

SS-1A SELECTIVE SIGNALING SYSTEM
IDENTIFICATION, INSTALLATION, CONNECTIONS, SERVICE OPTIONS
PRIVATE LINE TELEPHONE SERVICE

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1. GENERAL

1.01 This section contains identification, installation, connections, and service options for the SS-1A selective signaling system. Some of the information in this section was formerly contained in Section 518-600-401, Issue 1 and its associated addendum which are hereby cancelled.

1.02 This section is reissued to correct errors in the ordering guide tables and change associated figures.

1.03 The SS-1A selective signaling system provides sending, receiving, decoding, and controlling elements required for dial-controlled signaling between stations of 4-wire private line telephone systems. Two-digit station codes are generated by dial pulses transformed to frequency shift signals by keyer circuits. The signals are detected and reconverted to dial pulses by single frequency signaling units. The reconverted pulses are counted by the decoders which generate a ground pulse to operate a signal at the associated station set. Optional arrangements such as interarea and 3-digit interarea switching circuits, access from CO, and

dial or manual PBX connections are included in this section.

2. IDENTIFICATION

2.01 The nonprivacy arrangement is ordered as J53047A-L1. The required number of station lines is controlled by the J53047B units. J53047B-L1 provides one station control and gate unit with mounting space for five additional station control units, ordered as J53047B-L2s. One 2- by 23-inch mounting plate has the capacity to control six station lines.

2.02 The privacy arrangement requires a J53047A-L2 in addition to the J53047-L1 which is wired and equipped with common control station lockout and *1st* station control circuit. Connections for privacy are shown in Fig. 4.

2.03 Additional station control and gate units for the privacy arrangement is accomplished by adding the J53047C and J53047D units, as required. The J53047C-L1 unit provides manual privacy control and three additional station control circuits with a gate relay on one 2- by 23-inch mounting plate.

2.04 When manual privacy is not ordered, the J53047D-L1 unit provides one additional station control and gate unit with privacy. The J53047D-L2 provides for one additional station line (maximum of 4) on one 2- by 23-inch mounting plate.

3. INSTALLATION

3.01 Installation of the two basic arrangements is shown in Fig. 1 and 2. The privacy arrangement can use station control units with or without manual privacy. The requirements of a specific location determine the ultimate placement of the station control units.

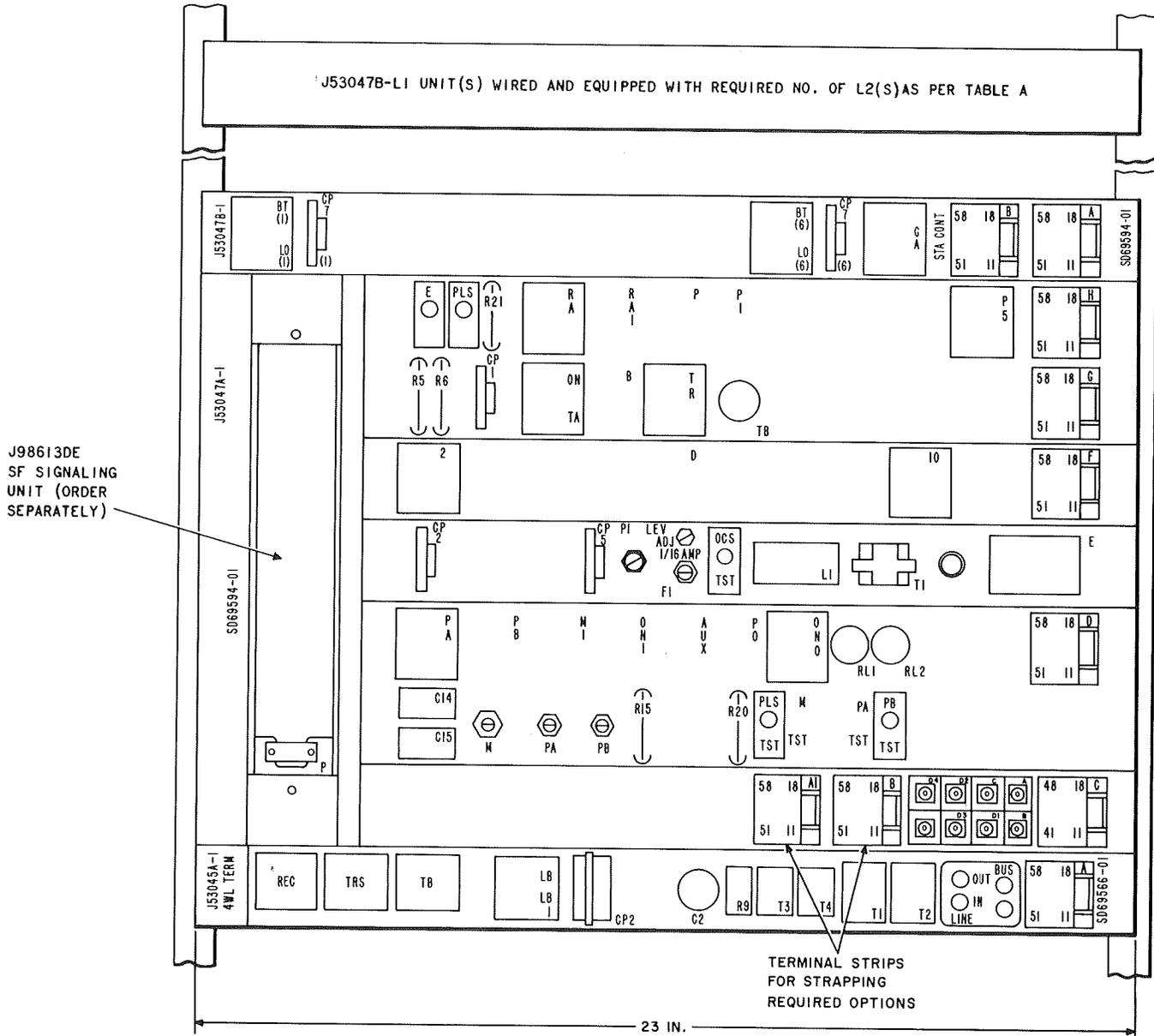


Fig. 1—Typical SS-1A Installation Arranged for Nonprivacy

3.02 The nonprivacy arrangement shown in Fig. 1 must use the J53047B units when more than one telephone set is required at a customer location.

4. ORDERING GUIDE

4.01 Table A shows equipment requirements for the number of stations desired at a location equipped for nonprivacy. One J53047B-L1 equipped with (5) additional L2s has the capability of controlling

six station lines. Equipment requirements for 28 station sets, arranged for nonprivacy, would be; four each J53047B-L1 wired and equipped with (5) L2s and one J53047B-L1 wired and equipped with (3) L2s. These requirements are in addition to the J53047A-L1 basic nonprivacy unit.

4.02 Table B shows the number of units required in addition to J53047A-L1 and L2 basic privacy unit. The J53047C-L1 unit is equipped

STATION CONTROL WITH PRIVACY AS REQUIRED J53047D L1 & L2

J98613DE SF SIGNALING UNIT (ORDER SEPARATELY)

BASIC UNIT EQUIPPED FOR PRIVACY J53047A L1 & L2

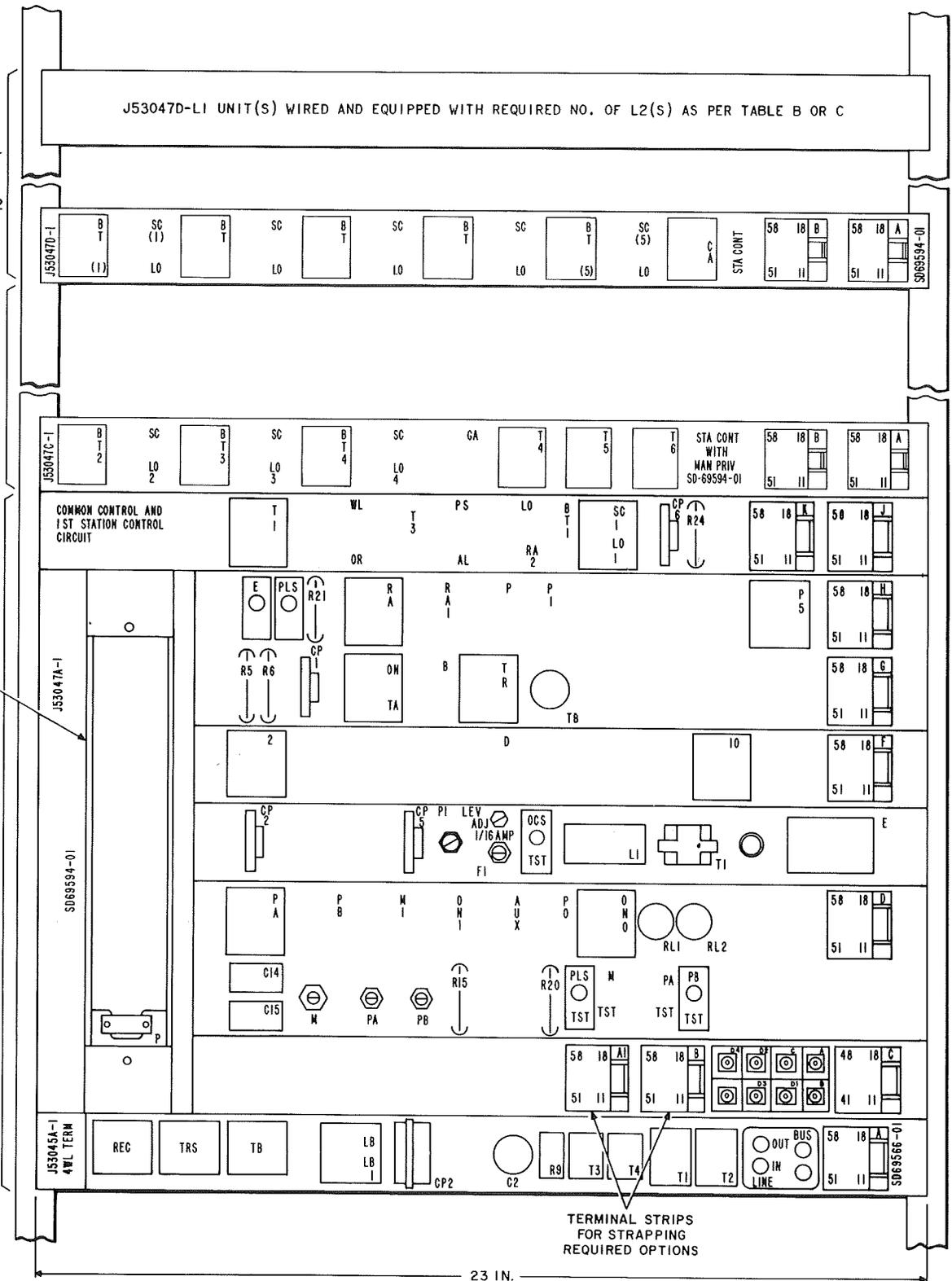


Fig. 2—Typical SS-1A Arrangement Equipped for Privacy

TABLE A

**ORDERING GUIDE FOR SS-1A ARRANGED FOR
NONPRIVACY (REQUIRED IN ADDITION
TO J53047A-L1)**

NO. OF STA. LINES	J53047B-L1 UNITS E/W (5) ADDITIONAL L2'S	J53047B-L1 UNIT WIRED FOR (1) STATION	ADDITIONAL L2'S REQD
*1	0	0	0
2			1
3			2
4			3
5			4
6	1	0	—
7			0
8			1
9			2
10			3
11		4	
12	2	0	—
13			0
14			1
15			2
16			3
17		4	
18	3	0	—
19		1	0
20			1

* No station control required for single station installations.

for manual privacy and can be arranged in conjunction with the J53047D units as required.

4.03 Table C shows equipment requirements for systems equipped for automatic privacy.

4.04 The J53045 unit (SD-69566-01) is capable of providing transmission requirements for 20 stations off hook simultaneously without adverse effects. Tables A, B, and C show the SS-1A equipment necessary for 1 through 20 stations with (1) J53045 unit.

TABLE B

**ORDERING GUIDE FOR SS-1A ARRANGED FOR
MANUAL PRIVACY (REQUIRED IN
ADDITION TO J53047A-L1 AND L2)**

NO. OF STA. LINES	J53047C-L1 UNIT	J53047D-L1 UNIT E/W (4) ADDITIONAL L2'S	J53047D-L1 UNIT (WIRED AND EQUIPPED FOR (1) STATION	ADDITIONAL L2'S REQUIRED FOR STA. CONTROL	
1	*	*			
2	1	0			
3					
4					
5	†	0			1
6			1		
7			2		
8			3		
9	†	1	1	—	
10				0	
11				1	
12				2	
13	†	2	1	3	
14				—	
15				0	
16				1	
17	†	3	0	2	
18				3	
19				—	
20				1	0

* 1st station control circuit contained in the basic J53047A-L2 common control unit.

† Only *one* J53047C unit is required per customer location. Stations in excess of 4 are controlled with the J53047D units.

5. SERVICE OPTIONS

5.01 The fuse panel contains terminal strips A1 and B which are provided for optional strapping. Tables D and E indicate the option and are to be selected as required. Terminal strips A1 and B appear on Fig. 3 and 4.

6. POWER REQUIREMENTS

6.01 The 4-wire private line terminating unit (J53045A) is packaged as a component part

TABLE C
ORDERING GUIDE FOR SS-1A ARRANGED FOR
AUTOMATIC PRIVACY (REQUIRED IN
ADDITION TO J53047A-L1 AND L2)

NO. OF STA. LINES	J53047D-L1 UNITS E/W (4) ADDITIONAL L2'S	J53047D-L1 UNITS WIRED FOR (1) STA.	ADDITIONAL L2'S REQD FOR STATION CONTROL
1	*	*	—
2	0	1	0
3			1
4			2
5			3
6	1	0	—
7		1	0
8			1
9			2
10	3		
11	2	0	—
12		1	0
13			1
14			2
15	3		
16	3	0	—
17		1	0
18			1
19			2
20	3		

* 1st station control circuit contained in the basic J53047A-L2 common control unit.

of SS-1A. The voltage requirement for SS-1A (J53047A) is -48 volts but the 4-wire private line terminating unit requires -24 volts for operating the 227-type amplifiers, and loopback feature.

7. CONNECTIONS

7.01 Connections for the privacy arrangement are shown in Fig. 4 and the nonprivacy arrangement in Fig. 3. Terminal strips A1 and B are for optional strapping of the features required.

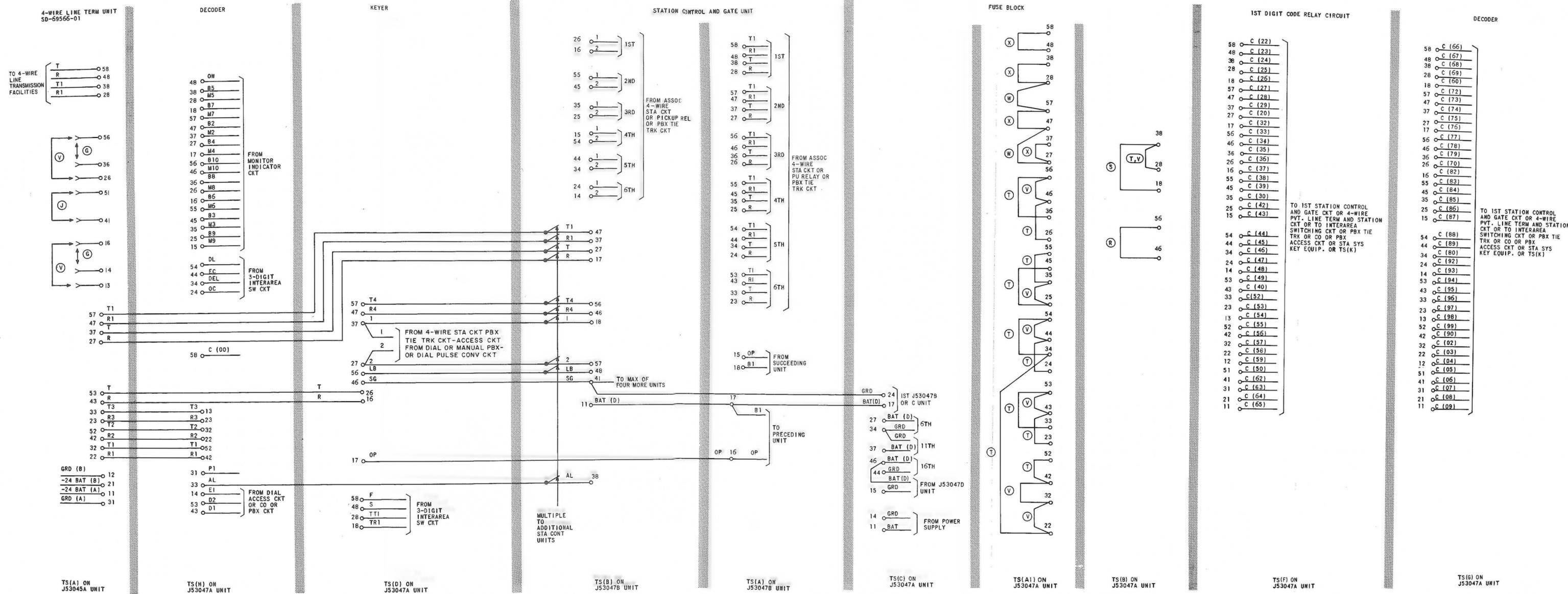


Fig. 3—Connections for 5S-1A Arranged for Nonprivacy

TABLE D

**SENDING AND RECEIVING 1 TO 81 CODES WITHOUT COMMON CONTROL
(NONPRIVACY) WITH ON PREMISES DIALING AND WITH OR WITHOUT
STATION LOCKOUT DURING DIALING**

SERVICE OPTION	WIRING OPTION	TERMINAL STRIP DESIGNATION
Station lockout during dialing	Z, S	B
No station lockout during dialing	Z	B
Station control circuit for station lockout during dialing	S	B

TABLE E

SENDING AND RECEIVING 1 TO 81 CODES WITH COMMON CONTROL (PRIVACY)

SERVICE OPTION	WIRING OPTION	TERMINAL STRIP DESIGNATION
Manual Privacy	T	A1 & B
Automatic Privacy	V	A1
Station Lockout for Dial Access to PBX or CO	On Premises PBX	K
	On Premises CO	M
	Off Premises PBX and CO	J
	Without Access from Manual PBX	R
More than one station control circuit required	W	A
Monitor capability required with more than one station control circuit	W, Q	A1 & K
Only one station control circuit required	X	A
Monitor capability required with only one station control circuit	Q	K
Monitor capability not required with only one station control circuit	N	J
Monitor capability not required with more than one station control circuit	W, N	A1 & J