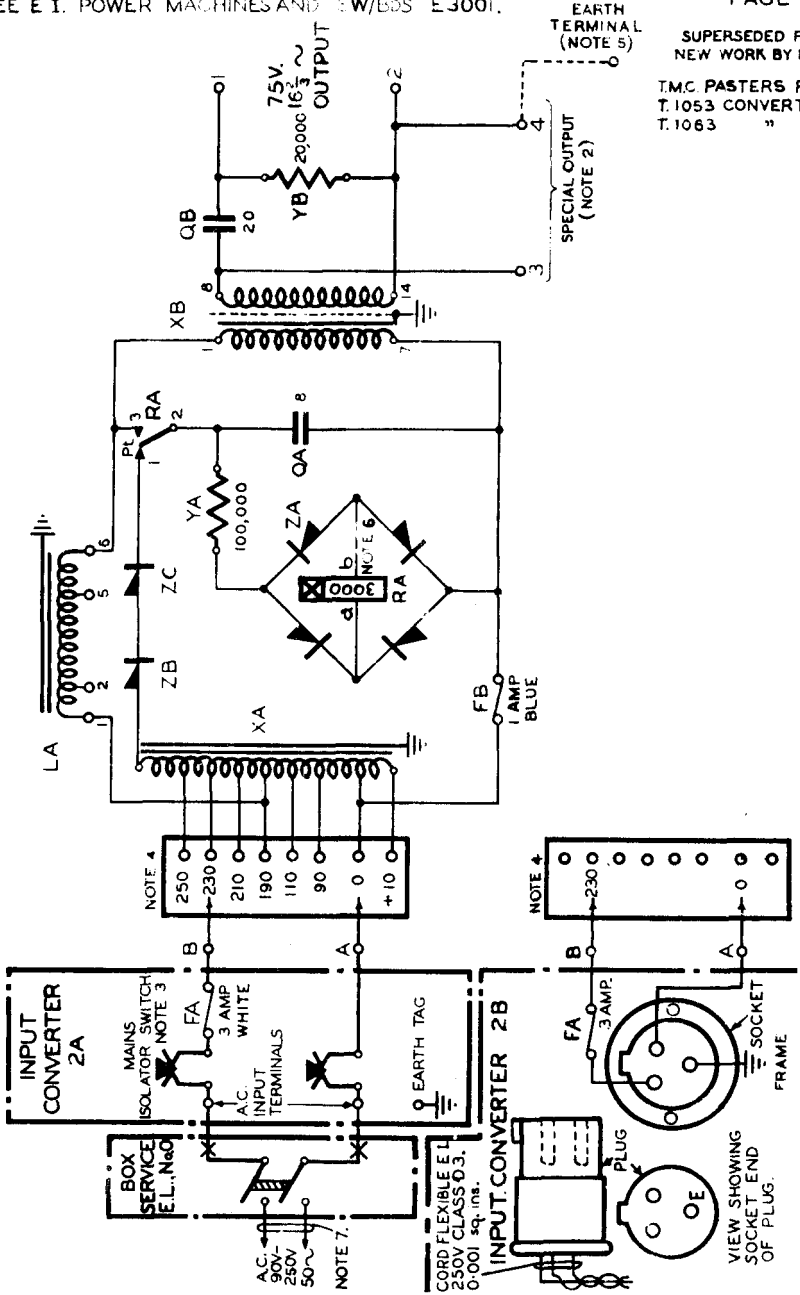


CONVERTER, RINGING, Nos. 2A & 2B (NOTE 1)
 POWER RINGING SUPPLY FROM A.C. MAINS FOR P.B.X.'s.
 SEE E.I. POWER MACHINES AND EW/BDS E3001.

N 642/0
 ISSUE C
 PAGE 1-2

SUPERSEDED FOR
 NEW WORK BY N 642/1

T.M.C. PASTERS REFER.
 T.1053 CONVERTER 2A
 " " " " " 2B



P.O.E.D.

S. BCH.

PAPER:- Y

CIRCULATION
 GENERAL

ISSUES		
C	NEW FORMAT	Kmd
B	MADE	YELLOW
A	MADE	10 & SUPERSESSON NOTE ADDED
		2-6-66
		18-4-62
		14-9-44
		30-12-42

NOTES -

1. CONVERTER RINGING No.2A } SEE E.T. POWER MACHS.
 IS FOR RACK MOUNTING } AND SW/BDS. E 3001.
 CONVERTER RINGING No.2B }
 IS FOR WALL MOUNTING }
2. FOR SPECIAL USE ON VERY LIGHT LOADS
 WHERE FULL OUTPUT VOLTAGE OF 100V.
 IS REQUIRED.
3. OPERATES ON REMOVAL OF COVER.
4. TAPPING NORMALLY SET FOR 230V
 ADJUST FOR OTHER VOLTAGES WHEN
 NECESSARY.
5. EARTH TO BE CONNECTED WHEN REQUIRED
6. RELAY ADJUSTMENTS -
 (a) ARMATURE - STANDARD TRAVEL
 RESIDUAL 4 MILS
 (b) SPRING SET - 1/10 TWIN PL CONTACTS
 (c) CONTACT - LIFT AND PRESSURE, STANDARD
 CLEARANCE 20 MILS. (CRITICAL)
 (d) TEST CURRENT - OPERATE 2.6mA.
 SATURATE 20mA.
 HOLD 0.7mA
 RELEASE DISCONNECT.
 NON-OP 0.8mA.
7. SUPPLY TO BE WIRED TO CONVERTER IN CABLE
 E.L. 250V 0.002 sq. ins., RUN IN EFFECTIVELY
 EARTHED CONDUIT OR CABLE E.L. 1RV. CORE
 250V TWIN FLAT 0.002 sq. ins. - SHEATH EARTHED.

APPARATUS SCHEDULE	
CODE	DESCRIPTION
F4,FB	FUSES BELLING-LEE TYPE 1055 WITH FUSES 36/3 (FA) AND 36/1A (FB).
LA	CHOKE 23 B1
QA	CONDENSER 8 μ F (\pm 8%) 250V A.C.
QB	CONDENSER 20 μ F (\pm 10%) 200V D.C.
FA	SPECIAL RELAY USING 3000 TYPE PIECE PARTS (SIEMENS RDH 3436)
XA	AUTO-TRANSFORMER 23 B 3
XB	TRANSFORMER 23 B2
YA	RESISTOR NR 20 1/2 W 100,000 Ω .
YB	RESISTOR NR 20 1/2 W 20,000 Ω .
ZA	RECTIFIER MBH 4-3-1
ZB & C	RECTIFIER H50

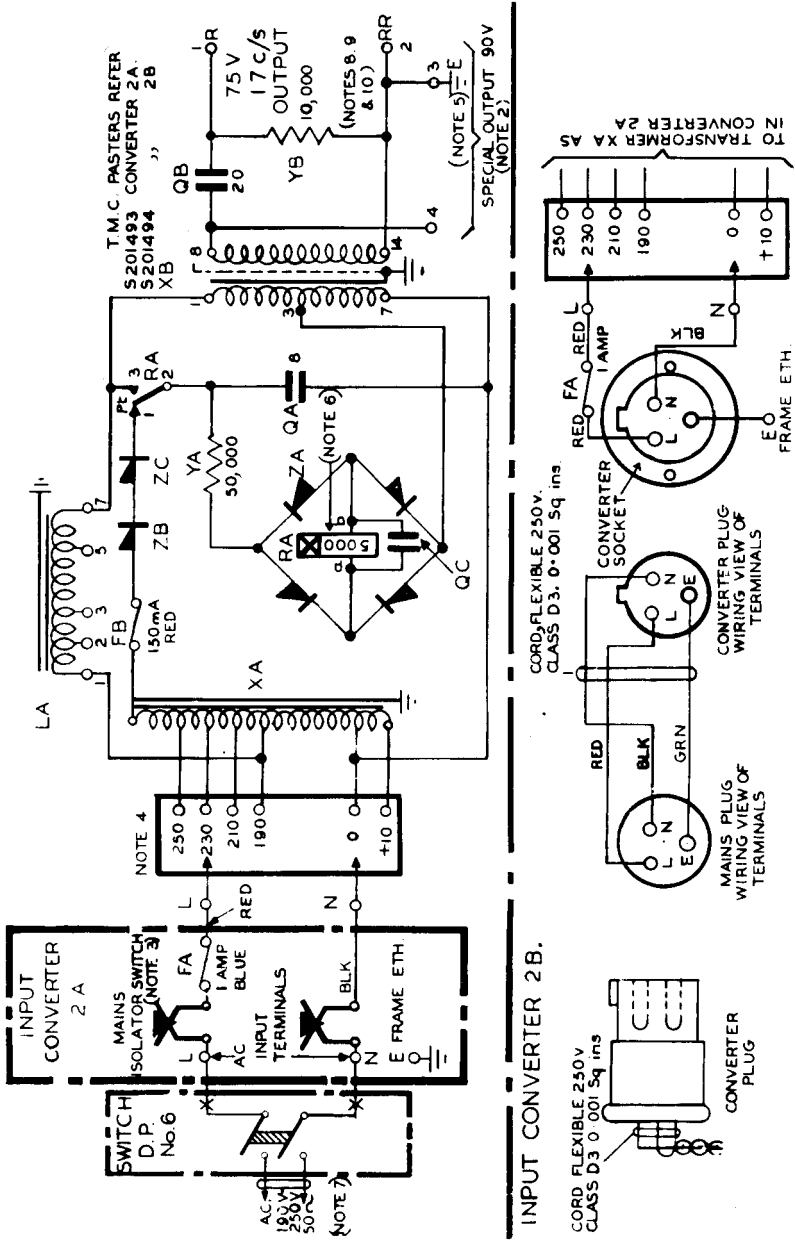
NOTES:-

1. CONVERTER RINGING No.2A } SEE E.I. POWER MACHS.
 IS FOR RACK MOUNTING } AND SW/BDS. E 3001.
 CONVERTER RINGING No.2B }
 IS FOR WALL MOUNTING }
2. FOR SPECIAL USE ON VERY LIGHT LOADS
 WHERE FULL OUTPUT VOLTAGE OF 100 V.
 IS REQUIRED.
3. OPERATES ON REMOVAL OF COVER
4. TAPPING NORMALLY SET FOR 230V.
 ADJUST FOR OTHER VOLTAGES WHEN
 NECESSARY.
5. EARTH TERMINAL SEE E. I. POWER. GEN.S3801 PARA.10.
6. RELAY ADJUSTMENTS:-
 (a) ARMATURE:-STANDARD TRAVEL RESIDUAL 4 MILS.
 (b) CONTACT CLEARANCE 20 MILS.(CRITICAL)
 (c) LEVER TENSION 4-9 GRMS.
 (d) BUFFER TENSION 15-21 " "
 (e) BIAS SPRING TENSION 30-40 GRMS.
 SUPPLY TO BE WIRED TO CONVERTER IN CABLE
 E.I. 250V. 0-002 sq.ins.RUN IN EFFECTIVELY
 EARTHED CONDUIT OR CABLE E.L.IRV. CORE
 250V. TWIN FLAT 0-002 sq.ins.-SHEATH EARTHED
- 7.

APPARATUS SCHEDULE	
CODE	DESCRIPTION
FA,FB	FUSES 36/1A (FA) AND 36/1B (FB)
LA	CHOKE 23 BI
QA	CONDENSER 8 μ F ($\pm 6\%$) 250V. A.C.
QB	CONDENSER 20 μ F ($\pm 10\%$) 200 V. D.C.
QC	CONDENSER 1 μ F ($\pm 15\%$)
RA	SPECIAL RELAY USING 3000 TYPE PIECE PARTS. (SIEMENS RDH 3436)
XA	AUTO-TRANSFORMER 23 B 3
XB	TRANSFORMER 23 B2
YA	RESISTOR NR.2D 2 WATT 59000 Ω ($\pm 5\%$)
YB	RESISTOR NR.2D 1 WATT 109000 Ω ($\pm 20\%$)
ZA	RECTIFIER MBH 4-3-1
ZB,ZC	RECTIFIER H50

CONVERTER, RINGING, Nos. 2A & 2B (NOTE 1)
 17c/s RINGING SUPPLY DERIVED FROM
 50c/s A.C. MAINS FOR P.B.X.s.

N 642/2
 ISSUE G
 PAGE 1.-2



P.O.E.D.
 S. BCH.
 PAPER:- Y
 CIRCULATION
 GENERAL

ISSUE		
G	NEW FORMAT K.m.a.	
F	RE-INSTATED AFTER CANCELLATION (PHOTO-COPY). MADE YELLOW.	2-6-66
F	90 & 110V I/P. TAPS DELETED TITLE AMENDED	18-4-62
	E. S. R.	24-7-53
		14-9-44

APPARATUS SCHEDULE	
CODE	DESCRIPTION
FA FB	FUSES 36/1A(FA) AND 36/0.15(F B)
LA	CHOKE 23 B1
QA	CAPACITOR 8 μ F ($\pm 8\%$) 250V. AC.
QB	CAPACITOR 20 μ F ($\pm 10\%$) 200V D.C
RA	SPECIAL RELAY USING 3000 TYPE PIECE PARTS
XA	TRANSFORMER 23B 45 520/1481
XB	TRANSFORMER 23 B2
YA	RESISTOR COIL No.12. 50000
YB	RESISTOR NR 2D 1 WATT. 10000 Ω ($\pm 20\%$)
ZA	5D 3 4. WESTALITE
ZB&ZC	RECTIFIER H 50.
QC	CAPACITOR μ F ($\pm 15\%$)

NOTES:-

1. CONVERTER RINGING No.2 A } SEE E. I. POWER MACHS.
IS FOR BACK MOUNTING }
CONVERTER RINGING No.2B } AND SW/BDS. E 3001.
IS FOR WALL MOUNTING }
2. ONLY USE "SPECIAL OUTPUT" TERMINALS ON VERY LIGHT LOADS WHERE A CONSTANT VOLTAGE IS REQUIRED. DO NOT USE FOR SIGNALLING OR RINGING.
3. OPERATES ON REMOVAL OF COVER
4. TAPPING NORMALLY SET FOR 230V. ADJUST FOR OTHER VOLTAGES WHEN NECESSARY.
5. THIS EARTH IS SEPARATE FROM THE "FRAME" PROTECTIVE EARTH. (SEE E1 PROTECTION GENERAL S 3901)
6. RELAY ADJUSTMENTS:-
(a) ARMATURE-STANDARD TRAVEL-RESIDUAL 4 MILS
(b) CONTACT CLEARANCE 20 MILS. (CRITICAL)
(c) LEVER TENSION 4-9 GRMS.
(d) BUFFER TENSION 15-21 GRMS.
(e) BIAS SPRING TENSION 30-40 GRMS.
7. SUPPLY TO BE WIRED TO CONVERTER OR SOCKET OUTLET IN CABLE. E.L. 250V 0.002 Sq. ins. RUN IN EFFECTIVELY EARTHED CONDUIT OR CABLE E.L. IRV CORE 250V. TWIN FLAT 0.002 Sq. ins. SHEATH EARTHED
8. ON SECTIONS, SWITCH P. M. B. X. No. 1A, CONNECT -RINGING, TO TIP OF CORD CIRCUITS, AND RINGING RETURN TO RING.
9. ON OTHER CORD-TYPE P. B. X. SWBDS. CONNECT RINGING TO RING OF CORD CIRCUITS AND RINGING RETURN TO TIP.
10. ON CORDLESS P. B. X. SWBDS. CONNECT RINGING TO "A" SIDE OF RING - KEYS, AND RINGING RETURN TO "B" SIDE.