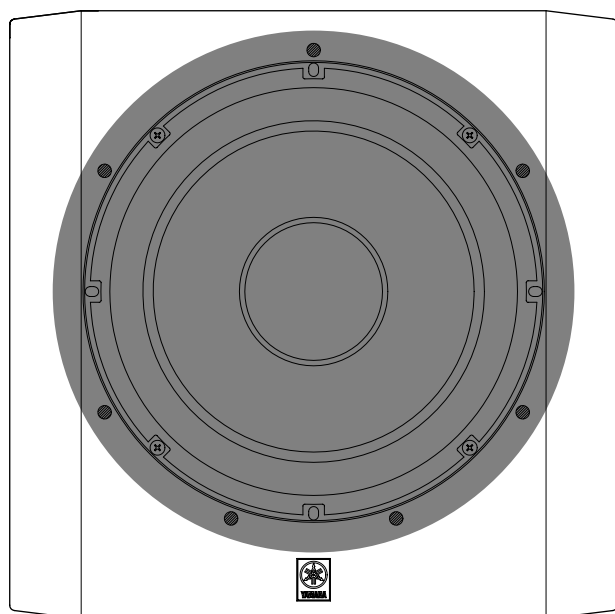


SUBWOOFER SYSTEM YST-SW216

SERVICE MANUAL

YST-SW216



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 inherent to 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 any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation 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 principle-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 buss in the unit (heavy gauge black wires connect to this buss).

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

■ CONTENTS

TO SERVICE PERSONNEL	2
SPECIFICATIONS	3
INTERNAL VIEW	4
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DISASSEMBLY PROCEDURES	6~7

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This Service Manual uses recycled paper.

100993

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YAMAHA

YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan

'05.12

■ TO SERVICE PERSONNEL

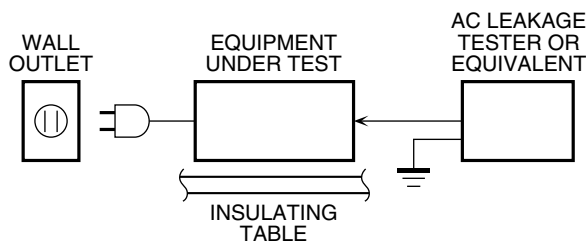
1. Critical Components Information

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

2. Leakage Current Measurement (For 120V Models Only)

When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohms shunted by $0.15\mu\text{F}$.



- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



“CAUTION”

“F1: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 1.6A, 125V FUSE.”

CAUTION

F1: REPLACE WITH SAME TYPE 1.6A, 125V FUSE.

ATTENTION

F1: UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE 1.6A, 125V.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and /or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

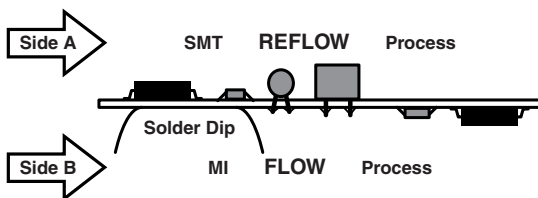
Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

About Lead Free Solder

The P.C.B.s installed in this unit are soldered using the following solder.

	Side A	Side B
MAIN P.C.B.	—	Lead Free Solder



Among some types of lead free solder currently available, it is recommended to use one of the following types for the repair work.

- Sn + Ag + Cu (tin + silver + copper)
- Sn + Cu (tin + copper)
- Sn + Zn + Bi (tin + zinc + bismuth)

Caution:

1. As the melting point temperature of the lead free solder is about 30°C to 40°C (50°F to 70°F) higher than that of the lead solder, be sure to use a soldering iron suitable to each solder.
2. If lead solder must be used, be sure to remove lead free solder from each terminal section of the parts to be replaced and from the area around it completely before soldering, or make sure that the lead free solder and lead solder melt together fully.

SPECIFICATIONS

Type Advanced Yamaha Active Servo Technology II
Output Power 50 W (100 Hz, 5 ohms 10% T.H.D)
Input Sensitivity 50 mV (100 Hz, 50 W / 5 ohms)
Dynamic Power 100 W, 5 ohms
Input Impedance 12 k-ohms
Frequency Response 25 Hz to 180 Hz
Driver 25cm (9-13/16") Cone Woofer
Magnetic Shielding Type

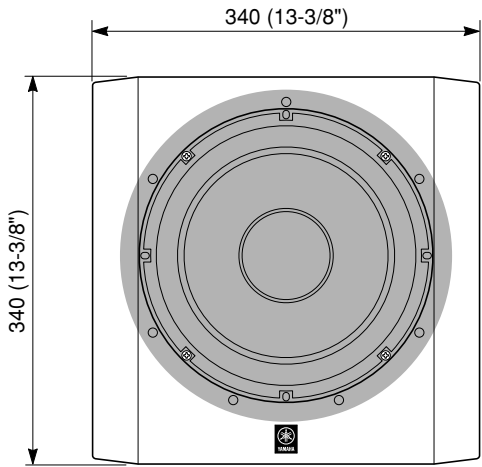
Input/Output Section
INPUT1/OUTPUT Speaker Terminal
INPUT2 RCA Pin jack

Operation Section
Power Switch, Volume Control, High Cut Switch, LED indicator

Power Supply
U, C models AC 120 V, 60 Hz
R, L models AC 110-120 / 220-240 V, 50 / 60 Hz
A model AC 240 V, 50 Hz
B, G models AC 230 V, 50 Hz

Power Consumption 45 W
Dimensions (W x H x D) 340 x 340 x 384.5 mm
(13-3/8" x 13-3/8" x 15-1/8")
Weight 11.2 kg (24 lbs. 11 oz.)

DIMENSIONS



Finish
Black color U, C, R, A, B, G, L models
Accessories
Nonskid pad x 4

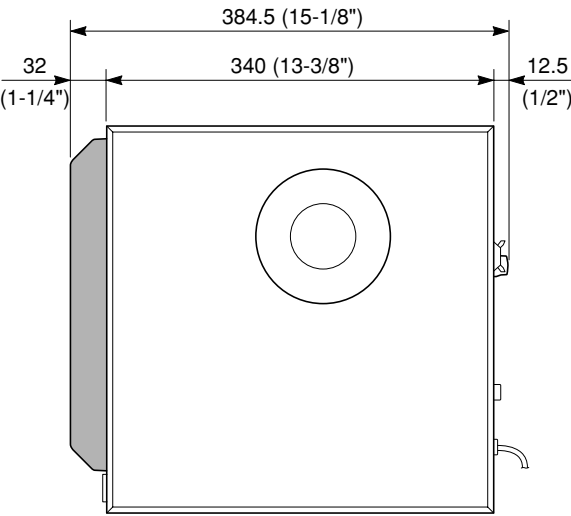
* Specifications are subject to change without notice due to product improvements.

- | | |
|-------------------------|--------------------------|
| U U.S.A. model | C Canadian model |
| R General model | A Australian model |
| B British model | G European model |
| L Singapore model | |



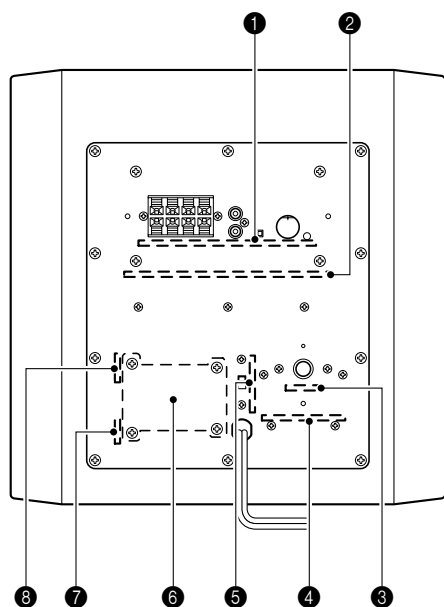
Advanced YST II

This subwoofer system employs Advanced Yamaha Active Servo Technology II which Yamaha has developed for reproducing higher quality super-bass sound. This super bass sound adds a more realistic, theater-in-the-home effect to your stereo system.



Unit: mm (inch)

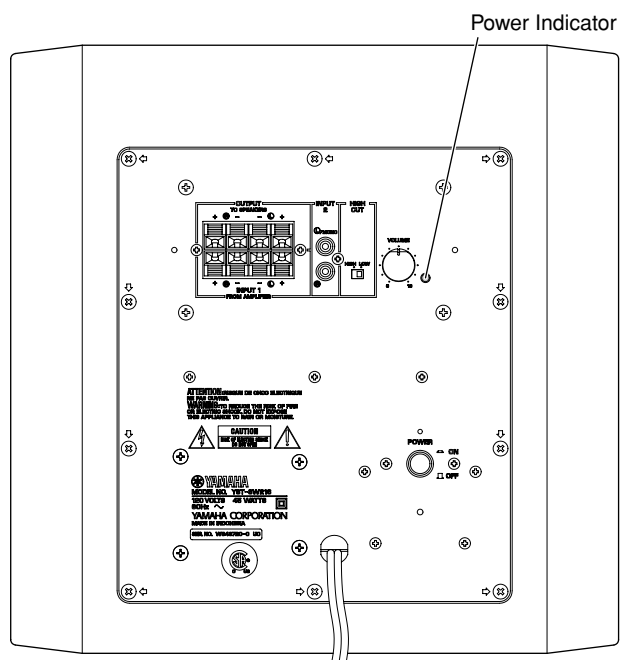
INTERNAL VIEW



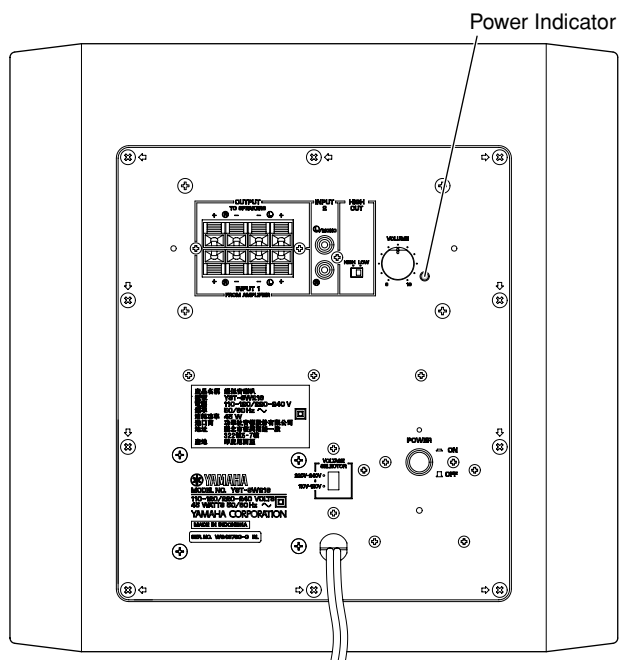
- ❶ MAIN (2) P.C.B.
- ❷ MAIN (1) P.C.B.
- ❸ MAIN (5) P.C.B.
- ❹ MAIN (3) P.C.B.
- ❺ MAIN (9) P.C.B. (R, L models)
- ❻ Power Transformer
- ❼ MAIN (6) P.C.B.
- ❽ MAIN (7) P.C.B. (U, C, A, B, G models)
- ❾ MAIN (10) P.C.B. (R, L models)

REAR PANELS

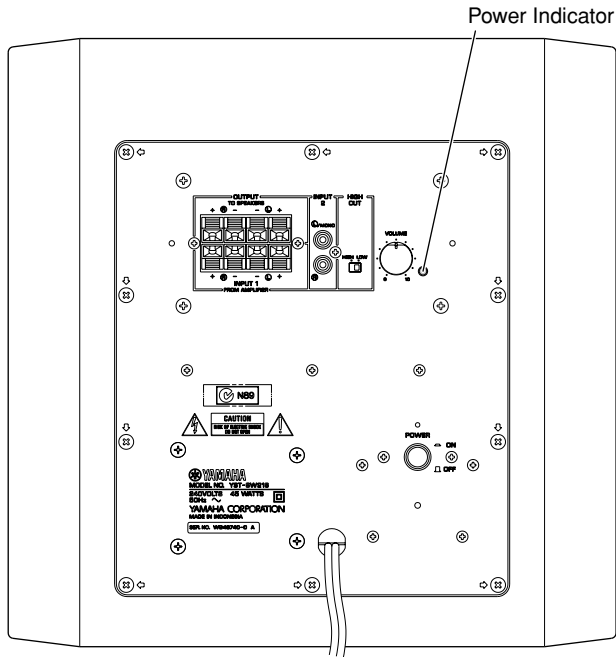
U, C models



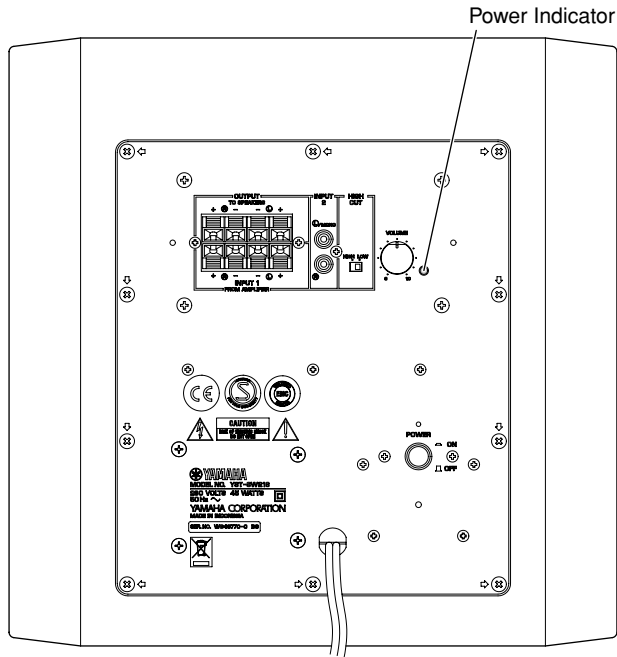
R model



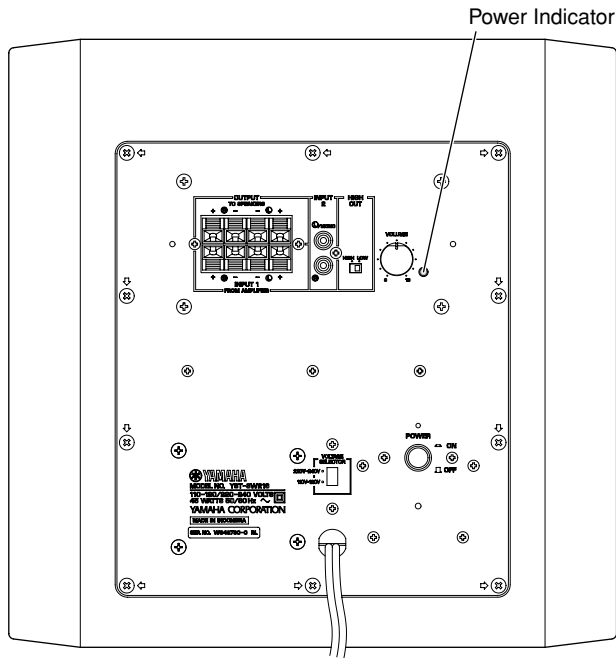
A model



B, G models



L model



YST-SW216

■ DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

Disconnect the power cable from the AC outlet.

1. Removal of Front Grille Ass'y

- * The Front Grille Ass'y is fixed to the cabinet with dowels at 7 locations.

As a flatblade screwdriver is used for removal, use special care not to cause damage to the Cabinet Ass'y.

- a. Using the flatblade screwdriver inserted in the gap between the Front Grille Ass'y and the Cabinet Ass'y (bottom side first), push up the Front Grille Ass'y. (Fig.1)
 - b. Remove the Front Grille Ass'y by lifting a metalblade up. (Fig.1)
- * When installing the Front Grille Ass'y, apply quick-drying bond or the like to dowels and then fit them into dowel holes for secure installation. (The Front Grille Ass'y will come off easily if its dowels are fitted into dowel holes without applying quick-drying bond or the like.)

2. Removal of Driver

- a. Remove 4 screws (①) and remove the Driver. (Fig.1)
- b. Disconnect the connector connected to the terminal of the Driver. (Fig. 1)

3. Removal of Rear Panel Ass'y

- a. Remove 8 screws (②) and remove the Rear Panel Ass'y. (Fig.1)
- * Screws (②) are identified with arrow marks (◀).

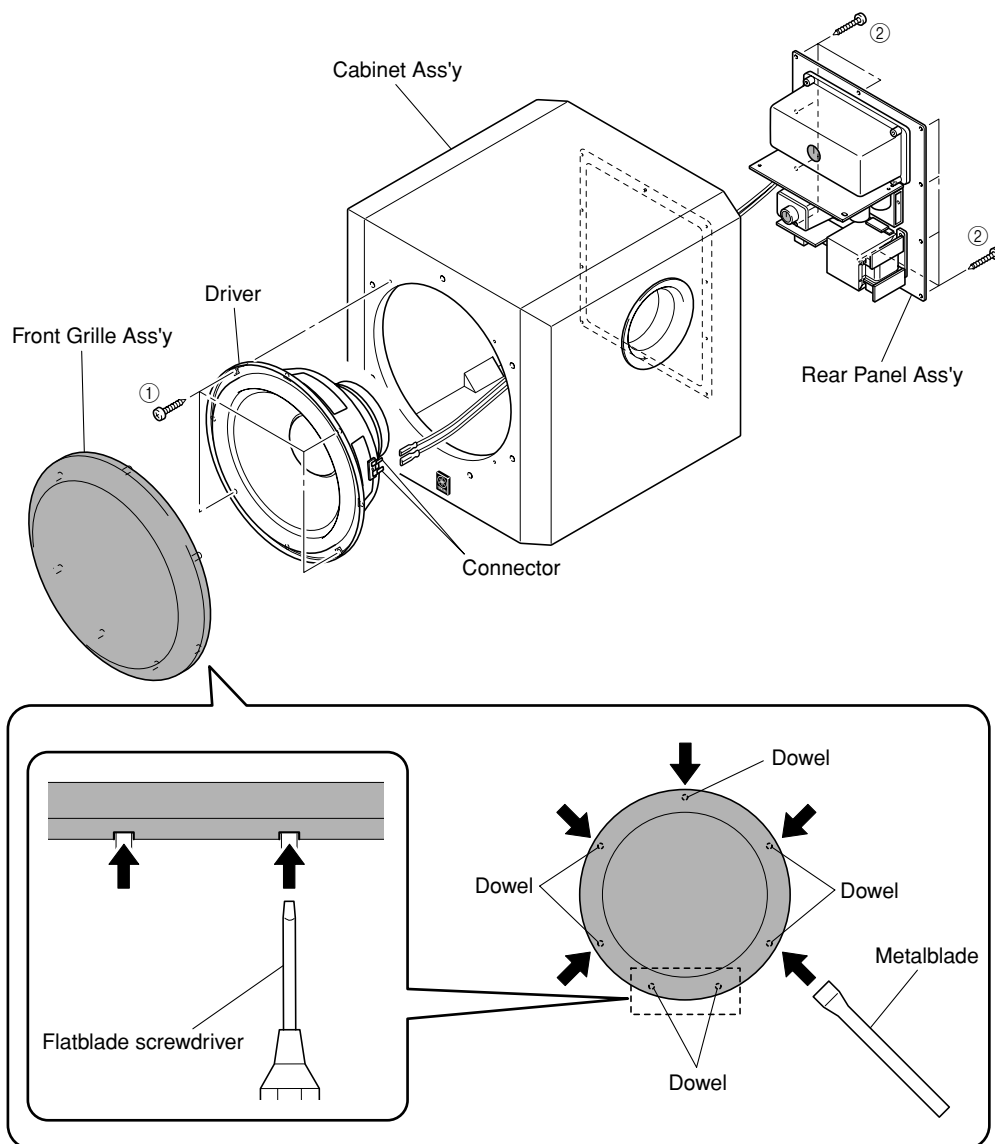
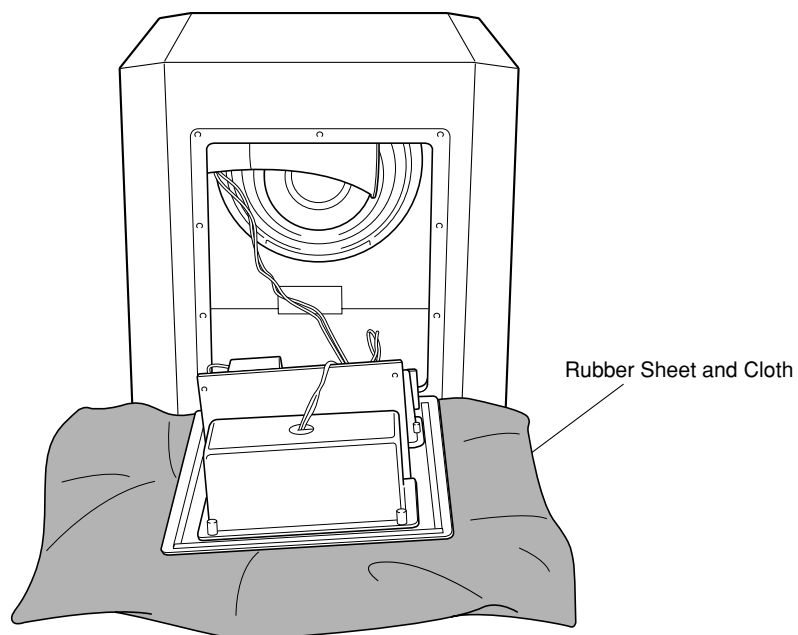


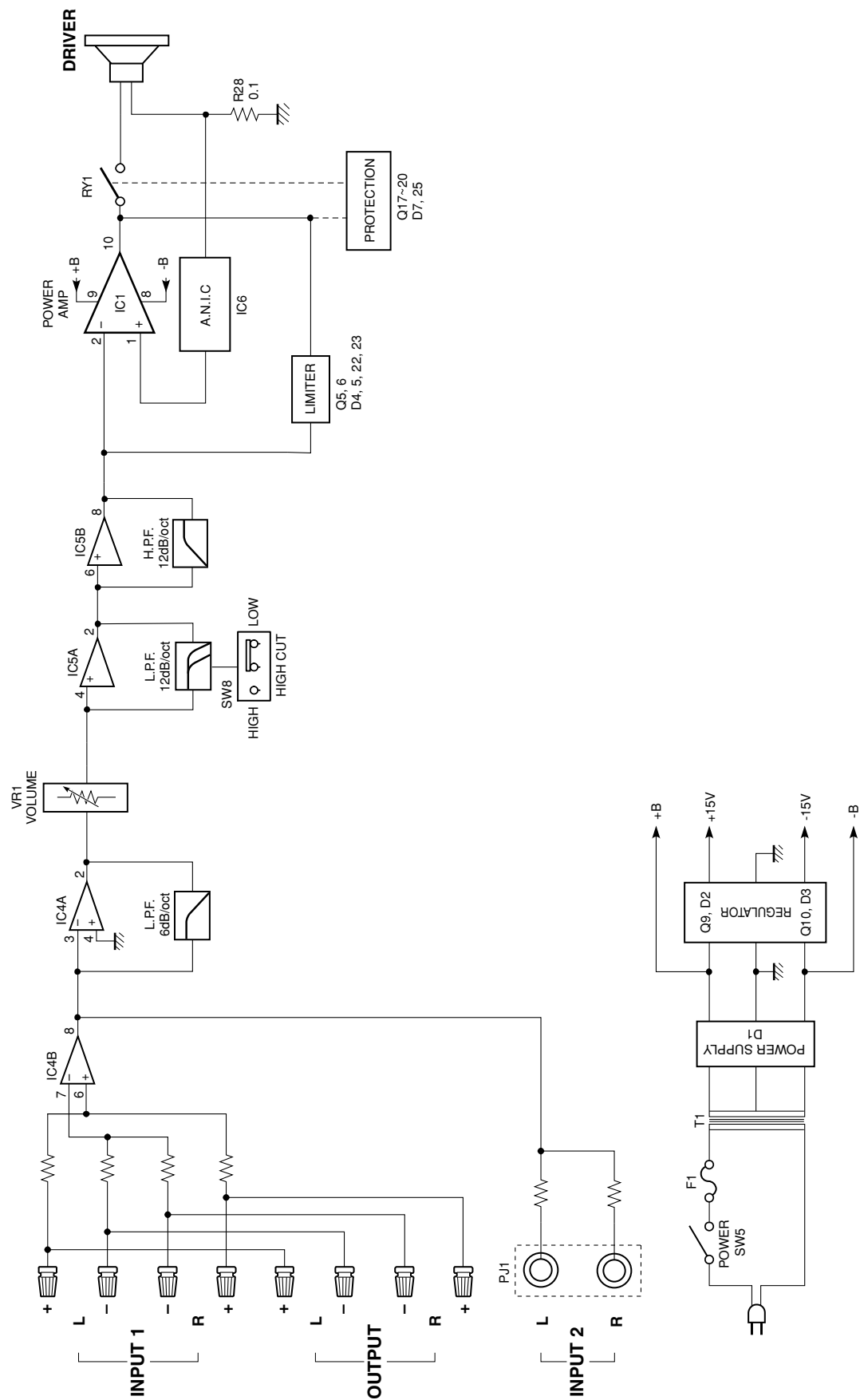
Fig. 1

When Checking the P.C.B..

- Connect all the connectors removed during disassembly back to the original positions.
- Spread the Rubber Sheet and Cloth for insulation purpose and place the Rear Panel Ass'y on the Rubber Sheet and Cloth. (Fig. 2)

**Fig. 2**

■ BLOCK DIAGRAM

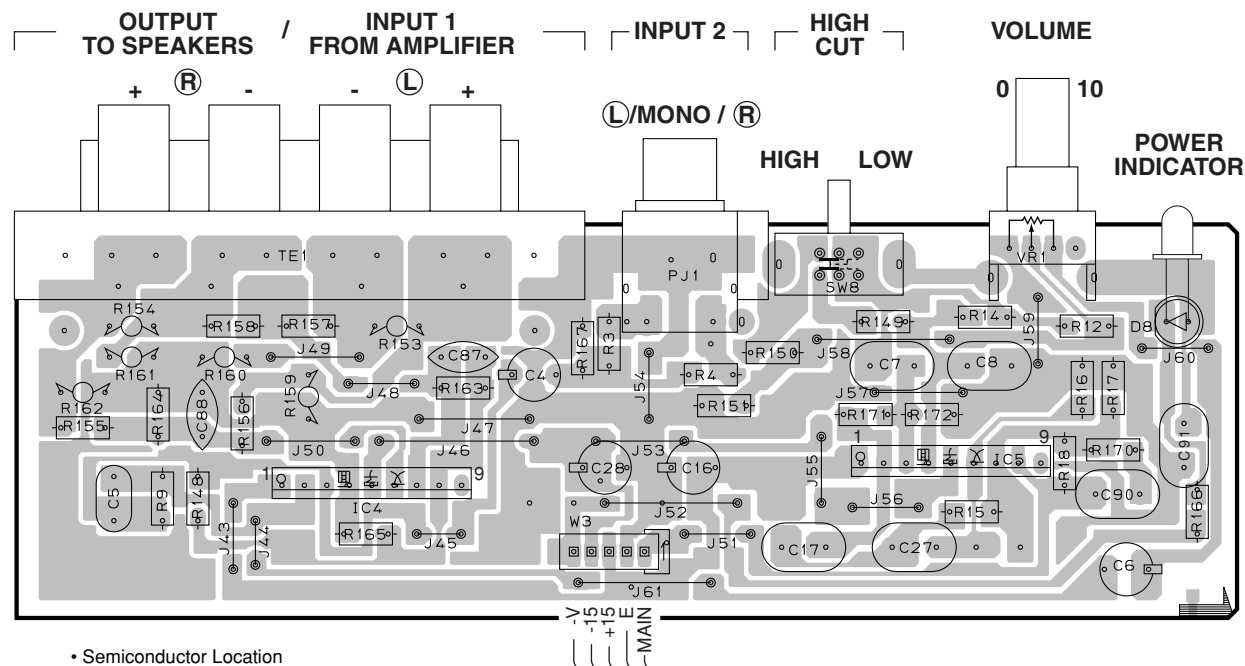


YST-SW216

MAIN (1) P.C.B. (Side A)

■ **PRINTED CIRCUIT BOARD** Lead Free Solder Used

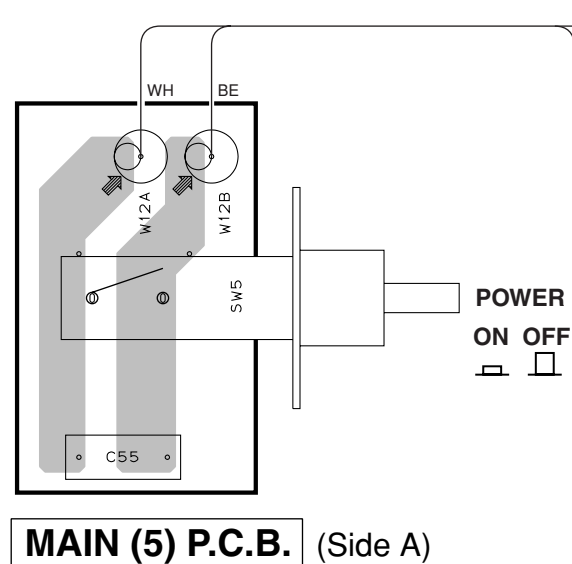
MAIN (2) P.C.B. (Side A)



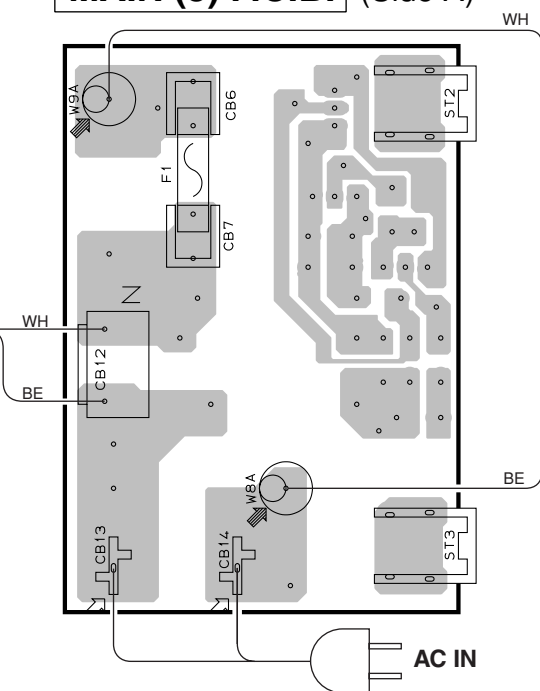
- Semiconductor Location

Ref. no.	Location	Ref. no.	Location	Ref. no.	Location
D1	J2	D24	J3	Q5	G3
D2	H4	D25	F3	Q6	G3
D3	I4	D28	I3	Q9	H4
D4	H2	D29	I3	Q10	H4
D5	H2	IC1	H2	Q17	F3
D6	G2	IC4	B3	Q18	F3
D7	F2	IC5	D3	Q19	F3
D8	E3	IC6	G3	Q20	F3
D22	G2	Q1	F3		
D23	G2	Q2	F3		

Circuit No.	U, C, R, A, L	B, G
C79	X	O
C91	X	O



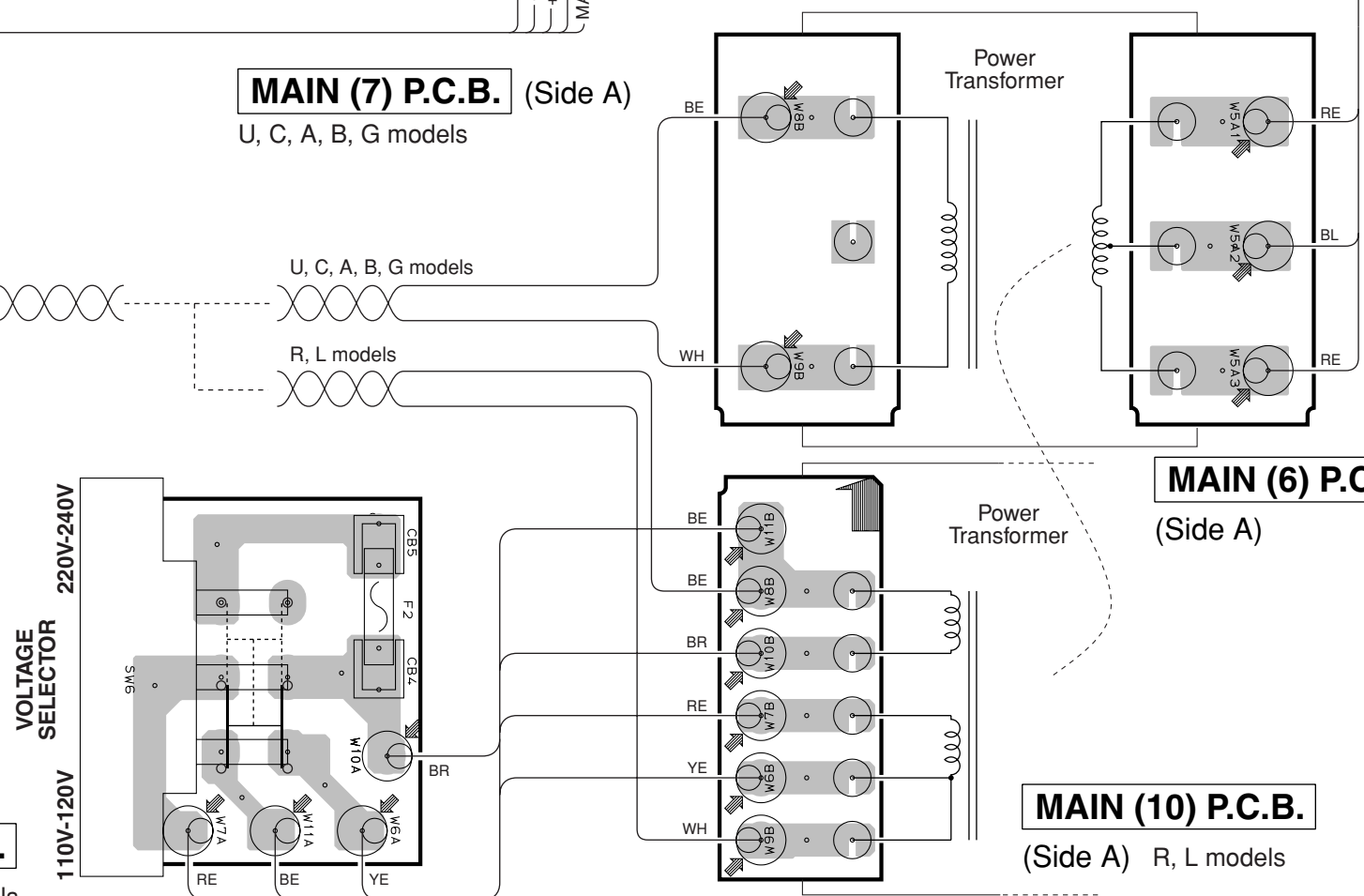
MAIN (5) P.C.B. (Side A)

**MAIN (9) P.C.B.**

(Side A) R, L models



U, C, A, B, G models



MAIN (6) P.C.B.

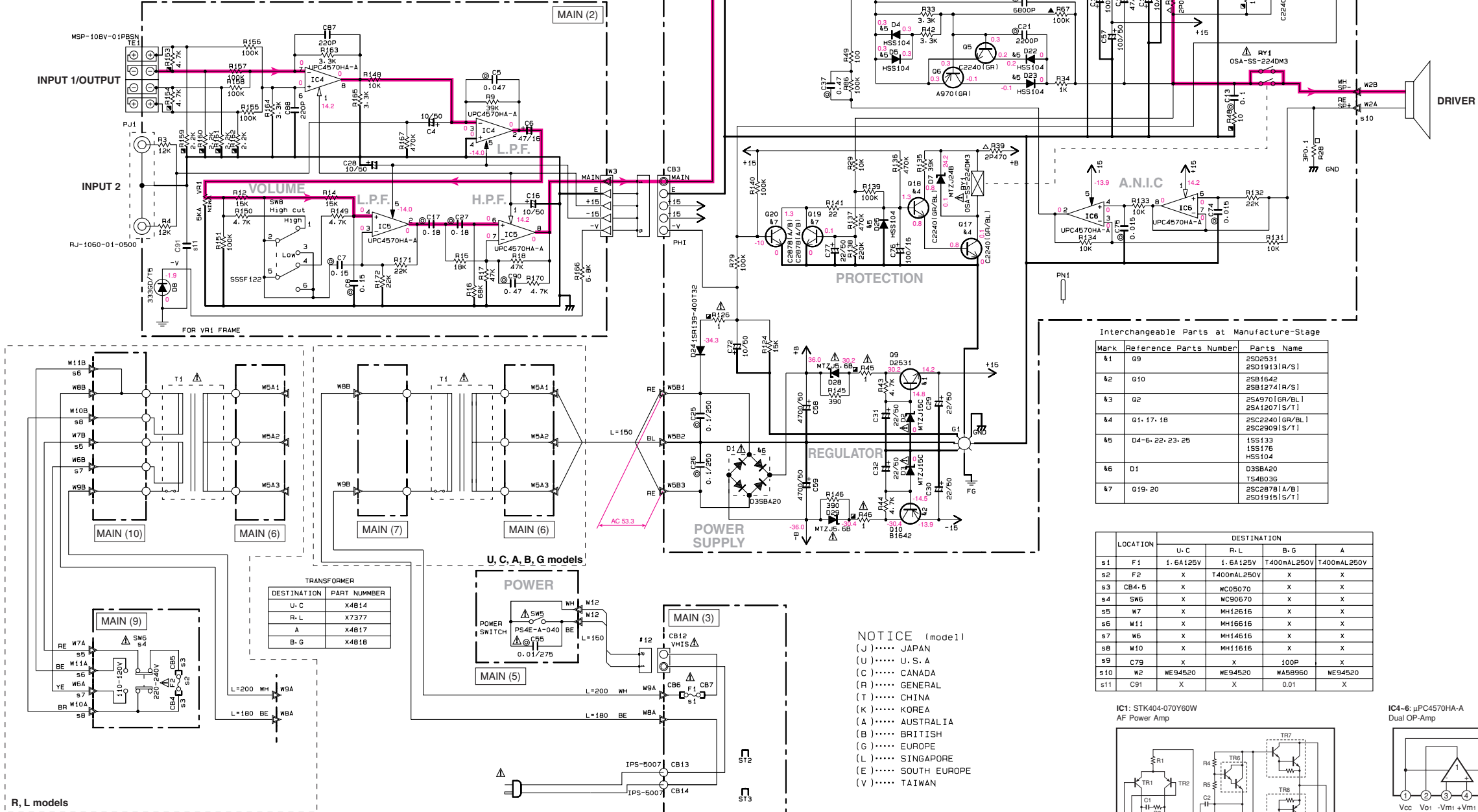
(Side A)

MAIN (10) P.C.B.

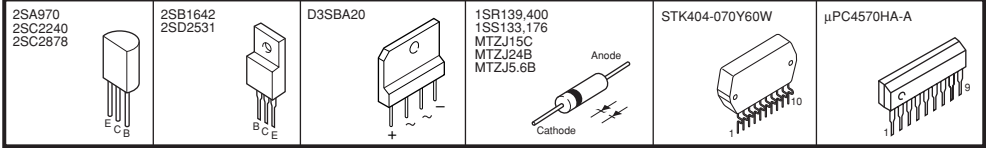
(Side A) R, L models

SCHEMATIC DIAGRAM

RESISTOR		CAPACITOR	
REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)	NO MARK	ELECTROLYTIC CAPACITOR
	CARBON FILM RESISTOR (P=10)		TANTALUM CAPACITOR
	METAL OXIDE FILM RESISTOR	NO MARK	CERAMIC CAPACITOR
	METAL FILM RESISTOR		CERAMIC TUBULAR CAPACITOR
	METAL PLATE RESISTOR		POLYESTER FILM CAPACITOR
	FIRE PROOF CARBON FILM RESISTOR		POLYSTYRENE FILM CAPACITOR
	CEMENT MOLDED RESISTOR		MICA CAPACITOR
	SEMI VARIABLE RESISTOR		POLYPROPYLENE FILM CAPACITOR
	CHIP RESISTOR		SEMICONDUCTIVE CERAMIC CAPACITOR
			POLYPHENYLENE SULFIDE FILM CAPACITOR



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.



★ All voltages are measured with a 10M Ω V DC electronic 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

■ ELECTRICAL PARTS

■ WARNING

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

ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS:

C.A.EL.CHP	: CHIP ALUMI.ELECTROLYTIC CAP	L.EMIT	: LIGHT EMITTING MODULE
C.CE	: CERAMIC CAP	LED.DSPLY	: LED DISPLAY
C.CE.ARRAY	: CERAMIC CAP ARRAY	LED.INFRD	: LED,INFRARED
C.CE.CHP	: CHIP CERAMIC CAP	MODUL.RF	: MODULATOR,RF
C.CE.ML	: MULTILAYER CERAMIC CAP	PHOT.CPL	: PHOTO COUPLER
C.CE.M.CHP	: CHIP MULTILAYER CERAMIC CAP	PHOT.INTR	: PHOTO INTERRUPTER
C.CE.SAFTY	: RECOGNIZED CERAMIC CAP	PHOT.RFLCT	: PHOTO REFLECTOR
C.CE.TUBLR	: CERAMIC TUBULAR CAP	PIN.TEST	: PIN,TEST POINT
C.CE.SMI	: SEMI CONDUCTIVE CERAMIC CAP	PLST.RIVET	: PLASTIC RIVET
C.EL	: ELECTROLYTIC CAP	R.ARRAY	: RESISTOR ARRAY
C.MICA	: MICA CAP	R.CAR.	: CARBON RESISTOR
C.ML.FLM	: MULTILAYER FILM CAP	R.CAR.CHP	: CHIP RESISTOR
C.MP	: METALLIZED PAPER CAP	R.CAR.FP	: FLAME PROOF CARBON RESISTOR
C.MYLAR	: MYLAR FILM CAP	R.FUS	: FUSABLE RESISTOR
C.MYLAR.ML	: MULTILAYER MYLAR FILM CAP	R.MTL.CHP	: CHIP METAL FILM RESISTOR
C.PAPER	: PAPER CAPACITOR	R.MTL.FLM	: METAL FILM RESISTOR
C.PLS	: POLYSTYRENE FILM CAP	R.MTL.OXD	: METAL OXIDE FILM RESISTOR
C.POL	: POLYESTER FILM CAP	R.MTL.PLAT	: METAL PLATE RESISTOR
C.POLY	: POLYETHYLENE FILM CAP	RSNR.CE	: CERAMIC RESONATOR
C.PP	: POLYPROPYLENE FILM CAP	RSNR.CRYS	: CRYSTAL RESONATOR
C.TNTL	: TANTALUM CAP	R.TW.CEM	: TWIN CEMENT FIXED RESISTOR
C.TNTL.CHP	: CHIP TANTALUM CAP	R.CEMENT	: CEMENT RESISTOR
C.TRIM	: TRIMMER CAP	SCR.BND.HD	: BIND HEAD B-TITE SCREW
CN	: CONNECTOR	SCR.BW.HD	: BW HEAD TAPPING SCREW
CN.BS.PIN	: CONNECTOR,BASE PIN	SCR.CUP	: CUP TITE SCREW
CN.CANNON	: CONNECTOR,CANNON	SCR.TERM	: SCREW TERMINAL
CN.DIN	: CONNECTOR,DIN	SCR.TR	: SCREW,TRANSISTOR
CN.FLAT	: CONNECTOR,FLAT CABLE	SUPRT.PCB	: SUPPORT,P.C.B.
CN.POST	: CONNECTOR,BASE POST	SURG.PRTCT	: SURGE PROTECTOR
COIL.MX.AM	: COIL,AM MIX	SW.TACT	: TACT SWITCH
COIL.AT.FM	: COIL,FM ANTENNA	SW.LEAF	: LEAF SWITCH
COIL.DT.FM	: COIL,FM DETECT	SW.LEVER	: LEVER SWITCH
COIL.MX.FM	: COIL,FM MIX	SW.MICRO	: MICRO SWITCH
COIL.OUTPT	: OUTPUT COIL	SW.PUSH	: PUSH SWITCH
DIOD.ARRAY	: DIODE ARRAY	SW.RT.ENC	: ROTARY ENCODER
DIODE.BRG	: DIODE BRIDGE	SW.RT.MTR	: ROTARY SWITCH WITH MOTOR
DIODE.CHP	: CHIP DIODE	SW.RT	: ROTARY SWITCH
DIODE.VAR	: VARACTOR DIODE	SW.SLIDE	: SLIDE SWITCH
DIOD.Z.CHP	: CHIP ZENER DIODE	TERM.SP	: SPEAKER TERMINAL
DIODE.ZENR	: ZENER DIODE	TERM.WRAP	: WRAPPING TERMINAL
DSCR.CE	: CERAMIC DISCRIMINATOR	THRMST.CHP	: CHIP THERMISTOR
FER.BEAD	: FERRITE BEADS	TR.CHP	: CHIP TRANSISTOR
FER.CORE	: FERRITE CORE	TR.DGT	: DIGITAL TRANSISTOR
FET.CHP	: CHIP FET	TR.DGT.CHP	: CHIP DIGITAL TRANSISTOR
FL.DSPLY	: FLUORESCENT DISPLAY	TRANS	: TRANSFORMER
FLTR.CE	: CERAMIC FILTER	TRANS.PULS	: PULSE TRANSFORMER
FLTR.COMB	: COMB FILTER MODULE	TRANS.PWR	: POWER TRANSFORMER ASS'Y
FLTR.LC.RF	: LC FILTER,EMI	TUNER.AM	: TUNER PACK,AM
GND.MTL	: GROUND PLATE	TUNER.FM	: TUNER PACK,FM
GND.TERM	: GROUND TERMINAL	TUNER.PK	: FRONT-ENDTUNER PACK
HOLDER.FUS	: FUSE HOLDER	VR	: ROTARY POTENTIOMETER
IC.PRTCT	: IC PROTECTOR	VR.MTR	: POTENTIOMETER WITH MOTOR
JUMPER.CN	: JUMPER CONNECTOR	VR.SW	: POTENTIOMETER WITH ROTARY SW
JUMPER.TST	: JUMPER,TEST POINT	VR.SLIDE	: SLIDE POTENTIOMETER
L.DTCT	: LIGHT DETECTING MODULE	VR.TRIM	: TRIMMER POTENTIOMETER

P.C.B. MAIN

P.C.B. MAIN

Ref. No.	Part No.	Description	Markets
	WG592300	P. C. B.	UC
	WG592400	P. C. B.	RL
	WG592500	P. C. B.	A
	WG592600	P. C. B.	BG
CB3	VB390100	CN. BS. PIN	5P
CB4-5	WC050700	CLIP. FUSE	EYF-52BCY
CB6-7	WC050700	CLIP. FUSE	EYF-52BCY
CB12	VG879900	CN. BS. PIN	2P
CB13-14	VT658100	TERM. WRAP	352-TX119
C1	UA655100	C. MYLAR	0.1uF 50V J
C2	UA655820	C. MYLAR	0.82uF 50V J
C4	UR867100	C. EL	10uF 50V
C5	UA654470	C. MYLAR	0.047uF 50V J
C6	UR837470	C. EL	47uF 16V
C7	UA655150	C. MYLAR	0.15uF 50V J
C8	UA655150	C. MYLAR	0.15uF 50V J
C9	UA654100	C. MYLAR	0.01uF 50V J
C10-11	UR867100	C. EL	10uF 50V
C12	UR867470	C. EL	47uF 50V
C13	UA655100	C. MYLAR	0.1uF 50V J
C14	UR868100	C. EL	100uF 50V
C15	UR838100	C. EL	100uF 16V
C16	UR867100	C. EL	10uF 50V
C17	UA655180	C. MYLAR	0.18uF 50V J
C18	UA654330	C. MYLAR	0.033uF 50V J
C19	FG652100	C. CE	100pF 50V
C21	UA653220	C. MYLAR	2200pF 50V J
C25-26	WB540200	C. POL. MTL	0.1uF 250V
C27	UA655180	C. MYLAR	0.18uF 50V J
C28	UR867100	C. EL	10uF 50V
C29	UR867220	C. EL	22uF 50V
C30-32	UR867220	C. EL	22uF 50V
C37	UA655470	C. MYLAR	0.47uF 50V J
C38	UA653680	C. MYLAR	6800pF 50V J
C55	V6185300	C. CE. SAFTY	0.01uF 275V
C57	UR868100	C. EL	100uF 50V
C58-59	VU434800	C. EL	4700uF 50V
C72	UR867100	C. EL	10uF 50V
C74-75	UA654150	C. MYLAR	0.015uF 50V J
C76	UR838100	C. EL	100uF 16V
C77	UR867220	C. EL	22uF 50V
C79	FG652100	C. CE	100pF 50V
C87-88	FG652220	C. CE	220pF 50V
C90	UA655470	C. MYLAR	0.47uF 50V J
C91	FG644100	C. CE	0.01uF 50V
D1	VN011300	DIODE. BRG	D3SBA20 4A 200V
D2	VG440900	DIODE. ZENR	MTZJ15C 15V
D3	VG440900	DIODE. ZENR	MTZJ15C 15V

* New Parts

Ref. No.	Part No.	Description	Markets
D4	VD631600	DIODE	1SS133, 176
D5	VD631600	DIODE	1SS133, 176
D6	VD631600	DIODE	1SS133, 176
D7	VG442500	DIODE. ZENR	MTZJ24B 24V
D8	WG613900	LED	333GD/T5 GREEN
D22-23	VD631600	DIODE	1SS133, 176
D24	VU264100	DIODE	1SR139, 400
D25	VD631600	DIODE	1SS133, 176
D28-29	VG437700	DIODE. ZENR	MTZJ5.6B 5.6V
F1	WG409700	FUSE	1.6A 125V
F1	KB000660	FUSE	400mA 250V
F2	KB000660	FUSE	400mA 250V
G1	V5995800	PLATE. GND	
IC1	X5610A00	IC	STK404-070Y60W
IC4-6	XB247A00	IC	uPC4570HA-A
PJ1	V6415800	JACK. PIN	2P
PN1	WB543700	PIN	L=70 #18
Q1	iC224030	TR	2SC2240 GR, BL
Q2	iA097030	TR	2SA970 GR, BL
Q5	WF612700	TR	2SC2240 GR
Q6	iA097040	TR	2SA970 GR
Q9	V6896700	TR	2SD2531
Q10	V6896500	TR	2SB1642
Q17-18	iC224030	TR	2SC2240 GR, BL
Q19	iC287820	TR	2SC2878 A, B
Q20	iC287820	TR	2SC2878 A, B
R1	HV756150	R. CAR. FP	1.5K Ω 1/4W
R5	HV756120	R. CAR. FP	1.2K Ω 1/4W
R28	V6022600	R. CEMENT	0.1 Ω 3W
R39	VC760500	R. MTL. OXD	470 Ω 2W
R45-46	HV753100	R. CAR. FP	1 Ω 1/4W
R47	VC751900	R. MTL. OXD	0.22 Ω 2W
R48	HV754100	R. CAR. FP	10 Ω 1/4W
R66	HB026270	R. MTL. FLM	2.7K Ω 1/4W
R67	HB028100	R. MTL. FLM	100K Ω 1/4W
R95	HV755100	R. CAR. FP	100 Ω 1/4W
R126	HV753100	R. CAR. FP	1 Ω 1/4W
R153-154	HV756470	R. CAR. FP	4.7K Ω 1/4W
R159-162	HV756220	R. CAR. FP	2.2K Ω 1/4W
RY1	VU161600	RELAY	DC 0SA-SS-224DM3
ST2-3	V4040500	SCR. TERM	M3
SW5	WG803400	SW. PUSH	PS4E-A-040-NP
SW6	WC906700	SW. SLIDE	SDKPA40300
SW8	VQ545800	SW. SLIDE	SSSF04
TE1	V9065900	TERM. SP	MSP-108V-01 PBSN
VR1	WC595500	VR	A 5K Ω
	WB419000	HOLDER. LED	LDT-70G

* New Parts

Parts List for Carbon Resistors

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	HJ35 3100	HF85 3100	10 k Ω	HF45 7100	HF45 7100
1.8 Ω	HJ35 3180	*	11 k Ω	HF45 7110	HF45 7110
2.2 Ω	HJ35 3220	HF85 3220	12 k Ω	HJ35 7120	HF85 7120
3.3 Ω	HJ35 3330	HF85 3330	13 k Ω	HF45 7130	HF45 7130
4.7 Ω	HJ35 3470	HF85 3470	15 k Ω	HF45 7150	HF45 7150
5.6 Ω	HJ35 3560	HF85 3560	18 k Ω	HF45 7180	HF45 7180
10 Ω	HF45 4100	HF45 4100	22 k Ω	HF45 7220	HF45 7220
15 Ω	HJ35 4150	HF85 4150	24 k Ω	HF45 7240	HF45 7240
22 Ω	HF45 4220	HF45 4220	27 k Ω	HJ35 7270	HF85 7270
27 Ω	HJ35 4270	HF85 4270	30 k Ω	HF45 7300	HF45 7300
33 Ω	HF45 4330	HF45 4330	33 k Ω	HF45 7330	HF45 7330
39 Ω	HJ35 4470	HF85 4390	36 k Ω	HF45 7360	HF45 7360
47 Ω	HF45 4470	HF45 4470	39 k Ω	HF45 7390	HF45 7390
56 Ω	HF45 4560	HF45 4560	47 k Ω	HF45 7470	HF45 7470
68 Ω	HF45 4680	HF45 4680	51 k Ω	HF45 7510	HF45 7510
75 Ω	HF45 4750	HF45 4750	56 k Ω	HF45 7560	HF45 7560
82 Ω	HF45 4820	HF45 4820	62 k Ω	HF45 7620	HF45 7620
91 Ω	HF45 4910	HF45 4910	68 k Ω	HF45 7680	HF45 7680
100 Ω	HF45 5100	HF45 5100	82 k Ω	HF45 7820	HF45 7820
110 Ω	HJ35 5110	HF85 5110	91 k Ω	HF45 7910	HF45 7910
120 Ω	HF45 5120	HF45 5120	100 k Ω	HF45 8100	HF45 8100
150 Ω	HF45 5150	HF45 5150	110 k Ω	HF45 8110	HF45 8110
160 Ω	HJ35 5160	*	120 k Ω	HF45 8120	HF45 8120
180 Ω	HF45 5180	HF45 5180	150 k Ω	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 k Ω	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 k Ω	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 k Ω	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 k Ω	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 k Ω	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 k Ω	HJ35 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 k Ω	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 k Ω	HJ35 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 k Ω	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 k Ω	HJ35 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 M Ω	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 M Ω	HJ35 9120	*
1.0 k Ω	HF45 6100	HF45 6100	1.5 M Ω	HJ35 9150	HF85 9150
1.2 k Ω	HF45 6120	HF45 6120	1.8 M Ω	HJ35 9180	HF85 9180
1.5 k Ω	HF45 6150	HF45 6150	2.2 M Ω	HJ35 9220	HF85 9220
1.8 k Ω	HF45 6180	HF45 6180	3.3 M Ω	HJ35 9330	HF85 9330
2.0 k Ω	HJ35 6200	HF85 6200	3.9 M Ω	HJ35 9390	*
2.2 k Ω	HF45 6220	HF45 6220	4.7 M Ω	HJ35 9470	HF85 9470
2.4 k Ω	HJ35 6240	HF85 6240			
2.7 k Ω	HF45 6270	HF45 6270			
3.0 k Ω	HF45 6300	HF45 6300			
3.3 k Ω	HF45 6330	HF45 6330			
3.6 k Ω	HJ35 6360	HF85 6360			
3.9 k Ω	HF45 6390	HF45 6390			
4.7 k Ω	HF45 6470	HF45 6470			
5.1 k Ω	HF45 6510	HF45 6510			
5.6 k Ω	HF45 6560	HF45 6560			
6.8 k Ω	HF45 6680	HF45 6680			
8.2 k Ω	HF45 6820	HF45 6820			
9.1 k Ω	HF45 6910	HF45 6910			

1/4W Type

HJ35 10mm

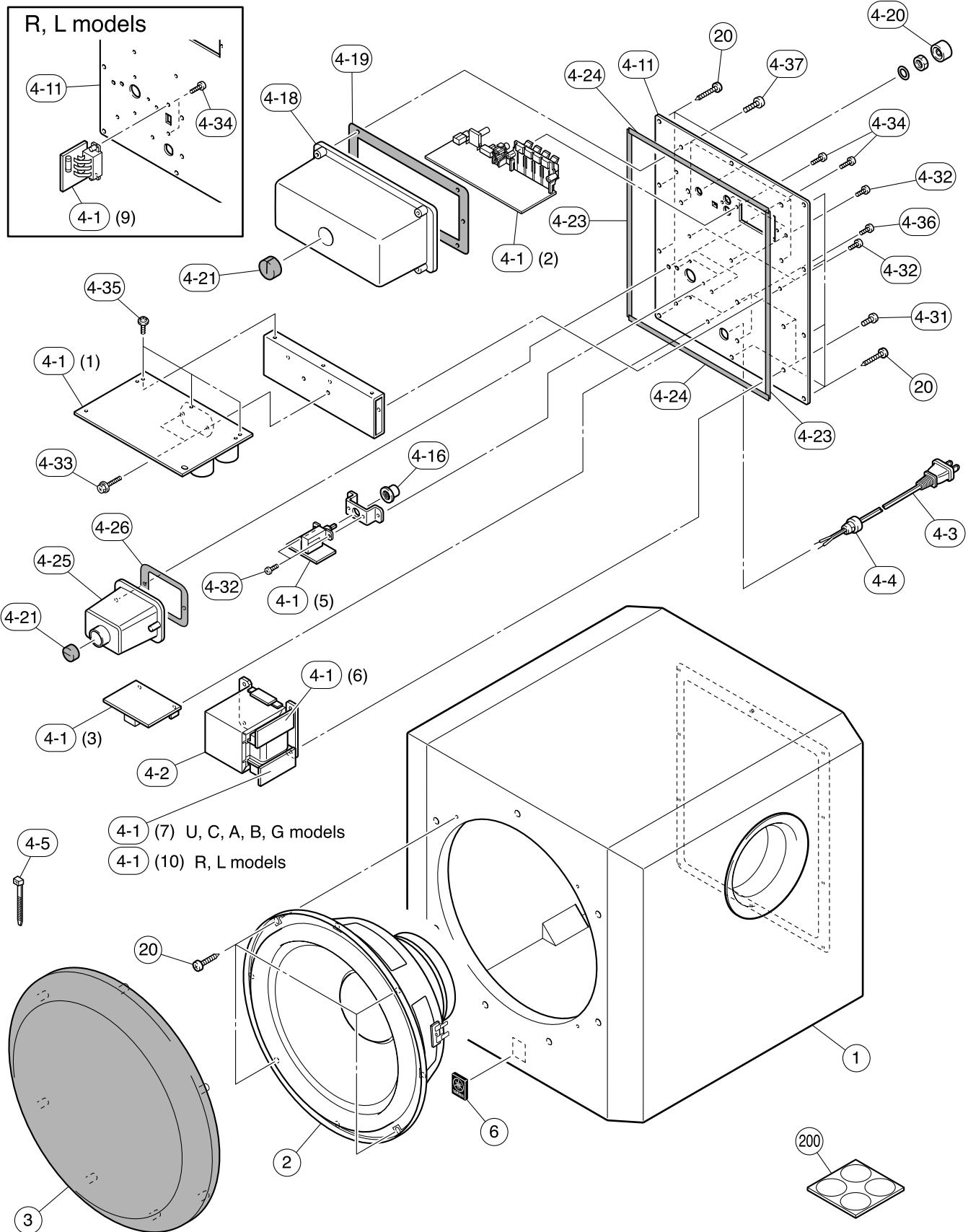
1/6W Type

HF85 5mm

* : Not available

YST-SW216

EXPLODED VIEW



MECHANICAL PARTS

Ref. No.	Part No.	Description	Remarks	Markets
*	1	WG589900 CABINET ASS'Y	BL	
*	2	X7416A00 DRIVER WOOFER	25cm 6Ω	
*	3	WG590000 FRONT GRILLE ASS'Y		
*	4-1	WG592300 P.C.B. ASS'Y	MAIN	UC
*	4-1	WG592400 P.C.B. ASS'Y	MAIN	RL
*	4-1	WG592500 P.C.B. ASS'Y	MAIN	A
*	4-1	WG592600 P.C.B. ASS'Y	MAIN	BG
*	4-2	X4814A00 POWER TRANSFORMER		UC
*	4-2	X7377A00 POWER TRANSFORMER		RL
	4-2	X4817B00 POWER TRANSFORMER		A
	4-2	X4818A00 POWER TRANSFORMER		BG
	4-3	V2689600 POWER CABLE	2m	UC
	4-3	WD042000 POWER CABLE	2m	R
	4-3	WC883100 POWER CABLE	2m	A
	4-3	V6977100 POWER CABLE	2m	B
	4-3	V6893100 POWER CABLE	2m	GL
	4-4	CB072750 CORD STOPPER	SR-4N-4	
*	4-5	WG886600 BINDING TIE	CT-100	
*	4-11	WG487200 REAR PANEL		UC
*	4-11	WG487300 REAR PANEL		RL
*	4-11	WG487400 REAR PANEL		A
*	4-11	WG487700 REAR PANEL		BG
	4-16	WA217100 POWER KNOB		
	4-18	V5987000 COVER	TERMINAL	
	4-19	V5987300 PACKING	COVER TERMINAL	
	4-20	WD562900 VOLUME KNOB		
	4-21	WC736000 BUSH		
*	4-23	WG562500 PACKING	6x235 t=1	
	4-24	WA201400 PACKING	6x202 t=1	
	4-25	WE252900 COVER	P. SW	
	4-26	WE279500 PACKING	COVER P. SW	
	4-31	WE994800 BIND HEAD S-TIGHT SCREW	4x8 MFZN2B3	
	4-32	WE774400 BIND HEAD B-TIGHT SCREW	3x8 MFZN2B3	
	4-33	WE774600 SCREW IC	3x18 MFZN2W3	
	4-34	WF268000 BIND HEAD P-TIGHT SCREW	3x10 MFZN2B3	
	4-35	VT669300 PW HEAD B-TIGHT SCREW	3x8-8 MFC2	
	4-36	WE983600 BIND HEAD SCREW	3x8 MFZN2B3	
	4-37	WE981100 BIND HEAD P-TIGHT SCREW	4x12 MFZN2B3	
	6	V9467400 EMBLEM		
	20	WE955200 BIND HEAD TAPPING SCREW	4x20 MFZN2B3	
	200	WB365800 ACCESSORIES NONSKID PAD	M32 t2 4pcs/set	

* New Parts

YST-SW216



YAMAHA
