

POWER AMPLIFIER

XM6150/XM4220

SERVICE MANUAL



XM6150



XM4220

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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 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 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 WHATSOEVER 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.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this main lead are coloured in accordance with the following code:
 BLUE: NEUTRAL
 BROWN: LIVE


As the colours of the wires in the main lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The BLUE wire must be connected to the terminal that is marked with the letter N (or coloured BLACK).

The BROWN wire must be connected to the terminal that is marked with the letter L (or coloured RED).

Be certain that neither core is connected to the earth terminal of the three pin plug.

■ WARNING

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

SPECIFICATIONS

		XM6150	XM4220
Power Output Level (Rated Power) 20 Hz~20 kHz THD+N= 0.2%	8Ω	100 W x 6	140 W x 4
	4Ω	120 W x 6	180 W x 4
	8Ω/BRIDGE	240 W x 3	360 W x 2
1 kHz THD+N= 0.2%	8Ω	120 W x 6	170 W x 4
	4Ω	150 W x 6	220 W x 4
	8Ω/BRIDGE	300 W x 3	440 W x 2
	70.7V/BRIDGE	150 W x 3	350 W x 2
Power Bandwidth	Half Power	10 Hz~40 kHz (THD+N= 1%)	
Total Harmonic Distortion (THD + N) 20 Hz~20 kHz, Half Power		≤0.2%	
Frequency Response	8Ω, P _o = 1 W	0 dB, 0.5 dB, -1 dB 20 Hz~50 kHz	
Intermodulation distortion (IMD) 60 Hz:7 kHz, 4:1, Half Power		≤0.2%	
Channel Separation	Half Power, R _L = 8Ω, 1 kHz Vol. 0(maximum), input 600Ω shunt	≥60 dB	
Residual Noise	Vol. 0(maximum) 12.7 kHz LPF	≤-68 dB	≤-66.5 dB
SN Ratio	12.7 kHz LPF	100 dB	
Damping Factor	8Ω, 1f= 1 kHz	≥100	
Sensitivity (Vol. 0:maximum) Rated Power into 8 Ω		0 dB	
Voltage Gain (Vol. 0:maximum)		32.1 dB	33.6 dB
Input Impedance		30 kΩ/Balanced, 15 kΩ/Unbalanced	
Controls	Front Panel Rear Panel	POWER switch (ON/OFF) Volume (31 position) /ch BRIDGE switch (ON/OFF) /2ch HPFswitch (ON/OFF) /ch fc=80 Hz, -12 dB/oct. CH A TO ALL CH switch	
Connectors	Input Output	XLR-3-31 type/ch Euroblock connector 5-way binding posts	
Indicators	POWER PROTECTION CLIP SIGNAL	Green Red Red Green	
Protection Circuits		POWER switch ON muting, DC detection, Temp. detection (heatsink temp ≥ 85°C)	
PC limiter		R _L ≤ 2 Ω	
Fan Speed		Low/~50°C, Variable, High/70°C~	
Power Requirements	US & Canada Europe Other	120 V, 60 Hz 230 V, 50 Hz 240 V, 50 Hz	
Power Consumption	Idling 1/8 output power, 4Ω Maximum output, 4Ω	45 W 400 W/550 VA 1800 W	45 W 400 W/500 VA 1800 W
Dimensions (W x H x D)		480 x 132 x 319 mm	
Weight		18 kg	18 kg
Accessories		Euroblock connector x 6	Euroblock connector x 4

0 dB=0.775 V_{rms}, Half Power=1/2 Power Output Level (Rated Power)

For European Model

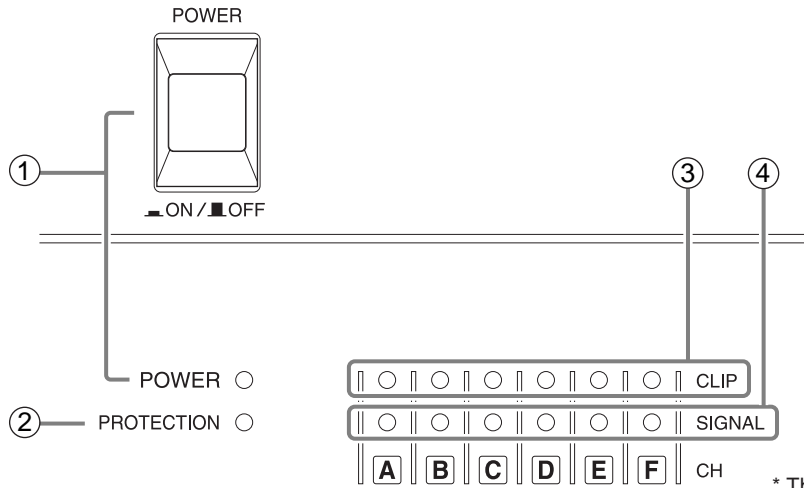
Purchaser/User information specified in EN55103-1 and EN55103-2.

Inrush Current: 56A

Conformed Environment: E1, E2, E3 and E4.

PANEL LAYOUT

• Front Panel



* The illustration shows model XM6150.

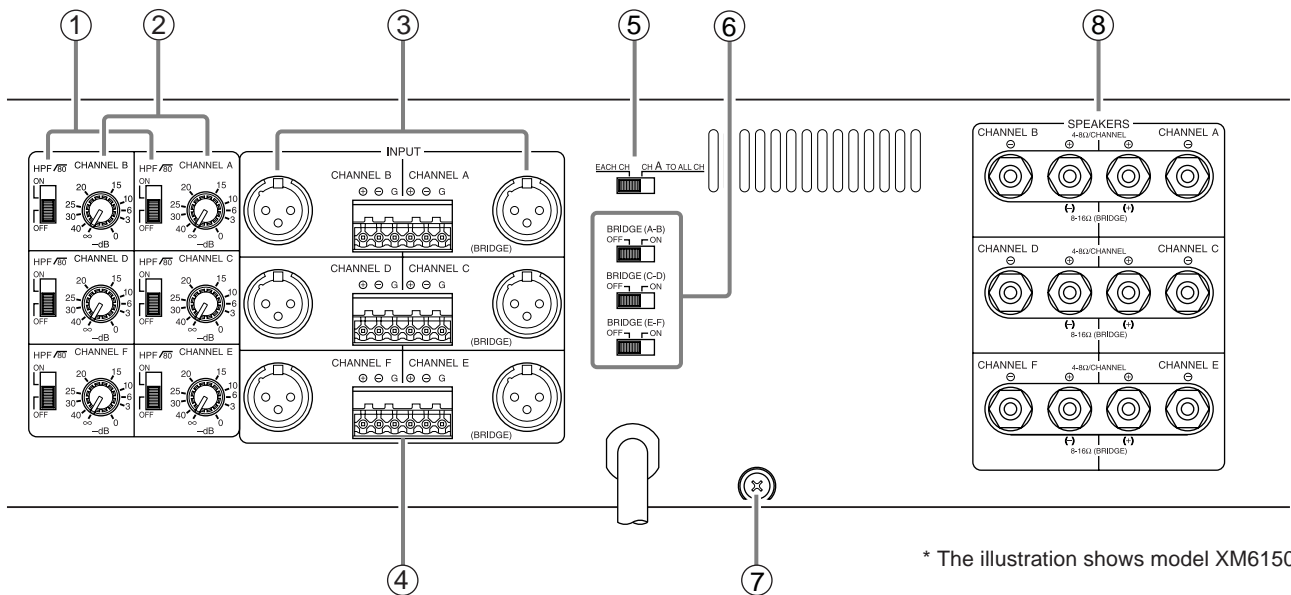
① POWER switch and indicator

③ CLIP indicator

② PROTECTION indicator

④ SIGNAL indicator

• Rear Panel



* The illustration shows model XM6150.

① HPF switches

⑤ CH A TO ALL CH switch

② Attenuators

⑥ BRIDGE switches

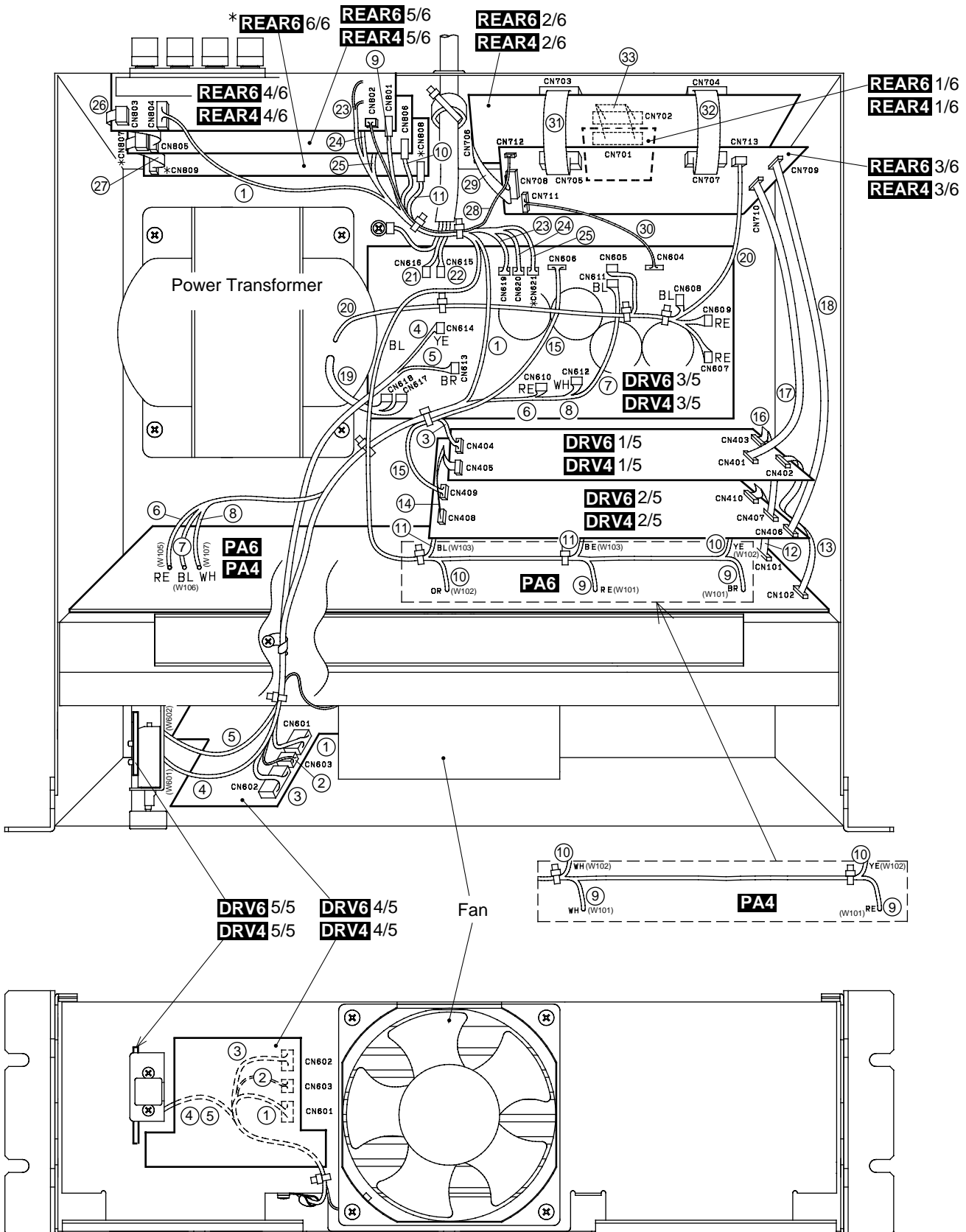
③ XLR inputs

⑦ GND terminals

④ Euroblock connectors

⑧ Speaker outputs

CIRCUIT BOARD LAYOUT



	DESTINATION		CONNECTOR ASSEMBLY	PIN/ LENGHT	PART LIST REF NO.
①	DRV6 or DRV4 (4/5)-CN601	REAR6 or REAR4 (4/6)-CN804	SIG	9P	Overall Assembly [330]
②	DRV6 or DRV4 (4/5)-CN603	Fan	Fan	2P	Overall Assembly [160]
③	DRV6 or DRV4 (4/5)-CN602	DRV6 or DRV4 (1/5)-CN404	CLP	8P	Overall Assembly [320]
④	DRV6 or DRV4 (5/5)-W601	DRV6 or DRV4 (3/5)-CN614	AC1	1P	DRV6 or DRV4 C.B. [W601]
⑤	DRV6 or DRV4 (5/5)-W602	DRV6 or DRV4 (3/5)-CN613	AC2	1P	DRV6 or DRV4 C.B. [W602]
⑥	PA6 or PA4-W105	DRV6 or DRV4 (3/5)-CN610	+B	1P	PA6 or PA4 C.B. [W105]
⑦	PA6 or PA4-W106	DRV6 or DRV4 (3/5)-CN611	GND	1P	PA6 or PA4 C.B. [W106]
⑧	PA6 or PA4-W107	DRV6 or DRV4 (3/5)-CN612	-B	1P	PA6 or PA4 C.B. [W107]
⑨	PA6 or PA4-W101	REAR6 or REAR4 (4/6)-CN801	OUT AB	2P	PA6 or PA4 C.B. [W101]
⑩	PA6 or PA4-W102	REAR6 or REAR4 (5/6)-CN806	OUT CD	2P	PA6 or PA4 C.B. [W102]
⑪	PA6-W103	REAR6 (6/6)-CN808	OUT EF	2P	PA6 C.B. [W103]
⑫	PA6 or PA4-CN101	DRV6 or DRV4 (2/5)-CN410	FFC	10P/L60	Overall Assembly [240]
⑬	PA6 or PA4-CN102	DRV6 or DRV4 (1/5)-CN402	FFC	14P/L80	Overall Assembly [230]
⑭	DRV6 or DRV4 (1/5)-CN405	DRV6 or DRV4 (2/5)-CN408	FFC	6P/L50	Overall Assembly [260]
⑮	DRV6 or DRV4 (2/5)-CN409	DRV6 or DRV4 (3/5)-CN606		5P/L180	Overall Assembly [290]
⑯	DRV6 or DRV4 (1/5)-CN403	DRV6 or DRV4 (2/5)-CN407	FFC	8P/L60	Overall Assembly [270]
⑰	DRV6 or DRV4 (1/5)-CN401	REAR6 or REAR4 (3/6)-CN710	FFC	14P/L150	Overall Assembly [310]
⑱	DRV6 or DRV4 (2/5)-CN406	REAR6 or REAR4 (3/6)-CN709	FFC	6P/L140	Overall Assembly [280]
⑲	Power Transformer	DRV6 or DRV4 (3/5) -CN617, CN618	Power Transformer	1P	Overall Assembly [70]
⑳	Power Transformer	DRV6 or DRV4 (3/5)-CN605, CN607, CN608, CN609 REAR6 or REAR4 (3/6)-CN713	Power Transformer	1P	Overall Assembly [70]
㉑	DRV6 or DRV4 (3/5)-CN616	AC Cord	AC Cord	1P	Overall Assembly [40]
㉒	DRV6 or DRV4 (3/5)-CN615	AC Cord	AC Cord	1P	Overall Assembly [40]
㉓	DRV6 or DRV4 (3/5)-CN619	REAR6 or REAR4 (4/6)-W801	OUT G	2P	DRV6 or DRV4 C.B. [W801]
㉔	DRV6 or DRV4 (3/5)-CN620	REAR6 or REAR4 (5/6)-W802	OUT G	2P	DRV6 or DRV4 C.B. [W802]
㉕	DRV6(3/5)-CN621	REAR6(6/6)-W803	OUT G	2P	REAR6 C.B. [W803]
㉖	REAR6 or REAR4 (4/6)-CN803	REAR6 or REAR4 (5/6)-CN805	FFC	6P/L70	Rear Assembly [R150]
㉗	REAR6 (5/6)-CN807	REAR6 (6/6)-CN809	FFC	6P/L70	Rear Assembly [R150]
㉘	REAR6 or REAR4 (3/6)-CN712	REAR6 or REAR4 (4/6)-CN802		3P/L80	Rear Assembly [R130]
㉙	REAR6 or REAR4 (2/6)-CN706	REAR6 or REAR4 (3/6)-CN708	FFC	20P/L50	Rear Assembly [R60]
㉚	DRV6 or DRV4 (3/5)-CN604	REAR6 or REAR4 (3/6)-CN711		7P/L180	Rear Assembly [R140]
㉛	REAR6 or REAR4 (2/6)-CN703	REAR6 or REAR4 (3/6)-CN705	FFC	20P/L50	Rear Assembly [R60]
㉜	REAR6 or REAR4 (2/6)-CN704	REAR6 or REAR4 (3/6)-CN707	FFC	35P/L50	Rear Assembly [R70]
㉝	REAR6 or REAR4 (1/6)-CN701	REAR6 or REAR4 (2/6)-CN702	FFC	24P/L50	Rear Assembly [R50]

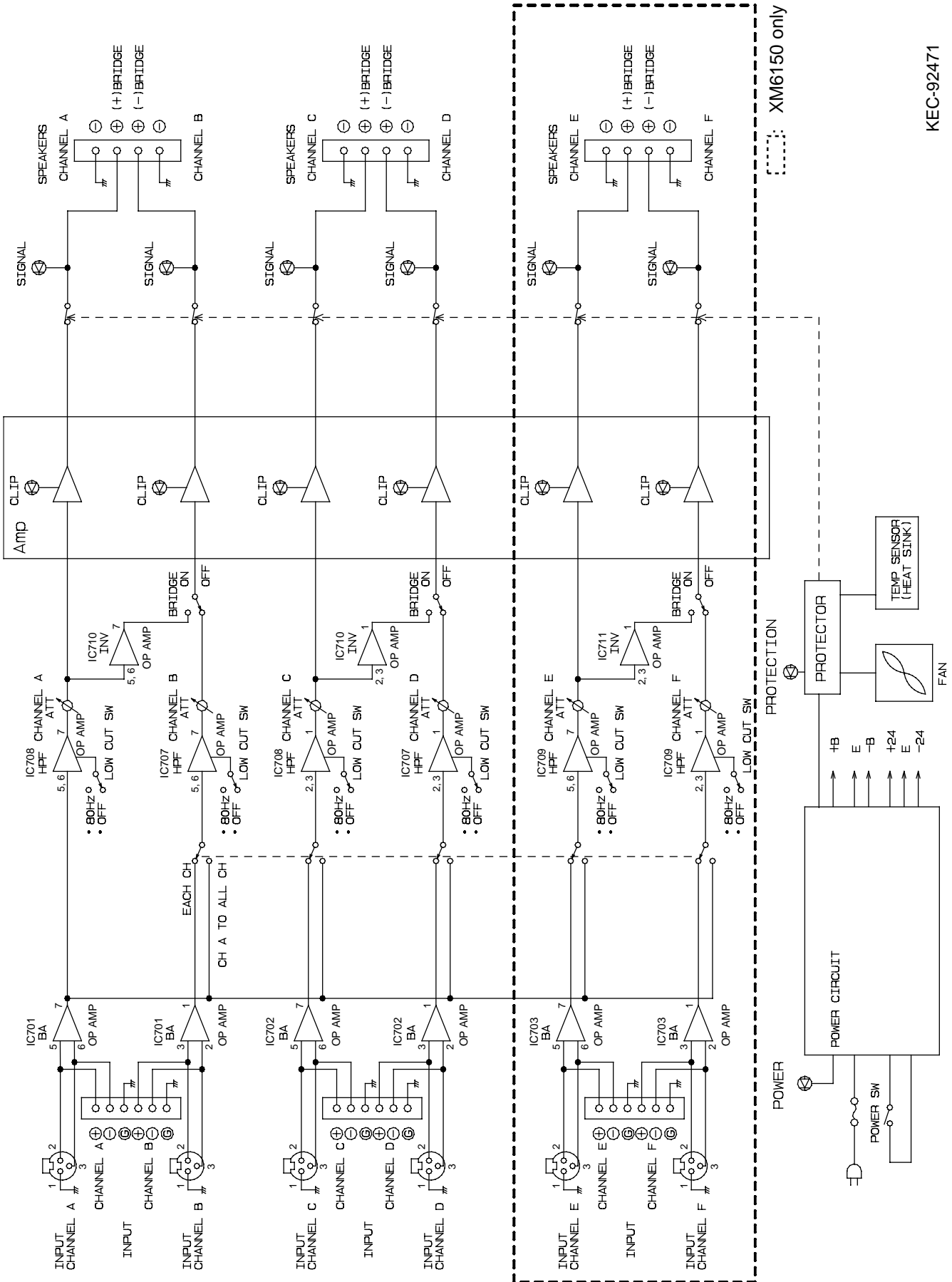
• Wire color

	CN801	CN806	CN808
XM6150	BR, RE	OR, YE	BE, BL
XM4220	RE, WH	YE, WH	

• Wire color

	Japanese	U.S. Canadian	North European British	Australian
⑲	YE	BR	BE	RE
㉑	WH	WH	BE	BE
㉒	BL	BL	BR	BR

BLOCK DIAGRAM



KEC-92471

DISASSEMBLY PROCEDURE

1. Top Cover

1-1 Remove the nine (9) screws marked [480]. The top cover can then be removed. (Fig.1)

2. Front Panel

2-1 Remove the top cover. (See procedure 1.)
 2-2 Remove the four (4) screws marked [450]. The front panel can then be removed. (Fig.2)

3. Rear Assembly

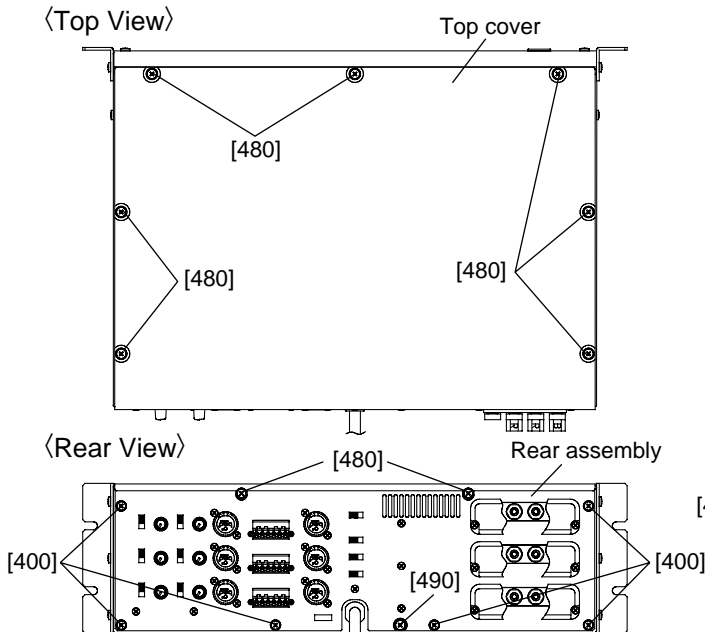
3-1 Remove the top cover. (See procedure 1.)
 3-2 Remove the six (6) screws marked [400] and the screw marked [490]. The rear assembly can then be removed. (Fig.1)

4. DRV6(3/5) Circuit Board <XM6150> DRV4(3/5) Circuit Board <XM4220>

4-1 Remove the top cover. (See procedure 1.)
 4-2 Remove the rear assembly. (See procedure 3.)
 4-3 Remove the four (4) screws marked [100], the two (2) screws marked [110] and the screw marked [60]. The DRV6(3/5) circuit board or the DRV4(3/5) circuit board can then be removed. (Fig.2)

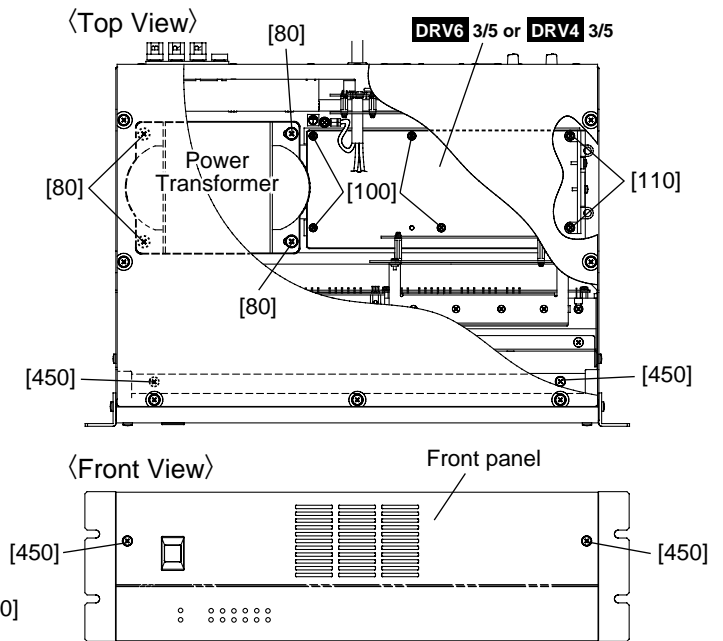
5. Power Transformer

5-1 Remove the top cover. (See procedure 1.)
 5-2 Remove the four (4) screws marked [80]. The power transformer can then be removed. (Fig.2)



- [400]: Bonding Tapping Screw-B 4.0 X 8 MFZN2BL (VR779900)
- [480]: Bind Head Tapping Screw-B 4.0 X 8 MFZN2BL (EG340190)
- [490]: Bind Head Screw A4.0 X 8 MFZN2BL (VP156800)

(Fig.1)

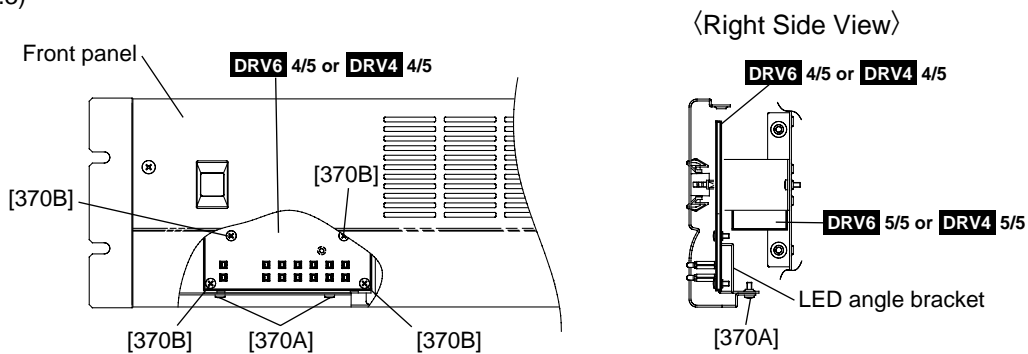


- [60]: Bind Head Screw A4.0 X 8 MFZN2BL (VP156800)
- [80]: Bind Head Screw SP5.0 X 10 MFZN2BL (VU688100)
- [100]: Bind Head Tapping Screw-B 3.0 X 8 MFZN2BL (EP600190)
- [110]: Bind Head Tapping Screw-B 3.0 X 12 MFZN2BL (VQ074600)
- [450]: Bind Head Tapping Screw-B 4.0 X 8 MFZN2BL (EG340190)

(Fig.2)

**6. DRV6(4/5) Circuit Board <XM6150>
DRV4(4/5) Circuit Board <XM4220>**

- 6-1 Remove the top cover. (See procedure 1.)
- 6-2 Remove the front panel. (See procedure 2.)
- 6-3 Remove the two (2) screws marked [370A]. The DRV6(4/5) circuit board or the DRV4(4/5) circuit board can then be removed with the LED angle bracket. (Fig.3)
- 6-4 Remove the four (4) screws marked [370B]. The LED angle bracket can then be removed from the DRV6(4/5) circuit board or the DRV4(4/5) circuit board. (Fig.3)



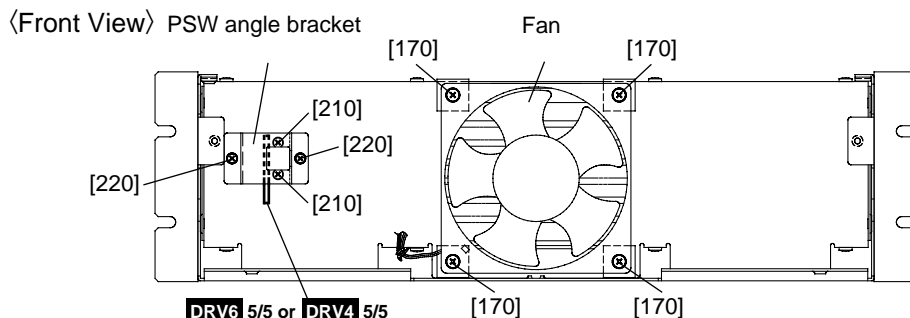
[370]: Bind Head Tapping Screw-B 3.0 X 8 MFZN2BL (EP600190)
(Fig.3)

**7. DRV6(5/5) Circuit Board <XM6150>
DRV4(5/5) Circuit Board <XM4220>**

- 7-1 Remove the top cover. (See procedure 1.)
- 7-2 Remove the front panel. (See procedure 2.)
- 7-3 Remove the two (2) screws marked [220]. The PSW angle bracket can then be removed. (Fig.4)
- 7-4 Pull out the PSW knob and remove the two (2) screws marked [210]. The DRV6(5/5) circuit board or the DRV4(5/5) circuit board can then be removed from the PSW angle bracket. (Fig.4)

8. Fan

- 8-1 Remove the top cover. (See procedure 1.)
- 8-2 Remove the front panel. (See procedure 2.)
- 8-3 Remove the four (4) screws marked [170]. The fan can then be removed. (Fig.4)



(Fig.4)

- [170]: Bind Head Screw 4.0 X 45 MFZN2BL (VB857700)
- [210]: Bind Head Screw 3.0 X 8 MFZN2BL (VB659000)
- [220]: Bind Head Tapping Screw-B 3.0 X 8 MFZN2BL (EP600190)

**9. DRV6(1/5), (2/5) Circuit Boards <XM6150>
DRV4(1/5), (2/5) Circuit Boards <XM4220>**

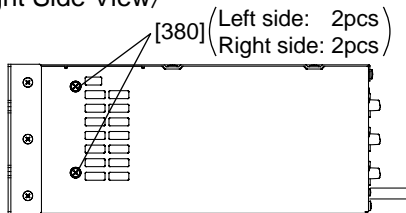
PA Unit

PA6 Circuit Board <XM6150>

PA4 Circuit Board <XM4220>

- 9-1 Remove the top cover. (See procedure 1.)
- 9-2 Remove the front panel. (See procedure 2.)
- 9-3 Remove the four (4) screws marked [380]. The PA unit can then be removed with the fan angle bracket, the DRV6(1/5) and DRV6(2/5) circuit boards (or the DRV4(1/5) and DRV4(2/5) circuit boards). (Fig.5, 6)
- 9-4 Remove the DRV6(1/5) circuit board or the DRV4(1/5) circuit board from the four (4) supports marked [A]. (Fig.6)
- 9-5 Remove the four (4) screws marked [250]. The DRV6(2/5) circuit board or the DRV4(2/5) circuit board can then be removed. (Fig.6)
- 9-6 Remove the eight (8) screws marked [150]. The FAN angle bracket can then be removed from the PA unit. (Fig.6)
- 9-7 Remove the six (6) screws marked [P40] and the twenty-two (22) screws marked [P90]. The PA6 circuit board or the PA4 circuit board can then be removed. (Fig.7)

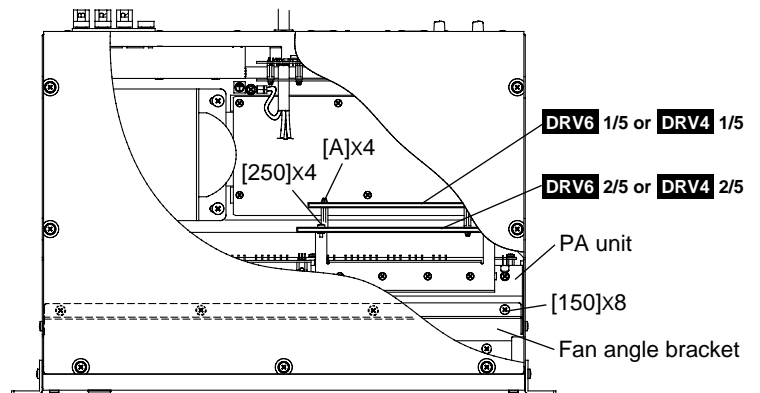
<Right Side View>



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

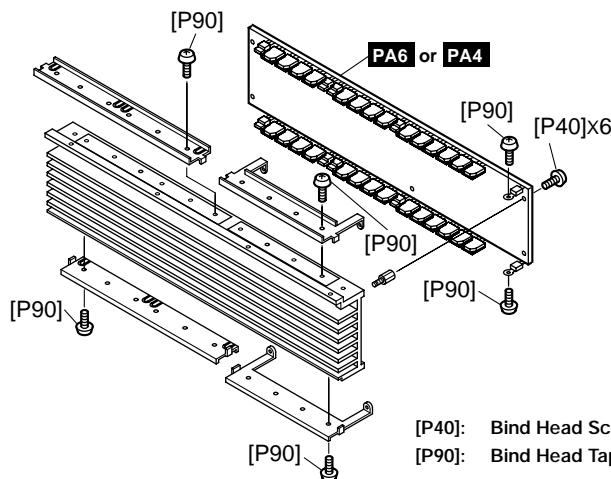
(Fig.5)

<Top View>



(Fig.6)

• PA Unit



[P40]: Bind Head Screw SP3.0 X 8 MFZN2Y (EG330290)

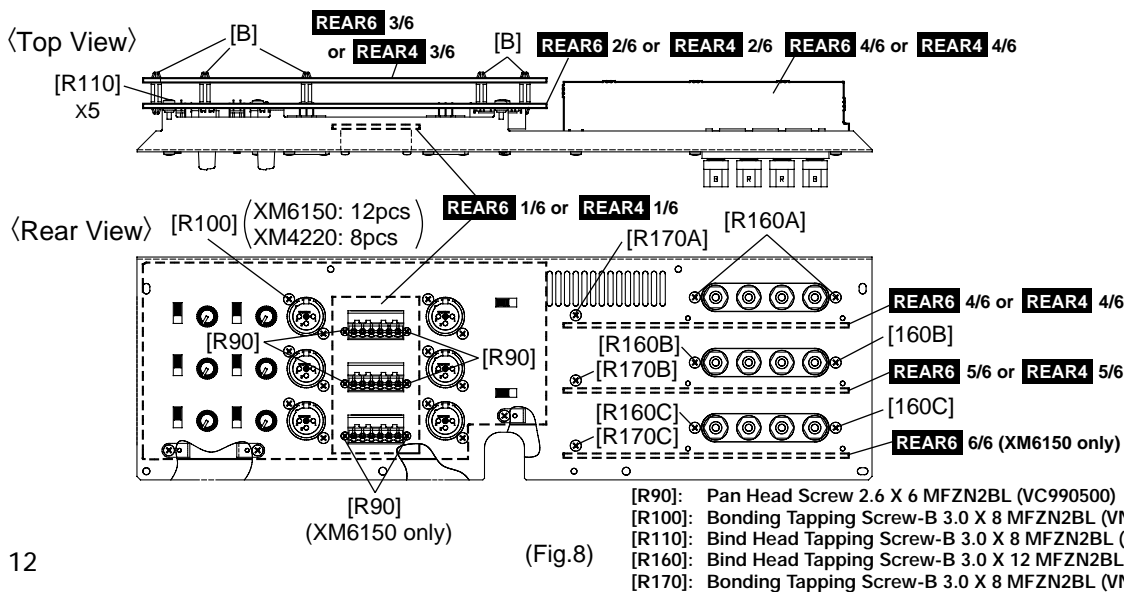
[P90]: Bind Head Tapping Screw-B 3.0 X 12 MFZN2BL (VQ074600)

(Fig.7)

**10. REAR6(1/6)-(6/6) Circuit Boards <XM6150>
REAR4(1/6)-(6/6) Circuit Boards <XM4220>**

- 10-1 Remove the top cover. (See procedure 1.)
- 10-2 Remove the rear assembly. (See procedure 3.)
- 10-3 REAR6(3/6) or REAR4(3/6) Circuit Board:
Remove the REAR6(3/6) circuit board or the REAR4(3/6) circuit board from the five (5) supports marked [B]. (Fig.8)
- 10-4 REAR6(2/6) or REAR4(2/6) Circuit Board:
Remove the REAR6(3/6) circuit board or the REAR4(3/6) circuit board. (See procedure 10-3.)
Remove the screws (XM6150: 12pcs, XM4220: 8pcs) marked [R100] and the five (5) screws marked [R110]. The REAR6(2/6) circuit board or the REAR4(2/6) circuit board can then be removed. (Fig.8)
- 10-5 REAR6(1/6) or REAR4(1/6) Circuit Board:
Remove the REAR6(3/6) and REAR6(2/6) circuit boards or the REAR4(3/6) and REAR4(2/6) circuit boards. (See procedure 10-3, 10-4.)
Remove the screws (XM6150: 6pcs, XM4220: 4pcs) marked [R90]. The REAR6(1/6) circuit board or the REAR4(1/6) circuit board can then be removed. (Fig.8)
- 10-6 REAR6(4/6) or REAR4(4/6) Circuit Board:
Remove the two (2) screws marked [R160A] and the screw marked [R170A]. The REAR6(4/6) circuit board or the REAR4(4/6) circuit board can then be removed. (Fig.8)
- 10-7 REAR6(5/6) or REAR4(5/6) Circuit Board:
Remove the two (2) screws marked [R160B] and the screw marked [R170B]. The REAR6(5/6) circuit board or the REAR4(5/6) circuit board can then be be removed. (Fig.8)
- 10-8 REAR6(6/6) Circuit Board:
Remove the two (2) screws marked [R160C] and the screw marked [R170C]. The REAR6(6/6) circuit board can then be removed. (Fig.8)

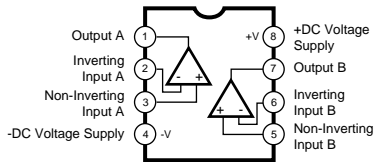
• Rear Assembly



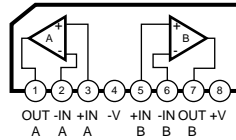
(Fig.8)

IC BLOCK DIAGRAM

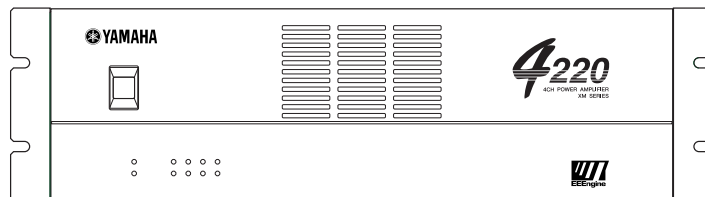
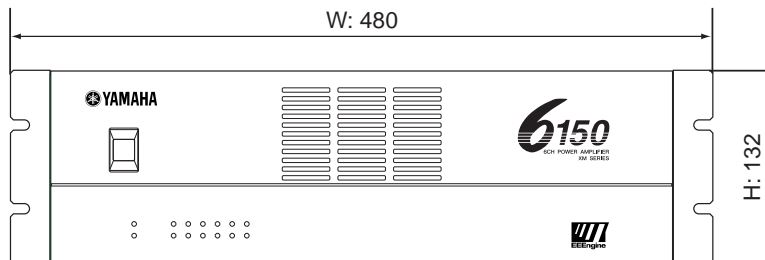
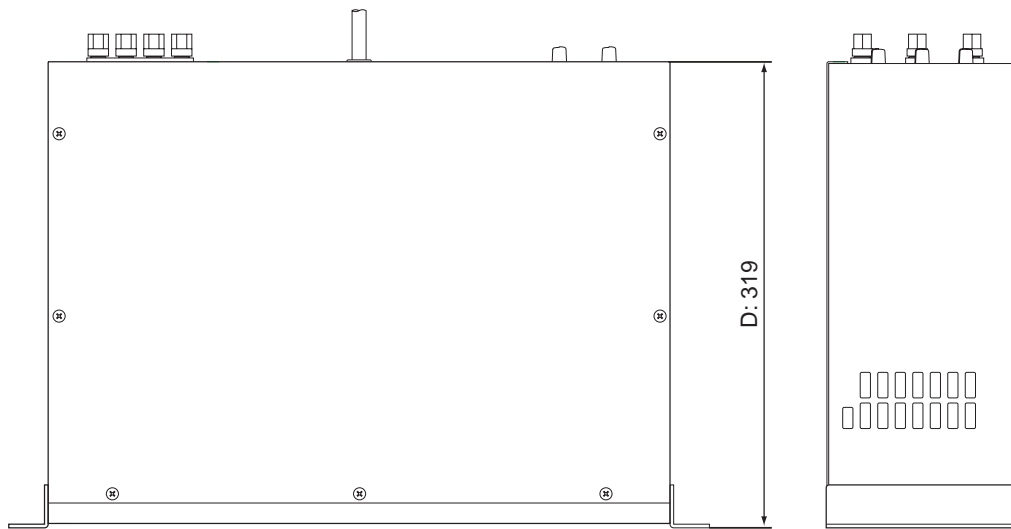
- **M5238AP** (XM085A00)
NJM4580DD (XM651A00)
Dual Operational Amplifier
REAR6: IC701 to 703
REAR4: IC701,702



- **NJM2068L-D** (XM356A00)
Dual Operational Amplifier
REAR6: IC704,707 to 711
REAR4: IC704,707,708,710



DIMENSIONS



Unit: mm

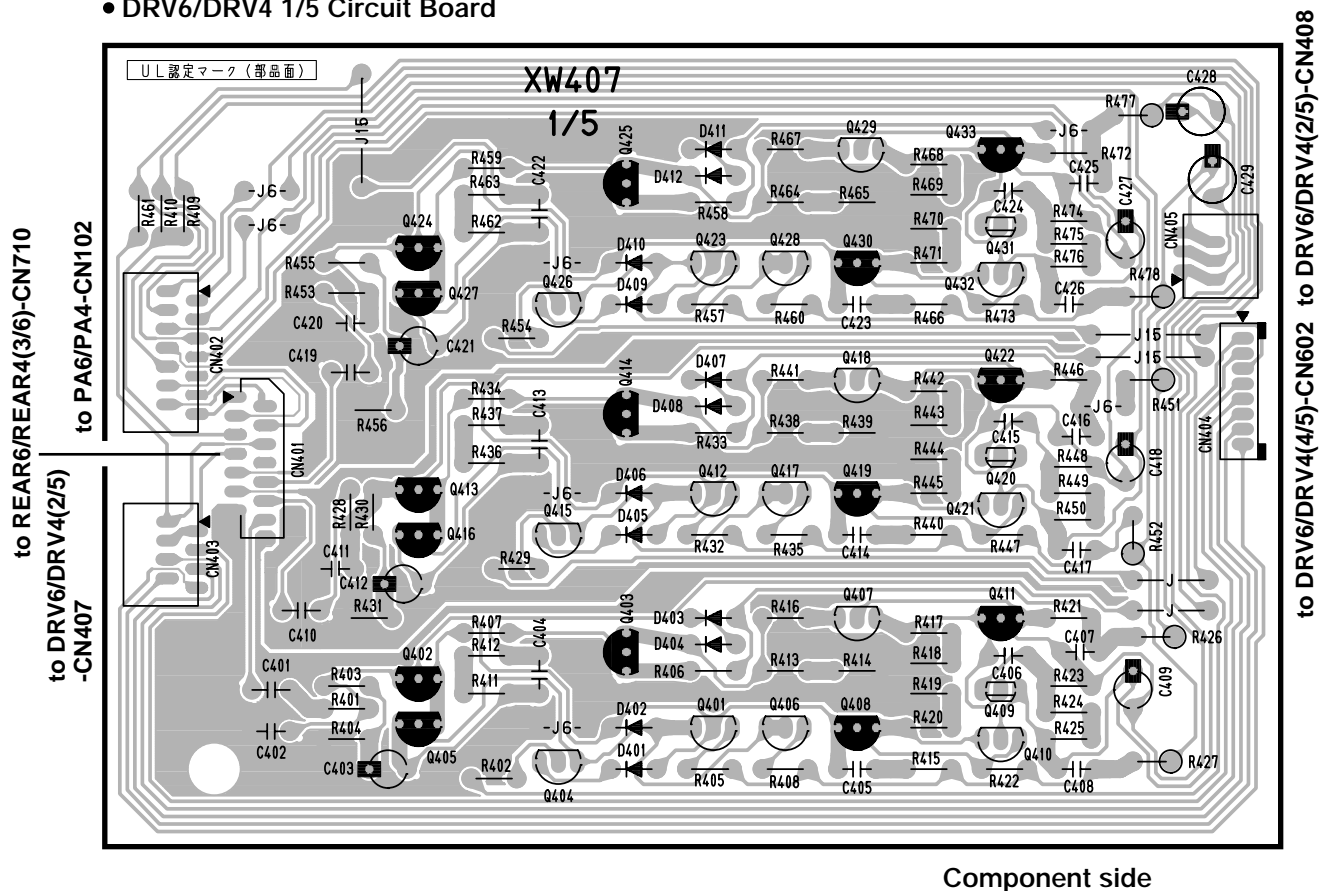
CIRCUIT BOARDS

DRV6/DRV4 1/5 Circuit Board(XW407B0)	14
DRV6/DRV4 2/5 Circuit Board(XW407B0)	16
DRV6/DRV4 3/5 Circuit Board(XW407B0)	15
DRV6/DRV4 4/5 Circuit Board(XW407B0)	16
DRV6/DRV4 5/5 Circuit Board(XW407B0)	16
REAR6/REAR4 1/6 Circuit Board(XW406B0)	17
REAR6/REAR4 2/6 Circuit Board(XW406B0)	18
REAR6/REAR4 3/6 Circuit Board(XW406B0)	19
REAR6/REAR4 4/6 Circuit Board(XW406B0)	17
REAR6/REAR4 5/6 Circuit Board(XW406B0)	17
REAR6/REAR4 6/6 Circuit Board(XW406B0)	17
PA6 Circuit Board(XW403B0)	20
PA4 Circuit Board(XW404B0)	21

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

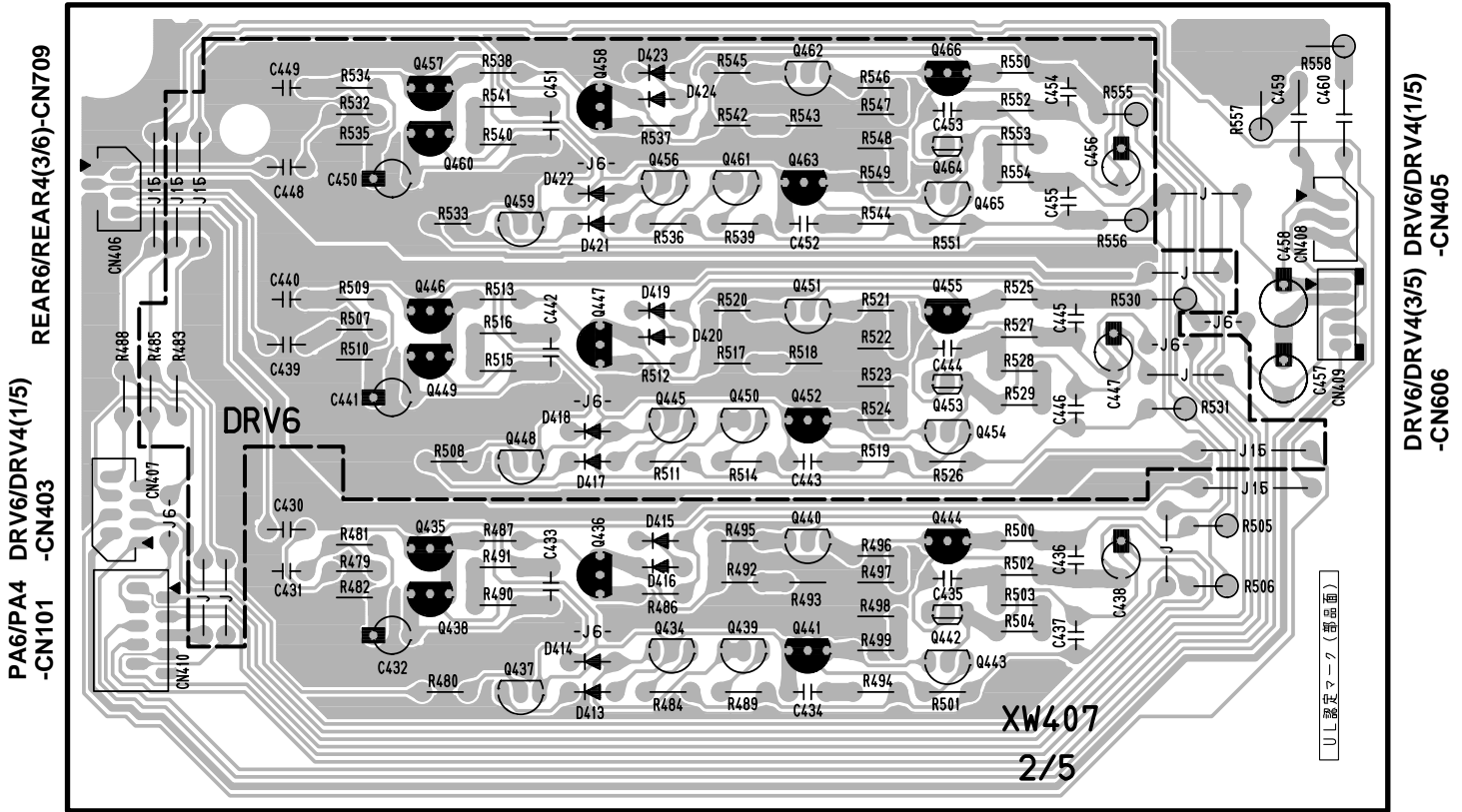
[] : XM6150 Only

• DRV6/DRV4 1/5 Circuit Board



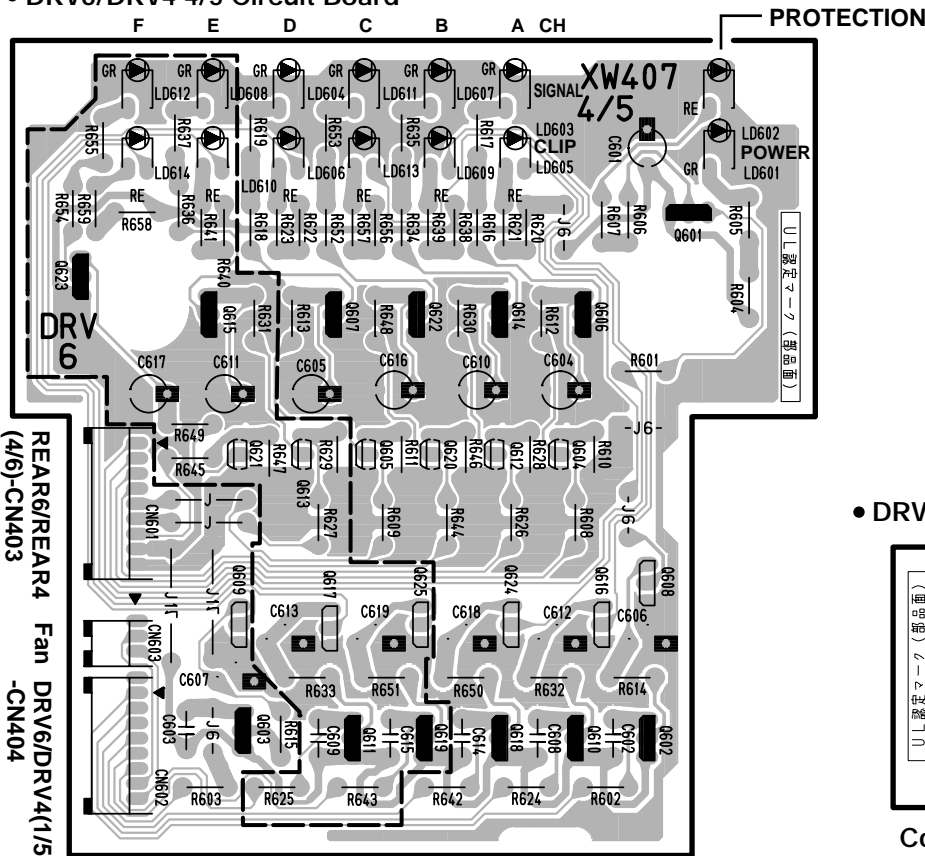
Component side

• DRV6/DRV4 2/5 Circuit Board



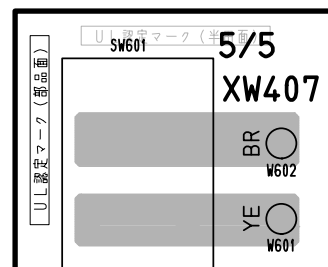
Component side

• DRV6/DRV4 4/5 Circuit Board



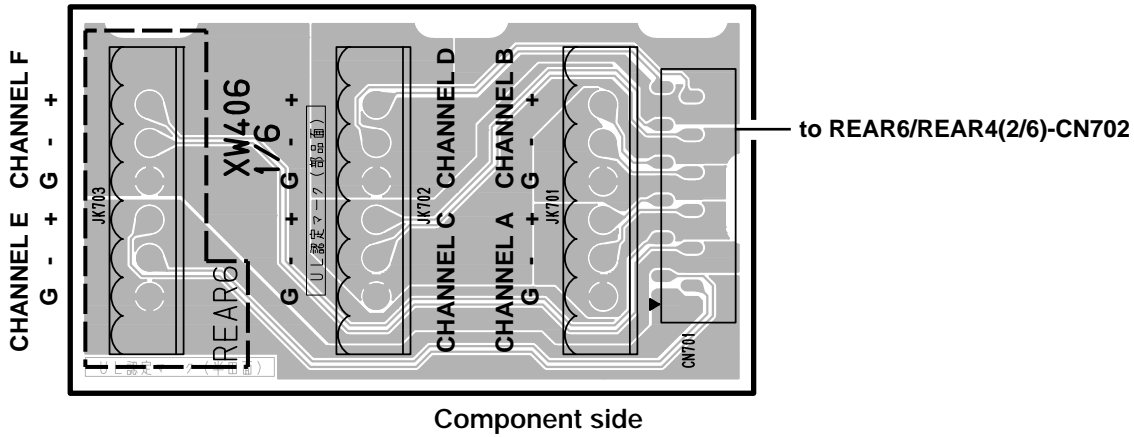
Component side

• DRV6/DRV4 5/5 Circuit Board

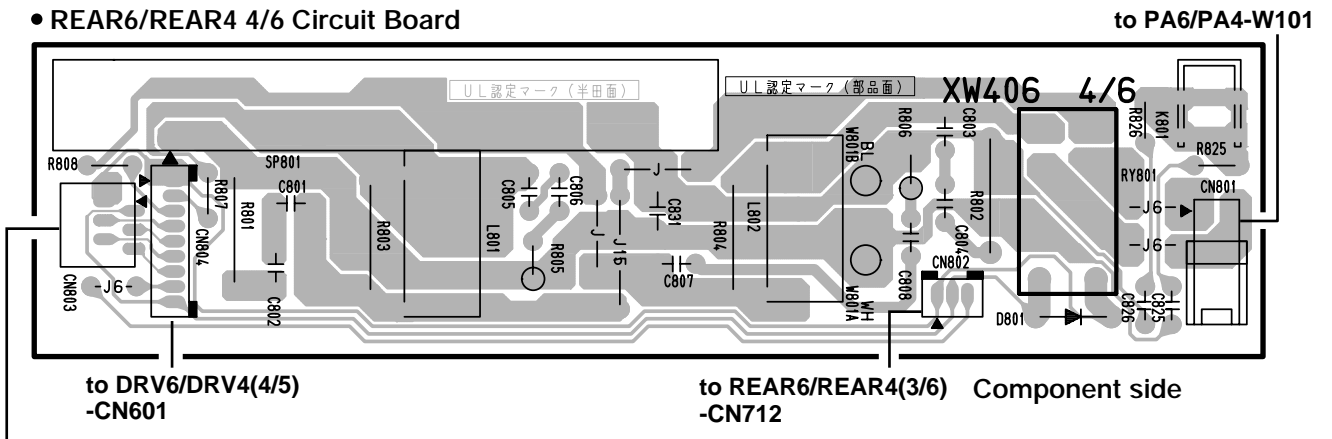


Component side

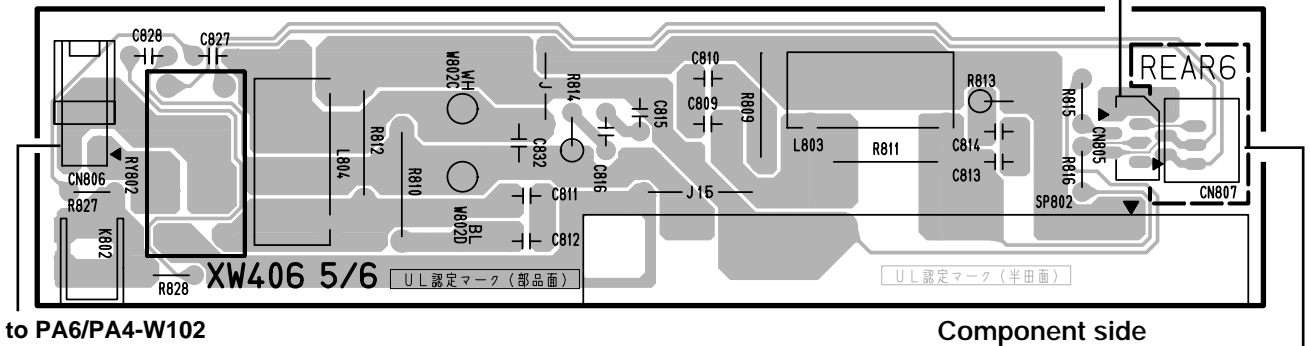
• REAR6/REAR4 1/6 Circuit Board



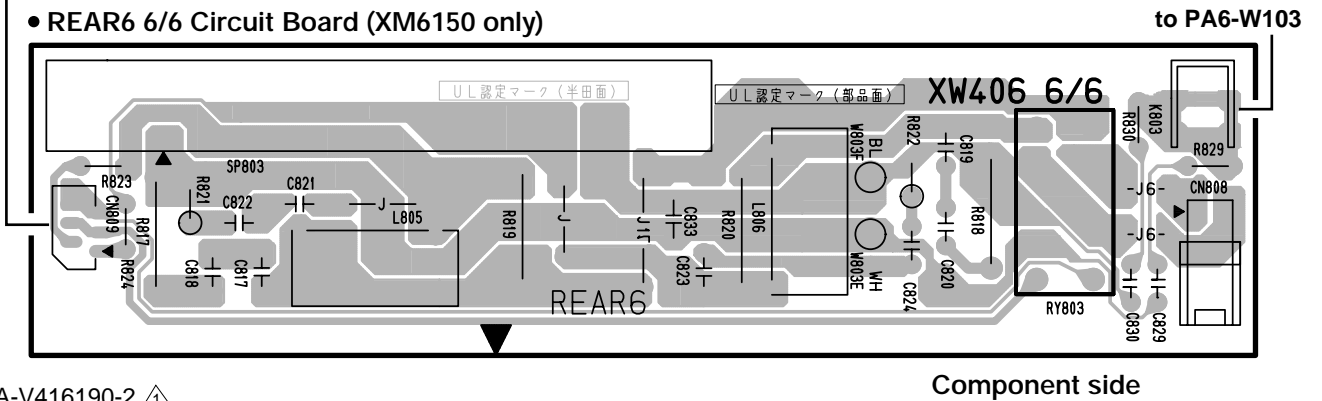
• REAR6/REAR4 4/6 Circuit Board



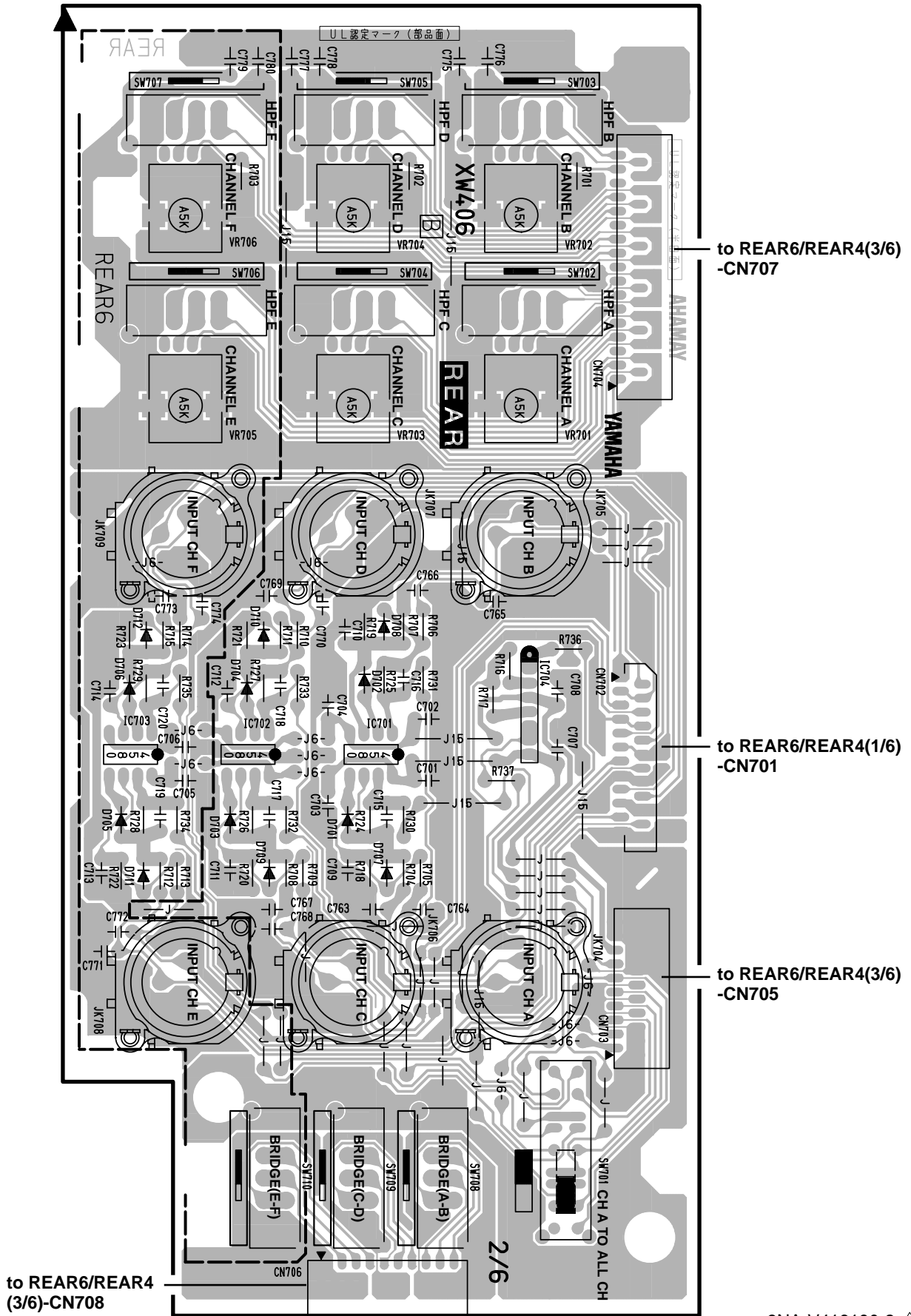
• REAR6/REAR4 5/6 Circuit Board



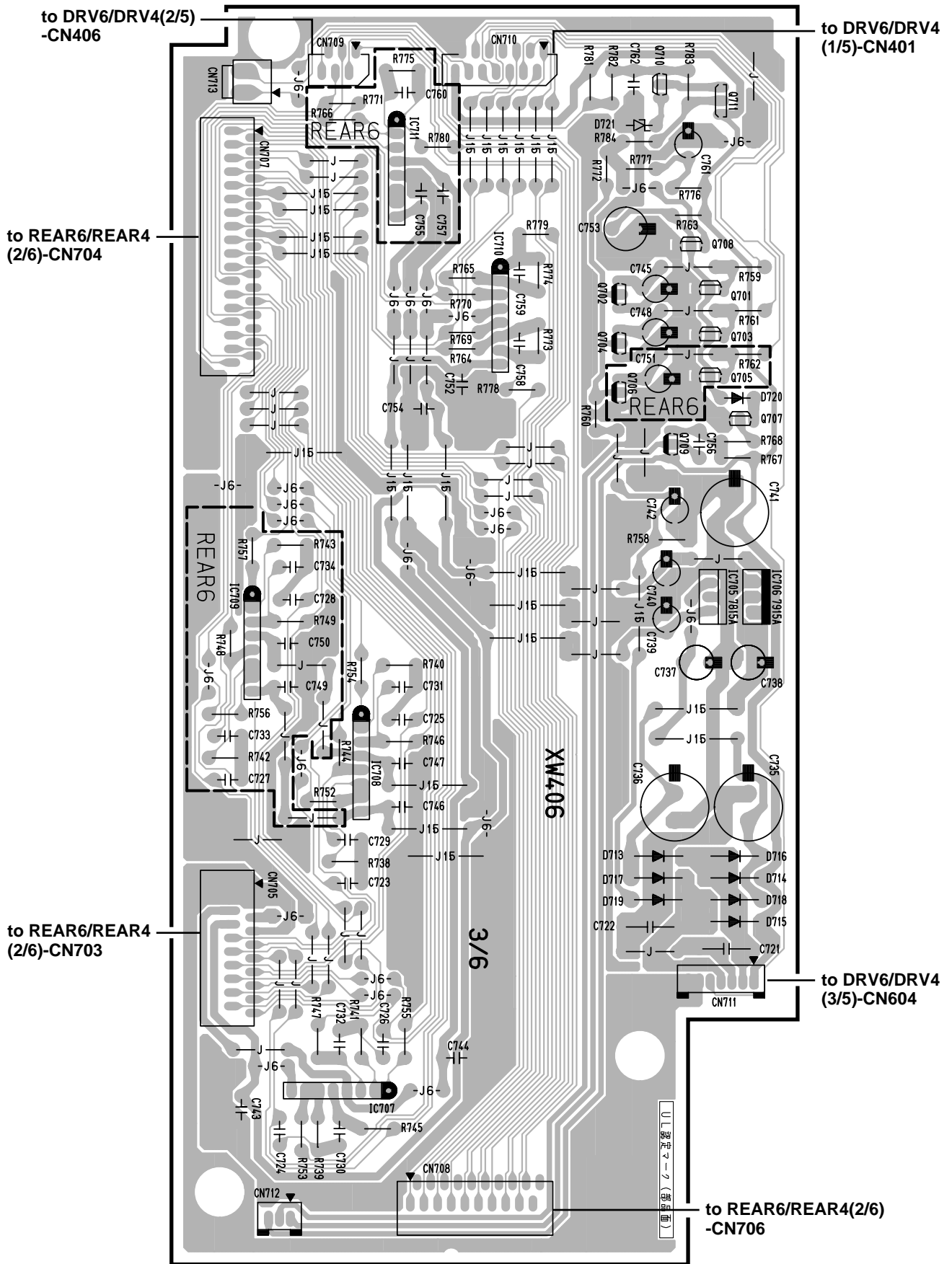
• REAR6 6/6 Circuit Board (XM6150 only)



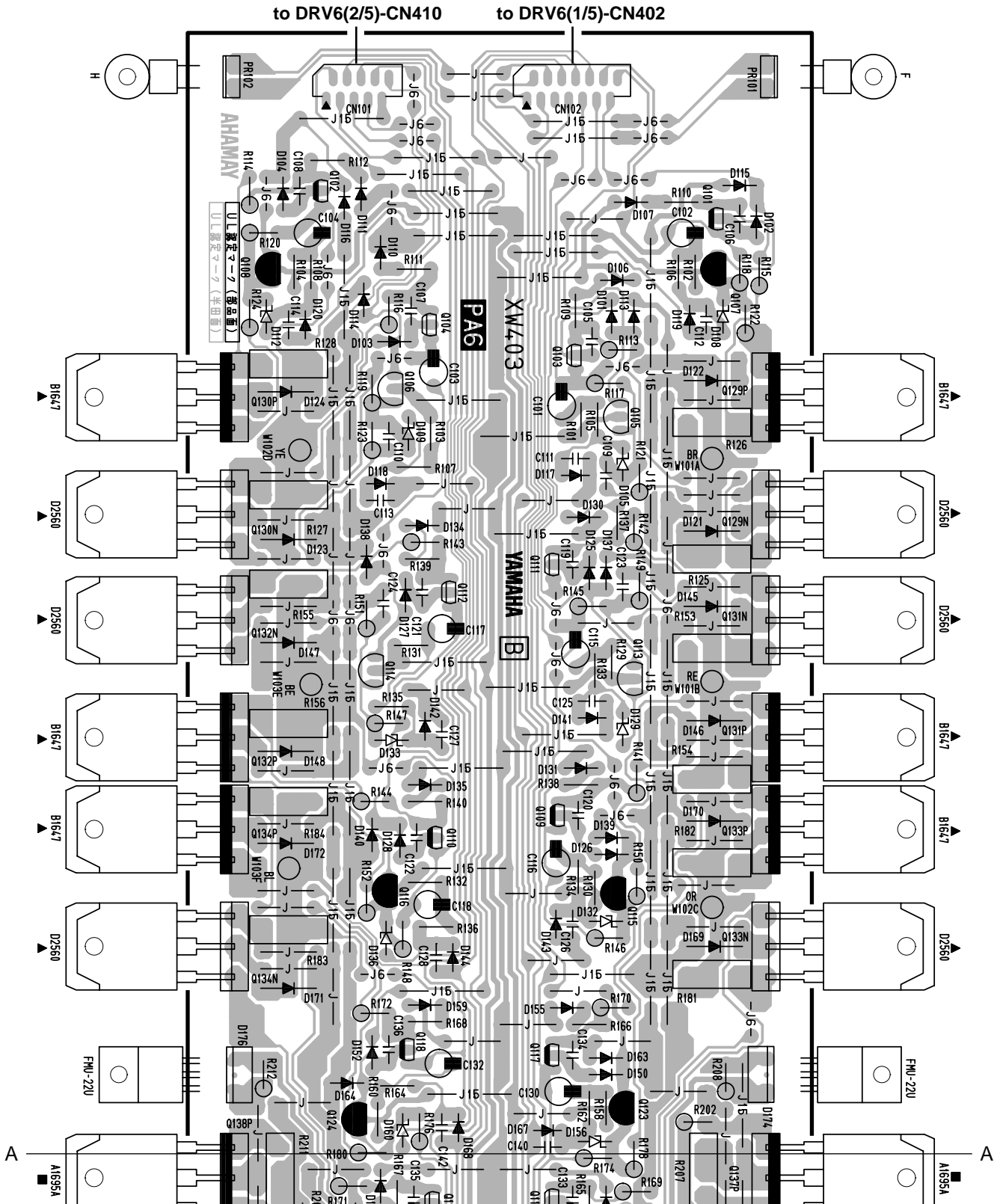
• REAR6/REAR4 2/6 Circuit Board

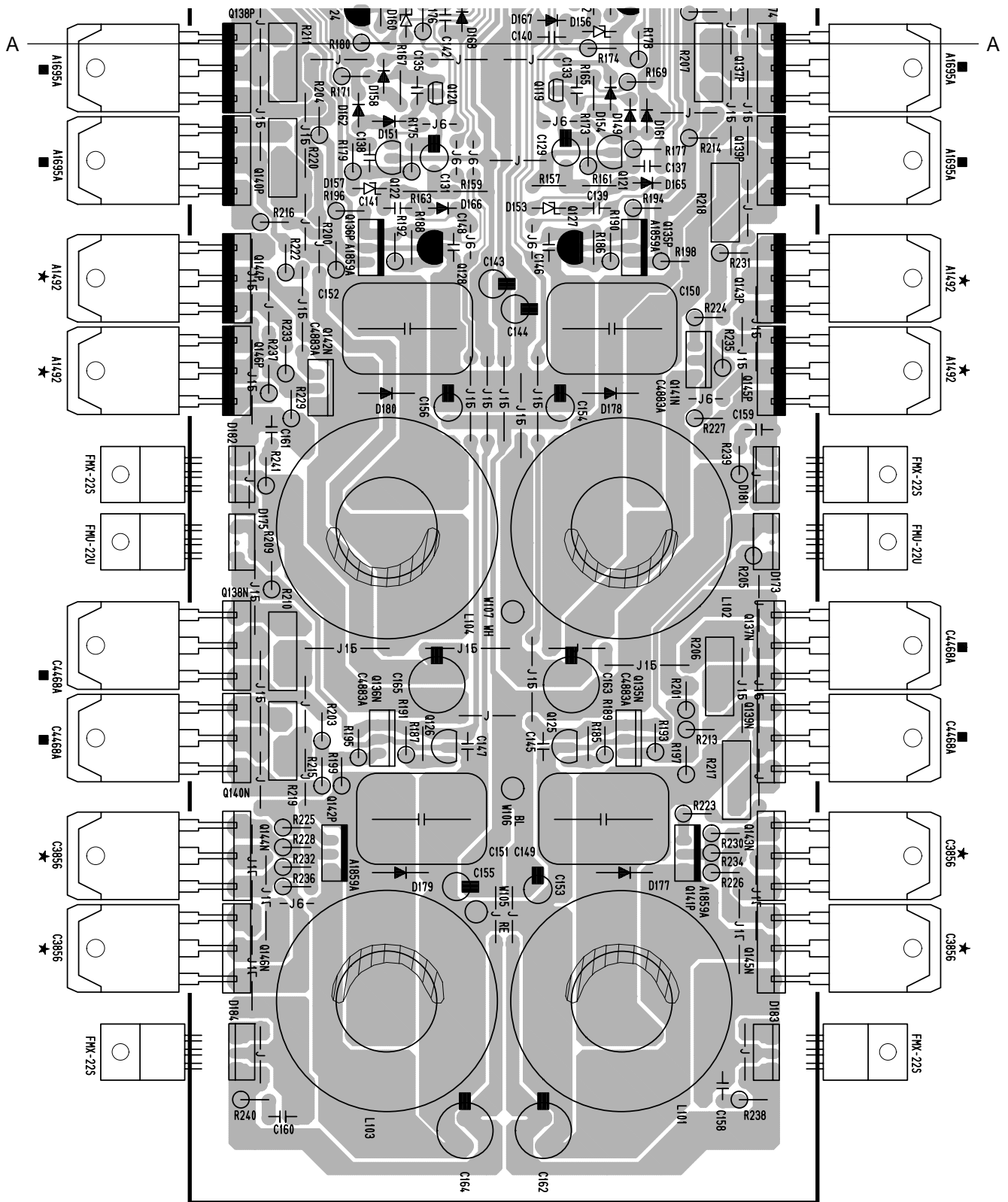


• REAR6/REAR4 3/6 Circuit Board



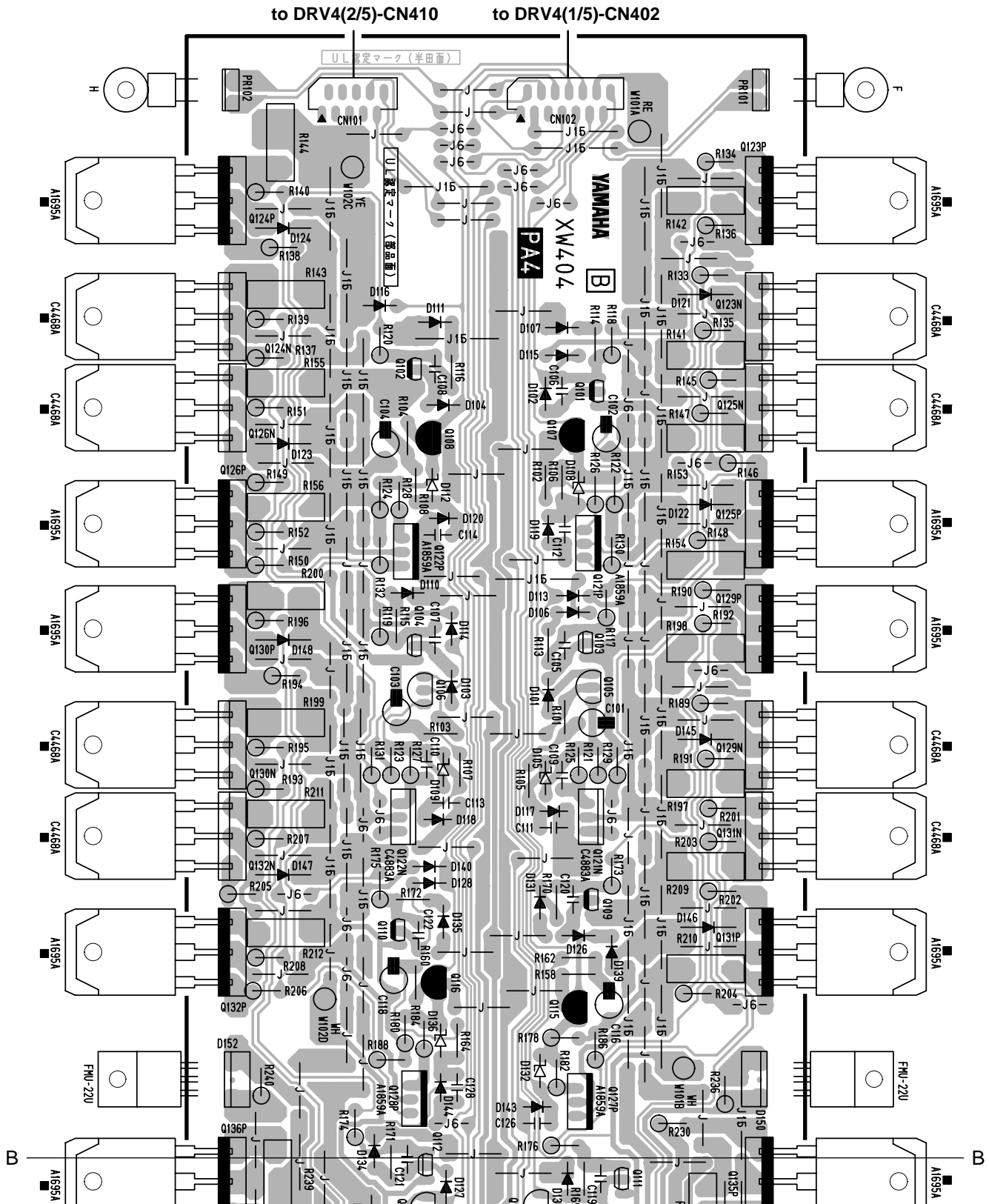
● PA6 Circuit Board

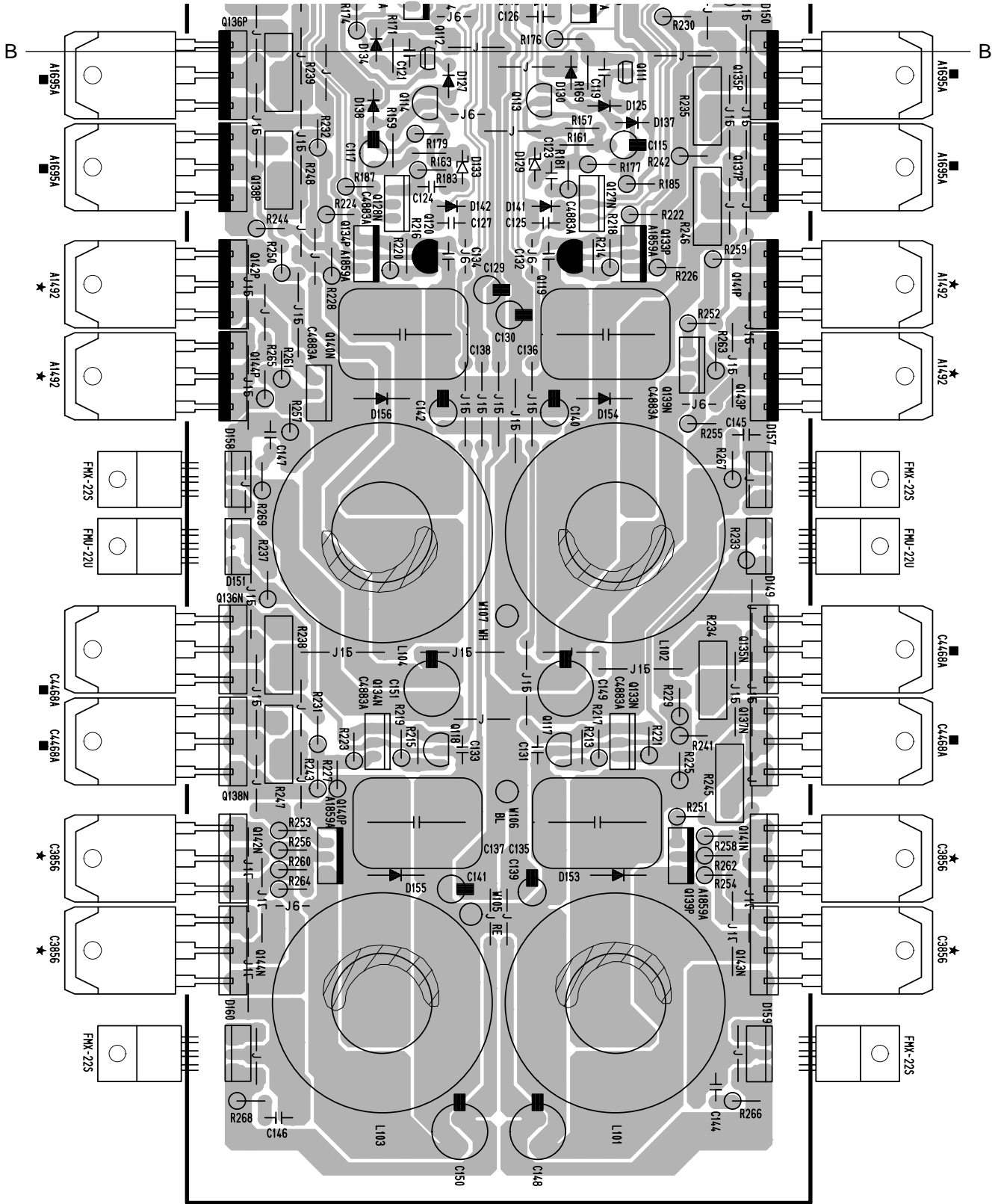




Component side

• PA4 Circuit Board





Component side

INSPECTIONS

1. Inspection in BRIDGE OFF mode

<Preparation>

Input attenuation:	0 (maximum)
Input terminal:	Cannon connector (Pin 2 HOT, pins 1 and 3 GROUND)
Input select switch:	EACH CH
[BRIDGE] switches:	All OFF
Output terminal:	Load resistance 4 Ω , non-induction resistance, power capacity 500W or higher
Other:	If there is no particular indication, all channel operations should be active, and inspection should be carried out over all channels. In addition, if there is no particular indication, the [HPF] switch should be off.

<Inspection and adjustment>

(1) Fan Test

When turning on the power switch, check that the fan operates at low speed.

(2) Power ON Muting Time Test

Check that muting is canceled and the [PROTECTION] indicator is switched off for 2.5 ± 1 seconds after the power switch has been turned on.

(3) Output Terminal DC Voltage Test

Measure the output terminal DC voltage when the input terminal is grounded, and check that the DC voltage V_{dc} of the output terminal is 0 ± 75 mV.

(4) Gain Test

Check that the following output voltage is obtained when a 1kHz, -10.0dBu sine wave is applied to the input terminal.

XM6150: $+22.1 \pm 0.5$ dBu

XM4220: $+23.6 \pm 0.5$ dBu

This test should be repeated after the input select switch is moved from [CH A to ALL CH].

(5) Frequency Response Test

HPF SW OFF: Check that the response is within 0.0 ± 0.5 dB at 20Hz and within -0.5 ± 0.5 dB at 20kHz using 1kHz as a reference when sine waves at frequencies of 20Hz, 1kHz and 20kHz at -10dBu are input to the input terminal.

HPF SW ON: Check that the response is within 3.0 ± 1.0 dB using 1kHz as a reference when a sine wave at a frequency of 80Hz at 10dBu is applied to the input terminal and the filter switch is OFF.

(6) Total High Harmonic Distortion Test

Check that the total harmonic distortion (THD) is 0.2% or less at the following rated outputs when a high-quality sine wave of 1kHz is applied to the input terminal.

XM6150: 150W x 6/4 Ω (30.0dBu/ch)

XM4220: 220W x 4/4 Ω (31.7dBu/ch)

This test should be completed within 30 seconds of starting.

(7) Channel Separation Test at 8 Ω Load Resistance

Apply a sine wave of 1kHz at -5dBu to the input terminal of one channel, set the output voltage obtained at the reference level (0dB), and then short the input via a 600 Ω resistance to the input terminal of another channel which has been grounded. Check that the output voltage from the other channel at this time is -60dB or less.

(8) Output Noise Level Test

Ground the input terminal via a 600 Ω resistance, and then check that the noise level generated at the output terminal is as follows.

XM6150: -68dBu or less

XM4220: -66.5dBu or less

Be careful to avoid any effects from noise induced during the inspection.

(9) Stability Test

Check that the following conditions are satisfied when a rectangular wave of 10kHz at -10dBu is applied to the input and a capacitor of 10pF to 0.47 μ F connected with a 4 Ω load resistor in parallel.

Overshoot: $V_p/V_o \leq 1.8$

Ringings: Less than 5 waves

Next, when the load resistance is removed and the load is only the capacitor of 10pF to 0.47 μ F, check that the overshoot is $V_p/V_o \leq 2.5$ and that the ringing fades away in less than 7 waves with no oscillation.

(10) Protection Circuit Test

First, check that the protection circuit operates and the relay opens with 2 seconds when CN713 of the REAR6(3/6) circuit board or REAR4(3/6) circuit board is disconnected.

Next, check that the state does not return to normal after the protection circuit has operated and CN713 is re-connected.

After this, turn the power off and then back on again.

(11) Power Consumption Test

q Check that the primary power is within the following range when a sine wave of 1kHz at -10dBu is applied to the input terminal.

XM6150: 360W \pm 30W

XM4220: 330W \pm 30W

w Ground the input terminal via a 600 Ω resistance, and then check that the primary power is within the following range.

XM6150: 40W \pm 10W

XM4220: 30W \pm 10W

(12) PC Limiter Test

Apply a sine wave of 1kHz and -7dBu to the input terminal and connect a load of 1k Ω (\pm 5%) to the output terminal. Use an oscilloscope to monitor the output terminal and check that the output is as follows.

XM6150: $V_{p-p} \leq 20$ V

XM4220: $V_{p-p} \leq 40$ V

Also check that the [CLIP] indicator is lit at this time. This test should be completed within 30 seconds of starting.

(13) [SIGNAL] Indicator Test

Check that the [SIGNAL] indicator lights when a sine wave of 1kHz at -23dBu is applied to the input.

2. Inspection in BRIDGE mode

<Preparation>

- Input attenuation: 0 (maximum)
- Input terminal:
 - α [INPUT CHANNEL A]
 - w [INPUT CHANNEL C]
 - e [INPUT CHANNEL E]
 - (XM6150 only)
 - Cannon connector (Pin 2 HOT, pins 1 and 3 GROUND)
- [BRIDGE] switches: All ON
- [HPF] switch: OFF
- Output terminal:
 - α [SPEAKERS CHANNEL A+B]
 - w [SPEAKERS CHANNEL C+D]
 - e [SPEAKERS CHANNEL E+F]
 - (XM6150 only)
- Load resistance: 4 Ω +4 Ω non-induction resistance power capacity 500W or higher
- Measuring apparatus
 - connection: Floating ground, with load resistance connected in between.

<Inspection>

(1) Gain Test

Check that the following output voltage is obtained when a 1kHz, -10.0dBu sine wave is applied to the input terminal.

- XM6150: +22.1 ± 1.0dBu
- XM4220: +23.6 ± 1.0dBu

(2) Frequency Response Test

Check that the response is within 0.0 ± 0.5dB at 20Hz and within -0.5 ± 0.5dB at 20kHz using 1kHz as a reference when sine waves at frequencies of 20Hz, 1kHz and 20kHz at -10dBu are input to the input terminal.

(3) Total High Harmonic Distortion Test

Check that the total harmonic distortion (THD) is 0.2% or less at the following rated outputs when a high-quality sine wave of 1kHz is applied to the input terminal.

- XM6150: 30.0dBu
- XM4220: 31.7dBu

This test should be completed within 30 seconds of starting.

3. Settings after inspection is complete

Turn the input attenuator all the way counterclockwise. Turn off the [HPF] and [BRIDGE] switches. Set the input select switch to EACH CH.

4. Other

0dBu=0.775V

When measuring the noise level, use an audio filter.

POWER AMPLIFIER XM6150 PARTS LIST


■ CONTENTS

OVERALL ASSEMBLY	2
ELECTRICAL PARTS	5

Notes : DESTINATION ABBREVIATIONS

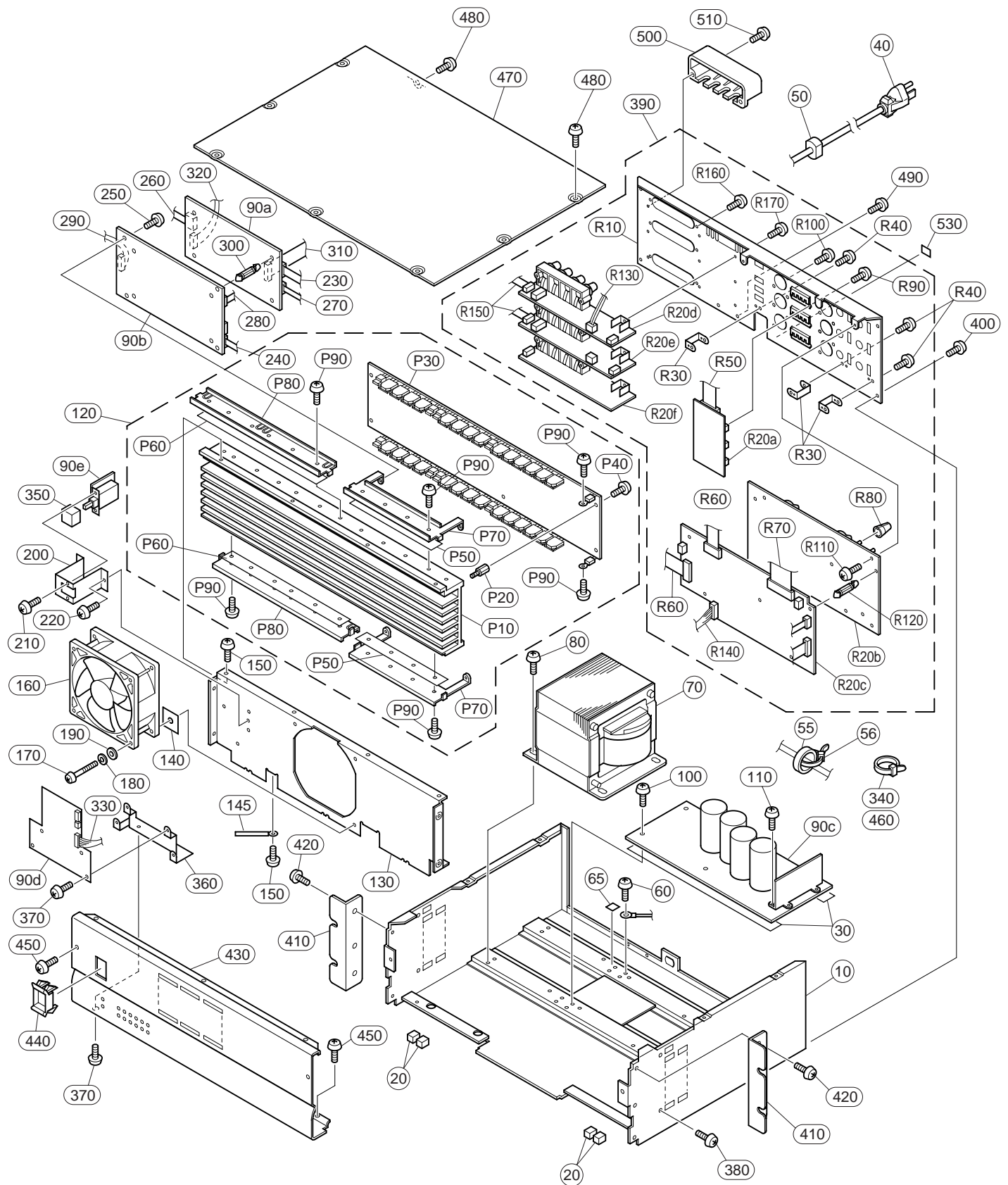
A : Australian model	M : South African model
B : British model	O : Chinese model
C : Canadian model	Q : South-east Asia model
D : German model	T : Taiwan model
E : European model	U : U.S.A. model
F : French model	V : General export model (110V)
H : North European model	W : General export model (220)
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	XM6150		
	--	Overall Assembly	J (V455520)		
	--	Overall Assembly	U,V (V455530)		
	--	Overall Assembly	H,W (V455540)		
	--	Overall Assembly	B (V455550)		
	--	Overall Assembly	A (V455560)		
* 10	V2942800	Main Chassis			
20	V3200700	Protector		4	01
30	--	Spacer	(V542880)	2	
40	V2943900	AC Cord	VCTF 1.25X2 12A		05
40	VZ021200	AC Cord	SJT 3X#18 10A		06
40	V2944000	AC Cord	H05VV-F0.75X3 6A		06
40	VZ021600	AC Cord	H05VV-F 13A		08
50	VV103100	Cord Strain Relief	SR-6P1		01
55	V3225000	Ferrite Core	FR25/15/12-D40		03
56	VV104600	Cord Holder			01
60	VP156800	Bind Head Screw	A4.0X8 MFZN2BL		01
65	--	Label	GND		
70	XW412A00	Power Transformer	E MAP606		
70	XW413A00	Power Transformer	A MAP606		
70	XW414A00	Power Transformer	E MAP606		
70	XW415A00	Power Transformer	E MAP606		
80	VU688100	Bind Head Screw	SP 5.0X10 MFZN2BL		01
90	--	Circuit Board	DRV6		
90	--	Circuit Board	DRV6		
90	--	Circuit Board	DRV6		
* 90a	AAAX13070	Circuit Board	DRV6 1/5		
* 90b	AAAX13080	Circuit Board	DRV6 2/5		
* 90c	AAAX13090	Circuit Board	DRV6 3/5		
* 90c	AAAX13100	Circuit Board	DRV6 3/5		
* 90c	AAAX13110	Circuit Board	DRV6 3/5		
* 90d	AAAX13120	Circuit Board	DRV6 4/5		
* 90d	AAAX13130	Circuit Board	DRV6 4/5		
* 90e	AAAX13140	Circuit Board	DRV6 5/5		
100	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
110	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL		01
* 120	V4555800	PA Unit			
130	V2942900	Angle Bracket, Fan		06	
140	V2945200	Packing		4	04
145	--	Cord Binder	WC-3-MT		
150	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		01
160	V2945700	Fan	KDE2412PMS3-6A/A47		09
170	VB857700	Bind Head Screw	4.0X45 MFZN2BL		01
180	03765330	Spring Washer	#2 4.0 MFZN2BL		01
190	ET500040	Flat Washer	4.0X10X0.8 MFZN2BL		01
* 200	V4556700	Angle Bracket	PSW		
210	VB659000	Bind Head Screw	3.0X8 MFZN2BL		01
220	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
230	--	FFC Cable	BNCDP=1.25K-14-80		
240	--	FFC Cable	BNCDP=1.25K-10-60		
250	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
260	--	FFC Cable	BNCDP=1.25K-6-50		
270	--	FFC Cable	BNCDP=1.25K-8-60		
280	--	FFC Cable	BNCDP=1.25K-6-140		
290	--	Connector Assembly	2426&2426 5P 180L		
300	--	Support	KCA-20 PIN GOO		
310	--	FFC Cable	BNCDP=1.25K-14-150		
320	--	Connector Assembly	CLP 8P		
330	--	Connector Assembly	SIG 9P		
340	VV104600	Cord Holder			01
350	VU859000	Power Switch Knob			01
360	--	Angle Bracket			
370	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
380	VR779900	Bonding Tapping Screw-B	4.0X8 MFZN2BL		01
390	--	Rear Assembly			
390	--	Rear Assembly			
390	--	Rear Assembly			
390	--	Rear Assembly			
400	VR779900	Bonding Tapping Screw-B	4.0X8 MFZN2BL		01
410	V2943200	Rack Angle			03

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
420	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		6	01
* 430	V4557000	Front Panel				
440	VU859100	Escutcheon, Power Switch				02
450	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		4	01
460	VV104600	Cord Holder			5	01
470	V2943600	Top Cover				08
480	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		9	01
490	VP156800	Bind Head Screw	A4.0X8 MFZN2BL			01
500	VY938700	Cover, Speaker Terminal			3	03
510	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		6	01
530	VA039300	Label	DATE COAD	U,V		03
	--	Rear Assembly		J (V455630)		
	--	Rear Assembly		U,V (V455640)		
	--	Rear Assembly		H,B,W (V455650)		
	--	Rear Assembly		A (V455660)		
* R10	V4557700	Rear Panel		J		
* R10	V4557800	Rear Panel		U,V		
* R10	V4557900	Rear Panel		H,B,W		
* R10	V4558000	Rear Panel		A		
R20	--	Circuit Board	REAR6	(V416190)		
* R20a	AA13210	Circuit Board	REAR6 1/6	(XW406C0)		
* R20b	AA13220	Circuit Board	REAR6 2/6	(XW406C0)		
* R20c	AA13230	Circuit Board	REAR6 3/6	(XW406C0)		
* R20d	AA13240	Circuit Board	REAR6 4/6	(XW406C0)		
* R20e	AA13250	Circuit Board	REAR6 5/6	(XW406C0)		
* R20f	AA13260	Circuit Board	REAR6 6/6	(XW406C0)		
R30	--	Holder		(V455810)	3	
R40	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		3	01
R50	--	FFC Cable	BNCDP=1.25K-24-50	(V436100)		
R60	--	FFC Cable	BNCDP=1.25K-20-50	(V457290)	2	
R70	--	FFC Cable	BNCDP=1.25K-35-50	(V457300)		
R80	VU860400	Knob	RE/D-GRAY	VOLUME CHANNEL A-F	6	01
R90	VC990500	Pan Head Screw	2.6X6 MFZN2BL		6	01
R100	VN413300	Bonding Tapping Screw-B	3.0X8 MFZN2BL		12	01
R110	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		5	01
R120	V3224800	Support	KCA-14		5	01
R130	--	Connector Assembly	2426&2426 3P 80L	(VZ01600)		
R140	--	Connector Assembly	2426&2426 7P 180L	(V457370)		
R150	--	FFC Cable	BNCDP=1.25K-6-70	(V435970)	2	
R160	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL		6	01
R170	VN413300	Bonding Tapping Screw-B	3.0X8 MFZN2BL		3	01
* P10	V4555800	PA Unit				
P10	--	Heat Sink		(V455820)		
P20	VV086500	Support	H=7.4 B=5.5		6	01
* P30	V4161600	Circuit Board	PA6	(XW403C0)		
P40	EG330290	Bind Head Screw	SP 3.0X8 MFZN2Y		6	01
* P50	V4558400	Insulation Sheet	A TBM51W T=0.15		2	
* P60	V4558500	Insulation Sheet	B TBM51W T=0.15		2	
P70	--	Transistor Holder	A	(V455710)	2	
P80	--	Transistor Holder	B	(V455720)	2	
P90	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL		22	01
		ACCESSORIES				
* P100	V4559800	Euroblock Connector	MC100-50803 3P		6	

*: New Parts

RANK: Japan only

ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		ELECTRICAL PARTS		XM6150		
	--	Circuit Board	DRV6	J (V416230)(XW407C0)		
	--	Circuit Board	DRV6	U,V (V416240)(XW407C0)		
	--	Circuit Board	DRV6	H,B,A,W (V416250)(XW407C0)		
*	AAX13070	Circuit Board	DRV6 1/5	(XW407C0)		
*	AAX13080	Circuit Board	DRV6 2/5	(XW407C0)		
*	AAX13090	Circuit Board	DRV6 3/5	J (XW407C0)		
*	AAX13100	Circuit Board	DRV6 3/5	U,V (XW407C0)		
*	AAX13110	Circuit Board	DRV6 3/5	H,B,A,W (XW407C0)		
*	AAX13120	Circuit Board	DRV6 4/5	J,U,V (XW407C0)		
*	AAX13130	Circuit Board	DRV6 4/5	H,B,A,W (XW407C0)		
*	AAX13140	Circuit Board	DRV6 5/5	(XW407C0)		
*	V4161600	Circuit Board	PA6	(XW403C0)		
	--	Circuit Board	REAR6	(V416190)(XW406C0)		
*	AAX13210	Circuit Board	REAR6 1/6	(XW406C0)		
*	AAX13220	Circuit Board	REAR6 2/6	(XW406C0)		
*	AAX13230	Circuit Board	REAR6 3/6	(XW406C0)		
*	AAX13240	Circuit Board	REAR6 4/6	(XW406C0)		
*	AAX13250	Circuit Board	REAR6 5/6	(XW406C0)		
*	AAX13260	Circuit Board	REAR6 6/6	(XW406C0)		
	--	Circuit Board	DRV6	J (V416230)(XW407C0)		
	--	Circuit Board	DRV6	U,V (V416240)(XW407C0)		
	--	Circuit Board	DRV6	H,B,A,W (V416250)(XW407C0)		
*	AAX13070	Circuit Board	DRV6 1/5	(XW407C0)		
*	AAX13080	Circuit Board	DRV6 2/5	(XW407C0)		
*	AAX13090	Circuit Board	DRV6 3/5	J (XW407C0)		
*	AAX13100	Circuit Board	DRV6 3/5	U,V (XW407C0)		
*	AAX13110	Circuit Board	DRV6 3/5	H,B,A,W (XW407C0)		
*	AAX13120	Circuit Board	DRV6 4/5	J,U,V (XW407C0)		
*	AAX13130	Circuit Board	DRV6 4/5	H,B,A,W (XW407C0)		
*	AAX13140	Circuit Board	DRV6 5/5	(XW407C0)		
	VZ336500	Plastic Rivet	PR-08T		2	01
	VB763800	Bind Head Screw	SP 3.0X12 MFZN2Y		2	01
	VV319600	Fuse Holder	CQ-05CT		6	01
	--	Heat Sink	S	(V455830)		
	VV307300	LED Spacer			14	01
	VV291400	Jumper Wire	0.60		39	01
C401	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C402	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C403	UR847220	Electrolytic Cap.	22.00 25.0V			01
C404	FU451220	Mica Capacitor	22P 500V J			01
C405	VV060300	Mylar Capacitor	2200P 50V J			01
C406	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C407	FU451220	Mica Capacitor	22P 500V J			01
C408	FU451220	Mica Capacitor	22P 500V J			01
C409	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C410	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C411	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C412	UR847220	Electrolytic Cap.	22.00 25.0V			01
C413	FU451220	Mica Capacitor	22P 500V J			01
C414	VV060300	Mylar Capacitor	2200P 50V J			01
C415	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C416	FU451220	Mica Capacitor	22P 500V J			01
C417	FU451220	Mica Capacitor	22P 500V J			01
C418	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C419	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C420	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C421	UR847220	Electrolytic Cap.	22.00 25.0V			01
C422	FU451220	Mica Capacitor	22P 500V J			01
C423	VV060300	Mylar Capacitor	2200P 50V J			01
C424	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C425	FU451220	Mica Capacitor	22P 500V J			01
C426	FU451220	Mica Capacitor	22P 500V J			01
C427	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C428	VZ004000	Electrolytic Cap.-SK	2.2 200.0V			01
C429	VZ004000	Electrolytic Cap.-SK	2.2 200.0V			01
C430	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C431	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C432	UR847220	Electrolytic Cap.	22.00 25.0V			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
C433	FU451220	Mica Capacitor	22P 500V J		01
C434	VV060300	Mylar Capacitor	2200P 50V J		01
C435	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C436	FU451220	Mica Capacitor	22P 500V J		01
C437	FU451220	Mica Capacitor	22P 500V J		01
C438	UJ847100	Electrolytic Cap.	10.00 25.0V		01
C439	VV064400	Monolithic Mylar Capacitor	0.82 50V J		03
C440	VZ353500	Ceramic Capacitor-SL	100P 50V J		01
C441	UR847220	Electrolytic Cap.	22.00 25.0V		01
C442	FU451220	Mica Capacitor	22P 500V J		01
C443	VV060300	Mylar Capacitor	2200P 50V J		01
C444	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C445	FU451220	Mica Capacitor	22P 500V J		01
C446	FU451220	Mica Capacitor	22P 500V J		01
C447	UJ847100	Electrolytic Cap.	10.00 25.0V		01
C448	VV064400	Monolithic Mylar Capacitor	0.82 50V J		03
C449	VZ353500	Ceramic Capacitor-SL	100P 50V J		01
C450	UR847220	Electrolytic Cap.	22.00 25.0V		01
C451	FU451220	Mica Capacitor	22P 500V J		01
C452	VV060300	Mylar Capacitor	2200P 50V J		01
C453	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C454	FU451220	Mica Capacitor	22P 500V J		01
C455	FU451220	Mica Capacitor	22P 500V J		01
C456	UJ847100	Electrolytic Cap.	10.00 25.0V		01
C457	VZ004000	Electrolytic Cap.-SK	2.2 200.0V		01
C458	VZ004000	Electrolytic Cap.-SK	2.2 200.0V		01
C459	VZ004200	Mylar Capacitor	0.1000 100V M		01
C460	VZ004200	Mylar Capacitor	0.1000 100V M		01
C601	UJ866470	Electrolytic Cap.	4.70 50.0V		01
C602	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C603	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C604	UJ866100	Electrolytic Cap.	1.00 50.0V		01
-607	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C608	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C609	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C610	UJ866100	Electrolytic Cap.	1.00 50.0V		01
-613	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C614	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C615	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C616	UJ866100	Electrolytic Cap.	1.00 50.0V		01
-619	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C620	V3148500	Mylar Capacitor	0.33 250V M		01
C621	V3148500	Mylar Capacitor	0.33 250V M		01
* C622	V4578600	Electrolytic Cap.	10000 80V	J,H,B,A,W	
* -625	V4578600	Electrolytic Cap.	10000 80V	J,H,B,A,W	
C622	VV082100	Electrolytic Cap.	6800 80V	U,V	08
-625	VV082100	Electrolytic Cap.	6800 80V	U,V	08
C626	UJ867470	Electrolytic Cap.	47.00 50.0V		01
C627	UJ866470	Electrolytic Cap.	4.70 50.0V		01
C628	VV314800	Capacitor	1000P 400V J.U.C.S		01
C629	VV520600	Capacitor	0.01 400V J.U.C.S		02
CN401	VN394900	Connector, FFC	52045 14P TE		01
CN402	VF982200	Connector, FFC	52044 14P SE		02
CN403	VP682300	Connector, FFC	52045 8P SE		01
CN404	VV066800	Connector Base Post	M2426XX 8P TE		01
CN405	VQ044200	Connector, FFC	52044 6P SE		01
CN406	--	Connector, FFC	52045 6P TE	(VQ04700)	
CN407	VP682200	Connector, FFC	52045 8P TE		01
CN408	--	Connector, FFC	52045 6P TE	(VQ04700)	
CN409	VV066500	Connector Base Post	M2426XX 5P TE		01
CN410	VP113500	Connector, FFC	52044 10P SE		01
CN601	VV068300	Connector Base Post	M2426XXR 9P SE		01
CN602	VV068200	Connector Base Post	M2426XXR 8P SE		01
CN603	VV067600	Connector Base Post	M2426XXR 2P SE		01
CN604	VV066700	Connector Base Post	M2426XX 7P TE		01
CN605	LB932030	Base Post Connector	VH 3P TE		01
CN606	VV066500	Connector Base Post	M2426XX 5P TE		01
CN607	VZ005700	Fasten Terminal	TP82223-22		01
-618	VZ005700	Fasten Terminal	TP82223-22		01
CN619	LB932020	Base Post Connector	VH 2P TE		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
-621	LB932020	Base Post Connector	VH 2P TE			01
D401	VD631600	Diode	1SS133,176,HSS104			01
-424	VD631600	Diode	1SS133,176,HSS104			01
* D601	V4833600	Diode Stack	RBV2506 25.0A 600V			01
D602	VD631600	Diode	1SS133,176,HSS104			01
D603	VG438900	Zener Diode	MTZ J 8.2B 8.2V			01
D604	VG437700	Zener Diode	MTZ J 5.6B 5.6V			01
⚠ F601	VV070300	Fuse	TDS 1A 250V	J,U,V		01
⚠ F601	VV071200	Fuse	TSD 1A 250V	H,B,A,W		01
⚠ F602	VV070300	Fuse	TDS 1A 250V	J,U,V		01
⚠ F602	VV071200	Fuse	TSD 1A 250V	H,B,A,W		01
⚠ F603	VE876300	Fuse	20.00A	J		02
⚠ F603	KB001380	Fuse	15.00A	U,V		04
⚠ F603	KB003360	Fuse	6.30A S	H,B,A,W		02
J601	VV291400	Jumper Wire	0.60	J,U,V		01
J602	VV291400	Jumper Wire	0.60	J,U,V		01
L601	V0076300	Coil	EI	H,B,A,W		06
LD601	VV621000	LED	LT321-41-C13 GR	POWER		01
LD602	VV620800	LED	LT311G-41-C13 RE	PROTECTION		01
LD603	VV621000	LED	LT321-41-C13 GR	A CH SIGNAL		01
LD604	VV621000	LED	LT321-41-C13 GR	D CH SIGNAL		01
LD605	VV620800	LED	LT311G-41-C13 RE	A CH CLIP		01
LD606	VV620800	LED	LT311G-41-C13 RE	D CH CLIP		01
LD607	VV621000	LED	LT321-41-C13 GR	B CH SIGNAL		01
LD608	VV621000	LED	LT321-41-C13 GR	E CH SIGNAL		01
LD609	VV620800	LED	LT311G-41-C13 RE	B CH CLIP		01
LD610	VV620800	LED	LT311G-41-C13 RE	E CH CLIP		01
LD611	VV621000	LED	LT321-41-C13 GR	C CH SIGNAL		01
LD612	VV621000	LED	LT321-41-C13 GR	F CH SIGNAL		01
LD613	V3091800	LED	LT311G41BAC RE	C CH CLIP		01
LD614	V3091800	LED	LT311G41BAC RE	F CH CLIP		01
Q401	IC1815M0	Transistor	2SC1815 Y,GR			01
* Q402	IA097040	Transistor	2SA970 GR			01
Q403	IA097030	Transistor	2SA970 GR,BL			01
Q404	IC224030	Transistor	2SC2240 GR,BL			01
* Q405	IA097040	Transistor	2SA970 GR			01
Q406	IC1815M0	Transistor	2SC1815 Y,GR			01
Q407	IC1815M0	Transistor	2SC1815 Y,GR			01
Q408	IA101590	Transistor	2SA1015 O,Y			01
Q409	V2797700	Transistor	2SC5395 E,F			01
Q410	VU418600	Transistor	2SC3468 D,E			01
Q411	VU418400	Transistor	2SA1371 D,E			01
Q412	IC1815M0	Transistor	2SC1815 Y,GR			01
* Q413	IA097040	Transistor	2SA970 GR			01
Q414	IA097030	Transistor	2SA970 GR,BL			01
Q415	IC224030	Transistor	2SC2240 GR,BL			01
* Q416	IA097040	Transistor	2SA970 GR			01
Q417	IC1815M0	Transistor	2SC1815 Y,GR			01
Q418	IC1815M0	Transistor	2SC1815 Y,GR			01
Q419	IA101590	Transistor	2SA1015 O,Y			01
Q420	V2797700	Transistor	2SC5395 E,F			01
Q421	VU418600	Transistor	2SC3468 D,E			01
Q422	VU418400	Transistor	2SA1371 D,E			01
Q423	IC1815M0	Transistor	2SC1815 Y,GR			01
* Q424	IA097040	Transistor	2SA970 GR			01
Q425	IA097030	Transistor	2SA970 GR,BL			01
Q426	IC224030	Transistor	2SC2240 GR,BL			01
* Q427	IA097040	Transistor	2SA970 GR			01
Q428	IC1815M0	Transistor	2SC1815 Y,GR			01
Q429	IC1815M0	Transistor	2SC1815 Y,GR			01
Q430	IA101590	Transistor	2SA1015 O,Y			01
Q431	V2797700	Transistor	2SC5395 E,F			01
Q432	VU418600	Transistor	2SC3468 D,E			01
Q433	VU418400	Transistor	2SA1371 D,E			01
Q434	IC1815M0	Transistor	2SC1815 Y,GR			01
* Q435	IA097040	Transistor	2SA970 GR			01
Q436	IA097030	Transistor	2SA970 GR,BL			01
Q437	IC224030	Transistor	2SC2240 GR,BL			01
* Q438	IA097040	Transistor	2SA970 GR			01
Q439	IC1815M0	Transistor	2SC1815 Y,GR			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
Q440	IC1815M0	Transistor	2SC1815 Y,GR		01
Q441	IA101590	Transistor	2SA1015 O,Y		01
Q442	V2797700	Transistor	2SC5395 E,F		01
Q443	VU418600	Transistor	2SC3468 D,E		01
Q444	VU418400	Transistor	2SA1371 D,E		01
Q445	IC1815M0	Transistor	2SC1815 Y,GR		01
* Q446	IA097040	Transistor	2SA970 GR		
Q447	IA097030	Transistor	2SA970 GR,BL		01
Q448	IC224030	Transistor	2SC2240 GR,BL		01
* Q449	IA097040	Transistor	2SA970 GR		
Q450	IC1815M0	Transistor	2SC1815 Y,GR		01
Q451	IC1815M0	Transistor	2SC1815 Y,GR		01
Q452	IA101590	Transistor	2SA1015 O,Y		01
Q453	V2797700	Transistor	2SC5395 E,F		01
Q454	VU418600	Transistor	2SC3468 D,E		01
Q455	VU418400	Transistor	2SA1371 D,E		01
Q456	IC1815M0	Transistor	2SC1815 Y,GR		01
* Q457	IA097040	Transistor	2SA970 GR		
Q458	IA097030	Transistor	2SA970 GR,BL		01
Q459	IC224030	Transistor	2SC2240 GR,BL		01
* Q460	IA097040	Transistor	2SA970 GR		
Q461	IC1815M0	Transistor	2SC1815 Y,GR		01
Q462	IC1815M0	Transistor	2SC1815 Y,GR		01
Q463	IA101590	Transistor	2SA1015 O,Y		01
Q464	V2797700	Transistor	2SC5395 E,F		01
Q465	VU418600	Transistor	2SC3468 D,E		01
Q466	VU418400	Transistor	2SA1371 D,E		01
Q601	VD678500	Digital Transistor	DTA114ES		01
-603	VD678500	Digital Transistor	DTA114ES		01
Q604	V2797700	Transistor	2SC5395 E,F		01
Q605	V2797700	Transistor	2SC5395 E,F		01
Q606	VD678500	Digital Transistor	DTA114ES		01
-611	VD678500	Digital Transistor	DTA114ES		01
Q612	V2797700	Transistor	2SC5395 E,F		01
Q613	V2797700	Transistor	2SC5395 E,F		01
Q614	VD678500	Digital Transistor	DTA114ES		01
-619	VD678500	Digital Transistor	DTA114ES		01
Q620	V2797700	Transistor	2SC5395 E,F		01
Q621	V2797700	Transistor	2SC5395 E,F		01
Q622	VD678500	Digital Transistor	DTA114ES		01
-625	VD678700	Digital Transistor	DTC114ES		01
Q626	V2797700	Transistor	2SC5395 E,F		01
Q627	V2797600	Transistor	2SA1993 E,F		01
Q628	VS883300	Transistor	2SB1565 E,F		02
R401	HF456100	Carbon Resistor	1.0K 1/4 J		01
R402	HF458330	Carbon Resistor	330.0K 1/4 J		01
R403	HF457220	Carbon Resistor	22.0K 1/4 J		01
R404	VZ010600	Metal Film Resistor	560.0 1/4 F		01
-406	HF455560	Carbon Resistor	560.0 1/4 J		01
R407	HF457100	Carbon Resistor	10.0K 1/4 J		01
R408	HF455560	Carbon Resistor	560.0 1/4 J		01
R409	HF458150	Carbon Resistor	150.0K 1/4 J		01
R410	HF458150	Carbon Resistor	150.0K 1/4 J		01
R411	VV065600	Metal Film Resistor	11K 1/4 F		05
R412	VV065600	Metal Film Resistor	11K 1/4 F		05
R413	HF457470	Carbon Resistor	47.0K 1/4 J		01
R414	HF457470	Carbon Resistor	47.0K 1/4 J		01
R415	HF455200	Carbon Resistor	200.0 1/4 J		01
R416	HF455220	Carbon Resistor	220.0 1/4 J		01
R417	HF457470	Carbon Resistor	47.0K 1/4 J		01
-420	HF457470	Carbon Resistor	47.0K 1/4 J		01
R421	HF455330	Carbon Resistor	330.0 1/4 J		01
R422	HF455330	Carbon Resistor	330.0 1/4 J		01
R423	VV065100	Metal Film Resistor	2.2K 1/4 F		01
R424	VZ010600	Metal Film Resistor	560.0 1/4 F		01
* R425	V4567000	Metal Film Resistor	68.0 1/4 F		
R426	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R427	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R428	HF456100	Carbon Resistor	1.0K 1/4 J		01
R429	HF458330	Carbon Resistor	330.0K 1/4 J		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
R430	HF457220	Carbon Resistor	22.0K 1/4 J		01
R431	VZ010600	Metal Film Resistor	560.0 1/4 F		01
-433	HF455560	Carbon Resistor	560.0 1/4 J		01
R434	HF457100	Carbon Resistor	10.0K 1/4 J		01
R435	HF455560	Carbon Resistor	560.0 1/4 J		01
R436	VV065600	Metal Film Resistor	11K 1/4 F		05
R437	VV065600	Metal Film Resistor	11K 1/4 F		05
R438	HF457470	Carbon Resistor	47.0K 1/4 J		01
R439	HF457470	Carbon Resistor	47.0K 1/4 J		01
R440	HF455200	Carbon Resistor	200.0 1/4 J		01
R441	HF455220	Carbon Resistor	220.0 1/4 J		01
R442	HF457470	Carbon Resistor	47.0K 1/4 J		01
-445	HF457470	Carbon Resistor	47.0K 1/4 J		01
R446	HF455330	Carbon Resistor	330.0 1/4 J		01
R447	HF455330	Carbon Resistor	330.0 1/4 J		01
R448	VV065100	Metal Film Resistor	2.2K 1/4 F		01
R449	VZ010600	Metal Film Resistor	560.0 1/4 F		01
* R450	V4567000	Metal Film Resistor	68.0 1/4 F		01
R451	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R452	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R453	HF456100	Carbon Resistor	1.0K 1/4 J		01
R454	HF458330	Carbon Resistor	330.0K 1/4 J		01
R455	HF457220	Carbon Resistor	22.0K 1/4 J		01
R456	VZ010600	Metal Film Resistor	560.0 1/4 F		01
-458	HF455560	Carbon Resistor	560.0 1/4 J		01
R459	HF457100	Carbon Resistor	10.0K 1/4 J		01
R460	HF455560	Carbon Resistor	560.0 1/4 J		01
R461	HF458150	Carbon Resistor	150.0K 1/4 J		01
R462	VV065600	Metal Film Resistor	11K 1/4 F		05
R463	VV065600	Metal Film Resistor	11K 1/4 F		05
R464	HF457470	Carbon Resistor	47.0K 1/4 J		01
R465	HF457470	Carbon Resistor	47.0K 1/4 J		01
R466	HF455200	Carbon Resistor	200.0 1/4 J		01
R467	HF455220	Carbon Resistor	220.0 1/4 J		01
R468	HF457470	Carbon Resistor	47.0K 1/4 J		01
-471	HF457470	Carbon Resistor	47.0K 1/4 J		01
R472	HF455330	Carbon Resistor	330.0 1/4 J		01
R473	HF455330	Carbon Resistor	330.0 1/4 J		01
R474	VV065100	Metal Film Resistor	2.2K 1/4 F		01
R475	VZ010600	Metal Film Resistor	560.0 1/4 F		01
* R476	V4567000	Metal Film Resistor	68.0 1/4 F		01
R477	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R478	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R479	HF456100	Carbon Resistor	1.0K 1/4 J		01
R480	HF458330	Carbon Resistor	330.0K 1/4 J		01
R481	HF457220	Carbon Resistor	22.0K 1/4 J		01
R482	VZ010600	Metal Film Resistor	560.0 1/4 F		01
R483	HF458150	Carbon Resistor	150.0K 1/4 J		01
R484	HF455560	Carbon Resistor	560.0 1/4 J		01
R485	HF458150	Carbon Resistor	150.0K 1/4 J		01
R486	HF455560	Carbon Resistor	560.0 1/4 J		01
R487	HF457100	Carbon Resistor	10.0K 1/4 J		01
R488	HF458150	Carbon Resistor	150.0K 1/4 J		01
R489	HF455560	Carbon Resistor	560.0 1/4 J		01
R490	VV065600	Metal Film Resistor	11K 1/4 F		05
R491	VV065600	Metal Film Resistor	11K 1/4 F		05
R492	HF457470	Carbon Resistor	47.0K 1/4 J		01
R493	HF457470	Carbon Resistor	47.0K 1/4 J		01
R494	HF455200	Carbon Resistor	200.0 1/4 J		01
R495	HF455220	Carbon Resistor	220.0 1/4 J		01
R496	HF457470	Carbon Resistor	47.0K 1/4 J		01
-499	HF457470	Carbon Resistor	47.0K 1/4 J		01
R500	HF455330	Carbon Resistor	330.0 1/4 J		01
R501	HF455330	Carbon Resistor	330.0 1/4 J		01
R502	VV065100	Metal Film Resistor	2.2K 1/4 F		01
R503	VZ010600	Metal Film Resistor	560.0 1/4 F		01
* R504	V4567000	Metal Film Resistor	68.0 1/4 F		01
R505	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R506	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R507	HF456100	Carbon Resistor	1.0K 1/4 J		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
R508	HF458330	Carbon Resistor	330.0K 1/4 J		01
R509	HF457220	Carbon Resistor	22.0K 1/4 J		01
R510	VZ010600	Metal Film Resistor	560.0 1/4 F		01
-512	HF455560	Carbon Resistor	560.0 1/4 J		01
R513	HF457100	Carbon Resistor	10.0K 1/4 J		01
R514	HF455560	Carbon Resistor	560.0 1/4 J		01
R515	VV065600	Metal Film Resistor	11K 1/4 F		05
R516	VV065600	Metal Film Resistor	11K 1/4 F		05
R517	HF457470	Carbon Resistor	47.0K 1/4 J		01
R518	HF457470	Carbon Resistor	47.0K 1/4 J		01
R519	HF455200	Carbon Resistor	200.0 1/4 J		01
R520	HF455220	Carbon Resistor	220.0 1/4 J		01
R521	HF457470	Carbon Resistor	47.0K 1/4 J		01
-524	HF457470	Carbon Resistor	47.0K 1/4 J		01
R525	HF455330	Carbon Resistor	330.0 1/4 J		01
R526	HF455330	Carbon Resistor	330.0 1/4 J		01
R527	VV065100	Metal Film Resistor	2.2K 1/4 F		01
R528	VZ010600	Metal Film Resistor	560.0 1/4 F		01
* R529	V4567000	Metal Film Resistor	68.0 1/4 F		01
R530	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R531	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R532	HF456100	Carbon Resistor	1.0K 1/4 J		01
R533	HF458330	Carbon Resistor	330.0K 1/4 J		01
R534	HF457220	Carbon Resistor	22.0K 1/4 J		01
R535	VZ010600	Metal Film Resistor	560.0 1/4 F		01
R536	HF455560	Carbon Resistor	560.0 1/4 J		01
R537	HF455560	Carbon Resistor	560.0 1/4 J		01
R538	HF457100	Carbon Resistor	10.0K 1/4 J		01
R539	HF455560	Carbon Resistor	560.0 1/4 J		01
R540	VV065600	Metal Film Resistor	11K 1/4 F		05
R541	VV065600	Metal Film Resistor	11K 1/4 F		05
R542	HF457470	Carbon Resistor	47.0K 1/4 J		01
R543	HF457470	Carbon Resistor	47.0K 1/4 J		01
R544	HF455200	Carbon Resistor	200.0 1/4 J		01
R545	HF455220	Carbon Resistor	220.0 1/4 J		01
R546	HF457470	Carbon Resistor	47.0K 1/4 J		01
-549	HF457470	Carbon Resistor	47.0K 1/4 J		01
R550	HF455330	Carbon Resistor	330.0 1/4 J		01
R551	HF455330	Carbon Resistor	330.0 1/4 J		01
R552	VV065100	Metal Film Resistor	2.2K 1/4 F		01
* R553	VZ010600	Metal Film Resistor	560.0 1/4 F		01
R554	V4567000	Metal Film Resistor	68.0 1/4 F		01
R555	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R556	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R557	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R558	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R601	HF457820	Carbon Resistor	82.0K 1/4 J		01
R602	HF456470	Carbon Resistor	4.7K 1/4 J		01
R603	HF456470	Carbon Resistor	4.7K 1/4 J		01
R604	HF456120	Carbon Resistor	1.2K 1/4 J		01
-607	HF456120	Carbon Resistor	1.2K 1/4 J		01
R608	HF456470	Carbon Resistor	4.7K 1/4 J		01
R609	HF456470	Carbon Resistor	4.7K 1/4 J		01
R610	HF457100	Carbon Resistor	10.0K 1/4 J		01
R611	HF457100	Carbon Resistor	10.0K 1/4 J		01
R612	HF455220	Carbon Resistor	220.0 1/4 J		01
-615	HF455220	Carbon Resistor	220.0 1/4 J		01
R616	HF456120	Carbon Resistor	1.2K 1/4 J		01
-623	HF456120	Carbon Resistor	1.2K 1/4 J		01
R624	HF456470	Carbon Resistor	4.7K 1/4 J		01
-627	HF456470	Carbon Resistor	4.7K 1/4 J		01
R628	HF457100	Carbon Resistor	10.0K 1/4 J		01
R629	HF457100	Carbon Resistor	10.0K 1/4 J		01
R630	HF455220	Carbon Resistor	220.0 1/4 J		01
-633	HF455220	Carbon Resistor	220.0 1/4 J		01
R634	HF456120	Carbon Resistor	1.2K 1/4 J		01
-641	HF456120	Carbon Resistor	1.2K 1/4 J		01
R642	HF456470	Carbon Resistor	4.7K 1/4 J		01
-645	HF456470	Carbon Resistor	4.7K 1/4 J		01
R646	HF457100	Carbon Resistor	10.0K 1/4 J		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
R647	HF457100	Carbon Resistor	10.0K 1/4 J		01
R648	HF455220	Carbon Resistor	220.0 1/4 J		01
-651	HF455220	Carbon Resistor	220.0 1/4 J		01
R652	HF456120	Carbon Resistor	1.2K 1/4 J		01
-659	HF456120	Carbon Resistor	1.2K 1/4 J		01
R660	HF457100	Carbon Resistor	10.0K 1/4 J		01
R661	HF456820	Carbon Resistor	8.2K 1/4 J		01
R662	HF456820	Carbon Resistor	8.2K 1/4 J		01
R663	HF455220	Carbon Resistor	220.0 1/4 J		01
R664	HF455220	Carbon Resistor	220.0 1/4 J		01
R665	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R666	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
▲ SW601	VY898100	Push Switch	SDDFA3107U-YL UCS	POWER ON/OFF	05
W601	--	Connector Assembly	AC1 1P	(V295030)	
W602	--	Connector Assembly	AC2 1P	(V295040)	
*	V4161600	Circuit Board	PA6	(XW403C0)	
	VV104600	Cord Holder			3
	VV291400	Jumper Wire	0.60		180
C101	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-104	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C105	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
-108	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C109	VV060300	Mylar Capacitor	2200P 50V J		01
C110	VV060300	Mylar Capacitor	2200P 50V J		01
* C111	V4567500	Ceramic Capacitor-SL	10P 500V K		
-114	V4567500	Ceramic Capacitor-SL	10P 500V K		
C115	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-118	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C119	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
-122	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C123	VV060300	Mylar Capacitor	2200P 50V J		01
C124	VV060300	Mylar Capacitor	2200P 50V J		01
* C125	V4567500	Ceramic Capacitor-SL	10P 500V K		
-128	V4567500	Ceramic Capacitor-SL	10P 500V K		
C129	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-132	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C133	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
-136	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C137	VV060300	Mylar Capacitor	2200P 50V J		01
C138	VV060300	Mylar Capacitor	2200P 50V J		01
* C139	V4567500	Ceramic Capacitor-SL	10P 500V K		
-142	V4567500	Ceramic Capacitor-SL	10P 500V K		
C143	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C144	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C145	V3280500	Ceramic Capacitor-B	100P 500 K		01
-148	V3280500	Ceramic Capacitor-B	100P 500 K		01
C149	V5097700	Mylar Capacitor	3.3000 250V K		
-152	V5097700	Mylar Capacitor	3.3000 250V K		
C153	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-156	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C158	VV314600	Ceramic Capacitor-B	0.0022 500V K		01
-161	VV314600	Ceramic Capacitor-B	0.0022 500V K		01
* C162	V5307900	Electrolytic Cap.	100 100.0V		
-165	V5307900	Electrolytic Cap.	100 100.0V		
CN101	VM688900	Connector, FFC	52045 10P TE		01
CN102	VN394900	Connector, FFC	52045 14P TE		01
D101	VD631600	Diode	1SS133,176,HSS104		01
-104	VD631600	Diode	1SS133,176,HSS104		01
D105	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D106	VQ469600	Diode	HSS82		01
D107	VQ469600	Diode	HSS82		01
D108	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D109	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D110	VQ469600	Diode	HSS82		01
D111	VQ469600	Diode	HSS82		01
D112	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D113	VQ469600	Diode	HSS82		01
-116	VQ469600	Diode	HSS82		01
D117	VN478200	Diode	D1NL20U		01

*: New Parts

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REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
-120	VN478200	Diode	D1NL20U		01
D121	VU801600	Diode	1N4004L 26		01
-124	VU801600	Diode	1N4004L 26		01
D125	VD631600	Diode	1SS133,176,HSS104		01
-128	VD631600	Diode	1SS133,176,HSS104		01
D129	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D130	VQ469600	Diode	HSS82		01
D131	VQ469600	Diode	HSS82		01
D132	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D133	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D134	VQ469600	Diode	HSS82		01
D135	VQ469600	Diode	HSS82		01
D136	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D137	VQ469600	Diode	HSS82		01
-140	VQ469600	Diode	HSS82		01
D141	VN478200	Diode	D1NL20U		01
-144	VN478200	Diode	D1NL20U		01
D145	VU801600	Diode	1N4004L 26		01
-148	VU801600	Diode	1N4004L 26		01
D149	VD631600	Diode	1SS133,176,HSS104		01
-152	VD631600	Diode	1SS133,176,HSS104		01
D153	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D154	VQ469600	Diode	HSS82		01
D155	VQ469600	Diode	HSS82		01
D156	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D157	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D158	VQ469600	Diode	HSS82		01
D159	VQ469600	Diode	HSS82		01
D160	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D161	VQ469600	Diode	HSS82		01
-164	VQ469600	Diode	HSS82		01
D165	VN478200	Diode	D1NL20U		01
-168	VN478200	Diode	D1NL20U		01
D169	VU801600	Diode	1N4004L 26		01
-172	VU801600	Diode	1N4004L 26		01
* D173	V4816400	Diode Stack	FMU-22U 10A 200V		01
* -176	V4816400	Diode Stack	FMU-22U 10A 200V		01
D177	VU801600	Diode	1N4004L 26		01
-180	VU801600	Diode	1N4004L 26		01
D181	VS135800	Diode Stack	FMX-22S 10A 200V		03
-184	VS135800	Diode Stack	FMX-22S 10A 200V		03
* L101	V4668300	Coil	OH-20 100uH		
* -104	V4668300	Coil	OH-20 100uH		
* PR101	VM850500	Positive Thermistor	PTH9M04BF222TS2		
* PR102	VL964800	Positive Thermistor	PTH9M04BH222TS2		04
Q101	V2797600	Transistor	2SA1993 E,F		01
Q102	V2797600	Transistor	2SA1993 E,F		01
Q103	V2797700	Transistor	2SC5395 E,F		01
Q104	V2797700	Transistor	2SC5395 E,F		01
Q105	VU418600	Transistor	2SC3468 D,E		01
Q106	VU418600	Transistor	2SC3468 D,E		01
Q107	VU418400	Transistor	2SA1371 D,E		01
Q108	VU418400	Transistor	2SA1371 D,E		01
Q109	V2797600	Transistor	2SA1993 E,F		01
Q110	V2797600	Transistor	2SA1993 E,F		01
Q111	V2797700	Transistor	2SC5395 E,F		01
Q112	V2797700	Transistor	2SC5395 E,F		01
Q113	VU418600	Transistor	2SC3468 D,E		01
Q114	VU418600	Transistor	2SC3468 D,E		01
Q115	VU418400	Transistor	2SA1371 D,E		01
Q116	VU418400	Transistor	2SA1371 D,E		01
Q117	V2797600	Transistor	2SA1993 E,F		01
Q118	V2797600	Transistor	2SA1993 E,F		01
Q119	V2797700	Transistor	2SC5395 E,F		01
Q120	V2797700	Transistor	2SC5395 E,F		01
Q121	VU418600	Transistor	2SC3468 D,E		01
Q122	VU418600	Transistor	2SC3468 D,E		01
Q123	VU418400	Transistor	2SA1371 D,E		01
Q124	VU418400	Transistor	2SA1371 D,E		01
Q125	VU418600	Transistor	2SC3468 D,E		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
Q126	VU418600	Transistor	2SC3468 D,E		01
Q127	VU418400	Transistor	2SA1371 D,E		01
Q128	VU418400	Transistor	2SA1371 D,E		01
Q129N	V2954300	Pair Transistor	B1647/D2560		07
-134N	V2954300	Pair Transistor	B1647/D2560		07
Q129P	V2954300	Pair Transistor	B1647/D2560		07
-134P	V2954300	Pair Transistor	B1647/D2560		07
Q135N	VR732800	Pair Transistor	A1859A/C4883A		04
Q135P	VR732800	Pair Transistor	A1859A/C4883A		04
Q136N	VR732800	Pair Transistor	A1859A/C4883A		04
Q136P	VR732800	Pair Transistor	A1859A/C4883A		04
Q137N	V2950000	Pair Transistor	A1695A/C4468A		01
-140N	V2950000	Pair Transistor	A1695A/C4468A		01
Q137P	V2950000	Pair Transistor	A1695A/C4468A		01
-140P	V2950000	Pair Transistor	A1695A/C4468A		01
Q141N	VR732800	Pair Transistor	A1859A/C4883A		04
Q141P	VR732800	Pair Transistor	A1859A/C4883A		04
Q142N	VR732800	Pair Transistor	A1859A/C4883A		04
Q142P	VR732800	Pair Transistor	A1859A/C4883A		04
Q143N	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
-146N	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
Q143P	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
-146P	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
R101	HF457470	Carbon Resistor	47.0K 1/4 J		01
-108	HF457470	Carbon Resistor	47.0K 1/4 J		01
R109	HF457150	Carbon Resistor	15.0K 1/4 J		01
-112	HF457150	Carbon Resistor	15.0K 1/4 J		01
R113	VZ009400	Flame Proof C. Resistor	820.0 1/4 J		01
-116	VZ009400	Flame Proof C. Resistor	820.0 1/4 J		01
R117	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
-120	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
R121	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
-124	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
* R125	V4833200	Wire Wound Resistor	0.22 5W K		
* -128	V4833200	Wire Wound Resistor	0.22 5W K		
R129	HF457470	Carbon Resistor	47.0K 1/4 J		01
-136	HF457470	Carbon Resistor	47.0K 1/4 J		01
R137	HF457150	Carbon Resistor	15.0K 1/4 J		01
-140	HF457150	Carbon Resistor	15.0K 1/4 J		01
R141	VZ009400	Flame Proof C. Resistor	820.0 1/4 J		01
-144	VZ009400	Flame Proof C. Resistor	820.0 1/4 J		01
R145	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
-148	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
R149	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
-152	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
* R153	V4833200	Wire Wound Resistor	0.22 5W K		
* -156	V4833200	Wire Wound Resistor	0.22 5W K		
* R157	HF457470	Carbon Resistor	47.0K 1/4 J		01
-164	HF457470	Carbon Resistor	47.0K 1/4 J		01
R165	HF457150	Carbon Resistor	15.0K 1/4 J		01
-168	HF457150	Carbon Resistor	15.0K 1/4 J		01
R169	VZ009400	Flame Proof C. Resistor	820.0 1/4 J		01
-172	VZ009400	Flame Proof C. Resistor	820.0 1/4 J		01
R173	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
-176	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
R177	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
-180	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
* R181	V4833200	Wire Wound Resistor	0.22 5W K		
* -184	V4833200	Wire Wound Resistor	0.22 5W K		
R185	HF456560	Carbon Resistor	5.6K 1/4 J		01
-188	HF456560	Carbon Resistor	5.6K 1/4 J		01
R189	VZ008800	Flame Proof C. Resistor	22.0 1/4 J		01
-192	VZ008800	Flame Proof C. Resistor	22.0 1/4 J		01
R193	VZ008700	Flame Proof C. Resistor	2.2K 1/4 J		01
-196	VZ008700	Flame Proof C. Resistor	2.2K 1/4 J		01
R197	VZ008600	Flame Proof C. Resistor	150.0 1/4 J		01
-200	VZ008600	Flame Proof C. Resistor	150.0 1/4 J		01
R201	VV313600	Flame Proof C. Resistor	2.2 1/4 J		05
-205	VV313600	Flame Proof C. Resistor	2.2 1/4 J		05
R206	VZ370200	Wire Wound Resistor	0.1 5W K		01

*: New Parts

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
R207	VZ370200	Wire Wound Resistor	0.1 5W K			01
R208	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R209	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R210	VZ370200	Wire Wound Resistor	0.1 5W K			01
R211	VZ370200	Wire Wound Resistor	0.1 5W K			01
R212	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
-216	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R217	VZ370200	Wire Wound Resistor	0.1 5W K			01
-220	VZ370200	Wire Wound Resistor	0.1 5W K			01
R222	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
-229	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R230	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R231	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
-237	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R238	VV313900	Flame Proof C. Resistor	680.0 1/4 J			01
-241	VV313900	Flame Proof C. Resistor	680.0 1/4 J			01
W101	--	Connector Assembly	OUT AB VH-2P	(V457390)		
W102	--	Connector Assembly	OUT CD VH-2P	(V457400)		
W103	--	Connector Assembly	OUT EF VH-2P	(V457410)		
W105	--	Connector Assembly	+B PL-1P	(V457450)		
W106	--	Connector Assembly	GND PL-1P	(V457470)		
W107	--	Connector Assembly	-B PL-1P	(V457460)		
	--	Circuit Board	REAR6	(V416190)(XW406C0)		
*	AAX13210	Circuit Board	REAR6 1/6	(XW406C0)		
*	AAX13220	Circuit Board	REAR6 2/6	(XW406C0)		
*	AAX13230	Circuit Board	REAR6 3/6	(XW406C0)		
*	AAX13240	Circuit Board	REAR6 4/6	(XW406C0)		
*	AAX13250	Circuit Board	REAR6 5/6	(XW406C0)		
*	AAX13260	Circuit Board	REAR6 6/6	(XW406C0)		
	VV291400	Jumper Wire	0.60		136	01
* C701	V4609000	Monolithic Ceramic Cap.	0.01 50V Z			
* -708	V4609000	Monolithic Ceramic Cap.	0.01 50V Z			
C709	VZ353300	Ceramic Capacitor-SL	56P 50V J			01
-720	VZ353300	Ceramic Capacitor-SL	56P 50V J			01
C721	VZ004200	Mylar Capacitor	0.1000 100V M			01
C722	VZ004200	Mylar Capacitor	0.1000 100V M			01
C723	VV062400	Mylar Capacitor	0.047 50V J			01
-734	VV062400	Mylar Capacitor	0.047 50V J			01
C735	UJ659100	Electrolytic Cap.	1000 35.0V			02
C736	UJ659100	Electrolytic Cap.	1000 35.0V			02
C737	UJ867470	Electrolytic Cap.	47.00 50.0V			01
C738	UJ867470	Electrolytic Cap.	47.00 50.0V			01
C739	UJ867100	Electrolytic Cap.	10.00 50.0V			01
C740	UJ867100	Electrolytic Cap.	10.00 50.0V			01
C741	UJ659100	Electrolytic Cap.	1000 35.0V			02
C742	UJ866470	Electrolytic Cap.	4.70 50.0V			01
C743	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C744	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C745	UJ847470	Electrolytic Cap.	47.00 25.0V			01
C746	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C747	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C748	UJ847470	Electrolytic Cap.	47.00 25.0V		01	
C749	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C750	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C751	UJ847470	Electrolytic Cap.	47.00 25.0V			01
C752	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C753	VV330700	Electrolytic Cap.-SM	470.00 10.0V			01
C754	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C755	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C756	VZ353900	Ceramic Cap.-B	1000P 50V K			01
C757	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C758	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
-760	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
C761	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C762	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C763	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
-774	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
C775	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
-780	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01

*: New Parts

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
C801	VV062800	Mylar Capacitor	0.1 50V J			01
-804	VV062800	Mylar Capacitor	0.1 50V J			01
C805	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
-808	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
C809	VV062800	Mylar Capacitor	0.1 50V J			01
-812	VV062800	Mylar Capacitor	0.1 50V J			01
C813	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
-816	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
C817	VV062800	Mylar Capacitor	0.1 50V J			01
-820	VV062800	Mylar Capacitor	0.1 50V J			01
C821	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
-824	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
C825	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
-830	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C831	VZ353900	Ceramic Cap.-B	1000P 50V K			01
-833	VZ353900	Ceramic Cap.-B	1000P 50V K			01
CN701	VP798200	Connector, FFC	52044 24P SE			01
CN702	VP127700	Connector, FFC	52045 24P TE			01
CN703	VQ045000	Connector, FFC	52044 20P SE			01
CN704	VQ046400	Connector, FFC	52044 35P SE			01
CN705	VQ045000	Connector, FFC	52044 20P SE			01
CN706	VQ045000	Connector, FFC	52044 20P SE			01
CN707	VQ046400	Connector, FFC	52044 35P SE			01
CN708	VQ045000	Connector, FFC	52044 20P SE			01
CN709	--	Connector, FFC	52045 6P TE	(VQ04700)		01
CN710	VN394900	Connector, FFC	52045 14P TE			01
CN711	VV066700	Connector Base Post	M2426XX 7P TE			01
CN712	VV066300	Connector Base Post	M2426XX 3P TE			01
CN713	LB932020	Base Post Connector	VH 2P TE			01
CN801	LB933020	Base Post Connector	VH 2P SE			01
CN802	VV066300	Connector Base Post	M2426XX 3P TE			01
CN803	VQ044200	Connector, FFC	52044 6P SE			01
CN804	VV066900	Connector Base Post	M2426XX 9P TE			01
CN805	--	Connector, FFC	52045 6P TE	(VQ04700)		01
CN806	LB933020	Base Post Connector	VH 2P SE			01
CN807	VQ044200	Connector, FFC	52044 6P SE			01
CN808	LB933020	Base Post Connector	VH 2P SE			01
CN809	--	Connector, FFC	52045 6P TE	(VQ04700)		01
D701	VD631600	Diode	1SS133,176,HSS104			01
-712	VD631600	Diode	1SS133,176,HSS104			01
D713	VU801600	Diode	1N4004L 26			01
-719	VU801600	Diode	1N4004L 26			01
D720	VD631600	Diode	1SS133,176,HSS104			01
D721	VG437700	Zener Diode	MTZ J 5.6B 5.6V			01
D801	VU801600	Diode	1N4004L 26			01
E801	VV075700	Terminal Plate				01
-803	VV075700	Terminal Plate				01
IC701	XM085A00	IC	M5238AP	OP AMP		03
-703	XM085A00	IC	M5238AP	OP AMP		03
IC704	XM356A00	IC	NJM2068L-D	OP AMP		02
IC705	XD853A00	IC	NJM7815FA	REGULATOR +15V		03
IC706	XD854A00	IC	NJM7915FA	REGULATOR -15V		03
IC707	XM356A00	IC	NJM2068L-D	OP AMP		02
-711	XM356A00	IC	NJM2068L-D	OP AMP		02
* JK701	V4177800	Connector	ME060-50806 6P	EUROBLOCK CONNECTOR A-B,		
* -703	V4177800	Connector	ME060-50806 6P	C-D-E-F		
JK704	VU805200	XLM Connector	XLR NC3FAV1-0	INPUT CHANNEL A-F		04
-709	VU805200	XLM Connector	XLR NC3FAV1-0			04
L801	VR150900	Coil	RZ-001 21mm			02
-806	VR150900	Coil	RZ-001 21mm			02
Q701	V2797700	Transistor	2SC5395 E,F			01
Q702	V2797600	Transistor	2SA1993 E,F			01
Q703	V2797700	Transistor	2SC5395 E,F			01
Q704	V2797600	Transistor	2SA1993 E,F			01
Q705	V2797700	Transistor	2SC5395 E,F			01
Q706	V2797600	Transistor	2SA1993 E,F			01
Q707	V2797700	Transistor	2SC5395 E,F			01
Q708	V2797700	Transistor	2SC5395 E,F			01
Q709	V2797600	Transistor	2SA1993 E,F			01
Q710	V2797700	Transistor	2SC5395 E,F			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
Q711	VD678500	Digital Transistor	DTA114ES		01
R701	VV065200	Metal Film Resistor	4.7K 1/4 F		05
-703	VV065200	Metal Film Resistor	4.7K 1/4 F		05
R704	VZ009900	Metal Film Resistor	15K 1/4 F		01
-715	VZ009900	Metal Film Resistor	15K 1/4 F		01
R716	HF456100	Carbon Resistor	1.0K 1/4 J		01
R717	HF456100	Carbon Resistor	1.0K 1/4 J		01
R718	VZ009900	Metal Film Resistor	15K 1/4 F		01
-729	VZ009900	Metal Film Resistor	15K 1/4 F		01
R730	HF454180	Carbon Resistor	18.0 1/4 J		01
-737	HF454180	Carbon Resistor	18.0 1/4 J		01
R738	V2440500	Metal Film Resistor	27K 1/4 F		01
-743	V2440500	Metal Film Resistor	27K 1/4 F		01
R744	V3028900	Metal Film Resistor	56K 1/4 F		01
-749	V3028900	Metal Film Resistor	56K 1/4 F		01
R752	HF454180	Carbon Resistor	18.0 1/4 J		01
-757	HF454180	Carbon Resistor	18.0 1/4 J		01
R758	HF457150	Carbon Resistor	15.0K 1/4 J		01
R759	HF457100	Carbon Resistor	10.0K 1/4 J		01
R760	HF457560	Carbon Resistor	56.0K 1/4 J		01
R761	HF457100	Carbon Resistor	10.0K 1/4 J		01
R762	HF457100	Carbon Resistor	10.0K 1/4 J		01
R763	HF458150	Carbon Resistor	150.0K 1/4 J		01
R764	VV065200	Metal Film Resistor	4.7K 1/4 F		05
-766	VV065200	Metal Film Resistor	4.7K 1/4 F		05
R767	HF457220	Carbon Resistor	22.0K 1/4 J		01
R768	HF457470	Carbon Resistor	47.0K 1/4 J		01
R769	HF456470	Carbon Resistor	4.7K 1/4 J		01
-771	HF456470	Carbon Resistor	4.7K 1/4 J		01
R772	HF457100	Carbon Resistor	10.0K 1/4 J		01
R773	VV065200	Metal Film Resistor	4.7K 1/4 F		05
-775	VV065200	Metal Film Resistor	4.7K 1/4 F		05
R776	HF457470	Carbon Resistor	47.0K 1/4 J		01
R777	HF457470	Carbon Resistor	47.0K 1/4 J		01
R778	HF454180	Carbon Resistor	18.0 1/4 J		01
-780	HF454180	Carbon Resistor	18.0 1/4 J		01
R781	HF457680	Carbon Resistor	68.0K 1/4 J		01
R782	HF456120	Carbon Resistor	1.2K 1/4 J		01
R783	HF456220	Carbon Resistor	2.2K 1/4 J		01
R784	HF457560	Carbon Resistor	56.0K 1/4 J		01
R801	V2961000	Metal Oxide Film Resistor	4.7 2W J		01
-804	V2961000	Metal Oxide Film Resistor	4.7 2W J		01
R805	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R806	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R807	HF457270	Carbon Resistor	27.0K 1/4 J		01
R808	HF457270	Carbon Resistor	27.0K 1/4 J		01
R809	V2961000	Metal Oxide Film Resistor	4.7 2W J		01
-812	V2961000	Metal Oxide Film Resistor	4.7 2W J		01
R813	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R814	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R815	HF457270	Carbon Resistor	27.0K 1/4 J		01
R816	HF457270	Carbon Resistor	27.0K 1/4 J		01
R817	V2961000	Metal Oxide Film Resistor	4.7 2W J		01
-820	V2961000	Metal Oxide Film Resistor	4.7 2W J		01
R821	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R822	VV276700	Flame Proof C. Resistor	4.7 1/4 J		01
R823	HF457270	Carbon Resistor	27.0K 1/4 J		01
R824	HF457270	Carbon Resistor	27.0K 1/4 J		01
R825	HF453470	Carbon Resistor	4.7 1/4 J		01
-830	HF453470	Carbon Resistor	4.7 1/4 J		01
RY801	VV315400	Relay	DC OSA-SH-224DM3M		06
-803	VV315400	Relay	DC OSA-SH-224DM3M		06
SP801	VZ956900	Speaker Terminal	STB-403AU 4P	SPEAKERS CHANNEL A-F	06
-803	VZ956900	Speaker Terminal	STB-403AU 4P		06
* SW701	V4103700	Slide Switch	SS001-P262BUB-PA14	EACH CH/CH A TO ALL CH	
SW702	V2802400	Slide Switch	SS001-P022BQB-PA14	HPF SW A-F ON/OFF,	03
-710	V2802400	Slide Switch	SS001-P022BQB-PA14	BRIDGE(A-F) SW ON/OFF	03
VR701	V2479500	Rotary Variable Resistor	A 5K RK11K113	VOLUME CHANNEL A-F	06
-706	V2479500	Rotary Variable Resistor	A 5K RK11K113		06
W801	--	Connector Assembly	OUT G VH-2P	(V457380)	

*: New Parts

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POWER AMPLIFIER XM4220 PARTS LIST


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OVERALL ASSEMBLY	2
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Notes : DESTINATION ABBREVIATIONS

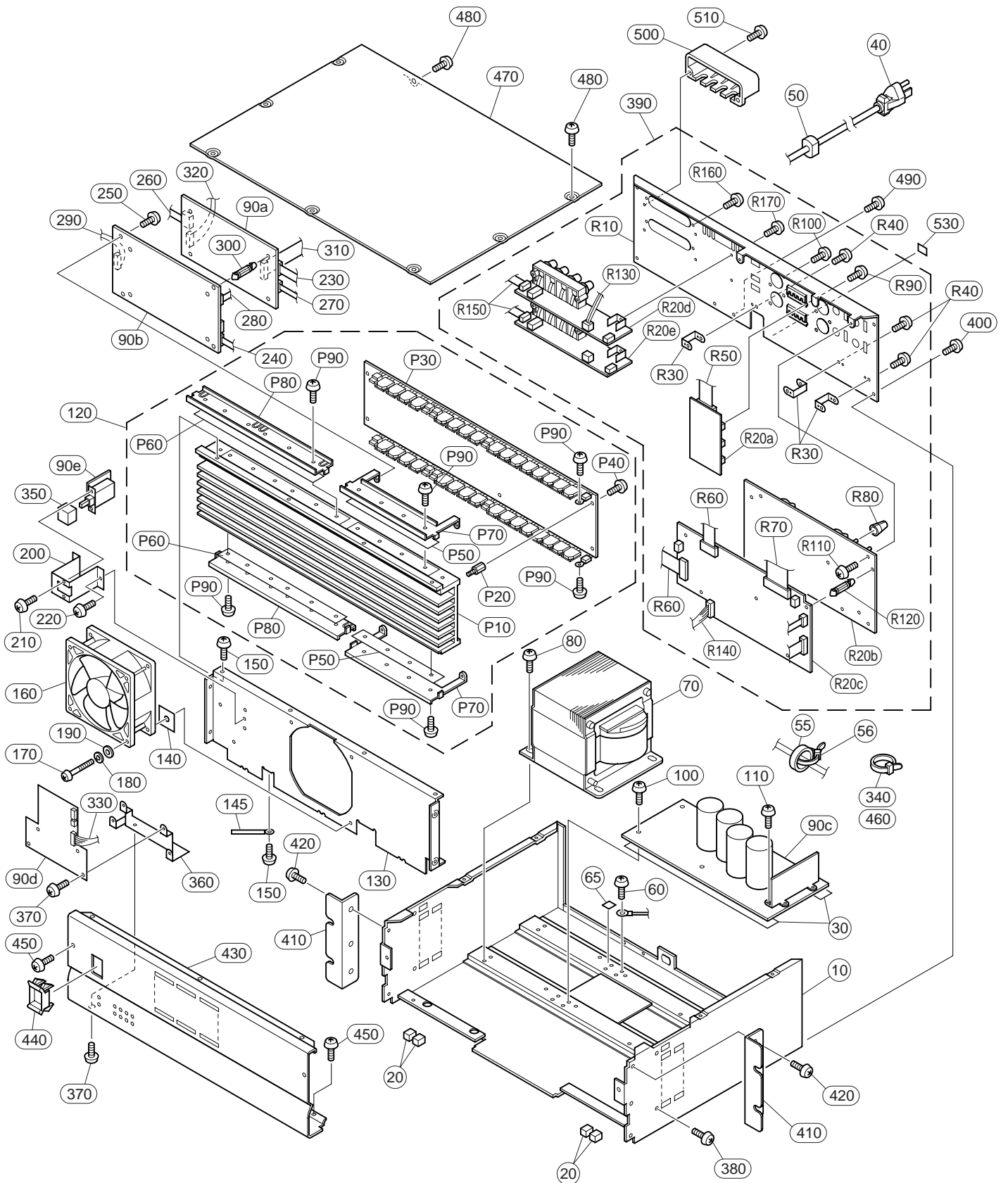
A : Australian model	M : South African model
B : British model	O : Chinese model
C : Canadian model	Q : South-east Asia model
D : German model	T : Taiwan model
E : European model	U : U.S.A. model
F : French model	V : General export model (110V)
H : North European model	W : General export model (220)
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	XM4220		
	--	Overall Assembly	J (V455470)		
	--	Overall Assembly	U,V (V455480)		
	--	Overall Assembly	H,W (V455490)		
	--	Overall Assembly	B (V455500)		
	--	Overall Assembly	A (V455510)		
* 10	V2942800	Main Chassis			
20	V3200700	Protector		4	01
30	--	Spacer	(V542880)	2	
40	V2943900	AC Cord	VCTF 1.25X2 12A		05
40	VZ021200	AC Cord	SJT 3X#18 10A		06
40	V2944000	AC Cord	H05VV-F0.75X3 6A		06
40	VZ021600	AC Cord	H05VV-F 13A		08
50	VV103100	Cord Strain Relief	SR-6P1		01
55	V3225000	Ferrite Core	FR25/15/12-D40		03
56	VV104600	Cord Holder			01
60	VP156800	Bind Head Screw	A4.0X8 MFZN2BL		01
65	--	Label	GND		
70	XW408A00	Power Transformer	E MAP410		
70	XW409A00	Power Transformer	A MAP410		
70	XW410A00	Power Transformer	E MAP410		
70	XW411A00	Power Transformer	E MAP410		
80	VU688100	Bind Head Screw	SP 5.0X10 MFZN2BL		01
90	--	Circuit Board	DRV4		
90	--	Circuit Board	DRV4		
90	--	Circuit Board	DRV4		
90a	AAAX12990	Circuit Board	DRV4 1/5		
90b	AAAX13000	Circuit Board	DRV4 2/5		
90c	AAAX13010	Circuit Board	DRV4 3/5		
90c	AAAX13020	Circuit Board	DRV4 3/5		
90c	AAAX13030	Circuit Board	DRV4 3/5		
90d	AAAX13040	Circuit Board	DRV4 4/5		
90d	AAAX13050	Circuit Board	DRV4 4/5		
90e	AAAX13060	Circuit Board	DRV4 5/5		
100	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
110	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL		01
120	V4555700	PA Unit			
130	V2942900	Angle Bracket, Fan			06
140	V2945200	Packing			04
145	--	Cord Binder	WC-3-MT		
150	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		01
160	V2945700	Fan	KDE2412PMS3-6A/A47		09
170	VB857700	Bind Head Screw	4.0X45 MFZN2BL		01
180	03765330	Spring Washer	#2 4.0 MFZN2BL		01
190	ET500040	Flat Washer	4.0X10X0.8 MFZN2BL		01
200	V4556700	Angle Bracket	PSW		
210	VB659000	Bind Head Screw	3.0X8 MFZN2BL		01
220	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
230	--	FFC Cable	BNCDP=1.25K-14-80		
240	--	FFC Cable	BNCDP=1.25K-10-60		
250	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
260	--	FFC Cable	BNCDP=1.25K-6-50		
270	--	FFC Cable	BNCDP=1.25K-8-60		
280	--	FFC Cable	BNCDP=1.25K-6-140		
290	--	Connector Assembly	2426&2426 5P 180L		
300	--	Support	KCA-20 PIN GOO		
310	--	FFC Cable	BNCDP=1.25K-14-150		
320	--	Connector Assembly	CLP 8P		
330	--	Connector Assembly	SIG 9P		
340	VV104600	Cord Holder			01
350	VU859000	Power Switch Knob			01
360	--	Angle Bracket			
370	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		01
380	VR779900	Bonding Tapping Screw-B	4.0X8 MFZN2BL		01
390	--	Rear Assembly			
390	--	Rear Assembly			
390	--	Rear Assembly			
390	--	Rear Assembly			
400	VR779900	Bonding Tapping Screw-B	4.0X8 MFZN2BL		01
410	V2943200	Rack Angle			03

*: New Parts

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
420	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		6	01
* 430	V4556900	Front Panel				
440	VU859100	Escutcheon, Power Switch				02
450	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		4	01
460	VV104600	Cord Holder			5	01
470	V2943600	Top Cover				08
480	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL		9	01
490	VP156800	Bind Head Screw	A4.0X8 MFZN2BL			01
500	VY938700	Cover, Speaker Terminal			2	03
510	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		4	01
530	VA039300	Label	DATE COAD	U,V		03
	--	Rear Assembly		J (V455590)		
	--	Rear Assembly		U,V (V455600)		
	--	Rear Assembly		H,B,W (V455610)		
	--	Rear Assembly		A (V455620)		
* R10	V4557300	Rear Panel		J		
* R10	V4557400	Rear Panel		U,V		
* R10	V4557500	Rear Panel		H,B,W		
* R10	V4557600	Rear Panel		A		
R20	--	Circuit Board	REAR4	(V416180)		
* R20a	AAX13150	Circuit Board	REAR4 1/6	(XW406C0)		
* R20b	AAX13160	Circuit Board	REAR4 2/6	(XW406C0)		
* R20c	AAX13170	Circuit Board	REAR4 3/6	(XW406C0)		
* R20d	AAX13180	Circuit Board	REAR4 4/6	(XW406C0)		
* R20e	AAX13190	Circuit Board	REAR4 5/6	(XW406C0)		
* R20f	AAX13200	Circuit Board	REAR4 6/6	(XW406C0)		
R30	--	Holder		(V455810)	3	
R40	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		3	01
R50	--	FFC Cable	BNCDP=1.25K-24-50	(V436100)		
R60	--	FFC Cable	BNCDP=1.25K-20-50	(V457290)	2	
R70	--	FFC Cable	BNCDP=1.25K-35-50	(V457300)		
R80	VU860400	Knob	RED/D-GRAY	VOLUME CHANNEL A-D	4	01
R90	VC990500	Pan Head Screw	2.6X6 MFZN2BL		4	01
R100	VN413300	Bonding Tapping Screw-B	3.0X8 MFZN2BL		8	01
R110	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		5	01
R120	V3224800	Support	KCA-14		5	01
R130	--	Connector Assembly	2426&2426 3P 80L	(VZ01600)		
R140	--	Connector Assembly	2426&2426 7P 180L	(V457370)		
R150	--	FFC Cable	BNCDP=1.25K-6-70	(V435970)		
R160	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL		4	01
R170	VN413300	Bonding Tapping Screw-B	3.0X8 MFZN2BL		2	01
* P10	V4555700	PA Unit				
	--	Heat Sink		(V455820)		
P20	VV086500	Support	H=7.4 B=5.5		6	01
* P30	V4161700	Circuit Board	PA4	(XW404C0)		
P40	EG330290	Bind Head Screw	SP 3.0X8 MFZN2Y		6	01
* P50	V4558400	Insulation Sheet	A TBM51W T=0.15		2	
* P60	V4558500	Insulation Sheet	B TBM51W T=0.15		2	
P70	--	Transistor Holder	A	(V455710)	2	
P80	--	Transistor Holder	B	(V455720)	2	
P90	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL		22	01
		ACCESSORIES				
* V4559800		Euroblock Connector	MC100-50803 3P		4	

*: New Parts

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ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		ELECTRICAL PARTS		XM4220		
	--	Circuit Board	DRV4	J (V416200)(XW407C0)		
	--	Circuit Board	DRV4	U,V (V416210)(XW407C0)		
	--	Circuit Board	DRV4	H,B,A,W (V416220)(XW407C0)		
*	AAX12990	Circuit Board	DRV4 1/5	(XW407C0)		
*	AAX13000	Circuit Board	DRV4 2/5	(XW407C0)		
*	AAX13010	Circuit Board	DRV4 3/5	J (XW407C0)		
*	AAX13020	Circuit Board	DRV4 3/5	U,V (XW407C0)		
*	AAX13030	Circuit Board	DRV4 3/5	H,B,A,W (XW407C0)		
*	AAX13040	Circuit Board	DRV4 4/5	J,U,V (XW407C0)		
*	AAX13050	Circuit Board	DRV4 4/5	H,B,A,W (XW407C0)		
*	AAX13060	Circuit Board	DRV4 5/5	(XW407C0)		
*	V4161700	Circuit Board	PA4	(XW404C0)		
	--	Circuit Board	REAR4	(V416180)(XW406C0)		
*	AAX13150	Circuit Board	REAR4 1/6	(XW406C0)		
*	AAX13160	Circuit Board	REAR4 2/6	(XW406C0)		
*	AAX13170	Circuit Board	REAR4 3/6	(XW406C0)		
*	AAX13180	Circuit Board	REAR4 4/6	(XW406C0)		
*	AAX13190	Circuit Board	REAR4 5/6	(XW406C0)		
	--	Circuit Board	DRV4	J (V416200)(XW407C0)		
	--	Circuit Board	DRV4	U,V (V416210)(XW407C0)		
	--	Circuit Board	DRV4	H,B,A,W (V416220)(XW407C0)		
*	AAX12990	Circuit Board	DRV4 1/5	(XW407C0)		
*	AAX13000	Circuit Board	DRV4 2/5	(XW407C0)		
*	AAX13010	Circuit Board	DRV4 3/5	J (XW407C0)		
*	AAX13020	Circuit Board	DRV4 3/5	U,V (XW407C0)		
*	AAX13030	Circuit Board	DRV4 3/5	H,B,A,W (XW407C0)		
*	AAX13040	Circuit Board	DRV4 4/5	J,U,V (XW407C0)		
*	AAX13050	Circuit Board	DRV4 4/5	H,B,A,W (XW407C0)		
*	AAX13060	Circuit Board	DRV4 5/5	(XW407C0)		
	VZ336500	Plastic Rivet	PR-08T		2	01
	VB763800	Bind Head Screw	SP 3.0X12 MFZN2Y		2	01
	VV319600	Fuse Holder	CQ-05CT		6	01
	--	Heat Sink	S	(V455830)		
	VV307300	LED Spacer			10	01
	VV291400	Jumper Wire	0.60		27	01
C401	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C402	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C403	UR847220	Electrolytic Cap.	22.00 25.0V			01
C404	FU451220	Mica Capacitor	22P 500V J			01
C405	VV060300	Mylar Capacitor	2200P 50V J			01
C406	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C407	FU451220	Mica Capacitor	22P 500V J			01
C408	FU451220	Mica Capacitor	22P 500V J			01
C409	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C410	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C411	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C412	UR847220	Electrolytic Cap.	22.00 25.0V			01
C413	FU451220	Mica Capacitor	22P 500V J			01
C414	VV060300	Mylar Capacitor	2200P 50V J			01
C415	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C416	FU451220	Mica Capacitor	22P 500V J			01
C417	FU451220	Mica Capacitor	22P 500V J			01
C418	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C419	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C420	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C421	UR847220	Electrolytic Cap.	22.00 25.0V			01
C422	FU451220	Mica Capacitor	22P 500V J			01
C423	VV060300	Mylar Capacitor	2200P 50V J			01
C424	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C425	FU451220	Mica Capacitor	22P 500V J			01
C426	FU451220	Mica Capacitor	22P 500V J			01
C427	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C428	VZ004000	Electrolytic Cap.-SK	2.2 200.0V			01
C429	VZ004000	Electrolytic Cap.-SK	2.2 200.0V			01
C430	VV064400	Monolithic Mylar Capacitor	0.82 50V J			03
C431	VZ353500	Ceramic Capacitor-SL	100P 50V J			01
C432	UR847220	Electrolytic Cap.	22.00 25.0V			01
C433	FU451220	Mica Capacitor	22P 500V J			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
C434	VV060300	Mylar Capacitor	2200P 50V J		01
C435	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C436	FU451220	Mica Capacitor	22P 500V J		01
C437	FU451220	Mica Capacitor	22P 500V J		01
C438	UJ847100	Electrolytic Cap.	10.00 25.0V		01
C457	VZ004000	Electrolytic Cap.-SK	2.2 200.0V		01
C458	VZ004000	Electrolytic Cap.-SK	2.2 200.0V		01
C459	VZ004200	Mylar Capacitor	0.1000 100V M		01
C460	VZ004200	Mylar Capacitor	0.1000 100V M		01
C601	UJ866470	Electrolytic Cap.	4.70 50.0V		01
C602	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C603	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C604	UJ866100	Electrolytic Cap.	1.00 50.0V		01
-607	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C608	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C610	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C612	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C614	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C616	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C618	UJ866100	Electrolytic Cap.	1.00 50.0V		01
C620	V3148500	Mylar Capacitor	0.33 250V M		01
C621	V3148500	Mylar Capacitor	0.33 250V M		01
C622	VY897000	Electrolytic Cap.	6800 100V		08
-625	VY897000	Electrolytic Cap.	6800 100V		08
C626	UJ867470	Electrolytic Cap.	47.00 50.0V		01
C627	UJ866470	Electrolytic Cap.	4.70 50.0V		01
C628	VV314800	Capacitor	1000P 400V J.U.C.S		01
C629	VV520600	Capacitor	0.01 400V J.U.C.S		02
CN401	VN394900	Connector, FFC	52045 14P TE		01
CN402	VF982200	Connector, FFC	52044 14P SE		02
CN403	VP682300	Connector, FFC	52045 8P SE		01
CN404	VV066800	Connector Base Post	M2426 8P TE		01
CN405	VQ044200	Connector, FFC	52044 6P SE		01
CN406	--	Connector, FFC	52045 6P TE	(VQ04700)	
CN407	VP682200	Connector, FFC	52045 8P TE	(VQ04700)	01
CN408	--	Connector, FFC	52045 6P TE	(VQ04700)	
CN409	VV066500	Connector Base Post	M2426 5P TE		01
CN410	VP113500	Connector, FFC	52044 10P SE		01
CN601	VV068300	Connector Base Post	M2426XXR 9P SE		01
CN602	VV068200	Connector Base Post	M2426XXR 8P SE		01
CN603	VV067600	Connector Base Post	M2426XXR 2P SE		01
CN604	VV066700	Connector Base Post	M2426XX 7P TE		01
CN605	LB932030	Base Post Connector	VH 3P TE		01
CN606	VV066500	Connector Base Post	M2426XX 5P TE		01
CN607	VZ005700	Fasten Terminal	TP82223-22		01
-618	VZ005700	Fasten Terminal	TP82223-22		01
CN619	LB932020	Base Post Connector	VH 2P TE		01
CN620	LB932020	Base Post Connector	VH 2P TE		01
D401	VD631600	Diode	1SS133,176,HSS104		01
-416	VD631600	Diode	1SS133,176,HSS104		01
* D601	V4833600	Diode Stack	RBV2506 25.0A 600V		01
D602	VD631600	Diode	1SS133,176,HSS104		01
D603	VG438900	Zener Diode	MTZ J 8.2B 8.2V		01
D604	VG437700	Zener Diode	MTZ J 5.6B 5.6V		01
F601	VV070300	Fuse	TDS 1A 250V	J,U,V	01
F601	VV071200	Fuse	TSD 1A 250V	H,B,A,W	01
F602	VV070300	Fuse	TDS 1A 250V	J,U,V	01
F602	VV071200	Fuse	TSD 1A 250V	H,B,A,W	01
F603	VE876300	Fuse	20.00A	J	02
F603	KB001380	Fuse	15.00A	U,V	04
F603	KB003360	Fuse	6.30A S	H,B,A,W	02
J601	VV291400	Jumper Wire	0.60	J,U,V	01
J602	VV291400	Jumper Wire	0.60	J,U,V	01
L601	V0076300	Coil	EI	H,B,A,W	06
LD601	VV621000	LED	LT321-41-C13 GR	J POWER	01
LD601	V3091900	LED	LT032141BAC GR	U,V,H,B,A,W POWER	01
LD602	VV620800	LED	LT311G-41-C13 RE	J PROTECTION	01
LD602	V3091800	LED	LT311G41BAC RE	U,V,H,B,A,W PROTECTION	01
LD603	VV621000	LED	LT321-41-C13 GR	J A CH SIGNAL	01
LD603	V3091900	LED	LT032141BAC GR	U,V,H,B,A,W A CH SIGNAL	01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
LD604	VV621000	LED	LT321-41-C13 GR		01
LD604	V3091900	LED	LT032141BAC GR	J D CH SIGNAL	01
LD605	VV620800	LED	LT311G-41-C13 RE	U,V,H,B,A,W D CH SIGNAL	01
LD605	V3091800	LED	LT311G41BAC RE	J A CH CLIP	01
LD606	VV620800	LED	LT311G-41-C13 RE	U,V,H,B,A,W A CH CLIP	01
LD606	V3091800	LED	LT311G41BAC RE	J D CH CLIP	01
LD607	VV621000	LED	LT321-41-C13 GR	U,V,H,B,A,W D CH CLIP	01
LD607	V3091900	LED	LT032141BAC GR	J B CH SIGNAL	01
LD609	VV620800	LED	LT311G-41-C13RE	U,V,H,B,A,W B CH SIGNAL	01
LD609	V3091800	LED	LT311G41BAC RE	J B CH CLIP	01
LD611	VV621000	LED	LT321-41-C13 GR	U,V,H,B,A,W B CH CLIP	01
LD611	V3091900	LED	LT032141BAC GR	J C CH SIGNAL	01
LD613	VV620800	LED	LT311G-41-C13 RE	U,V,H,B,A,W C CH SIGNAL	01
LD613	V3091800	LED	LT311G41BAC RE	J C CH CLIP	01
Q401	IC1815M0	Transistor	2SC1815 Y,GR	U,V,H,B,A,W C CH CLIP	01
* Q402	IA097040	Transistor	2SA970 GR		01
Q403	IA097030	Transistor	2SA970 GR,BL		01
Q404	IC224030	Transistor	2SC2240 GR,BL		01
* Q405	IA097040	Transistor	2SA970 GR		01
Q406	IC1815M0	Transistor	2SC1815 Y,GR		01
Q407	IC1815M0	Transistor	2SC1815 Y,GR		01
-408	IA101590	Transistor	2SA1015 O,Y		01
Q409	V2797700	Transistor	2SC5395 E,F		01
Q410	VU418600	Transistor	2SC3468 D,E		01
Q411	VU418400	Transistor	2SA1371 D,E		01
Q412	IC1815M0	Transistor	2SC1815 Y,GR		01
* Q413	IA097040	Transistor	2SA970 GR		01
Q414	IA097030	Transistor	2SA970 GR,BL		01
Q415	IC224030	Transistor	2SC2240 GR,BL		01
* Q416	IA097040	Transistor	2SA970 GR		01
Q417	IC1815M0	Transistor	2SC1815 Y,GR		01
Q418	IC1815M0	Transistor	2SC1815 Y,GR		01
Q419	IA101590	Transistor	2SA1015 O,Y		01
Q420	V2797700	Transistor	2SC5395 E,F		01
Q421	VU418600	Transistor	2SC3468 D,E		01
Q422	VU418400	Transistor	2SA1371 D,E		01
Q423	IC1815M0	Transistor	2SC1815 Y,GR		01
* Q424	IA097040	Transistor	2SA970 GR		01
Q425	IA097030	Transistor	2SA970 GR,BL		01
Q426	IC224030	Transistor	2SC2240 GR,BL		01
* Q427	IA097040	Transistor	2SA970 GR		01
Q428	IC1815M0	Transistor	2SC1815 Y,GR		01
Q429	IC1815M0	Transistor	2SC1815 Y,GR		01
Q430	IA101590	Transistor	2SA1015 O,Y		01
Q431	V2797700	Transistor	2SC5395 E,F		01
Q432	VU418600	Transistor	2SC3468 D,E		01
Q433	VU418400	Transistor	2SA1371 D,E		01
Q434	IC1815M0	Transistor	2SC1815 Y,GR		01
* Q435	IA097040	Transistor	2SA970 GR		01
Q436	IA097030	Transistor	2SA970 GR,BL		01
Q437	IC224030	Transistor	2SC2240 GR,BL		01
* Q438	IA097040	Transistor	2SA970 GR		01
Q439	IC1815M0	Transistor	2SC1815 Y,GR		01
Q440	IC1815M0	Transistor	2SC1815 Y,GR		01
Q441	IA101590	Transistor	2SA1015 O,Y		01
Q442	V2797700	Transistor	2SC5395 E,F		01
Q443	VU418600	Transistor	2SC3468 D,E		01
Q444	VU418400	Transistor	2SA1371 D,E		01
Q601	VD678500	Digital Transistor	DTA114ES		01
-603	VD678500	Digital Transistor	DTA114ES		01
Q604	V2797700	Transistor	2SC5395 E,F		01
Q605	V2797700	Transistor	2SC5395 E,F		01
Q606	VD678500	Digital Transistor	DTA114ES		01
-610	VD678500	Digital Transistor	DTA114ES		01
Q612	V2797700	Transistor	2SC5395 E,F		01
Q614	VD678500	Digital Transistor	DTA114ES		01
Q616	VD678700	Digital Transistor	DTC114ES		01
Q618	VD678500	Digital Transistor	DTA114ES		01
Q620	V2797700	Transistor	2SC5395 E,F		01
Q622	VD678500	Digital Transistor	DTA114ES		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
Q624	VD678700	Digital Transistor	DTC114ES		01
Q626	V2797700	Transistor	2SC5395 E,F		01
-628	VS883300	Transistor	2SB1565 E,F		02
R401	HF456100	Carbon Resistor	1.0K 1/4 J		01
R402	HF458330	Carbon Resistor	330.0K 1/4 J		01
R403	V2961300	Metal Film Resistor	16.0K 1/4 J		01
* R404	V4604800	Metal Film Resistor	470.0 1/4 F		
R405	HF455560	Carbon Resistor	560.0 1/4 J		01
R406	HF455560	Carbon Resistor	560.0 1/4 J		01
R407	HF457100	Carbon Resistor	10.0K 1/4 J		01
R408	HF455560	Carbon Resistor	560.0 1/4 J		01
R409	HF458150	Carbon Resistor	150.0K 1/4 J		01
R410	HF458150	Carbon Resistor	150.0K 1/4 J		01
R411	VV065600	Metal Film Resistor	11K 1/4 F		05
R412	VV065600	Metal Film Resistor	11K 1/4 F		05
R413	HF457470	Carbon Resistor	47.0K 1/4 J		01
R414	HF457470	Carbon Resistor	47.0K 1/4 J		01
R415	HF455200	Carbon Resistor	200.0 1/4 J		01
R416	HF455220	Carbon Resistor	220.0 1/4 J		01
R417	HF457470	Carbon Resistor	47.0K 1/4 J		01
-420	HF457470	Carbon Resistor	47.0K 1/4 J		01
R421	HF455330	Carbon Resistor	330.0 1/4 J		01
R422	HF455330	Carbon Resistor	330.0 1/4 J		01
R423	VV065100	Metal Film Resistor	2.2K 1/4 F		01
* R424	V4604800	Metal Film Resistor	470.0 1/4 F		
* R425	V4567000	Metal Film Resistor	68.0 1/4 F		
R426	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R427	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R428	HF456100	Carbon Resistor	1.0K 1/4 J		01
R429	HF458330	Carbon Resistor	330.0K 1/4 J		01
R430	V2961300	Metal Film Resistor	16.0K 1/4 J		01
* R431	V4604800	Metal Film Resistor	470.0 1/4 F		
R432	HF455560	Carbon Resistor	560.0 1/4 J		01
R433	HF455560	Carbon Resistor	560.0 1/4 J		01
R434	HF457100	Carbon Resistor	10.0K 1/4 J		01
R435	HF455560	Carbon Resistor	560.0 1/4 J		01
R436	VV065600	Metal Film Resistor	11K 1/4 F		05
R437	VV065600	Metal Film Resistor	11K 1/4 F		05
R438	HF457470	Carbon Resistor	47.0K 1/4 J		01
R439	HF457470	Carbon Resistor	47.0K 1/4 J		01
R440	HF455200	Carbon Resistor	200.0 1/4 J		01
R441	HF455220	Carbon Resistor	220.0 1/4 J		01
R442	HF457470	Carbon Resistor	47.0K 1/4 J		01
-445	HF457470	Carbon Resistor	47.0K 1/4 J		01
R446	HF455330	Carbon Resistor	330.0 1/4 J		01
R447	HF455330	Carbon Resistor	330.0 1/4 J		01
R448	VV065100	Metal Film Resistor	2.2K 1/4 F		01
* R449	V4604800	Metal Film Resistor	470.0 1/4 F		
* R450	V4567000	Metal Film Resistor	68.0 1/4 F		
R451	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R452	VV313800	Flame Proof C. Resistor	220.0 1/4 J		01
R453	HF456100	Carbon Resistor	1.0K 1/4 J		01
R454	HF458330	Carbon Resistor	330.0K 1/4 J		01
R455	V2961300	Metal Film Resistor	16.0K 1/4 J		01
* R456	V4604800	Metal Film Resistor	470.0 1/4 F		
R457	HF455560	Carbon Resistor	560.0 1/4 J		01
R458	HF455560	Carbon Resistor	560.0 1/4 J		01
R459	HF457100	Carbon Resistor	10.0K 1/4 J		01
R460	HF455560	Carbon Resistor	560.0 1/4 J		01
R461	HF458150	Carbon Resistor	150.0K 1/4 J		01
R462	VV065600	Metal Film Resistor	11K 1/4 F		05
R463	VV065600	Metal Film Resistor	11K 1/4 F		05
R464	HF457470	Carbon Resistor	47.0K 1/4 J		01
R465	HF457470	Carbon Resistor	47.0K 1/4 J		01
R466	HF455200	Carbon Resistor	200.0 1/4 J		01
R467	HF455220	Carbon Resistor	220.0 1/4 J		01
R468	HF457470	Carbon Resistor	47.0K 1/4 J		01
-471	HF457470	Carbon Resistor	47.0K 1/4 J		01
R472	HF455330	Carbon Resistor	330.0 1/4 J		01
R473	HF455330	Carbon Resistor	330.0 1/4 J		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
R474	VV065100	Metal Film Resistor	2.2K 1/4 F			01
* R475	V4604800	Metal Film Resistor	470.0 1/4 F			
* R476	V4567000	Metal Film Resistor	68.0 1/4 F			
R477	VV313800	Flame Proof C. Resistor	220.0 1/4 J			01
R478	VV313800	Flame Proof C. Resistor	220.0 1/4 J			01
R479	HF456100	Carbon Resistor	1.0K 1/4 J			01
R480	HF458330	Carbon Resistor	330.0K 1/4 J			01
R481	V2961300	Metal Film Resistor	16.0K 1/4 J			01
* R482	V4604800	Metal Film Resistor	470.0 1/4 F			
R484	HF455560	Carbon Resistor	560.0 1/4 J			01
R486	HF455560	Carbon Resistor	560.0 1/4 J			01
R487	HF457100	Carbon Resistor	10.0K 1/4 J			01
R488	HF458150	Carbon Resistor	150.0K 1/4 J			01
R489	HF455560	Carbon Resistor	560.0 1/4 J			01
R490	VV065600	Metal Film Resistor	11K 1/4 F			05
R491	VV065600	Metal Film Resistor	11K 1/4 F			05
R492	HF457470	Carbon Resistor	47.0K 1/4 J			01
R493	HF457470	Carbon Resistor	47.0K 1/4 J			01
R494	HF455200	Carbon Resistor	200.0 1/4 J			01
R495	HF455220	Carbon Resistor	220.0 1/4 J			01
R496	HF457470	Carbon Resistor	47.0K 1/4 J			01
-499	HF457470	Carbon Resistor	47.0K 1/4 J			01
R500	HF455330	Carbon Resistor	330.0 1/4 J			01
R501	HF455330	Carbon Resistor	330.0 1/4 J			01
R502	VV065100	Metal Film Resistor	2.2K 1/4 F			01
* R503	V4604800	Metal Film Resistor	470.0 1/4 F			
* R504	V4567000	Metal Film Resistor	68.0 1/4 F			
R505	VV313800	Flame Proof C. Resistor	220.0 1/4 J			01
R506	VV313800	Flame Proof C. Resistor	220.0 1/4 J			01
R557	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R558	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R601	HF457820	Carbon Resistor	82.0K 1/4 J			01
R602	HF456470	Carbon Resistor	4.7K 1/4 J			01
R603	HF456470	Carbon Resistor	4.7K 1/4 J			01
R604	HF456120	Carbon Resistor	1.2K 1/4 J			01
-607	HF456120	Carbon Resistor	1.2K 1/4 J			01
R608	HF456470	Carbon Resistor	4.7K 1/4 J			01
R609	HF456470	Carbon Resistor	4.7K 1/4 J			01
R610	HF457100	Carbon Resistor	10.0K 1/4 J			01
R611	HF457100	Carbon Resistor	10.0K 1/4 J			01
R612	HF455220	Carbon Resistor	220.0 1/4 J			01
-615	HF455220	Carbon Resistor	220.0 1/4 J			01
R616	HF456120	Carbon Resistor	1.2K 1/4 J			01
-623	HF456120	Carbon Resistor	1.2K 1/4 J			01
R624	HF456470	Carbon Resistor	4.7K 1/4 J			01
R626	HF456470	Carbon Resistor	4.7K 1/4 J			01
R628	HF457100	Carbon Resistor	10.0K 1/4 J			01
R630	HF455220	Carbon Resistor	220.0 1/4 J			01
R632	HF455220	Carbon Resistor	220.0 1/4 J			01
R634	HF456120	Carbon Resistor	1.2K 1/4 J			01
R635	HF456120	Carbon Resistor	1.2K 1/4 J			01
R638	HF456120	Carbon Resistor	1.2K 1/4 J			01
R639	HF456120	Carbon Resistor	1.2K 1/4 J			01
R642	HF456470	Carbon Resistor	4.7K 1/4 J			01
R644	HF456470	Carbon Resistor	4.7K 1/4 J			01
R646	HF457100	Carbon Resistor	10.0K 1/4 J			01
R648	HF455220	Carbon Resistor	220.0 1/4 J			01
R650	HF455220	Carbon Resistor	220.0 1/4 J			01
R652	HF456120	Carbon Resistor	1.2K 1/4 J			01
R653	HF456120	Carbon Resistor	1.2K 1/4 J			01
R656	HF456120	Carbon Resistor	1.2K 1/4 J			01
R657	HF456120	Carbon Resistor	1.2K 1/4 J			01
R660	HF457100	Carbon Resistor	10.0K 1/4 J			01
R661	HF456820	Carbon Resistor	8.2K 1/4 J			01
R662	HF456820	Carbon Resistor	8.2K 1/4 J			01
R663	HF455220	Carbon Resistor	220.0 1/4 J			01
R664	HF455220	Carbon Resistor	220.0 1/4 J			01
R665	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R666	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
△ SW601	VY898100	Push Switch	SDDFA3107U-YL UCS	POWER ON/OFF		05

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
W601	--	Connector Assembly	AC1 1P	(V295030)	
W602	--	Connector Assembly	AC2 1P	(V295040)	
* V4161700		Circuit Board	PA4	(XW404C0)	
VV104600		Cord Holder			2 01
VV291400		Jumper Wire	0.60		176 01
C101	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-104	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C105	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
-109	VV060300	Mylar Capacitor	2200P 50V J		01
C110	VV060300	Mylar Capacitor	2200P 50V J		01
* C111	V4567500	Ceramic Capacitor-SL	10P 500V K		01
* -114	V4567500	Ceramic Capacitor-SL	10P 500V K		01
C115	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-118	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C119	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
-122	VZ354000	Ceramic Capacitor-F	0.0100 50V Z		01
C123	VV060300	Mylar Capacitor	2200P 50V J		01
C124	VV060300	Mylar Capacitor	2200P 50V J		01
* C125	V4567500	Ceramic Capacitor-SL	10P 500V K		01
* -128	V4567500	Ceramic Capacitor-SL	10P 500V K		01
C129	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C130	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C131	V3280500	Ceramic Capacitor-B	100P 500 K		01
-134	V3280500	Ceramic Capacitor-B	100P 500 K		01
C135	V5097700	Mylar Capacitor	3.3000 250V K		01
-138	V5097700	Mylar Capacitor	3.3000 250V K		01
C139	UJ896470	Electrolytic Cap.	4.7 100.0V		01
-142	UJ896470	Electrolytic Cap.	4.7 100.0V		01
C144	VV314600	Ceramic Capacitor-B	0.0022 500V K		01
-147	VV314600	Ceramic Capacitor-B	0.0022 500V K		01
* C148	V5307900	Electrolytic Cap.	100 100.0V		01
* -151	V5307900	Electrolytic Cap.	100 100.0V		01
D101	VD631600	Diode	1SS133,176,HSS104		01
-104	VD631600	Diode	1SS133,176,HSS104		01
D105	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D106	VQ469600	Diode	HSS82		01
D107	VQ469600	Diode	HSS82		01
D108	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D109	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D110	VQ469600	Diode	HSS82		01
D111	VQ469600	Diode	HSS82		01
D112	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D113	VQ469600	Diode	HSS82		01
-116	VQ469600	Diode	HSS82		01
D117	VN478200	Diode	D1NL20U		01
-120	VN478200	Diode	D1NL20U		01
D121	VU801600	Diode	1N4004L 26		01
-124	VU801600	Diode	1N4004L 26		01
D125	VD631600	Diode	1SS133,176,HSS104		01
-128	VD631600	Diode	1SS133,176,HSS104		01
D129	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D130	VQ469600	Diode	HSS82		01
D131	VQ469600	Diode	HSS82		01
D132	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D133	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D134	VQ469600	Diode	HSS82		01
D135	VQ469600	Diode	HSS82		01
D136	VG438400	Zener Diode	MTZ J 6.8C 6.8V		01
D137	VQ469600	Diode	HSS82		01
-140	VQ469600	Diode	HSS82		01
D141	VN478200	Diode	D1NL20U		01
-144	VN478200	Diode	D1NL20U		01
D145	VU801600	Diode	1N4004L 26		01
-148	VU801600	Diode	1N4004L 26		01
* D149	V4816400	Diode Stack	FMU-22U 10A 200V		01
* -152	V4816400	Diode Stack	FMU-22U 10A 200V		01
D153	VU801600	Diode	1N4004L 26		01
-156	VU801600	Diode	1N4004L 26		01
D157	VS135800	Diode Stack	FMX-22S 10A 200V		03

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
-160	VS135800	Diode Stack	FMX-22S 10A 200V		03
L101	V4668300	Coil	OH-20 100uH		
-104	V4668300	Coil	OH-20 100uH		
Q101	V2797600	Transistor	2SA1993 E,F		01
Q102	V2797600	Transistor	2SA1993 E,F		01
Q103	V2797700	Transistor	2SC5395 E,F		01
Q104	V2797700	Transistor	2SC5395 E,F		01
Q105	VU418600	Transistor	2SC3468 D,E		01
Q106	VU418600	Transistor	2SC3468 D,E		01
Q107	VU418400	Transistor	2SA1371 D,E		01
Q108	VU418400	Transistor	2SA1371 D,E		01
Q109	V2797600	Transistor	2SA1993 E,F		01
Q110	V2797600	Transistor	2SA1993 E,F		01
Q111	V2797700	Transistor	2SC5395 E,F		01
Q112	V2797700	Transistor	2SC5395 E,F		01
Q113	VU418600	Transistor	2SC3468 D,E		01
Q114	VU418600	Transistor	2SC3468 D,E		01
Q115	VU418400	Transistor	2SA1371 D,E		01
Q116	VU418400	Transistor	2SA1371 D,E		01
Q117	VU418600	Transistor	2SC3468 D,E		01
Q118	VU418600	Transistor	2SC3468 D,E		01
Q119	VU418400	Transistor	2SA1371 D,E		01
Q120	VU418400	Transistor	2SA1371 D,E		01
Q121N	VR732800	Pair Transistor	A1859A/C4883A		04
Q121P	VR732800	Pair Transistor	A1859A/C4883A		04
Q122N	VR732800	Pair Transistor	A1859A/C4883A		04
Q122P	VR732800	Pair Transistor	A1859A/C4883A		04
Q123N	V2950000	Pair Transistor	A1695A/C4468A		01
-126N	V2950000	Pair Transistor	A1695A/C4468A		01
Q123P	V2950000	Pair Transistor	A1695A/C4468A		01
-126P	V2950000	Pair Transistor	A1695A/C4468A		01
Q127N	VR732800	Pair Transistor	A1859A/C4883A		04
Q127P	VR732800	Pair Transistor	A1859A/C4883A		04
Q128N	VR732800	Pair Transistor	A1859A/C4883A		04
Q128P	VR732800	Pair Transistor	A1859A/C4883A		04
Q129N	V2950000	Pair Transistor	A1695A/C4468A		01
-132N	V2950000	Pair Transistor	A1695A/C4468A		01
Q129P	V2950000	Pair Transistor	A1695A/C4468A		01
-132P	V2950000	Pair Transistor	A1695A/C4468A		01
Q133N	VR732800	Pair Transistor	A1859A/C4883A		04
Q133P	VR732800	Pair Transistor	A1859A/C4883A		04
Q134N	VR732800	Pair Transistor	A1859A/C4883A		04
Q134P	VR732800	Pair Transistor	A1859A/C4883A		04
Q135N	V2950000	Pair Transistor	A1695A/C4468A		01
-138N	V2950000	Pair Transistor	A1695A/C4468A		01
Q135P	V2950000	Pair Transistor	A1695A/C4468A		01
-138P	V2950000	Pair Transistor	A1695A/C4468A		01
Q139N	VR732800	Pair Transistor	A1859A/C4883A		04
Q139P	VR732800	Pair Transistor	A1859A/C4883A		04
Q140N	VR732800	Pair Transistor	A1859A/C4883A		04
Q140P	VR732800	Pair Transistor	A1859A/C4883A		04
Q141N	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
-144N	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
Q141P	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
-144P	VZ222300	Pair Transistor	A1492C3856(Z)(210)		06
R101	HF457470	Carbon Resistor	47.0K 1/4 J		01
-108	HF457470	Carbon Resistor	47.0K 1/4 J		01
R113	HF457100	Carbon Resistor	10.0K 1/4 J		01
-116	HF457100	Carbon Resistor	10.0K 1/4 J		01
R117	VV058400	Flame Proof C. Resistor	390.0 1/4 J		01
-120	VV058400	Flame Proof C. Resistor	390.0 1/4 J		01
R121	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
-124	VZ009300	Flame Proof C. Resistor	330.0 1/4 J		01
R125	VV276800	Flame Proof C. Resistor	100 1/4 J		01
-128	VV276800	Flame Proof C. Resistor	100 1/4 J		01
R129	VV313700	Flame Proof C. Resistor	47.0 1/4 J		01
-132	VV313700	Flame Proof C. Resistor	47.0 1/4 J		01
R133	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
R134	VZ009100	Flame Proof C. Resistor	33.0 1/4 J		01
R135	VZ008800	Flame Proof C. Resistor	22.0 1/4 J		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
R136	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R137	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R138	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R139	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R140	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
* R141	V4833200	Wire Wound Resistor	0.22 5W K			
* -144	V4833200	Wire Wound Resistor	0.22 5W K			
R145	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R146	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R147	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R148	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R149	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R150	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R151	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R152	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
* R153	V4833200	Wire Wound Resistor	0.22 5W K			
* -156	V4833200	Wire Wound Resistor	0.22 5W K			
R157	HF457470	Carbon Resistor	47.0K 1/4 J			01
-164	HF457470	Carbon Resistor	47.0K 1/4 J			01
R169	HF457100	Carbon Resistor	10.0K 1/4 J			01
-172	HF457100	Carbon Resistor	10.0K 1/4 J			01
R173	VV058400	Flame Proof C. Resistor	390.0 1/4 J			01
-180	VZ009300	Flame Proof C. Resistor	330.0 1/4 J			01
R181	VV276800	Flame Proof C. Resistor	100 1/4 J			01
-184	VV276800	Flame Proof C. Resistor	100 1/4 J			01
R185	VV313700	Flame Proof C. Resistor	47.0 1/4 J			01
-188	VV313700	Flame Proof C. Resistor	47.0 1/4 J			01
R189	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R190	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R191	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R192	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R193	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R194	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R195	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R196	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
* R197	V4833200	Wire Wound Resistor	0.22 5W K			
* -200	V4833200	Wire Wound Resistor	0.22 5W K			
R201	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R202	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R203	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R204	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R205	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R206	VZ009100	Flame Proof C. Resistor	33.0 1/4 J			01
R207	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R208	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
* R209	V4833200	Wire Wound Resistor	0.22 5W K			
* -212	V4833200	Wire Wound Resistor	0.22 5W K			
R213	HF456560	Carbon Resistor	5.6K 1/4 J			01
-216	HF456560	Carbon Resistor	5.6K 1/4 J			01
R217	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
-220	VZ008800	Flame Proof C. Resistor	22.0 1/4 J			01
R221	VZ008700	Flame Proof C. Resistor	2.2K 1/4 J			01
-224	VZ008700	Flame Proof C. Resistor	2.2K 1/4 J			01
R225	VZ008600	Flame Proof C. Resistor	150.0 1/4 J			01
-228	VZ008600	Flame Proof C. Resistor	150.0 1/4 J			01
R229	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
-233	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R234	VZ370200	Wire Wound Resistor	0.1 5W K			01
R235	VZ370200	Wire Wound Resistor	0.1 5W K			01
R236	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R237	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R238	VZ370200	Wire Wound Resistor	0.1 5W K			01
R239	VZ370200	Wire Wound Resistor	0.1 5W K			01
R240	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
-244	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R245	VZ370200	Wire Wound Resistor	0.1 5W K			01
-248	VZ370200	Wire Wound Resistor	0.1 5W K			01
R250	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
-257	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R258	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
-265	VV313600	Flame Proof C. Resistor	2.2 1/4 J			05
R266	VV313900	Flame Proof C. Resistor	680.0 1/4 J			01
-269	VV313900	Flame Proof C. Resistor	680.0 1/4 J			01
* PR101	VM850500	Positive Thermistor	PTH9M04BF222TS2			
PR102	VL964800	Positive Thermistor	PTH9M04BH222TS2			04
W101	--	Connector Assembly	OUT AB-4 VH-2P	(V457420)		
W102	--	Connector Assembly	OUT CD-4 VH-2P	(V457430)		
W105	--	Connector Assembly	+B PL-1P	(V457450)		
W106	--	Connector Assembly	GND PL-1P	(V457470)		
W107	--	Connector Assembly	-B PL-1P	(V457460)		
	--	Circuit Board	REAR4	(V416180)(XW406C0)		
* AAX13150		Circuit Board	REAR4 1/6	(XW406C0)		
* AAX13160		Circuit Board	REAR4 2/6	(XW406C0)		
* AAX13170		Circuit Board	REAR4 3/6	(XW406C0)		
* AAX13180		Circuit Board	REAR4 4/6	(XW406C0)		
* AAX13190		Circuit Board	REAR4 5/6	(XW406C0)		
VV291400		Jumper Wire	0.60		120	01
* C701	V4609000	Monolithic Ceramic Cap.	0.01 50V Z			
* -704	V4609000	Monolithic Ceramic Cap.	0.01 50V Z			
* C707	V4609000	Monolithic Ceramic Cap.	0.01 50V Z			
* C708	V4609000	Monolithic Ceramic Cap.	0.01 50V Z			
C709	VZ353300	Ceramic Capacitor-SL	56P 50V J			01
-712	VZ353300	Ceramic Capacitor-SL	56P 50V J			01
C715	VZ353300	Ceramic Capacitor-SL	56P 50V J			01
-718	VZ353300	Ceramic Capacitor-SL	56P 50V J			01
C721	VZ004200	Mylar Capacitor	0.1000 100V M			01
C722	VZ004200	Mylar Capacitor	0.1000 100V M			01
C723	VV062400	Mylar Capacitor	0.047 50V J			01
-726	VV062400	Mylar Capacitor	0.047 50V J			01
C729	VV062400	Mylar Capacitor	0.047 50V J			01
-732	VV062400	Mylar Capacitor	0.047 50V J			01
C735	UJ659100	Electrolytic Cap.	1000 35.0V			02
C736	UJ659100	Electrolytic Cap.	1000 35.0V			02
C737	UJ867470	Electrolytic Cap.	47.00 50.0V			01
C738	UJ867470	Electrolytic Cap.	47.00 50.0V			01
C739	UJ867100	Electrolytic Cap.	10.00 50.0V			01
C740	UJ867100	Electrolytic Cap.	10.00 50.0V			01
C741	UJ659100	Electrolytic Cap.	1000 35.0V			02
C742	UJ866470	Electrolytic Cap.	4.70 50.0V			01
C743	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C744	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C745	UJ847470	Electrolytic Cap.	47.00 25.0V			01
C746	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C747	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C748	UJ847470	Electrolytic Cap.	47.00 25.0V			01
C752	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C753	VV330700	Electrolytic Cap.-SM	470.00 10.0V			01
C754	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C756	VZ353900	Ceramic Cap.-B	1000P 50V K			01
C758	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
C759	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
C761	UJ847100	Electrolytic Cap.	10.00 25.0V			01
C762	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C763	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
-770	VZ352800	Ceramic Capacitor-SL	22P 50V J			01
C775	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
-778	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C801	VV062800	Mylar Capacitor	0.1 50V J			01
-804	VV062800	Mylar Capacitor	0.1 50V J			01
C805	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
-808	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
C809	VV062800	Mylar Capacitor	0.1 50V J			01
-812	VV062800	Mylar Capacitor	0.1 50V J			01
C813	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
-816	VZ012200	Ceramic Capacitor-B	0.001 500V K			01
C825	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
-828	VZ354000	Ceramic Capacitor-F	0.0100 50V Z			01
C831	VZ353900	Ceramic Cap.-B	1000P 50V K			01
C832	VZ353900	Ceramic Cap.-B	1000P 50V K			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
CN701	VP798200	Connector, FFC	52044 24P SE			01
CN702	VP127700	Connector, FFC	52045 24P TE			01
CN703	VQ045000	Connector, FFC	52044 20P SE			01
CN704	VQ046400	Connector, FFC	52044 35P SE			01
CN705	VQ045000	Connector, FFC	52044 20P SE			01
CN706	VQ045000	Connector, FFC	52044 20P SE			01
CN707	VQ046400	Connector, FFC	52044 35P SE			01
CN708	VQ045000	Connector, FFC	52044 20P SE			01
CN709	--	Connector, FFC	52045 6P TE	(VQ04700)		01
CN710	VN394900	Connector, FFC	52045 14P TE			01
CN711	VV066700	Connector Base Post	M2426XX 7P TE			01
CN712	VV066300	Connector Base Post	M2426XX 3P TE			01
CN713	LB932020	Base Post Connector	VH 2P TE			01
CN801	LB933020	Base Post Connector	VH 2P SE			01
CN802	VV066300	Connector Base Post	M2426XX 3P TE			01
CN803	VQ044200	Connector, FFC	52044 6P SE			01
CN804	VV066900	Connector Base Post	M2426XX 9P TE			01
CN805	--	Connector, FFC	52045 6P TE	(VQ04700)		01
CN806	LB933020	Base Post Connector	VH 2P SE			01
D701	VD631600	Diode	1SS133,176,HSS104			01
-704	VD631600	Diode	1SS133,176,HSS104			01
D707	VD631600	Diode	1SS133,176,HSS104			01
-710	VD631600	Diode	1SS133,176,HSS104			01
D713	VU801600	Diode	1N4004L 26			01
-719	VU801600	Diode	1N4004L 26			01
D720	VD631600	Diode	1SS133,176,HSS104			01
D721	VG437700	Zener Diode	MTZ J 5.6B 5.6V			01
D801	VU801600	Diode	1N4004L 26			01
E801	VV075700	Terminal Plate				01
E802	VV075700	Terminal Plate				01
IC701	XM651A00	IC	NJM4580DD	OP AMP		02
IC702	XM651A00	IC	NJM4580DD	OP AMP		02
IC704	XM356A00	IC	NJM2068L-D	OP AMP		02
IC705	XD853A00	IC	NJM7815FA	REGULATOR +15V		03
IC706	XD854A00	IC	NJM7915FA	REGULATOR -15V		03
IC707	XM356A00	IC	NJM2068L-D	OP AMP		02
IC708	XM356A00	IC	NJM2068L-D	OP AMP		02
IC710	XM356A00	IC	NJM2068L-D	OP AMP		02
* JK701	V4177800	Connector	ME060-50806 6P	EUROBLOCK CONNECTOR A-B,		
* JK702	V4177800	Connector	ME060-50806 6P	C-D		
JK704	VU805200	XLM Connector	XLR NC3FAV1-0	INPUT CHANNEL A-D		04
-707	VU805200	XLM Connector	XLR NC3FAV1-0			04
L801	VR150900	Coil	RZ-001 21mm			02
-804	VR150900	Coil	RZ-001 21mm			02
Q701	V2797700	Transistor	2SC5395 E,F			01
Q702	V2797600	Transistor	2SA1993 E,F			01
Q703	V2797700	Transistor	2SC5395 E,F			01
Q704	V2797600	Transistor	2SA1993 E,F			01
Q707	V2797700	Transistor	2SC5395 E,F			01
Q708	V2797700	Transistor	2SC5395 E,F			01
Q709	V2797600	Transistor	2SA1993 E,F			01
Q710	V2797700	Transistor	2SC5395 E,F			01
Q711	VD678500	Digital Transistor	DTA114ES			01
R701	VV065200	Metal Film Resistor	4.7K 1/4 F			05
R702	VV065200	Metal Film Resistor	4.7K 1/4 F			05
R704	VZ009900	Metal Film Resistor	15K 1/4 F			01
-711	VZ009900	Metal Film Resistor	15K 1/4 F			01
R716	HF456100	Carbon Resistor	1.0K 1/4 J			01
R717	HF456100	Carbon Resistor	1.0K 1/4 J			01
R718	VZ009900	Metal Film Resistor	15K 1/4 F			01
-721	VZ009900	Metal Film Resistor	15K 1/4 F			01
R724	VZ009900	Metal Film Resistor	15K 1/4 F			01
-727	VZ009900	Metal Film Resistor	15K 1/4 F			01
R730	HF454180	Carbon Resistor	18.0 1/4 J			01
-733	HF454180	Carbon Resistor	18.0 1/4 J			01
R736	HF454180	Carbon Resistor	18.0 1/4 J			01
R737	HF454180	Carbon Resistor	18.0 1/4 J			01
R738	V2440500	Metal Film Resistor	27K 1/4 F			01
-741	V2440500	Metal Film Resistor	27K 1/4 F			01
R744	V3028900	Metal Film Resistor	56K 1/4 F			01

*: New Parts

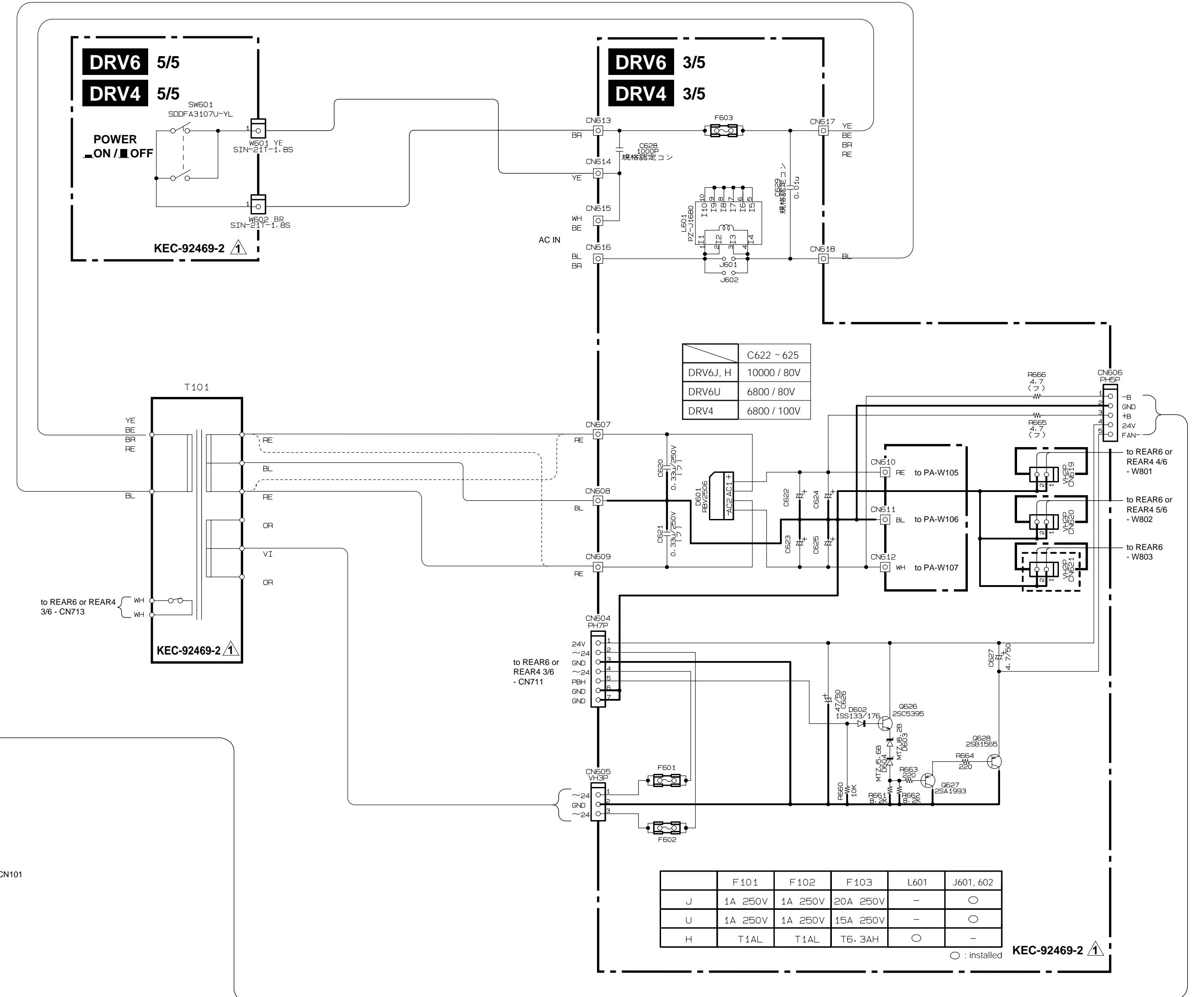
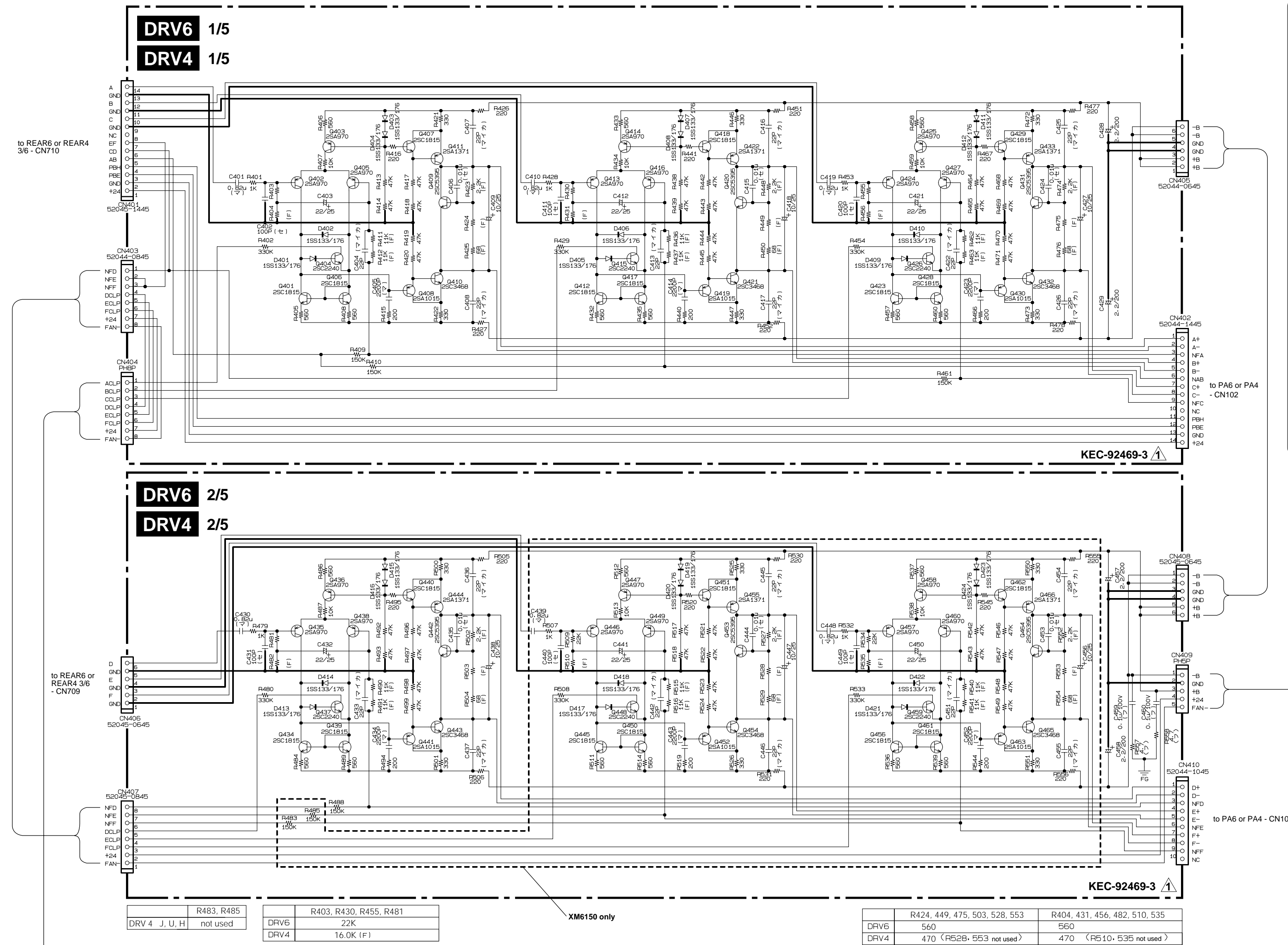
RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
-747	V3028900	Metal Film Resistor	56K 1/4 F			01
R752	HF454180	Carbon Resistor	18.0 1/4 J			01
-755	HF454180	Carbon Resistor	18.0 1/4 J			01
R758	HF457150	Carbon Resistor	15.0K 1/4 J			01
R759	HF457100	Carbon Resistor	10.0K 1/4 J			01
R760	HF457560	Carbon Resistor	56.0K 1/4 J			01
R761	HF457100	Carbon Resistor	10.0K 1/4 J			01
R763	HF458150	Carbon Resistor	150.0K 1/4 J			01
R764	VV065200	Metal Film Resistor	4.7K 1/4 F			05
R765	VV065200	Metal Film Resistor	4.7K 1/4 F			05
R767	HF457220	Carbon Resistor	22.0K 1/4 J			01
R768	HF457470	Carbon Resistor	47.0K 1/4 J			01
R769	HF456470	Carbon Resistor	4.7K 1/4 J			01
R770	HF456470	Carbon Resistor	4.7K 1/4 J			01
R772	HF457100	Carbon Resistor	10.0K 1/4 J			01
R773	VV065200	Metal Film Resistor	4.7K 1/4 F			05
R774	VV065200	Metal Film Resistor	4.7K 1/4 F			05
R776	HF457470	Carbon Resistor	47.0K 1/4 J			01
R777	HF457470	Carbon Resistor	47.0K 1/4 J			01
R778	HF454180	Carbon Resistor	18.0 1/4 J			01
R779	HF454180	Carbon Resistor	18.0 1/4 J			01
R781	HF457680	Carbon Resistor	68.0K 1/4 J			01
R782	HF456120	Carbon Resistor	1.2K 1/4 J			01
R783	HF456220	Carbon Resistor	2.2K 1/4 J			01
R784	HF457560	Carbon Resistor	56.0K 1/4 J			01
R801	V2961000	Metal Oxide Film Resistor	4.7 2W J			01
-804	V2961000	Metal Oxide Film Resistor	4.7 2W J			01
R805	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R806	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R807	HF457270	Carbon Resistor	27.0K 1/4 J			01
R808	HF457270	Carbon Resistor	27.0K 1/4 J			01
R809	V2961000	Metal Oxide Film Resistor	4.7 2W J			01
-814	VV276700	Flame Proof C. Resistor	4.7 1/4 J			01
R815	HF457270	Carbon Resistor	27.0K 1/4 J			01
R816	HF457270	Carbon Resistor	27.0K 1/4 J			01
R825	HF453470	Carbon Resistor	4.7 1/4 J			01
-828	HF453470	Carbon Resistor	4.7 1/4 J			01
RY801	VV315400	Relay	DC OSA-SH-224DM3M			06
RY802	VV315400	Relay	DC OSA-SH-224DM3M			06
SP801	VZ956900	Speaker Terminal	STB-403AU 4P	SPEAKERS CHANNEL A-D		06
SP802	VZ956900	Speaker Terminal	STB-403AU 4P			06
* SW701	V4103700	Slide Switch	SS001-P262BUB-PA14	EACH CH/ CH A TO ALL CH		
SW702	V2802400	Slide Switch	SS001-P022BQB-PA14	HPF SW A-D ON/OFF		03
-705	V2802400	Slide Switch	SS001-P022BQB-PA14			03
SW708	V2802400	Slide Switch	SS001-P022BQB-PA14	BRIDGE(A-D) SW ON/OFF		03
SW709	V2802400	Slide Switch	SS001-P022BQB-PA14			03
VR701	V2479500	Rotary Variable Resistor	A 5K RK11K113	VOLUME CHANNEL A-D		06
-704	V2479500	Rotary Variable Resistor	A 5K RK11K113			06
W801	--	Connector Assembly	OUT G VH-2P	(V457380)		
W802	--	Connector Assembly	OUT G VH-2P	(V457380)		
⚠	V2943900	AC Cord	VCTF 1.25X2 12A	J		05
⚠	VZ021200	AC Cord	SJT 3X#18 10A	U,V		06
⚠	V2944000	AC Cord	H05VV-F0.75X3 6A	H,A,W		06
⚠	VZ021600	AC Cord	H05VV-F 13A	B		08
⚠*	XW408A00	Power Transformer	E MAP410	J		
⚠*	XW409A00	Power Transformer	A MAP410	U,V		
⚠*	XW410A00	Power Transformer	E MAP410	H,B,W		
⚠*	XW411A00	Power Transformer	E MAP410	A		
*	V4555700	PA Unit				
	V2945700	Fan	KDE2412PMS3-6A/A47			09

*: New Parts

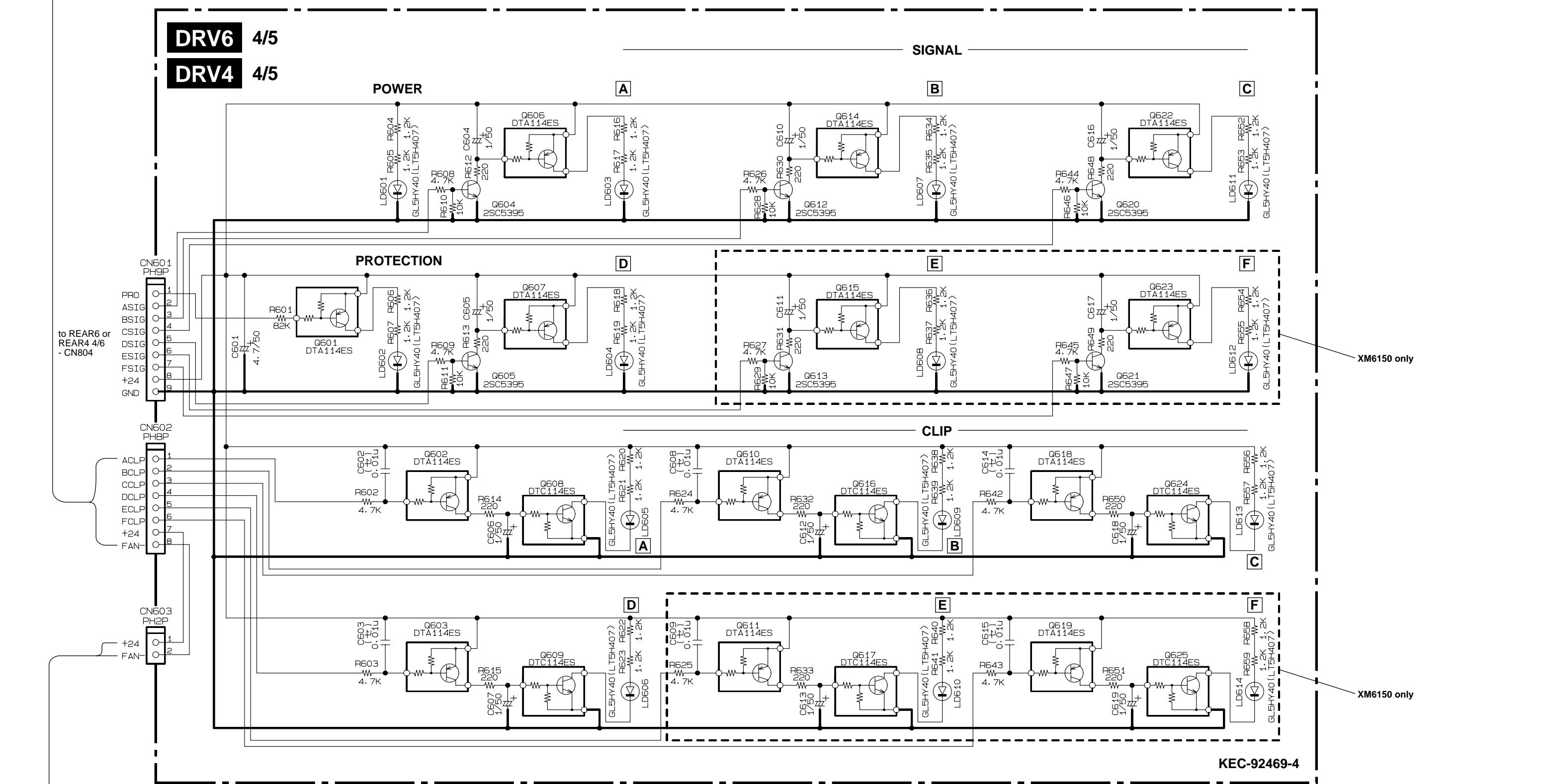
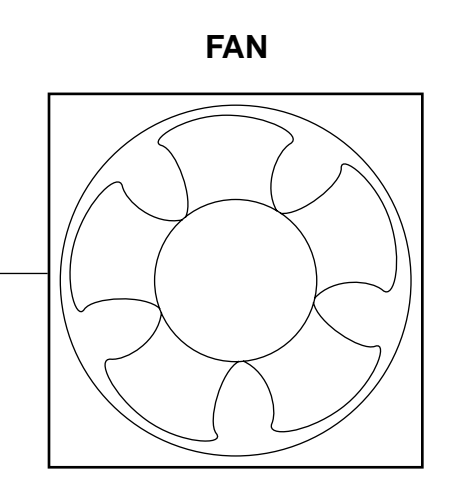
RANK: Japan only

XM6150 OVERALL CIRCUIT DIAGRAM 1/3 (DRV6)
XM4220 OVERALL CIRCUIT DIAGRAM 1/3 (DRV4)

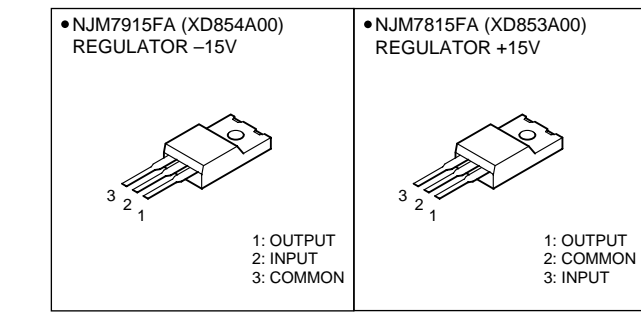
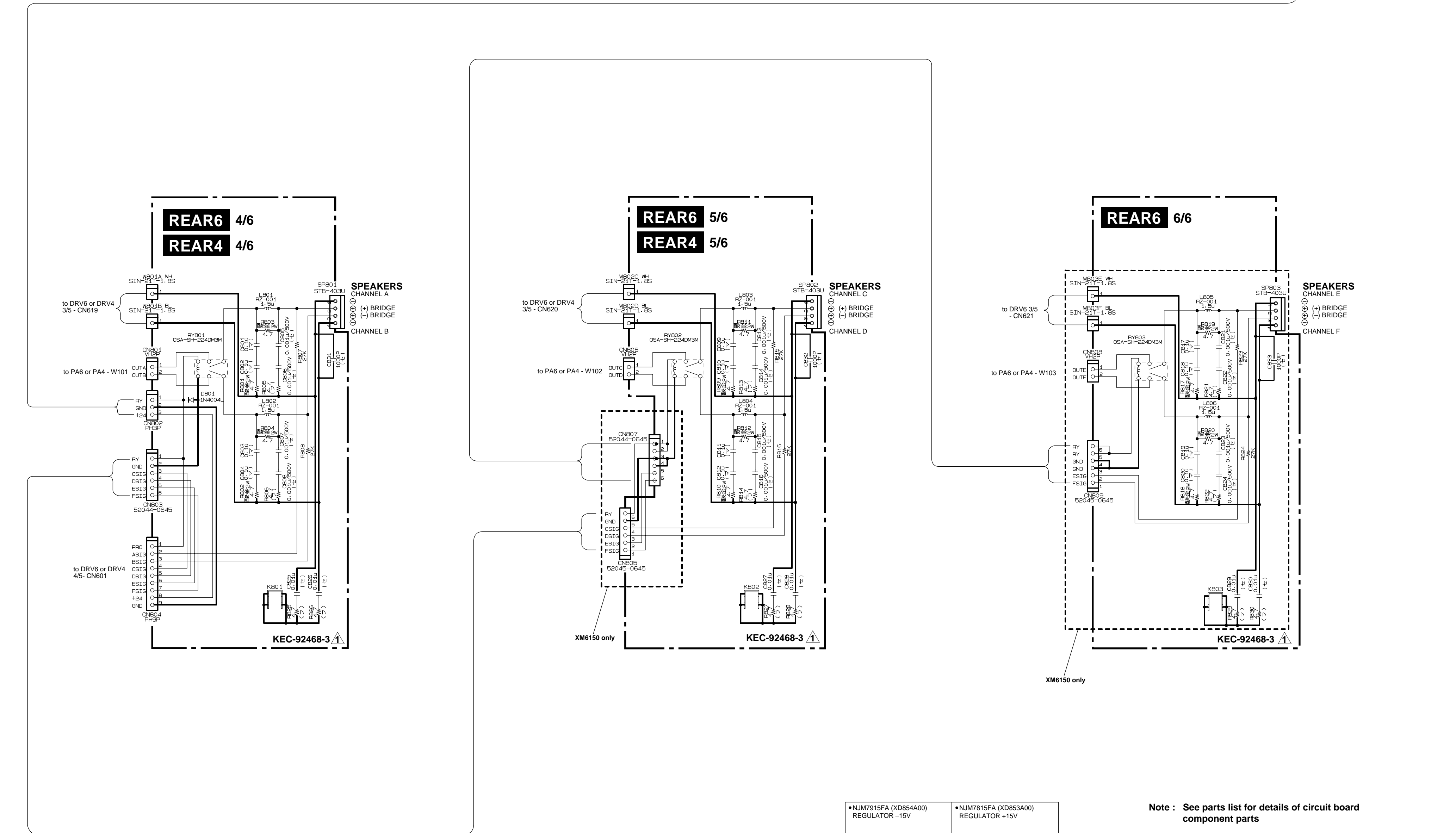
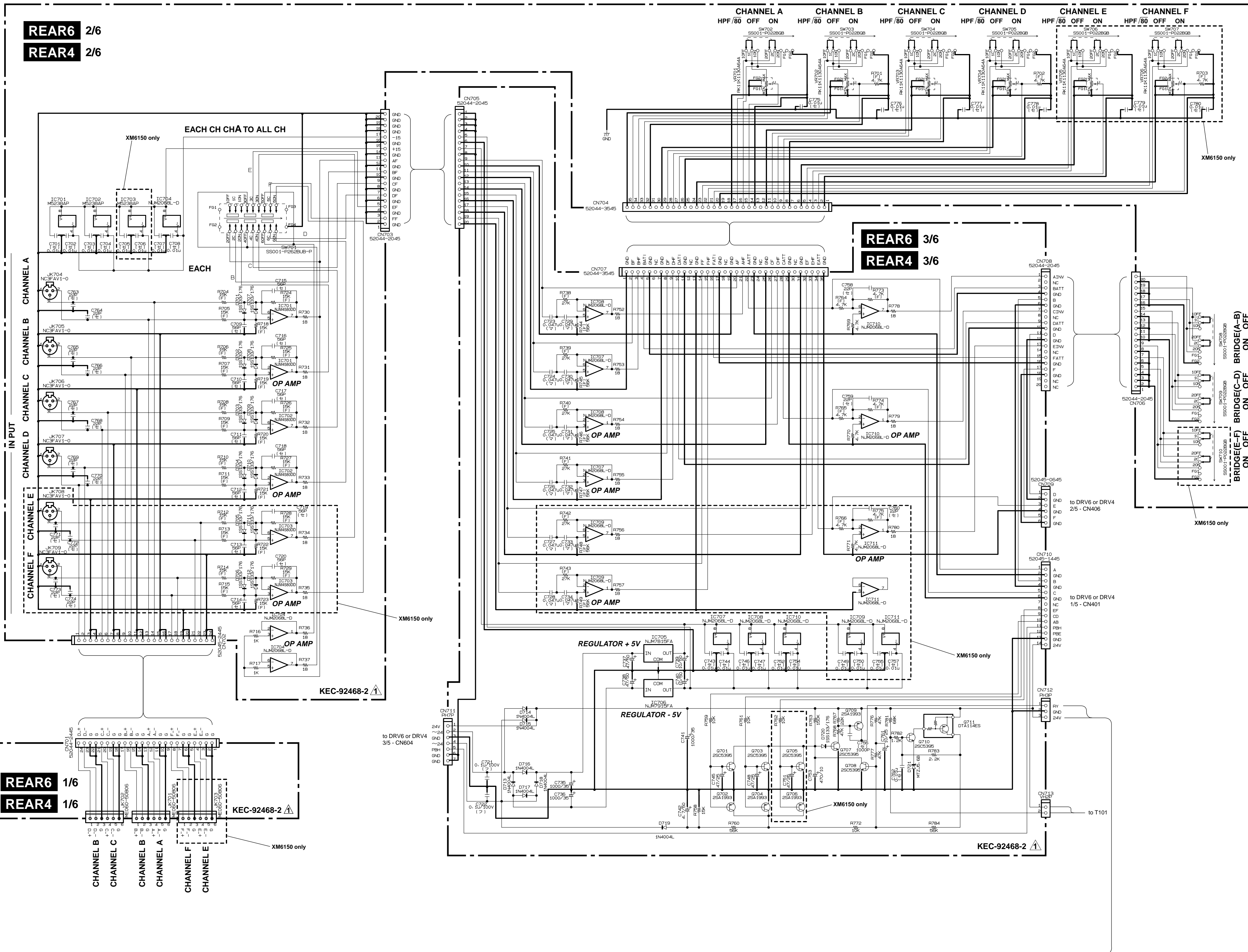


Note : See parts list for details of circuit board component parts

- (ε) : Ceramic Capacitor
- (M) : Mylar Capacitor
- (マイカ) : Mica Capacitor
- (規格認定コン) : Capacitor
- (F) : Flame Proof C. Resistor
- (F) : Metal Film Resistor



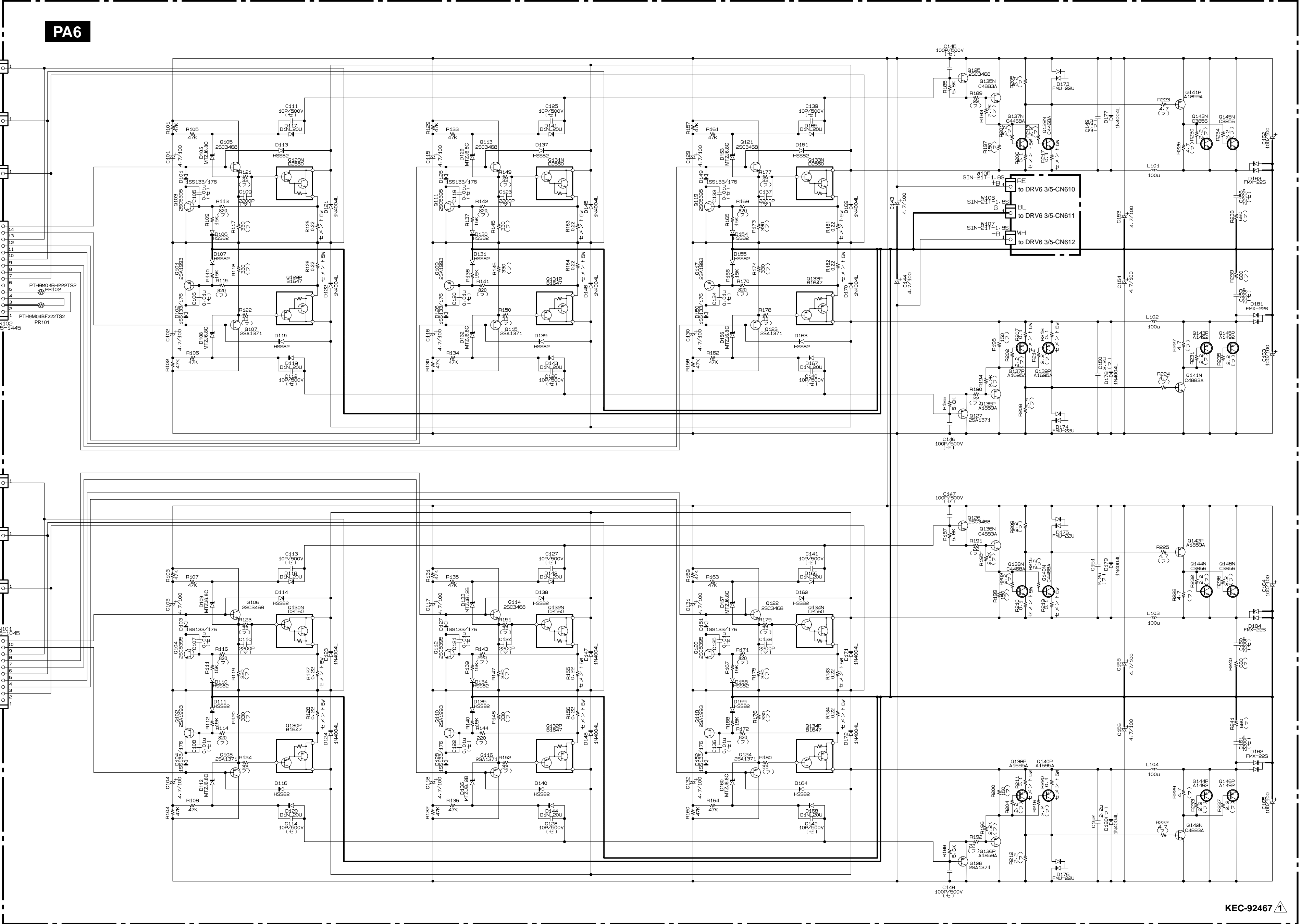
■ XM6150 OVERALL CIRCUIT DIAGRAM 2/3 (REAR6)
■ XM4220 OVERALL CIRCUIT DIAGRAM 2/3 (REAR4)



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

(M): Mylar Capacitor
(C): Ceramic Capacitor
(R): Flame Proof C. Resistor
(MF): Metal Oxide Film Resistor
(F): Metal Film Resistor

XM6150 OVERALL CIRCUIT DIAGRAM 3/3 (PA6)

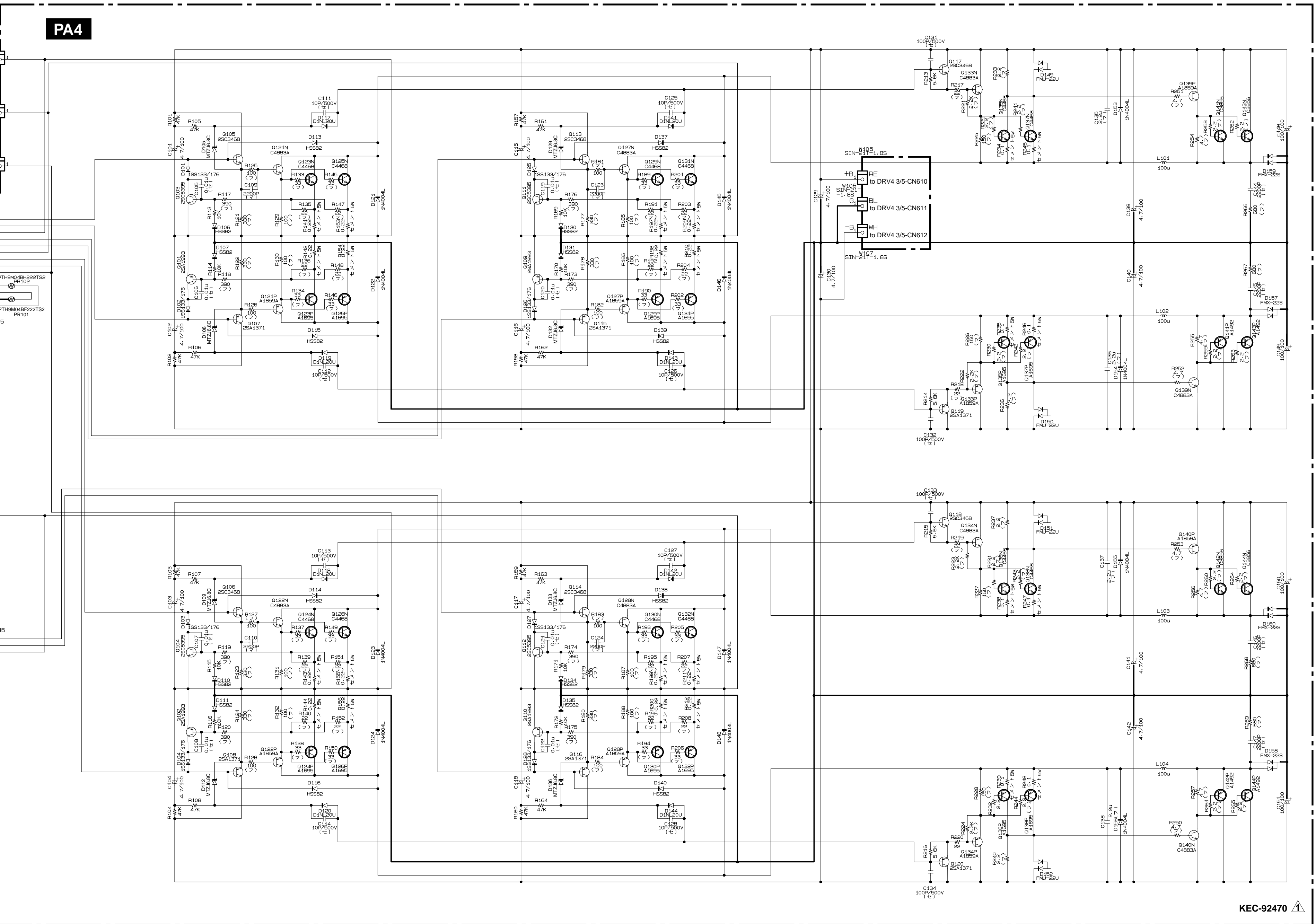


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Note : See parts list for details of circuit board component parts

- (F) : Flame Proof C. Resistor
- (S) : Wire Wound Resistor
- (C) : Ceramic Capacitor
- (M) : Mylar Capacitor

XM4220 OVERALL CIRCUIT DIAGRAM 3/3 (PA4)



KEC-92470