ORIGINATING SENDER FRAME
EQUIPMENT DESIGN REQUIREMENTS
NO. 1 CROSSBAR SYSTEM

1. GENERAL

SCOPE

1.01 This specification, together with the supplementary information listed herein, covers the equipment design requirements for the framework, equipment, and circuits to be used in the engineering, manufacture, and installation of the originating sender frame in No. 1 crossbar offices.

1.02 This specification is reissued:

(a) To arrange the J27951K sender for operation in offices with PCI control that require a final positive pulse. J27951M, List 4 is added.

(b) To arrange the J27951K sender for operation in offices that charge for directory assistance calls. J27951N, List 5 and J27951T, List 3 are added.

These changes are in accordance with SD-27810-01, Issue 25B.

CAPACITY

1.03 The originating sender frame (Fig. 2) has a capacity of five subscriber or keypulsing senders.

DESCRIPTION

1.04 The originating sender frame is a single-sided, single-bay, steel structure 11 feet 6 inches high and 5 feet 6-7/8 inches long. It has a capacity of five sender units and the apparatus common to all the sender circuits on one frame.

1.05 In general, five subscriber or five keypulsing senders shall be mounted on a frame. However, both subscriber and keypulsing senders may be mounted on the same frame where required.

1.06 This specification provides for a keypulsing sender (Fig. 1) and for a subscriber sender that may be arranged for extended area codes. This subscriber sender is arranged for automatic priming and direct distance dialing (DDD).

(a) ***Keypulsing Sender:*** This sender is for the use of A switchboard operators having keysets where 3-digit office codes are used. It can be equipped, on an optional basis, for extended area codes, where it serves A switchboard operators having keysets where the prefix 1-1 is to be registered before the office code (three digits only).

(b) ***Subscriber Sender Arranged for Automatic Priming and Direct Distance Dialing:*** This sender is for use with subscriber lines serving noncoin or coin stations and is arranged for automatic priming, 10-digit dial pulse or TOUCH-TONE® dialing, 0 and 1 prefix and 11X service codes, interchangeable office and area codes, 411-information calls, revertive, MF, and panel call indicator (PCI) outpulsing.

1.07 The subscriber sender, which is selected by a link when the subscriber removes the receiver from the hook, receives and registers the pulses from the sbuscriber dial. It establishes connection with an originating marker by means of an originating marker connector and transmits to the originating marker the class of subscriber, the number of the district link frame being used on the call, and the office code. It receives back from the originating marker and registers full information for completing the calls as far as the operations required are affected by the code of office called. After an outgoing trunk has been

chosen for use on the call, the sender controls the necessary selections beyond.

1.08 The sender design inherently includes providisons for DDD. The sender is capable of registering the ten digits required. It can optionally be arranged for code compression. Ten NPA codes can, by means of cross-connections, each be compressed to a single CC- digit that can be identified by the marker when seized.

1.09 The keypulsing sender operates in a manner similar to the subscriber sender, except that it is arranged to record pulses from an operator keyset instead of a subscrber dial.

1.10 All of the senders are unit mounted, each unit accommodating the equipment for one sender. The same framework is used for each of these units.

1.11 The subscriber senders may be arranged, when required, for operation with AMA equipment. They will then transmit to the transverter, through a transverter connector, the information regarding calling and called subscriber identity that is required for billing purposes.

1.12 The subscriber sender may be arranged for TOUCH-TONE operation. For this feature, a TOUCH-TONE calling receiver and framework to mount it are added to the sender unit.

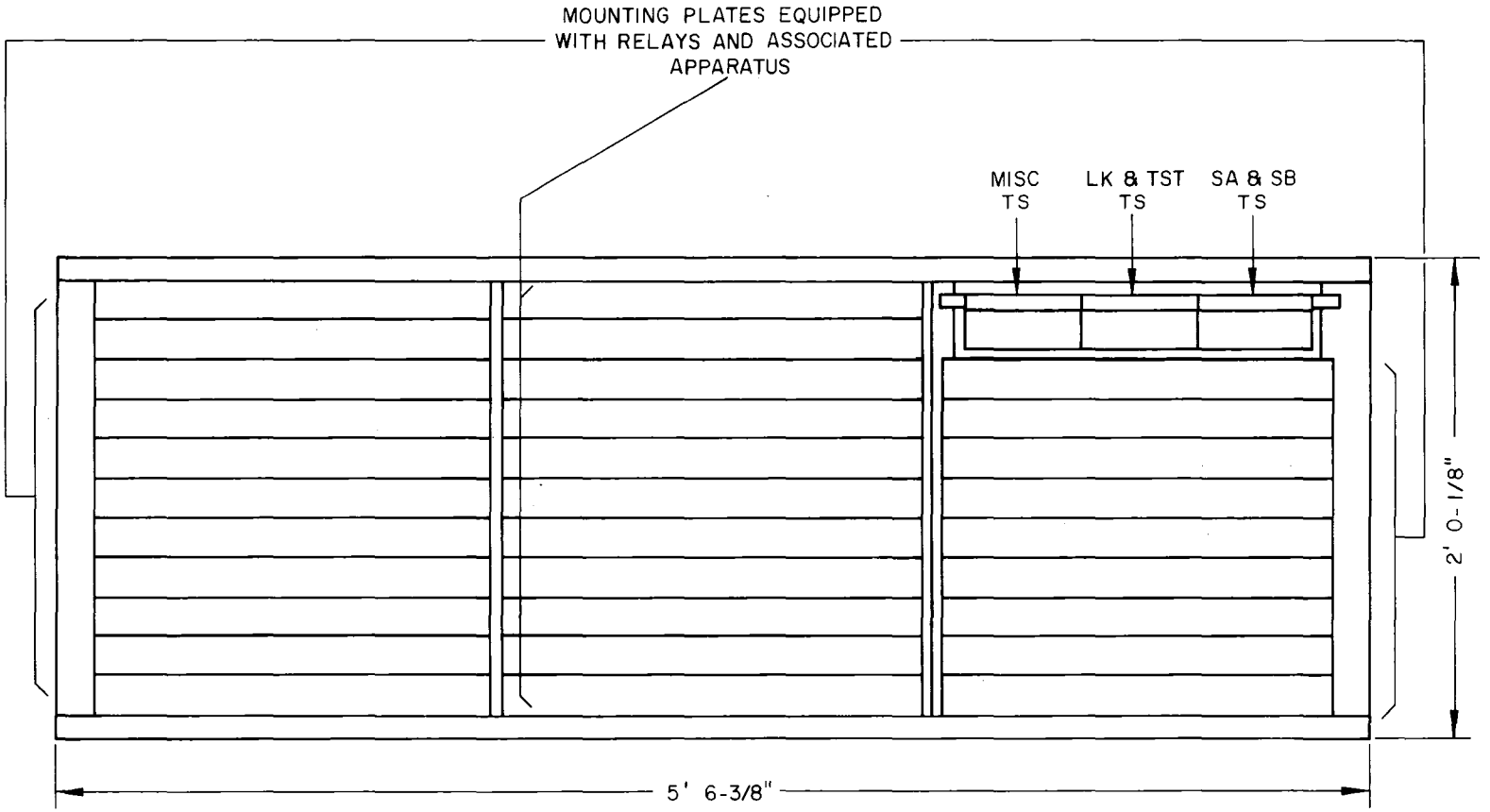

Fig. 1—Keypulsing Sender Unit, J27951G

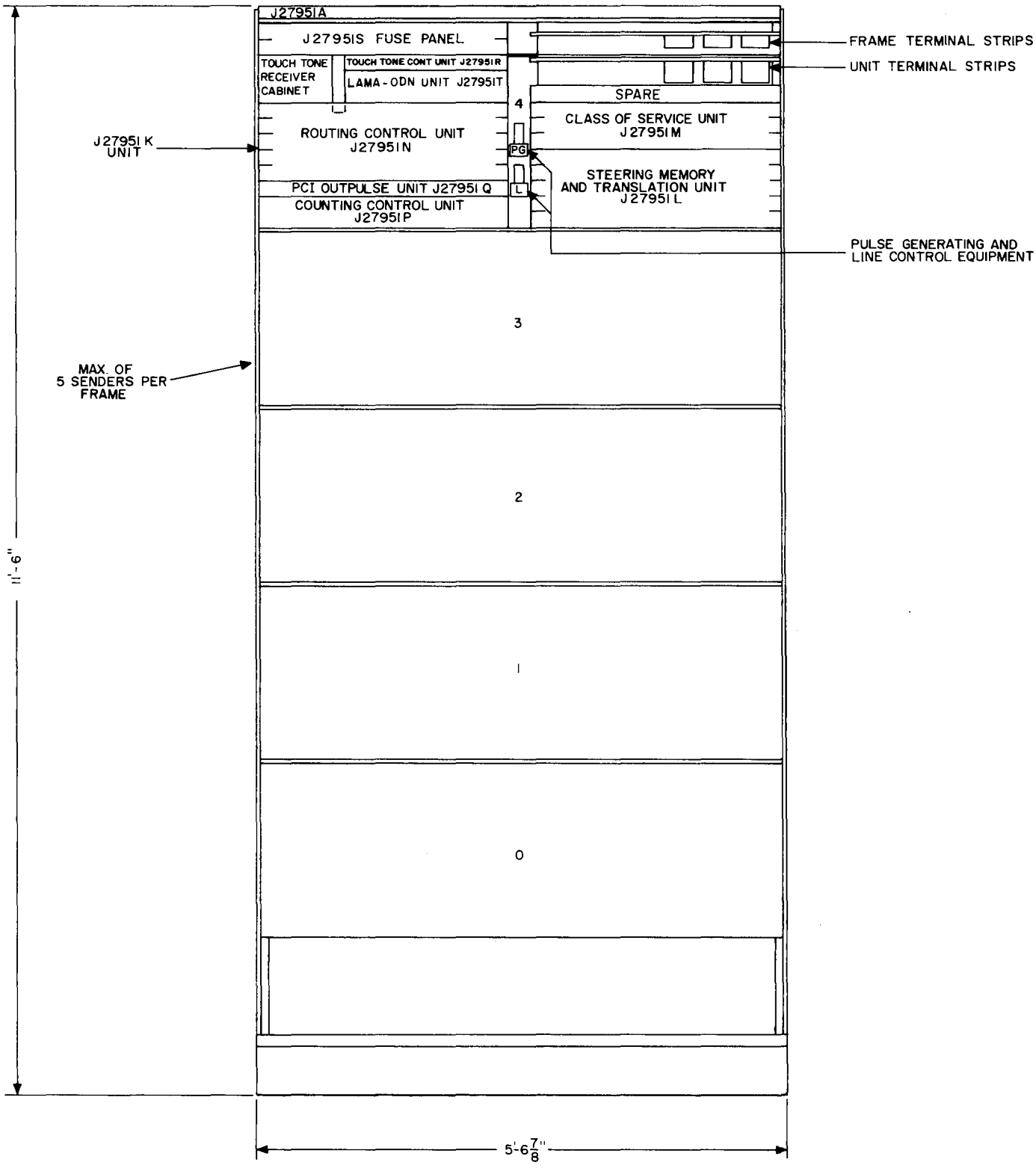

Fig. 2—Originating Sender Frame

2. SUPPLEMENTARY INFORMATION

816-000-000—Numerical Index—No. 1 Crossbar System
800-600-000—Checking List—General Equipment Requirements
800-610-152—Gauge and Insulation of Wire
J22450—816-102-150—Calling Line Register Frame
J95103—816-500-150—Auxiliary Sender Frame—For Panel and No. 1 Crossbar Systems—Direct Distance Dialing
J95104—816-425-150—Auxiliary Sender Link Frame—For Panel and No. 1 Crossbar Systems—Direct Distance Dialing
J99289—TOUCH-TONE Calling Receiver Signaling
Floor Plan Data—Section 9.1 Sheet 9
Current Drain Data—SD-25000-02—No. 1 Crossbar

3. DRAWINGS

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

Keysheet

SD-25000-01—No. 1 Crossbar System

Circuits

SD-25015-01—Keypulsing Sender Circuit
SD-25052-01—Miscellaneous Circuit
SD-27810-01—Subscriber Sender Circuit

Equipment

ED-25021-53—Jack, Key, Lamp, and Test Post Panel
ED-25025-59—Fuse Panel Assembly

Wiring and Cabling

ED-25144-10—Frame and Unit Local Cable
ED-25174-10—Switchboard Cabling Details—Subscriber Sender Frame
ED-25346-14, ED-25346-15, ED-25346-16—Method of Running Power Feeders
ED-27114-01—Table of Wire Gauges and Type of Insulation for No. 1 Crossbar Frames

4. EQUIPMENT

J27951A—AT&TCo Std—Originating Sender Frame

List 1—A&M Only—Framework, assembly, wiring, and common equipment for one originating sender frame (less sender units).

	WIRE	EQUIP	NOTES
Framework, ED-25142-31, G1 and G2		1	
Fuse Panel Assembly, ED-25025-59, G25		1	
Jack, Key, Lamp, and Test Post Panel, ED-25021-53, G6 and G7		1	C
Sender Circuit, SD-25012-01 or SD-25015-01	1	1	A
Sender Circuit, SD-25012-01 or SD-25015-01, BA and BB Resistance Only	5	0	A,B
Sender Circuit, SD-25012-01: Fig. E, Resistance Only	5	0	A,B
Misc Frame Ckt, SD-25052-01: Fig. 2,3,4,6,8,9,10 & 11	1	0	C,D

List 2—A&M Only—Equipment per SD-25052-01, Fig. 10 required in addition to list 1 to equip the intersender timing control relay. Included in this list is the mounting plate necessary to mount this relay.

List 4—A&M Only—Equipment and wiring per SD-25052-01, Fig. 11 required in addition to lists 1 and 2 to equip the information entry control relay

List 5—A&M Only—Equipment and wiring per SD-25052-01, Fig. 8, option V required in addition to list 1 when solid state components are furnished on the frame or its associated senders.

List 6—Framework, assembly, wiring, and common equipment for one originating sender (less sender units).

	WIRE	EQUIP	NOTES
Framework, ED-25141-31, G3	0	1	
Jack, Key, and Lamp Panels ED-25021-53, G6 & G7	0	1	
Misc Frame Ckt, SD-25052-01:			
Fig. 2, 3, 4, 6 & 9	1	1	A
Fig. 12, 13 & 14	1	0	
Sender Circuit, SD-27810: Fig. 14	5	0	A

Notes

A. The frame local cable containing the common and miscellaneous leads shall be universally wired between the sender unit terminal strips and the equipment mounted external to the unit on the sender frame.

B. The BA, BB, and BC resistors are mounted at the top of the frame. The BA resistance is required for both keypulsing and subscriber senders; the BB resistance is required for subscriber senders only. The BC resistance is required for subscriber coin senders only. The universal frame local cable is wired for all three of these resistances, but apparatus shall be provided only as required for each job.

C. Miscellaneous frame jacks and test posts on the front and rear of the frames shall be furnished on all sender frames except for a partially equipped frame with one sender unit. On this frame, only the test posts on the rear of the frame shall be furnished with the high resistance ground obtained from the adjacent sender frame by means of installer wiring. The jacks and test posts shall be equipped on the front at the time a second sender unit is mounted on the frame.

D. The IEC relay is mounted on the even numbered originating sender frame of a pair and serves the two sender frames.

J27951G AT&TCo Std—Keypulsing Sender Unit

List 1—Framework, assembly, wiring, and common equipment for one keypulsing sender.

	WIRE	EQUIP	NOTES
Framework, ED-25140-72, G2		1	
Magnetic Shield, ED-25146-50: Item 1		2	
Casing Assemblies, ED-90978-57 and ED-90978-58:			
G4111F, Front and Rear Casings Each		1	L,M
G2011, Front and Rear Casings Each		1	L,M
Sender Circuit, SD-25015-01:			
Fig. 1, 2, 3, C, G, H, M & Q		1	A-G,N

List 2—Wiring and equipment for one sender circuit per SD-25015-01, Fig. D required in addition to list 1 to provide for 3 digit office codes without provision for registering the prefix 1-1 before the office code.

List 3—Wiring and equipment for one sender circuit per SD-25015-01, Fig. E required in addition to list 1 to provide for 3-digit office codes and for registering the prefix 1-1 before the office code.

List 4—Wiring and equipment for one sender circuit per SD-25015-01, Fig. S and Fig. U, with B apparatus, required in addition to list 1 for 20-cycle stored ringing. (See Notes H and I.)

List 5—Wiring and equipment for one sender circuit per SD-25015-01, Fig. T and Fig. U, with B apparatus, required in addition to list 1 for both 20-cycle and simplex-stored ringing. (See Notes H and J.)

List 6—A&M Only—Wiring and equipment for one sender circuit per SD-25015-01, Fig. 0, R, and V required in addition to list 1 for additions to offices not arranged for stored ringing. (See Notes H and J.)

Notes

A. The unit local cable shall contain all standard optional wiring for the figures included in list 1.

B. The B and B′ relays (L apparatus) shall be furnished when the tandem office is arranged to receive 3-digit office codes.

C. If any calls are to be routed:

via direct trunks to incoming selectors or to incoming trunks,

via direct trunk to distant office selectors, or

via direct trunk to full selector tandem district,

equipment shall be furnished in each sender in accordance with the note on the circuit.

D. In offices having party letters in each sender numbers, equipment shall be furnished in each sender in accordance with the note on the circuit.

E. The F0 through F9 relays (AB apparatus) are used to indicate the number of the frame upon which the associated district junctors are mounted. These relays shall be furnished as required and designated F0 through F9 to correspond to the numbering of the district junctor frame with which they are associated.

F. The F00 and F10 relays (M apparatus) shall be furnished only when the group of senders serves districts in both 0 through 9 and 10 through 19 district frame groups.

G. Furnish W apparatus for senders arranged for 2-stage tandem PCI class.

H. Furnish AZ apparatus of Fig. O or U for senders arranged for completing calls to manual straightforward through crossbar tandem.

I. Furnish Fig. S and Fig. U with B apparatus when senders are arranged for stored ringing and the controlled ringing toll completing trunks require 20-cycle start ringing.

J. Furnish Fig. T and U with B apparatus, when senders are arranged for stored ringing and the controlled ringing toll completing trunks required either 20-cycle or simplex-start ringing.

K. The resistance lamps for 20-cycle ringing supply and +130 volt supply are located on the fuse bay with the associated fuses.

L. In general, where 24-inch or more aisle spacing is used for sender frames, the senders shall be furnished with twin casing doors as specified in list 1. Where less than 24-inch aisle spacing is used and where columns or other obstructions may interfere with the opening of the front or rear casing door, casings with folding doors per G4111F shall be furnished front and rear.

M. For front and rear casings per ED-90978-01, G4111, the doorstops per Fig. 10R and 11L, respectively, shall be removed. For casings per G2011, the doorstops per Fig. 10L and 11R shall be removed. The cover details per ED-90978-01, Fig. 9 for doorstop mounting holes shall be furnished where the doorstops are omitted.

N. Provide option DV as a part of list 1 when a keypulsing sender works with markers that are arranged for toll diversion.

J27951H—AT&TCo Std—TOUCH-TONE Calling Signal to Dial Pulse Converter Unit

List 1—Assembly, wiring, and equipment for one TOUCH-TONE calling signal to dial pulse converter circuit per SD-26184-01, Fig. 1. (See Notes A, B, and C.)

List 2—Wiring and equipment required in addition to list 1 when the associated sender is arranged for automatic priming after time-out or timed release per SD-26184-01, Fig. 2, and option Z.

List 3—Wiring required in addition to list 1, when the associated receiver unit is mounted above the converter.

List 4—Wiring required in addition to list 1, when the associated receiver unit is mounted below the converter.

Notes

A. In addition, there are options involving wiring only as follows. Wiring required in addition to list 1 when transfer of alarms to another location is not required per SD-26184-01, option W.

B. This unit is mounted on a relay rack above or below its associated receiver.

C. One TOUCH-TONE calling signal to dial pulse converter unit and one signal receiving unit per J99289B-( ) are required for each subscriber sender. The signal receiving unit is mounted on a mounting shelf per J99289A-( ) which is

designed to mount two receivers. This mounting shelf is mounted on relay rack with the associated converters mounted directly above and below it.

J27951K—AT&TCo Std—Subscriber Sender Arranged for Automatic Priming and Direct Distance Dialing

List 1—Framework, common equipment, and local cable for one sender.

	WIRE	EQUIP	NOTES
Sender Circuit, SD-27810-01:			
Fig. 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 21, 22	1	0	
Fig. 5	1	1	

List 2—Framework required in addition to list 1 when TOUCH-TONE calling is provided.

List 3—Supplementary local cable required in addition to list 1 when office is equipped for LAMA operation.

	WIRE	EQUIP	NOTES
SD-27810-01: Fig. 19, 20 and Option J	1	0	

List 4—Equipment and wiring per SD-27810-01, Fig. 22, required in addition to list 1 for operation with coin service improvements (dial-tone first) coin lines.

Notes

A. The following options involving wiring only are required:

1. For wiring options refer to SD-27810-01, Note 102.

B. This sender is equipped in accordance with Table A.

TABLE A

SENDER J27951K EQUIPMENT

UNIT		QUANTITY TO BE PROVIDED		DESCRIPTION OF FEATURE OR OPTION
J CODE	LIST	ALWAYS	FOR OPTION INDICATED	
	1	1		Steering, Memory, and Translation
J27951L	2		1	Code Compression
	3		1	TOUCH-TONE Peg Count
	4		1	Coin Service Improvement (Dial-Tone-First)
	1	1		Service Class (1-6)
J27951M	2		1	Service Class (7-12)
	3		1	Service Class (13-24)
	4		1	PCI Control-Final Positive Pulse
	1	1		Routing Control
J27951N	2		1	Code Compression
	3		1	2-Party Test
	4		1	TOUCH-TONE Peg Count
	5		1	Directory Assistance Charging
J27951P	1	1		Counting Control
J27951Q	1		1	Pulsing (PCI)
J27951R	1		1	TOUCH-TONE Control
J27951T	1		1	LAMA—ODN Unit Eqpt for LAMA
	2		1	For Outpulsing of Directory Number
	3		1	Directory Assistance Charging
J99289B	1		1	TOUCH-TONE Receiver

J27951L—AT&TCo Std—Steering, Memory, and Translation Unit

List 1—Assembly, equipment, and wiring per SD-27810-01, Fig. 1 and 11 for one steering and translation unit.

List 2—Equipment and wiring per SD-27810-01, Fig. 9 required in addition to list 1 to provide up to ten code compressions.

List 3—Equipment and wiring per SD-27810-01, option A required in addition to list 1 when TOUCH-TONE peg count traffic register and outpulsing of the directory number are required.

List 4—Equipment and wiring per SD-27810-01, Fig. 21 required in addition to list 1 for operation with coin service improvements (dial-tone-first) coin lines.

Note

A. The following options involving wiring only are required.

1. For wiring options refer to SD-27810-01, Note 102.

J27951M—AT&TCo Std—Class of Service Unit

List 1—Assembly, equipment, and wiring per SD-27810-01, Fig. 2 for one class of service unit. This unit will handle up to seven classes of service.

List 2—Equipment and wiring per SD-27810-01, Fig. 6 required in addition to list 1 when sender is to handle up to 12 classes of service.

List 3—Equipment and wiring per SD-27810-01, Fig. 7 required in addition to list 2 when sender is to handle up to 24 classes of service.

List 4—Equipment and wiring per SD-27810-01, option YK required in addtion to list 1 when PCI control and a final positive pulse are required.

Note

A. The following options involving wiring only are required:

1. For wiring options refer to SD-27810-01, Note 102.

J27951N—AT&TCo Std—Routing Control Unit

List 1—Assembly, equipment, and wiring per SD-27810-01, Fig. 3 for one routing control unit.

List 2—Equipment and wiring per SD-27810-01, Fig. 10 required in addition to list 1 to provide up to ten code compressions.

List 3—Equipment and wiring per SD-27810-01, Fig. 10 required in addition to list 1 to provide 2-party testing.

List 4—Equipment and wiring per SD-27810-01, option ZA required in addition to list 1 when TOUCH-TONE peg count traffic register is required.

List 5—Equipment and wiring per SD-27810-01, option YF required in addition to list 3 when the second 2-party test is required for charging for directory assistance calls when the marker grounds the CL3 lead on 411-information calls in non-LAMA offices or for charging for directory assistance calls, 411, that are routed straightforward in LAMA offices.

Note

A. The following options involving wiring only are required.

1. For wiring options refer to SD-27810-01, Note 102.

J27951P—AT&TCo Std—Counting Control Unit

List 1—Assembly, equipment, and wiring per SD-27810-01, Fig. 4 for one counting control unit.

J27951Q—AT&TCo Std—Panel Call Indicator Outpulsing Unit

List 1—Assembly, equipment, and wiring per SD-27810-01, Fig. 8 for one panel call indicator outpulsing unit.

J27951R—AT&TCo Std—TOUCH-TONE Control Unit

List 1—Assembly, equipment, and wiring per SD-27810-01, Fig. 12 for one TOUCH-TONE control unit.

J27951S—AT&TCo Std—Subscriber Sender Frame Fuse Panel

List 1—Assembly, equipment, and wiring per SD-25052-01, Fig. 12 and 13 for one subscriber sender frame fuse panel.

List 2—Equipment and wiring per SD-27810-01, Fig. 14 required for each sender on the sender frame.

List 3—Equipment per SD-25052-01, Fig. 14 when offices provide AMA and are equipped with senders per SD-27810-01 to furnish (411) information entry control (specify on first frame of pair only). Do not specify in offices equipped to charge for directory assistance calls.

J27951T—AT&TCo Std—LAMA—Outpulsing Directory Number Unit

List 1—Assembly, equipment, and wiring required for one LAMA-ODN unit per SD-27810-01, Fig. 19.

List 2—Equipment and wiring required in addition to list 1 to provide for outpulsing of directory number per SD-27810-01, Fig. 20.

List 3—Equipment and wiring per SD-27810-01, option ZY required in addition to list 1 in offices which charge for directory assistance calls that are routed straightforward.

5. GENERAL NOTES AND INDEXES

Equipment

5.01 Due to the close association of the sender frames with the originating marker connector and originating marker frames, they should be located as near these frames as practicable.

5.02 Subscriber sender frames are furnished and equipped as follows:

(a) When the group contains 15 or less senders, they are divided as evenly as possible among three link subgroups, and the senders of each subgroup are located on one sender frame. Three frames are required.

(b) When the group contains from 16 through 25 senders, they are divided as evenly as possible among five link subgroups, and the senders of each subgroup are located on the sender frame. Five frames are required.

(c) When the group contains from 26 through 50 senders, they are divided among five link subgroups in such a manner that the minimum number of subgroups contains more than five senders, but no one subgroup contains more than approximately 25 per cent of the total. Five fully equipped sender frames are furnished, one for the first five senders of each subgroup. An additional sender frame is furnished for each subgroup containing more than five senders.

(d) When the group contains 51 or more senders, they are divided into link subgroups of ten senders each, with one or two partial subgroups as described in the subscriber sender link frame specification. Two sender frames are furnished for each subgroup with the possible exception of the last, which will require but one frame if it is a partial subgroup of five senders.

(e) In all cases, the sender frames shall be numbered from 0 up, regardless of the type of sender mounted thereon. Sender units shall also be numbered from 0 up on each frame. In the case of partially equipped frames, the equipment shall begin at the bottom of the frame with sender 0, and the senders shall be equipped in numerical order. When nine or more subscriber sender frames are required initially, they shall be paired on the floor plan, the two frames of a physical pair containing the senders of one link subgroup. When less than nine frames are required initially, the first shall accommodate senders of subgroups 0 through 4, respectively, additional frames containing additional senders for subgroups in 0 up order. The paired arrangement is preferable from a maintenance standpoint and may be adopted in the case of fewer than nine frames, but it requires the reservation of space for the future frames.

5.03 When arranging the subscriber senders of an office in link subgroups and when locating them in originating marker connector circuits, it is desirable to have all the senders of a link subgroup in the same originating marker connector circuit. If all the senders of a link subgroup cannot be located in one circuit, they shall be located in not more than two originating marker connector circuits. When both subscriber and keypulsing senders are located in the same connector, the combination shall, in general, be made up of five subscriber and one, two or three keypulsing senders.

5.04 The originating sender frame arranged for either subscriber or keypulsing senders shall, in general, be equipped with all subscriber or all keypulsing senders. This provides for the cabling of subscriber senders on a frame basis. The combining of subscriber and keypulsing senders on the same frame requires an irregular cabling arrangement of the subscriber senders and extends the irregularity on to additions; therefore, subscriber and keypulsing senders shall be mounted on the same originating sender frame only where no additions are anticipated and where a saving of framework results.

5.05 In arranging the fuses on the fuseboard for the battery supply and the LT2 dial tone

and TN timed-release-disconnect tone leads associated with subsriber sender frames, the total number of frames in each sender group shall be divided into two equal parts (as nearly as possible) and the fuses for the odd- and even-numbered frames shall be located on separate bus bars. This arrangement is followed in order to prevent putting out of service more than one-half of the senders in one sender group in the event that the battery or tone supply leads should become accidentally grounded or open.

5.06 The TM and SD interrupter contacts for use with subscriber and keypulsing senders shall be distributed as evenly as possible over a minimum of four office interrupter frames. This will avoid putting out of service more than approximately one-quarter of the senders in an office, in case of motor failure on any one office interrupter frame. In addition, the TM and SD interrupter contacts shall be assigned so that the CA1 and CA2 interrupter contacts for the associated originating marker connector will be assigned to the same interrupter frame and so that the TM and SD interrupter contacts of the senders in the same link subgroup appear on the same interrupter frame whenever possible. If it becomes necessary to locate the interrupter contacts for senders of one frame on more than one interrupter, they shall be located on the interrupters of the same or two adjacent frames.

5.07 Maintenance registers are furnished as follows.

(a) One stuck sender (SS) register circuit for each link subgroup of subscriber senders.

(b) One SS register circuit for each group of keypulsing senders.

(c) One waiting assignment WA register circuit for each group of subscriber senders when required.

(d) One partial dial (PD) register circuit (A&M Only) for each group of subscriber senders arranged for timed release.

(e) Prior to the issue of appendix 4 of issue 8 of this specification, stuck sender registers for subscriber senders were furnished on the basis of one circuit per group of senders. This is now A&M Only.

Cabling

5.08 Subscriber senders are cabled in five circuit cables, one cable per sender frame, to: (1) the subscriber sender link frames, (2) the subscriber sender selector units, (3) the originating marker connectors, (4) the originating sender test frame, (5) the calling line register frame, and (6) the transverter connector frame. The five circuit cables shall also be used on partially equipped frames to facilitate growth in the associated sender subgroups. Where a combination subscriber and keypulsing sender frame is furnished, it is recommended that the keypulsing senders be cabled in the usual way and that cables large enough to accommodate all of the subscriber senders be substituted for the usual five circuit cables.

5.09 Units per J27951B, C and D that have had several modifications applied may have a congested local cable pileup condition created by cables superimposed upon the main form. If this condition causes interference with the operation of the casing door, consideration should be given to either mining the local cable or furnishing 4-3/4 inch deep rear casings as replacements when specified by the telephone company. The engineering information for these casings is included on ED-90978-65. Consideration must be given to the fact that the 4-3/4 inch casing extends 1/2 inch beyond the guardrail.

List of A & M Only and Mfr Disc. Equipment

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
L1	A&M Only	14	—
J27951A,L2	A&M Only	12	—
L3	Mfr Disc.	12	J27951K
L4	A&M Only	12	—
L5	A&M Only	12	—
J27951B	Mfr Disc.	12	J27951K
J27951C	Mfr Disc.	12	J27951K
J27951D	Mfr Disc.	12	J27951K
J27951E,L1	Mfr Disc.	6	J27951G,L1, L2, & L6
L2	Mfr Disc.	3	—
L3	Mfr Disc.	4	J27951E,L1
J27951F,L1	Mfr Disc.	6	J27951G,L1, L3, & L6
L2	Mfr Disc.	3	—
L3	Mfr Disc.	4	J27951F,L1
J27951G,L6	A&M Only	7	—
J27951J	Mfr Disc.	12	J27951K

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

SUBDIVISIONS OF EQUIPMENT AND DETAILED INDEX

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

EQUIPMENT CODE	AT&T RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING	CKTS PER UNIT	MTG PLTS PER UNIT
J27951A	Std	Originating Sender Frame	J27951A-( )	SD-25012-01 SD-25015-01 SD-25052-01 SD-27810-01	Frame	—
J27951G	Std	Keypulsing Sender Unit	J27951G-( )	SD-25015-01	—	—
J27951H	Std	TOUCH-TONE Calling Signal to Dial Pulse Converter Unit	J27951H-( )	SD-26184-01	1	5
J27951K	Std	Subscriber Sender Arranged for Automatic Priming and Direct Distance Dialing	J27951K-( )	SD-27810-01	—	—
J27951L	Std	Steering, Memory and Translation Unit	J27951L-( )	SD-27810-01	1	5
J27951M	Std	Class of Service Unit	J27951M-( )	SD-27810-01	1	3
J27951N	Std	Routing Control Unit	J27951N-( )	SD-27810-01	1	5
J27951P	Std	Counting Control Unit	J27951P-( )	SD-27810-01	1	1*
J27951Q	Std	Panel Call Indicator Outpulsing Unit	J27951Q-( )	SD-27810-01	1	1
J27951R	Std	TOUCH-TONE Control Unit	J27951R-( )	SD-27810-01	1	1
J27951S	Std	Subscriber Sender Frame Fuse Panel	J27951S-( )	SD-25052-01 SD-27810-01	5	2
J27951T	Std	LAMA-Outpulsing Directory Number Unit	J27951T-( )	SD-27810-01	1	2

* 4″ Mtg Plt

Circuit Schematic Index

CIRCUIT DRAWING	J27951 EQPT CODE
SD-25012-01	A
SD-25015-01	A, G
SD-25052-01	A, S
SD-26184-01	H
SD-27810-01	A, K, L, M, N, P, Q, R, S, T

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