

Technical Manual

STEREO POWER AMPLIFIER RHBO5

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Specifications

Frequency response	10 to 130,000 Hz +0 or -1 dB
Signal to noise ratio	120 dB (IHF A)
Input impedance	30 k Ohms
Sensitivity	0.775 volts
Speaker Impedance	4-8 Ohms
Rated Output	100 watts at 8 Ohms 20-20,000 Hz 160 watts at 4 Ohms 20-20,000 Hz
Total Harmonic Distortion	0.03% (20-20,000 Hz, continuous rated power)
Intermodulation Distortion	0.03% (continuous rated power) 60 Hz:7 kHz = 4:1
Slew Rate	± 40 volts/microsecond
Damping Factor	550 (20-20,000 Hz at 8 Ohms)
Voltage required	120 volts/60 Hz, 220,230,240 volts/50 Hz
Power consumption	400 watts
Dimensions	470 mm (W) × 80 mm (H) × 365 mm (D) 18 1/2" × 3" × 14 3/8"
Weight (net)	13.5 kg (29.7 lbs.)

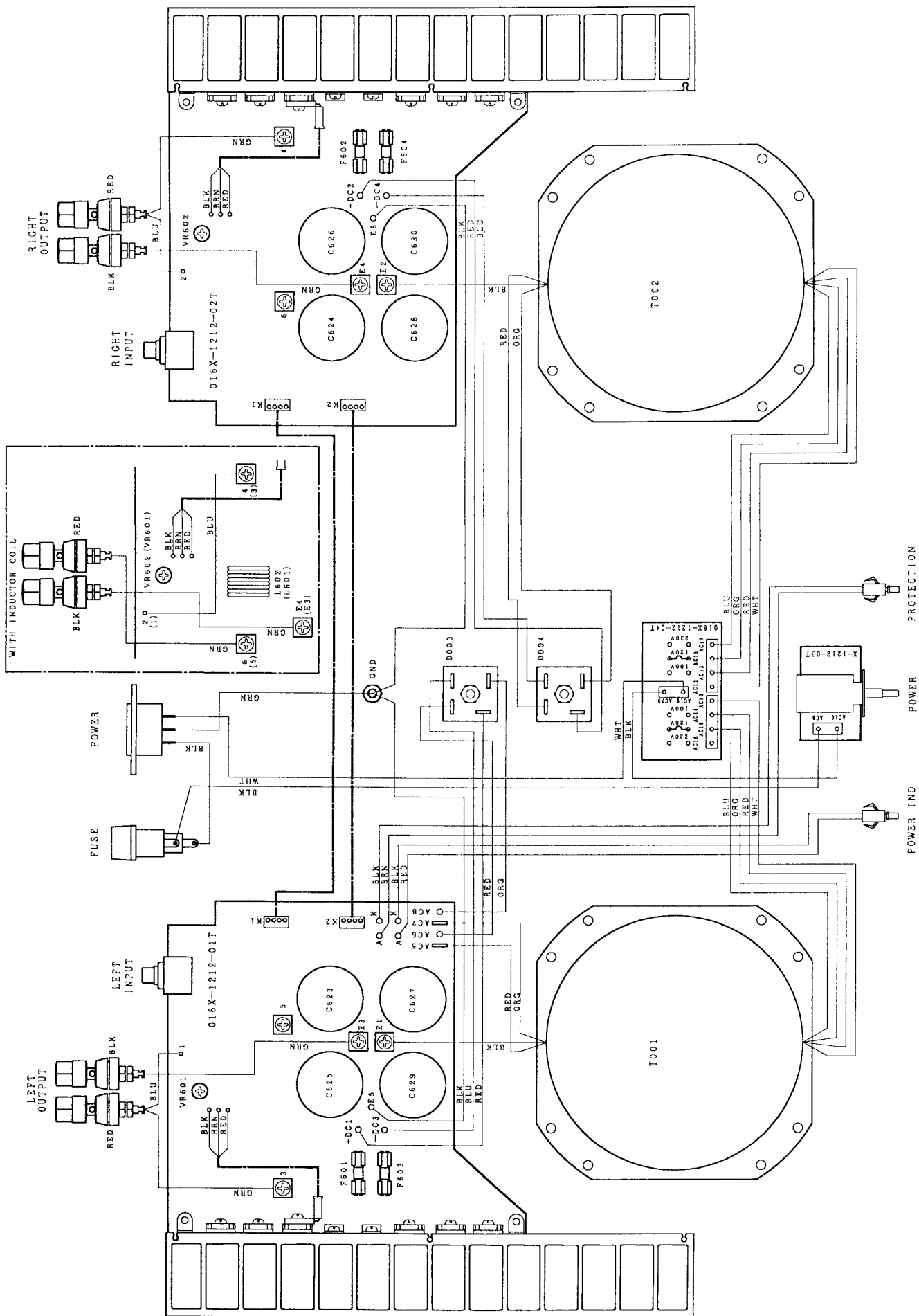
Serial No. Beginning

Parts List

SYMBOL	PARTS NO.	DESCRIPTION
<u>X-1212-01, 02 PCB ASSEMBLY</u>		
C601, 602	041 50BGF10M	CAP, ELEC. 50V10UF
C603, 604	044 FKP2-100V681H	CAP, P. P 100V680pF
C605, 606	044 FSC160V221H	CAP, STYROL 160V220pF
C607, 608	041 25BGF100M	CAP, ELEC. 25V100UF
C609, 610	044 FSC160V471H	CAP, STYROL 160V470pF
C611~614	044 FSC160V221H	CAP, STYROL 160V220pF
C615, 616	041 50BGF10M	CAP, ELEC. 50V10UF
C617, 618	044 MKT18-100V104K	CAP, M. P 100V0. 1UF
C623~630	041 NS2G63V6000	CAP, ELEC. 63V6000UF
C631	041 U63V220	CAP, ELEC. 63V220UF
C632	041 U50V22	CAP, ELEC. 50V22UF
C633	041 U10V220	CAP, ELEC. 10V220UF
C634	041 U25V47	CAP, ELEC. 25V47UF
D601~610	034 1N4148	DIODE
D613, 614	034 1N4148	DIODE
D615~618	034 1N4003	DIODE
D619, D620	034 1N4003	DIODE
D621	034 RD6. 2EB	ZENER DIODE
F601~604	036 (S)T6. 3A	MINI FUSE for CEE
	036 (U)F6A	MINI FUSE for STD
IC601	031 MPC1237HA	IC
L601, 602	021 RL-161	SPEAKER COIL
PJ601, 602	066 PK4-32B00T	1P PINJACK
Q601~604	033 2SC2362K-FG	TRANSISTOR
Q605~608	033 2SA1016K-FG	TRANSISTOR
Q609, 610	033 2SC2362K-FG	TRANSISTOR
Q611, 612	033 2SA1016K-FG	TRANSISTOR
Q613, 614	033 2SA1142-P	TRANSISTOR
Q615, 616	033 2SC2682-P	TRANSISTOR
Q617, 618	032 2SD1953	TRANSISTOR
Q619, 620	033 2SC3478-LKU	TRANSISTOR
Q621, 622	033 2SA1376-LKU	TRANSISTOR
Q623, 624	033 2SC4381-OY	TRANSISTOR
Q625, 626	033 2SA1667-OY	TRANSISTOR
Q627~632	033 2SC3856-OPY	TRANSISTOR
Q633~638	033 2SA1492-OPY	TRANSISTOR
Q641	032 2SC2362K-FG	TRANSISTOR
R601, 602	054 MK2001KFECZ	R. METAL 1% 1K
R603, 604	054 VSH333	R. METAL 33K
R605, 606	054 VSH471	R. METAL 470Ω
R607~614	054 MK201K5FECZ	R. METAL 1% 1. 5K
R615, 616	054 VSH511	R. METAL 510Ω
R617~620	054 MK2220RFECZ	R. METAL 1% 220Ω
R621, 622	054 MK2047KFECZ	R. METAL 1% 47K
R623, 624	054 MK2100RFECZ	R. METAL 1% 100Ω
R625, 626	054 MF1/4-6801F	R. METAL 1% 6. 8K
R627, 628	054 MF1/4-3901F	R. METAL 1% 3. 9K
R629, 630	054 MK2100RFECZ	R. METAL 1% 100Ω
R635, 636	054 MK2001KFECZ	R. METAL 1% 1K
R637, 638	054 MK2047RFECZ	R. METAL 1% 47Ω

SYMBOL	PARTS NO.	DESCRIPTION
R639~650	054 MPC70-0. 22F	R. PLATE 2W 0. 22Ω
R655, 656	054 MK2039KFECZ	R. METAL 1% 39K
R657, 658	054 MK2001KFECZ	R. METAL 1% 1K
R659, 660	054 MK2056KFECZ	R. METAL 1% 56K
R661, 662	054 RSS2X-10F	RESISTOR 2W 10Ω
R663, 664	054 MPC71-1F	R. PLATE 5W 1Ω
R665~668	054 RSS2X-5. 6KF	RESISTOR 2W 5. 6K
R669, 670	054 RSS1X-1F	RESISTOR 1W 1Ω
R671, 672	054 VSH183	R. METAL 18K
R673	054 MK2047KFECZ	R. METAL 1% 47k
R674	054 RSS2X-4. 7KF	RESISTOR 2W 4. 7K
R675	054 RSS2X-5. 6KF	RESISTOR 2W 5. 6K
R676	054 RSS2X-1. 8KF	RESISTOR 2W 1. 8K
R677	054 MK2082KFECZ	R. METAL 1% 82k
R678	054 MK2047KFECZ	R. METAL 1% 47K
R679	054 MK2056KFECZ	R. METAL 1% 56K
R680	054 MK2018KFECZ	R. METAL 1% 18K
R681	054 MK2001KFECZ	R. METAL 1% 1K
RY601, 602	063 EA2-24	RELAY
TH601, 602	034 TD5C350DA	THERMISTOR
VR601, 601	051 VM6CKPV2. 2K	SEMI-FIXED RESISTOR
	068 C-4349A04	3P CONNECTOR
	069 C-3417A	FUSE CLIP
	069 C-4370A00	SCREW TERMINAL
<u>X-1212-03 PCB ASSEMBLY</u>		
C001	044 DE7150F472M	SPARK KILLER
S001	061 C-4176A06	POWER SWITCH
<u>OTHERS</u>		
D001, 002	034LTL2201A	LED
D003, 004	034 BR154	BRIDGE DIODE
F001,	036 (S)T4A	AC FUSE for CEE
	036 (U)F8A	AC FUSE for STD
T001, 002	022 T-1043T02	POWER TRANSFORMER
	011 FP-461	FRONT PANEL
	012 PK4-16B00	KNOB PUSH
	014 QP4-10A00	SIDE WOOD(L, R)
	014 QP3-05A00T	BOTTOM BOARD
	014 QP3-06A00T	UPPER BOARD
	015 TRP-638A	PRINTED REAR CHASSIS
	019 PK4-07A00T	METAL FOOT
	067 4TR-2744#1	SPEAKER TERMINAL(RED)
	067 4TR-2744#2	SPEAKER TERMINAL(BLK)
	069 C-1575	FUSE HOLDER
	069 4TR-2786	AC INLET
	072 C-4392A01	AC CORD for STD
	072 C-4393A01	AC CORD for EUROPA
	072 C-4423A01	AC CORD for AUSTRALIA
	072 C-4393A02	AC CORD for UK
	081 QP4-16A00	INSIDE CARTON

Wiring Diagram



Instruments : DC milli-voltmeter

Notes : Prior to Bias Adjustment, run about 5 minutes with rated output (8ohms) and warm up Power Transistor and Heat Sink. Set input off.

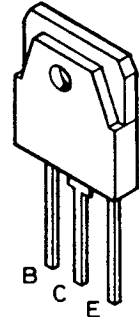
Step	Coupling		Location	Adjust	Adjust for
	Plus Lead	Minus Lead			
1	T P 1	T P 3	X-1212-01 PCB	VR601	DC milli-voltmeter reads 10mV
2	T P 2	T P 4	X-1212-02 PCB	VR602	



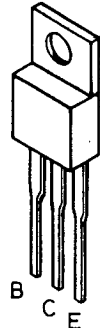
2SA1016
2SC2362
2SA1376
2SC3478



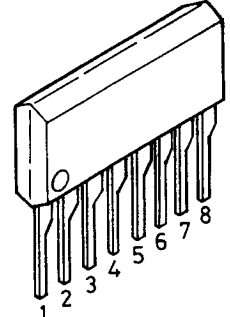
2SD1953
2SA1142
2SC2682



2SA1492
2SC3856

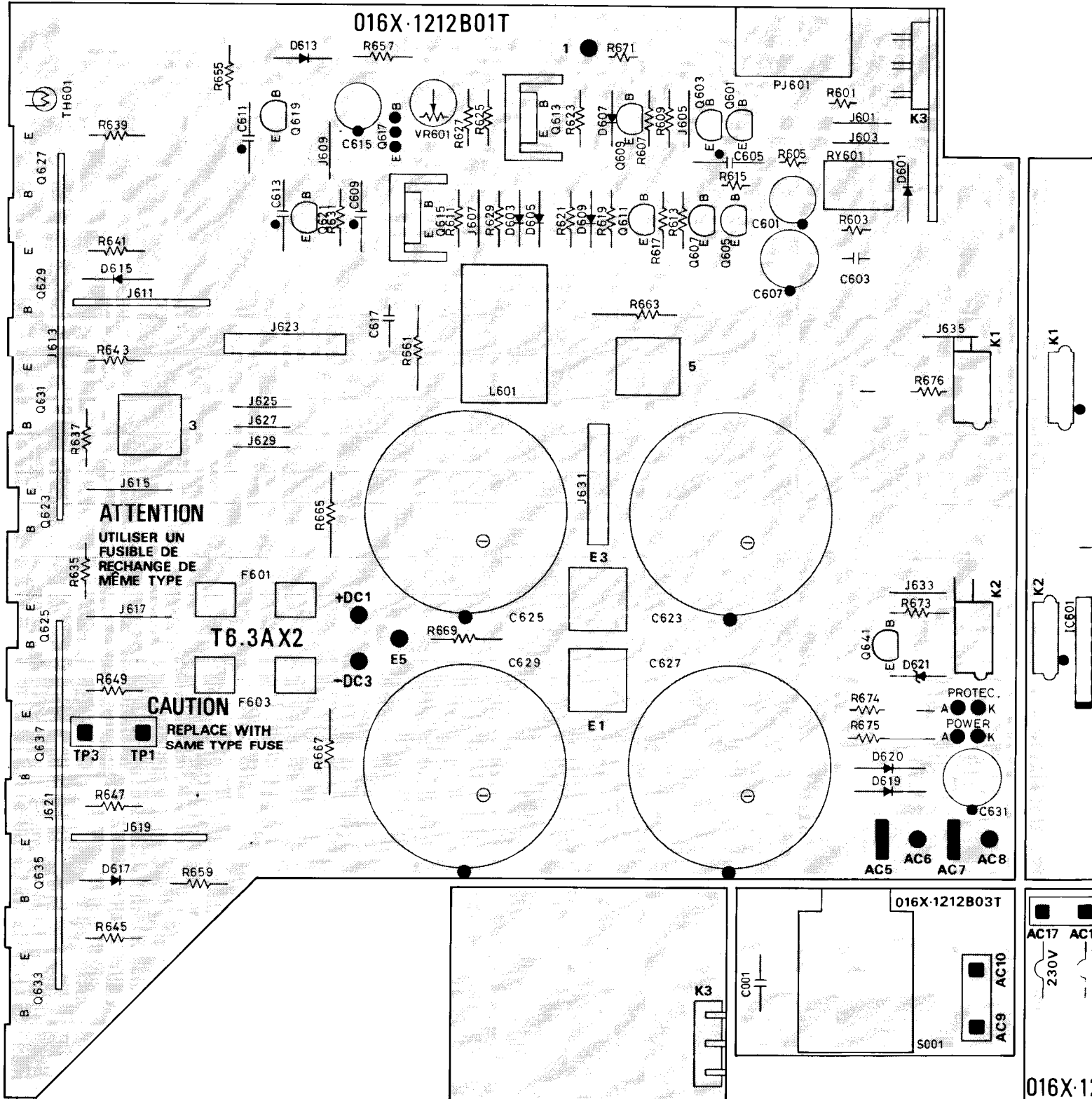


2SA1667
2SC4381

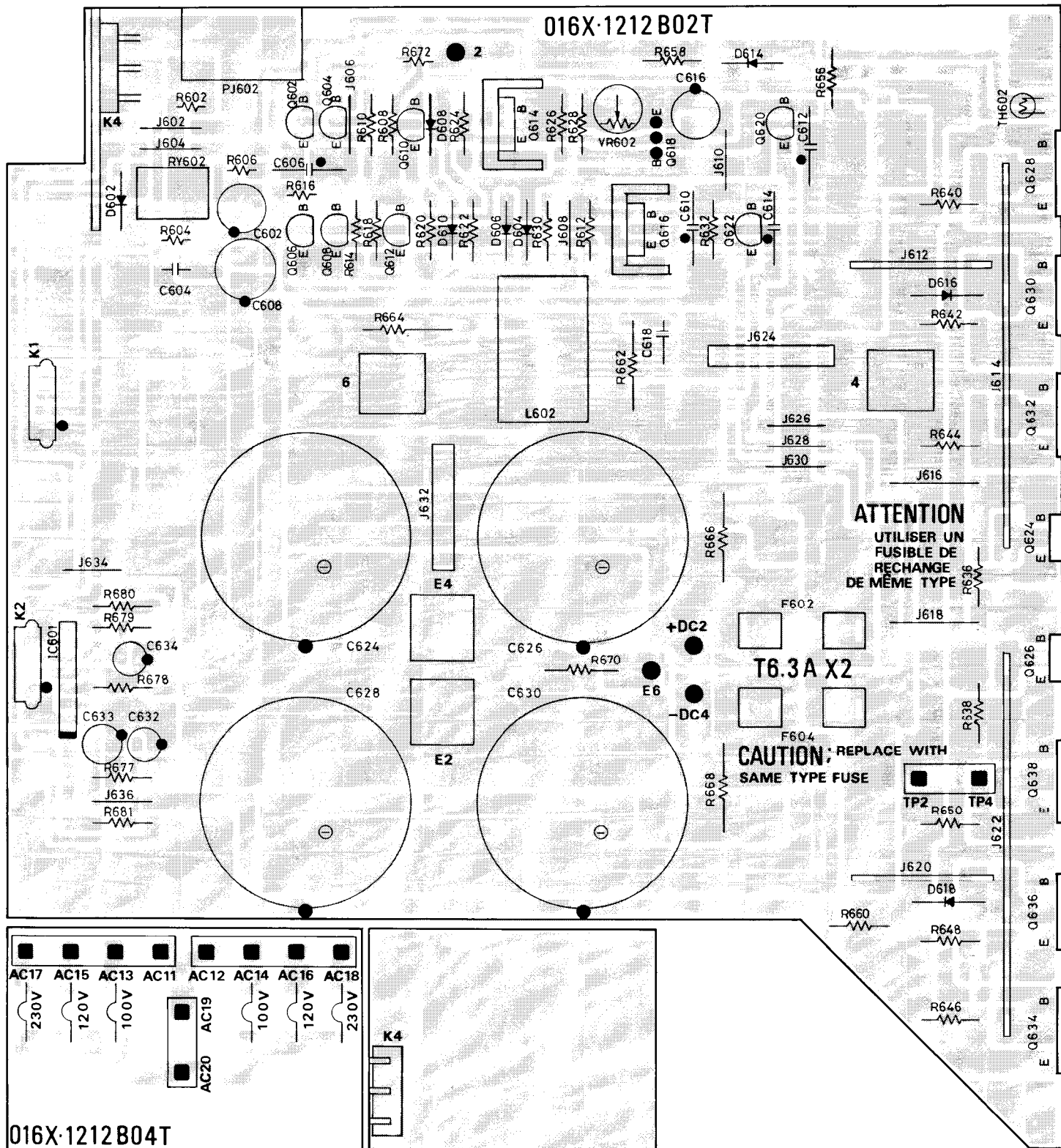


MPC1237HA

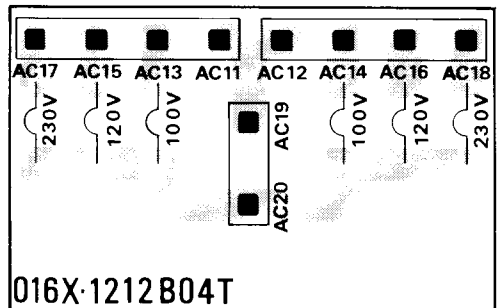
PCB Assembly

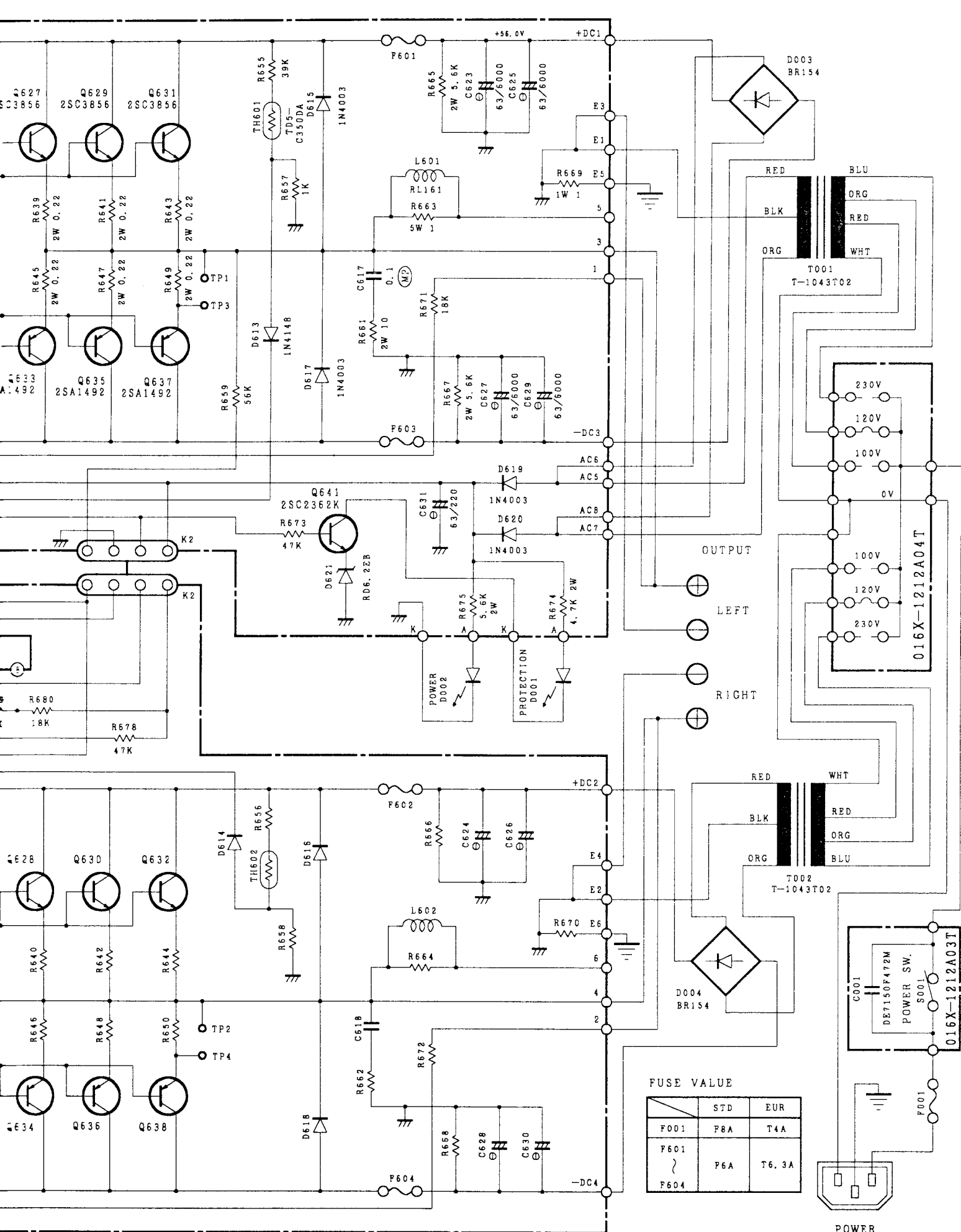


016X-1212 B02T



016X-1212 B04T





FUSE VALUE

	STD	EUR
F001	F8A	T4A
F601	F6A	T6.3A
F604		

