

REGISTRATION INTERFACE
SERIES SINGLE LINE
TIP AND RING ARRANGEMENTS
RJ31X, RJ32X, RJ33X, RJ34X, RJ35X, AND RJ36X

1. GENERAL

1.01 This section provides information on the standard arrangements to be provided under the Federal Communications Commission (FCC) Registration program.

1.02 If this section is reissued, the reasons for reissue will be contained in this paragraph.

1.03 The arrangements covered in this section require the installation of a 635A connecting block. This connecting block is designed to place the customer provided equipment (CPE) in series with the telephone line and the telephone company equipment when the plug from the CPE is inserted in the modular jack. In this mode loop continuity must be maintained through the registered equipment. When the CPE plug is removed, the circuit is restored between the line and the telephone company equipment.

1.04 In all the arrangements tip and ring of a single line are supplied through the interface. Where the arrangement is used with a Key Telephone System (KTS), the A and A1 leads are also furnished. When used with a telephone set equipped with an exclusion key and a data set (RJ36X), mode indication leads (M1 and M1C) are supplied.

1.05 All unused leads and terminals are reserved for telephone company use. In the 635A connecting block terminals 1 and 8 are not equipped with contact springs and are spare for telephone company use. Preliminary production of the 635A will not be equipped with terminals 1 and 8. Disposition of spare leads should be per local instructions.

Note: Circuit incompatibility may occur involving spare leads if a change in service is installed, ie, a line with A lead control installed originally would not be compatible with a subsequent installation involving a data set. Whenever service is altered at an installation involving registration USOC codes, check that all appearances are properly wired.

1.06 Unless otherwise specifically required by a particular wiring arrangement, access to the required leads can be at any access point. USOC RJ35X must be accessed in the telephone set in order to provide the series tip and ring connection of all lines appearing in the set. Fig. 5 provides modification of the more common sets. For the other arrangements, if installed in a large KTS with color-keyed backboards, the auxiliary (yellow) field should be used; otherwise, access at satellite closets, distribution boxes, connecting blocks, etc.

1.07 When necessary to access leads in COM KEY* installations, wire as follows:

- (1) COM KEY 416—Tip and ring ahead of the line circuit can be obtained only at the 91A connecting block for the primary station. A and A1 will require use of a KS-19252 adapter in the cabling loop. A short length of connector cable must be plugged into the adapter and the raw end terminated on a 66-type connecting block. The required leads are then accessed on the connecting block. Where T, R, A, and A1 are required behind the line circuit, the KS-19252 adapter and short connector cable are again used but all leads are accessed on the 66-type connecting block. Refer to Section 518-450-105 for information on COM KEY 416.

NOTICE

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(2) COM KEY 718—Tip and ring ahead of the line circuit can be obtained at the incoming CO/PBX line terminations on block 3 using 183B adapters. If T, R, A, or A1 are required behind the line circuit, they can be accessed per line at any of the line appearances of the station terminations on blocks 3, 4, or 5. Again use 183B adapters. For information on COM KEY 718, refer to Section 518-450-100.

(3) COM KEY 1434—Tip and ring ahead of the line circuit can be accessed at the incoming line terminations on block 7 using 183B adapters. T and R behind the line circuit and A and A1 for a particular line can be accessed at any of the line appearances of the station terminations on blocks 6 through 15 using 183B adapters. For information on COM KEY 1434, refer to Section 518-450-102.

(4) COM KEY 2152—Tip and ring ahead of the line circuit can be accessed on block 3 of the 100A1 or 101A1 connecting unit. T and R behind the line circuit and A and A1 are accessed per line on the station cutdown blocks of the connecting units. Use 183B2 adapters to provide termination. For information on COM KEY 2152, refer to Section 518-450-110.

*Trademark

2. IDENTIFICATION

2.01 USOC RJ31X: This arrangement is wired so that when the CPE is plugged into the 635A connecting block, the CPE is placed in series with the tip and ring of the line (Fig. 1). When the CPE plug is removed, tip and ring are cut through to the station equipment. ***The 635A connecting block must be wired in the circuit ahead of all station equipment, to prevent false operation of the registered device, and to cut off all station equipment from the line.***

2.02 USOC RJ32X: This arrangement (Fig. 2) also provides a series tip and ring connection through the 635A connecting block but is used where the CPE is connected at the station, such as an automatic dialer.

2.03 USOC RJ33X: Provides a series connection of the tip and ring of a KTS line ahead of the line circuit because the registered equipment

requires CO/PBX ringing and a bridged connection of A and A1 from behind the line circuit (Fig. 3). Tip and ring are the only leads opened when the CPE plug is inserted in the 635A connecting block. Typical usage would be for CP automatic dialers or call restricters. Access to the required leads can be anywhere leads are available, but tip and ring must be ahead of the line circuit.

2.04 USOC RJ34X: This arrangement provides a series tip and ring connection and a bridged A and A1 to the CPE. All leads are connected behind the line circuit (Fig. 4). Typical usage is for automatic dialers and call restricters.

2.05 USOC RJ35X: Provides a series tip and ring connection of all lines appearing in a key telephone set plus a bridged A and A1. The arrangement requires that the set wiring be modified as shown in Fig. 5 to put the CPE in series with the T and R multiple from the key(s) and the T and R going to the speech network. Connections between the 635A connecting block and the telephone set terminals can be made using a D6AA cord.

2.06 USOC RJ36X: This arrangement provides a connection for a telephone set equipped with an exclusion key where the telephone line is also to be used with a registered data set. The arrangement provides a series connection to the tip and ring, plus mode indication leads M1 and M1C. The exclusion key can be used to transfer the telephone line between the data set and the telephone set. This arrangement will be associated with a telephone company provided data jack.

3. MAINTENANCE

3.01 Maintenance of the wiring arrangements covered in this section is limited to:

- Verification of the telephone company wiring and equipment
- Assurance that the required leads are supplied in the interface used for CPE connection.

No attempt should be made to test, modify, or repair customer-owned and maintained equipment.

3.02 When in the judgment of repair personnel the trouble is located in the CPE, the Repair Service Bureau should be notified so that proper

Maintenance of Billing can be initiated as required and as outlined in the following:

- Section 660-101-318, Tariff and Registration Violation Notice Procedures.

- Section 660-101-312, Maintenance of Service Charge on Services With Customer-Provided Equipment (CPE)

NOTE:

CIRCUITS BETWEEN 2-4 AND 5-7 ARE OPENED WHEN CPE PLUG IS INSERTED IN JACK.

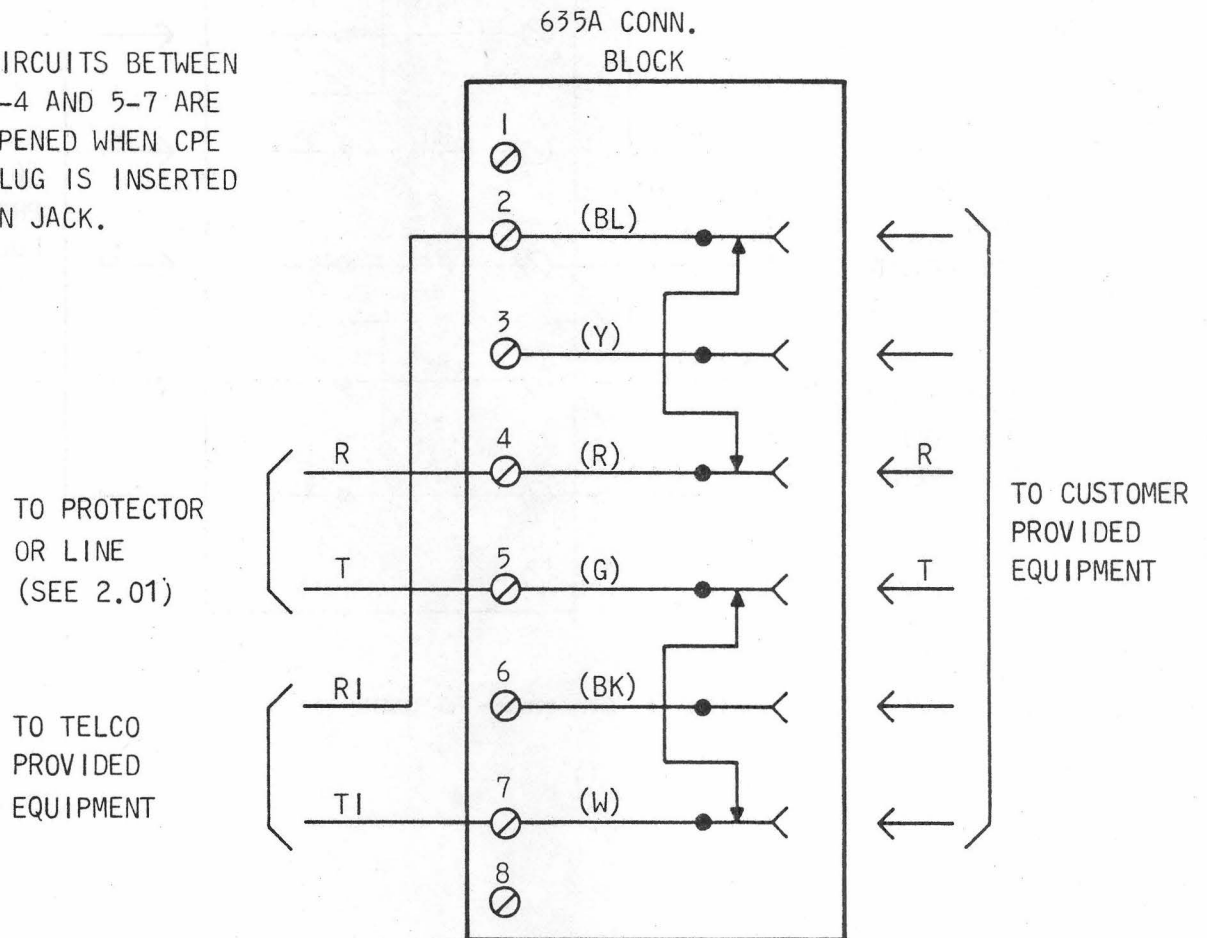


Fig. 1—Connections for USOC RJ31X

NOTE:

CIRCUITS BETWEEN
2-4 AND 5-7 ARE
OPENED WHEN CPE
PLUG IS INSERTED
IN JACK.

INSIDE
WIRE FROM
PROTECTOR
(SEE 2.02)

TO TELCO
PROVIDED
EQUIPMENT

635A CONN
BLOCK

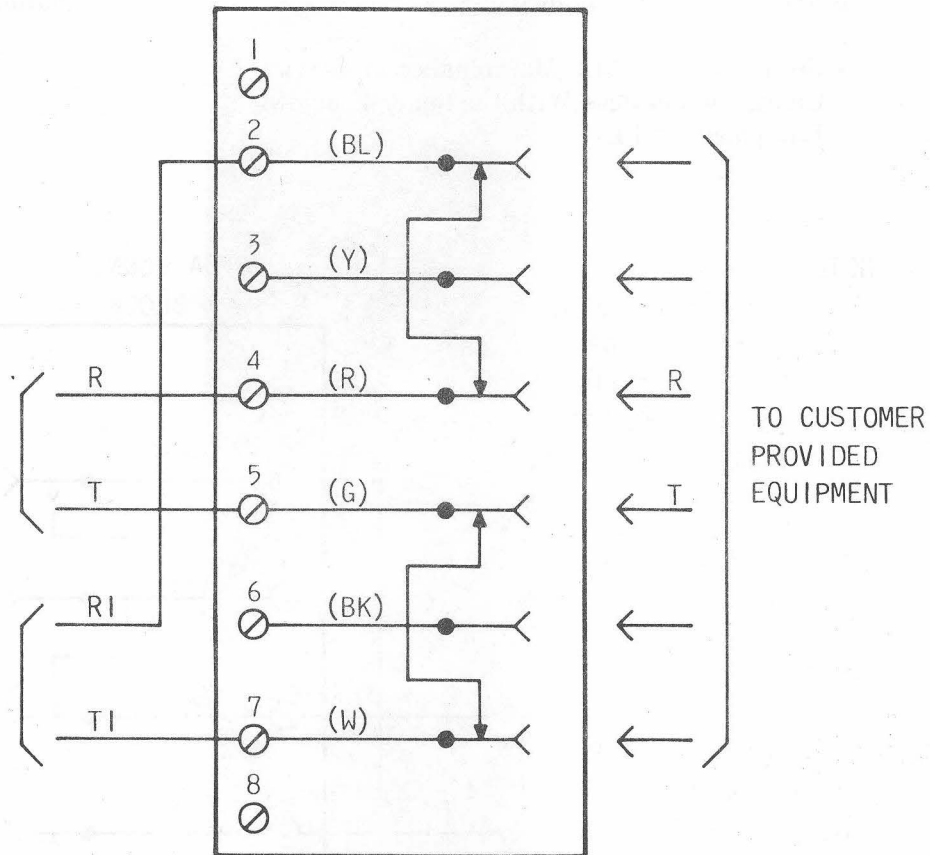


Fig. 2—Connections for USOC RJ32X

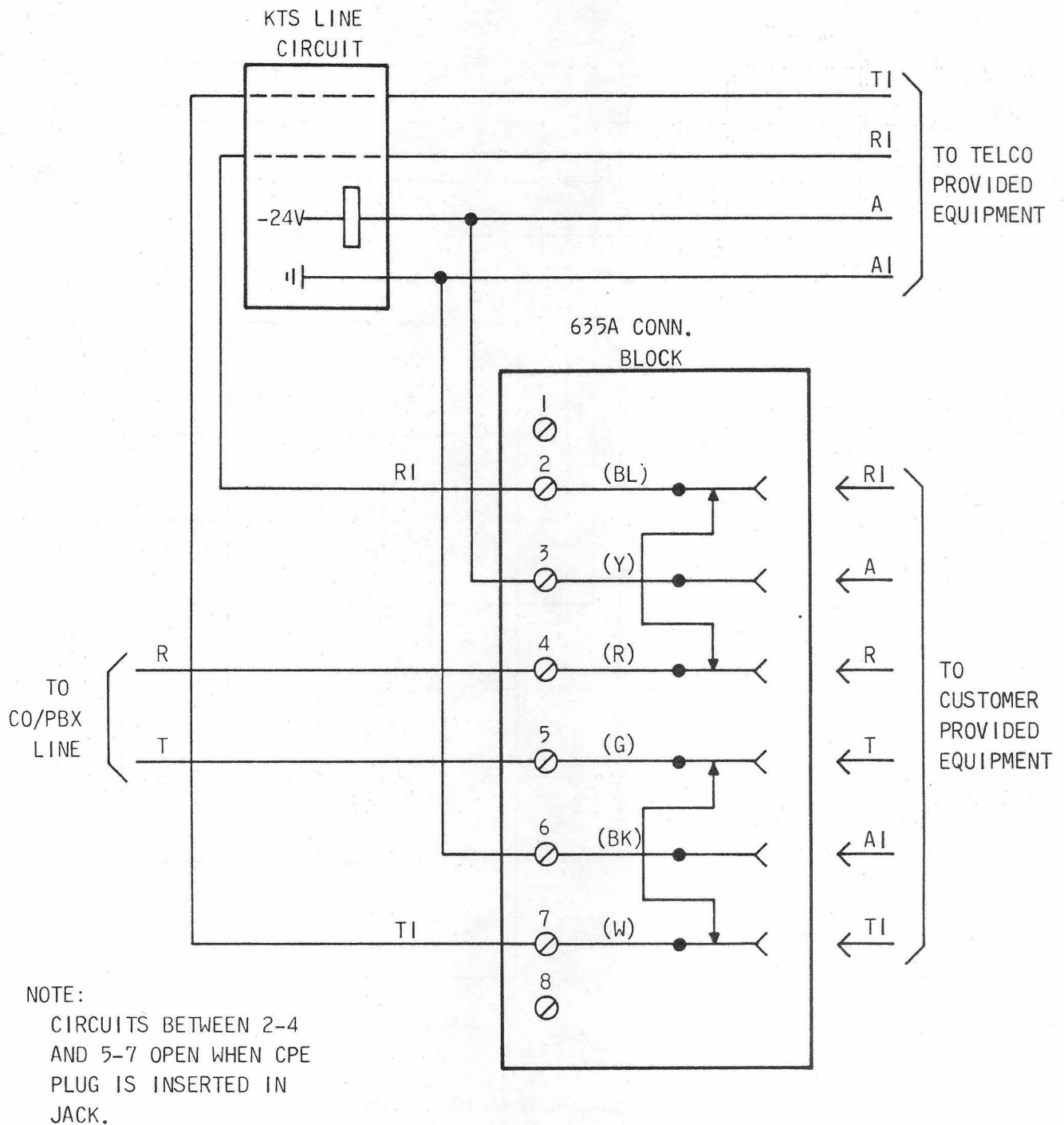


Fig. 3—Connections for USOC RJ33X

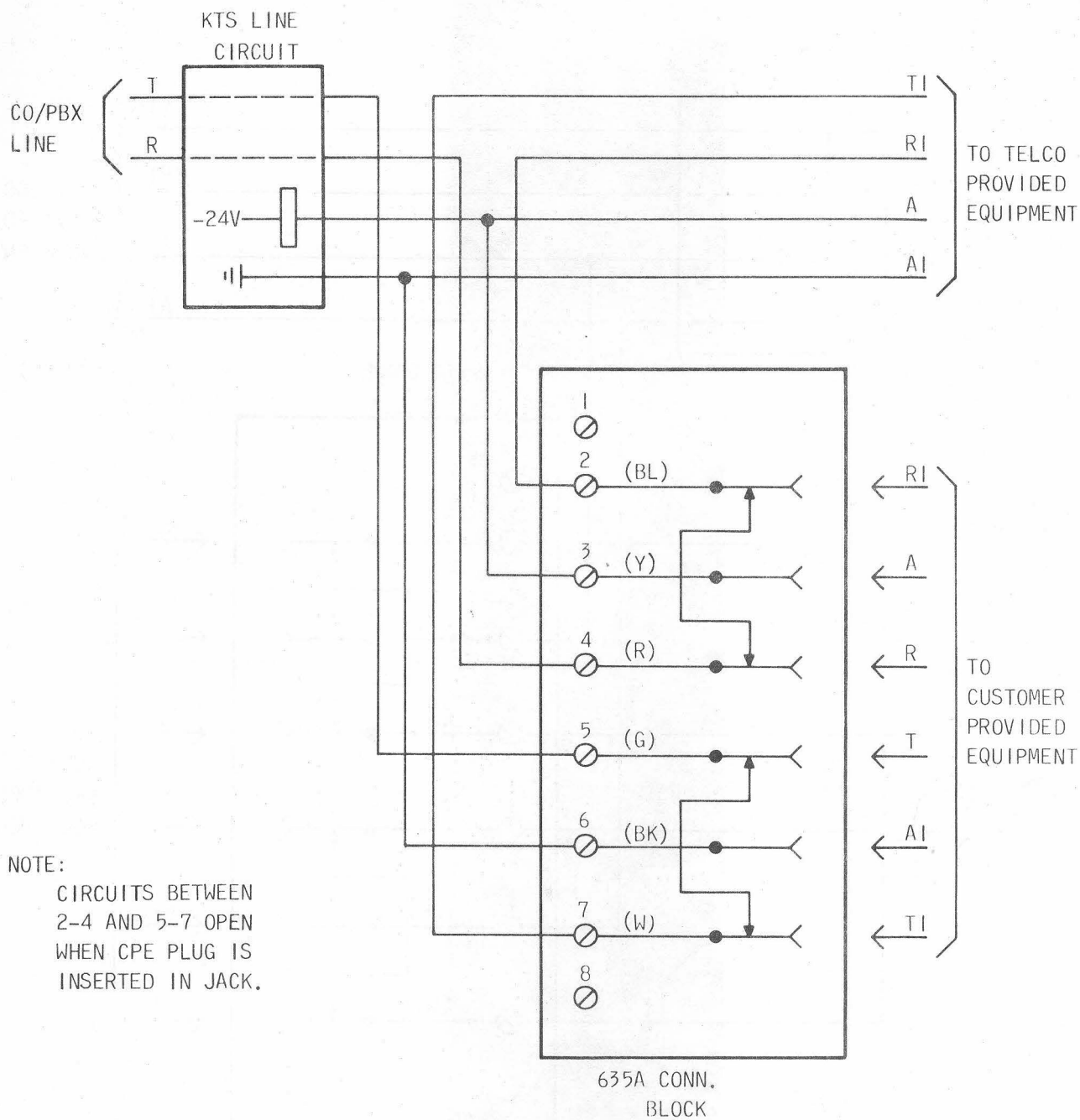
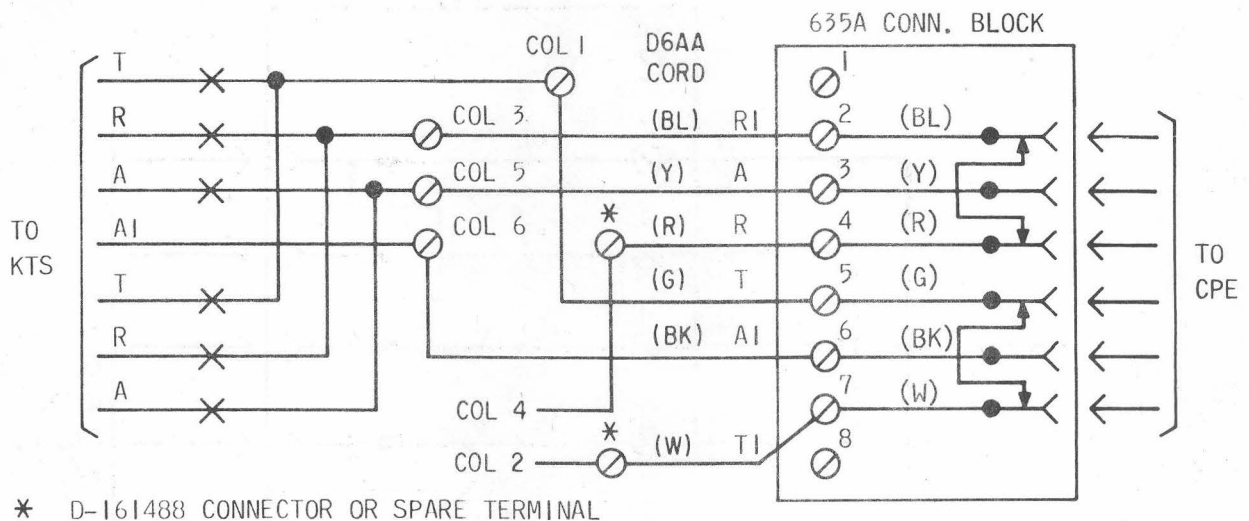


Fig. 4—Connections for USOC RJ34X



TELEPHONE SET CODE	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6
	T	TI	R	RI	A	AI
565GK	F	BL (DIAL)	N	G	M	IB
565HK/LK			9	(L SW)		
2565GK	L2	G (DIAL)	N	G		
2565HK/LK			9	(L SW)		
630D/631D	F	BL (DIAL)	2	G	5	I
630DA/631DA			13	(L SW)	7	8
636C/637D			2	BL-W	5	I
636CA/637CA			9	(FLASH)	7	8
2630D/2631D	4	G (DIAL)	2	G	5	I
2630DA/2631DA	12		13	(L SW)	7	8
2636C/2637D	4		2	BL-W	5	I
2636CA/2637DA	12		9	(FLASH)	7	8
851-TYPE	F	BL (DIAL)	13	G	9	4
2851-TYPE	20	G (DIAL)		(L SW)		
830/831-TYPE	F	BL (DIAL)	6	G (L SW)	7	10
2830/2831-TYPE	8	G (DIAL)				
832/833-TYPE	F	BL (DIAL)				
2832/2833-TYPE		G (DIAL)			15	

MODIFY SETS AS FOLLOWS:

1. DISCONNECT COLUMN 2 LEAD FROM COLUMN 1 TERMINAL. CONNECT TO TI LEAD FROM JACK USING D-161488 CONN. OR SPARE TERMINAL.
2. CONNECT T LEAD FROM JACK TO COLUMN 1 TERMINAL.
3. DISCONNECT COLUMN 4. LEAD FROM COLUMN 3 TERMINAL. CONNECT TO RI LEAD FROM JACK USING D-161488 CONN. OR SPARE TERMINAL.
4. CONNECT R LEAD FROM JACK TO COLUMN 3 TERMINAL.
5. CONNECT A AND AI LEADS TO TERMINALS IN COLUMNS 5 AND 6 RESPECTIVELY.

Fig. 5—Connections for USOC RJ35X

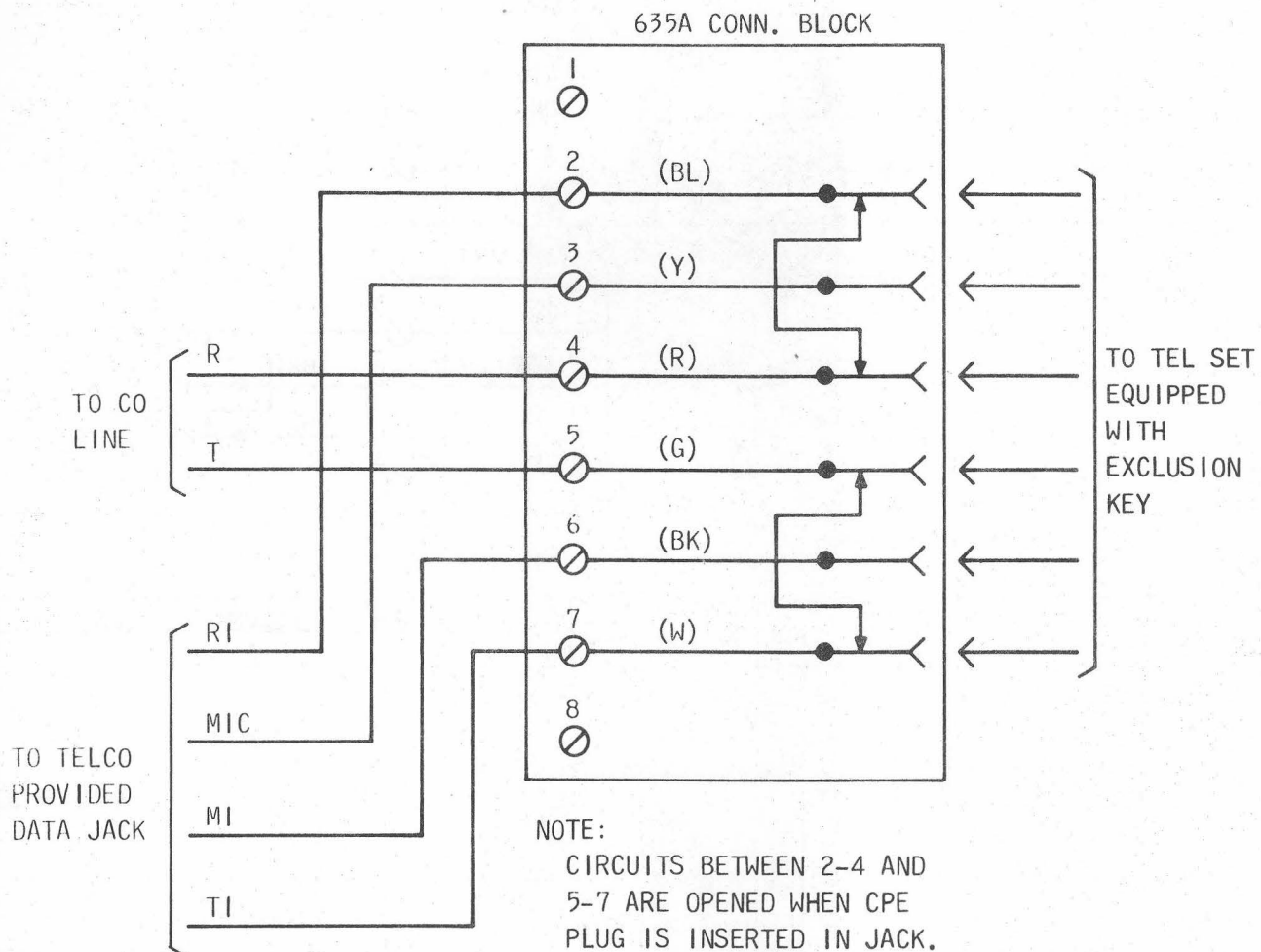


Fig. 6—Connections for USOC RJ36X