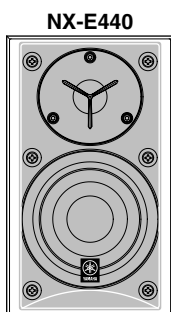


HOME CINEMA 5.1CH SPEAKER PACKAGE / HOME CINEMA 6.1CH SPEAKER PACKAGE

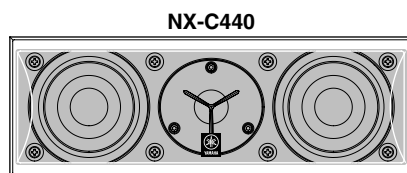
NS-P440/NS-P446

SERVICE MANUAL

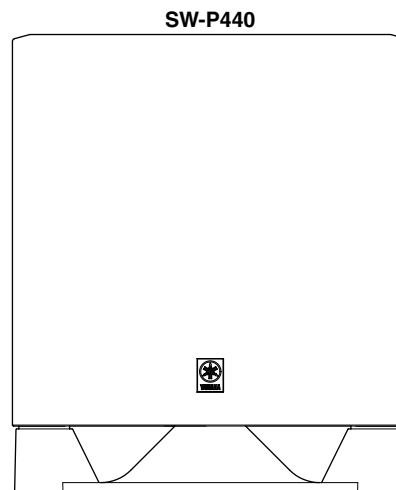
NS-P440/NS-P446 consists of the NX-E440, NX-C440 and SW-P440.



NX-E440
x 4 (for NS-P440)
x 5 (for NS-P446)



x 1



x 1

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	BLOCK DIAGRAM	8
SPECIFICATIONS	3~4	PRINTED CIRCUIT BOARD	9
INTERNAL VIEW	4	SCHEMATIC DIAGRAM	10
REAR PANELS	5~6	PARTS LIST	11~19
DISASSEMBLY PROCEDURES	7		



このサービスマニュアルは、エコマーク認定の再生紙を使用しています。
This Service Manual uses recycled paper.

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YAMAHA

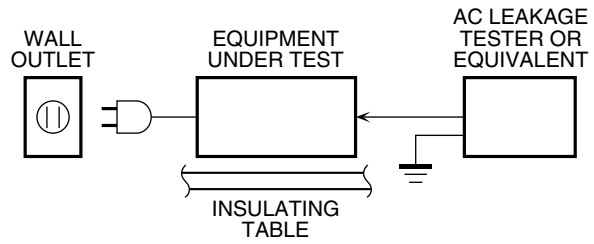
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan

'05.12

NS-P440/NS-P446

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.
- 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 0.15µF.



- 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!

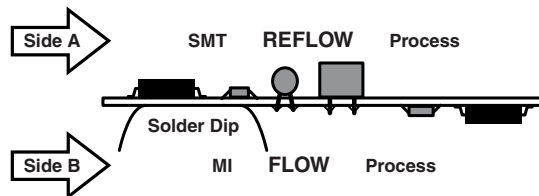
Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

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:

- 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.
- 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

■ NX-E440

Type 2-way Acoustic Suspension
Magnetic Shielding Type

Driver

Woofer 8 cm (3-1/8") Cone Magnetic Shielding Type x 1
Tweeter ... 2.5 cm (1") Balanced Dome Magnetic Shielding Type x 1

Frequency Response 65 Hz to 40 kHz

Impedance 6 ohms

Nominal Input 40 W

Maximum Input 80 W

Sensitivity 80 dB/2.83 V, 1 m

Crossover Frequency 7 kHz

Input Terminal Push type

Dimensions (W x H x D) 118 x 198 x 136.8 mm
(4-5/8" x 7-13/16" x 5-3/8")

Weight 1.4 kg (3 lbs. 1 oz.)

Finish

Silver color U, C, R, K, A, B, G, L models
Black color U, C, R, A, B, G, L models
Light Cherry color C, R, K, A, B, G, L models

Appropriate Speaker Stand SPS-30MMS

Appropriate Speaker Bracket SPM-8S

Speaker Bracket Accessory Screw Size M6

■ NX-C440

Type 2-way Acoustic Suspension
Magnetic Shielding Type

Driver

Woofer 7 cm (3-1/8") Cone Magnetic Shielding Type x 2
Tweeter ... 2.5 cm (1") Balanced Dome Magnetic Shielding Type x 1

Frequency Response 65 Hz to 40 kHz

Impedance 6 ohms

Nominal Input 40 W

Maximum Input 100 W

Sensitivity 82 dB/2.83 V, 1 m

Crossover Frequency 8 kHz

Input Terminal Push type

Dimensions (W x H x D) 285 x 99 x 129.7 mm
(11-3/16" x 3-7/8" x 5-1/8")

Weight 1.9 kg (4 lbs. 3 oz.)

Finish

Silver color U, C, R, K, A, B, G, L models
Black color U, C, R, A, B, G, L models
Light Cherry color C, R, K, A, B, G, L models

■ SW-P440

Type Advanced Yamaha Active Servo Technology II

Output Power 50 W (100 Hz, 5 ohms 10% T.H.D)

Dynamic Power 100 W, 5 ohms

Input Impedance

INPUT (P.J) 12 k-ohms

Frequency Response 30 Hz to 180 Hz

Driver 16cm (6-5/16") Cone Woofer
Magnetic Shielding Type

Input Section

INPUT RCA Pin Jack

Operation Section

Power Switch, Volume Control, LED indicator

Power Supply

U, C models AC 120 V, 60 Hz

R, L models AC 110-120 / 220-240 V, 50 / 60 Hz

K model AC 220 V, 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) 280 x 325 x 295.3 mm
(11" x 12-13/16" x 11-5/8")

Weight 8.2 kg (18 lbs. 1 oz.)

Finish

Silver color U, C, R, K, A, B, G, L models

Black color U, C, R, A, B, G, L models

Light Cherry color C, R, K, A, B, G, L models

■ ACCESSORIES

Speaker Cable (4 m) x 3, Speaker Cable (15 m) x 2 [for NS-P440] / x 3 [for NS-P446], Fastener x 2 [for NX-C440],
Subwoofer Cable (5 m) x 1, Nonskid pad x 4 [for SW-P440]

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

U U.S.A. model

C Canadian model

R General model

K Korean model

A Australian model

B British model

G European model

L Singapore model



Advanced YST

Advanced Yamaha Active Servo Technology is a unique system to let the speaker unit have a perfectly linear motion by the speaker and amplifier combination.

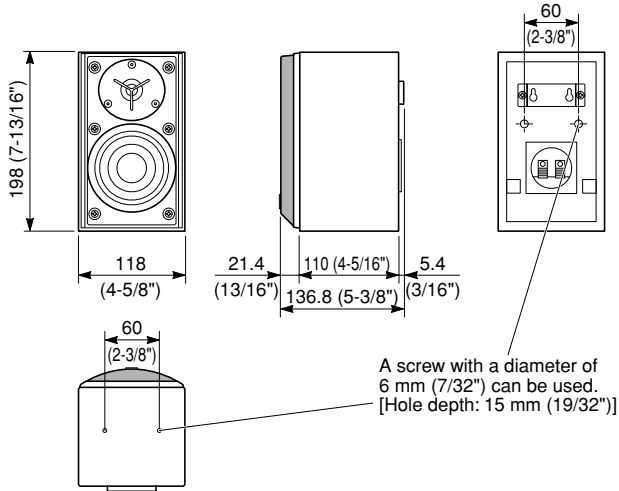


QD-Bass Technology

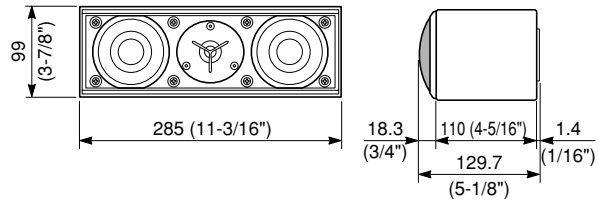
QD-Bass (Quatre Dispersion Bass) technology is a Yamaha unique technology to radiate the sound efficiently in four horizontal direction.

• DIMENSIONS

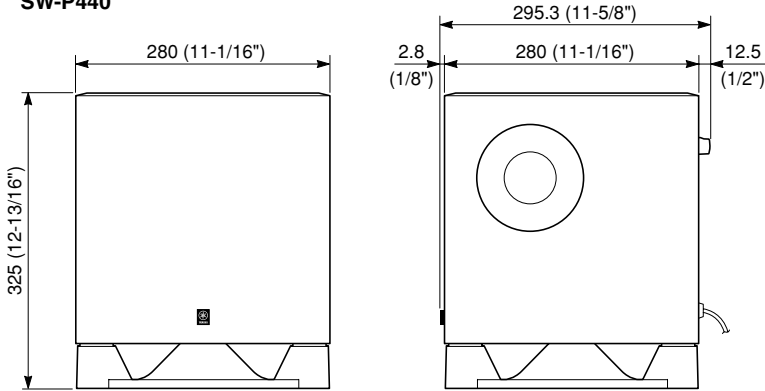
NS-E440



NS-C440

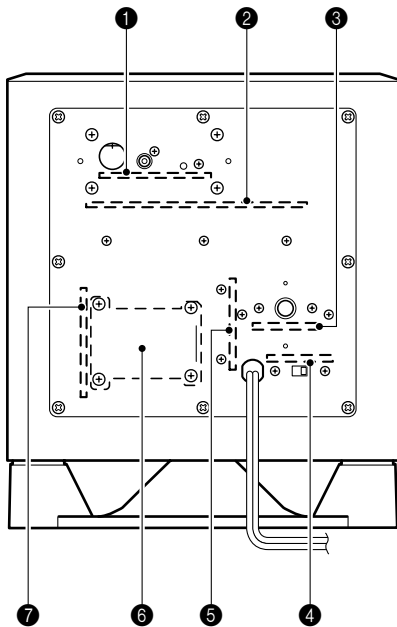


SW-P440



Unit: mm (inch)

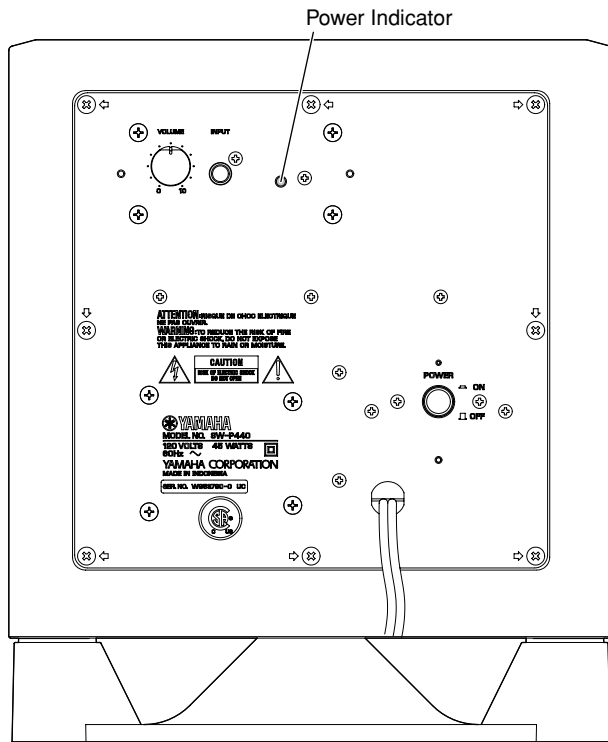
■ INTERNAL VIEW



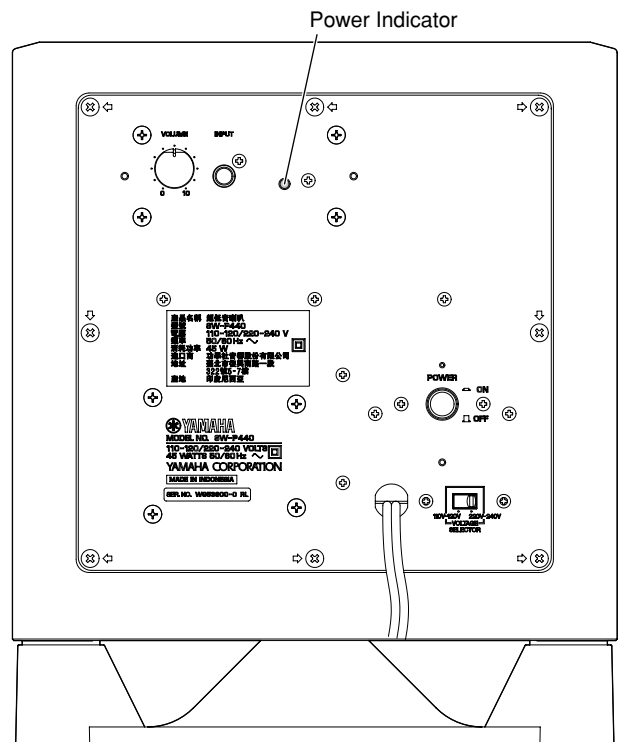
- ① MAIN (3) P.C.B.
- ② MAIN (1) P.C.B.
- ③ MAIN (5) P.C.B.
- ④ MAIN (9) P.C.B. (R, L models)
- ⑤ MAIN (2) P.C.B.
- ⑥ Power Transformer
- ⑦ MAIN (7) P.C.B. (U, C, K, A, B, G models)
MAIN (10) P.C.B. (R, L models)

REAR PANELS

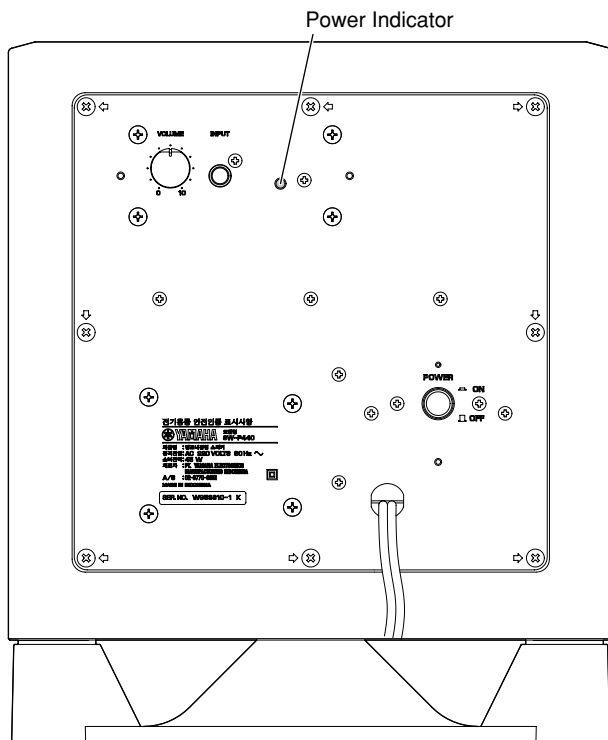
- SW-P440
U, C models



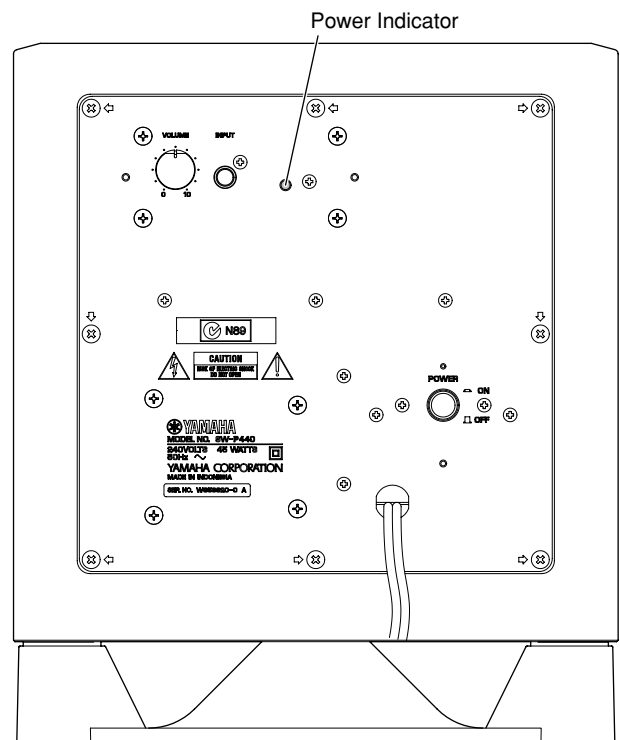
- SW-P440
R model



- SW-P440
K model

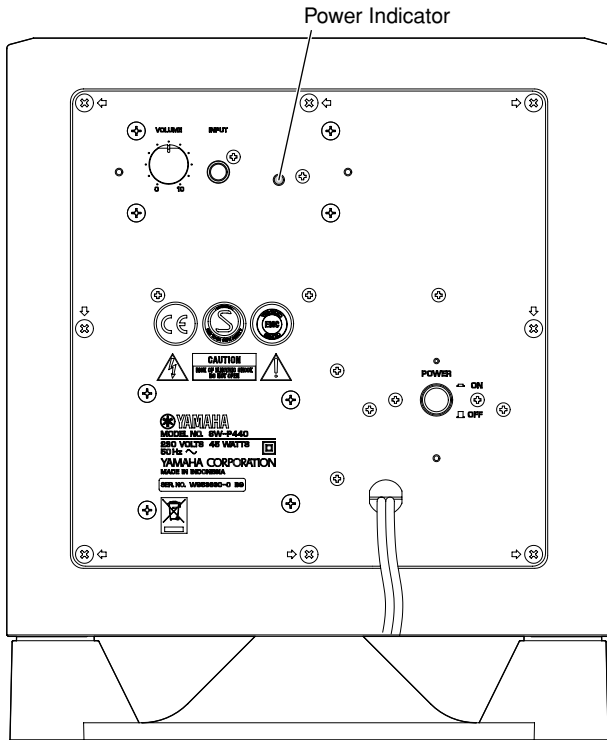


- SW-P440
A model

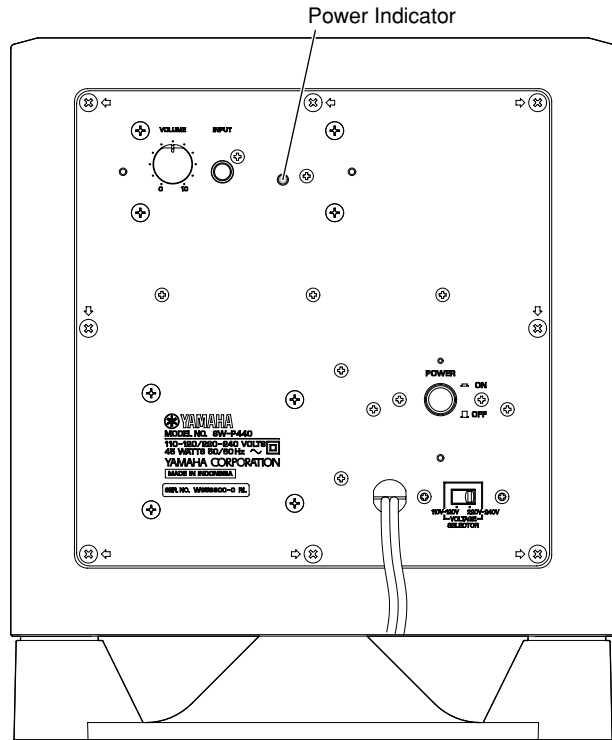


NS-P440/NS-P446

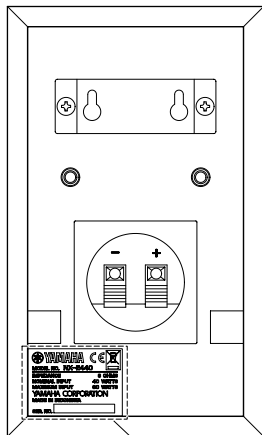
- SW-P440
B, G models



- SW-P440
L model



- NX-E440



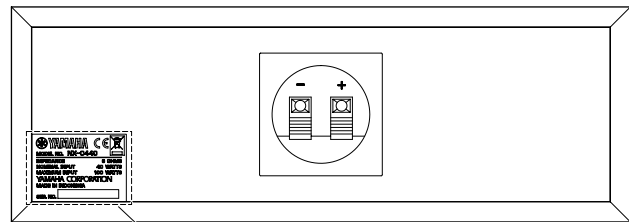
YAMAHA CE X
MODEL NO. NX-E440
250 VOLTS 48 WATTS
115V-250V/50-60Hz
YAMAHA CORPORATION
MADE IN INDONESIA

B, G models

YAMAHA CE X
MODEL NO. NX-E440
250 VOLTS 48 WATTS
115V-250V/50-60Hz
YAMAHA CORPORATION
MADE IN INDONESIA

U, C, R, K, A, L models

- NX-C440



YAMAHA CE X
MODEL NO. NX-C440
250 VOLTS 48 WATTS
115V-250V/50-60Hz
YAMAHA CORPORATION
MADE IN INDONESIA

B, G models

YAMAHA CE X
MODEL NO. NX-C440
250 VOLTS 48 WATTS
115V-250V/50-60Hz
YAMAHA CORPORATION
MADE IN INDONESIA

U, C, R, K, A, L models

NS-P440/NS-P446

DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

Disconnect the power cable from the AC outlet.

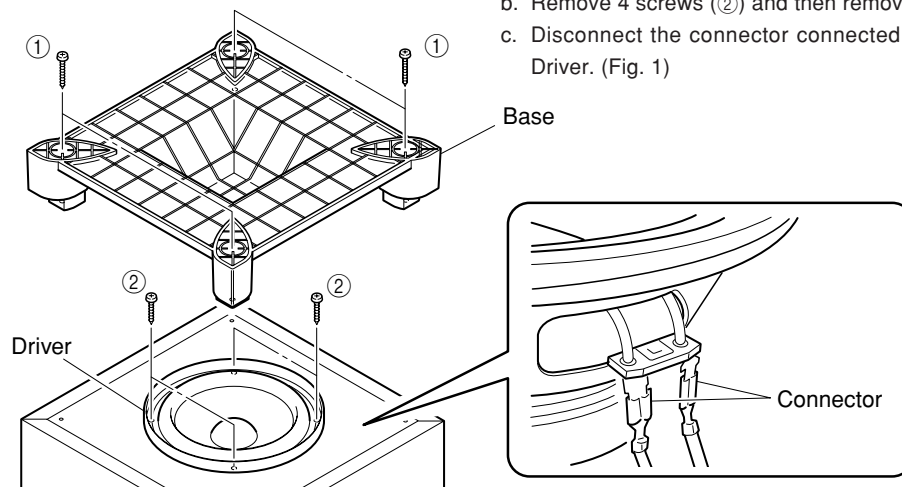


Fig. 1

1. Removal of Driver

- Remove 4 screws (①) and then remove the Base. (Fig. 1)
- Remove 4 screws (②) and then remove the Driver. (Fig. 1)
- Disconnect the connector connected to the terminal of the Driver. (Fig. 1)

2. Removal of Rear Panel Ass'y

- Remove 8 screws (③). (Fig. 2)
* Screws (③) are identified with arrow marks (◀).
- Pull out the rear panel ass'y. (Fig. 2)

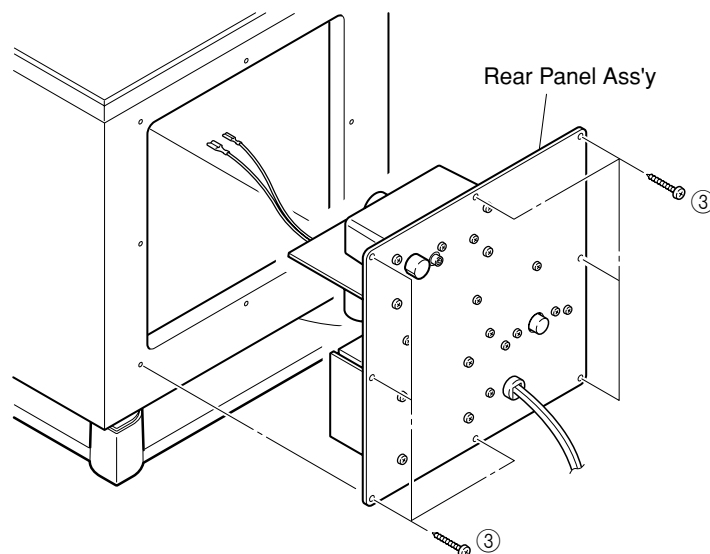


Fig. 2

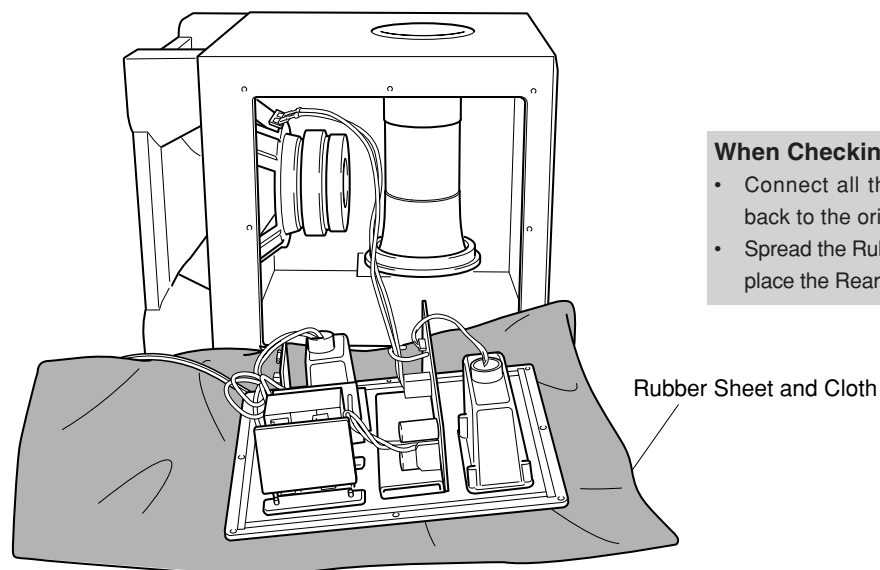
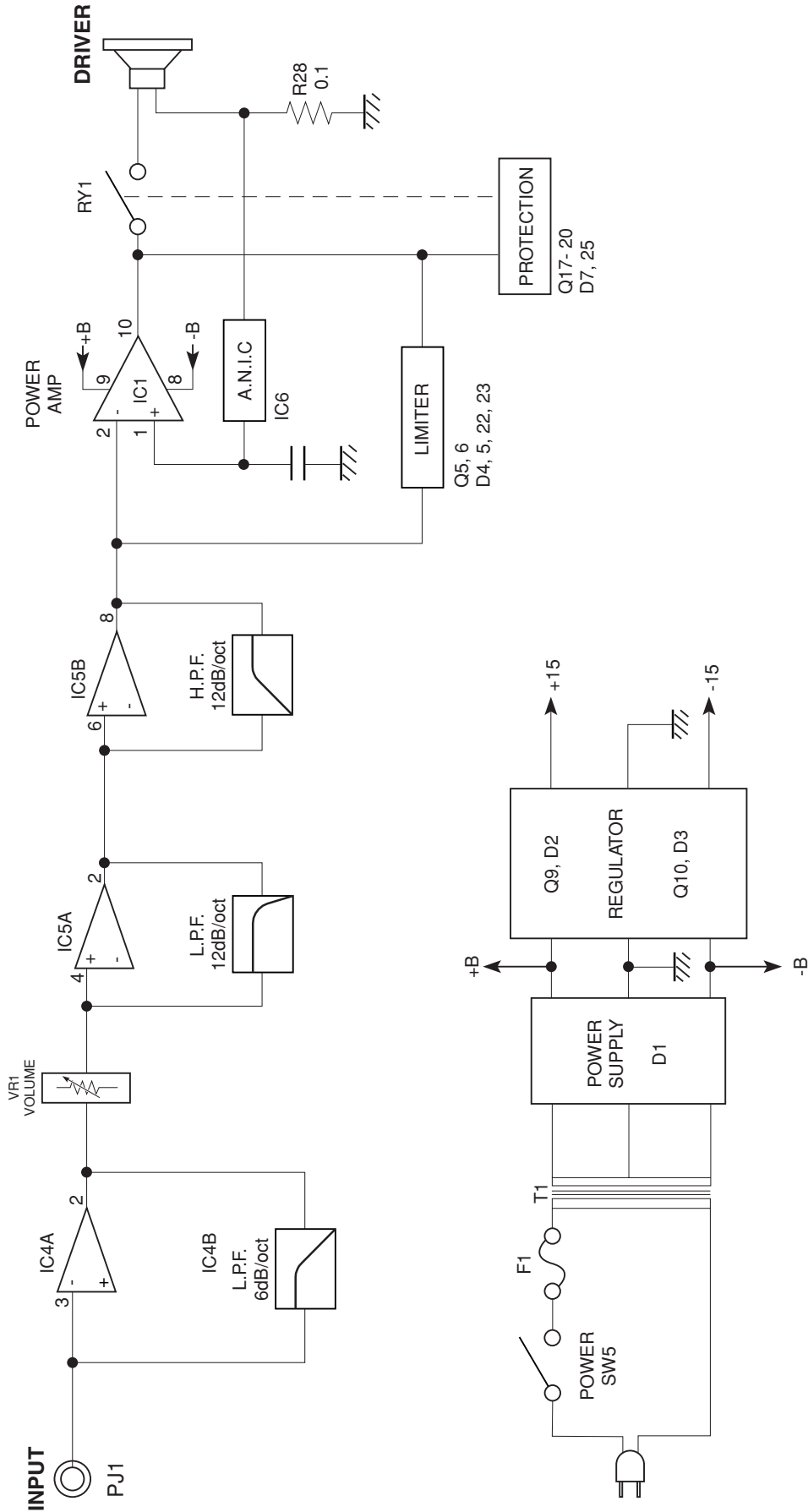


Fig. 3

When Checking the P.C.B.:

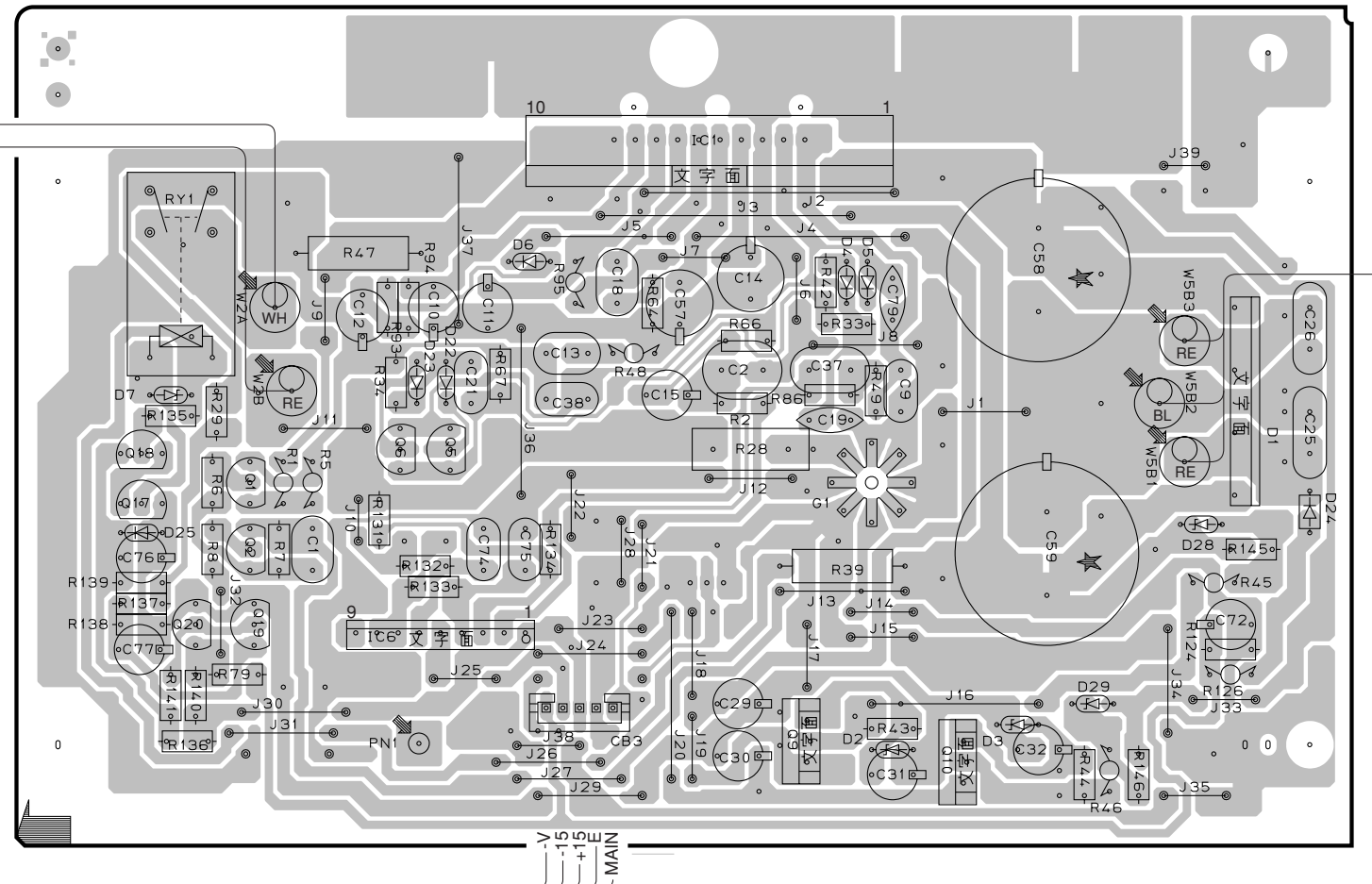
- Connect all the connectors removed during disassembly back to the original positions.
- Spread the Rubber Sheet and Cloth for insulation purpose and place the Rear Panel Ass'y on them. (Fig. 3)

■ BLOCK DIAGRAM



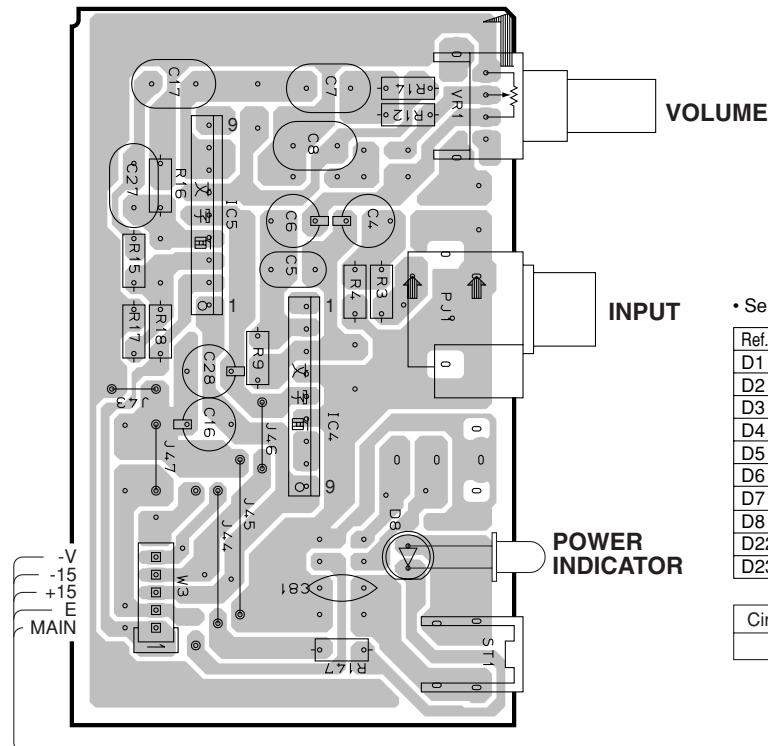
NS-P440/NS-P446

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



PRINTED CIRCUIT BOARD Lead Free Solder Used

MAIN (3) P.C.B. (Side A)

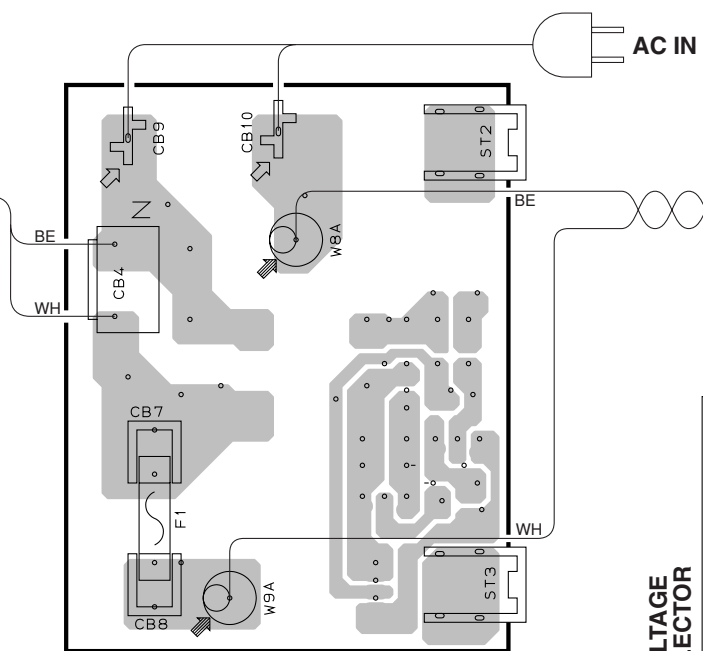


• Semiconductor Location

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	H1	Q17	F3
D6	G2	IC4	B3	Q18	F3
D7	F2	IC5	B2	Q19	F3
D8	B3	IC6	G3	Q20	F3
D22	G2	Q1	F3		
D23	G2	Q2	F3		

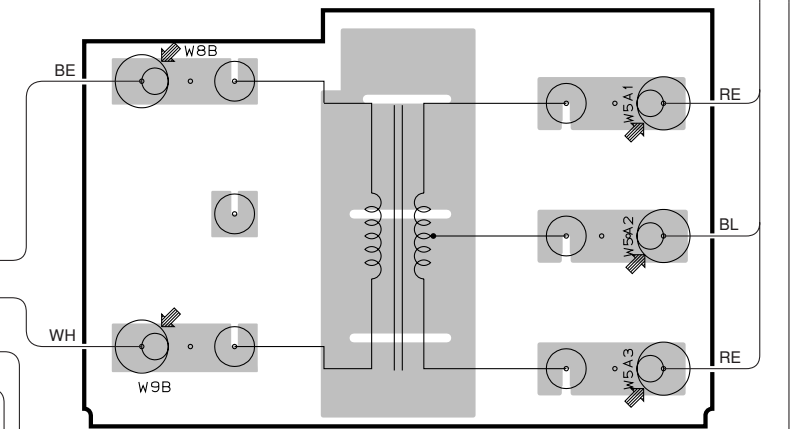
Circuit No.	U, C, R, A, L	K, B, G
C79	X	O

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

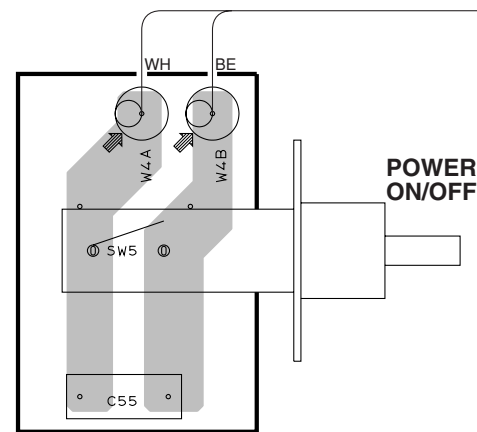


MAIN (7) P.C.B. (Side A)

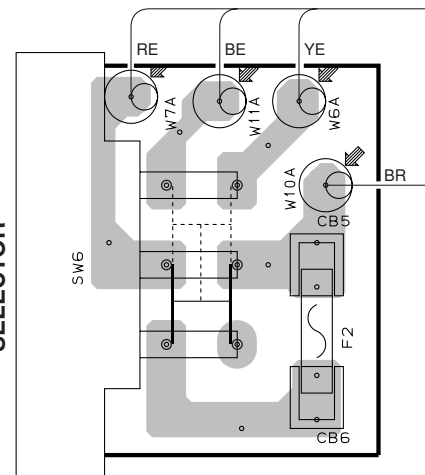
U, C, K, A, B, G models



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



VOLTAGE SELECTOR

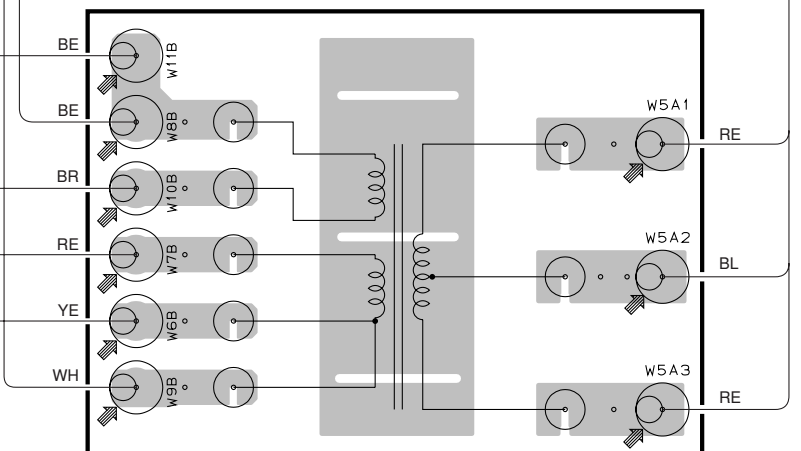


MAIN (9) P.C.B.

(Side A) R, L models

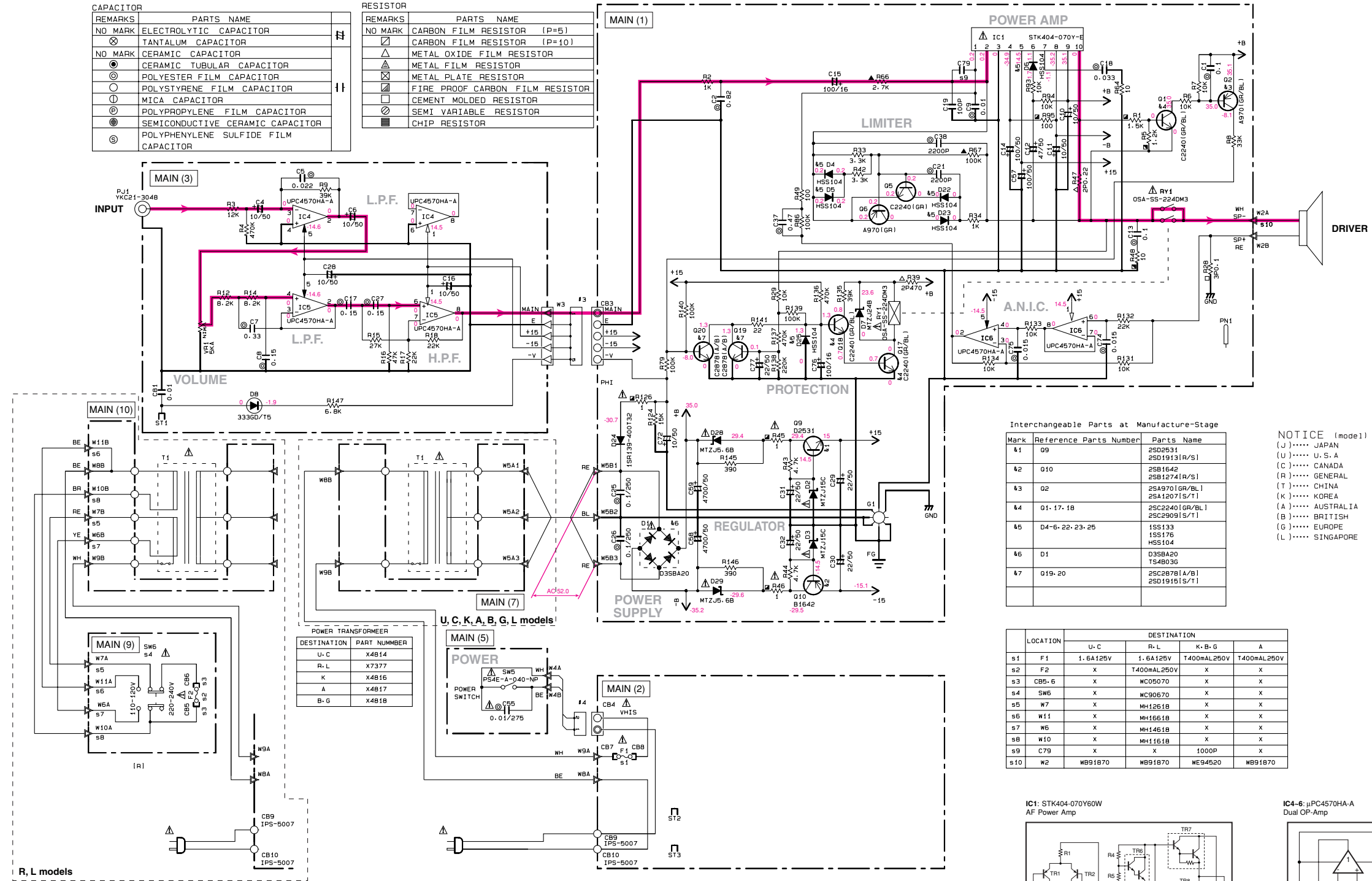
MAIN (10) P.C.B.

(Side A) R, L models



SCHEMATIC DIAGRAM

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



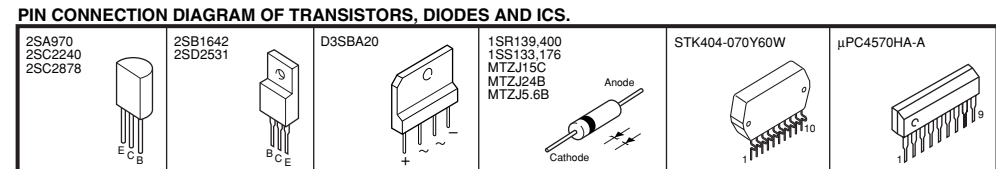
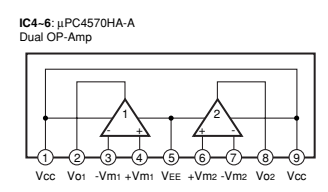
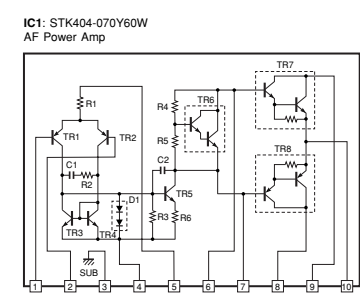
Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
*1	09	2SD2531 2SD1913(R/S)
*2	010	2SB1642 2SB1274(R/S)
*3	02	2SA970 (GR/BL) 2SA1207 (S/T)
*4	01-17-18	2SC2340 (GR/BL) 2SC2903 (S/T)
*5	04-6-22-23-25	1SS133 1SS176 HSS104
*6	D1	D35BA20 T54B03G
*7	019-20	2SC2878 (A/B) 2SD1915 (S/T)

NOTICE (model)

(J)..... JAPAN
 (U)..... U.S.A
 (C)..... CANADA
 (R)..... GENERAL
 (T)..... CHINA
 (K)..... KOREA
 (A)..... AUSTRALIA
 (B)..... BRITISH
 (G)..... EUROPE
 (L)..... SINGAPORE

LOCATION	U-C	DESTINATION			
		R-L	K-B-G	A	
s1	F1	1.6A125V	1.6A125V	T400MAL250V	T400MAL250V
s2	F2	X	T400MAL250V	X	X
s3	CB5-6	X	WC05070	X	X
s4	SW6	X	WC90670	X	X
s5	W7	X	MH1251B	X	X
s6	W11	X	MH1651B	X	X
s7	W6	X	MH1451B	X	X
s8	W10	X	MH1161B	X	X
s9	C79	X	X	1000P	X
s10	W2	WB91B70	WB91B70	WE94520	WB91B70



* All voltages are measured with a 10M Ω DC electronic volt meter.
 * Components having special characteristics are marked \triangle 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

SW-P440 P.C.B. MAIN

SW-P440 P.C.B. MAIN

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Ref. No.	Part No.	Description	Markets
	WG592800	P. C. B.	UC
	WG592900	P. C. B.	RL
	WG593000	P. C. B.	KBG *
	WG593100	P. C. B.	A
CB3	VB390100	CN. BS. PIN	5P
⚠ CB4	VG879900	CN. BS. PIN	2P
⚠ CB5-6	WC050700	CLIP. FUSE	EYF-52BCY
⚠ CB7-8	WC050700	CLIP. FUSE	EYF-52BCY
CB9-10	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	UA654220	C. MYLAR	0.022uF 50V J
C6	UR867100	C. EL	10uF 50V
C7	UA655330	C. MYLAR	0.33uF 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	UA655150	C. MYLAR	0.15uF 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	UA655150	C. MYLAR	0.15uF 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	UA653220	C. MYLAR	2200pF 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	FG613100	C. CE	1000pF 50V
C81	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
D4	VD631600	DIODE	1SS133, 176
D5	VD631600	DIODE	1SS133, 176

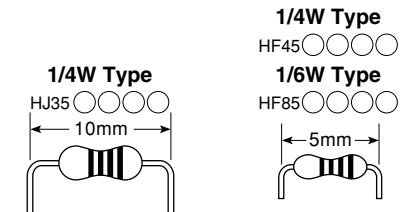
* New Parts

Ref. No.	Part No.	Description	Markets
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	VL552600	JACK. PIN	1P
PN1	WB543700	PIN	WB54370 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	1.5KΩ 1/4W
R5	HV756120	R. CAR. FP	1.2KΩ 1/4W
R28	V6022600	R. CEMENT	0.1Ω 3W
R39	VC760500	R. MTL. OXD	470Ω 2W
⚠ R45-46	HV753100	R. CAR. FP	1Ω 1/4W
R47	VC751900	R. MTL. OXD	0.22Ω 2W
R48	HV754100	R. CAR. FP	10Ω 1/4W
R66	HB026270	R. MTL. FLM	2.7KΩ 1/4W
R67	HB028100	R. MTL. FLM	100KΩ 1/4W
R95	HV755100	R. CAR. FP	100Ω 1/4W
⚠ R126	HV753100	R. CAR. FP	1Ω 1/4W
⚠ RY1	VU161600	RELAY	DC 0SA-SS-224DM3
ST1-3	V4040500	SCR. TERM	M3
* ⚠ SW5	WG803400	SW. PUSH	PS4E-A-040-NP
⚠ SW6	WC906700	SW. SLIDE	SDKPA40300
VR1	WC595500	VR	A 5KΩ
	WB419000	HOLDER. LED	LDT-70G

* New Parts

NS-P440/NS-P446

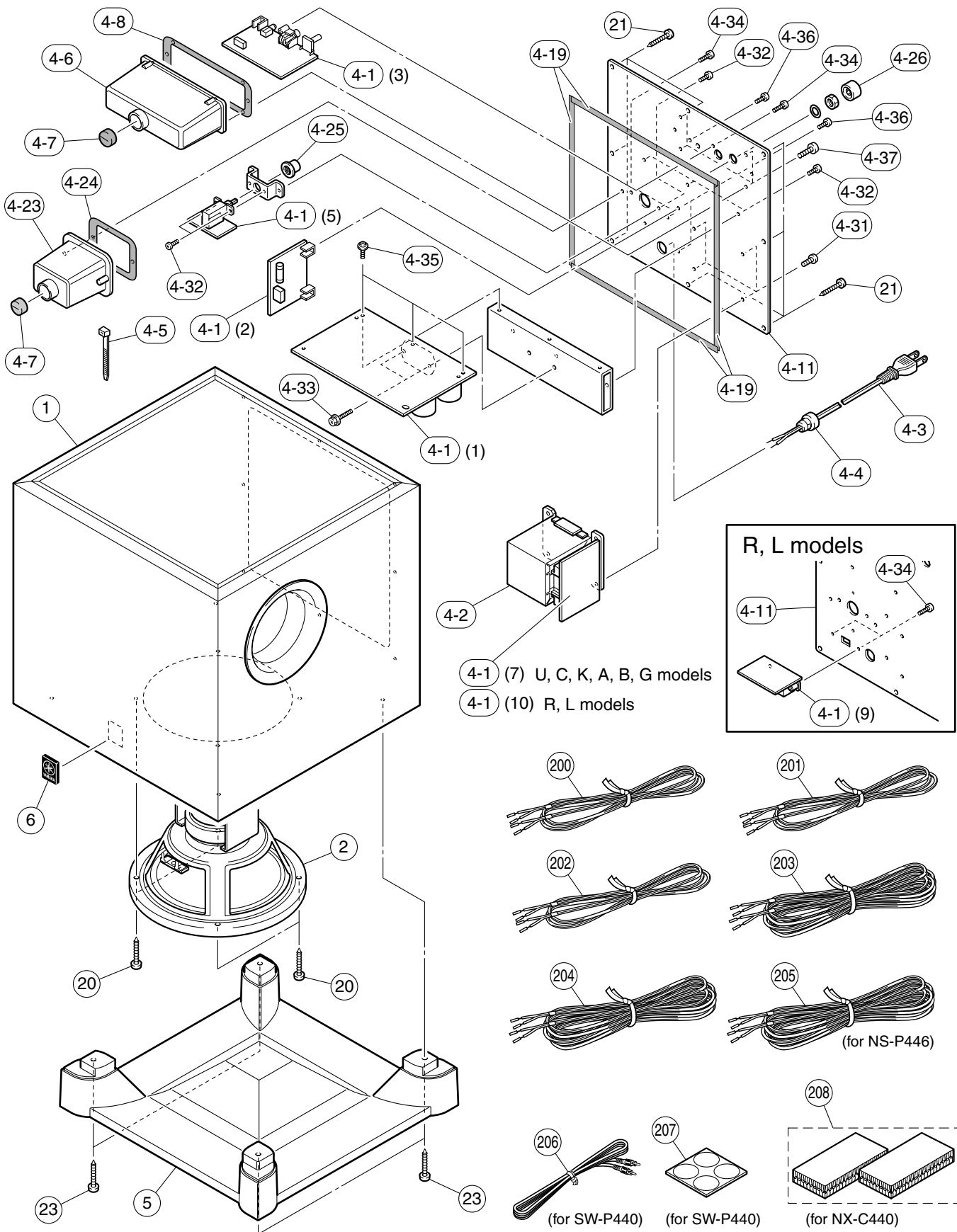
Parts List for Carbon Resistors

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			
					

* : Not available

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SW-P440 EXPLODED VIEW



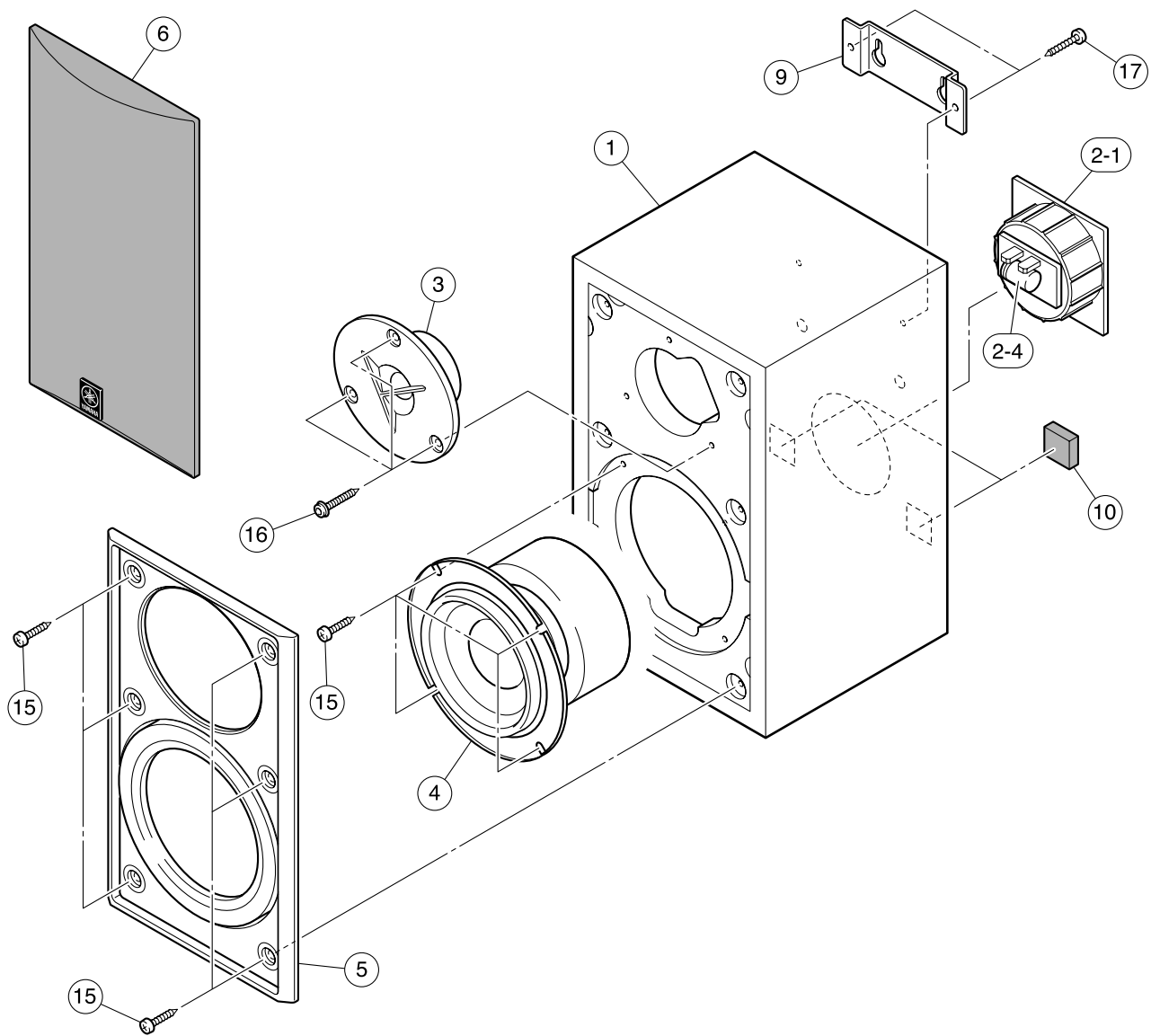
SW-P440 MECHANICAL PARTS

Ref. No.	Part No.	Description	Remarks	Markets	
*	1	WG636900	CABINET ASS' Y	SW-P440LC	
*	1	WG636800	CABINET ASS' Y	SW-P440BL	
*	1	WG636700	CABINET ASS' Y	SW-P440SI	
	2	X2323B00	DRIVER WOOFER	JA1689	
*	4-1	WG592800	P. C. B. ASS' Y	16cm 6Ω	UC
*	4-1	WG592900	P. C. B. ASS' Y	MAIN	RL
*	4-1	WG593000	P. C. B. ASS' Y	MAIN	KBG
*	4-1	WG593100	P. C. B. ASS' Y	MAIN	A
*	⚠	4-2	X4814A00	POWER TRANSFORMER	UC
*	⚠	4-2	X7377A00	POWER TRANSFORMER	RL
*	⚠	4-2	X4816B00	POWER TRANSFORMER	K
*	⚠	4-2	X4817B00	POWER TRANSFORMER	A
*	⚠	4-2	X4818A00	POWER TRANSFORMER	BG
	⚠	4-3	V2689600	POWER CABLE	UC
	⚠	4-3	WD042000	POWER CABLE	R
	⚠	4-3	V8012900	POWER CABLE	K
	⚠	4-3	WC883100	POWER CABLE	A
	⚠	4-3	V6977100	POWER CABLE	B
	⚠	4-3	V6893100	POWER CABLE	GL
	4-4	CB072750	CORD STOPPER	SR-4N-4	
*	4-5	WG886600	BINDING TIE	CT-100	
	4-6	WB817100	COVER		
	4-7	WC736000	BUSH		
	4-8	WB930900	PACKING		
*	4-11	WG537900	REAR PANEL		UC
*	4-11	WG538000	REAR PANEL		RL
*	4-11	WG538100	REAR PANEL		K
*	4-11	WG538200	REAR PANEL		A
*	4-11	WG538300	REAR PANEL		BG
	4-19	WA201400	PACKING 20140		
	4-23	WE252900	COVER P. SW		
	4-24	WE279500	PACKING P. SW		
	4-25	WA217100	POWER KNOB		
	4-26	WD562900	VOLUME KNOB		
	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	WF303900	BIND HEAD BONDING SCREW	3x6 MFZN2B3	
	4-37	WE981100	BIND HEAD P-TIGHT SCREW	4x12 MFZN2B3	
	5	WA085400	BASE		
	6	V9467400	EMBLEM		
	20	WE955200	BIND HEAD TAPPING SCREW	4x20 MFZN2B3	
	21	WF459800	BIND HEAD TAPPING SCREW #1	4x25 MFZN2B3	
*	23	WF744100	BIND HEAD TAPPING SCREW #1	4x25 MFZN2W3	
			ACCESSORIES		
	200	WA238100	SPEAKER CABLE	MAIN L 4m 1pc	
	201	WA238200	SPEAKER CABLE	MAIN R 4m 1pc	
	202	WA238300	SPEAKER CABLE	CENTER 4m 1pc	
	203	WA238400	SPEAKER CABLE	EFFECT L 15m 1pc	
	204	WA238500	SPEAKER CABLE	EFFECT R 15m 1pc	
	205	WA238600	SPEAKER CABLE	EFFECT C 15m 1pc	NS-P446
	206	WB918400	SUBWOOFER CABLE	1P 5m 1pc	
	207	V5982400	NONSKID PAD	M25 t2 4pcs/set	
	208	V4903800	FASTENER	40x25 2pairs/set	V192330, V192310

* New Parts

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■ NX-E440 EXPLODED VIEW



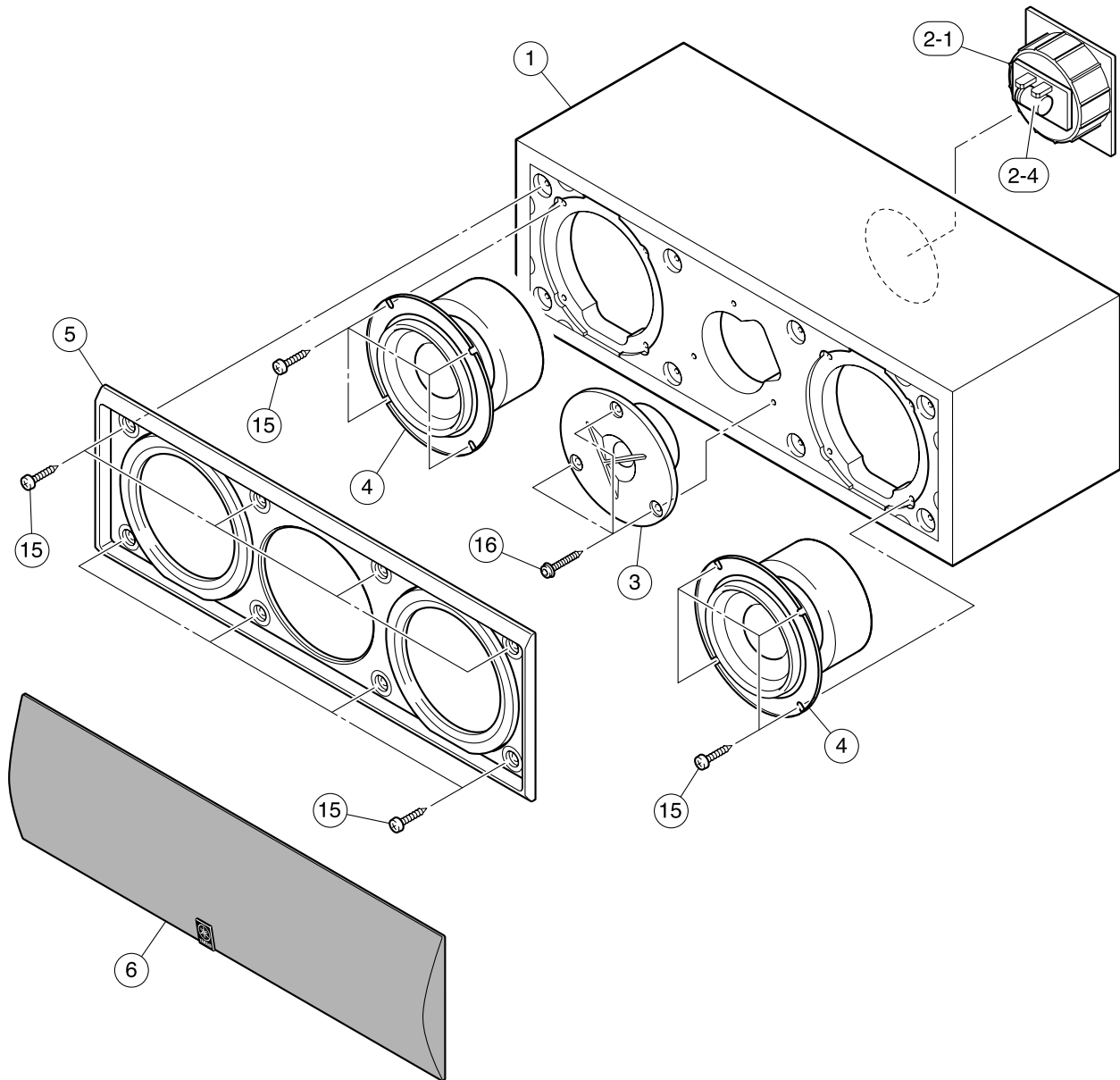
■ NX-E440 MECHANICAL PARTS

Ref. No.	Part No.	Description	Remarks	Markets	
*	1	WG574500	CABINET ASS'Y	NX-E440LC	
*	1	WG574400	CABINET ASS'Y	NX-E440BL	
*	1	WG574300	CABINET ASS'Y	NX-E440SI	
	2-1	WD362900	SPEAKER TERMINAL	2P PUSH	
	2-4	V8663800	BIPOLAR ELECTROLYTIC CAP	1uF 63V	
	3	X7114A00	DRIVER TWEETER	2.5cm 6Ω JA05F8	NX-E440LC, SI
*	3	X7436A00	DRIVER TWEETER	2.5cm 6Ω JA05G4	NX-E440BL
*	4	X7434A00	DRIVER WOOFER	8cm 6Ω JA0898	
*	5	WG474500	FRONT PANEL		NX-E440LC, SI
*	5	WG474600	FRONT PANEL		NX-E440BL
*	6	WG627300	FRONT GRILLE ASS'Y		NX-E440LC, SI
*	6	WG627400	FRONT GRILLE ASS'Y		NX-E440BL
	9	V5361200	BRACKET	1pc	
	10	VY893800	INSULATOR	15x15 t4 1pc	
*	15	WE971500	BIND HEAD TP SCREW #1	3.5x20 MFZN2W3	NX-E440LC, SI
	15	WE971600	BIND HEAD TP SCREW #1	3.5x20 MFZN2B3	NX-E440BL
	16	WF822200	SPECIAL SCREW (6SOCK)	3.5x20 MFN133	NX-E440LC, SI
*	16	WF435600	SPECIAL SCREW (6SOCK)	4x20 MFZN2B3	NX-E440BL
	17	WE971600	BIND HEAD TP SCREW #1	3.5x20 MFZN2B3	

* New Parts

NS-P440/NS-P446

■ NX-C440 EXPLODED VIEW



■ NX-C440 MECHANICAL PARTS

Ref. No.	Part No.	Description	Remarks	Markets	
*	1	WG574800	CABINET ASS'Y	NX-C440LC	
*	1	WG574700	CABINET ASS'Y	NX-C440BL	
*	1	WG574600	CABINET ASS'Y	NX-C440SI	
	2-1	WD362900	SPEAKER TERMINAL	2P PUSH	
	2-4	V8663800	BIPOLAR ELECTROLYTIC CAP	1uF 63V	
	3	X7114A00	DRIVER TWEETER	2.5cm 6Ω JA05F8	NX-C440LC, SI
*	3	X7436A00	DRIVER TWEETER	2.5cm 6Ω JA05G4	NX-C440BL
*	4	X7435A00	DRIVER WOOFER	7cm 12Ω JA0769	
*	5	WG474700	FRONT PANEL		NX-C440LC, SI
*	5	WG474800	FRONT PANEL		NX-C440BL
*	6	WG627500	FRONT GRILLE ASS'Y		NX-C440LC, SI
*	6	WG627600	FRONT GRILLE ASS'Y		NX-C440BL
*	15	WE971500	BIND HEAD TP SCREW #1	3.5x20 MFZN2W3	NX-C440LC, SI
	15	WE971600	BIND HEAD TP SCREW #1	3.5x20 MFZN2B3	NX-C440BL
*	16	WF435600	SPECIAL SCREW (6SOCK)	4x20 MFZN2B3	NX-C440LC, SI
	16	WF822200	SPECIAL SCREW (6SOCK)	3.5x20 MFN133	NX-C440BL

* New Parts

NS-P440/NS-P446

