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1. GENERAL

1.1 FOR DETAILS OF VARIOUS TYPES OF METERING AVAILABLE SEE DIAGRAM N1010

1.2 OPERATING PROCEDURE FOR SWITCHED TRIP METERING

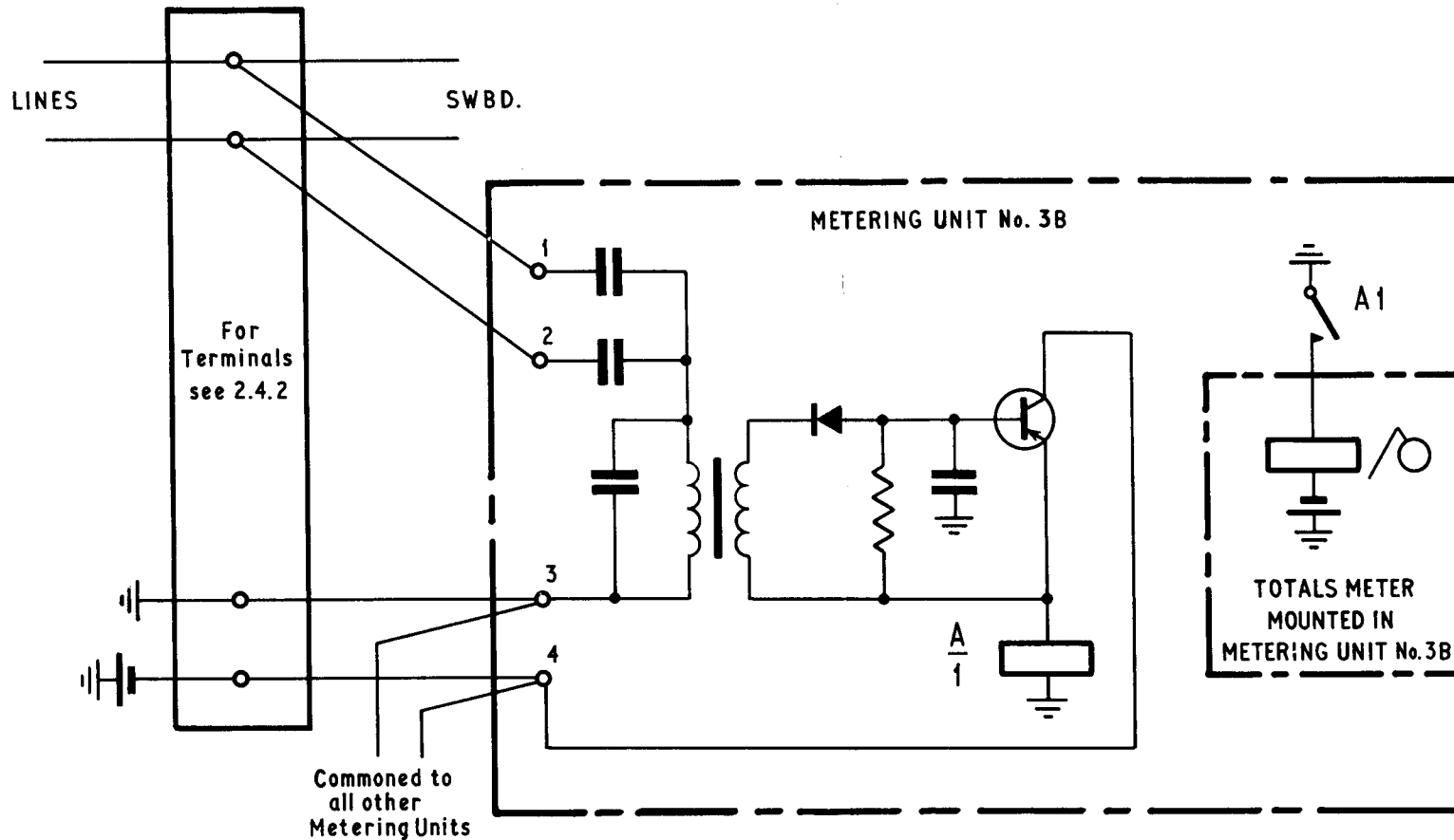
The exchange line on which trip metering is required is selected by depressing the appropriate button on the Switching Unit. The subsequent operation of another button to effect trip metering on another exchange line will automatically release any other button previously operated.

When required all operated buttons can be released by half-depressing a released button.

P. O. TELECOMMS. HQRS. PAPER W CIRCULATION GENERAL			
	B	REDESIGNED. REDRAWN. WAS 2 PAGES	MWH 18-1-71
	A	NEW FORMAT	26-6-68

2. TOTALS ONLY METERING ON EXCHANGE LINES

2.1 EXPLANATORY CIRCUIT



2.2 TOTALS METERING - STORES

2.2.1 STORES

RATE BOOK DESCRIPTION	QUANTITY
Metering Unit No.3B	1 per metered exchange line
Meter No.150C	1 per M.U. No.3B
Mounting D 91477	1 per M.U. No.3B
Part 1/DBL/95	As required - see 2.2.2

2.2.2 The quantity of Parts 1/DBL/95 depends upon the mounting arrangements of the Metering Units No. 3B.
When mounted individually 2 Parts are required per M.U.

When bolted together side by side 2 Parts are required only for the ends.

2.3 MOUNTING AND WIRING ARRANGEMENTS FOR TOTALS METERING

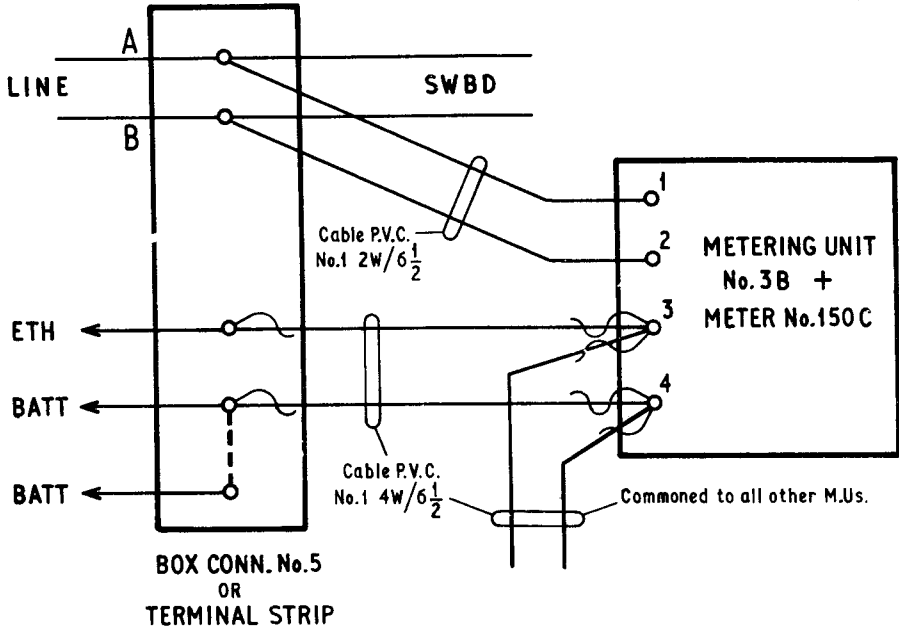
2.3.1 M.U.s. No. 3B are to be mounted in accordance with E.I. Teles. P.B.Xs. A 1003

2.3.2 Meters No.150C are to be mounted in M.U.s. No. 3B in accordance with E.I. Teles. P.B.Xs. A1003

2.3.3 Wire the following on the M.U.s.No.3B
Relay Spring A1 to Terminal 3
" " A2 to Meter Coil tag 'a'
Meter Coil tag 'e' to Terminal 4
Use Wire P.V.C. No.3A/6¹/₂

2.4 CABLING FOR TOTALS METERING

2.4.1 BLOCK SCHEMATIC



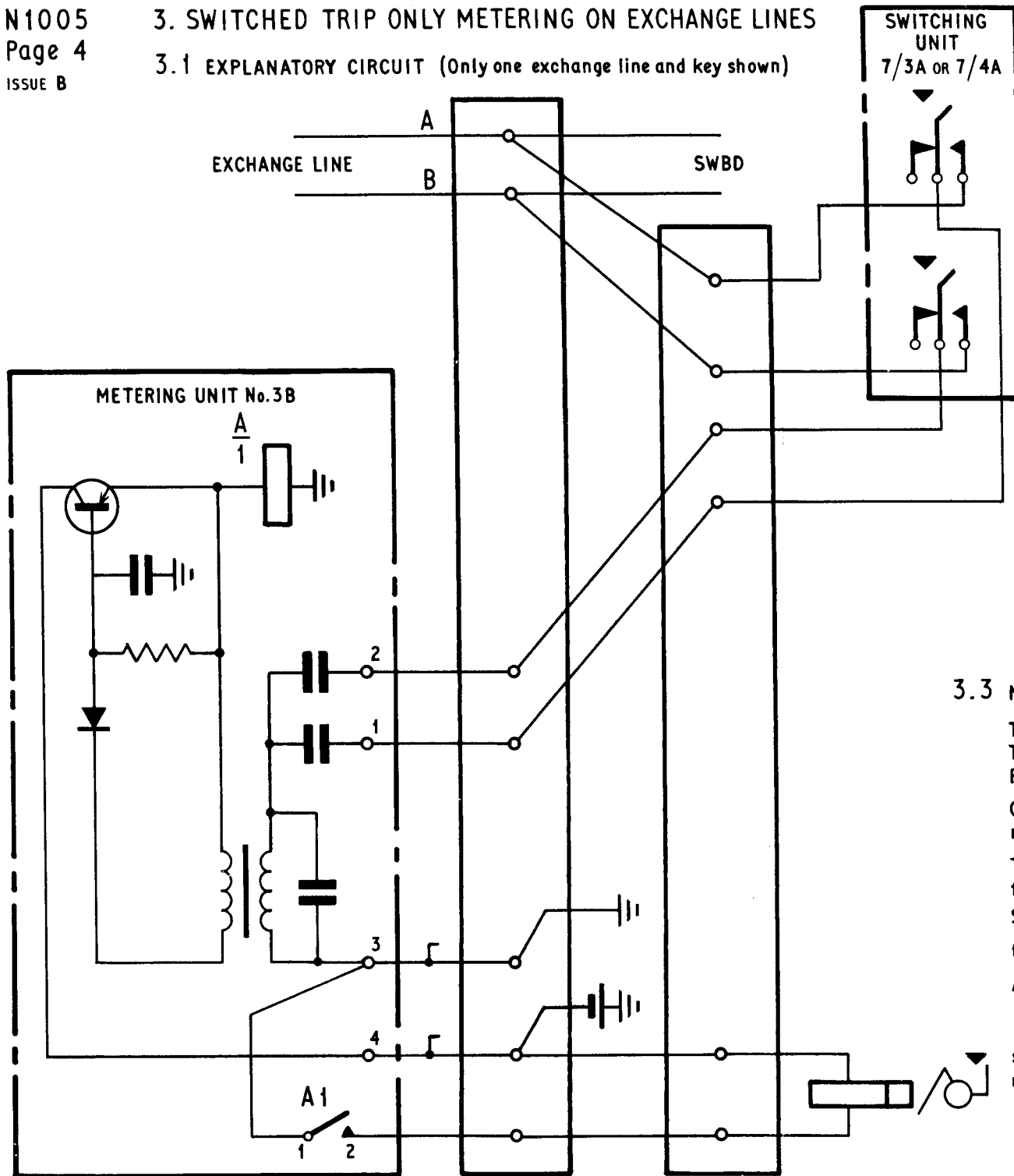
BOX CONN. No.5
OR
TERMINAL STRIP
(FOR TERMINALS SEE TABLE 2.4.2)

2.4.2 TERMINAL NUMBERS IN BOX CONNEXION No. 5 OR TERML.STRIP

EXCHANGE LINE		SWITCHBOARD P.M.B.X. No.			
		2/3A BOX CONNEXION No. 5B	2/4A BOX CONNEXION No. 5C	3/3B TS 2	3/5B TS 3
1	A	A 1	A 1	1 A	1 A
	B	A 2	A 2	1 B	1 B
2	A	A 3	A 3	2 A	2 A
	B	A 4	A 4	2 B	2 B
3	A	A 5	A 5	3A	3A
	B	A 6	A 6	3B	3B
4	A	—	A 7	—	4A
	B	—	A 8	—	4B
5	A	—	—	—	5A
	B	—	—	—	5B
BATTERY		D 7	D11	50v	50v
EARTH		E 7	DE 4	E	E
STRAPS		D7-D14	D11-D14	—	—

3. SWITCHED TRIP ONLY METERING ON EXCHANGE LINES

3.1 EXPLANATORY CIRCUIT (Only one exchange line and key shown)



3.2 SWITCHED TRIP METERING STORES

RATE BOOK DESCRIPTION	QUANTITY
Metering Unit No.3B	One
Mounting D91477	One
Part 1/DBL/95	Two
Meter No.21B.GREY	One
Switching Unit No.7/3A	One per SWBD 2/3A OR 3/3B
Switching Unit No.7/4A	One per SWBD 2/4A OR 3/5B
Strip Designation No. 33 Complete	One per SWBD 2/3A OR 3/3B
Strip Designation No. 34 A Complete	One per SWBD 2/4A
Strip Designation No. 35 A Complete	One per SWBD 2/4A
Strip Designation No.38 A Complete	One per SWBD 3/5B

3.3 MOUNTING ARRANGEMENTS

To fit the Switching Unit No.7/... and Meter No. 21B. Grey The Strip Designation No.... Complete on the face panel of the P.M.B.X. should be removed.

On the P.M.B.X. No.2/4A a Strip Designation No.34A should be mounted above the first free Link Lamp using screws provided.

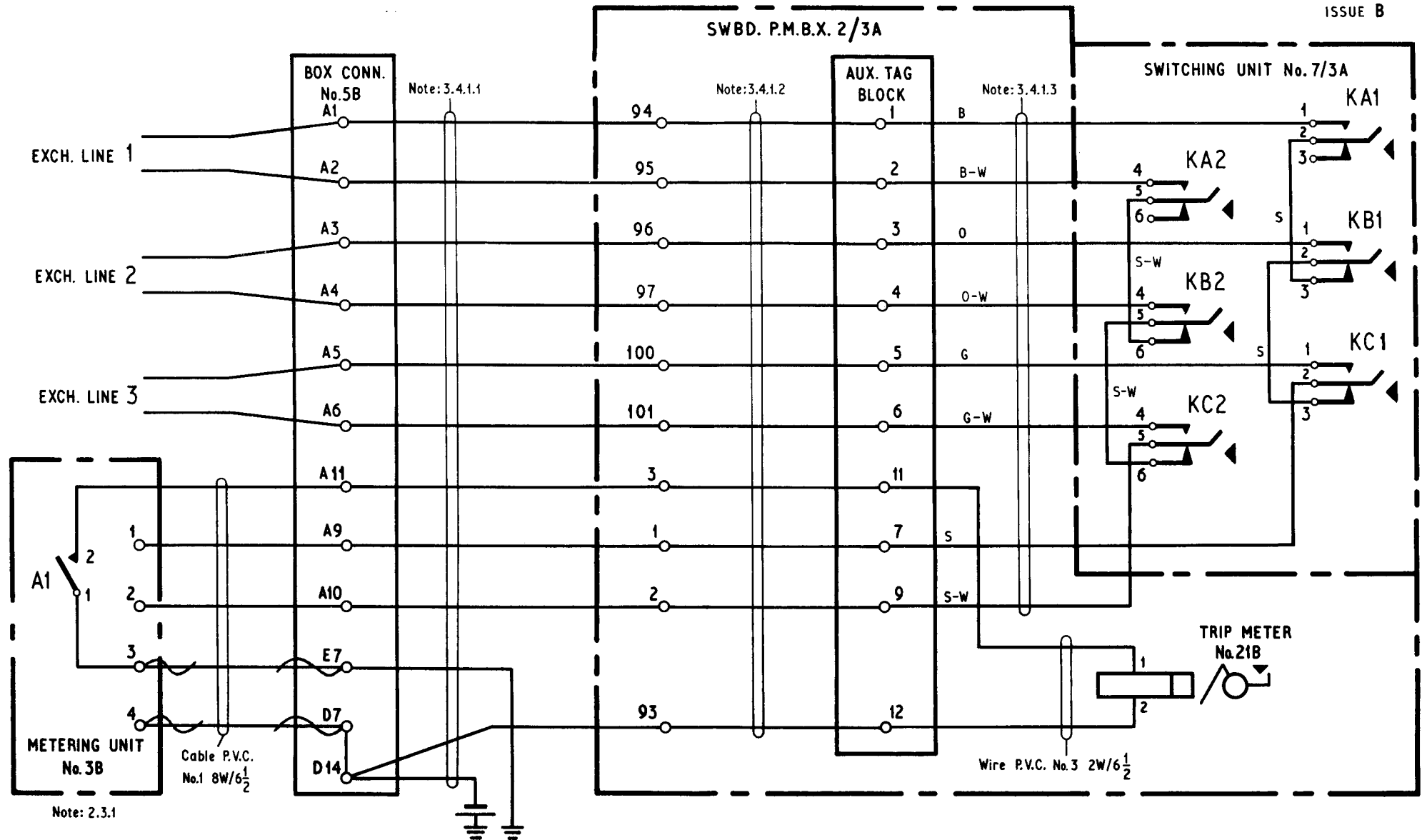
The Switching Unit and Meter should then be positioned in the face panel with the Meter to the left of the Switching Unit.

Screws 6 B.A. x $\frac{3}{16}$ IN. Csk.Hd. Elephant Grey. should be used to mount both items.

A Strip Designation No.33 on P.M.B.Xs. Nos. 2/3A and 3/3B
No.35A on P.M.B.X. No. 2/4A
No.38A on P.M.B.X. No. 3/5B

should be provided in place of the existing Strip Designation using the upper fixing screws of the Meter and Switching Unit

3.4 CABLING AND WIRING ARRANGEMENTS FOR SWITCHED TRIP METERING
 3.4.1 P.M.B.X. 2/3A WIRING AND CABLING DIAGRAM

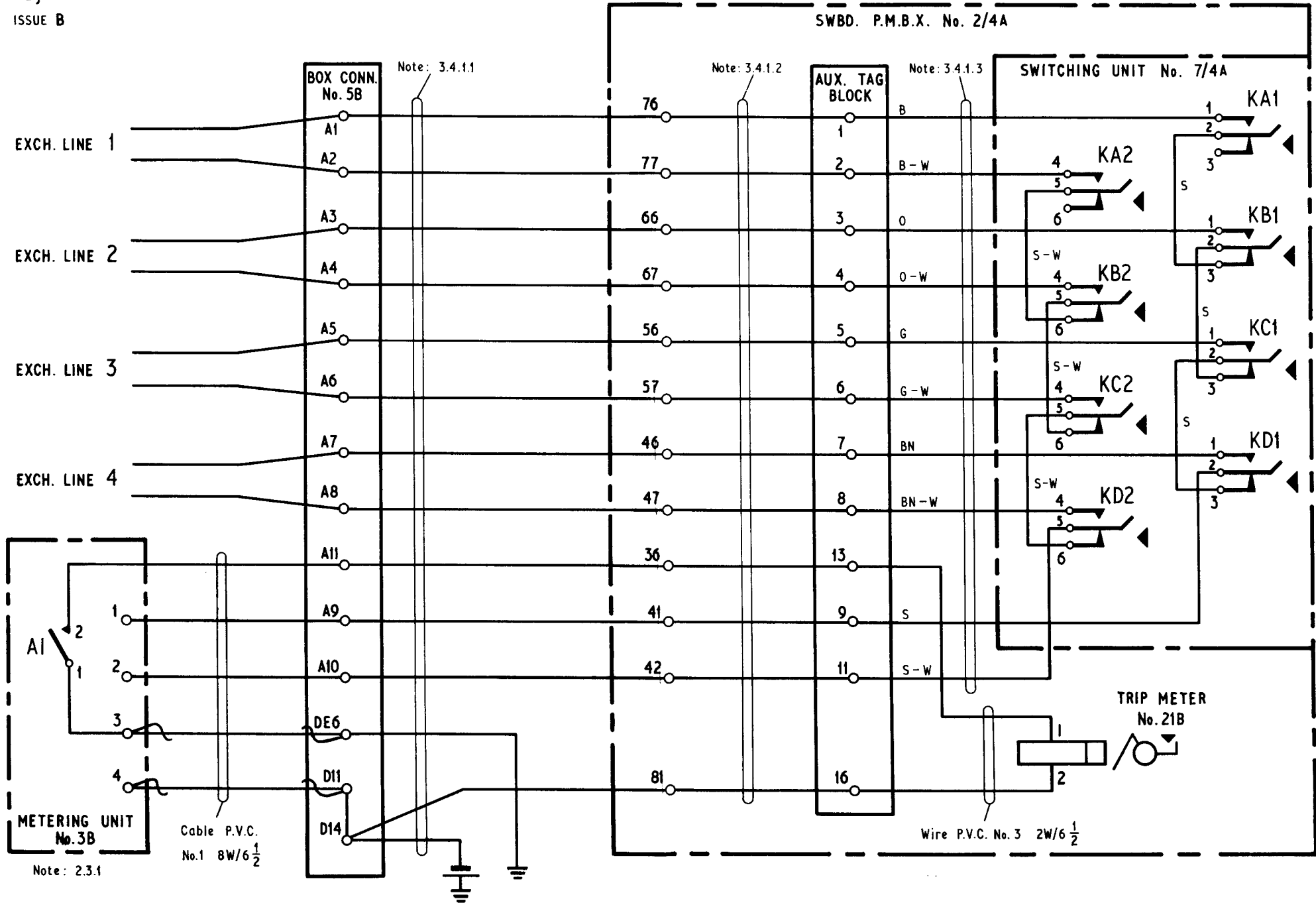


3.4.1.1 This wiring is provided when Switchboard is installed

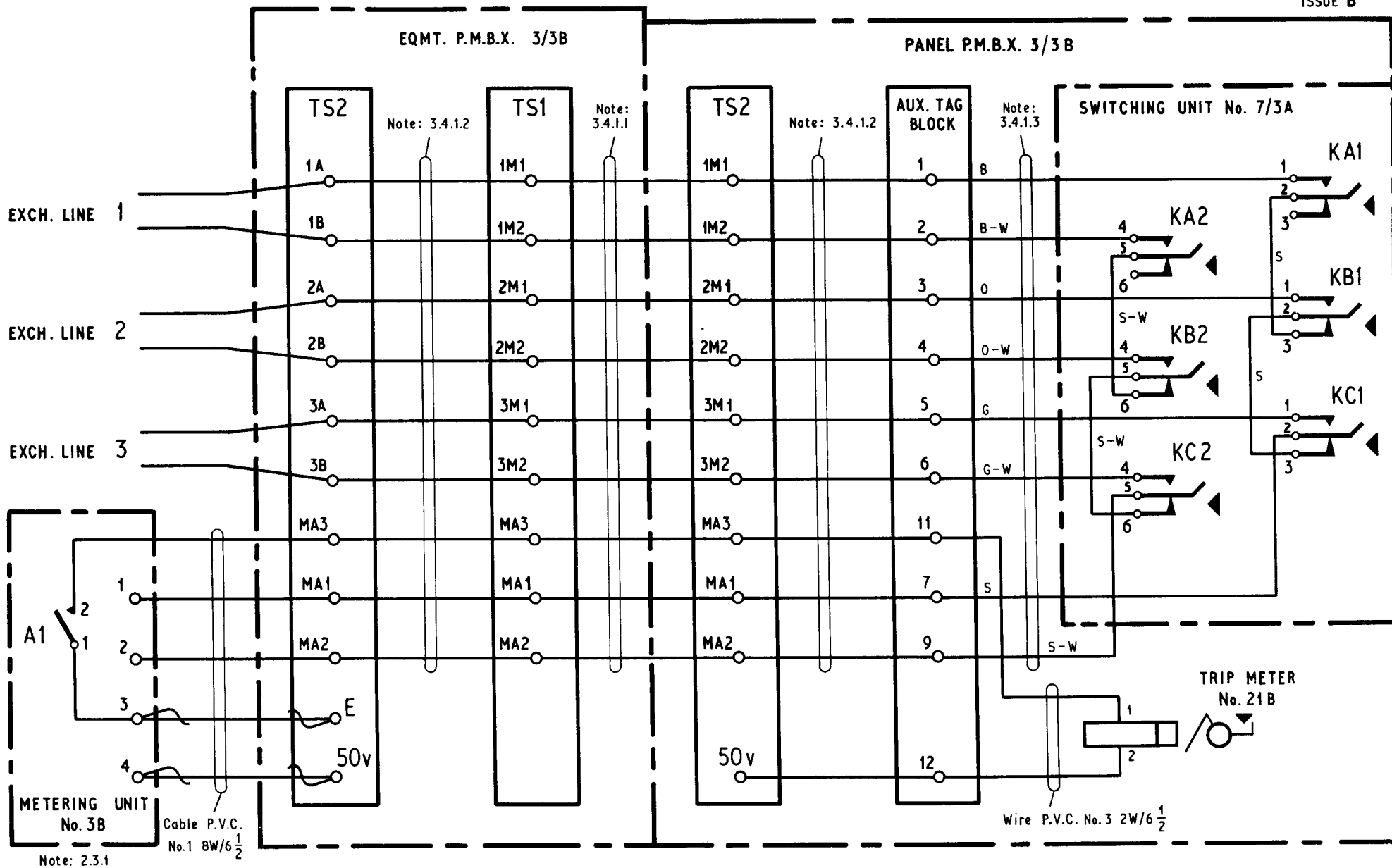
3.4.1.2 This wiring is already existing and is part of the Switchboard

3.4.1.3 The Switching Unit No. 7/... is supplied with flying leads which should be connected to the Auxiliary Tag Block as shown

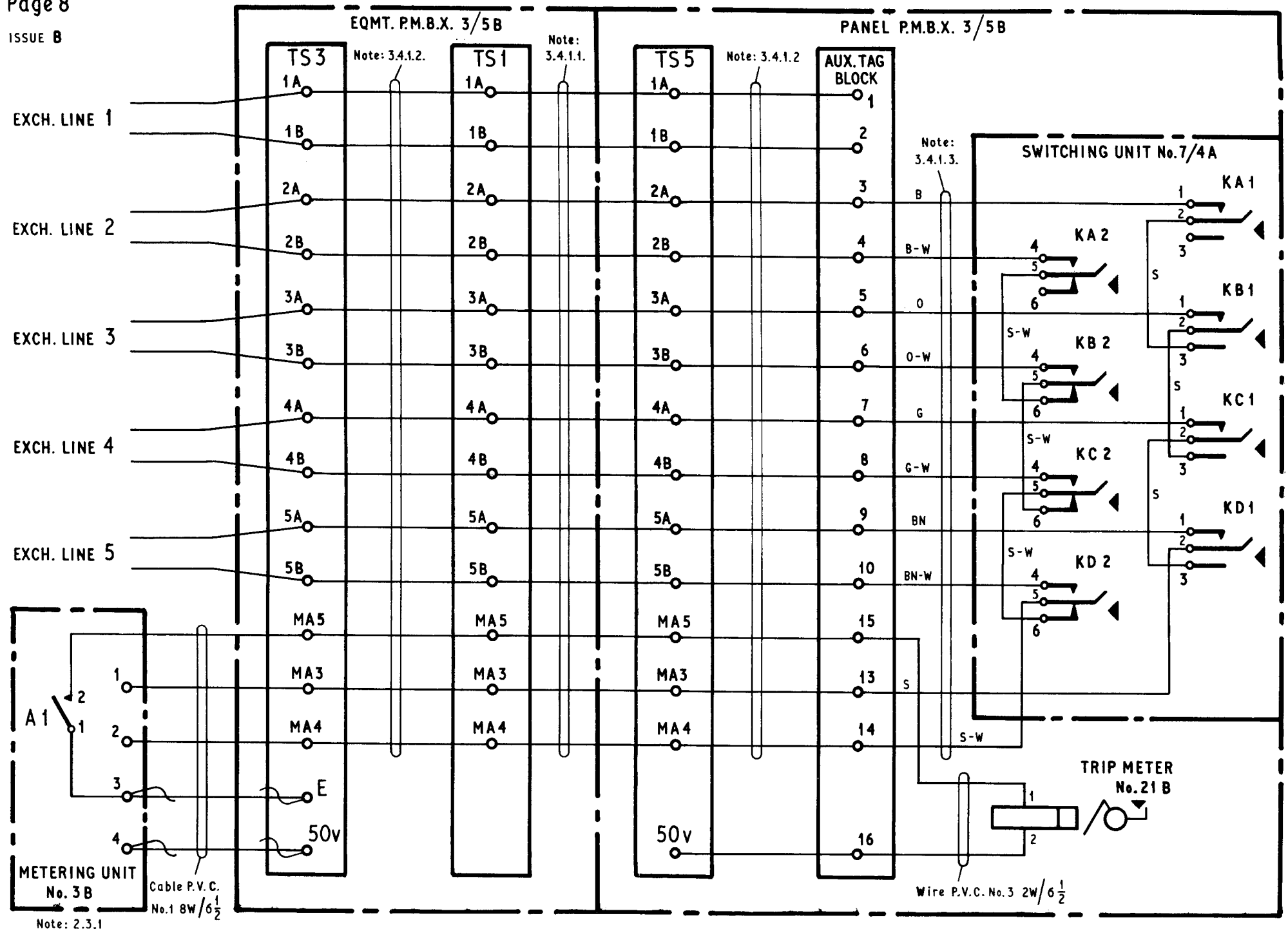
3.4.2 P.M.B.X. 2/4A WIRING AND CABLING DIAGRAM



3.4.3. P.M.B.X. 3/3B WIRING AND CABLING DIAGRAM

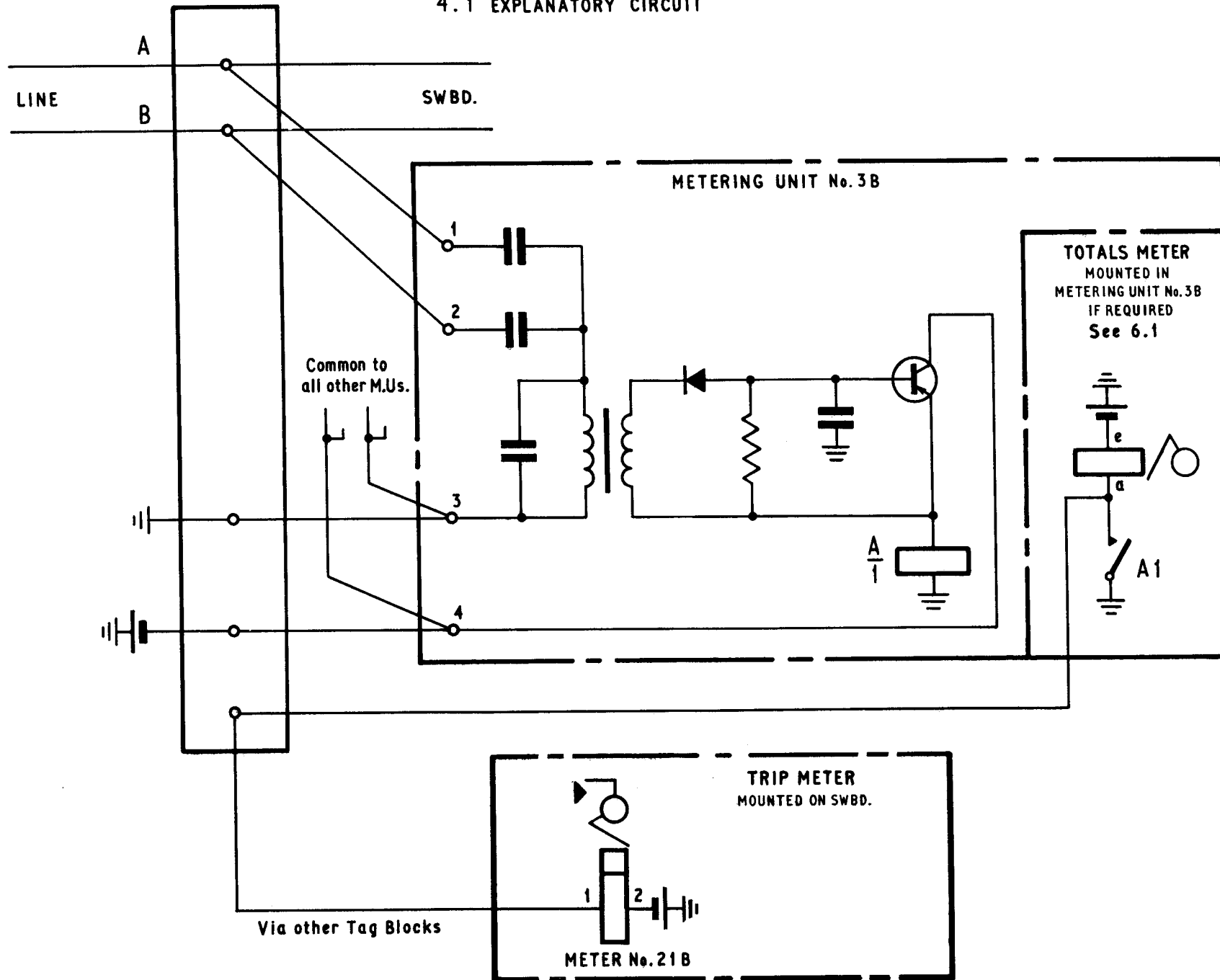


3.4.4. P.M.B.X. 3/5B WIRING AND CABLING DIAGRAM



4. PERMANENT TRIP ONLY METERING ON EXCHANGE LINES

4.1 EXPLANATORY CIRCUIT



4.2 PERMANENT TRIP METERING STORES

RATE BOOK DESCRIPTION	QUANTITY
Metering Unit No.3B	One per exchange line to be metered
Meter No.21B GREY	One per M.U. No.3B
Meters Dummy Nos. 5, 6 or 7	As required To fill unoccupied meter positions for 1, 2 or 3 meters respectively
Mounting D91477	One per M.U. No.3B
Part 1/DBL/95	As required. See 2.2.2
Strip Designation No.33 Complete	One per SWBD 2/3A, 3/3B and 3/5B
Strip Designation No.34A Complete	One per SWBD 2/4A
Strip Designation No.35A Complete	One per SWBD 2/4A

4.3 MOUNTING ARRANGEMENTS

4.3.1 PMBX 2/3A

The Trip Meters, Meters No. 21B, are fitted in the face panel of the Switchboard immediately below the appropriate exchange line lamp. The "Strip, Designation No.36A" should be removed and a "Strip, Designation No.33, Complete" should be fitted using the upper fixing screws of the Meters or Meters Dummy

4.3.2 PMBX 2/4A

The Trip Meters, Meters No.21B, are fitted in the face panel of the Switchboard immediately below the appropriate exchange line lamp. The "Strip, Designation No.41A" should be removed. A "Strip, Designation No.34 A, Complete" should be mounted above the first "free link" lamp using the screws provided. A "Strip, Designation No.35A" should be fitted using the upper fixing screws of the Meters or Meters Dummy

4.3.3 PMBX 3/3B

The Trip Meters, Meters No.21B, are fitted in the face of the panel immediately below the appropriate Exchange Line lamp. The "Strip Designation No.36 A" should be removed and a "Strip Designation No.33 Complete" should be fitted using the upper fixing screws of the Meters or Meters Dummy

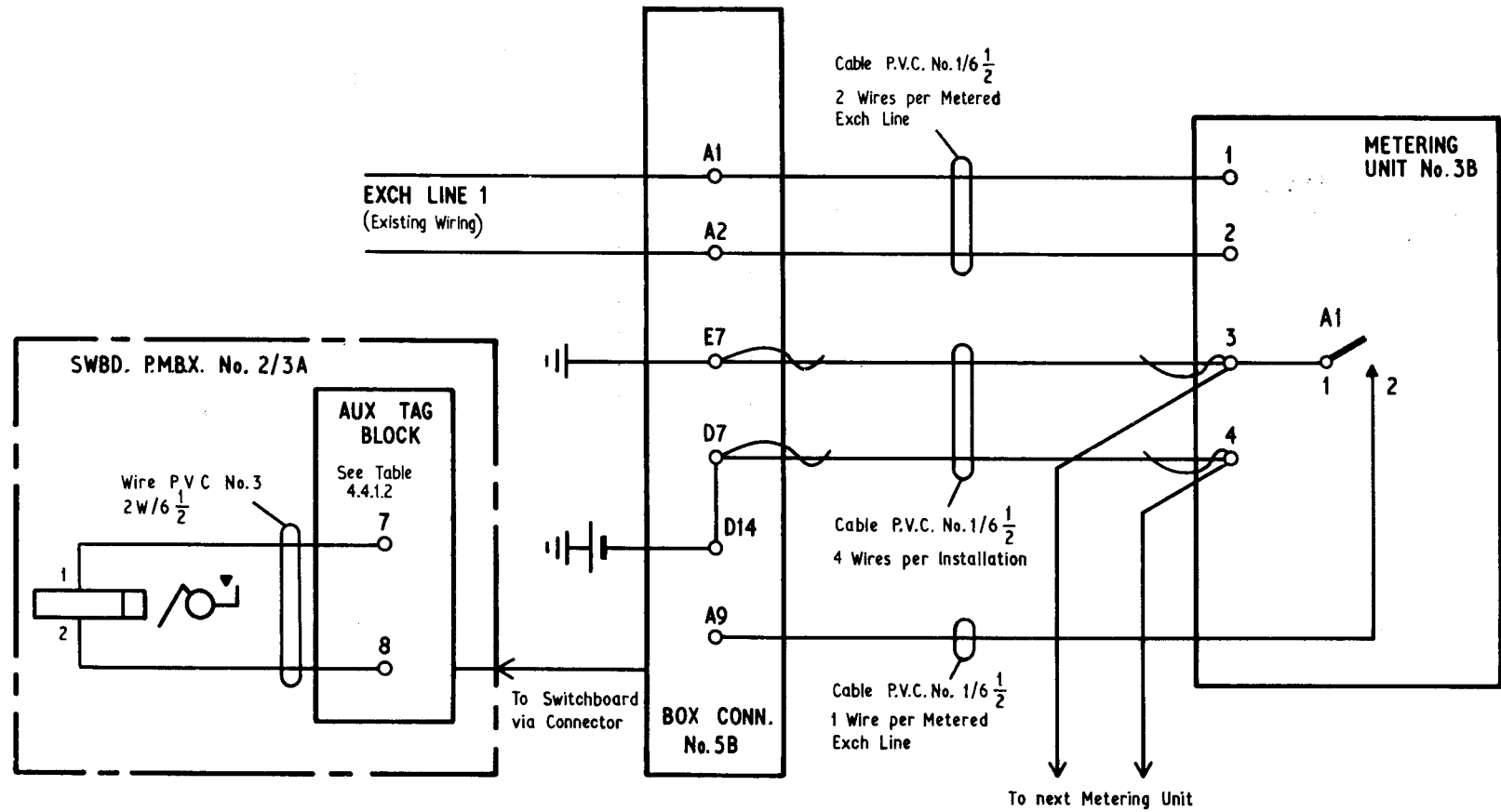
4.3.4 PMBX 3/5B

The Trip Meters, Meters No.21B, are fitted in the face of the panel immediately below the appropriate Exchange Line lamp. The existing Exchange Line Designation Strip should be removed and a "Strip Designation No.38A, Complete" should be fitted using the upper fixing screws of the Meters or Meters Dummy

4.4 CABLING AND WIRING ARRANGEMENTS FOR PERMANENT TRIP METERING

4.4.1 PMBX 2/3A

4.4.1.1 WIRING AND CABLING DIAGRAM



4.4.1.2 The Metering Units and Trip Meters should be connected as in the following table.

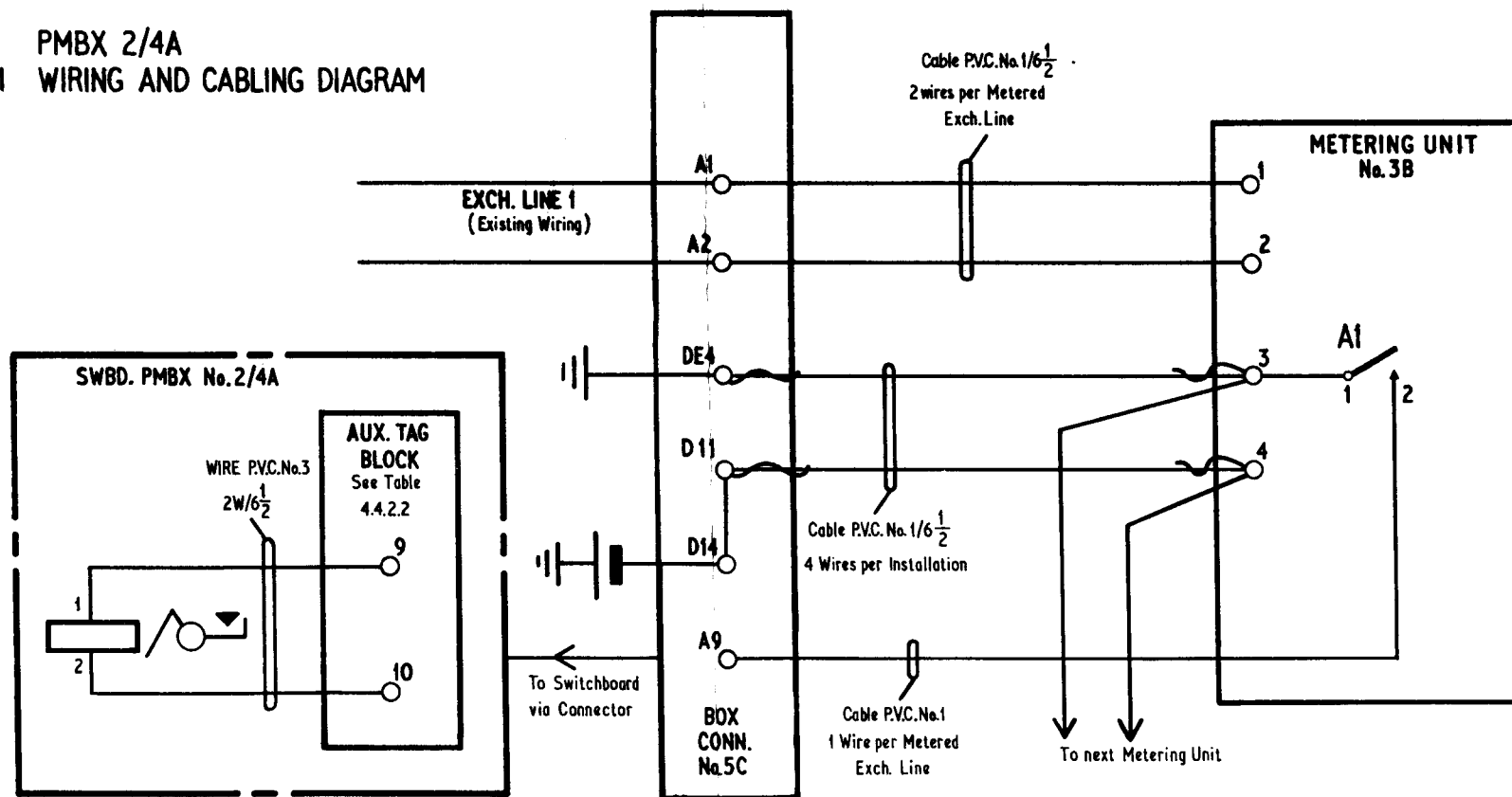
EXCH. LINE	M.U. No. 3B TAGS 1 & 2 WIRED TO BOX CONNEXION No.5B TAGS No. RESPECTIVELY	MAKE CONTACT OF M.U.RELAY WIRED TO BOX CONNEXION No.5B TAG No.	TRIP METER No.21B	
			TAG '1' WIRED TO AUXILIARY TERMINAL BLOCK TAG No.	TAG '2' WIRED TO AUXILIARY TERMINAL BLOCK TAG No.
1	A1 & A2	A9	7	8
2	A3 & A4	A10	9	10
3	A5 & A6	A11	11	12

4.4.2.2 The Metering Units and Trip Meters should be connected as in the following table.

EXCH. LINE	M.U. No.3B TAGS 1 & 2 WIRED TO BOX CONNEXION No.5C TAGS No. RESPECTIVELY	MAKE CONTACT OF M.U.RELAY WIRED TO BOX CONNEXION No. 5C TAG No.	TRIP METER No. 21B	
			TAG '1' WIRED TO AUXILIARY TERMINAL BLOCK TAG No.	TAG '2' WIRED TO AUXILIARY TERMINAL BLOCK TAG No.
1	A1 & A2	A9	9	10
2	A3 & A4	A10	11	12
3	A5 & A6	A11	13	14
4	A7 & A8	A12	15	16

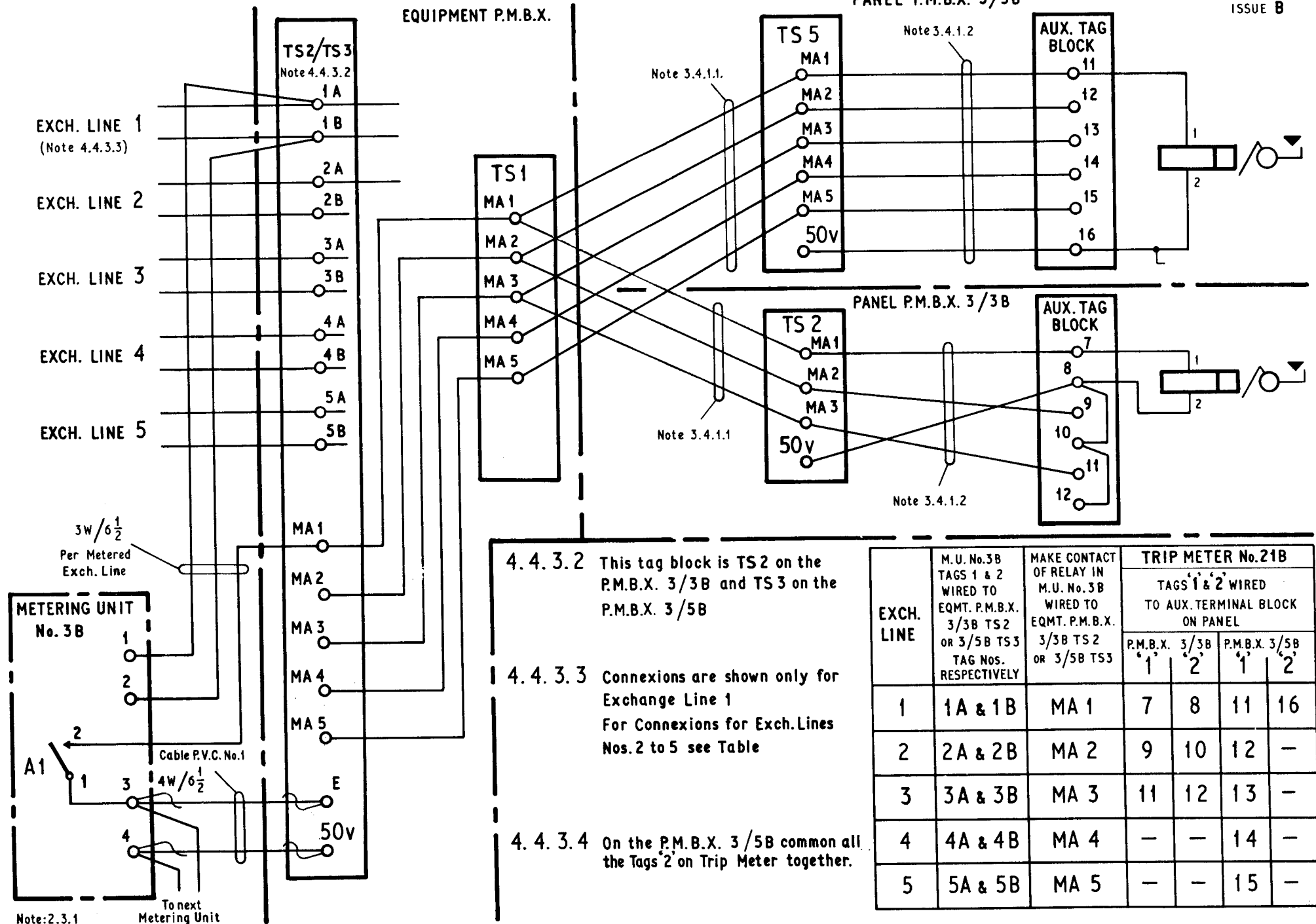
4.4.2 PMBX 2/4A

4.4.2.1 WIRING AND CABLING DIAGRAM



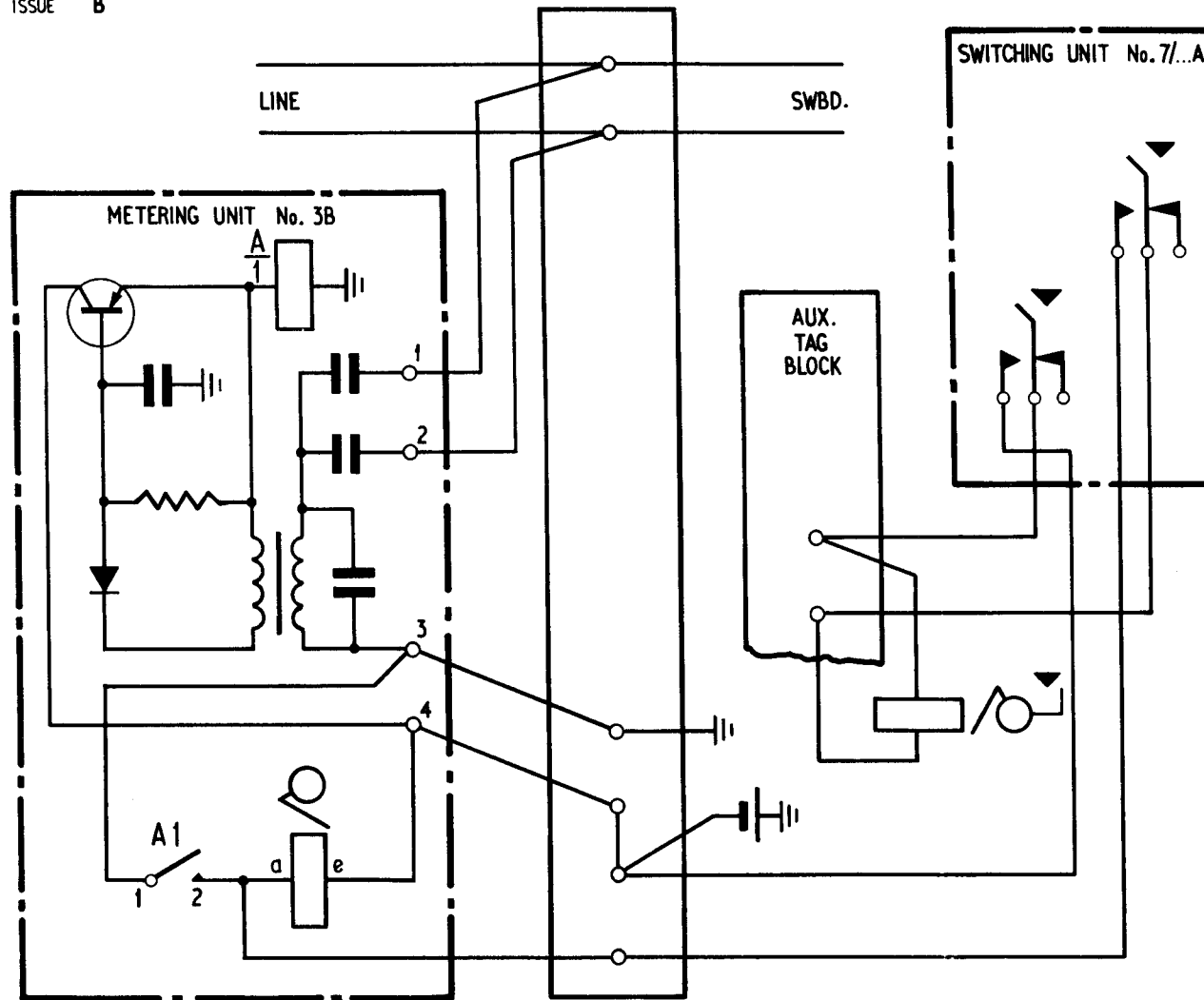
4.4.3. P.M.B.X. 3/3B AND 3/5B

4.4.3.1 WIRING AND CABLING DIAGRAM



5. BOTH TOTALS AND SWITCHED TRIP METERING ON EXCHANGE LINES

5.1 EXPLANATORY CIRCUIT (Only one exchange line and key shown)



5.2 TOTALS AND SWITCHED TRIP STORES

RATE BOOK DESCRIPTION	QUANTITY
Metering Unit No. 3B	One per exchange line to be metered
Mounting D91477	One per M.U. No. 3B
Part 1/DBL/95	Two. but see 2.2.2
Meters No. 21B .Grey	One
Meters No. 150C	One per M.U. No. 3B
Switching Unit No. 7/3A	One per SWBD. 2/3A OR 3/3B
Switching Unit No. 7/4A	One per SWBD. 2/4A OR 3/5B
Strip Designation No. 33 Complete	One per SWBD. 2/3A OR 3/3B
Strip Designation No. 34A Complete	One per SWBD. 2/4A
Strip Designation No. 35A Complete	One per SWBD. 2/4A
Strip Designation No. 38A Complete	One per SWBD. 3/5B

5.3 MOUNTING ARRANGEMENTS

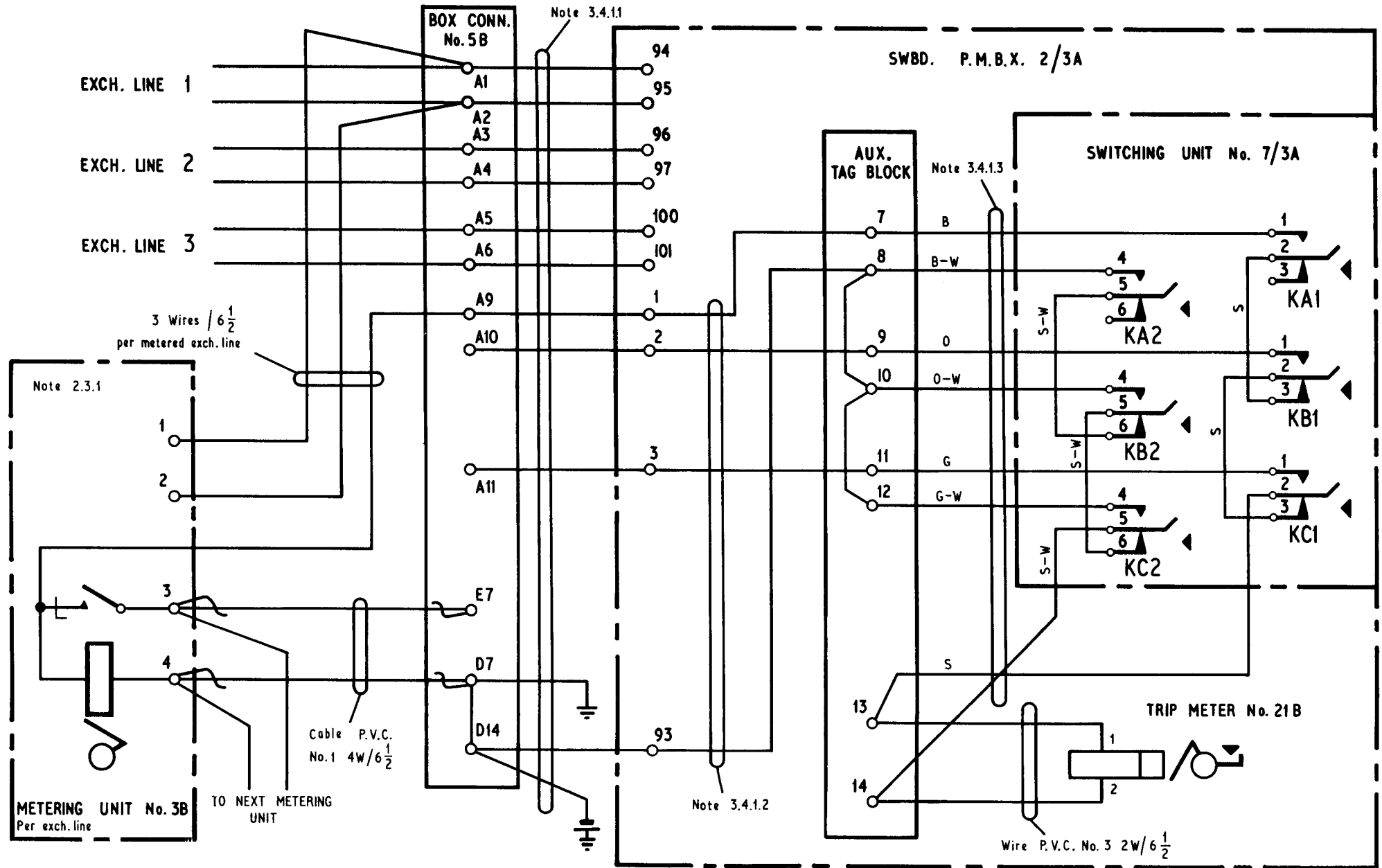
5.3.1 M.U.s. No. 3B should be mounted in accordance with E.I. Teles PBXs. A1003

5.3.2 Totals meters No. 150C should be mounted in the M.U.s. No. 3B in accordance with E.I. Teles. PBXs. A1003

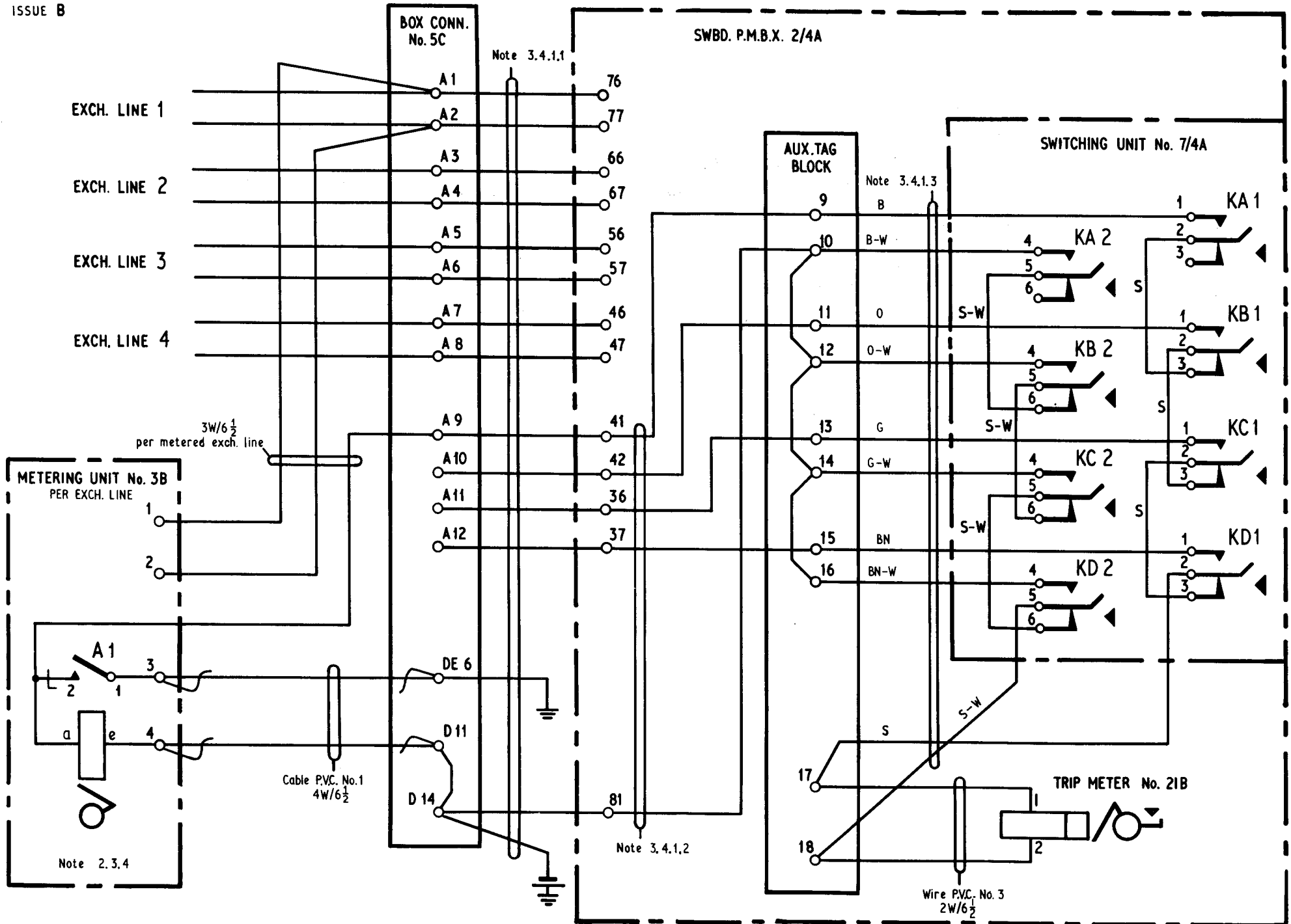
5.3.3 The Switching Units Nos. 7/3A and 7/4A and meters No. 21B should be mounted as described in Section 3.3

5.4 CABLING AND WIRING ARRANGEMENTS FOR BOTH
TOTALS AND SWITCHED TRIP METERING

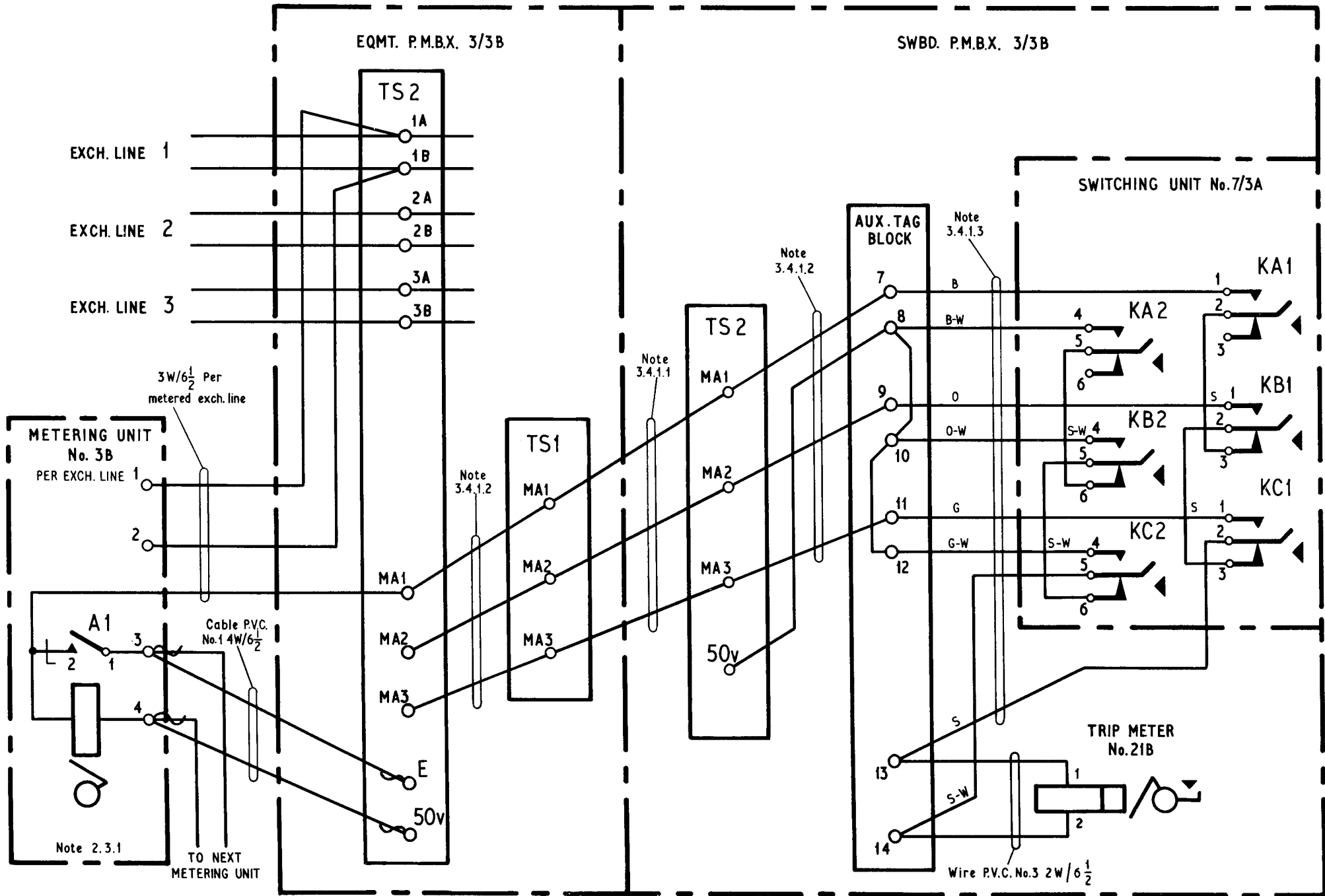
5.4.1 P.M.B.X. 2/3A WIRING AND CABLING DIAGRAM

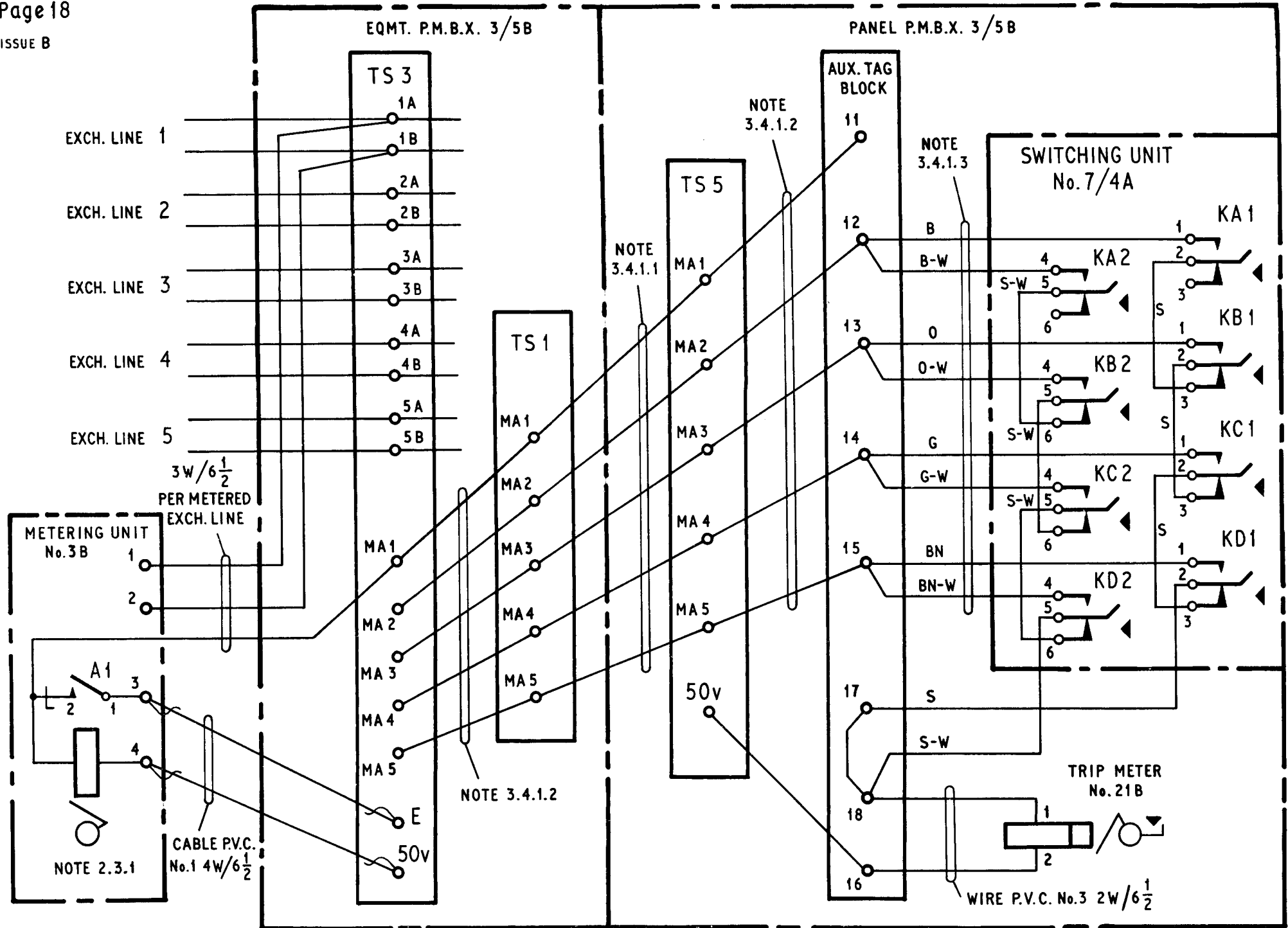


5.4.2 P.M.B.X. 2/4A WIRING AND CABLING DIAGRAM



5. 4. 3 P.M.B.X. 3/3B WIRING AND CABLING DIAGRAM





6. TOTALS AND PERMANENT TRIP METERING

6.1 EXPLANATORY CIRCUIT

The Explanatory Circuit is as shown in Section 4.1 (Page 9) with a Totals Meter mounted in every Metering Unit No.3B.

6.2 STORES

RATE BOOK DESCRIPTION	QUANTITY
Meter No.150C	One per M.U. No. 3B
Meter No.21B GREY	One per M.U. No.3B
Meters Dummy Nos5,6 or 7	As required To fill unoccupied meter positions for 1,2 or 3 meters respectively
Mounting D91477	One per M.U.No.3B
Part 1/DBL/95	As required. See 2.2.2
Strip Designation No.33 Complete	One per SWBD 2/3A, 3/3B and 3/5B
Strip Designation No.34A Complete	One per SWBD 2/4A
Strip Designation No.35A Complete	One per SWBD 2/4A

6.3 MOUNTING ARRANGEMENTS

6.3.1 M.U.s No. 3B should be mounted in accordance with E.I. Teles. PBXs.A1003

6.3.2 Totals Meters No.150C should be mounted in the M.U.s. No.3B in accordance with E.I.Teles. PBXs.A1003

6.4 CABLING AND WIRING ARRANGEMENTS

6.4.1 For each Switchboard wire and cable in accordance with the Wiring and Cabling Diagrams given in Section 4.4.

6.4.2 Provide the following additional wiring on each Metering Unit No.3B using Wire P.V.C.No.3 1W/6 $\frac{1}{2}$

Totals Meter Coil tag 'a' to Contact A2
Totals Meter Coil tag 'e' to M.U. Terminal 4