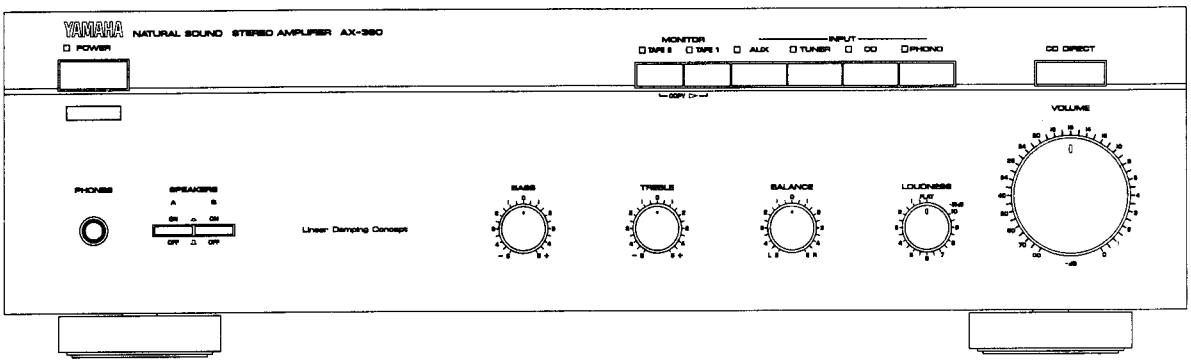
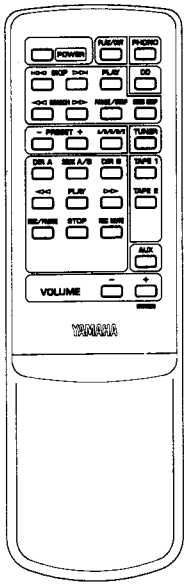
STEREO AMPLIFIER

AX-380

SERVICE MANUAL





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 reseach, 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

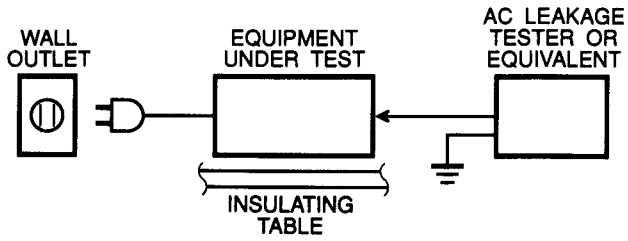
100491

YAMAHA
YAMAHA CORPORATION
P.O.Box1,Hamamatsu,Japan

1.85K-713 Printed in Japan '94.4

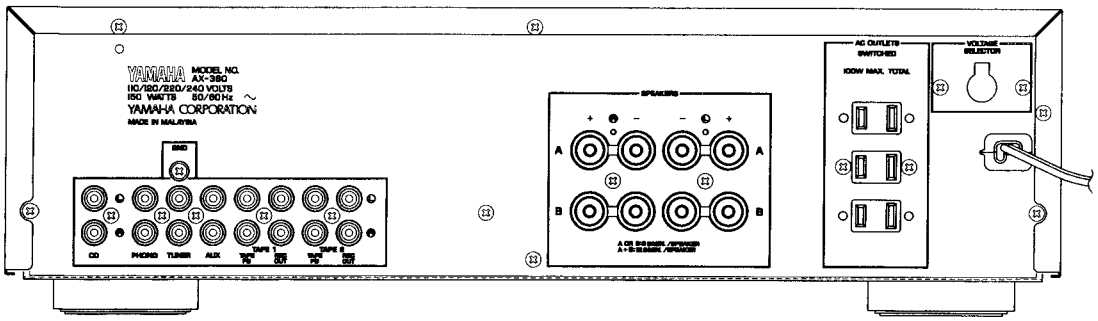
■ TO SERVICE PERSONNEL

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

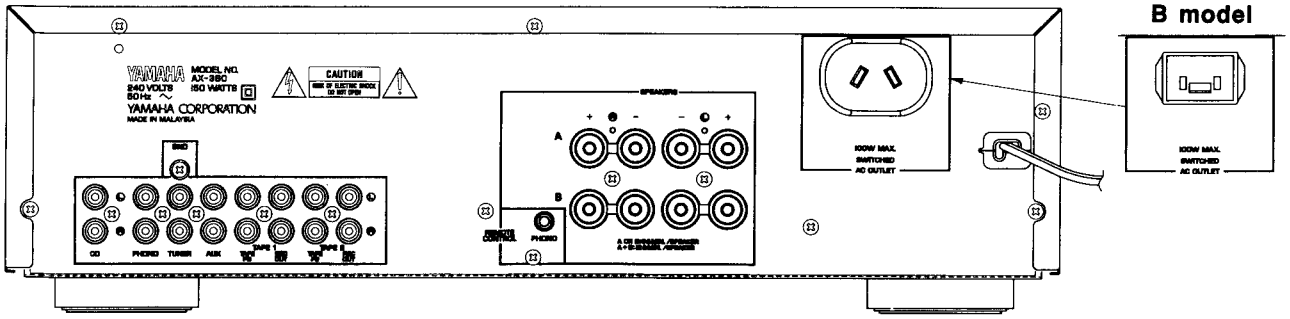


■ REAR PANELS

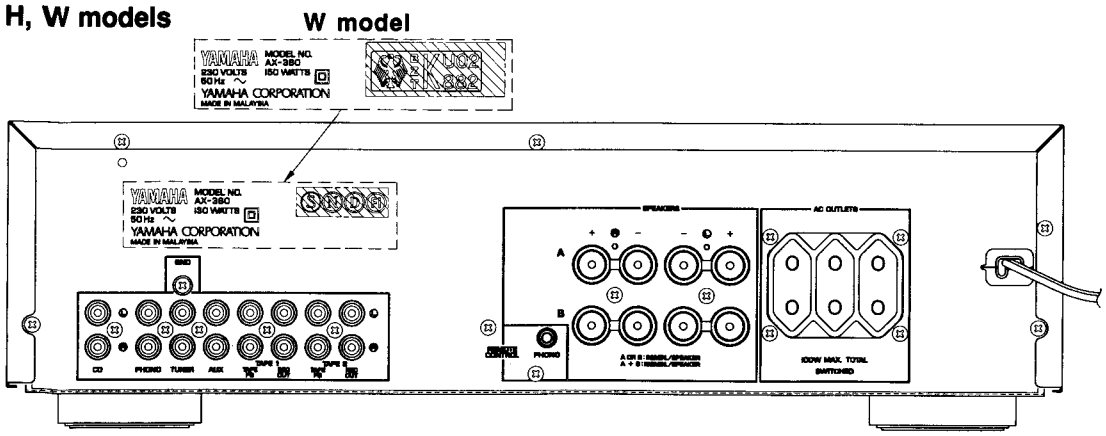
▼ R model



▼ A, B models



▼ H, W models



■ SPECIFICATIONS

■ AUDIO SECTION

Minimum RMS Output Power Per Channel
8Ω, 20Hz to 20kHz, 0.04% THD 55W
6Ω, 20Hz to 20kHz, 0.06% THD (Except H model) 60W

Dynamic Power per Channel (IHF)
8/6/4/2Ω 78/90/110/120W

DIN Standard Output Power Per Channel
1kHz, 0.7% THD, 4Ω (H, W models) 85W

Maximum Power EIAJ
1kHz, 10% THD, 8/6Ω (R model) 83/94W

IEC Power
1kHz, 0.04% THD, 8Ω (H, W models) 70W

Power Band Width
8Ω, 25W, 0.08% THD ..... 10Hz to 40kHz

Damping Factor
8Ω, 20Hz to 20kHz ..... 100 or more

Input Sensitivity/Impedance
PHONO MM 2.5mV/47kΩ
CD etc 150mV/47kΩ

Maximum Input Signal Level (1kHz, 0.04% THD)
PHONO MM 90mV

Output Level/Impedance
REC OUT 150mV/600Ω

Headphone Jack Rated Output/Impedance
0.04% THD, RL = 8Ω 0.42V/390Ω

Frequency Response (20Hz to 20kHz)
CD etc ..... 0±0.5dB

RIAA Equalization Deviation (20Hz to 20kHz)
PHONO MM ..... 0±0.5dB

Total Harmonic Distortion (20Hz to 20kHz)
PHONO MM to REC OUT (1V) 0.02%
CD etc to SP OUT (27.5W/8Ω) 0.02%

Signal-to-Noise Ratio (IHF-A Network)
PHONO MM (5mV Input Shorted) 82dB
CD etc (Shorted) 105dB

Residual Noise (IHF-A Network) 100μV
(CD Direct SW ON)

Channel Separation (Vol. –30dB)
PHONO MM (Input Shorted) 1kHz 65dB
CD etc 1kHz (Input 5.1kΩ Terminated) 60dB

Tone Control Characteristics
BASS : Boost/cut ..... ±10dB (20Hz)
Turnover Frequency 350Hz
TREBLE : Boost/cut ..... ±10dB (20kHz)
Turnover Frequency 3.5kHz

Continuous Loudness Control ..... –30dB (1kHz)
(Level related equalization)

■ GENERAL

Power Supply
H, W models ..... AC 230V, 50Hz
A, B models ..... AC 240V, 50Hz
R model ..... AC 110/120/220/240V, 60/50Hz

Power Consumption
H model 130W
Except H model 150W

AC Outlets
Switched x 3
H, W, R models ..... 100W max. (Total)
Switched x 1
A, B models ..... 100W max.

Dimensions (W x H x D) ..... 435 x 126 x 308.5mm
(17-1/8" x 4-15/16" x 12-1/8")

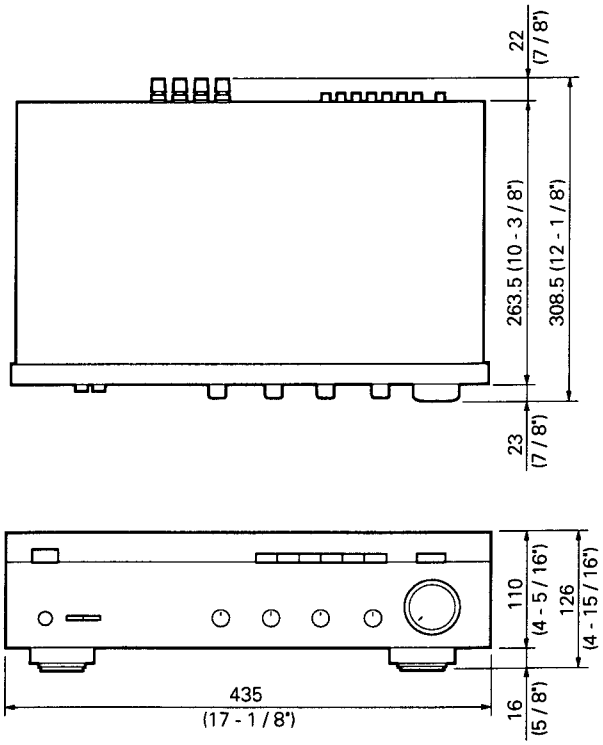
Weight ..... 6.6kg (14 lbs 8 oz)

Accessories ..... Remote Control Transmitter x 1
Battery (size "AA", R06) x 2

** Specifications subject to change without notice.*

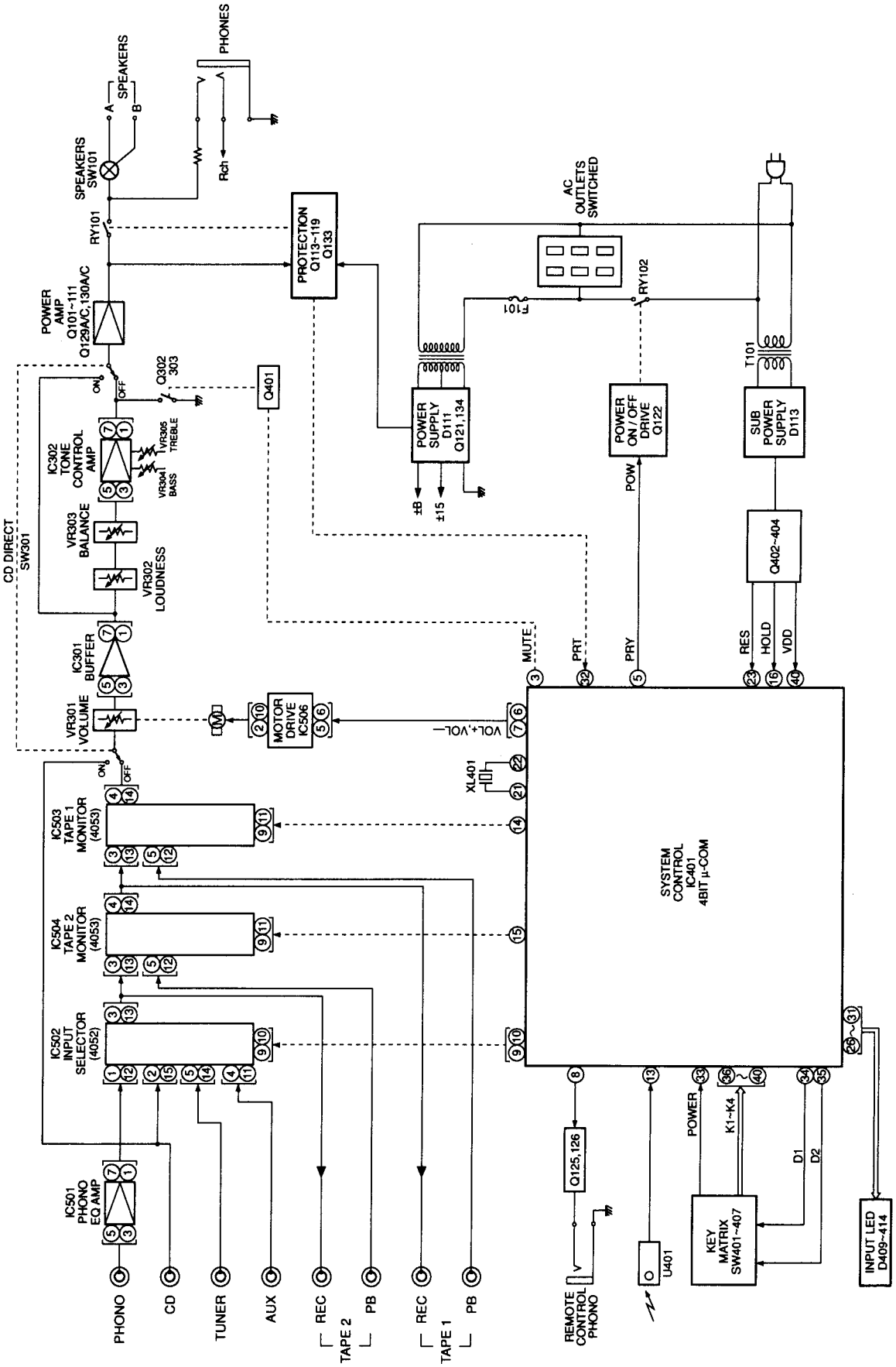
***H** ..... European model*
***W** ..... German model*
***A** ..... Australian model*
***B** ..... British model*
***R** ..... General model*

● DIMENSIONS

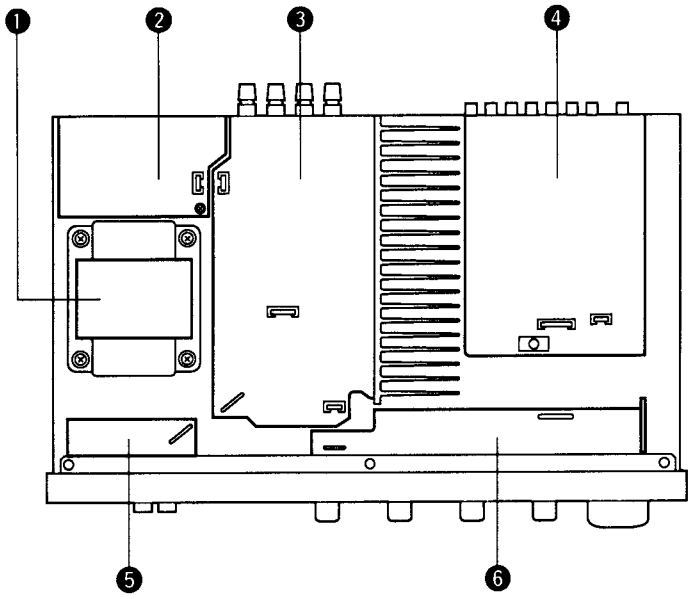


Units : mm (inch)

■ BLOCK DIAGRAM



■ INTERNAL VIEW



❶ POWER TRANSFORMER
❷ P.C.B. MAIN (2)
❸ P.C.B. MAIN (1)
❹ P.C.B. INPUT
❺ P.C.B. MAIN (3)
❻ P.C.B. OPERATION (1)

■ DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

1. **Removal of Top Cover**
   Remove 4 screws (①) and 3 screws (②) in Fig. 1.

2. **Removal of Front Panel**
   a. Remove 5 knobs.
   b. Remove 6 screws (③) in Fig. 1.

3. **Removal of Rear Panel**
   Remove 13 screws (④) in Fig. 2.
   * The P.C.B. MAIN & INPUT can be removed in this state.

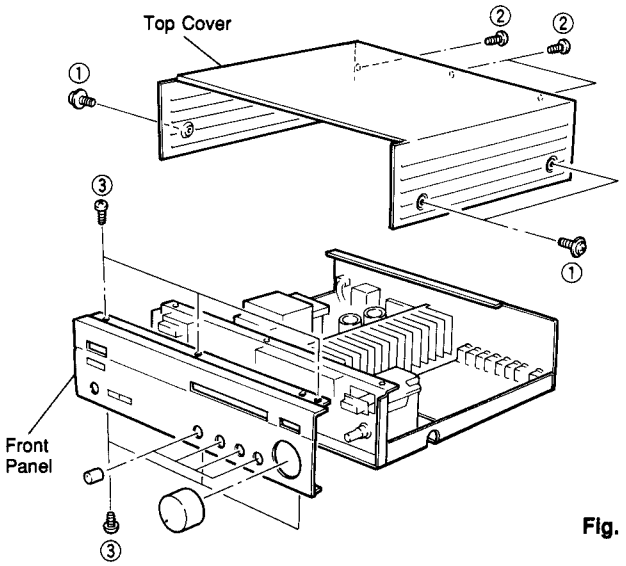


Fig. 1

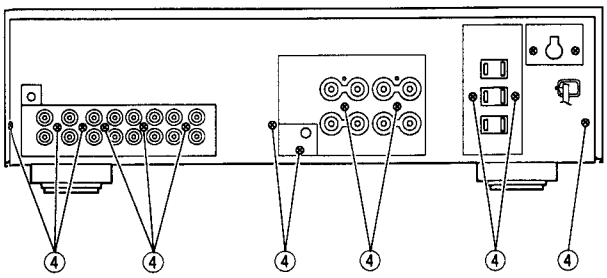
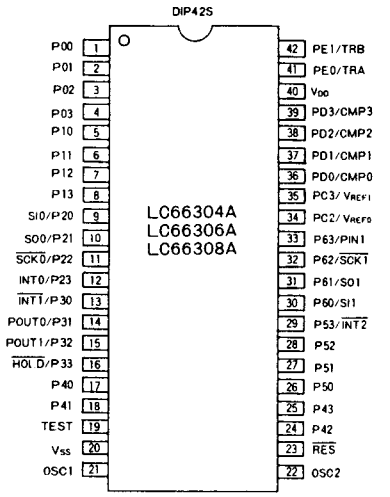
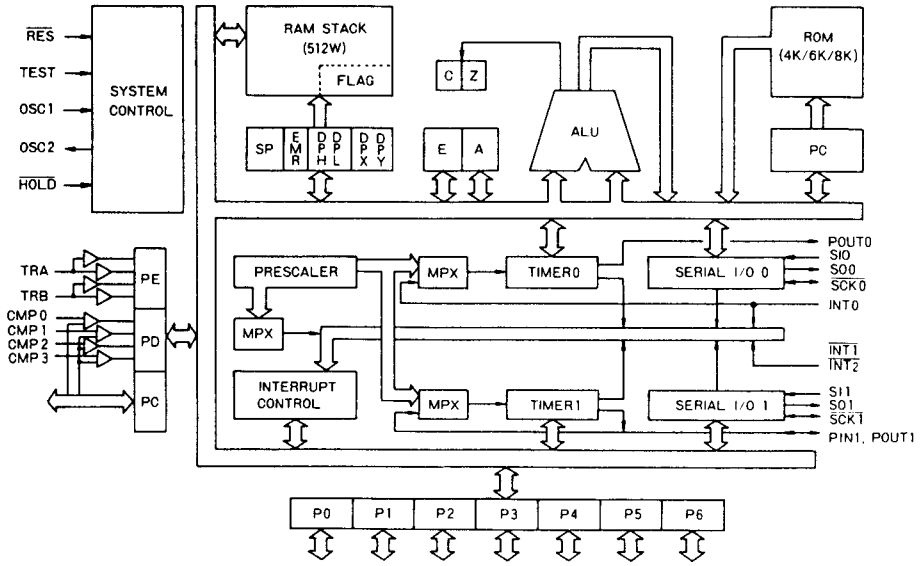


Fig. 2

■ μ-COM DATA

IC401 : LC66304
4bit μ-COM





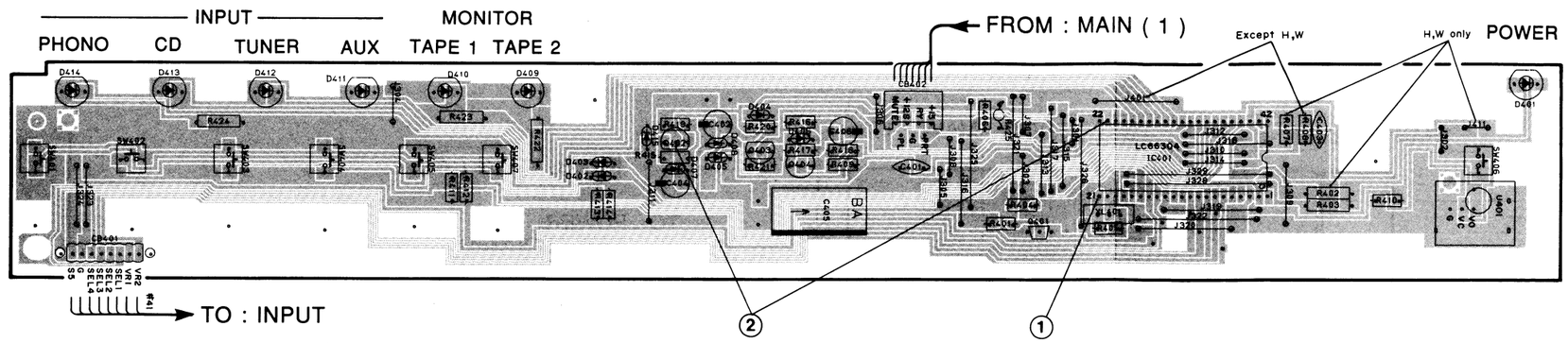
No.	Port	I/O	Name	Function
1	P00		—	N. C.
2	P01	I	IPSEL	Model Detect
3	P02	O	MUTE	Mute
4	P03		—	N. C.
5	P10	O	PRY	Power Relay
6	P11	O	VM+	Main Volume Up
7	P12	O	VM−	Main Volume Down
8	P13	O	PL	Player Control
9	SI0/P20	O	4052B	Input Selector
10	SO0/P21	O	4052A	Input Selector
11	SCK0/P22		—	N. C.
12	INT0/P23		—	N. C.
13	INT1/P30	I	REM	Remote Control
14	POUT0/P31	O	TMON1	Tape 1 Monitor
15	POUT1/P32	O	TMON2	Tape 2 Monitor
16	HOLD/P33	I	HOLD	Hold
17	P40	O	PLED	Power LED
18	P41	O	STBY	Standby LED
19	TEST		TEST	GND
20	Vss		Vss	GND
21	OSC1	I	OSC1	Clock (4MHz)

No.	Port	I/O	Name	Function
22	OSC2	O	OSC2	Clock (4MHz)
23	RES	I	RES	Reset Input
24	P42		—	N. C.
25	P43		—	N. C.
26	P50	O	PHLED	Input LED drive
27	P51	O	CDLED	Input LED drive
28	P52	O	TULED	Input LED drive
29	P53/INT2	O	AUXLED	Input LED drive
30	P60/SI1	O	T1LED	Input LED drive
31	P61/SO1	O	T2LED	Input LED drive
32	P62/SCK1	I	PRT	Protection
33	P63/PIN1	I	PSW	Power Switch
34	PC2/VREF0	O	D1	Key Digit
35	PC3/VREF1	O	D2	Key Digit
36	PD0/CMP0	I	K1	Key Input
37	PD1/CMP1	I	K2	Key Input
38	PD2/CMP2	I	K3	Key Input
39	PD3/CMP3	I	K4	Key Input
40	VDD		VDD	+5V
41	PE0/TRA	I	G/NOTG	Market Detect
42	PE1/TRB			Model Detect

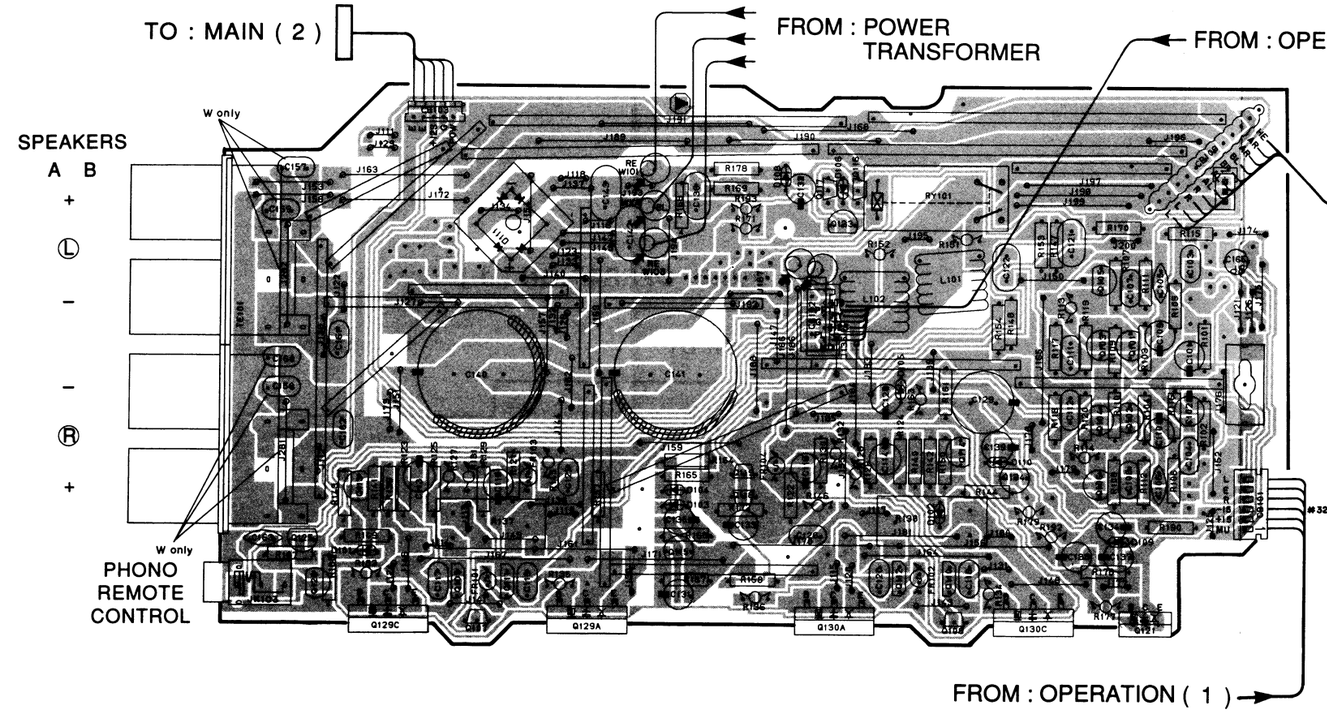
■ PRINTED CIRCUIT BOARD (Foil side)

① and ② : TEST POINT WAVEFORMS (See page 14)

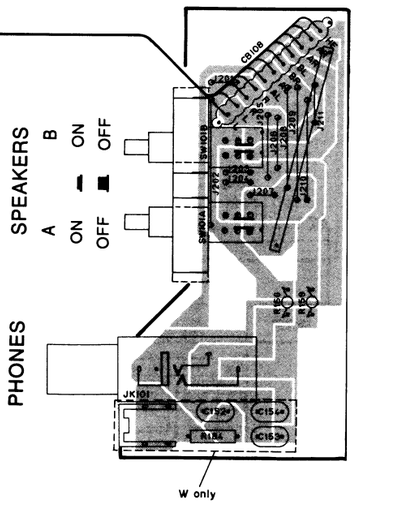
P.C.B. OPERATION (4)



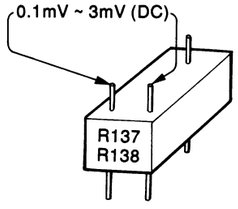
P.C.B. MAIN (1)

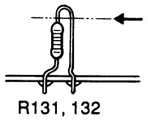


P.C.B. MAIN (3)



● **Confirmation of idling Current**
After Power is turned on, confirm that the voltage across R137 (L ch), R138 (R ch) is between 0.1mV to 3mV.
If it exceeds 3.1mV, open (cut off) R131 (L ch) or R132 (R ch), and reconfirm it.



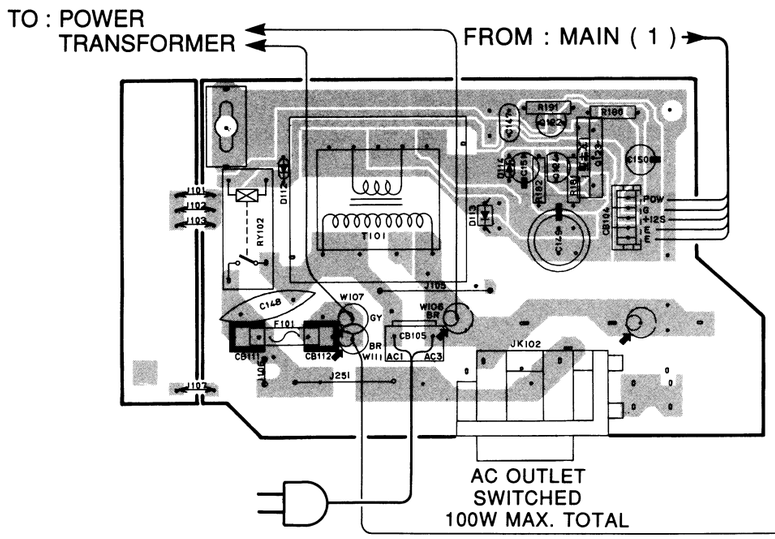


● Q107 and Q108 are transistors for temperature correction. Apply silicone grease to the contact surface with the heat sink.

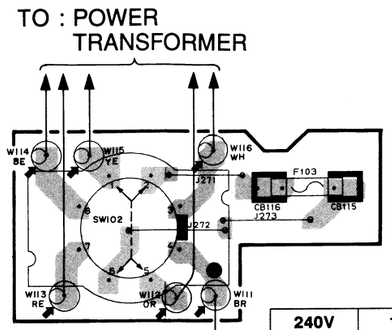
■ PRINTED CIRCUIT BOARD (Foil side)

● R model

P.C.B. MAIN (2)

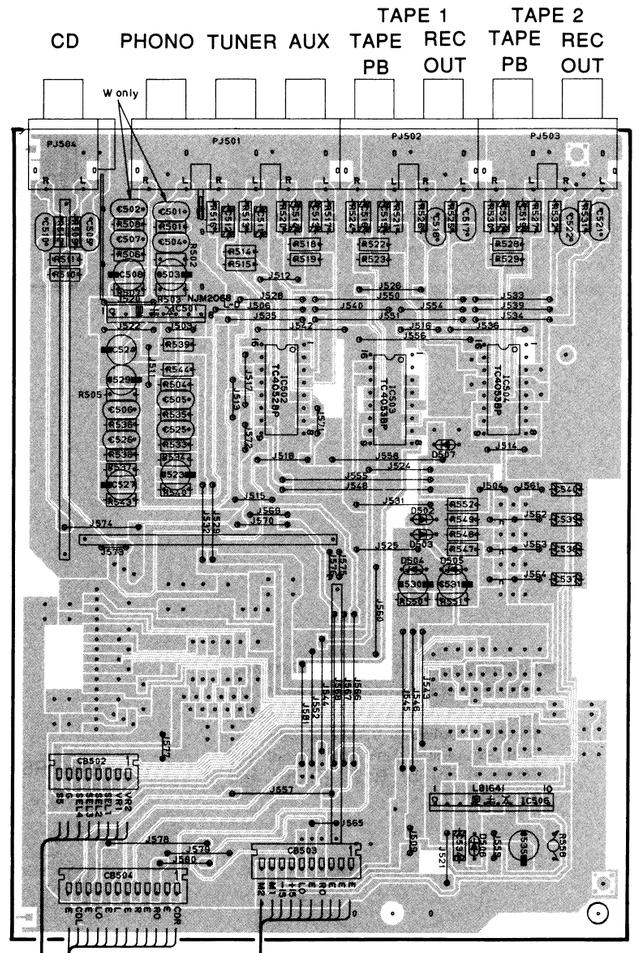


P.C.B. MAIN (4)

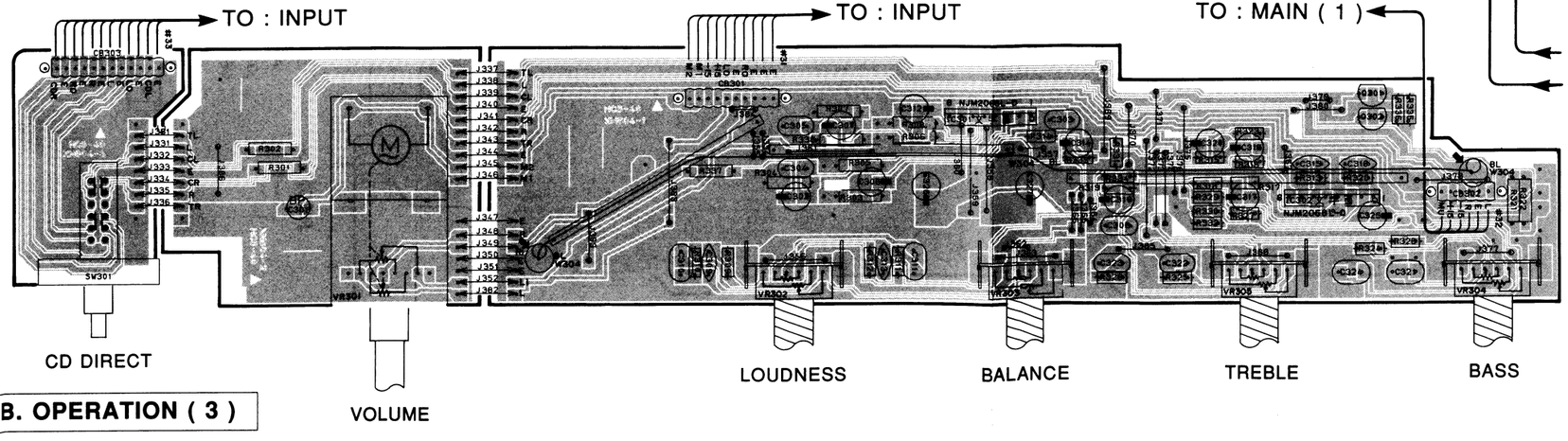


240V	1-2/5-6
220V	2-3/6-7
110V	3-4/7-8
120V	4-5/8-1

P.C.B. INPUT



P.C.B. OPERATION (2)



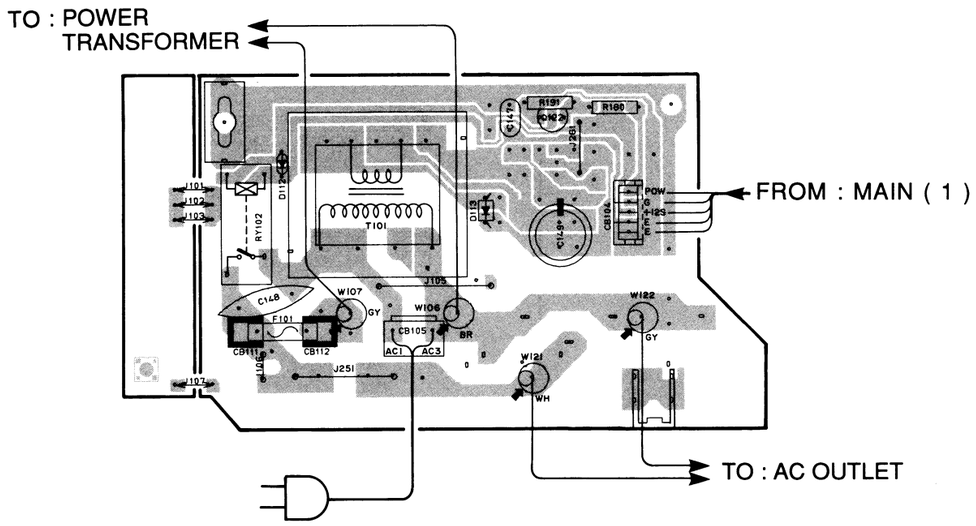
P.C.B. OPERATION (1)

P.C.B. OPERATION (3)

■ PRINTED CIRCUIT BOARD (Foil side)

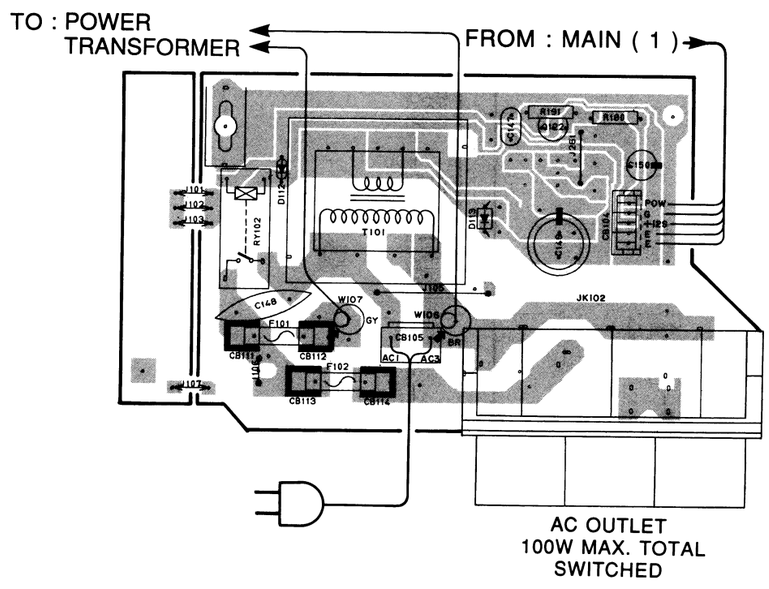
● A, B models

P.C.B. MAIN (2)



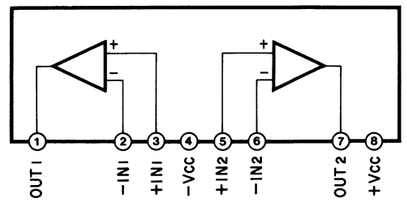
● H, W models

P.C.B. MAIN (2)

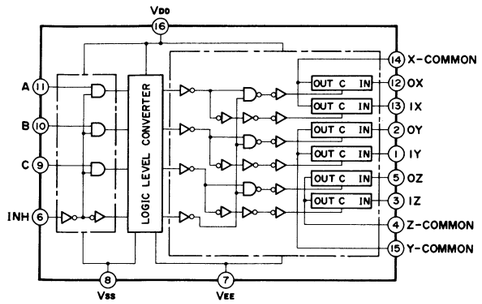


■ IC BLOCK

IC301, 302, 501 : NJM2068L-D
Dual OP-Amp



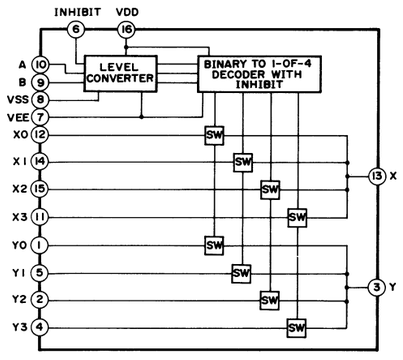
IC503, 504 : TC4053BP
Triple 2-Channel Multiplexer/Demultiplexer



CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C	B	A	0X (Pin 12), 0Y (Pin 2), OZ (Pin 5)
(Pin 6)	(Pin 9)	(Pin10)	(Pin11)	1X (Pin 13), 1Y (Pin 1), 1Z (Pin 3)
L	L	L	L	0X, 0Y, 0Z
L	L	L	H	1X, 0Y, 0Z
L	L	H	L	0X, 1Y, 0Z
L	L	H	H	1X, 1Y, 0Z
L	H	L	L	0X, 0Y, 1Z
L	H	L	H	1X, 0Y, 1Z
L	H	H	L	0X, 1Y, 1Z
L	H	H	H	1X, 1Y, 1Z
H	*	*	*	NONE

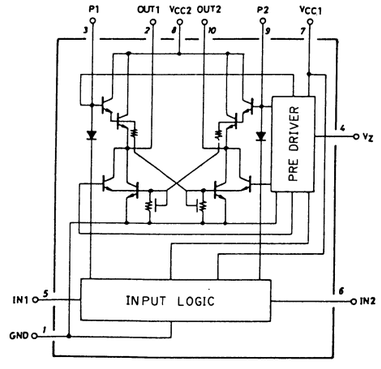
* Don't Care

IC502 : TC4052BP
Dual 4 Channel Analog Multiplexers/Demultiplexers



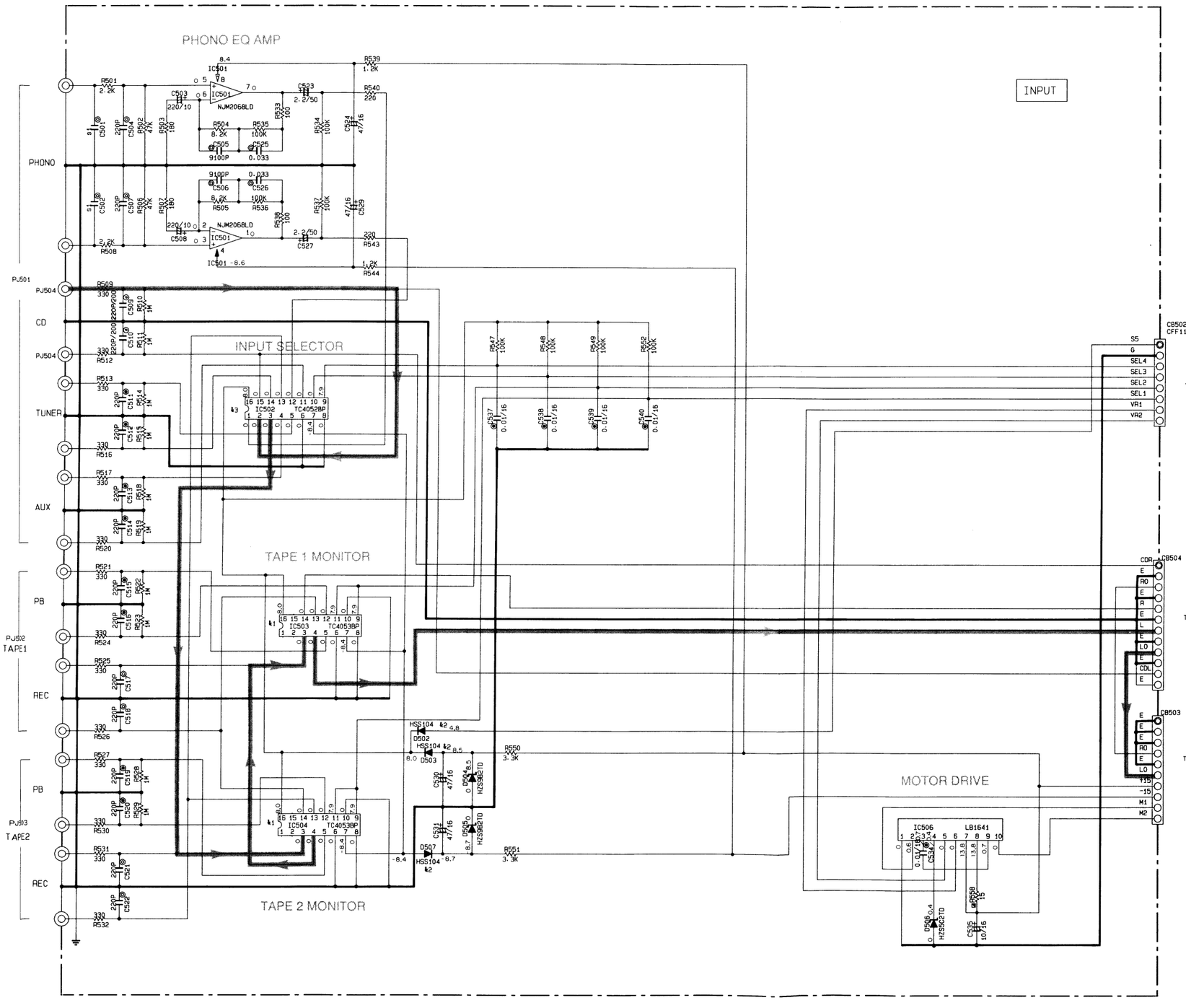
INHBIT	B	A	
0	0	0	0x, 0y
0	0	1	1x, 1y
0	1	0	2x, 2y
0	1	1	3x, 3y
1	X	X	NONE

IC506 : LB1641
Motor Driver



● Other IC
IC401 : LC66304
See page 5

■ SCHEMATIC DIAGRAM (INPUT)



RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊘	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

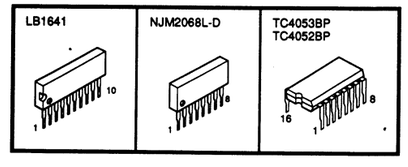
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	ǂ
⊗	TANTALUM CAPACITOR	ǂ
NO MARK	CERAMIC CAPACITOR	ǂǂ
◉	CERAMIC TUBULAR CAPACITOR	ǂǂ
◎	POLYESTER FILM CAPACITOR	ǂǂ
○	POLYSTYRENE FILM CAPACITOR	ǂǂ
Ⓘ	MICA CAPACITOR	ǂǂ
Ⓟ	POLYPROPYLENE FILM CAPACITOR	ǂǂ
●	SEMICONDUCTIVE CERAMIC CAPACITOR	ǂǂ

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
ǂ1	IC503·504	TC4053BP UPD4053BC
ǂ2	D502·503·507	HSS104 1SS133 1SS176
ǂ3	IC502	TC4052BP UPD4052BC

		J·R·A·B·H	W
s1	C501·502	X	220P

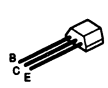
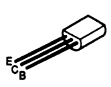
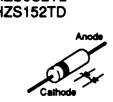
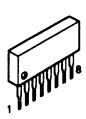
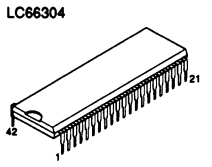
PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.



** All voltage are measured with a 10MΩ/V DC electric volt meter.*
** Schematic diagram is subject to change without notice.*

■ SCHEMATIC DIAGRAM (OPERATION)

PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.

2SA933S(Q,R) 2SC1740S(R,S) DTA114ES	2SC1815(Y) 2SC2878(A,B)	1SS133 HZS4C2TD HZS6C2TD HZS152TD	NJM2068L-D	LC66304
				

RESISTOR

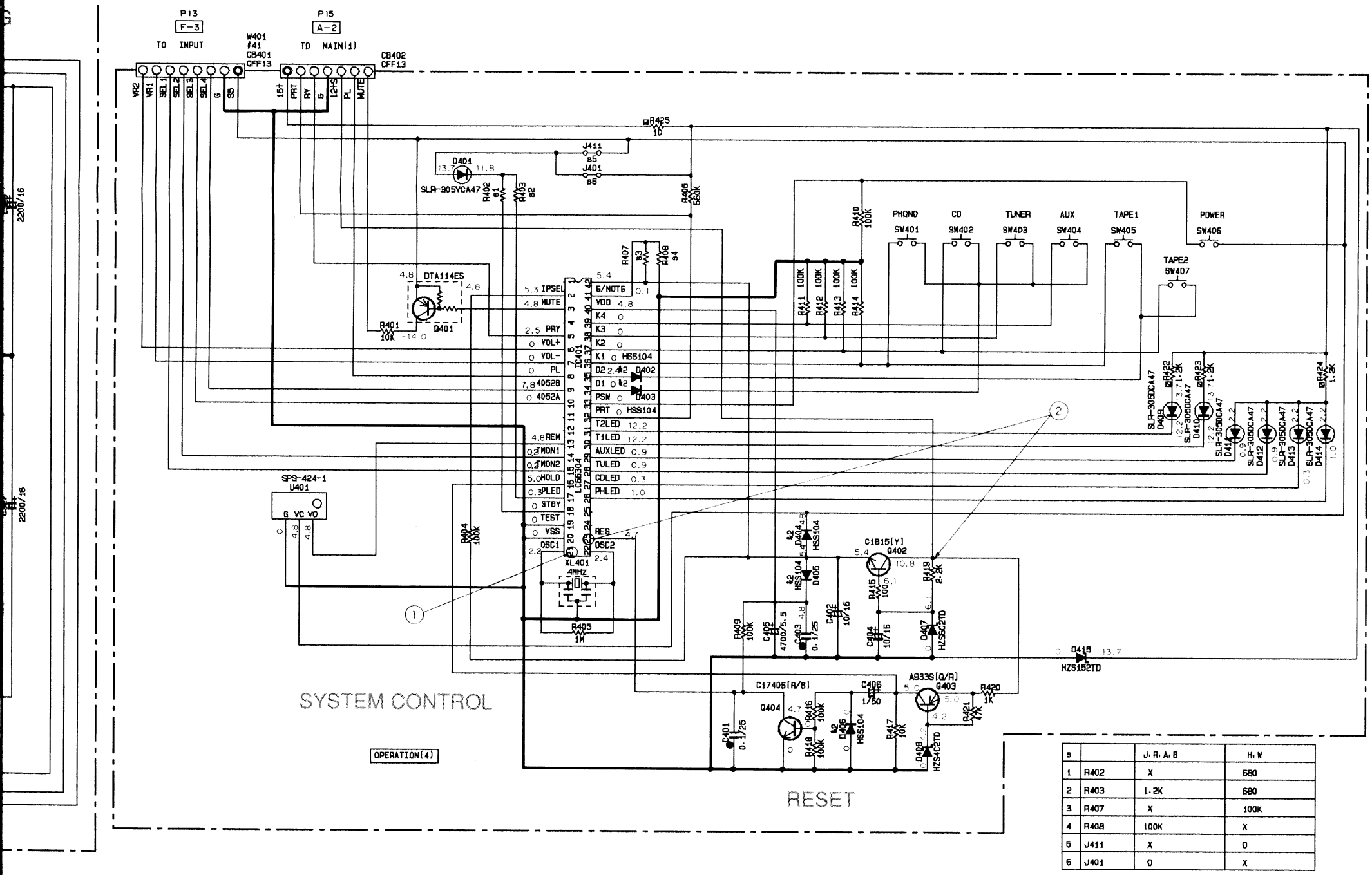
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊠	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⋕
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	⊣⊢
◉	CERAMIC TUBULAR CAPACITOR	
ⓜ	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
Ⓘ	MICA CAPACITOR	
Ⓟ	POLYPROPYLENE FILM CAPACITOR	
●	SEMICONDUCTIVE CERAMIC CAPACITOR	

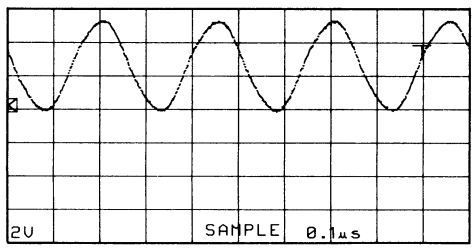
Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
♭1		
♭2	D402-406	HSS104 1SS133 1SS176
♭3		

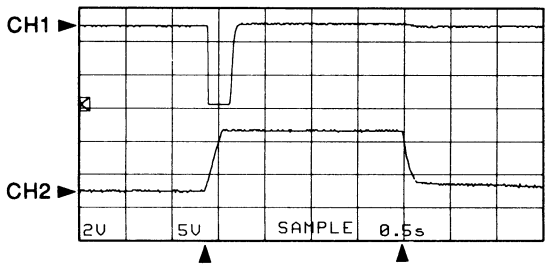


S		J, R, A, B	H, W
1	R402	X	680
2	R403	1.2K	680
3	R407	X	100K
4	R408	100K	X
5	J411	X	O
6	J401	O	X

Point ①
(Pin 21 of IC401)
V : 2V/div H : 0.1µsec/div
DC range 1 : 1 probe



Point ②
[CH1 : Pin 23 of IC401
CH2 : Collector of Q402]
V : 2V/div (CH1)
V : 5V/div (CH2)
H : 0.5sec/div
DC range 1 : 1 probe



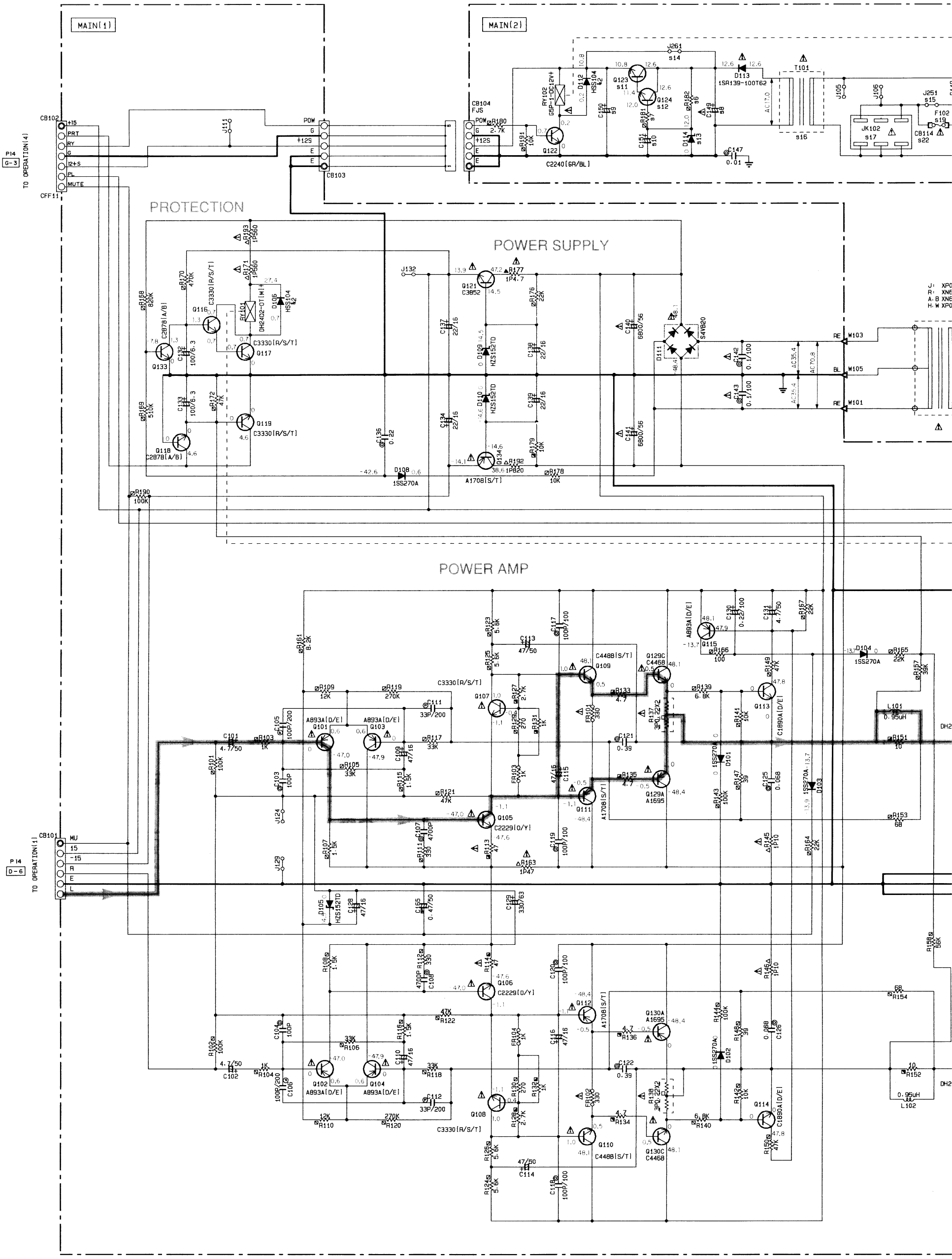
With the POWER switch turned ON, connect the power cord to the AC outlet.

Disconnect the power cord from the AC outlet.

* This waveform is not available by pushing the power switch ON and OFF.

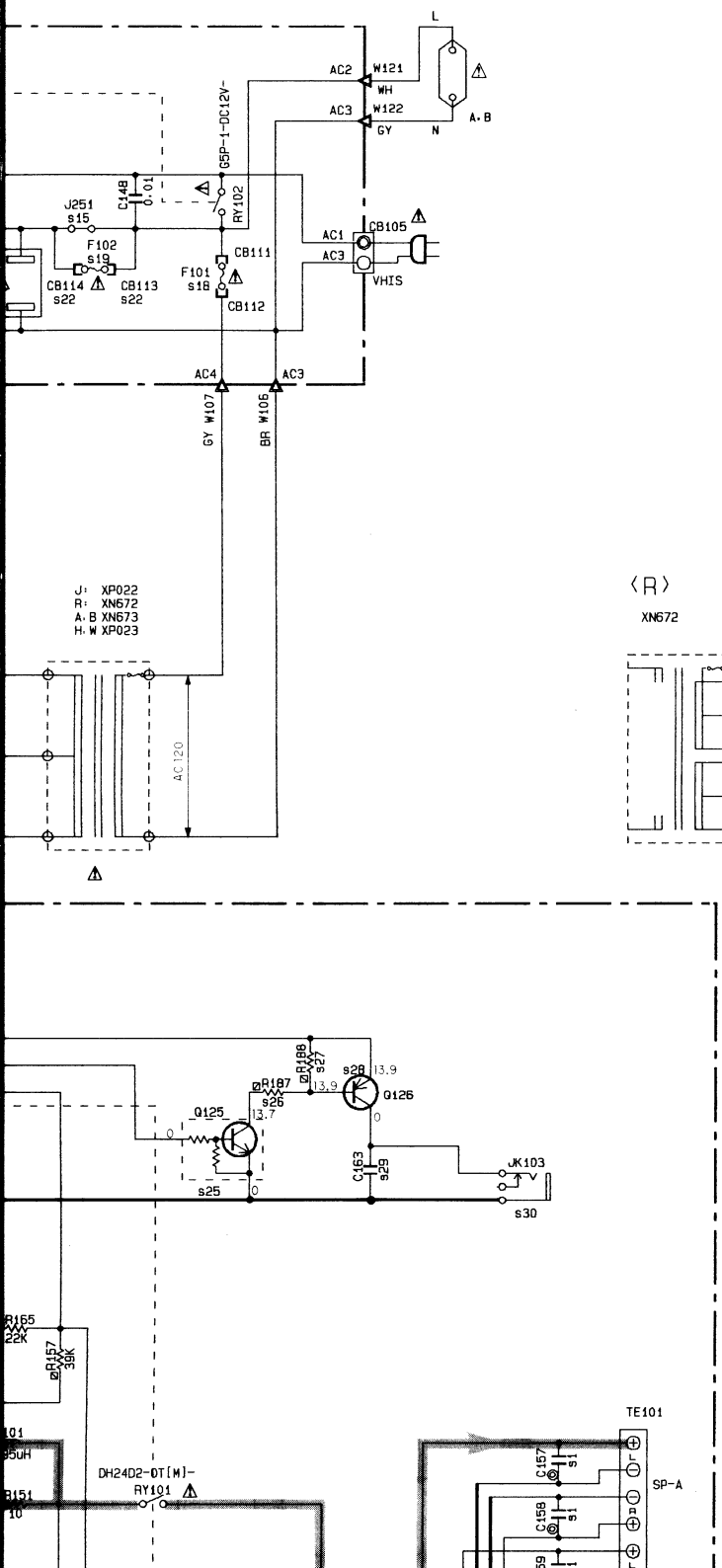
* *All voltage are measured with a 10MΩ/V DC electric volt meter.*
* *Schematic diagram is subject to change without notice.*

■ SCHEMATIC DIAGRAM (MAIN)



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.

2SA893A(D,E) 2SB560(E,F) 2SC2240(GR,BL) 2SC2878(A,B) 2SC1890A(D,E) 2SC2229(O,Y)	2SC3330(R,S,T) DTC114YS	2SA1708(S,T) 2SC4488(S,T)	2SC3852	2SC4466(O,P,Y) 2SA1695(O,P,Y) 2SC4468(O,P,Y)	1SS133 1SS139-100 1SS270A HZS12A2TD HZS152TD	S4VB20

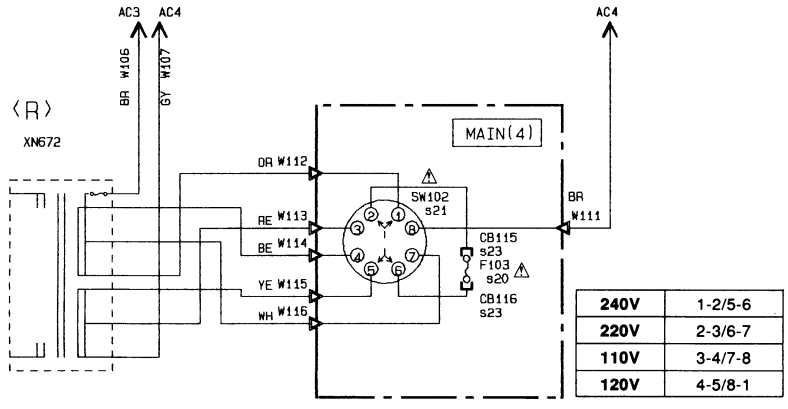


CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⧺
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	⧺
◉	CERAMIC TUBULAR CAPACITOR	
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
ⓘ	MICA CAPACITOR	
Ⓟ	POLYPROPYLENE FILM CAPACITOR	
●	SEMICONDUCTIVE CERAMIC CAPACITOR	

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊠	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR



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

		J	R	A.B	H	W
s1	C153,154,157~160	X	X	X	X	0.01(VE32480)
s2	C152					0.01(UA35410)
s3						
s4	R184	X	X	X	X	2.2
s5						
s6	R182	X	18K	X	X	X
s7	R181	X	100	X	X	X
s8	C149	330/25	330/63	330/25	330/25	330/25
s9	C150	X	100/16	X	X	X
s10	C151	X	10/16	X	X	X
s11	Q123	X	C4466[O/P/Y]	X	X	X
s12	Q124	X	C1890A[D/E]	X	X	X
s13	D114	X	HZS12A2TD	X	X	X
s14	J261	○	X	○	○	○
s15	J251	○	○	○	X	X
s16	T101	XC542	XC082	XC084	XC084	XC084
s17	JK102	VI32750	VI32750	X	VP72860	VP72860
s18	F101	5A125V	4A125V	T1.6A250V	T1.6A250V	T1.6A250V
s19	F102	X	X	X	T2.5A250V	T2.5A250V
s20	F103	X	T1.6A250V	X	X	X
s21	SW102	X	VA96180	X	X	X
s22	CB113,114	X	X	X	VP20650	VP20650
s23	CB115,116	X	VP20650	X	X	X
s24	TE101	VC31370	VC31370	VC31370	VK50620	VC31370
s25	Q125	X	DTC114YS	DTC114YS	DTC114YS	DTC114YS
s26	R187	X	2.2K	2.2K	2.2K	2.2K
s27	R188	X	10K	10K	10K	10K
s28	Q126	X	B560[E/F]	B560[E/F]	B560[E/F]	B560[E/F]
s29	C163	X	470P	470P	470P	470P
s30	JK103	X	VJ72680	VJ72680	VJ72680	VJ72680

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
※1		
※2	D105,112	HSS104 1SS133 1SS176

** All voltage are measured with a 10MΩ/V DC electric volt meter.*
** 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.

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

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

AX-380

P. C. B. MAIN

	Schm Ref.	PART NO.	Description	
*		VR349500	P.C.B.	MAIN(R)
*		VR349600	P.C.B.	MAIN(AB)
*		VR349700	P.C.B.	MAIN(H)
*		VR349800	P.C.B.	MAIN(W)
	CB101	VF728300	CN	6P
*	CB102	VR357800	CN.BS.PIN	7P
	CB103	VP768100	CN.BS.PIN	5P
	CB105	VG879900	CN.BS.PIN	2P
*	CB108	VQ585300	CN.BS.PIN	11P
*	CB109	VQ585300	CN.BS.PIN	11P
	CB111	VP206500	HOLDER.FUS	EYF-52BC
	CB112	VP206500	HOLDER.FUS	EYF-52BC
	CB113	VP206500	HOLDER.FUS	EYF-52BC(HW)
	CB114	VP206500	HOLDER.FUS	EYF-52BC(HW)
	CB115	VP206500	HOLDER.FUS	EYF-52BC(R)
	CB116	VP206500	HOLDER.FUS	EYF-52BC(R)
	C101	Vi377400	C.EL	4.7uF 63V
	C102	Vi377400	C.EL	4.7uF 63V
	C103	UA652100	C.MYLAR	100pF 50V
	C104	UA652100	C.MYLAR	100pF 50V
	C105	VK533900	C.PP	100pF 200V
	C106	VK533900	C.PP	100pF 200V
	C107	UA253470	C.MYLAR	4700pF 50V
	C108	UA253470	C.MYLAR	4700pF 50V
	C109	VG291200	C.EL	47uF 50V
	C110	VG291200	C.EL	47uF 50V
	C111	VQ245400	C.PP	33pF 200V
	C112	VQ245400	C.PP	33pF 200V
	C113	VG291200	C.EL	47uF 50V
	C114	VG291200	C.EL	47uF 50V
	C115	VE742600	C.EL	47uF 25V
	C116	VE742600	C.EL	47uF 25V
*	C117	VR325000	C.MYLAR	100pF 100V
*	C118	VR325000	C.MYLAR	100pF 100V
*	C119	VR325000	C.MYLAR	100pF 100V
*	C120	VR325000	C.MYLAR	100pF 100V
*	C121	VK399200	C.MYLAR.ML	0.39uF 50V
*	C122	VK399200	C.MYLAR.ML	0.39uF 50V
	C125	UA254680	C.MYLAR	0.068uF 50V
	C126	UA254680	C.MYLAR	0.068uF 50V
	C128	VG291200	C.EL	47uF 50V
	C129	VK699400	C.EL	330uF 63V
	C130	UJ895220	C.EL	0.22uF 100V
	C131	Vi377400	C.EL	4.7uF 63V
	C132	VF760000	C.EL	100uF 10V
	C133	VF760000	C.EL	100uF 10V
	C134	VG291000	C.EL	22uF 50V
	C136	UA655220	C.MYLAR	0.22uF 50V
	C137	VG291000	C.EL	22uF 50V
	C138	VG291000	C.EL	22uF 50V
	C139	VG291000	C.EL	22uF 50V
⚠*	C140	VR024000	C.EL	6800uF 56V
⚠*	C141	VR024000	C.EL	6800uF 56V

* New Parts

	Schm Ref.	PART NO.	Description	
⚠*	C142	VR325400	C.MYLAR	0.1uF 100V
⚠*	C143	VR325400	C.MYLAR	0.1uF 100V
	C147	UA254100	C.MYLAR	0.01uF 50V
	C148	Fi514100	C.CE.SAFTY	0.01uF VA-1
⚠	C149	VG289100	C.EL	330uF 25V(ABHW)
⚠	C149	VK699400	C.EL	330uF 63V(R)
	C150	VG288900	C.EL	100uF 25V(R)
	C151	VG290900	C.EL	10uF 50V(R)
	C152	UA254100	C.MYLAR	0.01uF 50V(W)
	C153	VE324800	C.MYLAR.ML	0.01uF 50V(W)
	C154	VE324800	C.MYLAR.ML	0.01uF 50V(W)
	C157	VE324800	C.MYLAR.ML	0.01uF 50V(W)
	C158	VE324800	C.MYLAR.ML	0.01uF 50V(W)
	C159	VE324800	C.MYLAR.ML	0.01uF 50V(W)
	C160	VE324800	C.MYLAR.ML	0.01uF 50V(W)
	C161	UA254100	C.MYLAR	0.01uF 50V
	C162	UA254100	C.MYLAR	0.01uF 50V
	C163	FG212470	C.CE	470pF 50V
*	C165	UK665470	C.EL	0.47uF 50V
	D101	VN008700	DIODE	1SS270A
	D102	VN008700	DIODE	1SS270A
	D103	VN008700	DIODE	1SS270A
	D104	VN008700	DIODE	1SS270A
	D105	VM975800	DIODE.ZENR	HZS152TD 15V
	D106	VD631600	DIODE	1SS133,176,HSS104
	D108	VN008700	DIODE	1SS270A
	D109	VM975800	DIODE.ZENR	HZS152TD 15V
	D110	VM975800	DIODE.ZENR	HZS152TD 15V
⚠	D111	iH001090	DIODE.BRG	S4VB20 2.6A 200V
	D112	VD631600	DIODE	1SS133,176,HSS104
⚠	D113	VH801600	DIODE	1SR139-100
	D114	VM975500	DIODE.ZENR	HZS12A2TD 12V(R)
⚠	F101	KB003060	FUSE	TL1.6A 250V(ABHW)
⚠	F101	KB003620	FUSE	T4.0A 125V(R)
⚠	F102	KB000690	FUSE	T2.5A 250V(HW)
⚠	F103	KB003060	FUSE	TL1.6A 250V(R)
⚠	FR101	VK188400	R.FUS	330Ω 1/4W
⚠	FR102	VK188400	R.FUS	330Ω 1/4W
	FR103	VK189000	R.FUS	1KΩ 1/4W
	FR104	VK189000	R.FUS	1KΩ 1/4W
	JK101	LB301720	JACK.PHONE	
⚠	JK102	Vi327500	OUTLET.AC	3P(R)
⚠	JK102	VP728600	OUTLET.AC	3P(HW)
	JK103	VJ726800	JACK.MNI	
*	L101	VR906600	COIL	0.95uH
*	L102	VR906600	COIL	0.95uH
⚠*	Q101	VP883000	TR	2SA893A D,E
⚠*	Q102	VP883000	TR	2SA893A D,E
⚠*	Q103	VP883000	TR	2SA893A D,E
⚠*	Q104	VP883000	TR	2SA893A D,E
⚠*	Q105	VR325600	TR	2SC2229 O,Y
⚠*	Q106	VR325600	TR	2SC2229 O,Y
⚠	Q107	VC218900	TR	2SC3330 R,S,T

* New Parts

P. C. B. MAIN & OPERATION

	Schm Ref.	PART NO.	Description	
⚠	Q108	VC218900	TR	2SC3330 R,S,T
⚠*	Q109	VP872700	TR	2SC4488 S,T
⚠*	Q110	VP872700	TR	2SC4488 S,T
⚠*	Q111	VP872600	TR	2SA1708 S,T
⚠*	Q112	VP872600	TR	2SA1708 S,T
*	Q113	VP883100	TR	2SC1890A D,E
*	Q114	VP883100	TR	2SC1890A D,E
*	Q115	VP883000	TR	2SA893A D,E
	Q116	VC218900	TR	2SC3330 R,S,T
	Q117	VC218900	TR	2SC3330 R,S,T
	Q118	iC287820	TR	2SC2878 A,B
	Q119	VC218900	TR	2SC3330 R,S,T
⚠	Q121	VC938500	TR	2SC3852
	Q122	iC224030	TR	2SC2240 GR,BL
	Q123	VP768300	TR	2SC4466 O,P,Y(R)
*	Q124	VP883100	TR	2SC1890A D,E(R)
*	Q125	VR827400	TR.DGT	DTC114YS TP
	Q126	iB056020	TR	2SB560 E,F
⚠	Q129A	iX630850	TR	2SA1695 O,P,Y
⚠	Q129C	iX630860	TR	2SC4468 O,P,Y
⚠	Q130A	iX630850	TR	2SA1695 O,P,Y
⚠	Q130C	iX630860	TR	2SC4468 O,P,Y
	Q133	iC287820	TR	2SC2878 A,B
⚠*	Q134	VP872600	TR	2SA1708 S,T
⚠	R113	HV454470	R.CAR.FP	47Ω 1/4W
⚠	R114	HV454470	R.CAR.FP	47Ω 1/4W
	R127	HV456270	R.CAR.FP	2.7KΩ 1/4W
	R128	HV456270	R.CAR.FP	2.7KΩ 1/4W
	R131	HV456100	R.CAR.FP	1KΩ 1/4W
	R132	HV456100	R.CAR.FP	1KΩ 1/4W
	R133	HV453470	R.CAR.FP	4.7Ω 1/4W
	R134	HV453470	R.CAR.FP	4.7Ω 1/4W
	R135	HV453470	R.CAR.FP	4.7Ω 1/4W
	R136	HV453470	R.CAR.FP	4.7Ω 1/4W
⚠	R137	VJ695400	R.WW	0.22Ωx2 3W
⚠	R138	VJ695400	R.WW	0.22Ωx2 3W
⚠	R145	HL314100	R.MTL.OXD	10Ω 1W
⚠	R146	HL314100	R.MTL.OXD	10Ω 1W
	R151	HV454100	R.CAR.FP	10Ω 1/4W
	R152	HV454100	R.CAR.FP	10Ω 1/4W
	R159	VP944500	R.MTL.OXD	390Ω 1W
	R160	VP944500	R.MTL.OXD	390Ω 1W
⚠	R163	HL314470	R.MTL.OXD	47Ω 1W
⚠	R171	HL315560	R.MTL.OXD	560Ω 1W
	R177	VP939700	R.MTL.OXD	4.7Ω 1W
	R179	HV457100	R.CAR.FP	10KΩ 1/4W
	R192	HL315820	R.MTL.OXD	820Ω 1W
⚠	R193	HL315560	R.MTL.OXD	560Ω 1W
⚠	RY101	VK438300	RELAY	DH24D2-0TM-II
⚠	RY102	VH230800	RELAY	G5P-1-DC12V
	SW101	VJ850200	SW.PUSH	PSE021A2KP 2
⚠	SW102	VA961800	VOLT.SELCT	ESE-37247-F(R)
⚠	T101	XC082A00	TRANS.PWR	(R)

*New Parts

	Schm Ref.	PART NO.	Description	
⚠	T101	XC084A00	TRANS.PWR	(ABHW)
	TE101	VC313700	TERM.SP	8P(RABW)
	TE101	VK506200	TERM.SP	8P(H)
*	W108	VR759400	CN.FLAT	11P 120mm
		VJ828000	PIN	IMSA-6024-03E
		BB071360	SCR.TERM	8.3x13(ABW)
		BB069510	GND.MTL	No.6951
*		VR349900	P.C.B.	OPERATION(RAB)
*		VR350100	P.C.B.	OPERATION(HW)
	CB301	Vi878800	CN.BS.PIN	10P
*	CB302	Vi878400	CN.BS.PIN	6P
*	CB303	Vi879000	CN.BS.PIN	12P
*	CB401	Vi878600	CN.BS.PIN	8P
*	CB402	VR361400	CN.BS.PIN	7P
*	C301	VG722100	C.EL	1uF 50V
	C302	VG290900	C.EL	10uF 50V
	C303	UA652100	C.MYLAR	100pF 50V
	C304	UA652100	C.MYLAR	100pF 50V
	C305	UA652100	C.MYLAR	100pF 50V
	C306	UA652100	C.MYLAR	100pF 50V
	C307	VG290900	C.EL	10uF 50V
	C308	VG291000	C.EL	22uF 50V
	C309	FG212680	C.CE	680pF 50V
	C310	UA654560	C.MYLAR	0.056uF 50V
	C311	UA654560	C.MYLAR	0.056uF 50V
	C312	VG291000	C.EL	22uF 50V
	C313	FG212680	C.CE	680pF 50V
	C314	VG290500	C.EL	1uF 50V
	C315	VE551900	C.CE	100pF 50V
	C316	VG290600	C.EL	2.2uF 50V
	C317	VG290600	C.EL	2.2uF 50V
	C318	VE551900	C.CE	100pF 50V
	C319	VG290500	C.EL	1uF 50V
	C320	VG291200	C.EL	47uF 50V
	C321	UA655120	C.MYLAR	0.12uF 50V
	C322	UA654330	C.MYLAR	0.033uF 50V
	C323	UA654330	C.MYLAR	0.033uF 50V
	C324	UA655120	C.MYLAR	0.12uF 50V
	C325	VG291200	C.EL	47uF 50V
	C326	VG288100	C.EL	2200uF 16V
	C327	VG288100	C.EL	2200uF 16V
	C401	VD930900	C.CE.SMI	0.1uF 25V
	C402	VJ836900	C.EL	10uF 16V
	C403	VD930900	C.CE.SMI	0.1uF 25V
	C404	VJ836900	C.EL	10uF 16V
*	C405	VR357400	C.EL	4700uF 5.5V
	C406	VJ839100	C.EL	1uF 50V
	D401	VP594000	LED(re)	SLR-305VCA47
	D402	VD631600	DIODE	1SS133,176,HSS104
	D403	VD631600	DIODE	1SS133,176,HSS104

*New Parts

P. C. B. OPERATION & INPUT

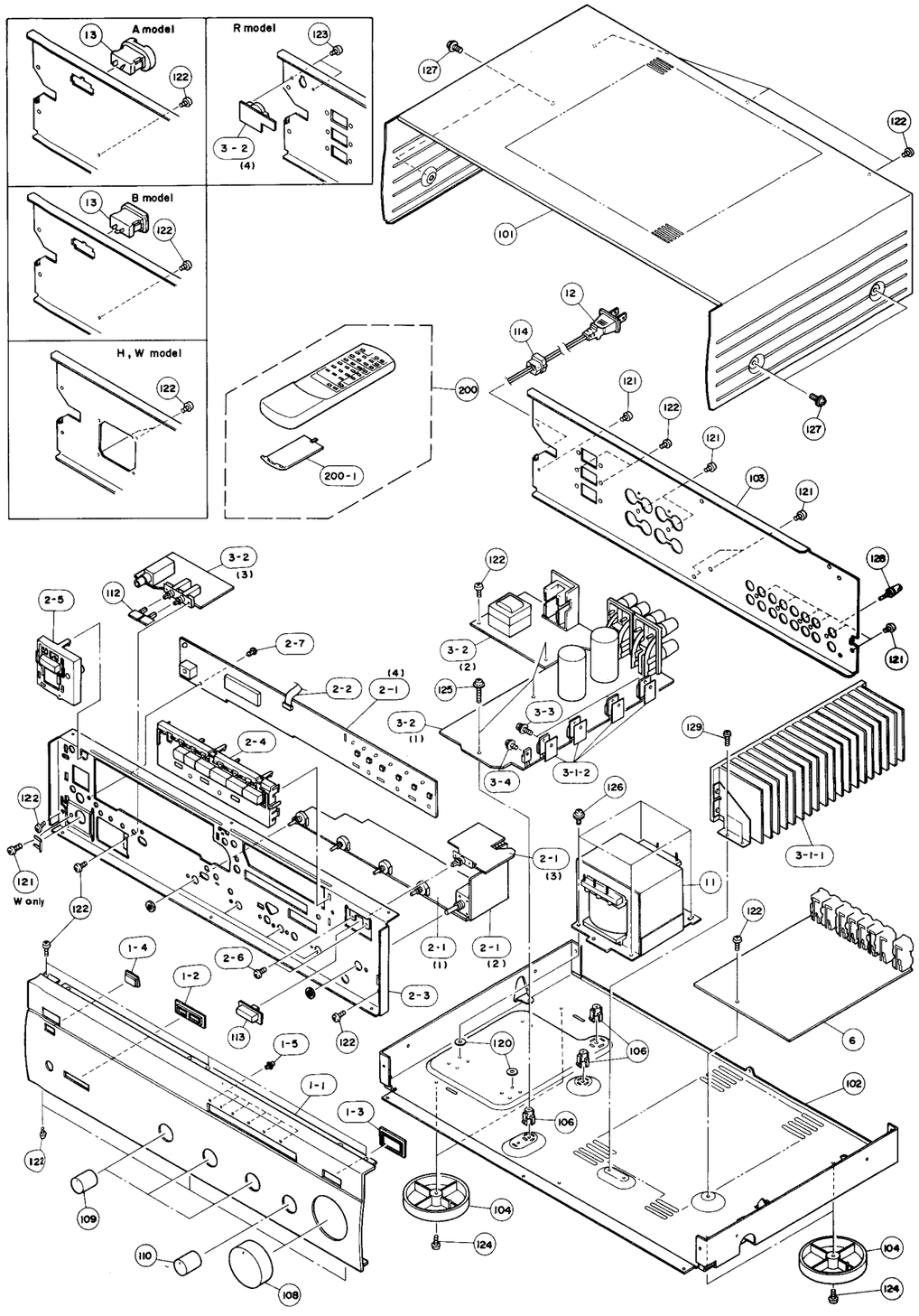
	Schm Ref.	PART NO.	Description	
	D404	VD631600	DIODE	1SS133,176,HSS104
	D405	VD631600	DIODE	1SS133,176,HSS104
	D406	VD631600	DIODE	1SS133,176,HSS104
	D407	VM974500	DIODE.ZENR	HZS6C2TD 6.0V
	D408	VM973900	DIODE.ZENR	HZS4C2TD 4.0V
	D409	VP593800	LED(or)	SLR-305DCA47
	D410	VP593800	LED(or)	SLR-305DCA47
	D411	VP593800	LED(or)	SLR-305DCA47
	D412	VP593800	LED(or)	SLR-305DCA47
	D413	VP593800	LED(or)	SLR-305DCA47
	D414	VP593800	LED(or)	SLR-305DCA47
	D415	VM975800	DIODE.ZENR	HZS152TD 15V
	IC301	XM356A00	IC	NJM2068LD
	IC302	XM356A00	IC	NJM2068LD
*	IC401	XN563A00	IC	LC66304
	Q301	iC287820	TR	2SC2878 A,B
	Q302	iC287820	TR	2SC2878 A,B
	Q401	VD678500	TR.DGT	DTA114ES
	Q402	iC1815C0	TR	2SC1815 Y
	Q403	iA093320	TR	2SA933S Q,R
	Q404	iC174020	TR	2SC1740S R,S
	R425	HV454100	R.CAR.FP	10Ω 1/4W
*	SW301	VR402500	SW.PUSH	PSK01-AF
	SW401	VG392900	SW.TACT	SKHVAA
	SW402	VG392900	SW.TACT	SKHVAA
	SW403	VG392900	SW.TACT	SKHVAA
	SW404	VG392900	SW.TACT	SKHVAA
	SW405	VG392900	SW.TACT	SKHVAA
	SW406	VG392900	SW.TACT	SKHVAA
	SW407	VG392900	SW.TACT	SKHVAA
*	U401	VR023400	L.DETCT	SPS-424-1
*	VR301	VR710500	VR.MTR	A100KΩ
*	VR302	VP700700	VR	A100KΩ
*	VR303	VP742000	VR	MN50KΩ
*	VR304	VP741800	VR	B20KΩ
*	VR305	VP741900	VR	G25KΩ
*	W401	VR759300	CN.FLAT	8P 200mm
	XL401	VD827600	RSNR.CE	4MHz
*		VR316500	BIND.TIE	CV-70
*		VR350200	P.C.B.	INPUT(RABH)
*		VR350300	P.C.B.	INPUT(W)
*	CB502	VK025200	CN.BS.PIN	8P
*	CB503	VF728200	CN.BS.PIN	10P
*	CB504	VK025600	CN.BS.PIN	12P
	C501	UA652220	C.MYLAR	220pF 50V(W)
	C502	UA652220	C.MYLAR	220pF 50V(W)
	C503	VG286900	C.EL	220uF 10V
	C504	UA652220	C.MYLAR	220pF 50V
	C505	UA653910	C.MYLAR	9100pF 50V
	C506	UA653910	C.MYLAR	9100pF 50V

*New Parts

	Schm Ref.	PART NO.	Description	
	C507	UA652220	C.MYLAR	220pF 50V
	C508	VG286900	C.EL	220uF 10V
	C509	VK534000	C.PP	220pF 200V
	C510	VK534000	C.PP	220pF 200V
	C511	VG278400	C.CE.TUBLR	220pF 50V
	C512	VG278400	C.CE.TUBLR	220pF 50V
	C513	VG278400	C.CE.TUBLR	220pF 50V
	C514	VG278400	C.CE.TUBLR	220pF 50V
	C515	VG278400	C.CE.TUBLR	220pF 50V
	C516	VG278400	C.CE.TUBLR	220pF 50V
	C517	UA652220	C.MYLAR	220pF 50V
	C518	UA652220	C.MYLAR	220pF 50V
	C519	VG278400	C.CE.TUBLR	220pF 50V
	C520	VG278400	C.CE.TUBLR	220pF 50V
	C521	UA652220	C.MYLAR	220pF 50V
	C522	UA652220	C.MYLAR	220pF 50V
	C523	VG290600	C.EL	2.2uF 50V
	C524	VG291200	C.EL	47uF 50V
	C525	UA654330	C.MYLAR	0.033uF 50V
	C526	UA654330	C.MYLAR	0.033uF 50V
	C527	VG290600	C.EL	2.2uF 50V
	C529	VG291200	C.EL	47uF 50V
	C530	VG291200	C.EL	47uF 50V
	C531	VG291200	C.EL	47uF 50V
	C534	VF467300	C.CE.TUBLR	0.01uF 16V
	C535	VG290900	C.EL	10uF 50V
	C537	VF467300	C.CE.TUBLR	0.01uF 16V
	C538	VF467300	C.CE.TUBLR	0.01uF 16V
	C539	VF467300	C.CE.TUBLR	0.01uF 16V
	C540	VF467300	C.CE.TUBLR	0.01uF 16V
	C541	VH053100	C.CE.TUBLR	0.1uF 50V(W)
	C542	VF466800	C.CE.TUBLR	100pF 50V(W)
	C543	VH053100	C.CE.TUBLR	0.1uF 50V(W)
	C545	VH053100	C.CE.TUBLR	0.1uF 50V(W)
	D502	VD631600	DIODE	1SS133,176,HSS104
	D503	VD631600	DIODE	1SS133,176,HSS104
	D504	VM975000	DIODE.ZENR	HZS9B2TD 9.0V
	D505	VM975000	DIODE.ZENR	HZS9B2TD 9.0V
	D506	VM974200	DIODE.ZENR	HZS5C2TD 5.0V
	D507	VD631600	DIODE	1SS133,176,HSS104
	IC501	XM356A00	IC	NJM2068LD
	IC502	XA053A00	IC	TC4052BP
	IC503	iG055100	IC	TC4053BP
	IC504	iG055100	IC	TC4053BP
	IC506	XF494A00	IC	LB1641
*	PJ501	VS022100	JACK.PIN	6P
	PJ502	VJ696200	JACK.PIN	4P
	PJ503	VJ696200	JACK.PIN	4P
*	PJ504	VR765100	JACK.PIN	2P
	R558	HV454150	R.CAR.FP	15Ω 1/4W
*		VR435100	PLATE	W16

*New Parts

■ EXPLODED VIEW



■ MECHANICAL PARTS Note) Ø : Diameter

	Ref. No.	PART NO.	Description		Remarks	Markets
*	1-1	VQ793100	FRONT PANEL		BL	
*	1-1	VQ793200	FRONT PANEL		TI	
*	1-2	VQ793400	BUTTON GUIDE		SPEAKERS BL	
*	1-2	VQ793500	BUTTON GUIDE		SPEAKERS TI	
*	1-3	VQ793600	BUTTON GUIDE		POWER BL	
*	1-3	VQ793700	BUTTON GUIDE		POWER TI	
*	1-4	VQ853400	LENS, FILTER			
	1-5	VH897700	LENS	2.2Lx2.2		
*	2-1	VR349900	P.C.B. ASS'Y	OPERATION		(RAB)
*	2-1	VR350100	P.C.B. ASS'Y	OPERATION		(HW)
*	2-2	VR417000	CONNECTOR, FLAT CABLE	7P 200mm		
*	2-3	VQ794100	SUB CHASSIS			
*	2-4	VQ860700	BUTTON		INPUT BL	
*	2-4	VQ860800	BUTTON		INPUT TI	
*	2-5	VR011500	BUTTON		POWER BL	
*	2-5	VR011600	BUTTON		POWER TI	
	2-6	ED330066	BIND HEAD SCREW	3x6 FCRM3-BL		
*	2-7	VQ368600	PUSH RIVET	P3555-B		
*	3-1-1	VQ967700	HEAT SINK ASS'Y			
	3-1-2	VK195900	SHEET	19x24		
*	3-2	VR349500	P.C.B. ASS'Y	MAIN		(R)
*	3-2	VR349600	P.C.B. ASS'Y	MAIN		(AB)
*	3-2	VR349700	P.C.B. ASS'Y	MAIN		(H)
*	3-2	VR349800	P.C.B. ASS'Y	MAIN		(W)
	3-3	VK173200	SCREW, TRANSISTOR	3x15 SP FCM3		
	3-4	EK930010	BW HEAD TAPPING SCREW	3x8-8 FCRM3-BL		
*	6	VR350200	P.C.B. ASS'Y	INPUT		(RABH)
*	6	VR350300	P.C.B. ASS'Y	INPUT		(W)
⚠*	11	XN672A00	POWER TRANSFORMER			(R)
⚠*	11	XN673A00	POWER TRANSFORMER			(AB)
⚠*	11	XP023A00	POWER TRANSFORMER			(HW)
⚠*	12	VL238900	POWER CORD ASS'Y			(HW)
⚠	12	VN804500	POWER CORD ASS'Y			(B)
⚠*	12	VQ508500	POWER CORD ASS'Y			(R)
⚠*	12	VQ508600	POWER CORD ASS'Y			(A)
⚠	13	VJ775000	AC OUTLET	2P		(B)
⚠	13	VP418700	AC OUTLET	2P		(A)
*	101	VQ793800	TOP COVER		BL	
*	101	VQ793900	TOP COVER		TI	
*	102	VQ794000	CHASSIS			
*	103	VQ798300	REAR PANEL			(R)
*	103	VQ798400	REAR PANEL			(AB)
*	103	VQ798500	REAR PANEL			(H)
*	103	VQ798600	REAR PANEL			(W)
*	104	VQ780300	LEG	D60xH16		
*	106	VR264400	SPACER, H8			
	108	VQ945600	KNOB	φ42	VOLUME TI	
*	108	VR021500	KNOB	φ42	VOLUME BL	
*	109	VQ779200	KNOB	φ16	BASS TRE. BL	
*	109	VQ779300	KNOB	φ16	BASS TRE. TI	
*	110	VQ779500	KNOB	φ16L	LOUDNESS BL	
*	110	VQ779600	KNOB	φ16L	LOUDNESS TI	
*	112	VQ779000	BUTTON	3x14	SPEAKERS BL	

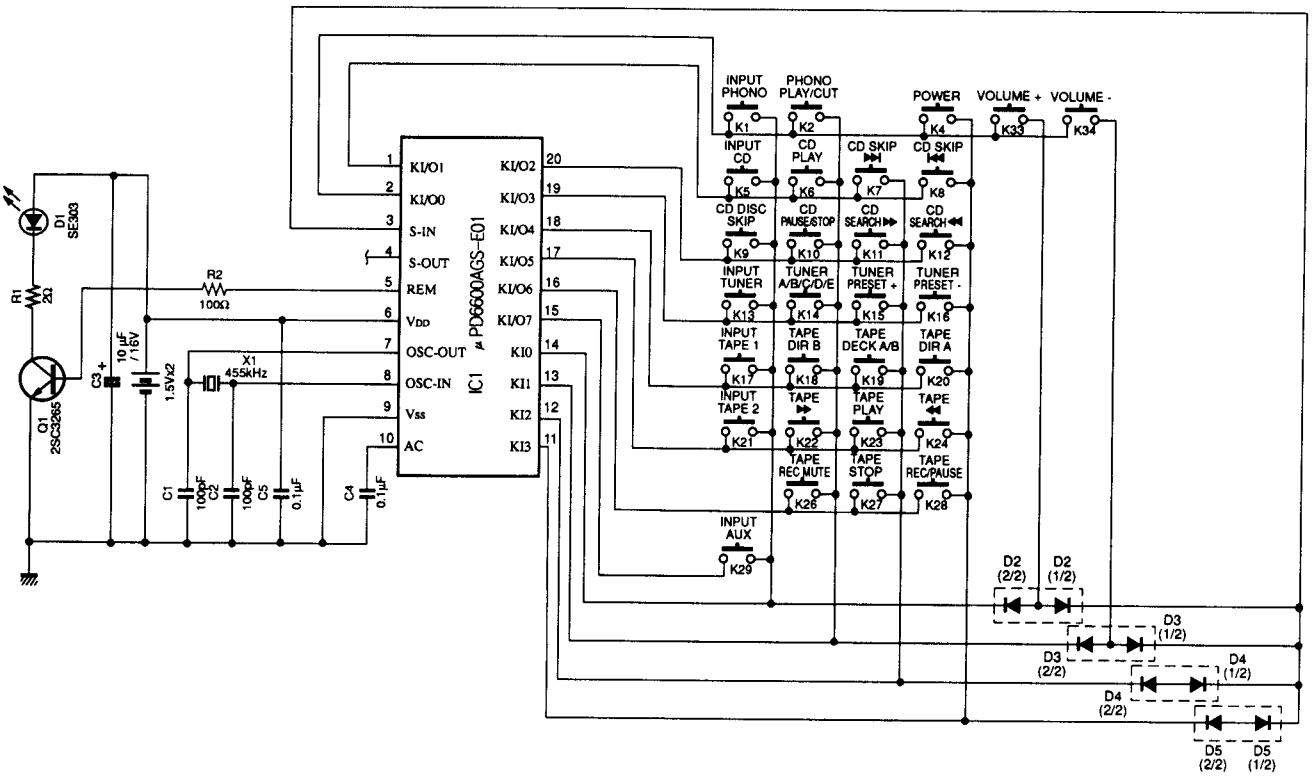
* New Parts

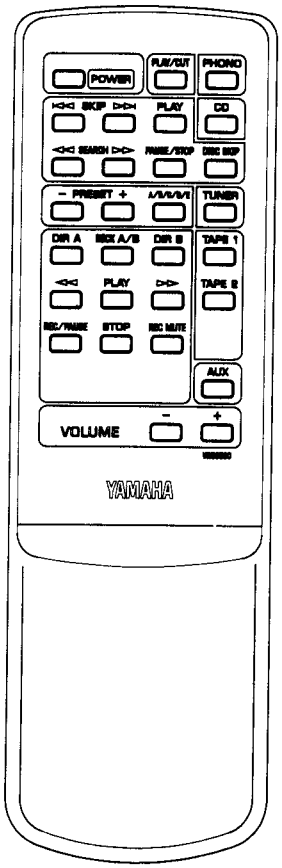
	Ref. No.	PART NO.	Description			Remarks	Markets
*	112	VQ779100	BUTTON	3x14		SPEAKERS TI	
*	113	VQ864000	BUTTON	8x25		CD DIR. BL	
*	113	VQ864100	BUTTON	8x25		CD DIR. TI	
	114	VN158600	CORD STOPPER	No. 2104			
*	120	VS069500	SPACER, T2				(HW)
	121	EN301010	BIND HEAD BONDING TAP. SCREW	3x8	FCRM3-BL		
	122	Ei330086	BIND HEAD B-TITE SCREW	3x8	FCRM3-BL		
	123	ED330066	BIND HEAD SCREW	3x6	FCRM3-BL		
	124	EK930010	BW HEAD TAPPING SCREW	3x8-8	FCRM3-BL		
	125	EL300480	BW HEAD B-TITE SCREW	3x15-8	FCRM3-BL		
	126	EK365020	BW HEAD SCREW	4x6	FCRM3-BL		(RAB)
	126	EL300470	BW HEAD S-TITE SCREW	4x8-10	FCRM3-BL		(W)
	127	EL300470	BW HEAD S-TITE SCREW	4x8-10	FCRM3-BL	BL	
	127	EX601150	BW HEAD S-TITE SCREW	4x8-10	FNM3-BL	TI	
	128	AA627310	GROUND TERMINAL				
	129	Ei030046	BIND HEAD TAPPING SCREW	3x4	ZMC2-Y		
			ACCESSORIES				
*	200	VR505900	REMOTE CONTROL TRANSMITTER				
*	200-1	CX675300	LID	70x31BLSMK		103RRS-028-01MR	
			BATTERY, MANGANESE	SUM-3, AA, R06			

* New Parts

REMOTE CONTROL TRANSMITTER

■ SCHEMATIC DIAGRAM

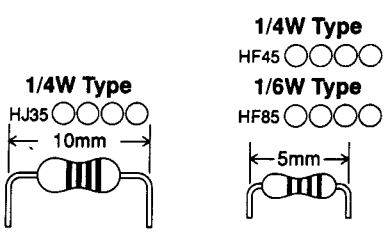




Key No.	Function	HEX	
		CUSTOM	DATA
1	INPUT PHONO	7A	14
2	PHONO PLAY/CUT	7A	0E
4	POWER	7A	1F
5	INPUT CD	7A	15
6	CD PLAY	7A	08
7	CD SKIP ▶▶I	7A	0A
8	CD SKIP I◀◀	7A	0B
9	CD DISC SKIP	7A	4F
10	CD PAUSE/STOP	7A	09
11	CD SEARCH ▶▶	7A	0C
12	CD SEARCH ◀◀	7A	0D
13	INPUT TUNER	7A	16
14	TUNER A/B/C/D/E	7A	12
15	TUNER PRESET +	7A	10
16	TUNER PRESET –	7A	11
17	INPUT TAPE 1	7A	18
18	TAPE DIR B	7A	40
19	TAPE DECK A/B	7A	06
20	TAPE DIR A	7A	07
21	INPUT TAPE 2	7A	19
22	TAPE ▶▶	7A	02
23	TAPE PLAY	7A	00
24	TAPE ◀◀	7A	01
26	TAPE REC MUTE	7A	05
27	TAPE STOP	7A	03
28	TAPE REC/PAUSE	7A	04
29	INPUT AUX	7A	17
33	VOLUME +	7A	1A
34	VOLUME –	7A	1B

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



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