

STEREO INTEGRATED AMPLIFIER

AX-500/AX-500U

SERVICE MANUAL

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
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 Oxon OX9 4QY
 Tel: 01844-351894 Fax: 01844-352554
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15218

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures in terms of the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The purchaser or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principal-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground bus of the unit (heavy gauge black wires connect to the bus).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

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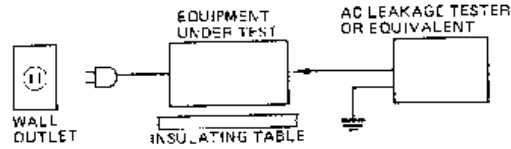
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YAMAHA
 YAMAHA CORPORATION
 PO Box 1, Hamamatsu, Japan

0.1K-027 Printed in Japan '89.12

TO SERVICE PERSONNEL

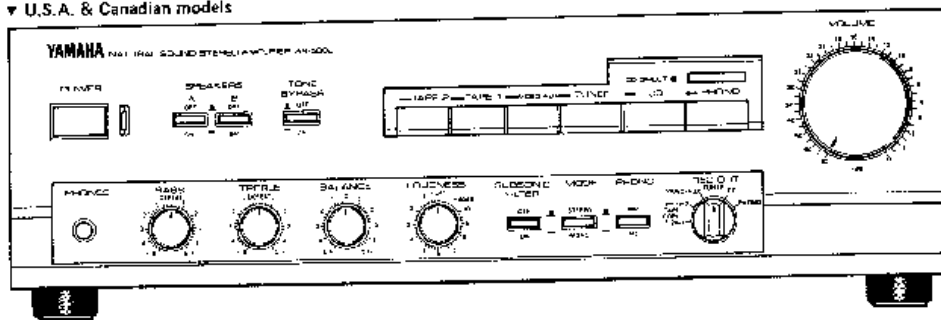
- Critical Components Information.**
Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- Leakage Current Measurement (For 120V Model Only).**
When service has been completed, it is imperative that you verify that all exposed conductive surfaces are properly insulated from supply circuits.
 - Meter impedance should be equivalent to 1500 ohm shunted by 0.15 μ F.
 - Leakage current must not exceed 0.5mA.
 - Be sure to test for leakage with the AC plug in both polarities.



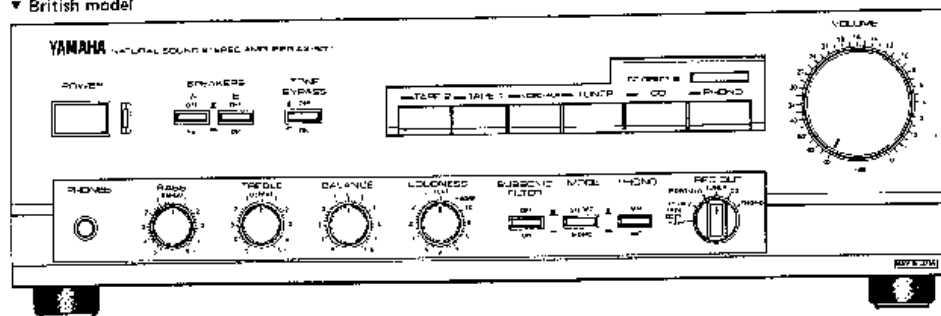
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FRONT PANELS

U.S.A. & Canadian models

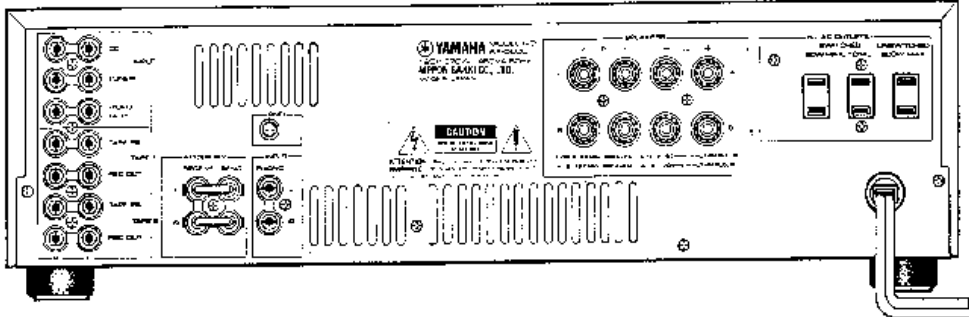


British model

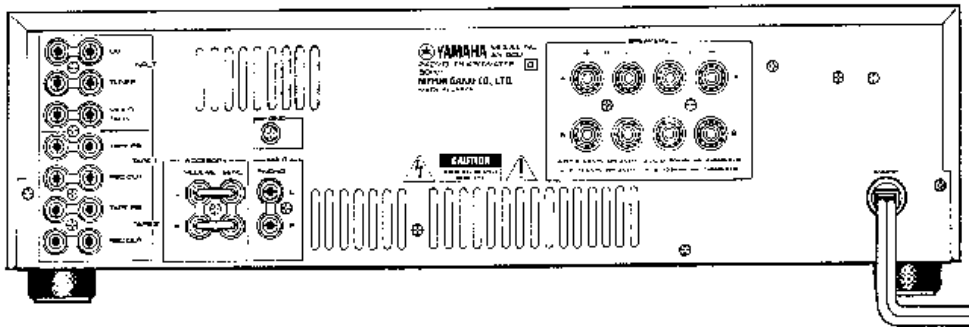


REAR PANELS

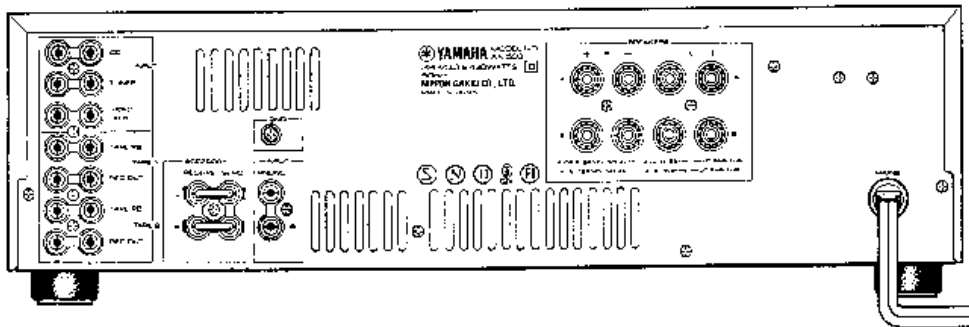
U.S.A. & Canadian models



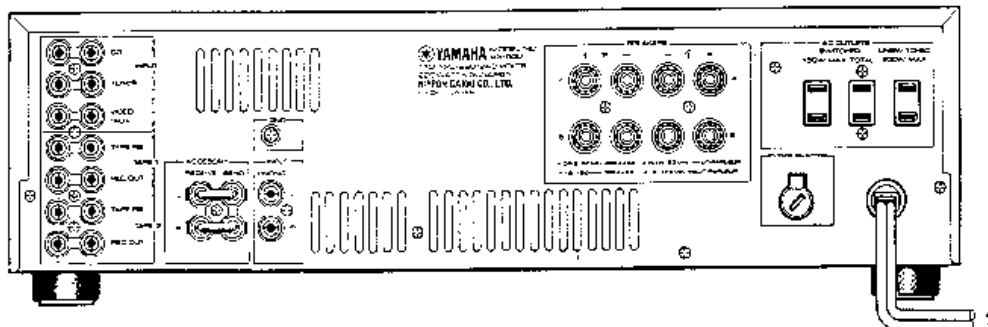
Australian & British models



European model



Other model



SPECIFICATIONS

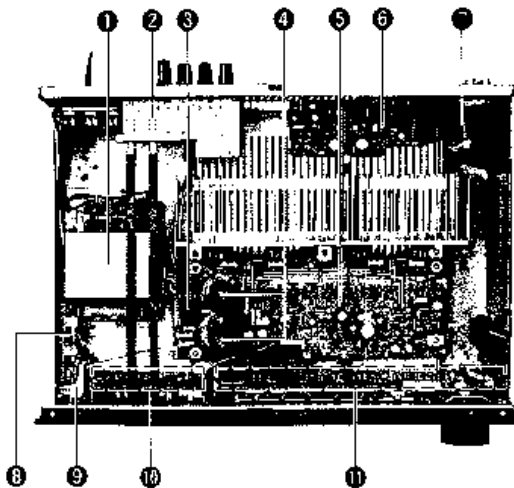
Minimum RMS Output Power Per Channel	
20Hz ~ 20kHz, 0.01% THD, 8Ω	85W
20Hz ~ 20kHz, 0.01% THD, 6Ω	100W (U)(CI)(R)
Dynamic Power Per Channel	
by IHF Dynamic Headroom measuring method	
8Ω	140W
6Ω	170W
4Ω	200W
2Ω	230W
DIN Standard Output Power Per Channel	
1kHz, 1% THD, 4Ω	120W (G)
Dynamic Headroom	
8Ω	2.17dB (R)(U)(C)
6Ω	2.17dB (R)(U)(C)
IEC Power	
1kHz, 1% THD, 8Ω	83W (G)
1kHz, 1% THD, 4Ω	120W (C)
Power Band Width	
0.03% THD, 12.5W, 8Ω	10Hz ~ 50kHz
Damping Factor	
1kHz, 8Ω	50
Input Sensitivity/Impedance	
Phono MC	160μV/220Ω
MM	2.6mV/47kΩ
CD etc.	150mV/47kΩ
Input Sensitivity (New IHF)	
Phono MC	19μV
MM	0.27mV
CD etc.	15.5mV
Maximum Input Signal (1kHz)	
Phono MC	10mV
MM	150mV
Output Level/Impedance	
Rec Out	150mV/470Ω
Headphone Jack Rated Output/Impedance	
0.01% THD, RL = 8Ω	0.75V/270Ω
Frequency Response	
20Hz ~ 20kHz, CD etc.	±0.5dB
RIAA Equalization Deviation	
Phono MC	±0.5dB
MM	±0.3dB
Total Harmonic Distortion (20Hz ~ 20kHz)	
Phono MC to Rec Out (3V)	0.007%
MM to Rec Out (3V)	0.003%
Intermodulation Distortion	
CD etc. Rated Output/8Ω	0.01%

Signal to Noise Ratio (IHF-A-Network)	
Phono MC (500μV Input Shorted)	73dB
MM (5mV Input Shorted)	90dB
CD etc. (Shorted)	100dB
Signal to Noise Ratio (New IHF)	
Phono MC	72dB
MM	76dB
CD etc.	80dB
Residual Noise (IHF-A-Network)	
	140μV
Channel Separation (1Vol -30dB)	
Phono MC/MM input cloned 1kHz	50dB
CD etc. input 5.1kHz terminated 1kHz	50dB
Tone Control Characteristics	
BASS boost/cut	±10dB (at 20Hz)
turnover frequency	350Hz
TREBLE boost/cut	±10dB (at 20kHz)
turnover frequency	3.5kHz
Filter Characteristics	
Subsonic	15Hz, -12dB/oct
Continuous Loudness Control	
(Level related equalization)	
Attenuation	-40dB (1kHz)
Gain Tracking Error (0dB ~ -60dB)	
	2dB
Power Supply	
J.S.A. & Canadian models	AC120V, 60Hz
European model	AC220V, 50Hz
Australian & British models	AC240V, 50Hz
Other models	AC110-120/220/ 240V, 60/50Hz
Power Consumption	
J.S.A. & Canadian models	370W
Australian, European & British models	430W
Other models	220W
AC Outlet (DHC)(R) only	
Switched x 2	80W max. (U)(C)
	150W max. (R)
Unswitched x 1	200W max.
Dimension (W x H x D)	
	435 x 139 x 332 mm (17-1/8 x 5-1/2 x 13-1/8")
Weight	
	7.7 kg (16 lbs. 15 oz)

* Specifications are subject to change without notice.

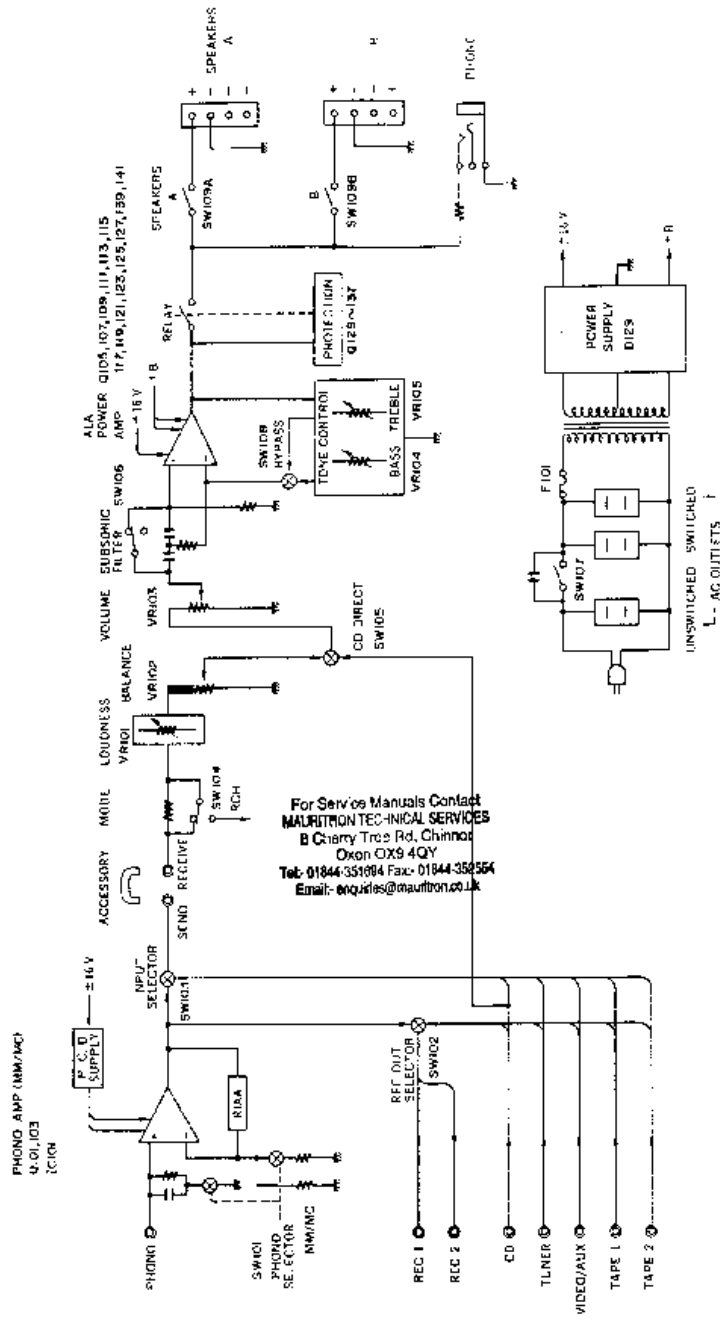
(U) U.S.A. model (G) European model
 (C) Canadian model (B) British model
 (A) Australian model (R) Other model

INTERNAL VIEW



- ① POWER TRANSFORMER
 U.S.A. model: XB792002
 Canadian model: XB795002
 European model: XB794002
 Australian & British models: XB793002
 Other model: XB791002
- ② MAIN CIRCUIT BOARD (6)
- ③ BRIDGE DIODE: 11000870 (4D4B41)
- ④ ELECTROLYTIC CAP
 12000μF 65V: VC107000
- ⑤ MAIN CIRCUIT BOARD (1)
- ⑥ MAIN CIRCUIT BOARD (3)
- ⑦ MAIN CIRCUIT BOARD (4)
- ⑧ FUSE
 U.S.A. & Canadian models:
 KB001520 (7A 125V)
 Australian, British & European models:
 KB000760 (T3.15A 250V)
 Other model:
 KB001300 (T7.0A 250V)
- ⑨ POWER SWITCH
- ⑩ MAIN CIRCUIT BOARD (5)
- ⑪ MAIN CIRCUIT BOARD (2)

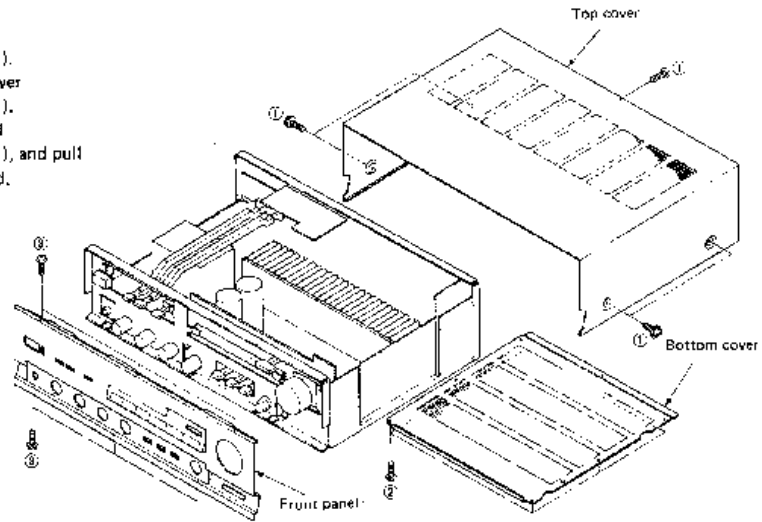
■ BLOCK DIAGRAM



DISASSEMBLY PROCEDURES

(Remove parts in disassembly order as numbered.)

1. Removal of top cover
Remove 5 screws (①).
2. Removal of bottom cover
Remove 7 screws (②).
3. Removal of front panel
Remove 6 screws (③), and pull the front panel forward.



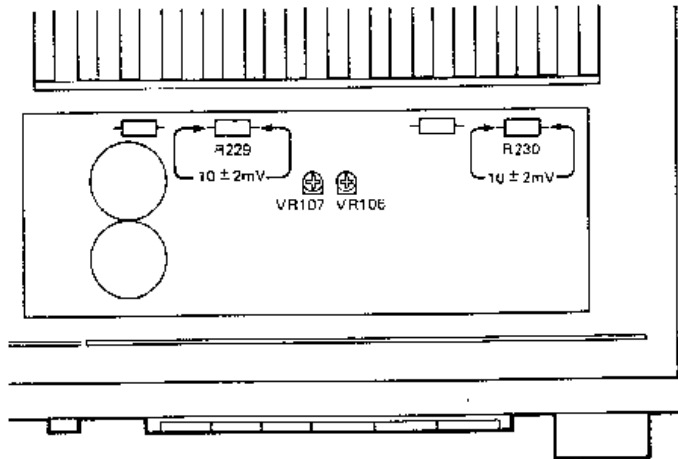
ADJUSTMENTS

● IDLING CURRENT ADJUSTMENT

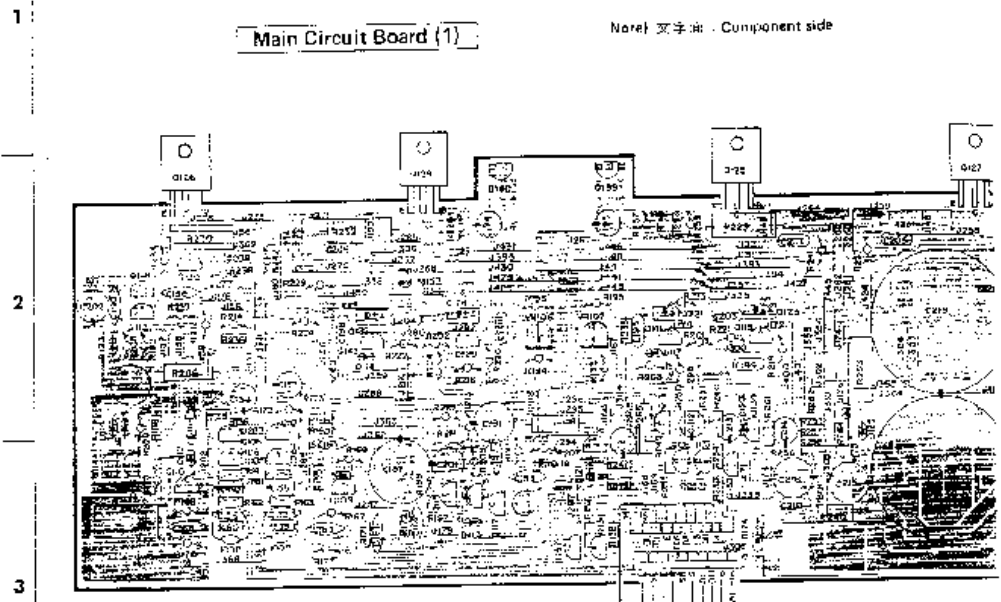
When replacing the power and drive transistors, adjust idling current. Adjust idling current in no signal and non load condition.

Adjust VR107 (Lch) and VR106 (Rch) so that the voltage across the terminal of R229 and R230 come to $10\text{mV} \pm 2\text{mV DC}$.

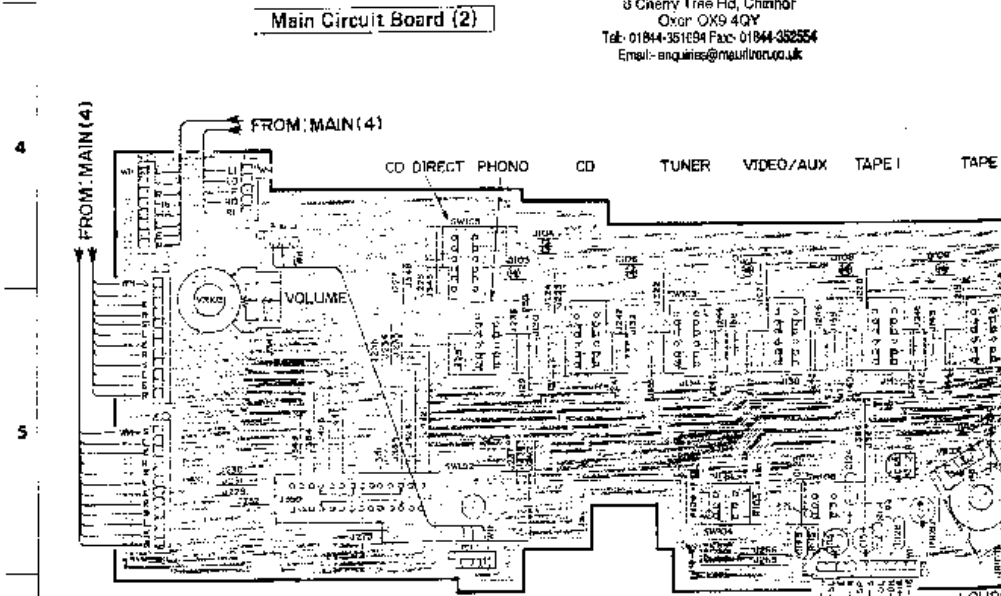
	Test points	Adjustment points	Test points
Lch	Across the terminals of R229	VR107	$10\text{mV} \pm 2\text{mV DC}$
Rch	Across the terminals of R230	VR106	$10\text{mV} \pm 2\text{mV DC}$



PRINTED CIRCUIT BOARD (Pattern side)



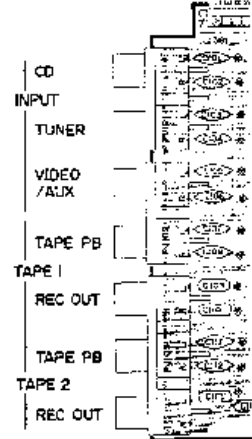
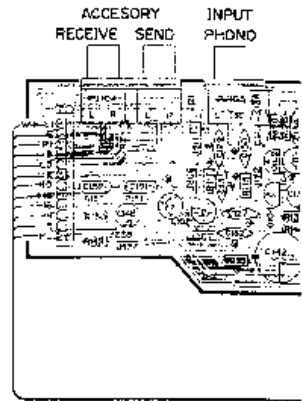
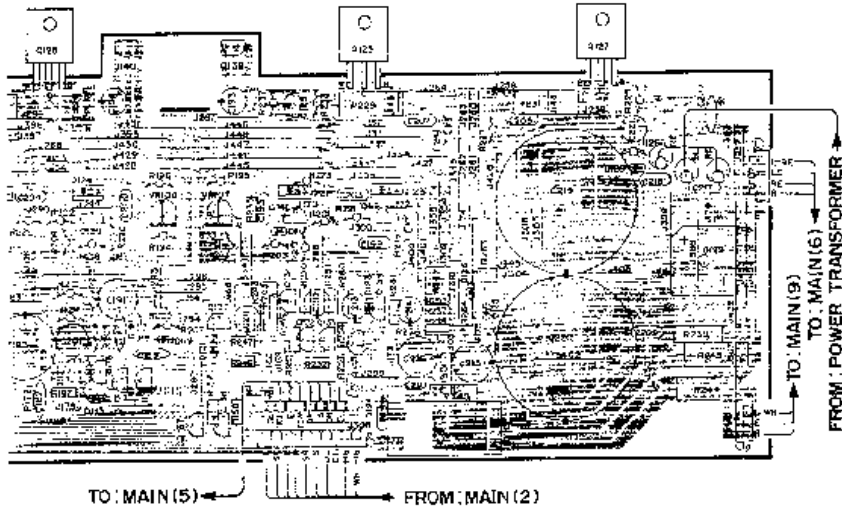
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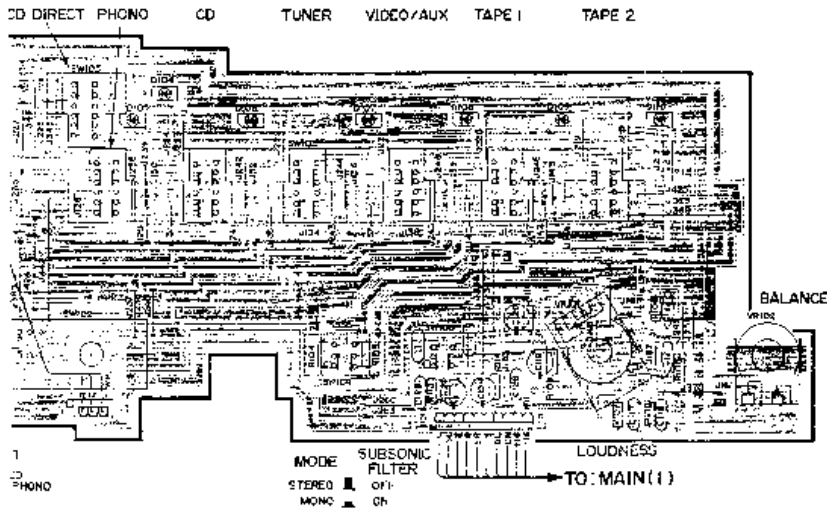
JARD (Pattern side)

Board (1)

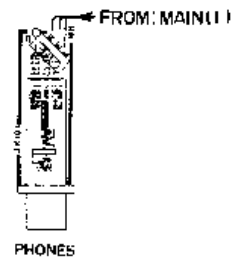
Note) 文字面 : Component side



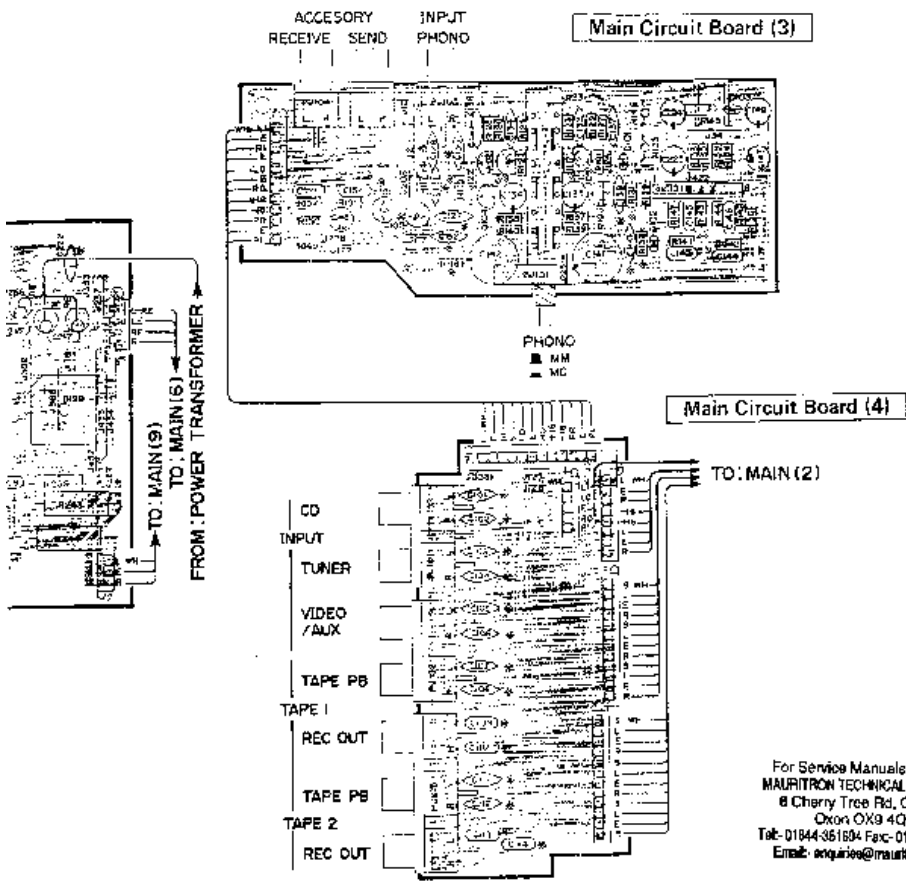
Board (2)



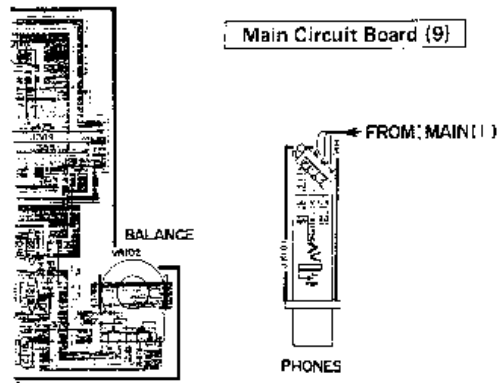
Main Circuit Board (9)



AX-500/AX-500U



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Note * marked

	R	U	C	A, B	G
R131, 132	100				180
R177, 178	180				82
C129, 130	OPEN				150P
R117, 118	30				33
C139, 140	1500P				2700P
L101, 102	SHORT				15uH
C238	OPEN				5600P
LT03, 104	OPEN				220uH
C101, 108	OPEN				470P
C111, 112	OPEN				
C222	OPEN				0.01
C227, 230	OPEN				5600P
C231, 236	OPEN				0.022
R268, 272	OPEN				4.7
F101	T7.0A 250V	7A 125V		T3.15A 250V	
F102	T3.5A 250V	OPEN			
J331	OPEN				SHORT
C109, 110	OPEN				470P
C113, 114	OPEN				
C231, 232	OPEN				220P
C233, 234	OPEN				270P

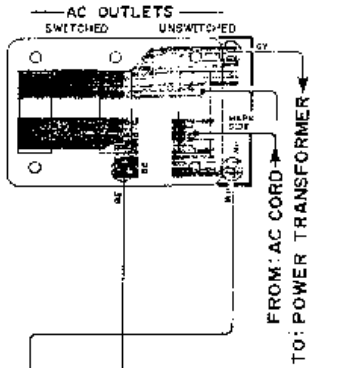
(1)

■ PRINTED CIRCUIT BOARD (Pattern side)

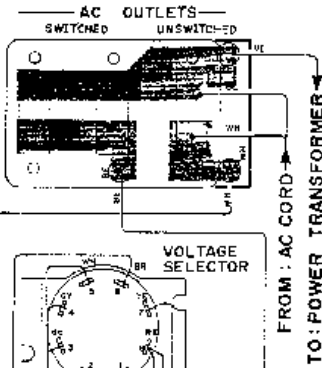
1
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Main Circuit Board (8)

U,C MODELS



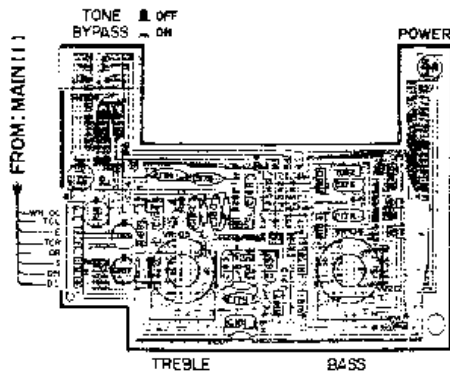
R MODEL



A,G

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Main Circuit Board (7)



Main Circuit Board (5)



C

D

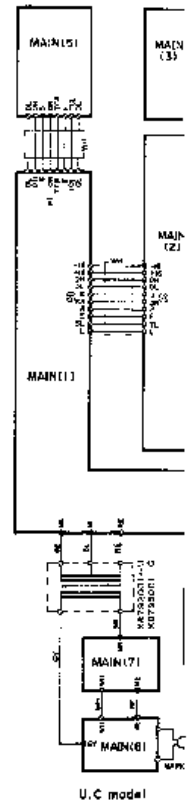
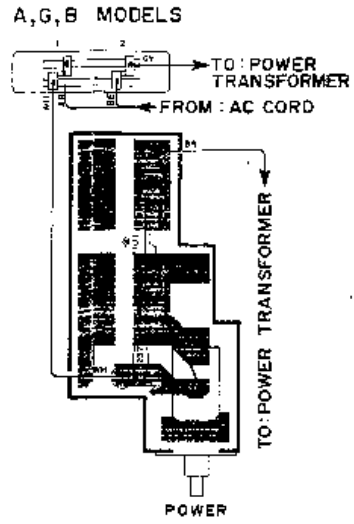
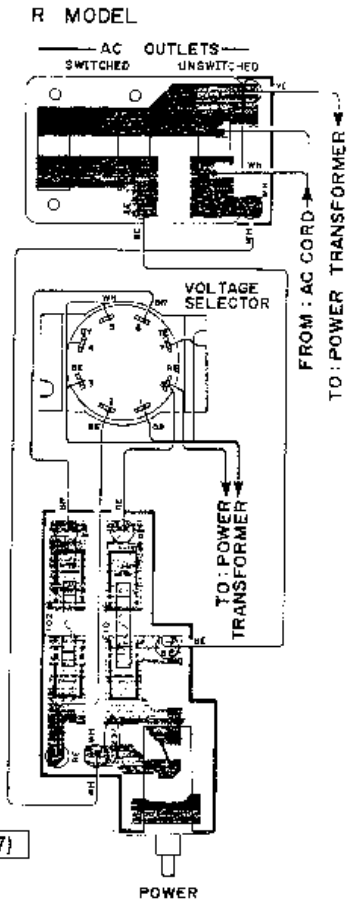
E

F

Pattern side)

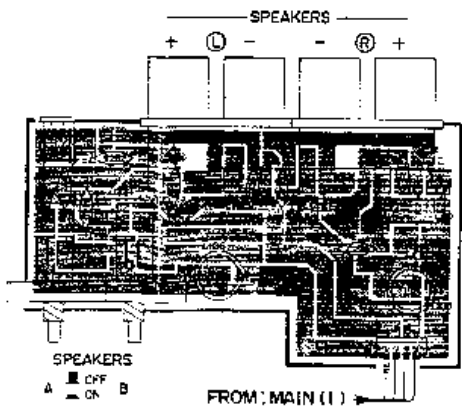
WIRING

Circuit Board (8)



Circuit Board (7)

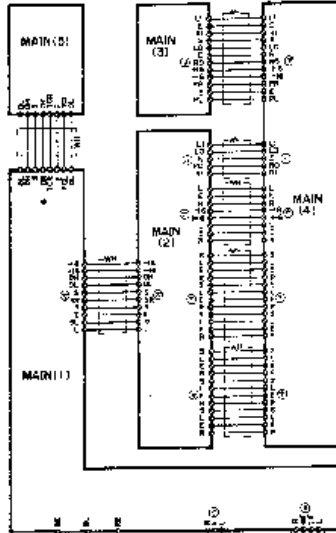
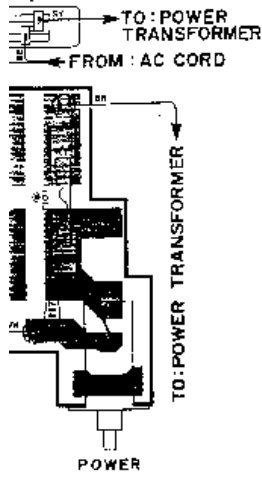
Main Circuit Board (6)



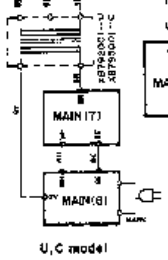
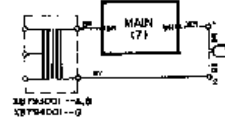
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■ WIRING

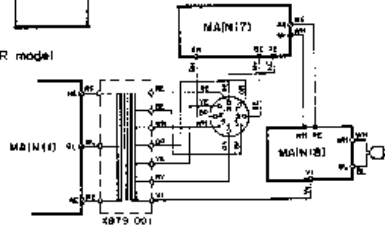
MODELS



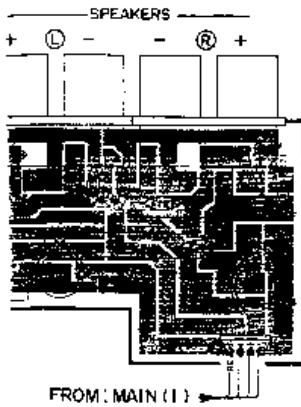
A, G, B models



R model

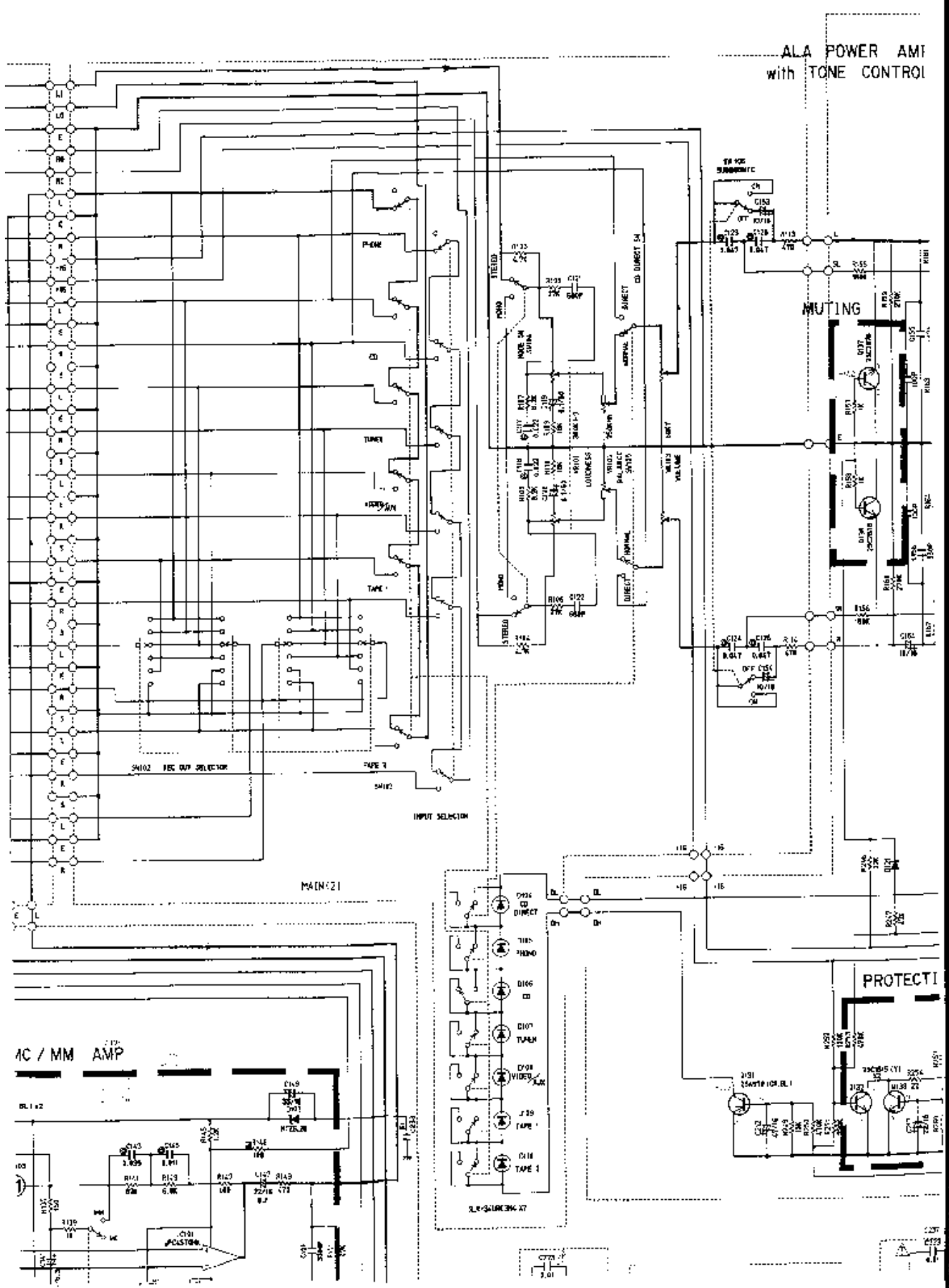


Main Circuit Board (6)



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ALA POWER AMP
with TONE CONTROL



4C / MM AMP

PROTECT

MUTING

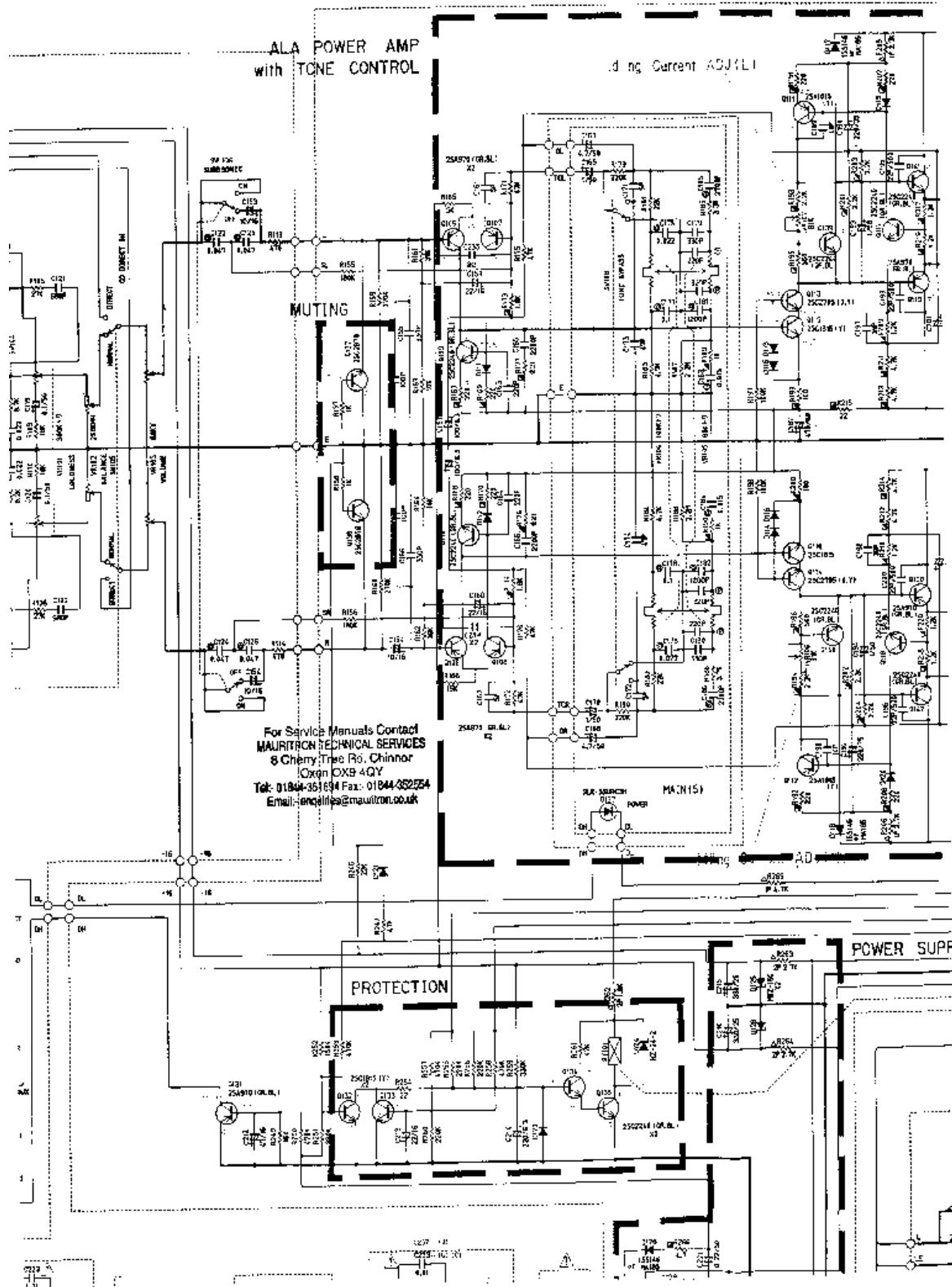
INPUT SELECTION

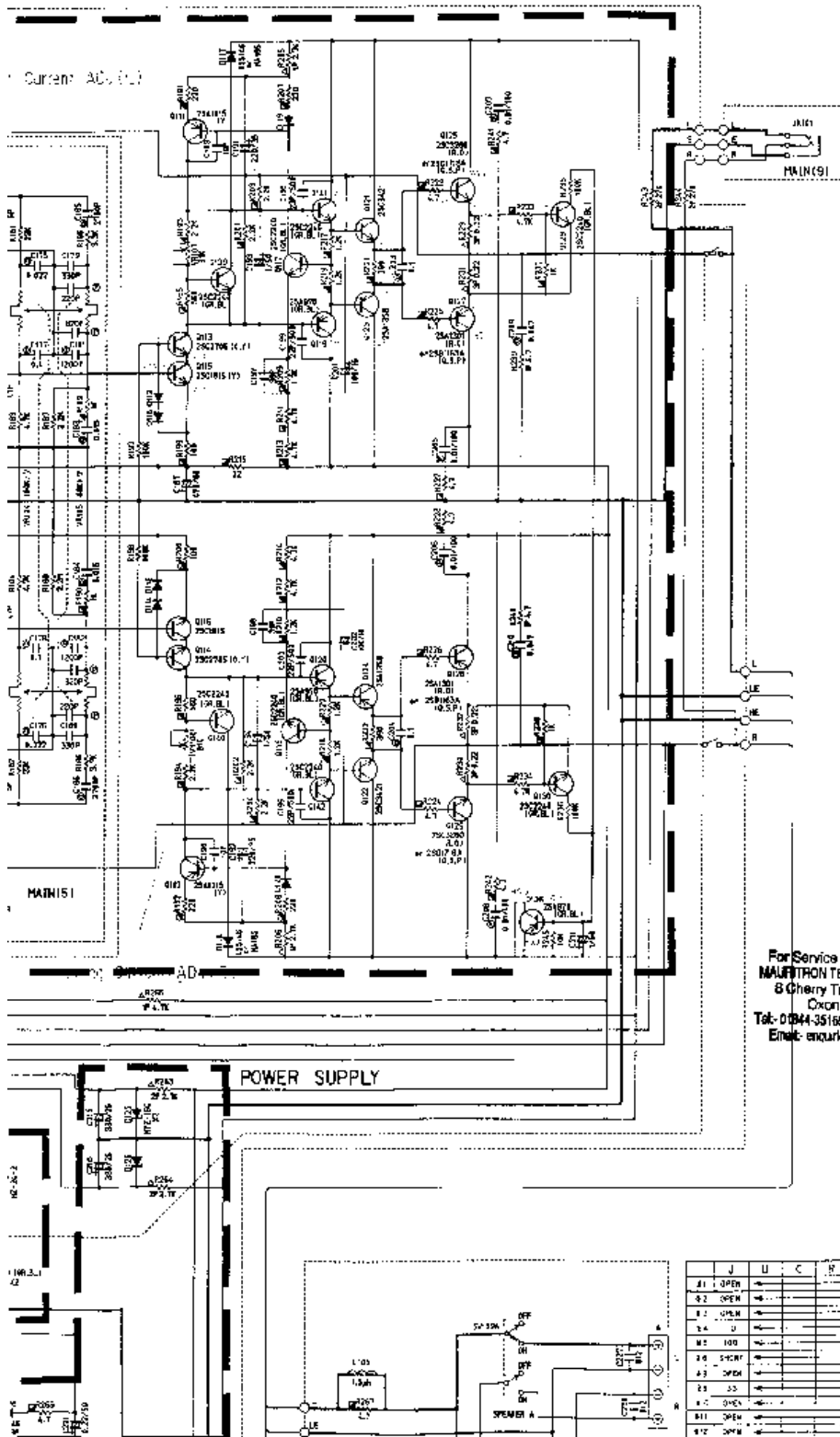
MAIN (21)

XL-S4103-07

BL142

100
1000
10000

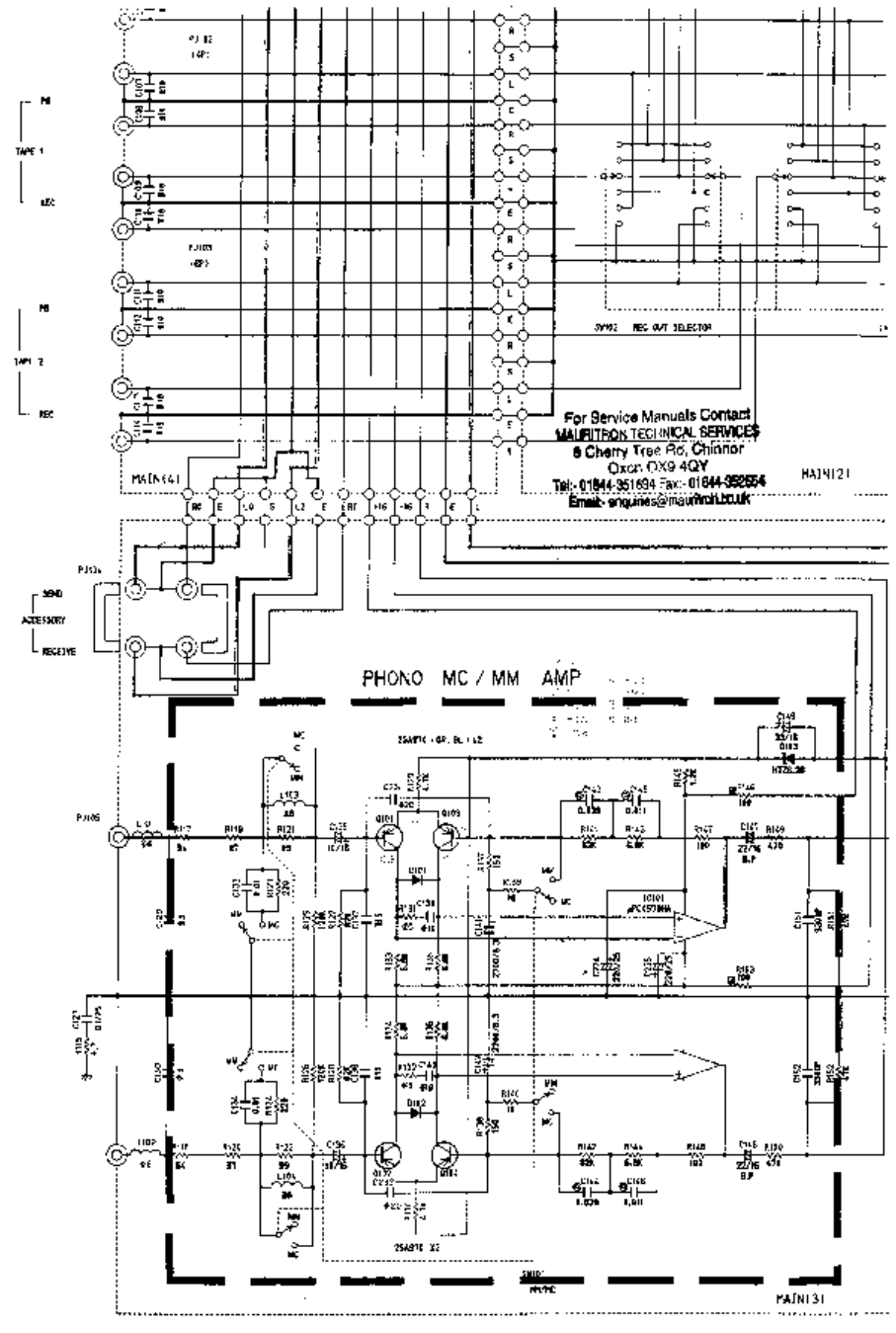




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	J	U	C	P	A	R	G
41	OPEN						350K
42	OPEN						270K
1	OPEN						150P
2							33
M1	100						100
10	SECRET						150P
11	OPEN						220P
23	33						22K
4	OPEN						100P
111	OPEN						0.21
412	OPEN						33K

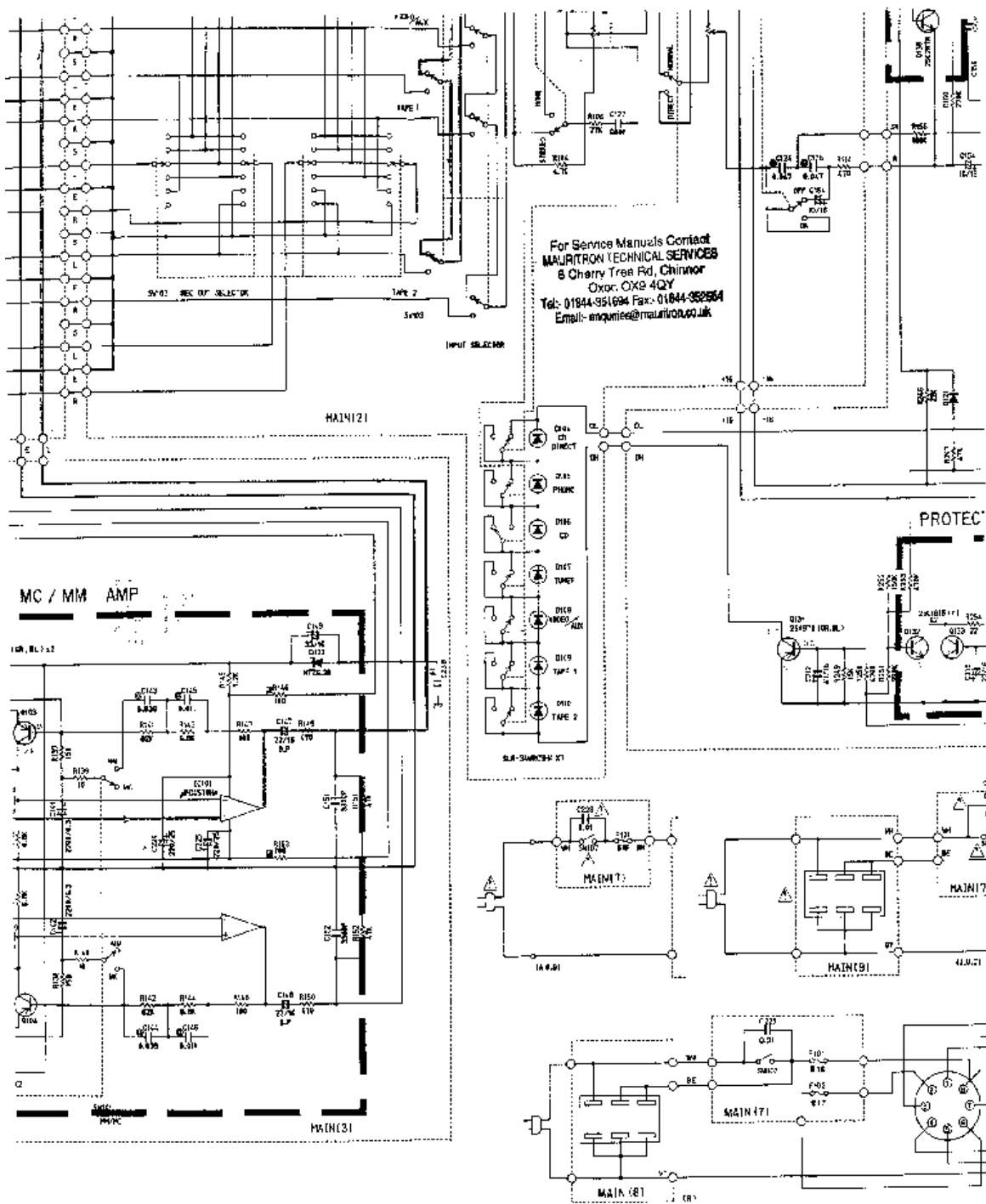
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PIN CONNECTIC
 2SA87C 1GR, B1
 2SA1015 (Y1)
 2SC1815 (Y)
 2SC2240 1GR, P
 2SC287B

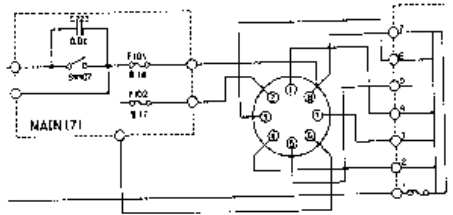
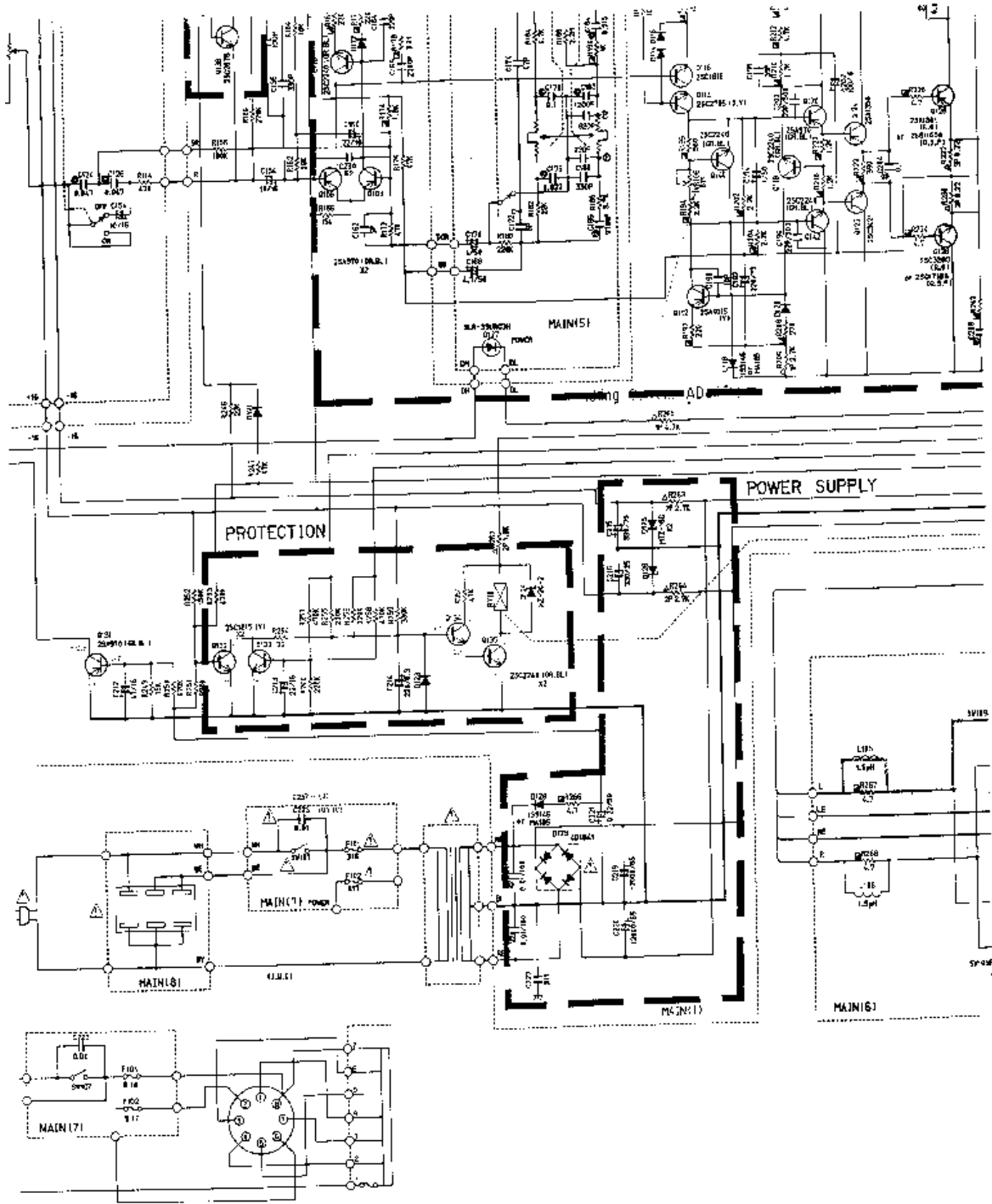
60



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PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

<p>2SA97 (IG, BL) 2SA10 (S, Y) 2SC1815 (Y) 2SC2240 (IG, BL) 2SC287B</p>	<p>2SC2706 (O, Y)</p>	<p>2SA1156 2SC3421</p>	<p>HZ21-2 MT216C MT25.2B 1SE133 1SE146</p>	<p>SLR340RC344</p>
---	-----------------------	-------------------------------------	--	--------------------



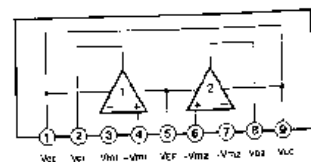
H224-3
MTZ16C
M: 28.28
1S5133
1S5146

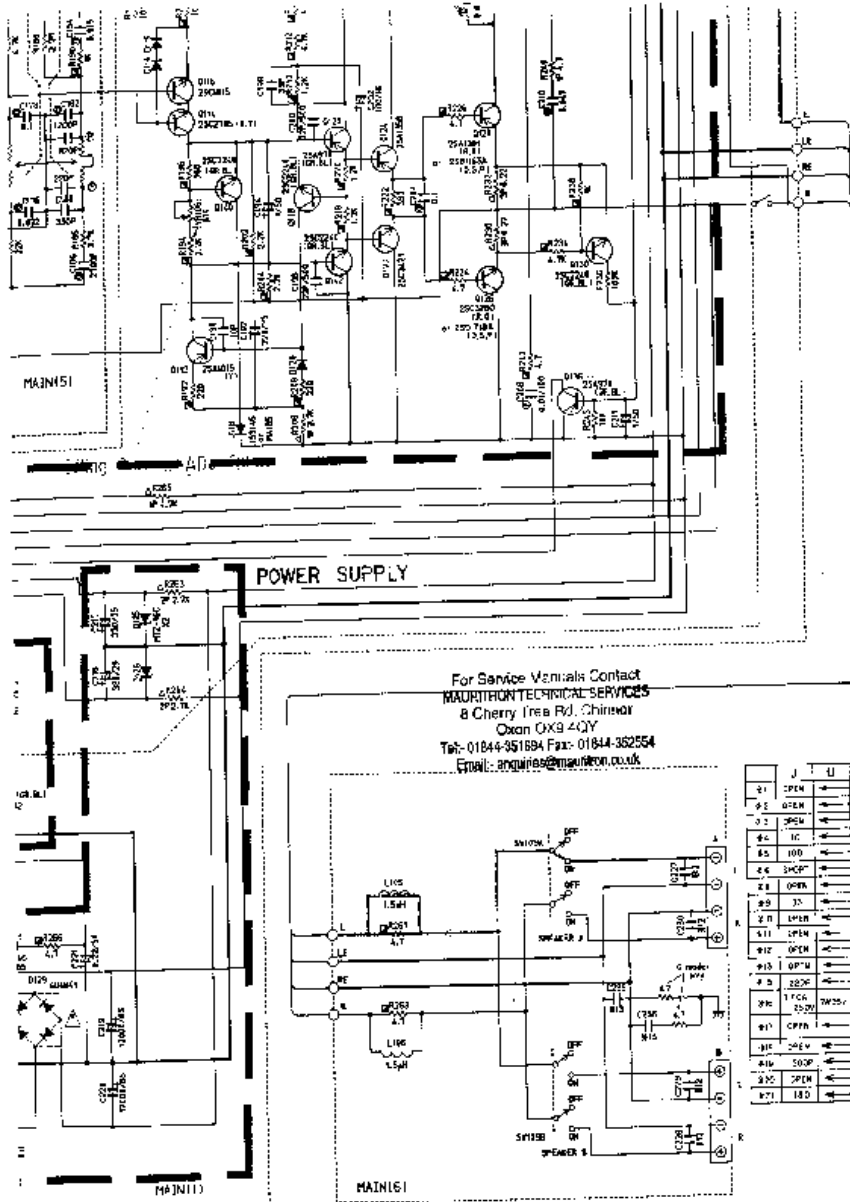
SLR 55URC2H
S_R 24URC3H4

4D4841

μPC4570-1A

IC101: μPC4570HA

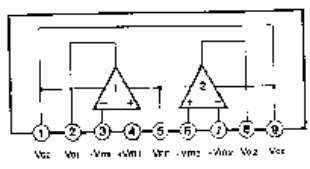




	J	U	C	R	A	B	G
01	OPEN						560P
02	OPEN						210P
03	OPEN						150P
04	IC						32
05	100						182
06	100						182H
07	300P						320P
08	OPEN						12K
09	32						420P
10	OPEN						0.0
11	OPEN						0.01
12	OPEN						0.002
13	OPEN						180P
14	220P						
15	100			750K	1315A		
16	100			250W	210K		
17	OPEN			175.5A	020V		
18	OPEN			250V			
19	OPEN						420P
20	500P						0.700P
21	OPEN						120P
22	180						47

LAST NO.	UNLISTED NO.
0296	115,116,120,151,188,193,222
0272	116,102,111,112,116,151,215,248
0190	
0229	123

IC101: μ PC4570HA



- All voltages are measured with a 10M Ω /DC electric volt meter.
- Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- Schematic diagram is subject to change without notice.

PARTS LIST

■WARNING

AX-500/AX-500U

Components having special characteristics are marked Δ , and must be replaced with parts having specifications equal to those originally installed.

• Carbon resistors (1/8W or 1/4W) are not included in the ELECTRICAL PARTS list. For the parts No. of the carbon resistor, refer to p. 17.

■ELECTRICAL PARTS

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets	ランク
	NA 09:24 60	Main Circuit Board	メインシート			J	
	NA 09:24 70	"	"			R	
	NA 09:24 80	"	"			U	
	NA 09:24 90	"	"			A, B	
	NA 09:25:00	"	"			G	
	NA 09:25:10	"	"			C	
	FI 32 41:00	Ceramic Cap.	セラコン	C237		J	Δ
	FI 41 41:00	"	"	C223		R, U, A, C, B	Δ
	VA 98:63:00	"	"	"		G	Δ
	FG 21:05:00	"	"	C181, 162, 171, 172			
	FG 21:11:00	"	"	C189, 190			
	FG 21:19 90	"	"	C197, 198			
	FG 21:14 70	"	"	C173, 174			
	FG 21:23 30	"	"	C155, 156, 179, *80			
	FG 21:21 50	"	"	C129, 130		G	
	FG 21:21 80	"	"	C137, 138		G	
	FG 21:22 20	"	"	"		J, R, J, A, C, B	
	FG 21:22:20	"	"	C163, 164			
	FG 21:22:20	"	"	C231, 232		G	
	FG 21:22:70	"	"	C233, 234		G	
	FG 21:26:80	"	"	C121, 122			
	FG 21:24:70	"	"	C101~106, 111, 112		G	
	FG 21:31:50	"	"	C139, 140		J, R, U, A, C, B	
	FG 21:32:70	"	"	"		G	
	FG 21:32:20	"	"	C165, 166			
	FG 21:35:50	"	"	C238		G	
	FG 44 41:00	"	"	C133, 134			
	FG 44 41:00	"	"	C122, 227~230		G	
	FG 44 42:20	"	"	C235, 236		G	
	FU 36:12 20	Mica Cap.	F E マイコン	C195, 196, 199, 200			
	FZ 00:50 30	Semiconductive Ceramic Cap	半導体セラコン	C127			
	UA 25:31:20	Myler Cap.	マイラーコン	C183, 182			
	UA 25:24:70	"	"	C109, 110, 113, 114		G	
	UA 25:32:70	"	"	C185, 186			
	UA 25 33:30	"	"	C151, 152			
	UA 25 41:10	"	"	C145, 146			
	UA 25 41:50	"	"	C183, 184			
	UA 25 42:20	"	"	C117, 118, 175, 176			
	UA 25 43:90	"	"	C143, 144			
	UA 25 44:70	"	"	C123~126, 209, 210			
	UA 25:51 00	"	"	C177, 178, 203, 204			
	UH 23:71:00	Electrolytic Cap.	ケミコン	C135, 136, 153, 154			
	UH 23:72:20	"	"	C169, 160, 213			
	UH 23:74:70	"	"	C212			
	UH 23:73:30	"	"	C149			
	JH 24 82:20	"	"	C224, 225			
	JH 26 52:20	"	"	C221			
	JH 28 51:00	"	"	C119, 120			
	JH 28 61:00	"	"	C169, 170, 193, 194			
	JH 26 04 70	"	"	C167, 168			
	JT 45 41 00	Polypropylene Film Cap.	ポリプロピレンコン	C206~209, 217, 218			
	UK 13:72 20	Electrolytic Cap.	EPコン	C147, 148			
	UM 04:81 00	"	オーディオケミコン	C201, 202			

*New Parts (新規部品)

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AX-500/AX-500U

Ref No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
	UW:81 92 20	Electrolytic Cap.	2200 μ F 6.3V	ケミコン	C141,142		
	UW:84 83 30	"	330 μ F 25V	"	C215,216		
	UW:85 82 20	"	220 μ F 35V	"	C191,192		
	UW:88 84 70	"	470 μ F 80V	"	C187		
	UW:81 82 20	"	220 μ F 6.3V	"	C214		
	UJ:11 81 00	"	100 μ F 6.3V	"	C187,158		
	VC:40 70 00	"	12000 μ F 65V	ブロックケミコン	C219,220		
	GD:80 04 70	Coil Output	1.5 μ H	アフトアットコイル	L10E,10E		
	VA:98 35 00	Coil	15 μ H	コイル	L101,102	G	
	VA:98 36 00	"	220 μ H	"	L103,104	G	
	HL:71 34 70	Metal Oxide Film Resistor	4.7 Ω 1W	酸化金属抵抗	R239,240		
	HL:71 62 70	"	2.7k Ω 1W	"	R205,206		
	HL:71 64 70	"	4.7k Ω 1W	"	R265		
	HL:72 62 70	"	270 Ω 2W	"	R243,244		
	HL:72 62 70	"	2.7k Ω 2W	"	R263,264		
	HL:72 61 80	"	8k Ω 2W	"	R262		
	HL:93 22 20	"	0.22 Ω 3W	"	R229-232		
	HV:45 34 70	Film Proof Carbon Resistor	4.7 Ω 1/4W	不感化カーボン抵抗	R228-229,241,242,268-269		
	HV:45 42 20	"	22 Ω 1/4W	"	R215		
	HV:45 54 00	"	100 Ω 1/4W	"	R 48 153,189,200		
	HV:45 51 80	"	180 Ω 1/4W	"	R 77 178	J,R,U,A,C,B	
	HV:45 48 20	"	52 Ω 1/4W	"	"	G	
	HV:45 52 20	"	220 Ω 1/4W	"	R187-170,191,192,202,208		
	HV:45 53 90	"	390 Ω 1/4W	"	R221,222		
	HV:45 65 60	"	550 Ω 1/4W	"	R195,196		
	HV:45 61 00	"	1k Ω 1/4W	"	R189,190,237,238		
	HV:45 61 20	"	1.2k Ω 1/4W	"	R209,210,217-220		
	HV:45 61 80	"	1.8k Ω 1/4W	"	R173,174		
	HV:45 62 20	"	2.2k Ω 1/4W	"	R193,194,201,204		
	HV:45 64 70	"	4.7k Ω 1/4W	"	R211-214,223,234		
	VA:78 75 00	Pre-Set Potentiometer	B1k Ω	半固定抵抗	VR10E,107		
	VC:23 71 00	Potentiometer	250KMN	可変抵抗器	VR102		
	VC:23 72 00	"	80K特	"	VR105		
	VC:23 73 00	"	100K特	"	VR104		
	VC:23 74 00	"	60KY	"	VR103		
	VC:23 74 00	"	300X特	"	VR101		
	IA:08 70 00	Transistor	2SA101(B)	トランジスタ	Q101-108,119,120,121,126		
	IA:10 15 21	"	2SA101(Y)	"	Q111,112		
	IC:18 15 20	"	2SC1815(Y)	"	Q115,116,132,133		
	IC:22 40 00	"	2SC2406R(B)	"	Q109,110,111,112,129		
	IX:80 08 90	"	2SC287B	"	Q137,138		
	IC:22 40 00	"	2SC2406R(B)	"	Q139,140		
	IC:27 05 00	"	2SC2705(O,Y)	"	Q113,114		
	IX:80 85 10	"	2SA135B	"	Q123,124		
	IX:80 85 20	"	2SC3421	"	Q121,122		
	IF:00 19 45	Zener Diode	4Z4-2	ツェナーダイオード	D124		
	IF:00 85 40	"	MTZ 6C	"	D125,126		
	IF:00 10 70	"	VTZ5.2B	"	D108		

*New Parts (新規部品)

Rfl No.	Part No.	Description	部品名	Remarks	Common Model	Markets	ランク
	IF 00:42 70	LED	3LR-5EJRC3F	L E D	D127		
	IF 00:23 80	"	3LR-34JRC3H4	"	D104~110		
	IF 00:46 00	Diode	1SS133	ダイオード	R12, 129, 133, 116		
	IF 00:81 30	"	1SS146	"	D117, 118, 128		
	IF 00:08 70	Diode Bridge	4D4B41	ダイオードブリッジ	D129		
	KB 24:70 01	IC	PC4570HA	I C	IC101		
	KC 00:19 40	Relay	DH24D2-CTM	リレー	RY101		
	KC 00:20 00	"	JR2A-DC24V	"	"	changeable	
	VC 17:67 00	Push Switch	NS4-2	プッシュスイッチ	SW105		
*	VC 17:55 00	"	NS2-2	"	SW104, 106		
*	VC 23:77 00	"	6連連動NS4-2	"	SW103		
*	VC 36:99 00	"	B-2	"	SW101		
*	VC 37:24 00	"	2連連動SPUF2-2	"	SW108		
*	VC 37:81 00	"	S2-2	"	SW106		
*	VC 23:78 00	Rotary Switch	SRZ-U	ロータリースイッチ	SW102		
*	VC 40:97 00	Power Switch	TV-4	パワースイッチ	SW107		△
	KB 00:03 70	Fuse	T3.5A 250V	ヒューズ	F102	R	△
	KB 00:07 80	"	T3.15A 250V	"	F101	A, G, B	△
	KB 00:13 00	"	T7.0A 250V	"	"	J, R	△
	KB 00:15 20	"	7A 125V	"	"	U, C	△
	LB 30:16 90	Phone Jack		ヘッドホンジャック	JK1C1		
	LB 20:22 90	Pin Jack	2P	ピンジャック	PJ105		
	LB 40:10 30	"	4P	"	PJ101, 102, 104		
	LB 60:60 90	"	5P	"	PJ103		
	VA 93:28 00	Voltage Selector		電圧切換器			△
	CB 64:46 70	Cover Capacitor	HY-0105	コンデンサーカバー		G	
	LB 20:10 60	Fuse Holder Pin	YSH403T	ヒューズホルダーピン		A, G, B	
	LB 20:18 70	"	Z31 65081	"		J, R, U, C	
	LB 60:42 80	AC Outlet		A C アウトレット		J, R	△
	LB 60:81 70	"		"		U, C	△
	VA 72:55 00	Holder, Wire	5P	パラレルホルダー			
	VA 72:58 00	"	8P	"			
	VA 72:60 00	"	10P	"			
	VA 72:62 00	"	12P	"			
	VB 22 98 00	Wire Trap	BP	ワイヤートラップ			
	VA 72:53 00	Holder, Wire	3P	パラレルホルダー			
*	VC 31:37 00	Speaker Terminal	BP	スピーカータミナル		J, R, U, C	
*	VC 72:09 00	"	BP	"		G	
	VA 82:15 00	Heat Sink		放熱板		C	
	BE 06:95 10	Ground Plate		ランド金具			
*	BB 07:13 60	Terminal, Screw		ネジ端子			
	EK 38:00 20	Cup Screw	3x14 F4M3-BI	カップスクリュー(Bタイプ)		C	

*New Parts (新規部品)

Service Manuals Contact
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MECHANISM PARTS

Note: ∅: Diameter

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markers	ランク
* 1	NB 64 00 30	Panel Unit	パネルユニット	Silver		R,A,G,B	
* "	NB 64 00 50	"	"	Black		R,A,G,B	
* "	NB 64 00 40	"	"	Silver		U,C	
* "	NB 64 00 60	"	"	Black		U,C	
* "	NB 64 08 40	"	"	Black		J	
* "	NB 64 09 50	"	"	Silver		J	
* 1-1	CB 65 91 80	Button Input	ボタンインプット	Black			
* "	CB 65 92 00	"	"	Silver			
1 2	AA 63 22 00	Spacer	スペーサ				
1-3	CB 09 98 00	Plastic Rivet	プラスチックリベット				
2	IX 60 81 10	Transistor	トランジスタ	Q127, 128			
"	IX 60 81 30	"	"	"			
3	IX 60 81 20	"	"	Q125, 126			
"	IX 60 81 40	"	"	"			
* 4	VC 65 78 00	Sheet	シム, エツシート				
* "	VC 39 72 00	"	デシカシート				
5	EK 33 00 20	BW Head Tapping Screw	3x14; 2.0x20; MC2 B	BWヘッドタッピングネジ			
6	BA 09 55 60	Heat Sink		放熱シート			
* 7	NA 09 24 60	Main Circuit Board		メインシート		J	
* "	NA 09 24 70	"	"	"		R	
* "	NA 09 24 80	"	"	"		U	
* "	NA 09 24 90	"	"	"		A,B	
* "	NA 09 25 00	"	"	"		G	
* "	NA 09 25 10	"	"	"		C	
8	CB 61 68 10	Cord Stopper	CM-22A	コードストッパー		J	
"	CB 62 01 90	"	CM-22A	"		R,A,G,B	
"	CB 62 02 00	"	CM-22C	"		U,C	
* 9	XB 79 10 02	Power Transformer		電源トランス		R	
* "	XB 79 00 02	"	"	"		J	
* "	XB 79 20 02	"	"	"		U	
* "	XB 79 30 02	"	"	"		A,B	
* "	XB 79 40 02	"	"	"		G	
* "	XB 79 50 02	"	"	"		C	
10	LA 00 29 50	Terminal Board	2P	中継端子台		A,G,B	
11	LB 10 11 10	Plug, Short		ショートプラグ			
12	MG 00 17 50	Power Cord	7A 125V 2.2m	電源コード		J	
"	MG 00 17 60	"	7A 125V 2.2m	"		J	
"	MG 00 18 30	"	6A 250V 2m	"		R	
"	MG 00 22 20	"	10A 125V 1.99m	"		U,C	
"	MG 00 23 70	"	10A 125V 2m	"		U,C	
"	MG 00 08 20	"	7.5A 250V 2.5m	"		A	
"	MG 00 14 90	"	7.5A 250V 2.5m	"		A	
"	MG 00 23 10	"	7.5A 250V 2m	"		A	
"	MG 00 16 20	"	2.5A 250V 2m	"		G	
"	MG 00 18 80	"	2.5A 250V 2m	"		B	
* 13	AA 63 12 80	Top Cover		トップカバー	Black		
* "	AA 63 12 90	"		"	Silver		
* 14	AA 63 13 20	Bottom Cover		ボトムカバー		J	
* 15	AA 63 13 30	Rear Panel		リアパネル		R	
* "	AA 63 13 40	"		"		U,C	
* "	AA 63 13 50	"		"		G	
* "	AA 63 13 60	"		"		A,B	
* "	AA 63 13 70	"		"		A,B	

* New Parts (新規部品)

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Parts List for Carbon Resistor

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ353100	*	12K Ω	HJ357120	HFB57120
1.8 "	HJ353180	*	15 "	HJ357150	HFB57150
2.2 "	HJ353220	HFB53220	18 "	HJ357180	HFB57180
3.3 "	HJ353330	HFB53330	22 "	HJ357220	HFB57220
4.7 "	HJ353470	HFB53470	27 "	HJ357270	HFB57270
5.6 "	HJ353560	HFB53560	33 "	HJ357330	HFB57330
10 "	HJ354100	HFB54100	39 "	HJ357390	HFB57390
15 "	HJ354150	HFB54150	47 "	HJ357470	HFB57470
22 "	HJ354220	HFB54220	56 "	HJ357560	HFB57560
27 "	HJ354270	HFB54270	68 "	HJ357680	HFB57680
33 "	HJ354330	HFB54330	82 "	HJ357820	HFB57820
39 "	HJ354390	HFB54390	91 "	HJ357910	HFB57910
47 "	HJ354470	HFB54470	100 "	HJ358100	HFB58100
56 "	HJ354560	HFB54560	120 "	HJ358120	HFB58120
68 "	HJ354680	HFB54680	150 "	HJ358150	HFB58150
82 "	HJ354820	HFB54820	180 "	HJ358180	HFB58180
100 "	HJ355100	HFB55100	220 "	HJ358220	HFB58220
110 "	HJ355110	HFB55110	270 "	HJ358270	HFB58270
120 "	HJ355120	HFB55120	330 "	HJ358330	HFB58330
150 "	HJ355150	HFB55150	390 "	HJ358390	HFB58390
160 "	HJ355160	*	470 "	HJ358470	HFB58470
180 "	HJ355180	HFB55180	560 "	HJ358560	HFB58560
220 "	HJ355220	HFB55220	680 "	HJ358680	HFB58680
270 "	HJ355270	HFB55270	820 "	HJ358820	HFB58820
330 "	HJ355330	HFB55330	1.0M Ω	HJ359100	HFB59100
390 "	HJ355390	HFB55390	1.2 "	HJ359120	*
470 "	HJ355470	HFB55470	1.5 "	HJ359150	HFB59150
510 "	*	HFB55510	1.8 "	HJ359180	HFB59180
560 "	HJ355560	HFB55560	2.2 "	HJ359220	HFB59220
580 "	HJ355580	HFB55580	3.3 "	HJ359330	HFB59330
820 "	HJ355820	HFB55820	3.9 "	HJ359390	*
910 "	HJ355910	HFB55910	4.7 "	HJ359470	*
1.0K Ω	HJ356100	HFB56100			
1.2 "	HJ356120	HFB56120			
1.5 "	HJ356150	HFB56150			
1.8 "	HJ356180	HFB56180			
2.0 "	HJ356200	HFB56200			
2.2 "	HJ356220	HFB56220			
2.4 "	HJ356240	HFB56240			
2.7 "	HJ356270	HFB56270			
3.0 "	HJ356300	HFB56300			
3.3 "	HJ356330	HFB56330			
3.6 "	HJ356360	HFB56360			
3.9 "	HJ356390	HFB56390			
4.7 "	HJ356470	HFB56470			
5.1 "	HJ356510	HFB56510			
5.6 "	HJ356560	HFB56560			
6.8 "	HJ356680	HFB56680			
8.2 "	HJ356820	HFB56820			
9.1 "	HJ356910	HFB56910			
10 "	HJ357100	HFB57100			

1/4W Type: 4.5mm

1/6W Type: 5mm