Note C.)

#### Notes

- A. When remote trunk answering is provided, only one auxiliary position unit per list 1 and one connector cable per list 2 are required per PBX. The unit operates with a maximum of ten central office trunks.
- B. External signaling equipment shall be ordered or provided separately by the customer.
- C. Lengths greater than 30 feet should be ordered separately.

#### J58829AJ (AT&TCo Std) - 756A PBX - Busy Verification Auxiliary Trunk Unit

Equipment - J58829AJ-()

<u>List 1</u> - Assembly, wiring, and equipment for one busy verification auxiliary trunk unit per SD-66911-01, Fig. 1.

(No. of Mtg Plt Positions 1 - No. of  $Ckt \ 1$ )

List 2 - One 402A tone generator and wiring required in addition to list 1 for tone warning, per SD-66911-01, Fig. 1, option "Z".	Equipment	Rating	Details Last Shown in Issue	Replacing Equipment
	J58829A,L1,	Mfr Disc.	3	J58829A,L12
J58829AK (AT&TCo Std) - 756A PBX - Indica- tion of Camp-On Unit	L2 L3,L5&L6 L8&L9		2,4	J58829A,L8 L9,L10&L11 J58829A,L13
Equipment - J58829AK-( )	L11		5 4	&L14 J58829A,L24
List 1 - Assembly, wiring, and equipment for one indication of camp-on unit	L12 L13,L14 &L15		4	J58829A,L15 J58829A,L18 L19&L20
per SD-65752-01, Fig. 6 and SD-65 <b>7</b> 57-01, Fig. 13.	L16 L17 L18&L19	A&M Only Mfr Disc.	6 7 6	J58829AF,L4 J58829A,L36 J58829A,L34
5. GENERAL NOTES	L20&L25 L21&L22		6 6	&L35 L27&L28 J58829AA,L2
	L23		6	&L3 J58829AC,L2
5.01 No circuit labels are provided with this equipment; instead, a set of associated schematics, cabling diagrams,	L2Ğ L27&L28	A&M Only Mfr Disc.	7 6	J58829A,L37 J58829A,L32 &L33
an equipment diagram, and a set of CD sheets covering the basic equipment are furnished with each PBX. The latest avail-	L29 J58829B,L1,		7 4	J58829B,L2
able issue of this information is provided in binders which may be stored in envelope	&L2 L3&L4		6	&L3 J58829B,L5 &L6
holders attached inside either the front or end panels (see 4. EQUIPMENT, Group 1,	L5&L6 J58829C,L1,	Mfr Disc.	6 3	L7&L8 J58829C,L2
Note A). The issue number of the schema- tic drawing from which the equipment was	L2 L3		3 4 6	J58829C,L3 J58829C,L4
manufactured is stamped on units in the PBX.	J58829D,L1,	Mfr Disc.		J58829D,L2 J58829D,L3
	J58829E,L1, &L2	Mfr Disc.		J58829E,L3 &L4
5.02 The packaging and ordering requirements for complete 756A PBX installations are covered in summarizing specifica-	L3&L4 J58829F,L1 L2	Mfr Disc.	6 2	L5&L <b>6</b> J58829F,L2 J58829F,L3
tion J58830.	L3 L4		4 6	&L4 J58829F,L5
5.03 Optional feature circuit schematic and CD sheets are not furnished with	J58829G,L1, <b>&amp;</b> L2	Mfr Disc.		J58829G,L3 &L4
the PBX and should be ordered separately.	L3&L4 L5&L6		4 6	L5&L6 J58829G,L <b>7</b> &L8
	J58829H,L7, L12	Mfr Disc.	2 3	J58829H,L15 J58829H,L16
5.04 <u>Grounding:</u> The ground for this PBX is normally obtained through the	L15 J58829J,L1,	Mfr Disc	3 4 2	J58829H,L17 J58829J,L2
third wire in the power cord. This requires that the customer provide a 125-volt,	L2 L3	, MII DIBO.	2 4 6	J58829J,L3 J58829J,L5
15-ampere single-grounding receptacle on a separate fuse for the PBX. To insure that the cabinet continues to be grounded when	J58829K J58829L,L1, &L3	Mfr Disc. Mfr Disc.	1	J58829L,L4 &L5
the power cord is removed, a building ground lead (18 gauge, minimum) shall be	L2 J58829L,L5	Mfr Disc.	2 4	J58829L,L3 J58829L,L6
connected to the AP ground terminals at the house terminal wall box.	J58829M,L1, &L2			J58829M,L3 &L4
	L5		6	J58829AF,L1 or L2
List of "A&M Only" and "Mfr Disc." Equipment	J58829R,L1 L2	Mfr Disc. A&M Only	57 75 54	J58829R,L2 J58829R,L4
The following equipment has been replaced as indicated. Where "A&M Only" items appear,	L3 J58829S,L1	A&M Only Mfr Disc.	1 5 5	J58829 <b>s,L2</b> J58829 <b>u,L</b> 2
the issue numbers shown are those of the issue in which the rating was first applied.	J58829U,L1 J58829Y	Mfr Disc. Mfr Disc.	4	- -

#### Reasons for Reissue

- 1. To specify the type 3C and type 4B telephone consoles and the 565GBRW 6-button key telephone set.
- 2. To add indication of camp-on as a basic feature in the 756A PBX.
- 3. To make the necessary changes to arrange the PBX for the following optional plug-in features: station controlled conference, attendant controlled conference, station dial transfer, remote trunk answering from stations, and busy verification.
- 4. To provide the feature cabling required to arrange the PBX for the above features.
- 5. To add reference to optional envelope holders for storing the book of drawings inside the PBX cabinets
- 6. To add the following optional plug-in feature units: station controlled conference unit (J58829AD), attendant controlled

conference unit (J58829AE), station dial transfer unit (J58829AG), auxiliary position unit for remote trunk answering (J58829AH), busy verification unit (J58829AJ), and cord switchboard auxiliary trunk unit (J58829AF).

7. To rate the following Mfr Disc.:

J58829A, Lists 16,18,19,20,21,22,23,25,27,
and 28

J58829B, Lists 3,4,5,6

J58829C, List 3

J58829D, List 2

J58829F, Lists 3 and 4

J58829F, Lists 4

J58829G, Lists 5 and 6

J58829J, List 3

J58829M, List 5

8. To rate the following A&M Only:

J58829A, Lists 17,26, and 29 J58829R, Lists 2 and 3

- 9. To arrange the general description of PBX features into basic and optional classifications.
- 10. To make minor revisions.

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