POWERED SPEAKER

MS400

SERVICE MANUAL

CONTENTS

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20001210-98000

YAMAHA
HAMAMATSU, JAPAN
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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 all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

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

The data provided is belived 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 changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

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

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

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 WHAT SO EVER!

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.

■ WARNING

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

■ SPECIFICATIONS

● General specifications

Type
Bi-Amp 2-way bass reflex powered speaker
(Bi-amp lifier electronic crossover network))
Speaker unit
LF : 38 cm cone
HF : 5 cm Titanium diaphragm compression driver
Frequency Range ..... 50 Hz~16 kHz (-10 dB)
Maximum Output Level ..... 124.5 dB (1m on Axis)
Directional angle ..... 90˚ (H)/40˚ (V)
Dimension (W x H x D) ..... 449 x 683 x 379 mm
Weight ..... 24.2 kg
Color ..... Black (approx.Munsell value: 5PB 2/1)
Tripod diameter pole ..... 35~36 mm
Accessories ..... Power cord (AC inlet type, 2.5 m)

■ Amp.unit

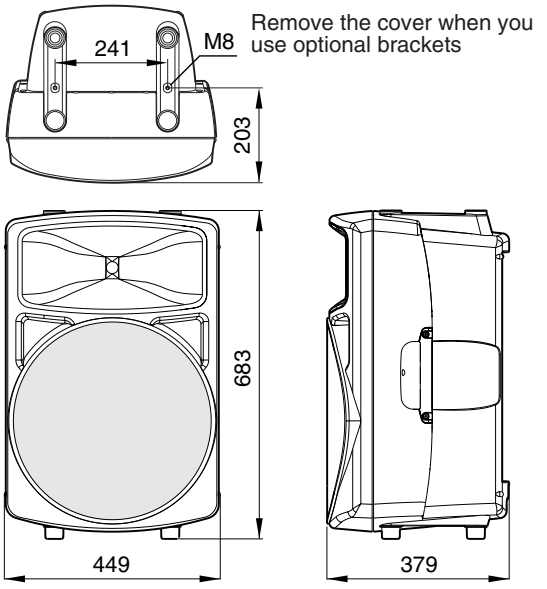
Maximum Output Power
LF: 300W at 500Hz, THD=1%, RL=4 ohms
HF:100W at 5kHz, THD=1%, RL=16 ohms
Cross over frequency ..... 1.6 kHz (30dB/oct.)
Input Sensitivity ..... LINE: +4dB*, MIC: -50dB*
Input impedance ..... LINE: 30 kohms, MIC: 5 kohms

Controls
LEVEL ..... LINE, MIC , MASTER
EQ ..... LOW: 0 (Max.) ~ -10 dB (Min.) at 55 Hz
HIGH: ±3 dB (HF)
Power switch ..... On/Off
Connectors (all balanced):
LINE in/out ..... XLR-3-31, XLR-3-32, phone
(They are all connected in parallel and can be used as line outputs.)
MIC in XLR-3-31
POWER indicator ..... Green LED
Power Requirement USA and Canada ..... 120 V, 60 Hz
Europe ..... 230 V, 50 Hz
Others ..... 240 V, 50 Hz
Power Consumption ..... 120 W
Accessor ies ..... Bracketadapter BAD251 (for BWS251-400, BCS251, and BBS251)

* 0 dB=0.775 V

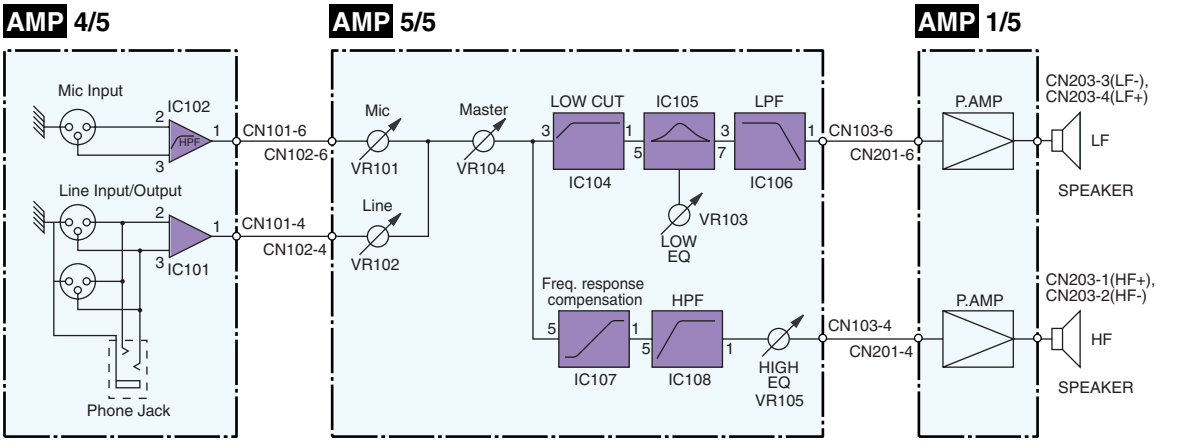
For European Model
Purchaser/User Information specified in EN55103-1 and EN55103-2.
Inrush Current: 25A
Conformed Environment: E1, E2, E3 and E4

DIMENSIONS



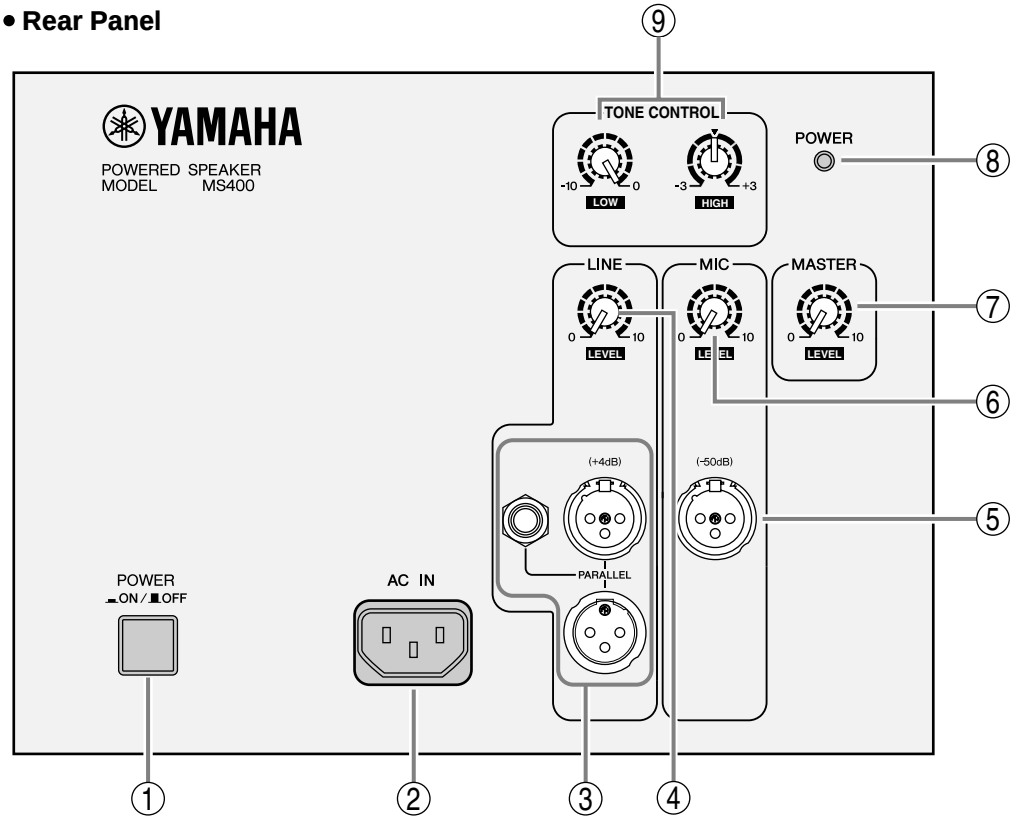
Units: mm

BLOCK DIAGRAM



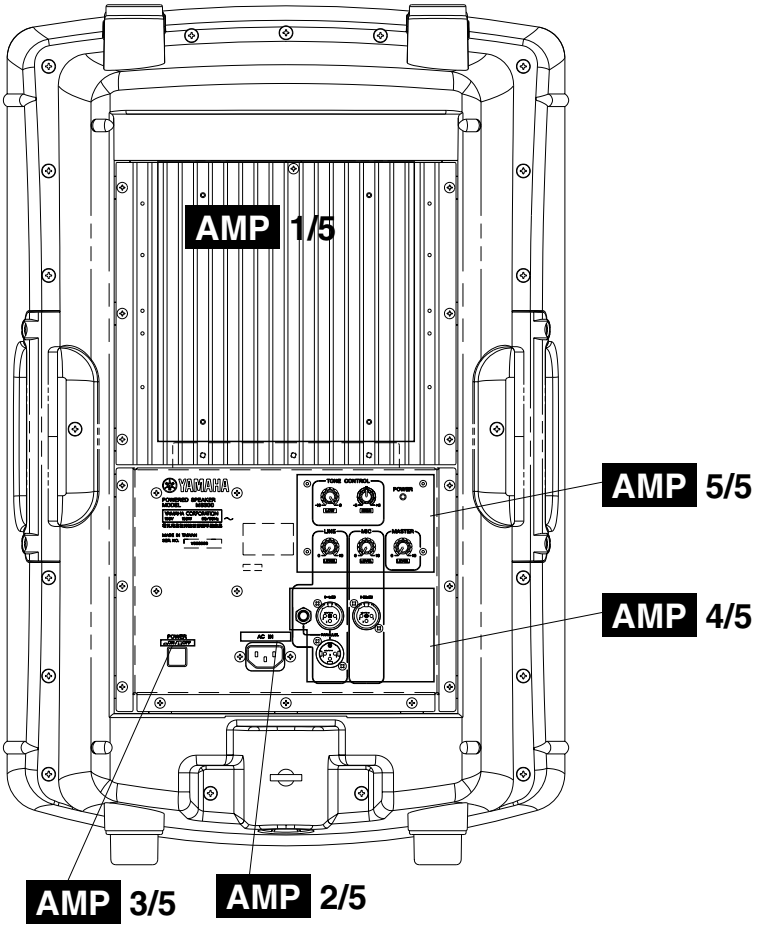
■ PANEL LAYOUT

• **Rear Panel**

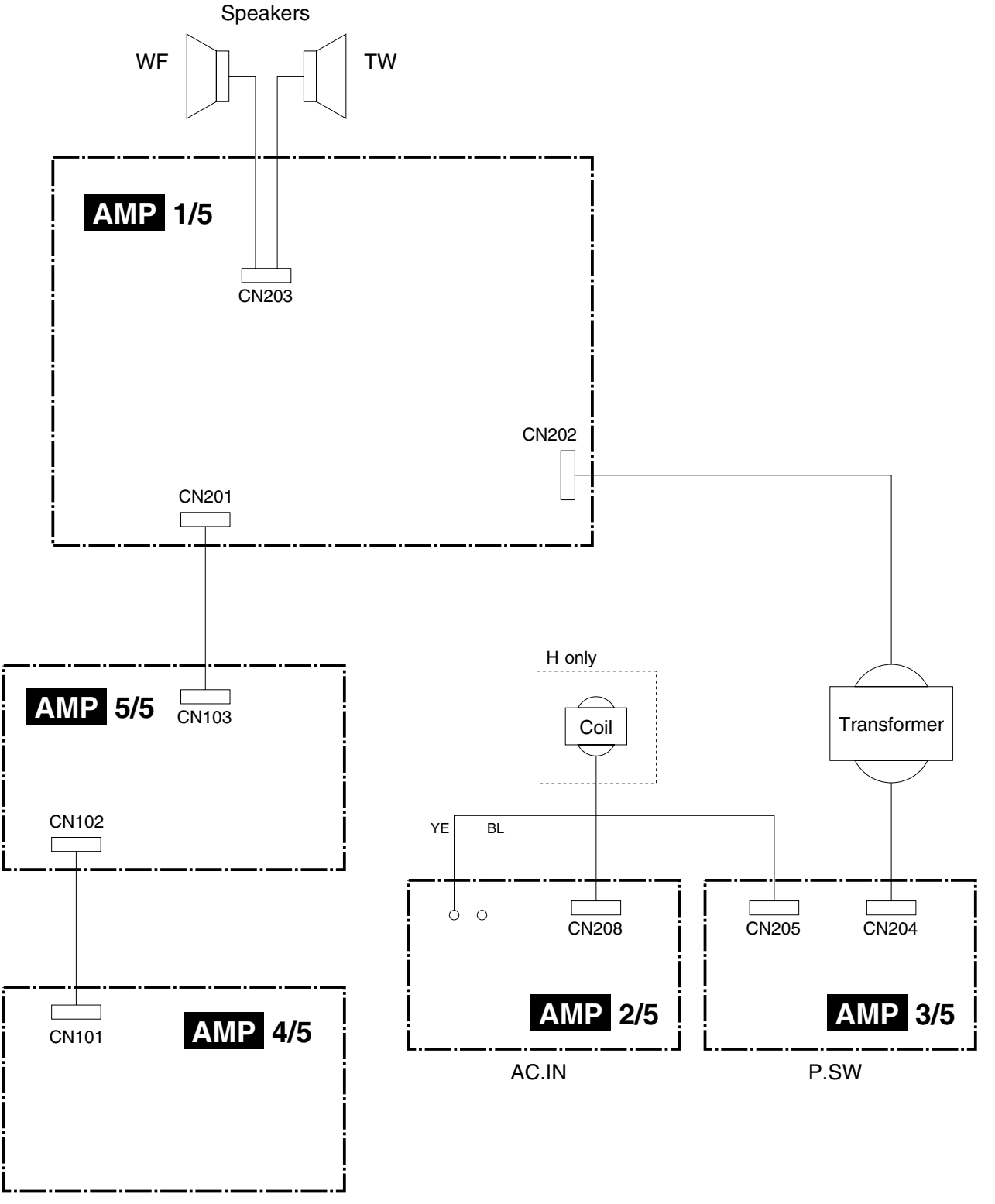


① **POWER switch**
② **AC IN connector**
③ **LINE connectors**
④ **LINE LEVEL control**
⑤ **MIC connector**
⑥ **MIC control**
⑦ **MASTER LEVEL control**
⑧ **POWER indicator**
⑨ **TONE CONTROL**

■ CIRCUIT BOARD LAYOUT



WIRING


Speakers
WF
TW
AMP 1/5
CN203
CN202
CN201
AMP 5/5
CN103
CN102
CN101
AMP 4/5
H only
Coil
Transformer
YE
BL
CN208
CN205
CN204
AMP 2/5
AMP 3/5
AC.IN
P.SW

DISASSEMBLY PROCEDURE

1. Amplifier assembly

1-1. Remove the sixteen (16) screws marked [180A]. The amplifier assembly can then be removed. (Fig. 1)

2. Cabinet assembly and buffle assembly

2-1. Remove the nineteen (19) screws marked [170]. The buffle assembly can then be removed from the capinet assembly. (Fig. 1)

3. Speakers (38cm, 25mm)

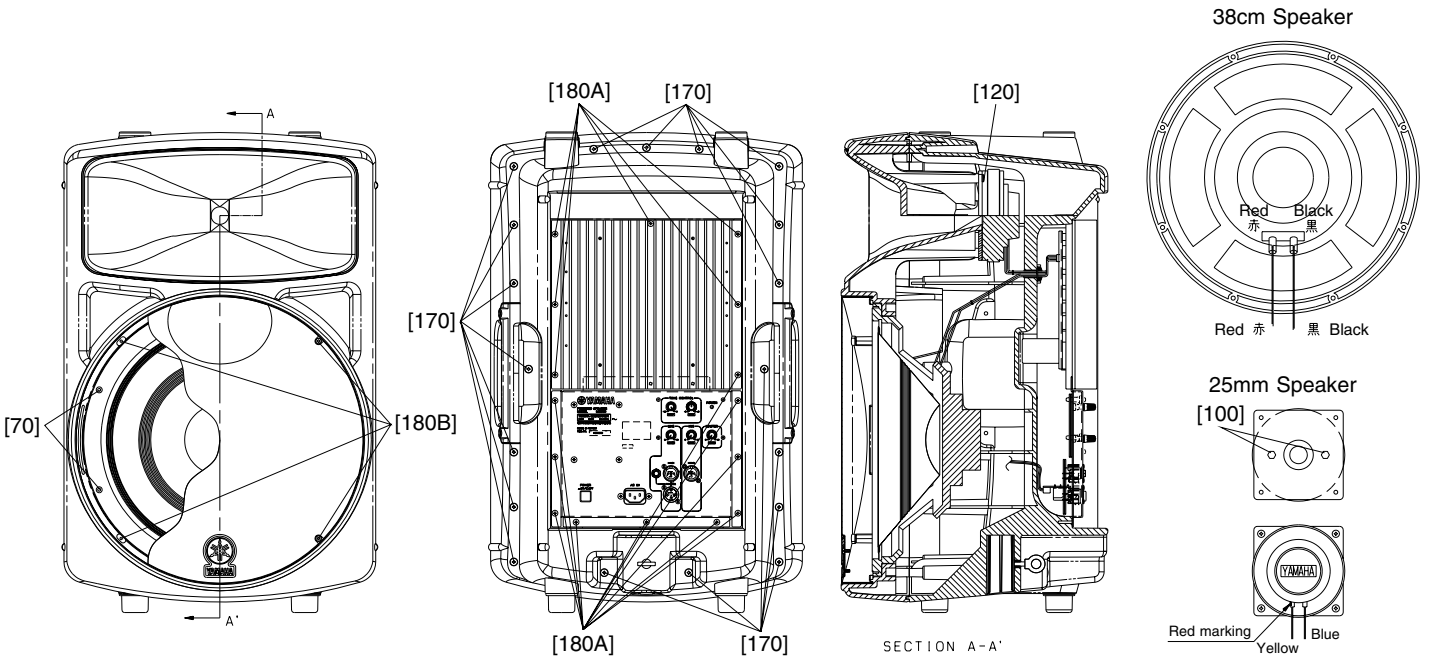
3-1. Remove the buffle assembly from the cabinet assembly. (See Procedure 2.)

3-2. To remove the 38cm speaker, remove the four (4) screws marked [180B] and the front grille. (Fig. 1)

3-3. Remove the eight (8) bolts marked [70]. The 38cm speaker can then be removed. (Fig. 1)

3-4. To remove the 25mm speaker, remove the four (4) screws marked [120]. Then remove the speaker with the bracket. (Fig. 1)

3-5. Remove the two (2) screws marked [100]. The 25mm speaker can then be removed from the bracket. (Fig. 1)



[70]: Hexagonal Bolt 5.0 X 35 MFZN2BL (V6389200)
[120]: Bind Head Tapping Screw-P 5.0 X 30 MFZN2BL (V6405200)
[170]: Bind Head Tapping Screw-P 5.0 X 50 MFZN2BL (V6084800)
[180]: Bind Head Screw-Giza 4 X 16 MFZN2BL (V6396400)

Fig.1

4. AMP Circuit Boards (1/5 to 5/5)

4-1. Remove the amplifier assembly. (See Procedure 1.)

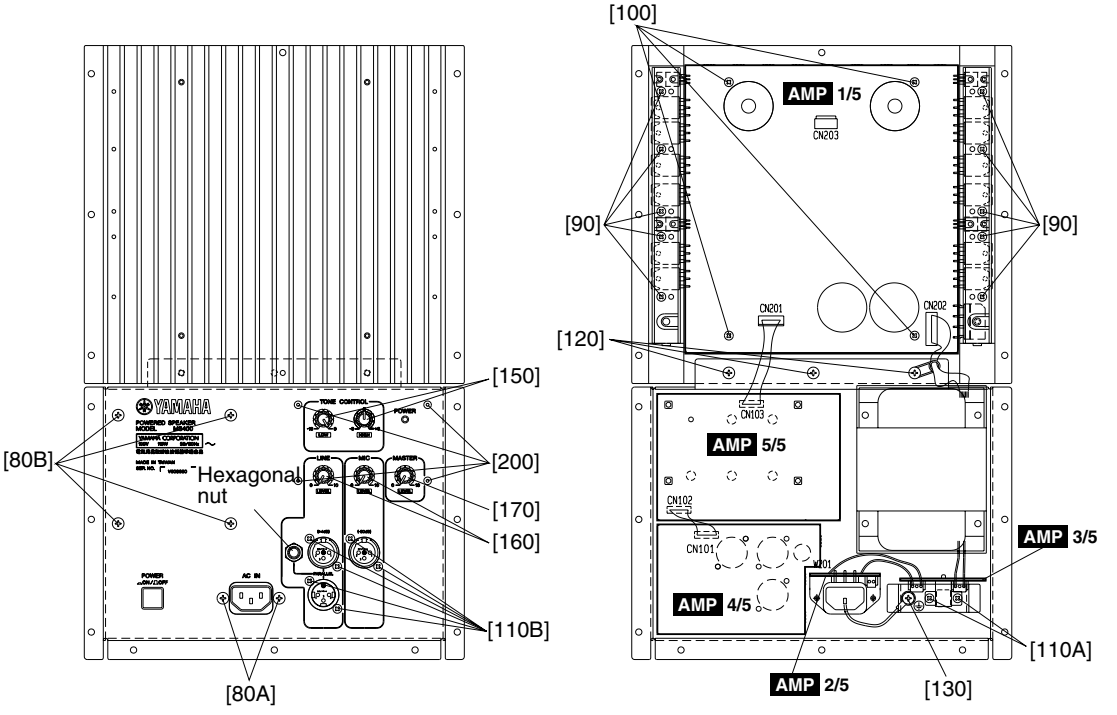
4-2. Remove the screws and the knob from each circuit board, which can then be removed. (Fig. 2)

PCB Name	Ref No.	Description	Q'ty
AMP1/5	90	Bind Head Tapping Screw-B 3.0 X 12 MFZN2BL (VQ074600)	10
Circuit Board	100	Bind Head Screw SP 3.0 X 8 MFZN2Y (EG330290)	4
AMP2/5	80A	Bonding Screw-B 4.0 X 12 MFZN2BL (V7242900)	2
Circuit Board	130	Bind Head Screw 4.0 X 8 MFZN2BL (VP156800)	1
AMP3/5 Circuit Board	110A	Bonding Screw-B 3.0 X 8 MFZN2BL (VN413300)	2
AMP4/5	110B	Bonding Screw-B 3.0 X 8 MFZN2BL (VN413300)	6
Circuit Board		Hexagonal Nut	1
AMP5/5	150	Knob MX-GREEN/D-GRAY (VU860200)	2
Circuit Board	160	Knob ORANGE/D-GRAY (VV625800)	2
	170	Knob RED/D-GRAY (VU860400)	1
	200	Button 3 X 25 MFZN2BL (V3289800)	4

5. Power transformer

5-1. Remove the amplifier assembly. (See Procedure 1.)

5-2. Remove the four (4) screws marked [80B]. The power transformer can then be removed. (Fig. 2)



[80]: Bonding Screw-B 4.0 X 12 MFZN2BL (V7242900)

Fig.2

6. Handle

6-1. Remove the cabinet assembly. (See Procedure 2.)

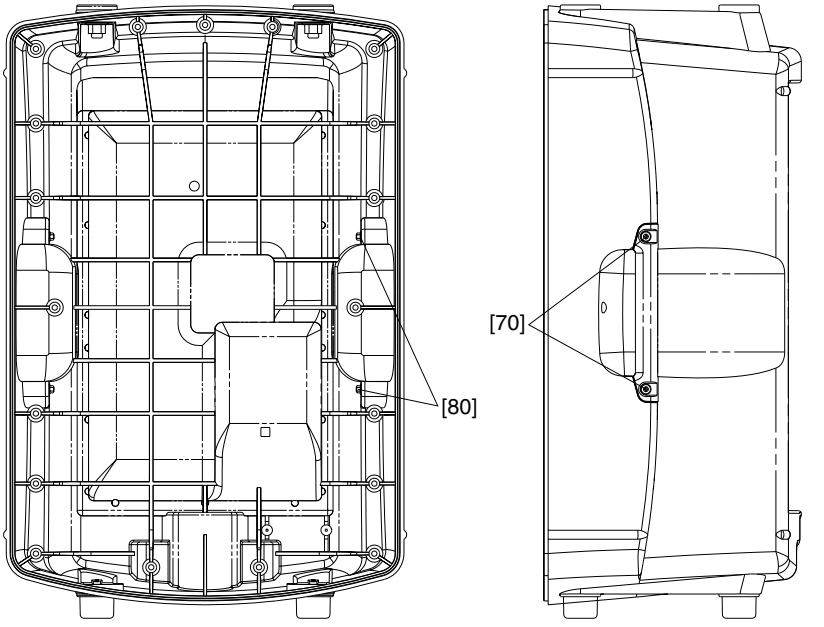
6-2. Remove the two (2) screws marked [70] and the two (2) nuts marked [80]. The handle can then be removed. (Fig.3)

7. Heat sink

7-1. Remove the amplifier assembly. (See Procedure 1.)

7-2. Remove the AMP 1/5 circuit board. (See Step 4-2.)

7-3. Remove the three (3) screws marked [120]. The heat sink can then be removed. (Fig.2)



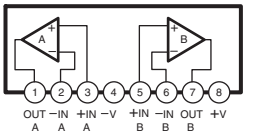
[120]: Bonding Screw-B 4.0 X 8 MFZN2BL (VR779900)

Fig.3

■ IC BLOCK DIAGRAM

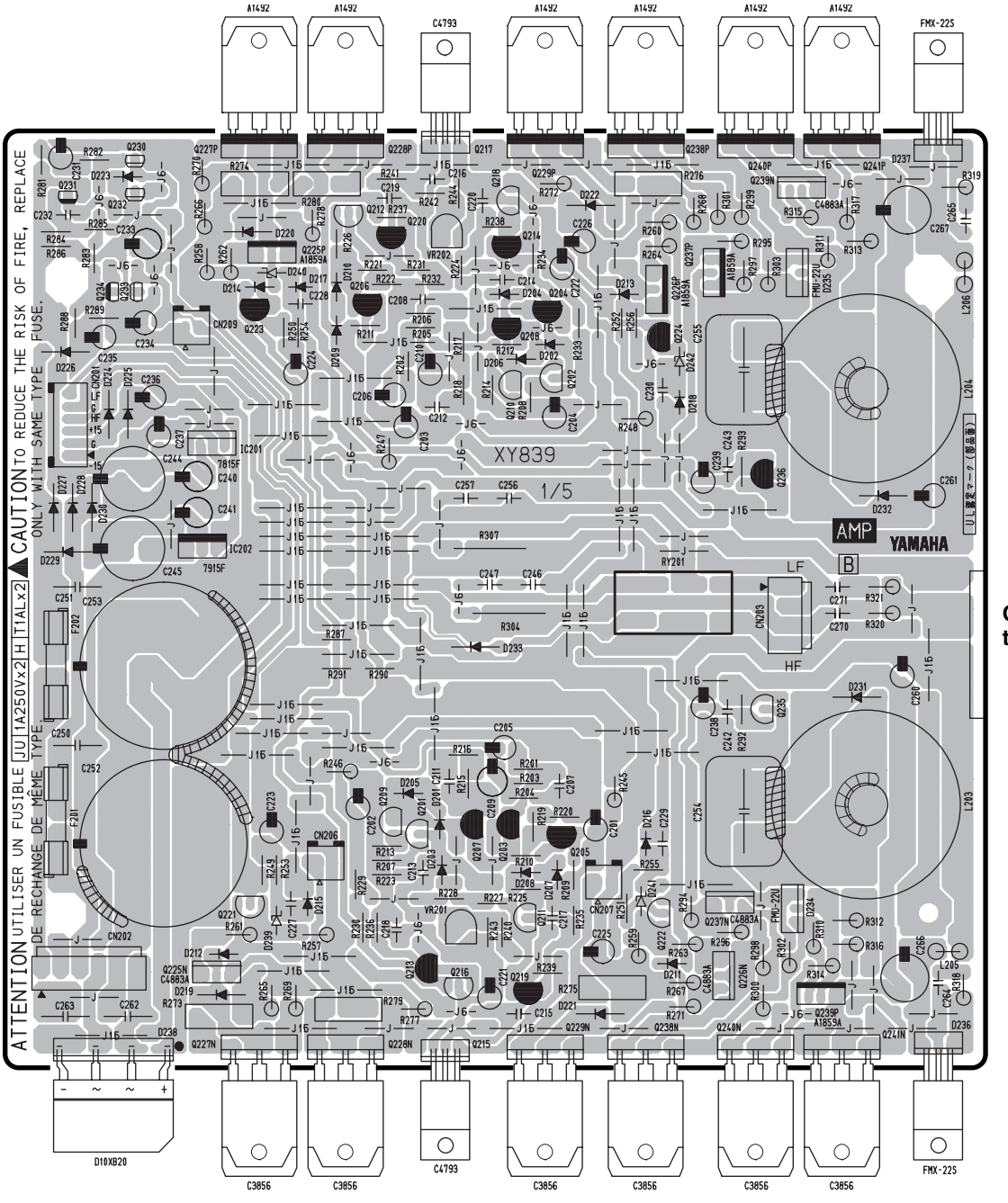
- **NJM2068L-D** (XM356A00)
  (IC101,103,104,105,106,107,108)
- **NJM4580L** (XF195A00)
  (IC102)

  Operational Amplifier



■ CIRCUIT BOARDS

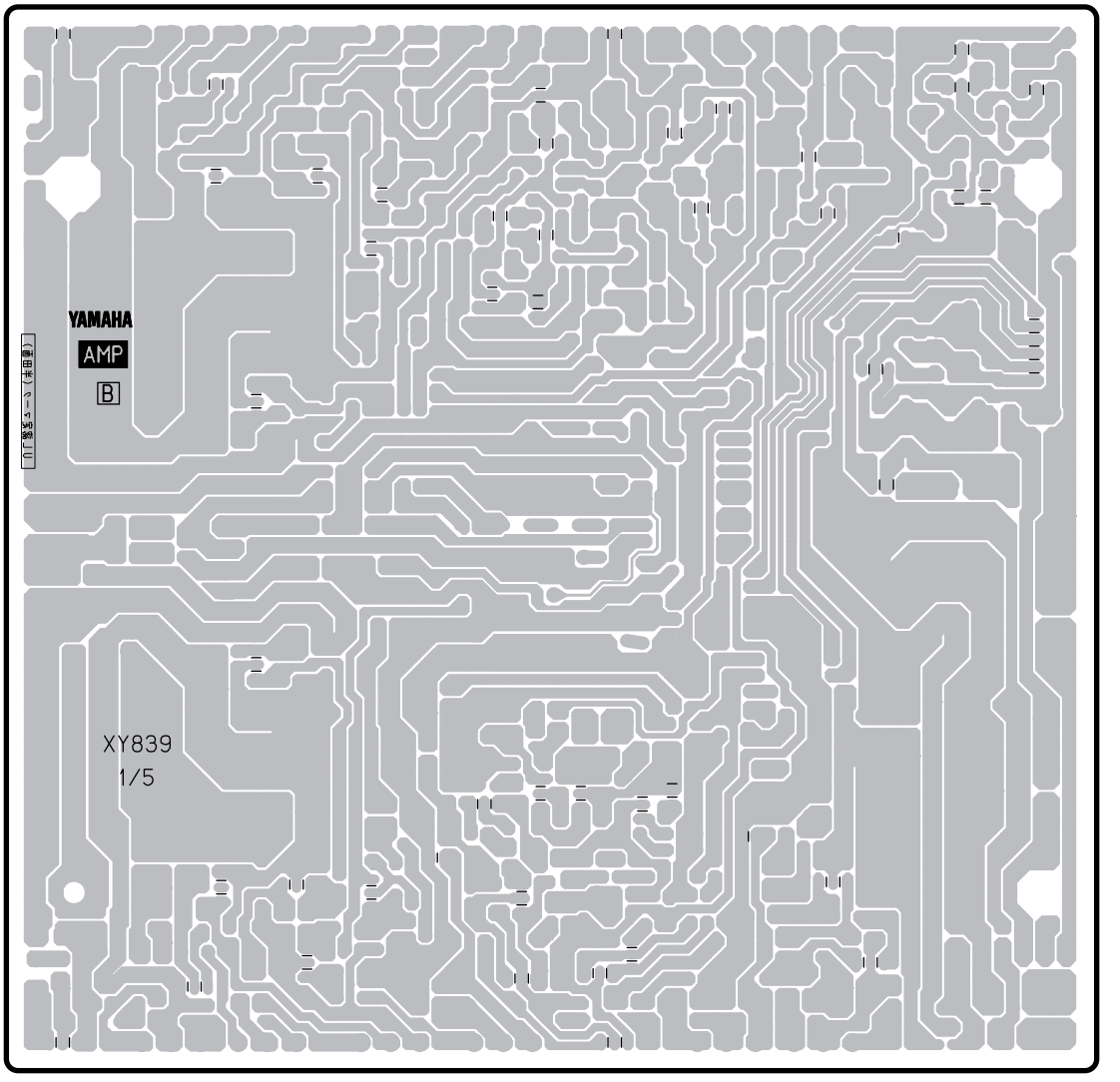
• AMP1/5 Circuit Board



Notes: VR201, VR202: Idling Adjustment VR.

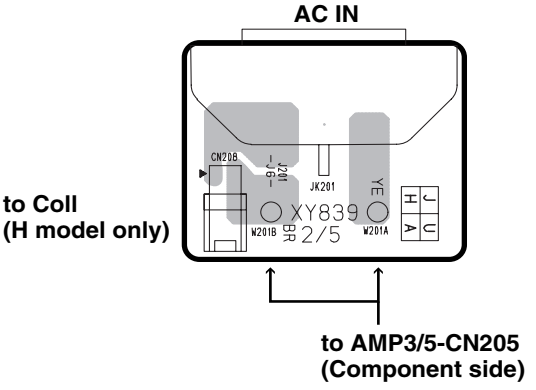
3NA: V606200

• **AMP1/5 Circuit Board**

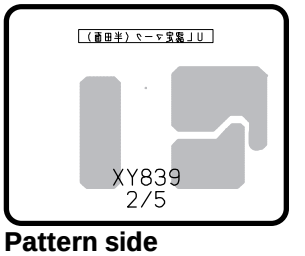


Pattern side

• **AMP2/5 Circuit Board**

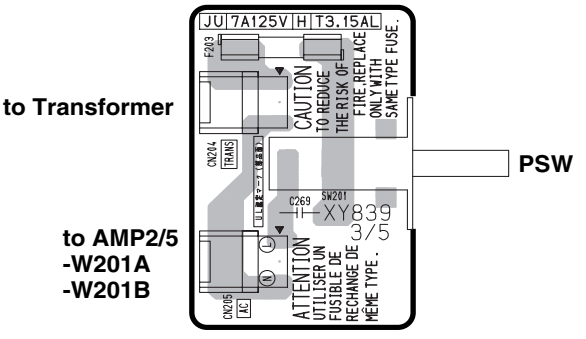


Component side

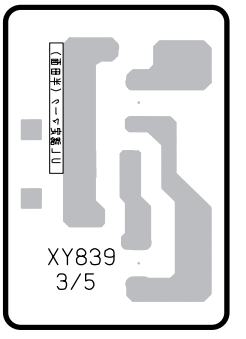


Pattern side

• **AMP3/5 Circuit Board**



Component side

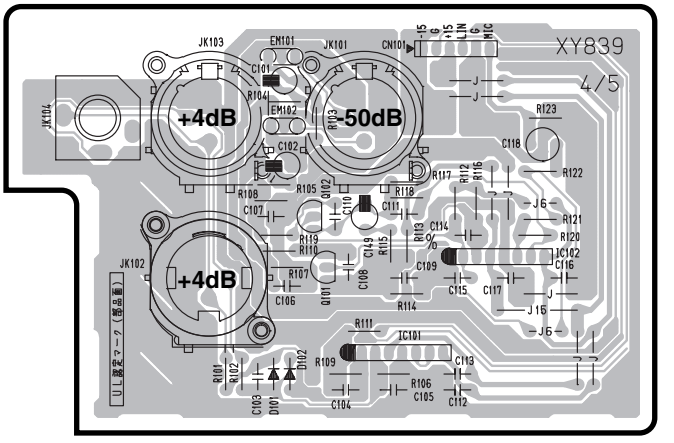


Pattern side

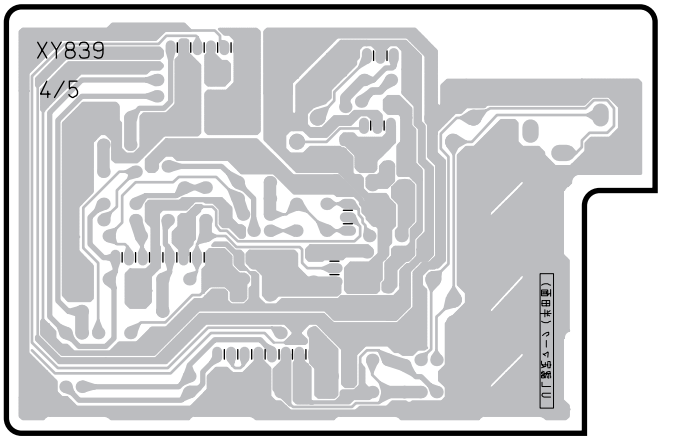
3NA: V606200

- **AMP4/5 Circuit Board**

LINE PARALLEL MIC to AMP5/5-CN102



Component side



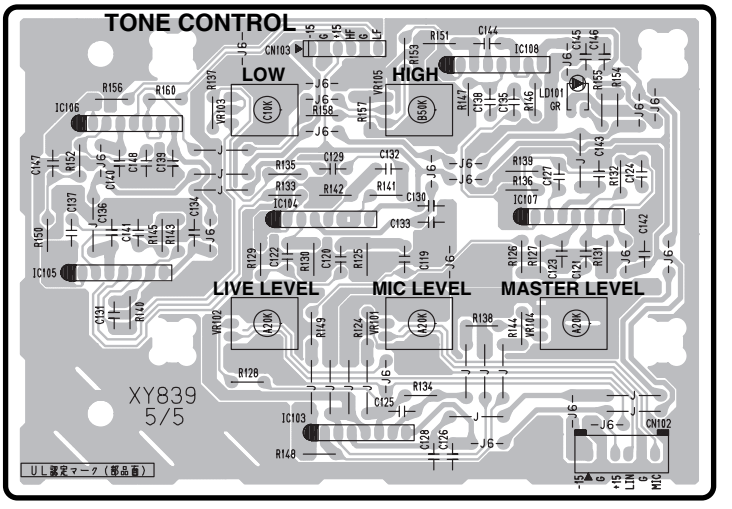
Pattern side

3NA: V606200

• **IN2/2 Circuit Board**

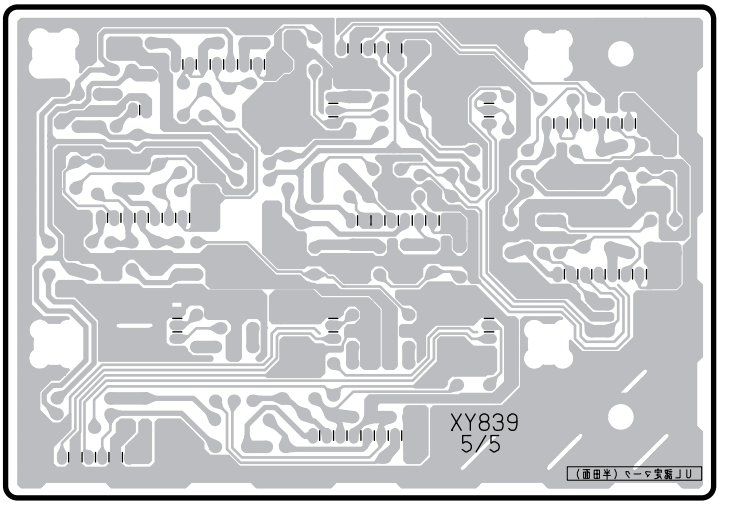
• **AMP5/5 Circuit Board**

to AMP1/5-CN201



to AMP4/5-CN101

Component side



Pattern side

3NA: V606200

INSPECTIONS

• Amplifier unit

1. Preparation

1) Input terminal
   LINE INPUT (XLR)
   MIC INPUT (XLR)
2) Output terminal: CN203 (VH4P)
   LF 1P(+) 2P(-), RL=4 ohms / Power capacity 500W
   HF 4P(+) 3P(-), RL=16 ohms / Power capacity 200W
   or more
3) LINE LEVEL: MAX (10)
4) MIC LEVEL: MIN (0)
6) TONE CONTROL HIGH: Center click position (0)
7) TONE CONTROL LOW: MAX (0)
8) The input signals should be in the form of sine wave.

2. Inspection

1) Power ON muting time
   Check that the muting function is cancelled and the relay turns on in 3±1 seconds after the power switch is turned on. Also, check that the power indicator lights up.,

2) Idling current adjustment
   Adjust VR201 and VR202 so that the voltage between Pins 1 and 2 of CN206 and CN207 becomes 1±0.2mV respectively.

3) Midpoint potential
   Check the DC voltage of CN203 (VH4P) when no signal is applied. It should be within ±70mV both at LF (between Pins 1 and 2) and at HF (between Pins 3 and 4).

4) Gain / Efficiency
   Input a 500Hz, -1dBu signal to the input terminal Line INPUT (XLR) and check that the output voltage at the output terminal LF is +28±1dBu. Also, check that the primary side power consumption at this time is 180±30W.

5) Full harmonic distortion
   Input a 500Hz signal to the input terminal LINE INPUT (XLR) and check that the full harmonic distortion when the output voltage at the output terminal LF is 300W is THD+N=1% or less.
   Input a 5kHz signal to the input terminal LINE INPUT (XLR) and check that the full harmonic distortion when the output voltage at the output terminal HF is 100W is THD+N=1% or less. This measurement should be completed within 30 seconds.

6) Output noise level

Ground the input terminals LINE INPUT (XLR) and MIC INPUT (XLR) with a 600 ohm resistance connected to each terminal and measure the noise level at the output terminals LF and HF. The measured value should be as specified below. Use a DIN audio filter for the noise meter.

LF ≦ -62dBu

HF ≦ -65dBu

7) Frequency response characteristics

Input -20dBu signals of 50Hz, 1kHz, 2kHz and 15kHz to the input terminal LINE INPUT (XLR). Using the output voltage measured at the output terminal LF when a 1kHz, -20dBu signal is input as standard (0dB), check that the output voltages measured at LF and HF are as specified below.

Frequency (Hz)	LF	HF
50	+8.5±2.0dB	--
1k	0dB	-16.5±2.0dB
2k	-9±2.0dB	-4.5±2.0dB
15k	--	+6.5±2.0dB

8) Tone control high change characteristics

Input a 5kHz, -20dBu signal to the input terminal LINE INPUT (XLR), move the tone control high VR and check that the output voltage measured at the output terminal HF then is as follows, using the output voltage when the VR is at the center click position as standard (0dB).

MAX(+3): +2.5dB ± 1dB

MIN(-3): -3.5dB ± 1dB

9) Tone control low change characteristic

Input a 50kHz, -20dBu signal to the input terminal LINE INPUT (XLR), move the tone control low VR and check that the output voltage measured at the output terminal LF then is as follows, using the output voltage when the VR is at the MAX position as standard (0dB).

the MAX position as standard (0dB)

MIN(-10): -9dB ± 1dB

10) MIC input

Input a 500Hz, -55dBu signal to the input terminal MIC INPUT (XLR), set the MIC level to MAX (10) and check that the output voltage measured then is 28 ± 1dBu.

11) Protection circuit

Apply DC+5V (power supply output resistance = 10 kohm) between Pins 1 and 2 of the connector CN208 and check that the relay turns off within 1 second. Also, check that it returns automatically within 10 seconds when the input signal is shut off.

• Finished product inspection

1. Preparation

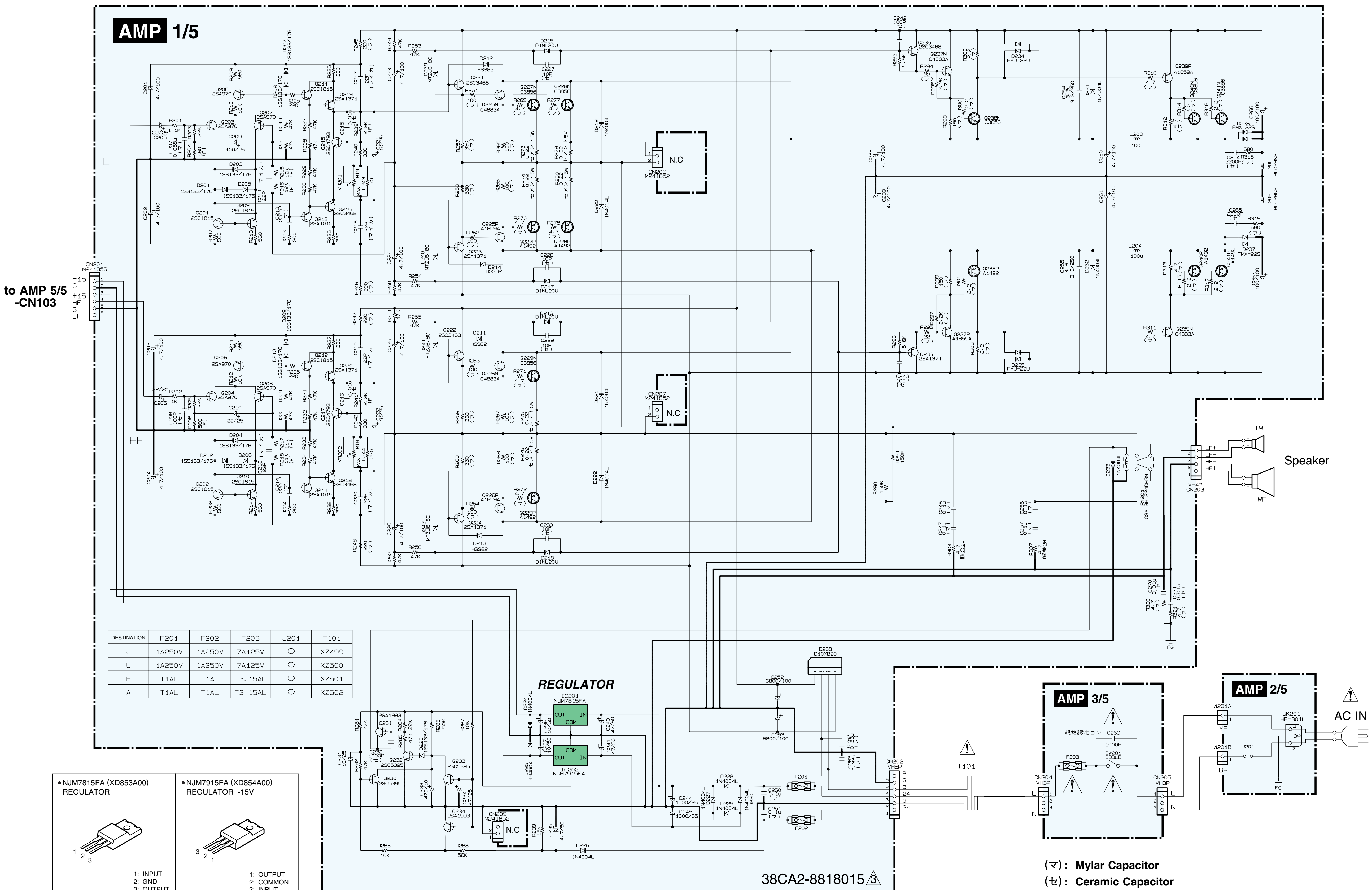
1) input terminal: LINE INPUT (XLR)
2) OUTPUT: LF
   HF
3) LINE LEVEL: MAX(10)
4) MIC LEVEL: MIN(0)
5) MASTER LEVEL: MAX(10)
6) TONE CONTROL HIGH: Center click position (0)
7) TONE CONTROL LOW: MAX(0)

2. Inspection

1) Input a 20Hz to 20kHz, 0.08V(-19.72dBu) sine wave signal to the input terminal LINE INPUT (XLR) and check that none of the contact of the voice coil, air leakage and abnormal noise such as vibration noise occurs.
   Next, input music signals to the input terminal LINE INPUT (XLR), move each VR knob and check that the sound volume and tone quality change smoothly without producing noise.

2) Phase of speaker output
   Check that the output at LF is in positive phase with respect to the input signal and the output at HF is in negative phase with respect to the input signal.

■MS400 OVERALL CIRCUIT DIAGRAM 1/2 (AMP 1/5, 2/5, 3/5)



DESTINATION	F201	F202	F203	J201	T101
J	1A250V	1A250V	7A125V	○	XZ499
U	1A250V	1A250V	7A125V	○	XZ500
H	T1AL	T1AL	T3.15AL	○	XZ501
A	T1AL	T1AL	T3.15AL	○	XZ502

- NJM7815FA (XD853A00)
  REGULATOR

1: INPUT
2: GND
3: OUTPUT

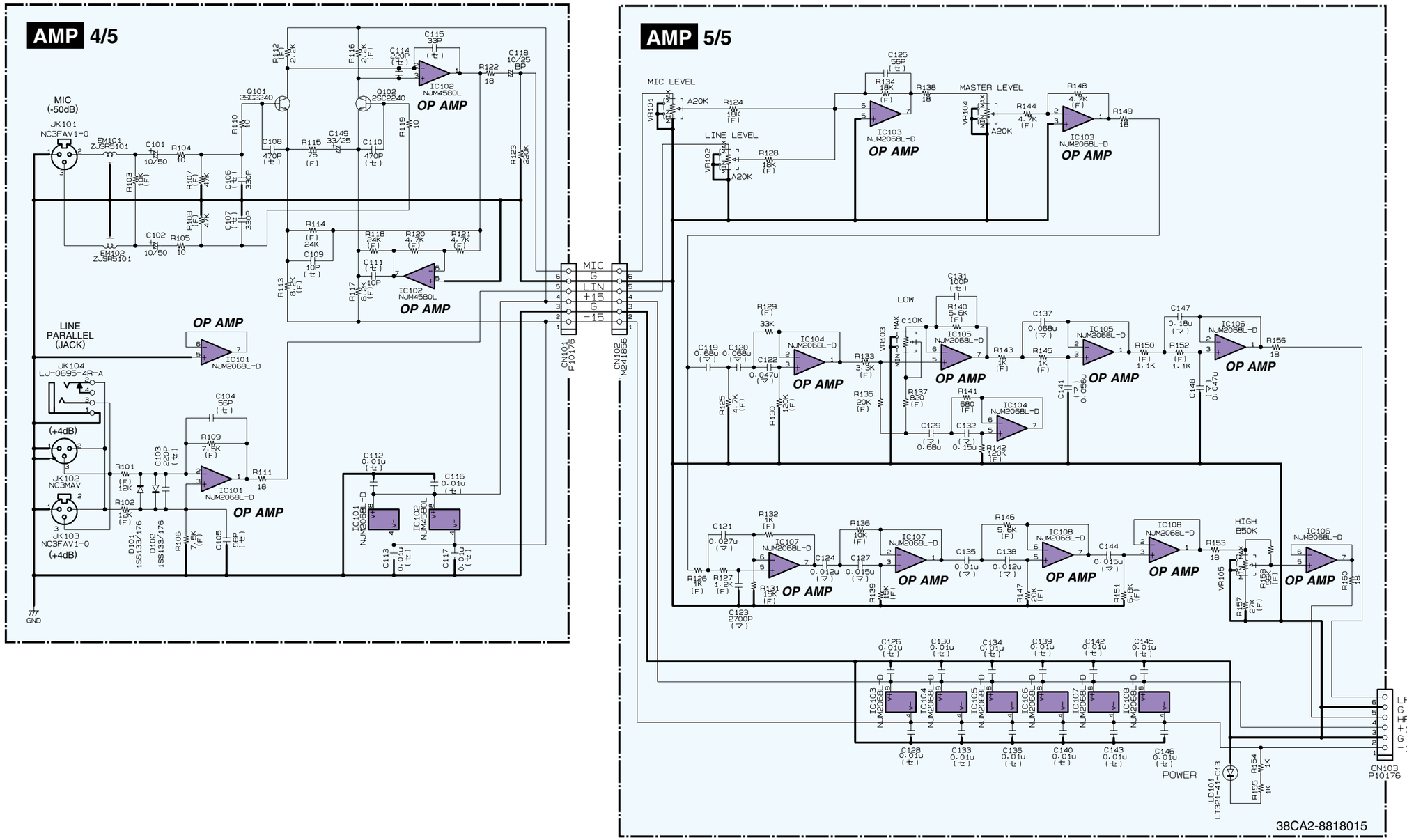
- NJM7915FA (XD854A00)
  REGULATOR -15V

1: OUTPUT
2: COMMON
3: INPUT

Note : See parts list for details of circuit board component parts.

(マ): Mylar Capacitor
(セ): Ceramic Capacitor
(フ): Flame ProofC. Resister
マイカ: Mica Capacitor
F : Metal Film Resistor

■MS400 OVERALL CIRCUIT DIAGRAM 2/2 (AMP 4/5, 5/5)



MS400

POWERED SPEAKER

MS400

PARTS LIST

CONTENTS

Notes : DESTINATION ABBREVIATIONS

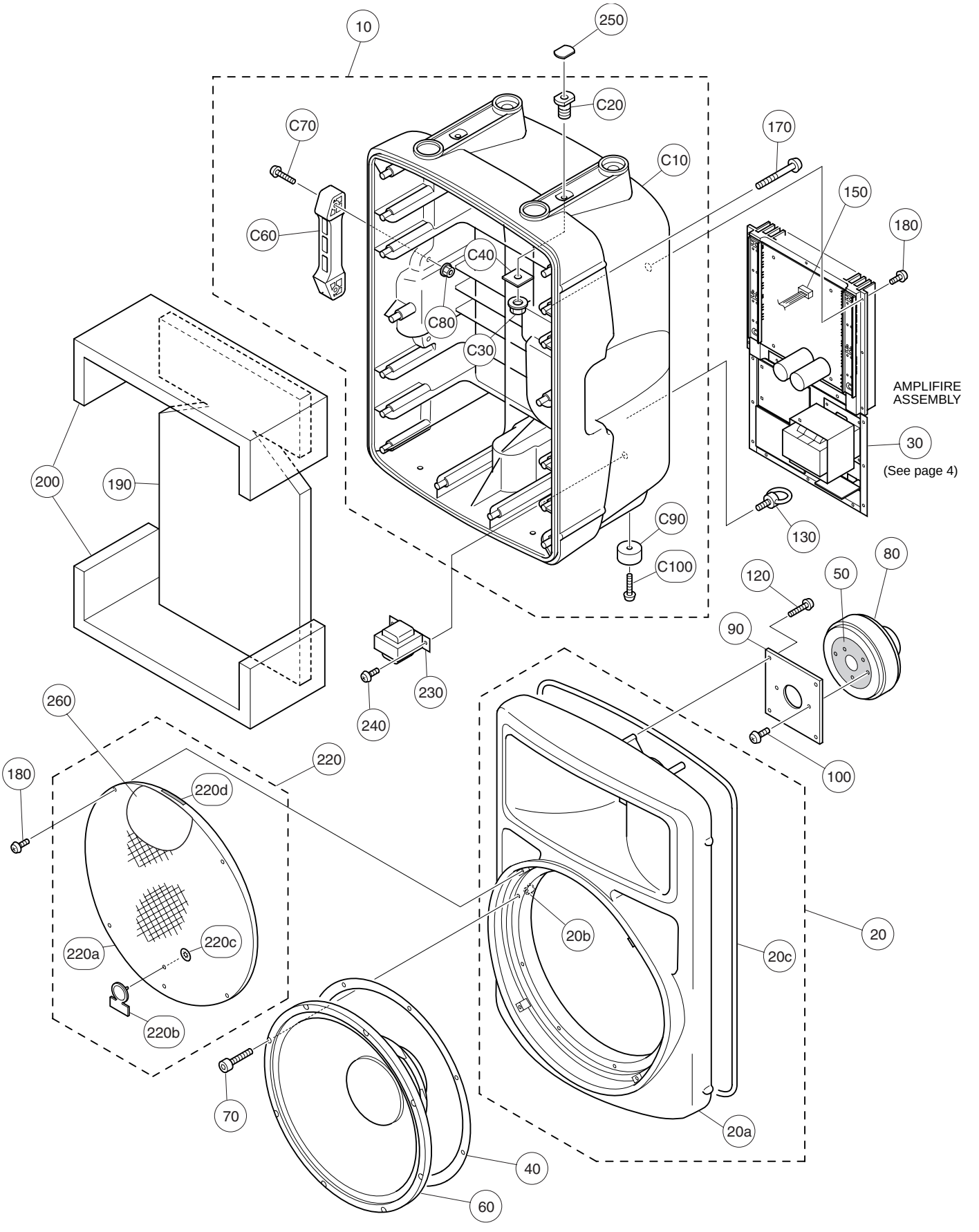
A : Australian model	M : South African model
B : British model	O : Chinese model
C : Canadian model	Q : South-east Asia model
D : German model	T : Taiwan model
E : European model	U : U.S.A. model
F : French model	V : General export model (110V)
H : North European model	W: General export model (220)
I : Indonesian model	N,X: General export model
J : Japanese model	Y : Export model

WARNING

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

- The numbers “QTY” show quantities for each unit.
- The parts with “--” in “PART NO.” are not available as spare parts.
- This mark “ } ” in the REMARKS column means these parts are interchangeable.
- The second letter of the shaded ( ) part number is O, not zero.
- The second letter of the shaded ( ) part number is I, not one.

OVERALL ASSEMBLY



	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
			OVERALL ASSEMBLY					
		--	Overall Assembly	J		J (V640020)		
		--	Overall Assembly	U		U (V640030)		
		--	Overall Assembly	H		H (V640040)		
		--	Overall Assembly	A		A (V640050)		
	10	--	Cabinet Assembly	J		(V640490)		
*	20	V6405100	Buffle Assembly	J				
	20a	--	Speaker Buffle			(V608710)		
	20b	--	Nut	B 5.0X12 MFZN2Y		(VA73570)	8	
	20c	--	Packin			(V688460)	2	
	30	--	Amplifier Assembly	J		J (V608740)		
	30	--	Amplifier Assembly	U V		U (V608750)		
	30	--	Amplifier Assembly	H		H (V608760)		
	30	--	Amplifier Assembly	A		A (V608770)		
*	40	V6085000	Gusket	WOFFER			4	
*	50	V6085400	Gusket					
*	60	XZ072A00	Speaker	38cm 4ohm				
*	70	V6389200	Hexagonal Bolt	5.0X35 MFZN2BL			8	
	80	JAY20610	Speaker	25mm 16ohm				22
	90	--	Angle			(V608620)		
*	100	V6289600	Bind Head Screw	1/4-20UNCX3/8			2	
*	120	V6405200	Bind Head Tapping Screw-P	5.0X30 MFZN2BL			4	
*	130	V6511500	I Bolt	6 MFZN2Y				
	150	--	Connector Assembly	SP		(V609150)		
*	170	V6084800	Bind Head Tapping Screw-P	5.0X50 MFZN2BL			18	
*	180	V6396400	Bind Head Screw-Giza	4X16 MFZN2BL			2	
	190	--	Felt A			(V608610)		
	200	--	Felt B			(V640620)	2	
	210	--	Label			U (VV94530)		
	220	--	Front Gril Assembly	J		(V640500)		
*	220a	V6085700	Front Grile					
*	220b	V6086300	Rogo Plate					
*	220c	V6290000	Bush Nut	SPN-4			2	
*	220d	V7054500	Cushion				4	
	250	--	Bolt Cover			H (V629020)	2	
*	260	V7397100	Grille Sticker					
			CABINET ASSEMBLY					
		--	Cabinet Assembly	J		(V640490)		
*	C10	V6087000	Speaker Cabinet					
	C20	--	Bolt	12X20 MFZN2BL		(V608450)	2	
*	C30	V6084400	Hexagonal Frange Nut	12			2	
*	C40	V6253400	Flat Washer	12X35 MFZN2Y			2	
*	C60	V6086000	Handle				2	
	C70	VL670600	Bind Head Screw	5.0X35 MFZN2BL			4	01
*	C80	VB664600	Hexagonal Nut	5.0 MFZN2BL			4	
*	C90	V6085900	Leg				4	
*	C100	V6405200	Hind Head Tapping Screw-P	5.0X30 MFZN2BL			4	
			ACCESSERIES					
⚠ *		V6283900	AC Cord	BS H05VV-F3X0.75		B		
⚠ *		V6284300	AC Cord	UC SJT#18X3		U		
⚠ *		V6284400	AC Cord	E H05VV-FX3 0.75		E		
⚠ *		V7240300	AC Cord	J VCTF 0.75X3		J		

✻: New Parts

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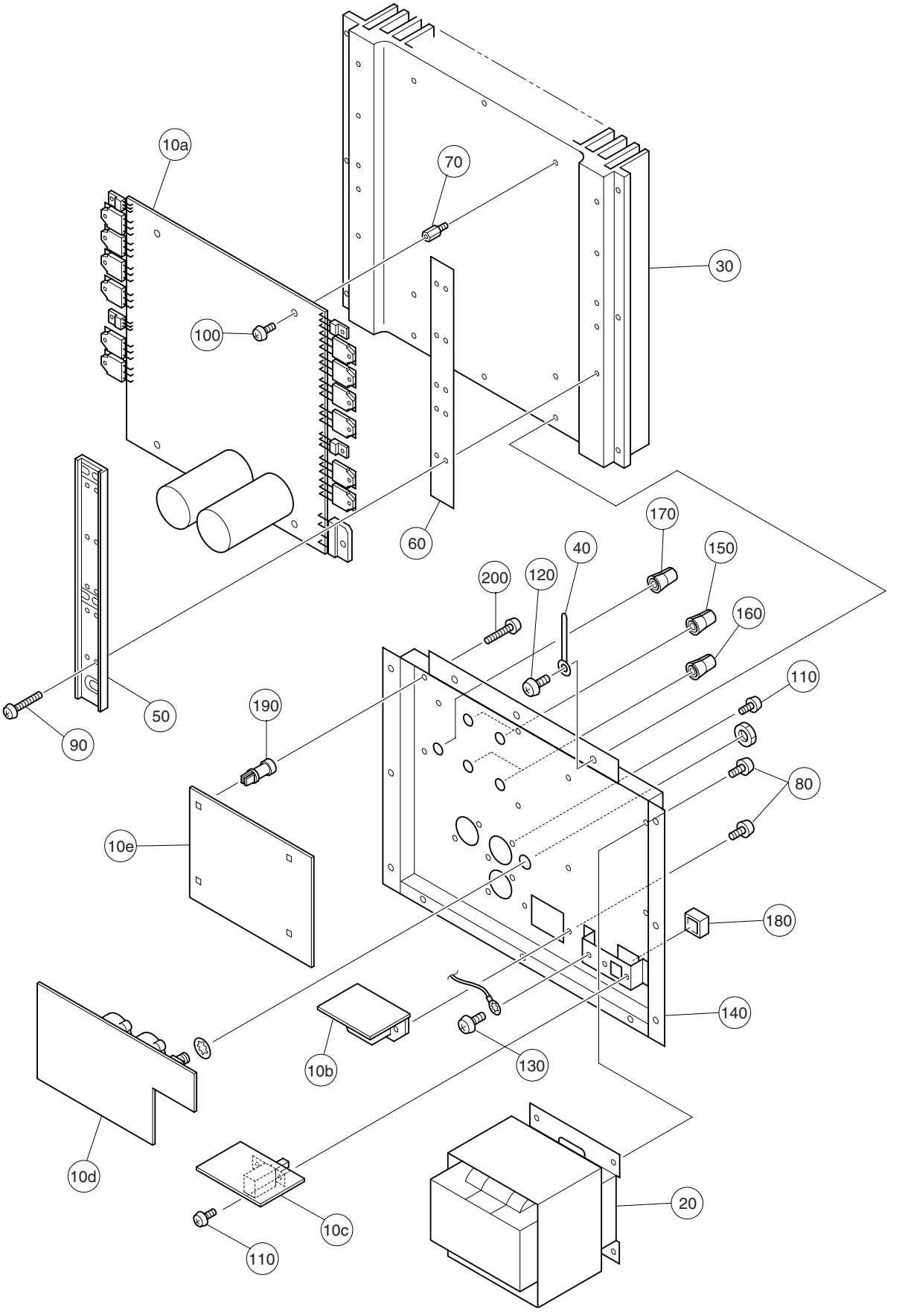
AMPLIFIRE ASSEMBLY



	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
			AMPLIFIER ASSEMBLY					
		--	Amplifier Assembly	MS400 J		J (V608740)		
		--	Amplifier Assembly	MS400 U V		UV (V608750)		
		--	Amplifier Assembly	MS400 H		H (V608760)		
		--	Amplifier Assembly	MS400 A		A (V608770)		
		VV104600	Cord Holder	CV-100		J	3	01
	10	--	Circuit Board	AMP H				
*	10a	**AAX20590**	Circuit Board	AMP 1/5		JU (XY839B0)		
*	10a	**AAX20600**	Circuit Board	AMP 1/5		HA (XY839B0)		
*	10b	**AAX20610**	Circuit Board	AMP 2/5		JUH (XY839B0)		
*	10b	**AAX20620**	Circuit Board	AMP 2/5		A (XY839B0)		
*	10c	**AAX20630**	Circuit Board	AMP 3/5		(XY839B0)		
*	10d	**AAX20640**	Circuit Board	AMP 4/5		(XY839B0)		
*	10e	**AAX20650**	Circuit Board	AMP 5/5		(XY839B0)		
⚠ *	20	**XZ499A00**	Power Transformer	E		J		
⚠ *	20	**XZ500A00**	Power Transformer	UL CSA E		UV		
⚠ *	20	**XZ501A00**	Power Transformer	CEE		H		
⚠ *	20	**XZ502A00**	Power Transformer	CEE		A		
*	30	**V6086400**	Heat sink					
	40	--	Cord Binder	WC-3-MT		(V460710)		
	50	--	Plate			(V608650)	2	
*	60	**V6074700**	Sheet	TBM51W T=0.15			2	
	70	**VV086500**	Angle	H=7.4 B=5.5			4	01
	80	**V7242900**	Bonding Tapping Screw-B	4.0X12 MFZN2BL			6	01
	90	**VQ074600**	Bind Head Tapping Screw-B	3.0X12 MFZN2BL				01
	100	**EG330290**	Bind Head Screw	SP 3.0X8 MFZN2Y			4	01
	110	**VN413300**	Bounding Screw-B	3.0X8 MFZN2BL			8	01
	120	**VR779900**	Bounding Screw-B	4.0X8 MFZN2BL			3	01
	130	**VP156800**	Bind Head Screw	4.0X8 MFZN2BL				01
*	140	**V6086600**	Rear Panel			J		
*	140	**V6086700**	Rear Panel			UV		
*	140	**V6086800**	Rear Panel			H		
*	140	**V6086900**	Rear Panel			A		
	150	**VU860200**	Knob	MX-GREEN/D-GRAY		TONE CONTROL:LOW,HIGH	2	01
	160	**VV625800**	Knob	ORANGE/D-GRAY		LINE:LEVEL,MIC:LEVEL	2	01
	170	**VU860400**	Knob	RED/D-GRAY		MASTER:LEVEL		01
	180	**VU859000**	Knob			POWER ON/OFF		01
*	190	**V7396900**	PCB Support				4	01
	200	**V3289800**	Button	3X25 MFZNBL			4	01

✻: New Parts

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■ ELECTRICAL PARTS

	REF NO.	PART NO.	DESCRIPTION			REMARKS		QTY	RANK
			ELECTRICAL PARTS						
*		**AAX20590**	Circuit Board	AMP 1/5		JU	(XY839B0)		
*		**AAX20600**	Circuit Board	AMP 1/5		HA	(XY839B0)		
*		**AAX20610**	Circuit Board	AMP 2/5		JUH	(XY839B0)		
*		**AAX20620**	Circuit Board	AMP 2/5		A	(XY839B0)		
*		**AAX20630**	Circuit Board	AMP 3/5			(XY839B0)		
*		**AAX20640**	Circuit Board	AMP 4/5			(XY839B0)		
*		**AAX20650**	Circuit Board	AMP 5/5			(XY839B0)		
		--	Connector Assembly	SGND			(V676790)		
		VV291400	Jamper Wire	0.60				159	01
		VV307300	LED Spacer	MX12/4					01
		VV319600	Fuse Holder	CQ-05CT				6	01
*	C101	**V7079500**	Electrolytic Cap.	10.00 50.0V					01
*	C102	**V7079500**	Electrolytic Cap.	10.00 50.0V					01
	C103	**VZ353600**	Ceramic Cap.-B	220P 50V K					01
	C104	**VZ353300**	Ceramic Cap.-SL	56P 50V J					01
	C105	**VZ353300**	Ceramic Cap.-SL	56P 50V J					01
	C106	**VZ353700**	Ceramic Cap.-B	330P 50V K					01
	C107	**VZ353700**	Ceramic Cap.-B	330P 50V K					01
	C108	**VZ353800**	Ceramic Cap.-B	470P 50V K					01
	C109	**VZ352700**	Ceramic Cap.-SL	10P 50V J					01
	C110	**VZ353800**	Ceramic Cap.-B	470P 50V K					01
	C111	**VZ352700**	Ceramic Cap.-SL	10P 50V J					01
	C112	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C113	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C114	**VZ353600**	Ceramic Cap.-B	220P 50V K					01
	C115	**VZ353000**	Ceramic Cap.-SL	33P 50V J					01
	C116	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C117	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C118	**V4587500**	Electrolytic Cap.-NK	10.00 25.0V					
	C119	**VV064300**	Monolithic Mylar Cap.	0.68 50V J					
	C120	**VV062600**	Mylar Cap.	0.068 50V J					01
	C121	**VV062100**	Mylar Cap.	0.027 50V J					01
	C122	**VV062400**	Mylar Cap.	0.047 50V J					01
	C123	**VV060400**	Mylar Cap.	2700P 50V J					
	C124	**VV061500**	Mylar Cap.	0.012 50V J					01
	C125	**VZ353300**	Ceramic Cap.-SL	56P 50V J					01
	C126	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C127	**VV061800**	Mylar Cap.	0.015 50V J					01
	C128	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C129	**VV064300**	Monolithic Mylar Cap.	0.68 50V J					
	C130	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C131	**V3280500**	Ceramic Cap.-B	100P 500 K					01
	C132	**V7079900**	Mylar Cap.-MS	0.15 50V J					01
	C133	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C134	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C135	**VV061400**	Mylar Cap.	0.010 50V J					01
	C136	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C137	**VV062600**	Mylar Cap.	0.068 50V J					01
	C138	**VV061500**	Mylar Cap.	0.012 50V J					01
	C139	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C140	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C141	**VV062500**	Mylar Cap.	0.056 50V J					01
	C142	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C143	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C144	**VV061800**	Mylar Cap.	0.015 50V J					01
	C145	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
	C146	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z					01
*	C147	**V7080000**	Mylar Cap.-MS	0.18 50V J					
	C148	**VV062400**	Mylar Cap.	0.047 50V J					01
	C149	**UR847330**	Electrolytic Cap.	33.00 25.0V					01
*	C201	**V7079300**	Electrolytic Cap.	4.7 100.0V					
*	-204	**V7079300**	Electrolytic Cap.	4.7 100.0V					
*	C205	**V6638400**	Electrolytic Cap.-FX	22.00 25.0V					
*	C206	**V6638400**	Electrolytic Cap.-FX	22.00 25.0V					
	C207	**VV062600**	Mylar Cap.	0.068 50V J					01
	C208	**VZ353500**	Ceramic Cap.-SL	100P 50V J					01
*	C209	**V6638300**	Electrolytic Cap.-FX	100.00 25.0V					
*	C210	**V6638400**	Electrolytic Cap.-FX	22.00 25.0V					
	C211	**FU451220**	Mica Cap.	22P 500V J					01

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	C212	**FU451220**	Mica Cap.	22P 500V J				01
	C213	**VV060300**	Mylar Cap.	2200P 50V J				01
	C214	**VV060300**	Mylar Cap.	2200P 50V J				01
	C215	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z				01
	C216	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z				01
	C217	**FU451220**	Mica Cap.	22P 500V J				01
	-220	**FU451220**	Mica Cap.	22P 500V J				01
*	C221	**V7079700**	Electrolytic Cap.	10.00 25.0V				01
*	C222	**V7079700**	Electrolytic Cap.	10.00 25.0V				01
*	C223	**V7079300**	Electrolytic Cap.	4.7 100.0V				
*	-226	**V7079300**	Electrolytic Cap.	4.7 100.0V				
	C227	**V4567500**	Ceramic Cap.-SL	10P 500V K				
	-230	**V4567500**	Ceramic Cap.-SL	10P 500V K				
*	C231	**V7079700**	Electrolytic Cap.	10.00 25.0V				01
	C232	**VZ353900**	Ceramic Cap.-B	1000P 50V K				01
	C233	**VV330700**	Electrolytic Cap.-SM	470.00 10.0V				01
	C234	**UR847470**	Electrolytic Cap.	47.00 25.0V				01
	C235	**UR866470**	Electrolytic Cap.	4.70 50.0V				01
*	C236	**V7079500**	Electrolytic Cap.	10.00 50.0V				01
*	C237	**V7079500**	Electrolytic Cap.	10.00 50.0V				01
*	C238	**V7079300**	Electrolytic Cap.	4.7 100.0V				
*	C239	**V7079300**	Electrolytic Cap.	4.7 100.0V				
*	C240	**V7079600**	Electrolytic Cap.	47.00 50.0V				01
*	C241	**V7079600**	Electrolytic Cap.	47.00 50.0V				01
	C242	**V3280500**	Ceramic Cap.-B	100P 500 K				01
	C243	**V3280500**	Ceramic Cap.-B	100P 500 K				01
*	C244	**V6433600**	Electrolytic Cap.-VR	1000 35.0V				
*	C245	**V6433600**	Electrolytic Cap.-VR	1000 35.0V				
	C246	**VV062800**	Mylar Cap.	0.1 50V J				01
	C247	**VV062800**	Mylar Cap.	0.1 50V J				01
	C250	**VZ004200**	Film Cap.	0.1000 100V M				01
	C251	**VZ004200**	Film Cap.	0.1000 100V M				01
	C252	**VY897000**	Electrolytic Cap.	6800 100V				08
	C253	**VY897000**	Electrolytic Cap.	6800 100V				08
	C254	**V5097700**	Film Cap.	3.3000 250V K				05
	C255	**V5097700**	Film Cap.	3.3000 250V K				05
	C256	**VV062800**	Mylar Cap.	0.1 50V J				01
	C257	**VV062800**	Mylar Cap.	0.1 50V J				01
*	C260	**V7079300**	Electrolytic Cap.	4.7 100.0V				
*	C261	**V7079300**	Electrolytic Cap.	4.7 100.0V				
	C262	**V3148500**	Film Cap.	0.33 250V M				01
	C263	**V3148500**	Film Cap.	0.33 250V M				01
	C264	**VV314600**	Ceramic Cap.-B	0.0022 500V K				01
	C265	**VV314600**	Ceramic Cap.-B	0.0022 500V K				01
*	C266	**V7079400**	Electrolytic Cap.	100 100.0V				
*	C267	**V7079400**	Electrolytic Cap.	100 100.0V				
⚠	C269	**VV314800**	Capacitor	1000P 400V J.U.C.S				01
	C270	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z				01
	C271	**VZ354000**	Ceramic Cap.-F	0.0100 50V Z				01
	CN101	**--**	Connector Assembly	IN		(V606240)		
*	CN102	**V3764400**	Connector Base Post	M24185XX 6P TE				
	CN103	**--**	Connector Assembly	PWR		(V606250)		
*	CN201	**V3764400**	Connector Base Post	M24185XX 6P TE				
	CN202	**LB932060**	Base Post	6P TE				01
	CN203	**LB932040**	Base Post	4P TE				01
	CN204	**LB933030**	Base Post	3P SE				01
	CN205	**LB933030**	Base Post	3P SE				01
*	CN206	**V3764000**	Connector Base Post	M24185XX 2P TE				
*	CN207	**V3764000**	Connector Base Post	M24185XX 2P TE				
*	CN209	**V3764000**	Connector Base Post	M24185XX 2P TE				
	D101	**VD631600**	Diode	1SS133,176,HSS104				01
	D102	**VD631600**	Diode	1SS133,176,HSS104				01
	D201	**VD631600**	Diode	1SS133,176,HSS104				01
	-210	**VD631600**	Diode	1SS133,176,HSS104				01
	D211	**VQ469600**	Diode	HSS82				01
	-214	**VQ469600**	Diode	HSS82				01
	D215	**VN478200**	Diode	D1NL20U				01
	-218	**VN478200**	Diode	D1NL20U				01
	D219	**VU801600**	Diode	1N4004L				01
	-222	**VU801600**	Diode	1N4004L				01

✻: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	D223	**VD631600**	Diode	1SS133,176,HSS104				01
	D224	**VU801600**	Diode	1N4004L				01
	-233	**VU801600**	Diode	1N4004L				01
	D234	**V4816400**	Twin Diode	FMU-22U 10A 200V				03
	D235	**V4816400**	Twin Diode	FMU-22U 10A 200V				03
	D236	**VS135800**	Twin Diode	FMX-22S 10.0A 200V				03
	D237	**VS135800**	Twin Diode	FMX-22S 10.0A 200V				03
	D238	**V2954200**	Diode Stack	D10XB20 10.0A 200V				04
	EM101	**V3260500**	Noise Filter	ZJSR5101-271TA				01
	EM102	**V3260500**	Noise Filter	ZJSR5101-271TA				01
	F201	**VV070300**	Fuse	TDS 1A 250V J/U/C				01
	F202	**VV070300**	Fuse	TDS 1A 250V J/U/C				01
⚠	F203	**VV071700**	Fuse	TSD 3.15A 250V SEM				01
	IC101	**XM356A00**	IC	NJM2068L-D		OP AMP		02
	IC102	**XF195A00**	IC	NJM4580L		OP AMP		04
	IC103	**XM356A00**	IC	NJM2068L-D		OP AMP		02
	-108	**XM356A00**	IC	NJM2068L-D		OP AMP		02
	IC201	**XD853A00**	IC	NJM7815FA		REGULATOR		03
	IC202	**XD854A00**	IC	NJM7915FA		REGULATOR		03
	JK101	**VU805200**	Canon Connector	XLR NC3FAV1-0				04
	JK102	**VU805100**	Canon Connector	XLR NC3MAV				04
	JK103	**VU805200**	Canon Connector	XLR NC3FAV1-0				04
	JK104	**V2954500**	Phone Connector	LJ-0695-4R-A				02
⚠*	JK201	**V5817000**	AC Inlet	HF-301L				
	L203	**V4668300**	Coil	OH-20 100UH				08
	L204	**V4668300**	Coil	OH-20 100UH				08
	L205	**GE300670**	Ferrite Bead	BL02RN2-R62T4				02
	L206	**GE300670**	Ferrite Bead	BL02RN2-R62T4				02
	LD101	**VV621000**	LED	LT321-41-C13 GR		Power		01
	Q101	**IC224030**	Transistor	2SC2240 GR,BL				01
	Q102	**IC224030**	Transistor	2SC2240 GR,BL				01
	Q201	**IC1815M0**	Transistor	2SC1815 Y,GR				01
	Q202	**IC1815M0**	Transistor	2SC1815 Y,GR				01
	Q203	**IA097040**	Transistor	2SA970 GR				01
	Q204	**IA097040**	Transistor	2SA970 GR				01
	Q205	**IA097030**	Transistor	2SA970 GR,BL				01
	Q206	**IA097030**	Transistor	2SA970 GR,BL				01
	Q207	**IA097040**	Transistor	2SA970 GR				01
	Q208	**IA097040**	Transistor	2SA970 GR				01
	Q209	**IC1815M0**	Transistor	2SC1815 Y,GR				01
	-212	**IC1815M0**	Transistor	2SC1815 Y,GR				01
	Q213	**IA101590**	Transistor	2SA1015 O,Y				01
	Q214	**IA101590**	Transistor	2SA1015 O,Y				01
	Q215	**VQ547300**	Transistor	2SC4793 (HFE)				03
	Q216	**VU418600**	Transistor	2SC3468 D,E				01
	Q217	**VQ547300**	Transistor	2SC4793 (HFE)				03
	Q218	**VU418600**	Transistor	2SC3468 D,E				01
	Q219	**VU418400**	Transistor	2SA1371 D,E				01
	Q220	**VU418400**	Transistor	2SA1371 D,E				01
	Q221	**VU418600**	Transistor	2SC3468 D,E				01
	Q222	**VU418600**	Transistor	2SC3468 D,E				01
	Q223	**VU418400**	Transistor	2SA1371 D,E				01
	Q224	**VU418400**	Transistor	2SA1371 D,E				01
	Q225N	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q225P	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q226N	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q226P	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q227N	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q227P	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q228N	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q228P	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q229N	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q229P	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q230	**V2797700**	Transistor	2SC5395 E,F				01
	Q231	**V2797600**	Transistor	2SA1993 E,F				01
	Q232	**V2797700**	Transistor	2SC5395 E,F				01
	Q233	**V2797700**	Transistor	2SC5395 E,F				01
	Q234	**V2797600**	Transistor	2SA1993 E,F				01
	Q235	**VU418600**	Transistor	2SC3468 D,E				01
	Q236	**VU418400**	Transistor	2SA1371 D,E				01

✻: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	Q237N	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q237P	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q238N	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q238P	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q239N	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q239P	**VR732800**	Pair Transistor	A1859A/C4883A				04
	Q240N	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q240P	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q241N	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	Q241P	**VZ222300**	Pair Transistor	A1492C3856(Z)(210)				06
	R101	**V2440400**	Metal Film Resistor	12K 1/4 F				01
	R102	**V2440400**	Metal Film Resistor	12K 1/4 F				01
	R103	**VV065500**	Metal Film Resistor	10K 1/4 F				01
	R104	**HF454100**	Carbon Resistor	10.0 1/4 J				01
	R105	**HF454100**	Carbon Resistor	10.0 1/4 J				01
*	R106	**V4404200**	Metal Film Resistor	7.5K 1/4 F				
	R107	**VV066100**	Metal Film Resistor	47K 1/4 F				01
	R108	**VV066100**	Metal Film Resistor	47K 1/4 F				01
*	R109	**V4404200**	Metal Film Resistor	7.5K 1/4 F				
	R110	**HF454100**	Carbon Resistor	10.0 1/4 J				01
	R111	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R112	**VV065100**	Metal Film Resistor	2.2K 1/4 F				01
	R113	**VV065400**	Metal Film Resistor	8.2K 1/4 F				01
	R114	**VV065900**	Metal Film Resistor	24K 1/4 F				01
	R115	**V2386300**	Metal Film Resistor	75.0 1/4 F				01
	R116	**VV065100**	Metal Film Resistor	2.2K 1/4 F				01
	R117	**VV065400**	Metal Film Resistor	8.2K 1/4 F				01
	R118	**VV065900**	Metal Film Resistor	24K 1/4 F				01
	R119	**HF454100**	Carbon Resistor	10.0 1/4 J				01
	R120	**VV065200**	Metal Film Resistor	4.7K 1/4 F				05
	R121	**VV065200**	Metal Film Resistor	4.7K 1/4 F				05
	R122	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R123	**HF458220**	Carbon Resistor	220.0K 1/4 J				01
	R124	**VV065700**	Metal Film Resistor	18K 1/4 F				
	R125	**VV065200**	Metal Film Resistor	4.7K 1/4 F				05
	R126	**V3029000**	Metal Film Resistor	1K 1/4 F				01
*	R127	**V6433400**	Metal Film Resistor	1.2K 1/4 F				
	R128	**VV065700**	Metal Film Resistor	18K 1/4 F				
	R129	**VV066000**	Metal Film Resistor	33K 1/4 F				01
*	R130	**V6570200**	Metal Film Resistor	120K 1/4 F				
	R131	**VZ009900**	Metal Film Resistor	15K 1/4 F				01
	R132	**V3029000**	Metal Film Resistor	1K 1/4 F				01
	R133	**V4404000**	Metal Film Resistor	3.3K 1/4 F				
	R134	**VV065700**	Metal Film Resistor	18K 1/4 F				
	R135	**VV065800**	Metal Film Resistor	20K 1/4 F				05
	R136	**VV065500**	Metal Film Resistor	10K 1/4 F				01
*	R137	**V6706200**	Metal Film Resistor	820.0 1/4 F				
	R138	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R139	**VZ009900**	Metal Film Resistor	15K 1/4 F				01
	R140	**V2440300**	Metal Film Resistor	5.6K 1/4 F				01
	R141	**VV312800**	Metal Film Resistor	680.0 1/4 F				01
*	R142	**V6570200**	Metal Film Resistor	120K 1/4 F				
	R143	**V3029000**	Metal Film Resistor	1K 1/4 F				01
	R144	**VV065200**	Metal Film Resistor	4.7K 1/4 F				05
	R145	**V3029000**	Metal Film Resistor	1K 1/4 F				01
	R146	**V2440300**	Metal Film Resistor	5.6K 1/4 F				01
	R147	**VV065800**	Metal Film Resistor	20K 1/4 F				05
	R148	**VV065200**	Metal Film Resistor	4.7K 1/4 F				05
	R149	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R150	**V4640100**	Metal Film Resistor	1.1K 1/4 F				
	R151	**VV065300**	Metal Film Resistor	6.8K 1/4 F				01
	R152	**V4640100**	Metal Film Resistor	1.1K 1/4 F				
	R153	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R154	**HF456100**	Carbon Resistor	1.0K 1/4 J				01
	R155	**HF456100**	Carbon Resistor	1.0K 1/4 J				01
	R156	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R157	**V2440500**	Metal Film Resistor	27K 1/4 F				01
	R158	**V3028900**	Metal Film Resistor	56K 1/4 F				01
	R160	**HF454180**	Carbon Resistor	18.0 1/4 J				01
	R201	**HF456110**	Carbon Resistor	1.1K 1/4 J				01

❇: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
R202	**HF456100**	Carbon Resistor	1.0K 1/4 J				01
R203	**HF457220**	Carbon Resistor	22.0K 1/4 J				01
R204	**VZ010600**	Metal Film Resistor	560.0 1/4 F				01
R205	**HF457220**	Carbon Resistor	22.0K 1/4 J				01
R206	**VZ010600**	Metal Film Resistor	560.0 1/4 F				01
R207	**HF455560**	Carbon Resistor	560.0 1/4 J				01
-209	**HF455560**	Carbon Resistor	560.0 1/4 J				01
R210	**HF457100**	Carbon Resistor	10.0K 1/4 J				01
R211	**HF455560**	Carbon Resistor	560.0 1/4 J				01
R212	**HF457100**	Carbon Resistor	10.0K 1/4 J				01
R213	**HF455560**	Carbon Resistor	560.0 1/4 J				01
R214	**HF455560**	Carbon Resistor	560.0 1/4 J				01
R215	**V2440400**	Metal Film Resistor	12K 1/4 F				01
R216	**V2440400**	Metal Film Resistor	12K 1/4 F				01
R217	**VV065600**	Metal Film Resistor	11K 1/4 F				05
R218	**VV065600**	Metal Film Resistor	11K 1/4 F				05
R219	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
-222	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
R223	**HF455200**	Carbon Resistor	200.0 1/4 J				01
R224	**HF455200**	Carbon Resistor	200.0 1/4 J				01
R225	**HF455220**	Carbon Resistor	220.0 1/4 J				01
R226	**HF455220**	Carbon Resistor	220.0 1/4 J				01
R227	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
-234	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
R235	**HF455330**	Carbon Resistor	330.0 1/4 J				01
-238	**HF455330**	Carbon Resistor	330.0 1/4 J				01
R239	**VV065100**	Metal Film Resistor	2.2K 1/4 F				01
R240	**HF455330**	Carbon Resistor	330.0 1/4 J				01
R241	**VV065100**	Metal Film Resistor	2.2K 1/4 F				01
R242	**HF455330**	Carbon Resistor	330.0 1/4 J				01
R243	**HF455270**	Carbon Resistor	270.0 1/4 J				01
R244	**HF455270**	Carbon Resistor	270.0 1/4 J				01
R245	**VV313800**	Flame Proof C. Resistor	220.0 1/4 J				01
-248	**VV313800**	Flame Proof C. Resistor	220.0 1/4 J				01
R249	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
-256	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
R257	**VZ009300**	Flame Proof C. Resistor	330.0 1/4 J				01
-260	**VZ009300**	Flame Proof C. Resistor	330.0 1/4 J				01
R261	**VV276800**	Flame Proof C. Resistor	100 1/4 J				01
-268	**VV276800**	Flame Proof C. Resistor	100 1/4 J				01
R269	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
-272	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
R273	**V4833200**	Cement Resistor	0.22 5W K				
-276	**V4833200**	Cement Resistor	0.22 5W K				
R277	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
R278	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
R279	**V4833200**	Cement Resistor	0.22 5W K				
R280	**V4833200**	Cement Resistor	0.22 5W K				
R281	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
R282	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
R283	**HF457100**	Carbon Resistor	10.0K 1/4 J				01
R284	**HF457220**	Carbon Resistor	22.0K 1/4 J				01
R285	**HF457470**	Carbon Resistor	47.0K 1/4 J				01
R286	**HF458150**	Carbon Resistor	150.0K 1/4 J				01
R287	**HF457100**	Carbon Resistor	10.0K 1/4 J				01
R288	**HF457560**	Carbon Resistor	56.0K 1/4 J				01
R289	**HF457150**	Carbon Resistor	15.0K 1/4 J				01
R290	**HF458150**	Carbon Resistor	150.0K 1/4 J				01
R291	**HF458150**	Carbon Resistor	150.0K 1/4 J				01
R292	**HF456560**	Carbon Resistor	5.6K 1/4 J				01
R293	**HF456560**	Carbon Resistor	5.6K 1/4 J				01
R294	**VZ008800**	Flame Proof C. Resistor	22.0 1/4 J				01
R295	**VZ008800**	Flame Proof C. Resistor	22.0 1/4 J				01
R296	**VZ008700**	Flame Proof C. Resistor	2.2K 1/4 J				01
R297	**VZ008700**	Flame Proof C. Resistor	2.2K 1/4 J				01
R298	**VZ008600**	Flame Proof C. Resistor	150.0 1/4 J				01
R299	**VZ008600**	Flame Proof C. Resistor	150.0 1/4 J				01
R300	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
-303	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
R304	**V2961000**	Metal Oxide Film Resistor	4.7 2W J				01

✻: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	R307	**V2961000**	Metal Oxide Film Resistor	4.7 2W J				01
	R310	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
	-313	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
	R314	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
	-317	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
	R318	**VV313900**	Flame Proof C. Resistor	680.0 1/4 J				01
	R319	**VV313900**	Flame Proof C. Resistor	680.0 1/4 J				01
	R320	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
	R321	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
	RY201	**VV315400**	Relay	DC OSA-SH-224DM3M				06
⚠	SW201	**VV089200**	Push Switch	SFDLB11R7U-YL U,C,		POWER ON/OFF		03
	VR101	**V5521500**	Rotary Variable Resistor	A 20.0K RK09D113		Mic level		01
	VR102	**V5521500**	Rotary Variable Resistor	A 20.0K RK09D113		Line level		01
*	VR103	**V6062600**	Rotary Variable Resistor	C 10.0K RK09D113		Low		
	VR104	**V5521500**	Rotary Variable Resistor	A 20.0K RK09D113		Master level		01
	VR105	**V5521600**	Rotary Variable Resistor	B 50.0K RD09F113		High		01
	VR201	**VA787500**	Trimmer Potentiometer	B 470 3P RHEOA		idling		01
	VR202	**VA787500**	Trimmer Potentiometer	B 470 3P RHEOA		idling		01
	W201	**--**	Connector Assembly	AC		(V606230)		
	ZD201	**VG438400**	Zener Diode	MTZ J 6.8C 6.8V				01
	-204	**VG438400**	Zener Diode	MTZ J 6.8C 6.8V				01
⚠ *		**XZ499A00**	Power Transformer	E		J		
⚠ *		**XZ500A00**	Power Transformer	UL CSA E		UV		
⚠ *		**XZ501A00**	Power Transformer	CEE		H		
⚠ *		**XZ502A00**	Power Transformer	CEE		A		
⚠ *		**V6283900**	AC Cord	BS H05VV-F3X0.75		B		
⚠ *		**V6284300**	AC Cord	UC SJT#18X3		U		
⚠ *		**V6284400**	AC Cord	E H05VV-FX3 0.75		E		
⚠ *		**V7240300**	AC Cord	J VCTF 0.75X3		J		
*		**XZ072A00**	Speaker	38cm 4ohm				
		JAY20610	Speaker	25mm 16ohm				22

✻: New Parts

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