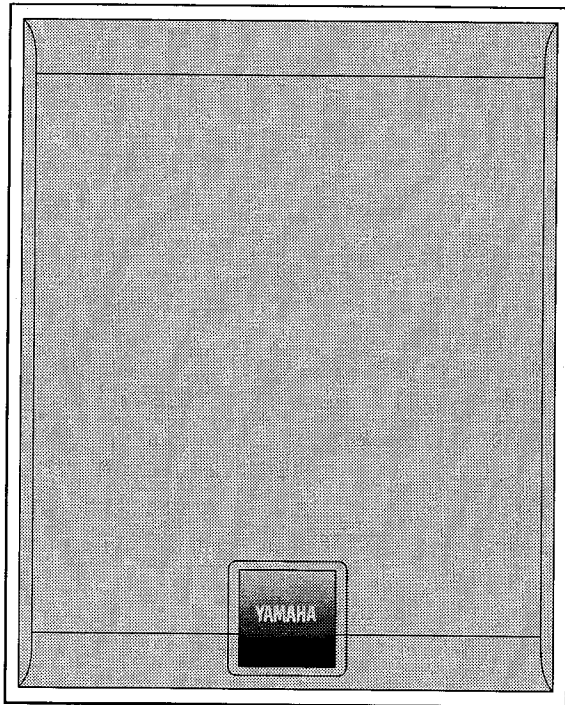


ACTIVE SERVO PROCESSING POWERED SUBWOOFER SYSTEM YST-SW300

SERVICE MANUAL

YST-SW300



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	1
SPECIFICATIONS	1
INTERNAL VIEW	1
REAR PANELS	2
DISASSEMBLY PROCEDURES	2
ADJUSTMENTS	3

BLOCK DIAGRAM	3
PRINTED CIRCUIT BOARD	4~6
IC BLOCK	7
SCHEMATIC DIAGRAM	8
PARTS LIST	9~16

100593

YAMAHA

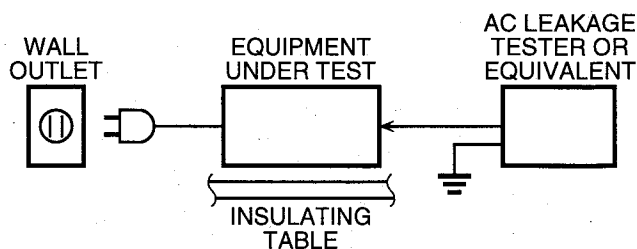
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan

3K-111 Printed in Japan '97.6

■ TO SERVICE PERSONNEL

Critical Components Information.

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



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.

■ SPECIFICATIONS

Type	Active Servo Processing Subwoofer System	
Speaker Unit	30 cm (11-13/16") cone (JA3018), magnetic-shield type	
Frequency Response	18Hz to 170Hz (-3dB)	
Cutoff Frequency	40Hz to 140Hz, variable (-24dB/oct.)	
Input Impedance		
INPUT1	4.7k ohms	
INPUT2	10k ohms	
Output Power	185W (5ohms)	

Input sensitivity 100mV / 2.35V 100Hz
70mV / 1.5V 70Hz

limiter circuit or limiter circuit

Power Consumption 150W

Power Supply

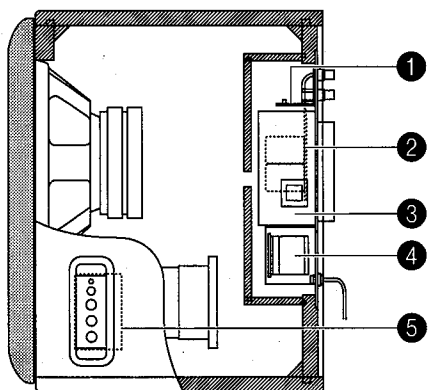
U.S.A. and Canada model	AC120V, 60Hz
Australia model	AC240V, 50Hz
U.K. and Europe model	AC230V, 50Hz
General model	AC110/120/220/240V, 50/60Hz

Dimensions (W x H x D) 400 x 500 x 434.5 mm
(15-3/4" x 19-11/16" x 17-1/8")

Weight 25.4kg (55 lbs. 16oz.)

* Specifications subject to change without notice.

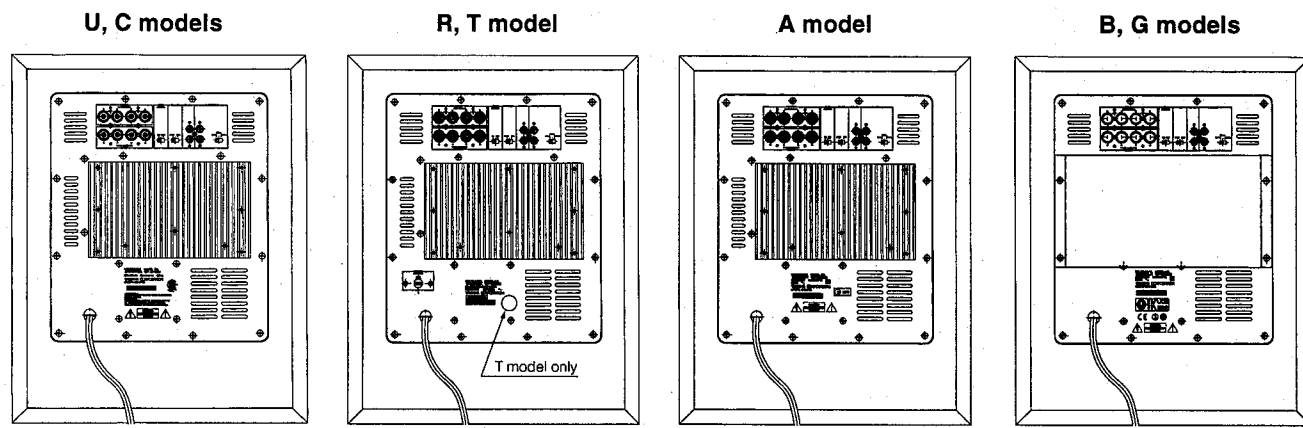
■ INTERNAL VIEW



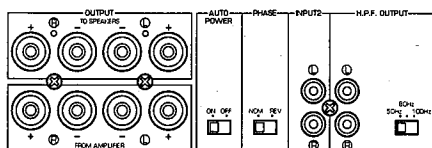
Right side internal view

- ① Main P. C. B. (3)
- ② Main P. C. B. (1)
- ③ Main P. C. B. (2)
- ④ Power Transformer w/Main P. C. B. (5) and (6)
- ⑤ Main P. C. B. (4)

REAR PANELS



Rear terminals



DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

1. Removal of the Rear Panel Ass'y

- Remove 12 screws (①), and remove the Rear Panel Ass'y.

2. Removal of the Side Panel Ass'y with the Main P. C. B. (4)

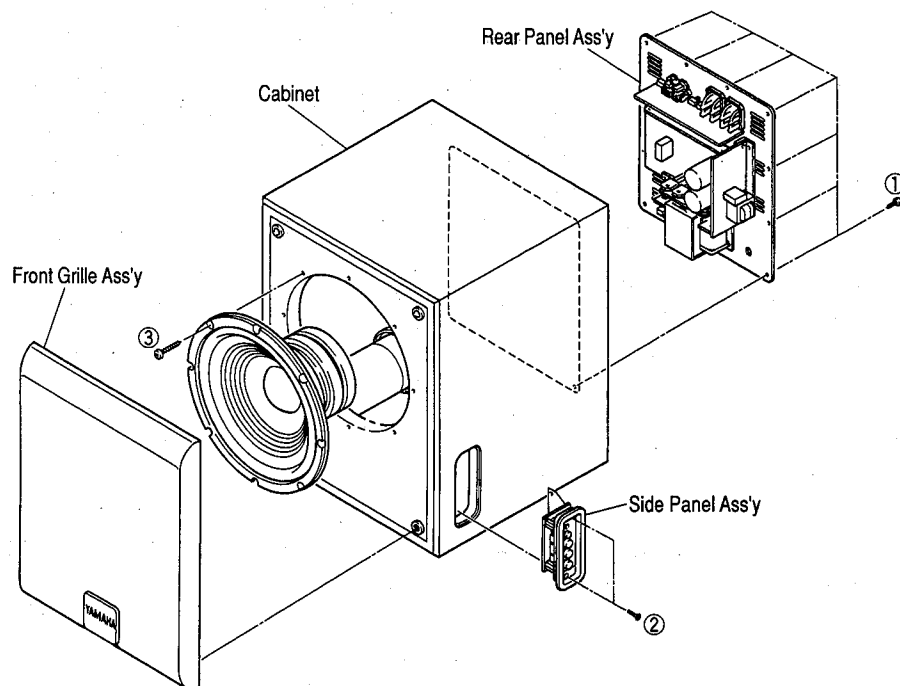
- Remove 2 screws (②), and remove the Side Panel Ass'y.

3. Removal of the Speaker Unit

- Remove the Front Grille Ass'y.

The Front Grille Ass'y is fixed to the Cabinet with dowels at 4 locations.

- Remove 8 screws (③), and remove the Speaker Unit.



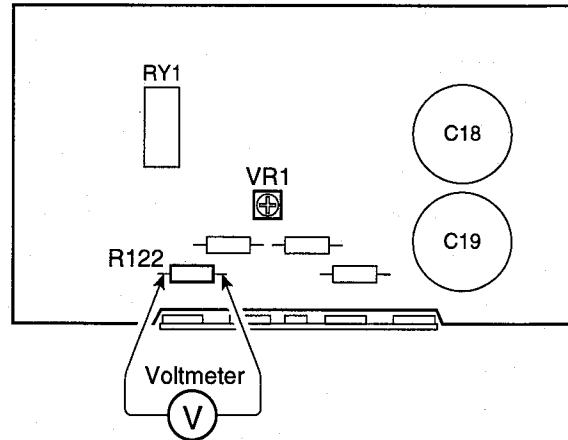
ADJUSTMENTS

● Idling Adjustment

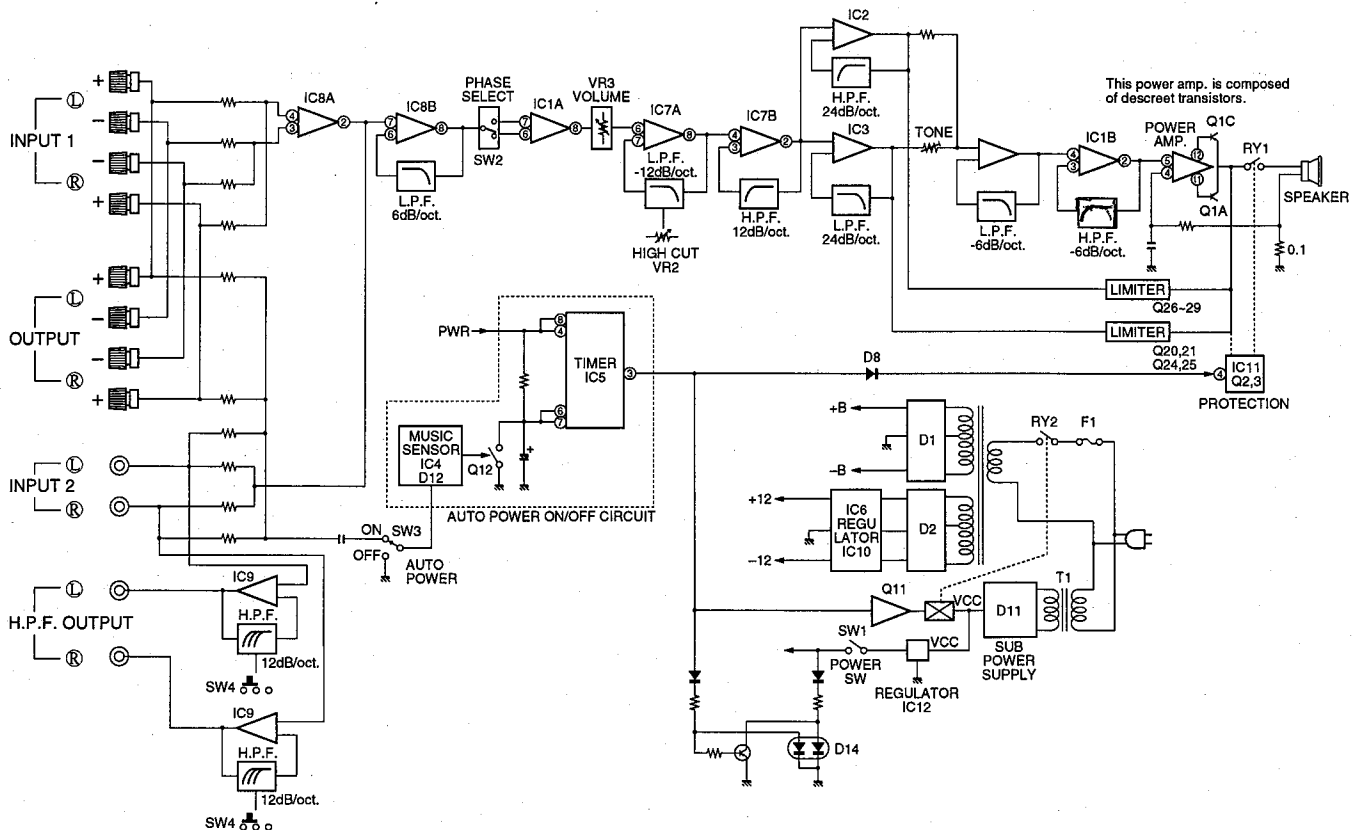
To stabilize operation of the amplifier, turn ON the power in the no-signal state and wait for 1 or 2 minutes before the adjustment.

Adjust VR1 so that the voltage at both ends of R122 (0.15) becomes DC 1mV to 4mV.

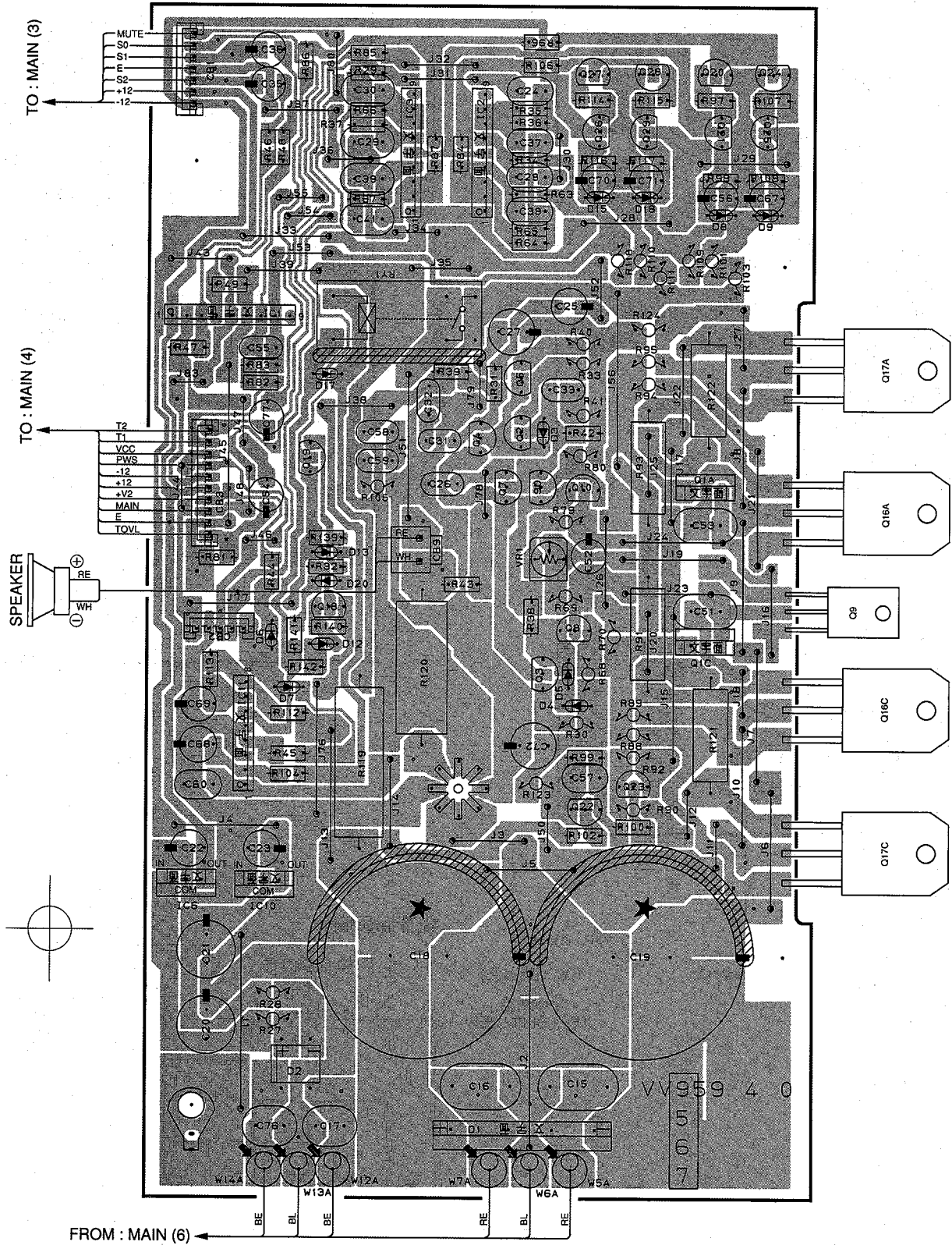
MAIN P.C.B. (1)



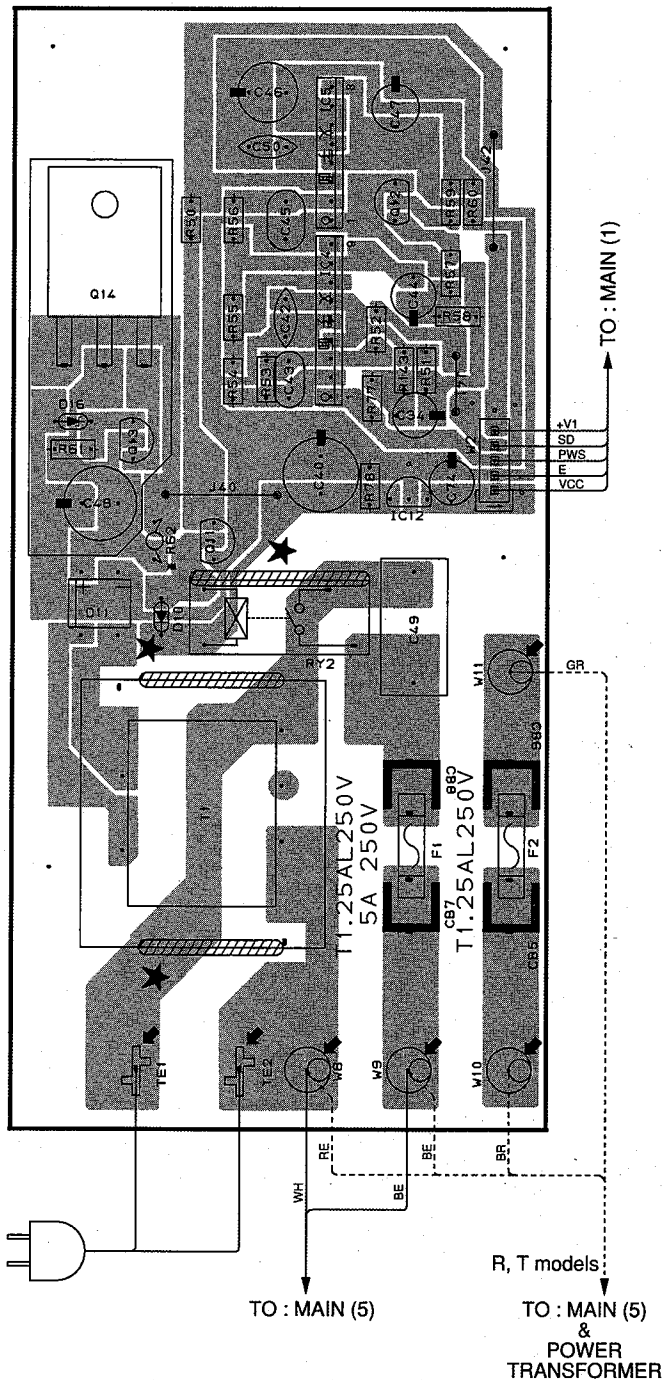
BLOCK DIAGRAM



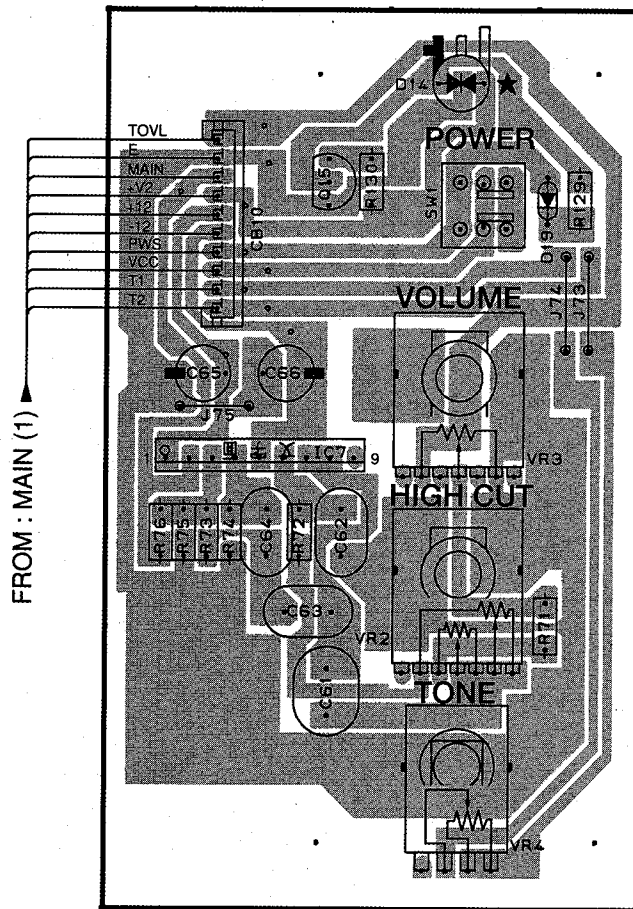
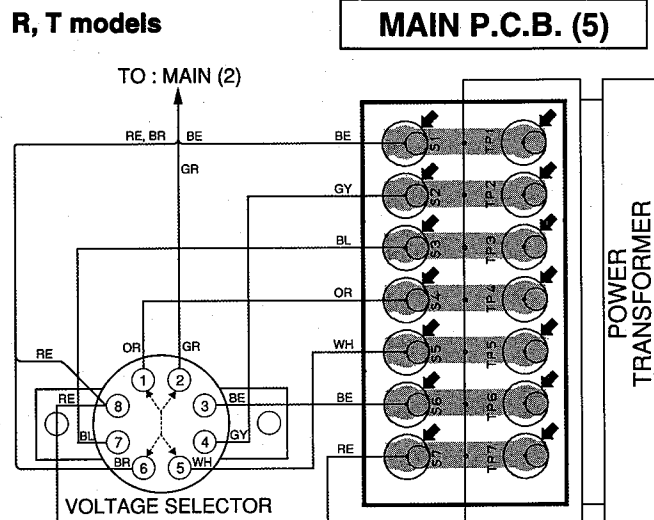
PRINTED CIRCUIT BOARD (Foil side)

MAIN P.C.B. (1)


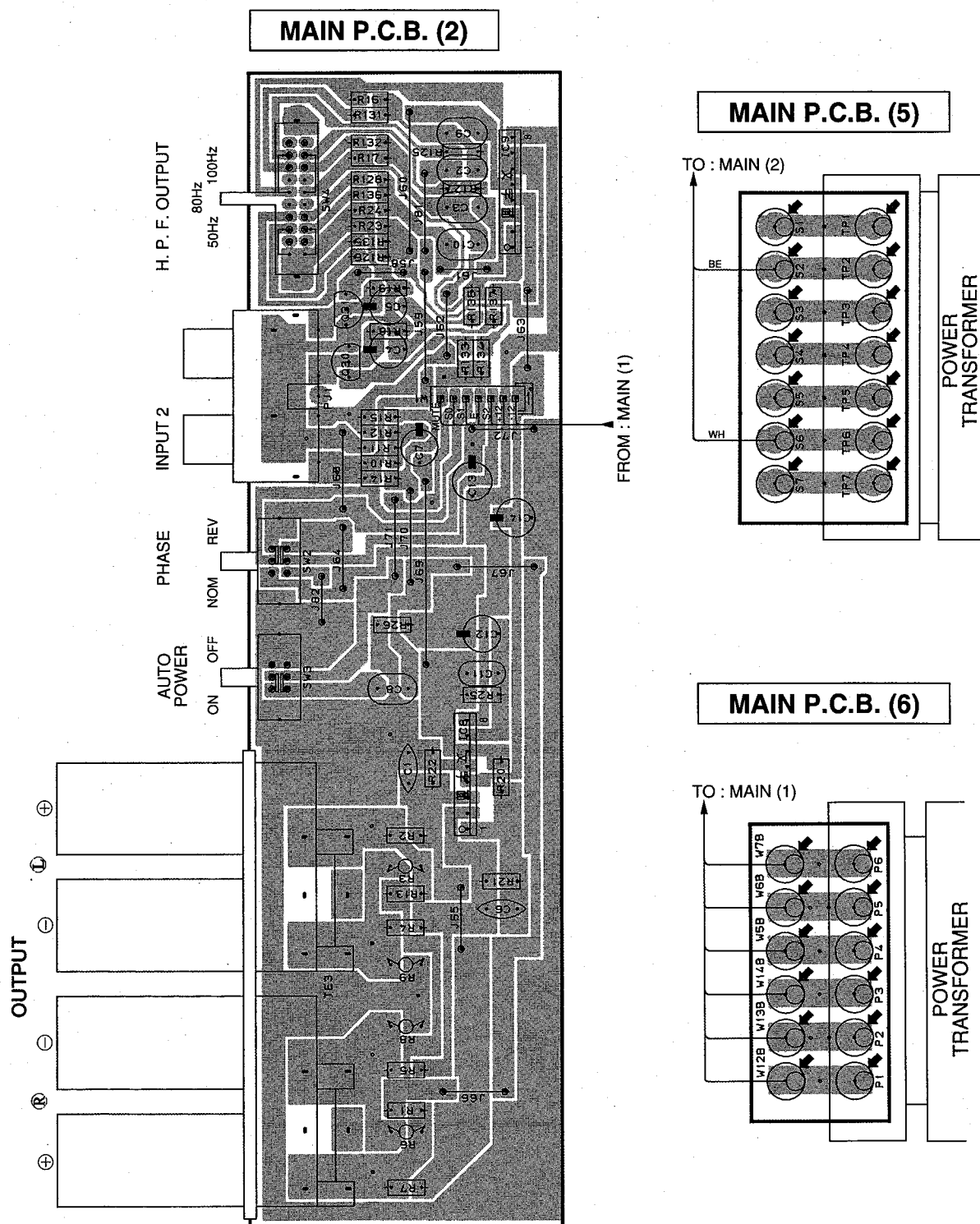
PRINTED CIRCUIT BOARD (Foil side)

MAIN P.C.B. (2)


240V	1-2/5-6
220V	2-3/6-7
110V	3-4/7-8
120V	4-5/8-1

MAIN P.C.B. (4)

MAIN P.C.B. (5)


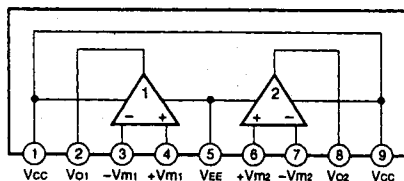
PRINTED CIRCUIT BOARD (Foil side)



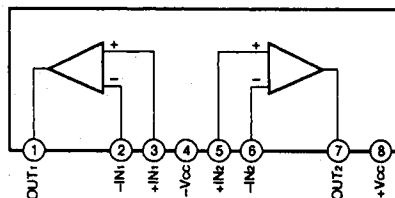
YST-SW300

IC BLOCK

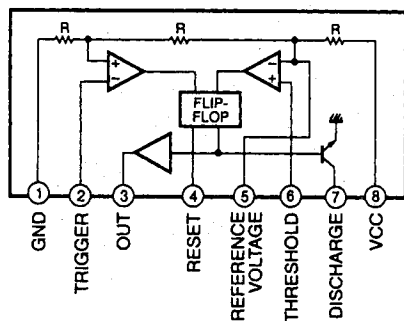
● IC1~4, 7 : μ PC4570HA (OP Amp.)



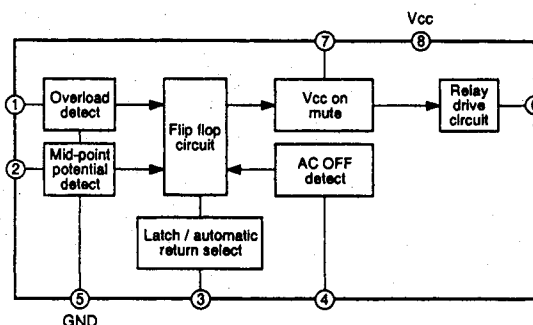
● IC8, 9 : NJM4558L (OP Amp.)



● IC5 : M51848L (Timer)



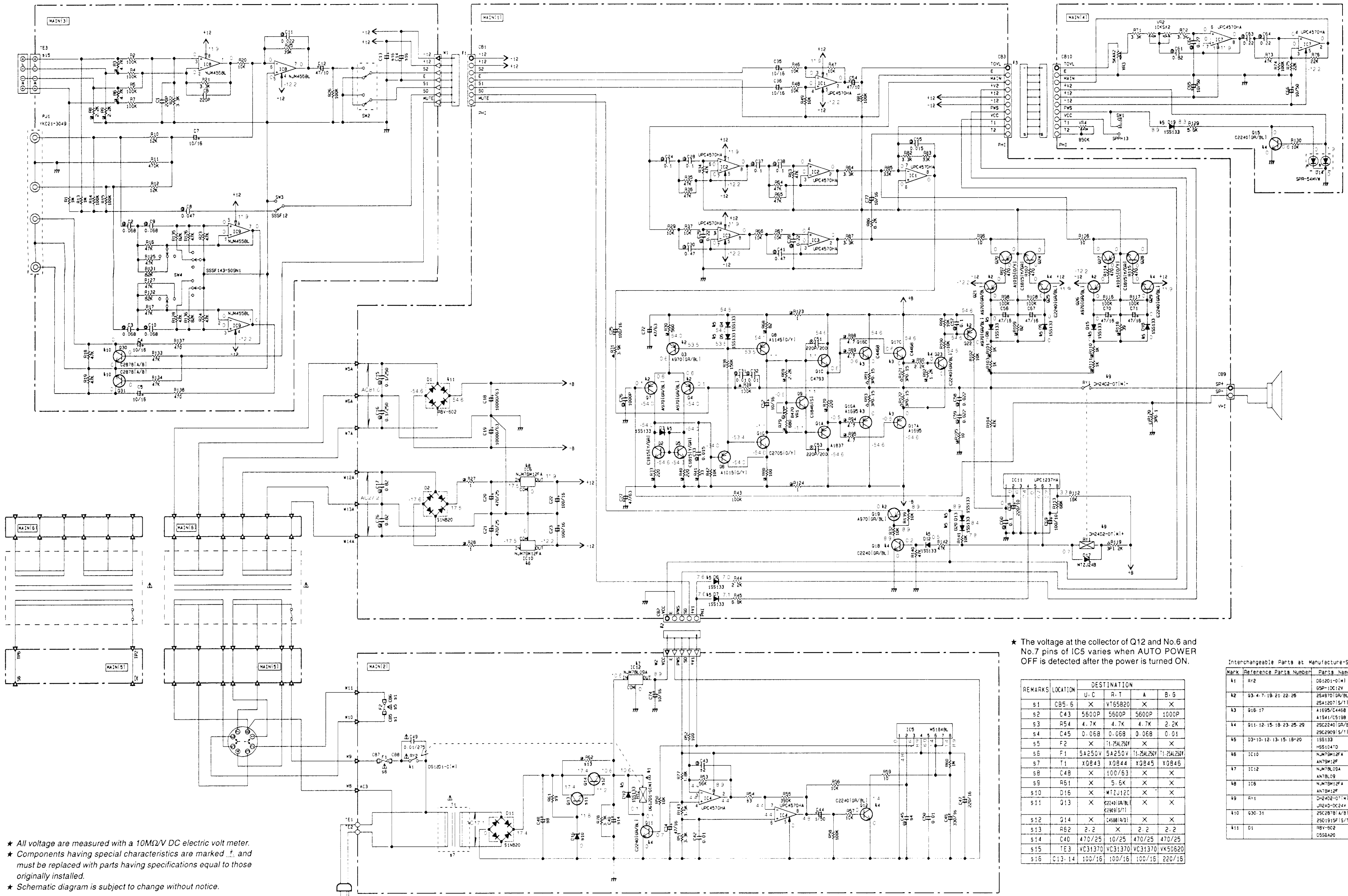
● IC11 : μ PC1237HA (Protect IC)



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

2SA1837 2SC4793	2SC1815 2SA970 2SA1015 2SA1145 2SC2705 2SC2240 2SC2878	2SC1846	2SC4688 2SA1695 2SC4468	RBV-602	S1NB20
1SS133 MTZJ12C MTZJ24B	μPC4570HA	M51848L μPC1237HA	NJM78M12FA NJM79M1	NJM4558L	NJM78L09A

SCHEMATIC DIAGRAM



★ The voltage at the collector of Q12 and No.6 and No.7 pins of IC5 varies when AUTO POWER OFF is detected after the power is turned ON.

REMARKS	LOCATION	DESTINATION
	U.C	R.T
S1	CB5-6	X
S2	C43	5600P
S3	R54	4.7K
S4	C45	0.068
S5	F2	X
S6	F1	5A250V
S7	T1	XQ843
S8	C48	X
S9	R51	X
S10	D16	X
S11	Q13	X
S12	Q14	X
S13	R52	X
S14	C40	X
S15	TE3	X
S16	C13-14	X

Mark	Reference Parts Number	Parts Name
11	R12	061201-01W1
12	Q3-4-7-19-21-22-26	25A120715/11
13	Q16-17	11695/24468
14	Q11-12-15-19-23-25-29	25C234015/11
15	Q3-10-12-13-15-18-20	15S133
16	IC10	NJM79M12FA
17	IC12	NJM79M12FA
18	IC6	NJM79M12FA
19	RV1	2H2402-01W1
20	Q30-31	25C234015/11
21	D1	15S133

PARTS LIST

ELECTRICAL PARTS

WARNING

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

- Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS List. For the parts No. of the carbon resistors, refer to last page.

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	: CHIPRESISTOR
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.WW	: WIRE WOUND 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	: POWERTRANSFORMER 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	: SLIDEPOTENTIOMETER
L.DTCT	: LIGHT DETECTING MODULE	VR.TRIM	: TRIMMER POTENTIOMETER

Note) Those parts marked with "#" are not included in the P.C.B. ass'y.

Schm Ref.	PART NO.	Description
* CB1	VV959400	P. C. B. MAIN(UC)
* CB2	VV959500	P. C. B. MAIN(RT)
* CB3	VV959600	P. C. B. MAIN(A)
* CB5	VV959700	P. C. B. MAIN(BG)
CB2	VD005000	CN. BS. PIN 7P
CB3	VD004800	CN. BS. PIN 5P
CB5	VD005300	CN. BS. PIN 10P
CB6	VT658200	HOLDER. FUS PC-FH1
CB7	VT658200	HOLDER. FUS PC-FH1
CB8	VT658200	HOLDER. FUS PC-FH1
CB9	LB932020	CN. BS. PIN 2P
CB10	VD005300	CN. BS. PIN 10P
C1	FG212220	C. CE 220pF 50V
C2	UA654680	C. MYLAR 0.068uF 50V
C3	UA654680	C. MYLAR 0.068uF 50V
C4	VJ836900	C. EL 10uF 16V
C5	VJ836900	C. EL 10uF 16V
C6	FG212220	C. CE 220pF 50V
C7	VJ836900	C. EL 10uF 16V
C8	UA654470	C. MYLAR 0.047uF 50V
C9	UA654680	C. MYLAR 0.068uF 50V
C10	UA654680	C. MYLAR 0.068uF 50V
C11	UA654220	C. MYLAR 0.022uF 50V
C12	Vi531900	C. EL 47uF 10V
C13	UJ648220	C. EL 220uF 25V
C13	VF964800	C. EL 100uF 16V
C14	UJ648220	C. EL 220uF 25V
C14	VF964800	C. EL 100uF 16V
C15	VT857900	C. POL 0.1uF 250V
C16	VT857900	C. POL 0.1uF 250V
C17	UA655820	C. MYLAR 0.82uF 50V
C18	VV954400	C. EL 10000uF 63V
C19	VV954400	C. EL 10000uF 63V
C20	UJ648470	C. EL 470uF 25V
C21	UJ648470	C. EL 470uF 25V
C22	VF964800	C. EL 100uF 16V
C23	VF964800	C. EL 100uF 16V
C24	UA655100	C. MYLAR 0.1uF 50V
C25	VF964800	C. EL 100uF 16V
C26	UA653100	C. MYLAR 1000pF 50V
C27	Ui377470	C. EL 47uF 63V
C28	UA655100	C. MYLAR 0.1uF 50V
C29	UA655220	C. MYLAR 0.22uF 50V
C30	UA655470	C. MYLAR 0.47uF 50V
C31	UA654100	C. MYLAR 0.01uF 50V
C32	UA654100	C. MYLAR 0.01uF 50V
C33	UA654150	C. MYLAR 0.015uF 50V
C34	VJ837200	C. EL 47uF 16V
C35	VJ836900	C. EL 10uF 16V
C36	VJ836900	C. EL 10uF 16V
C37	UA655100	C. MYLAR 0.1uF 50V
C38	UA655100	C. MYLAR 0.1uF 50V

* New Parts

Schm Ref.	PART NO.	Description
C39	UA655220	C. MYLAR 0.22uF 50V
C40	UJ648470	C. EL 470uF 25V
C40	VH620500	C. EL 10uF 25V
C41	UA655470	C. MYLAR 0.47uF 50V
C42	FG214100	C. CE 0.01uF 50V
C43	UA653100	C. MYLAR 1000pF 50V
C43	UA653560	C. MYLAR 5600pF 50V
C44	VJ839100	C. EL 1uF 50V
C45	UA654100	C. MYLAR 0.01uF 50V
C45	UA654680	C. MYLAR 0.068uF 50V
C46	UJ638330	C. EL 330uF 16V
C47	UJ648220	C. EL 220uF 25V
C48	UH178100	C. EL 100uF 63V
C49	VS741700	C. CE. SAFTY 0.01uF 275V
C50	FG214100	C. CE 0.01uF 50V
C51	VK534000	C. PP 220pF 200V
C52	VJ836900	C. EL 10uF 16V
C53	VK534000	C. PP 220pF 200V
C54	Vi531900	C. EL 47uF 10V
C55	UA654150	C. MYLAR 0.015uF 50V
C56	VJ837200	C. EL 47uF 16V
C57	UA655100	C. MYLAR 0.1uF 50V
C58	UA654220	C. MYLAR 0.022uF 50V
C59	UA654220	C. MYLAR 0.022uF 50V
C60	UA655100	C. MYLAR 0.1uF 50V
C61	UA655820	C. MYLAR 0.82uF 50V
C62	UA655270	C. MYLAR 0.27uF 50V
C63	UA655220	C. MYLAR 0.22uF 50V
C64	UA655220	C. MYLAR 0.22uF 50V
C65	UM417100	C. EL 10uF 50V
C66	UM417100	C. EL 10uF 50V
C67	VJ837200	C. EL 47uF 16V
C68	VE117600	C. EL 220uF 10V
C69	VF760000	C. EL 100uF 10V
C70	VJ837200	C. EL 47uF 16V
C71	VJ837200	C. EL 47uF 16V
C72	Ui377470	C. EL 47uF 63V
C74	VJ836900	C. EL 10uF 16V
C76	UA655820	C. MYLAR 0.82uF 50V
C77	VJ836900	C. EL 10uF 16V
D1	Vi234100	DIODE. BRG RBV-602
D2	VR253700	DIODE. BRG S1NB20 1.0A 200V
D3	iF004600	DIODE 1SS133
D4	iF004600	DIODE 1SS133
D5	iF004600	DIODE 1SS133
D6	iF004600	DIODE 1SS133
D7	iF004600	DIODE 1SS133
D8	iF004600	DIODE 1SS133
D9	iF004600	DIODE 1SS133
D10	iF004600	DIODE 1SS133
D11	VR253700	DIODE. BRG S1NB20 1.0A 200V
D12	iF004600	DIODE 1SS133
D13	iF004600	DIODE 1SS133

* New Parts

Schm Ref.	PART NO.	Description	
D14	VC615800	LED	SPR-54MVW
D15	iF004600	DIODE	1SS133
D16	VG440300	DIODE. ZENR	MTZJ12C 12V
D17	VG442500	DIODE. ZENR	MTZJ24B 24V
D18	iF004600	DIODE	1SS133
D19	iF004600	DIODE	1SS133
D20	iF004600	DIODE	1SS133
F1	KB000680	FUSE	1.25A 250V
F1	VV969800	FUSE	TL5. 0A
F2	KB000680	FUSE	1.25A 250V
IC1	XB247301	IC	uPC4570HA
IC2	XB247301	IC	uPC4570HA
IC3	XB247301	IC	uPC4570HA
IC4	XB247301	IC	uPC4570HA
IC5	XP741A00	IC	M51848L
IC6	XJ602A00	IC	NJM78M12FA
IC7	XB247301	IC	uPC4570HA
IC8	XM922A00	IC	NJM4558L
IC9	XM922A00	IC	NJM4558L
IC10	XD343A00	IC	NJM79M12FA
IC11	XF663A00	IC	uPC1237HA
IC12	XJ597A00	IC	NJM78L09A
PJ1	VJ696300	JACK. PIN	4P
Q1A	iX632610	TR	2SA1837 O, Y
Q1C	iX632620	TR	2SC4793 O, Y
Q2	iC1815M0	TR	2SC1815 Y, GR
Q3	iA097000	TR	2SA970 GR, BL
Q4	iA097000	TR	2SA970 GR, BL
Q5	iC1815M0	TR	2SC1815 Y, GR
Q6	iA101590	TR	2SA1015 O, Y
Q7	iA097000	TR	2SA970 GR, BL
Q8	VE198700	TR	2SA1145 O, Y
# Q9	VC398100	TR	2SC1846 S
Q10	VE198800	TR	2SC2705 O, Y
Q11	iC224030	TR	2SC2240 GR, BL
Q12	iC224030	TR	2SC2240 GR, BL
Q13	iC224030	TR	2SC2240 GR, BL
Q14	VK801200	TR	2SC4688 R, O
Q15	iC224030	TR	2SC2240 GR, BL
# Q16A	iX633340	TR	2SA1695 O, P, Y
# Q16C	iX633350	TR	2SC4468 O, P, Y
# Q17A	iX633340	TR	2SA1695 O, P, Y
# Q17C	iX633350	TR	2SC4468 O, P, Y
Q18	iC224030	TR	2SC2240 GR, BL
Q19	iA097000	TR	2SA970 GR, BL
Q20	iA101590	TR	2SA1015 O, Y
Q21	iA097000	TR	2SA970 GR, BL
Q22	iA097000	TR	2SA970 GR, BL
Q23	iC224030	TR	2SC2240 GR, BL
Q24	iC1815M0	TR	2SC1815 Y, GR
Q25	iC224030	TR	2SC2240 GR, BL
Q26	iA097000	TR	2SA970 GR, BL
Q27	iA101590	TR	2SA1015 O, Y

* New Parts

Schm Ref.	PART NO.	Description	
Q28	iC1815M0	TR	2SC1815 Y, GR
Q29	iC224030	TR	2SC2240 GR, BL
Q30	iC287820	TR	2SC2878 A, B
Q31	iC287820	TR	2SC2878 A, B
R3	HV456470	R. CAR. FP	4.7K Ω 1/4W
R6	HV456470	R. CAR. FP	4.7K Ω 1/4W
R8	HV456220	R. CAR. FP	2.2K Ω 1/4W
R9	HV456220	R. CAR. FP	2.2K Ω 1/4W
R27	HV453100	R. CAR. FP	1 Ω 1/4W
R28	HV453100	R. CAR. FP	1 Ω 1/4W
R30	HV455560	R. CAR. FP	560 Ω 1/4W
R31	HU576390	R. MTL. FLM	3.9K Ω 1/4W
R33	HV455220	R. CAR. FP	220 Ω 1/4W
R39	HU578100	R. MTL. FLM	100K Ω 1/4W
R40	HV455220	R. CAR. FP	220 Ω 1/4W
R41	HV454330	R. CAR. FP	33 Ω 1/4W
R62	HV453220	R. CAR. FP	2.2 Ω 1/4W
R68	HV454820	R. CAR. FP	82 Ω 1/4W
R69	HV456220	R. CAR. FP	2.2K Ω 1/4W
R70	HV455220	R. CAR. FP	220 Ω 1/4W
R79	HV455680	R. CAR. FP	680 Ω 1/4W
R80	HV455100	R. CAR. FP	100 Ω 1/4W
R88	HV453470	R. CAR. FP	4.7 Ω 1/4W
R89	HV453470	R. CAR. FP	4.7 Ω 1/4W
R90	HV456220	R. CAR. FP	2.2K Ω 1/4W
R91	VG730500	R. MTL. OXD	0.15 Ω 3W
R92	HV456120	R. CAR. FP	1.2K Ω 1/4W
R93	VG730500	R. MTL. OXD	0.15 Ω 3W
R94	HV453470	R. CAR. FP	4.7 Ω 1/4W
R95	HV453470	R. CAR. FP	4.7 Ω 1/4W
R101	HV456100	R. CAR. FP	1K Ω 1/4W
R103	HV456100	R. CAR. FP	1K Ω 1/4W
R105	HV454100	R. CAR. FP	10 Ω 1/4W
R109	HV454820	R. CAR. FP	82 Ω 1/4W
R110	HV456100	R. CAR. FP	1K Ω 1/4W
R111	HV456100	R. CAR. FP	1K Ω 1/4W
R118	HV454390	R. CAR. FP	39 Ω 1/4W
R119	HL236120	R. MTL. OXD	1.2K Ω 3W
R120	VH930000	R. WW	0.1 Ω 3W
R121	VG730500	R. MTL. OXD	0.15 Ω 3W
R122	VG730500	R. MTL. OXD	0.15 Ω 3W
R123	HV453100	R. CAR. FP	1 Ω 1/4W
R124	HV453100	R. CAR. FP	1 Ω 1/4W
RY1	VK438300	RELAY	DH24D2-OT/M2
RY2	VD506000	RELAY	AC DG12D1-O/M
SW1	VS066500	SW. PUSH	SPPH13-W
SW2	VL012000	SW. SLIDE	SSSF12
SW3	VL012000	SW. SLIDE	SSSF12
SW4	VV954500	SW. SLIDE	SSSF143-S09N1
T1	XQ843A00	TRANS. PWR	(UC)
T1	XQ844A00	TRANS. PWR	(R)
T1	XQ845A00	TRANS. PWR	(A)
T1	XQ846B00	TRANS. PWR	(BG)

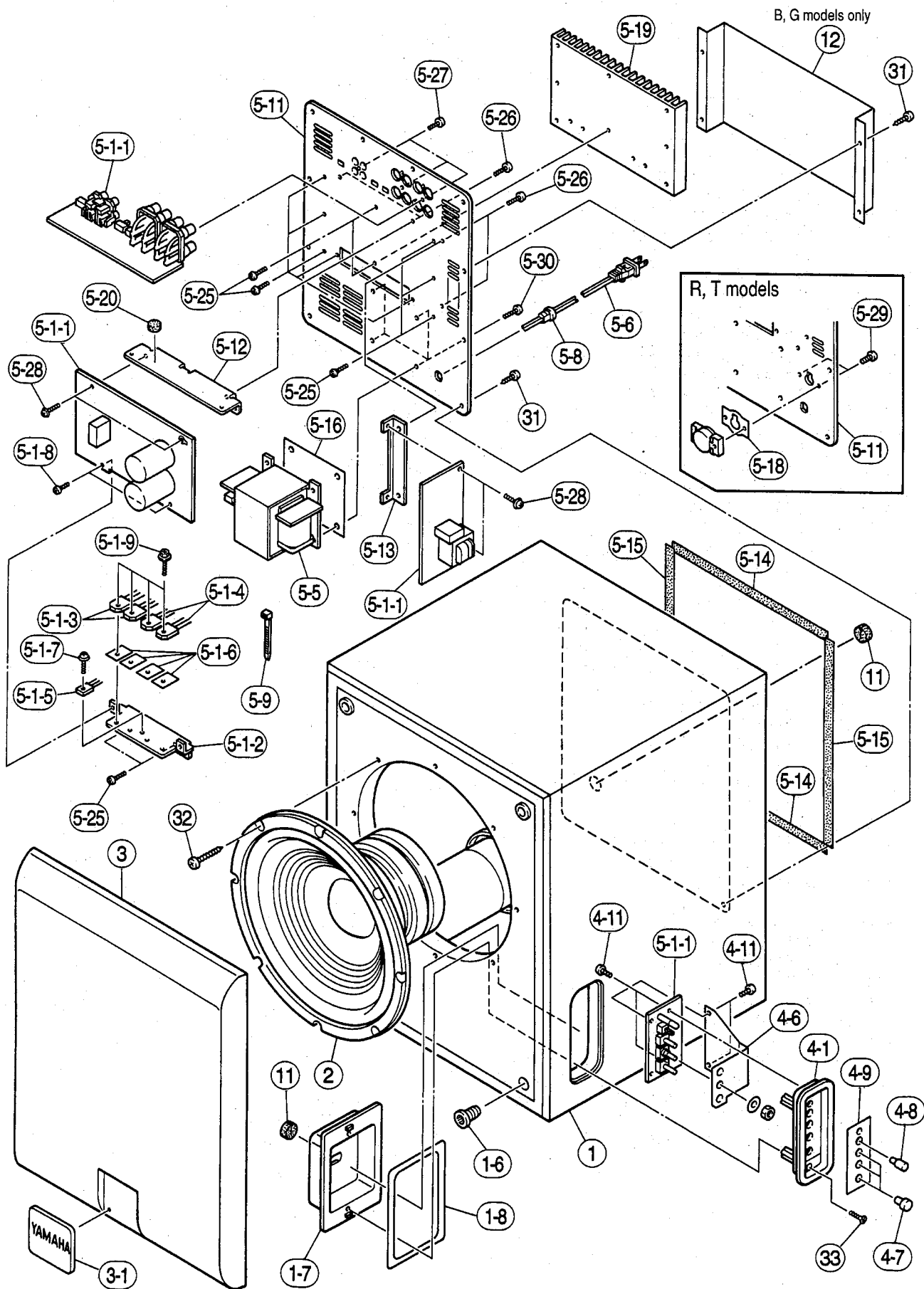
* New Parts

YST-SW300

Schm Ref.	PART NO.	Description	
TE1	VT658100	TERM. WRAP	352-TX119
TE2	VT658100	TERM. WRAP	352-TX119
TE3	VC313700	TERM. SP	8P
TE3	VK506200	TERM. SP	8P
VR1	VJ692800	VR. TRIM	B470 Ω
VR2	VV954800	VR	10K Ω
VR3	VV954700	VR	A5K Ω
VR4	VV954600	VR	B50K Ω
	BB070700	GND. MTL	
	VN774800	GND. WSHR	MEP1866 #11102
	VY659800	HOLDER. LED	LE56217-0A

* New Parts

EXPLODED VIEW



YST-SW300

MECHANICAL PARTS

Ref. No.	PART NO.	Description				
* 1	VV958800	SPEAKER CABINET				
1- 6	CB603920	HOLDER	PK-6			
* 1- 7	VY681700	SIDE COVER				
* 1- 8	VY693400	PACKING	C			
* 2	XT100A00	LOUD SPEAKER	JA3018			
* 3	VV958900	FRONT GRILLE ASS'Y				
* 3- 1	VY840300	EMBLEM PLATE	YAMAHA			
* 4- 1	VV924200	SIDE PANEL				
* 4- 6	VV962200	SHIELD SHEET				
4- 7	VS757200	KNOB, P	D12		BL	
4- 8	VS499700	KNOB, POWER SWITCH				
* 4- 9	VV981200	PANEL				
4-11	EP600290	BIND HEAD P-TITE SCREW	3x6	ZMC2-Y		
* 5-1-1	VV959400	P. C. B. ASS'Y	MAIN			(UC)
* 5-1-1	VV959500	P. C. B. ASS'Y	MAIN			(RT)
* 5-1-1	VV959600	P. C. B. ASS'Y	MAIN			(A)
* 5-1-1	VV959700	P. C. B. ASS'Y	MAIN			(BG)
* 5-1-2	VV925000	RADIATOR				
# 5-1-3	IX633340	TRANSISTOR	2SA1695 O,	P, Y	Q16A, 17A	
# 5-1-4	IX633350	TRANSISTOR	2SC4468 O,	P, Y	Q16C, 17C	
# 5-1-5	VC398100	TRANSISTOR	2SC1846 S		Q9	
5-1-6	VK195900	SHEET	19x24			
5-1-7	EX600250	CUP B-TITE SCREW	3x10	FCRM3-BL		
5-1-8	Ei330086	BIND HEAD B-TITE SCREW	3x8	FCRM3-BL		
5-1-9	VK173200	SCREW, TRANSISTOR	3x15 SP	FCM3		
5- 5	XT095A00	POWER TRANSFORMER				(UC)
5- 5	XT096A00	POWER TRANSFORMER				(R)
5- 5	XT097A00	POWER TRANSFORMER				(A)
5- 5	XT098A00	POWER TRANSFORMER				(BG)
5- 6	VE370900	POWER CORD	10A 125V			(UC)
5- 6	VE371200	POWER CORD	2. 5A 250V	2. 0m		(G)
5- 6	VL948500	POWER CORD	7A 250V	2. 0m		(RT)
5- 6	VQ790000	POWER CORD	5A	2. 0m		(B)
5- 6	VT666200	POWER CORD ASS'Y				(A)
5- 8	CB072750	CORD STOPPER	SR-4N-4			
5- 9	CB069250	BINDING TIE	BK-1			
* 5-11	VV924300	REAR PANEL				(UC)
* 5-11	VV962700	REAR PANEL				(RT)
* 5-11	VV962800	REAR PANEL				(A)
* 5-11	VV962900	REAR PANEL				(BG)
5-12	VT534100	PLATE	B			
* 5-13	VY840200	PLATE	D			
* 5-14	VV962300	PACKING	A			
* 5-15	VV962400	PACKING	B			
* 5-16	VY989300	PACKING	D			
5-18	VS498200	GASKET	F			(RT)
* 5-19	VV924400	HEAT SINK				
* 5-20	VY893800	INSULATOR				
5-25	Ei330086	BIND HEAD B-TITE SCREW	3x8	FCRM3-BL		
5-26	Ei340086	BIND HEAD TAPPING SCREW	4x8	FCRM3-BL		
5-27	EX601360	BIND HEAD P-TITE SCREW	3x10	FCRM3-BL		
5-28	Vi924800	BW HEAD TAPPING SCREW	3x10-8	FCM3-CU		
5-29	ED330086	BIND HEAD SCREW	3x8	FCRM3-BL		(RT)

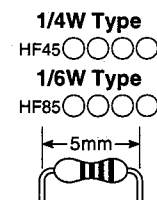
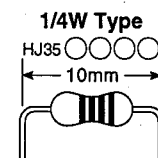
* New Parts

Ref. No.	PART NO.	Description				
5-30	EK396010	BIND HEAD S-TITE SCREW	4x8	FCRM3-BL		
11	VS755300	BUSH, B				
* 12	VV962100	REAR COVER				(BG)
31	EP040250	BIND HEAD TAPPING SCREW	4x16	ZMC2-BL		
32	Ei340256	BIND HEAD TAPPING SCREW	4x25	ZMC2-BL		
* 33	VY695200	FLAT HEAD P-TITE SCREW	4x20	MFZN2-BL		

* 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			



* : Not available