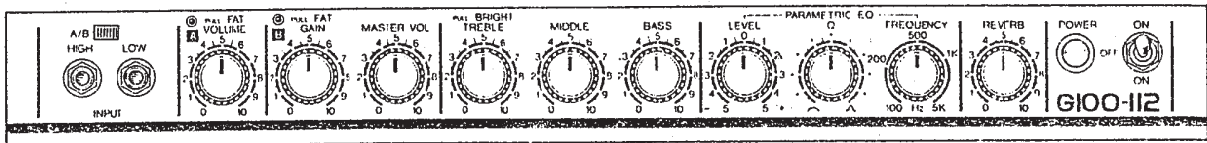


G50-112II, G100-112 G100-115II, G100-210 G100-212II

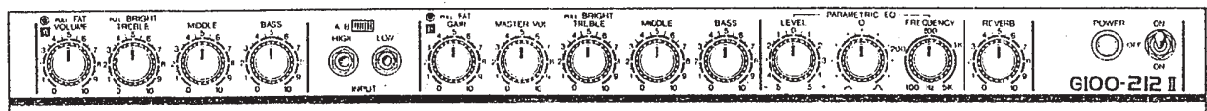
SERVICE MANUAL

FRONT PANEL

G100-112 (G50-112II)





G100-212II (G100-115II, G100-210)



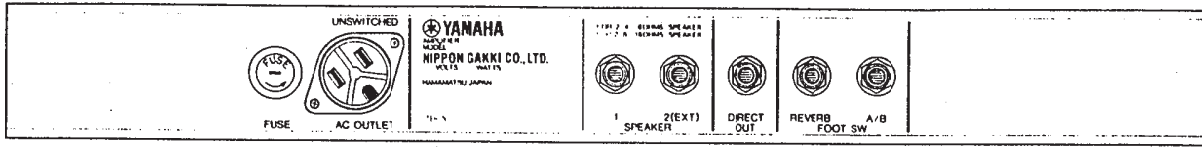
Panel size will vary depending on type of unit. For further details, please refer to specifications.

006413

SINCE 1887  **YAMAHA**
NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

'79.10.2.5K Printed in Japan  

REAR PANEL



The illustration shows the U.S. and CANADIAN models. Other models are equipped with voltage selectors instead of AC outlets. So be sure to check for desired voltage.

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GENERAL SPECIFICATIONS

GENERAL SPECIFICATIONS

Model	G100-212 II	G100-210	G100-115 II	G100-112	G50-112 II
Output Power	100 Watts RMS @ 10% THD into 4 ohms		100 Watts RMS @ 10% THD into 8 ohms		50 Watts RMS @ 10% THD into 8 ohms
Speaker(s)	2 x JA3066 (30 cm)	2 x JA2515 (25 cm)	1 x JA3802 (38 cm)	1 x JA3062 (30 cm)	1 x JA3066 (30 cm)
Gain (To Speaker Output @ 1kHz, loaced 4 or 8 ohms)	A CHANNEL High : 70 dB Low : 58 dB B CHANNEL High : 84 dB Low : 72 dB				
Input Impedance	High : 1 Megohm Low : 60 kohms				
Noise (All Volume Controls at min.)	-45 dB (4.4 mV)				
Reverb	Accutronics, spring-type				
Direct Output (For 600 ohms unbalanced line)	Nominal : -20 dB (77.5 mV) Maximum : -10 dB (0.25 V)		Nominal : -20 dB (77.5 mV) Maximum : -7 dB (0.35 V)		
Power	U.S. Model	180 W			120 W
	Canadian Model	120V 2A			120V 1.2A
Consumption	Other Models			250 W	160 W
Power Source	120V AC fixed, or 110, 130, 220 or 240V AC selectable, 50/60 Hz				
Dimensions	Width	687 mm	634 mm		530 mm
	Height	560 mm*	410 mm	600 mm*	450 mm
	Depth	280 mm	270 mm	280 mm	270 mm
Net Weight	28 kg	23 kg	31 kg	21 kg	18 kg
Standard Accessory	Foot Switch (FS-2)				

In above specifications, when dB represents a specific voltage, 0 dB is referenced to 0.775V RMS.

* Height includes detachable castors.

LOUDSPEAKER SPECIFICATIONS

Speaker	System	Cone Diameter	Nominal Impedance (Ω)	Sensitivity (dB/W.m)	Max. RMS Power (W)	Max. Peak Power (W)
JA2515	G100-210	10" (25 cm)	8	96	60	180
JA3066	G100-212II G50-112 II	12" (30 cm)	8	96	60	180
JA3062	G100-112	12" (30 cm)	8	99	100	300
JA3802	G100-115II	15" (38 cm)	8	102	120	360

Specifications subject to change without notice.

ADJUSTMENTS AND PERFORMANCE CHECKS

Measuring Instruments

- The impedance of the oscillator shall be no more than $1k\Omega$.
- The impedance of such instruments, as the oscilloscope and AC Voltmeter/dB meter shall be $100k\Omega$ or more.

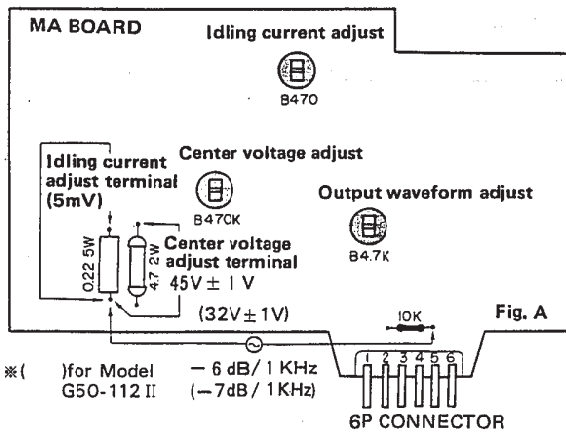
MA BOARD Adjustment

1. Adjust the B470k and B4.7k pots to somewhere around the middle.
2. With the unit in the condition of Table 1, apply a $-6dB/1kHz$ signal (or a $-7dB/1kHz$ signal for Model G50-112II) between the 6P connector pin ③ and ① (Fig. A), and adjust the B4.7k pot so as to produce a rounded waveform that is vertically symmetrical. (Load resistance : 8 ohms)
3. With the unit in the condition of Table 1, adjust the B470k pot so that the center voltage (measured at the 6P connector pin ⑤) of the output circuit will be $45\pm 1V$ (or $32\pm 1V$ for Model G50-112II).

NOTE: By performing adjustments 2 and 3 alternately, adjust the MA circuit board to the optimum condition. Adjustments are to be performed as swiftly as possible.

Idling Current Adjustment

With the unit in a no-signal condition, adjust the B470 pot so as to bring the voltage between the 6P connector pin ④ and ① (0.22Ω at both ends) to $5mV$.



※ () for Model G50-112 II

- 6 dB / 1 KHz
(- 7 dB / 1 KHz)

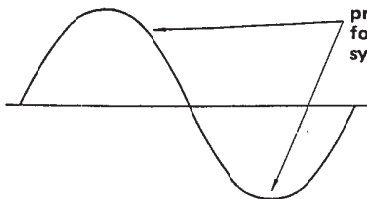


Fig.B

After completing the above adjustments (performed on a circuit board basis), proceed to performance checks.

● Prior to Performing Adjustments

- Set each control as shown in Table 1.
- Apply the signal to HIGH INPUT.
- Connect the load specified in Table 2 to SP OUT.

Table 1

Identification of Controls	Position of Controls
VOLUME	MAXIMUM
GAIN	MAXIMUM
MASTER VOLUME	MAXIMUM
TREBLE	MAXIMUM
MIDDLE	MAXIMUM
BASS	MAXIMUM
LEVEL	CENTER
Q	MINIMUM
FREQUENCY	MINIMUM
REVERB	MINIMUM
FAT SWITCH	OFF
BRIGHT SWITCH	OFF
A/B SWITCH	A ch (■)

Table 2

Model No.	Load Resistance
G50-112II	8Ω
G100-112	8Ω
G100-115II	8Ω
G100-210	4Ω
G100-212II	4Ω

1. GAIN

- With the unit in the condition specified in Tables 1 & 2, feed in the input signal. Outputs as shown in Tables 3 & 4 should be obtained.

Table 3 (G100-112, 115II, 210, 212II)

INPUT	ch. SW	JACK	OUT PUT
$-70dB/1\text{ KHz}$	A	HIGH	$1 \pm 3dBm$
- do. -	A	LOW	$-11 \pm 3dBm$
- do. -	B	HIGH	$14 \pm 3dBm$

Table 4 (G50-112II)

INPUT	ch. SW	JACK	OUT PUT
$-70dB/1\text{ KHz}$	A	HIGH	$1 \pm 3dBm$
- do. -	A	LOW	$-11 \pm 3dBm$
- do. -	B	HIGH	$13 \pm 3dBm$

2. MAXIMUM OUTPUT

- Put the unit in the condition specified in Tables 1 & 2. When the output is 100W (or 50W for Model G50-112II), and the T.H.D. is at 10%, the condition as shown in Table 5 should be satisfied.

Table 5

OUT PUT INPUT	Load (4 ohms)		Load (8 ohms)	
	At 100W output (28.2dBm)	T.H.D. (@ 10%)	At 100W output (31.2dBm)	T.H.D. (@ 10%)
1 KHz	T.H.D.: Less than 10%	140W, or less (29.7dB)	T.H.D.: Less than 10%	140W, or less (32.7dB)

Table 5 (G50-112II)

OUT PUT INPUT	Load (4 ohms)		Load (8 ohms)	
	At 50W output (25.2dBm)	T.H.D. (@ 10%)	At 50W output (28.2dBm)	T.H.D. (@ 10%)
1 KHz	T.H.D.: Less than 10%	70W, or less (26.7dB)	T.H.D.: Less than 10%	70W, or less (29.7dB)

3. FREQUENCY RESPONSE

- Regarding the frequency response of the unit in the condition specified in Tables 1&2, please refer to Fig.1 when the output level for a 1kHz input is set as the reference level(0dB). The tolerance shall be within ± 3 dB, respectively.

Table 6 () for Model G50-112II

Signal Input Level	Channel	Frequency (Hz)		
		70	400	7 K
-70dB	A ch.	-1 \pm 3dB	-8 \pm 3dB	6 \pm 3dB (5 \pm 3dB)
-70dB	B ch.	-1 \pm 3 dB	-8 \pm 3dB	5 \pm 3dB

- For models, G50-112II and G100-112, measurements are to be taken only for the A-ch.

4. TONE CONTROL

- Put the unit in the condition specified in Tables 1 & 2.
- When each tone control knob is turned from maximum to minimum, the output variation should stay within the range specified in Table 7.
- This applies both to the A-ch. and B-ch.

Table 7

Control	INPUT		Variation
	Freq.	Signal	
TREBLE	7KHz	-70dB	16 \pm 3dB
MIDDLE	400Hz	-70dB	6 \pm 3dB
BASS	70Hz	-70dB	11 \pm 3dB

5. FAT VARIATION CHARACTERISTICS

- Put the unit in the condition specified in Tables 1 & 2.
- When the Fat switch is turned ON and OFF, the output variation should stay within the range specified in Table 8.
- The same applies to the B-ch. as well.

Table 8

INPUT	Variation
-70dB / 400Hz	9 \pm 3dB

6. BRIGHT VARIATION CHARACTERISTICS

- Put the unit in the condition specified in Tables 1 & 2.
- Set the VOLUME and GAIN controls to gradation "5" (center).
- When the BRIGHT switch is turned ON and OFF, the output variations should stay within the range specified in Table 9.
- The same applies to the B-ch. as well.

Table 9

INPUT	Variation
-70dB / 7KHz	11 \pm 3dB

7. VARIATION CHARACTERISTICS OF PARAMETRIC EQ

- With the unit first put in the condition specified in Tables 1 & 2, position the VOLUME control to gradation "5" (Center).
- Set the Q. Frequency control as shown in Table 10.
- For each setting, turn the LEVEL control from maximum to minimum. The output variation should stay within the range specified in Table 10.

Table 10

Condition	INPUT	Variation
Q MIN., F MIN.	-70dB / 650Hz	$\pm 7 \pm 2$ dB
Q MIN., F MAX.	-do.--do.-	$\pm 7 \pm 2$ dB
Q MAX., F MIN.	-do.--do.-	No more than ± 1 dB
Q MAX., F MAX.	-do.--do.-	No more than ± 1 dB
Q MAX., F MIN.	-do.- * 90Hz	$\pm 15 \pm 2$ dB
Q MAX., F MAX.	-do.- 5KHz	$\pm 15 \pm 2$ dB

- However, it shall be considered okay if there is a point within the range from 85 to 100Hz (and not necessarily at 90Hz), where the variation can be established.

8. A/B FOOT SWITCH

- ON-OFF operations of the A/B Foot Switch should cause changeover between the A-ch. and B-ch.

9. REVERB FOOT SWITCH

- Put the unit in the condition specified in Tables 1 & 2.
- Turn the REVERB control to maximum.
- Apply a $-70\text{dB}/1\text{kHz}$ signal to INPUT. When the Foot Switch is turned ON and OFF, it should cause the reverberation-applied sounds to turn ON and OFF.
- It should be noted here that sounds without reverberation are also mixed in.

10. NOISE LEVEL

- Put the unit in the condition specified in Tables 1 & 2.
- No plug should be inserted into INPUT.
- When the unit is set as shown in Table 11, the output level should stay within the range specified in Table 11.
- Change the polarities of the POWER switch, measurement should be taken at the one whose noise level has been found to be lower.

Table 11

Channel	Condition	Variation
A ch	Set the Tables 1 & 2	No more than -32dB
A ch	VOLUME MIN.	No more than -45dB
B ch	Set the Tables 1 & 2	No more than -20dB
B ch	GAIN MIN.	No more than -42dB
B ch	MASTER VOL. MIN.	No more than -45dB

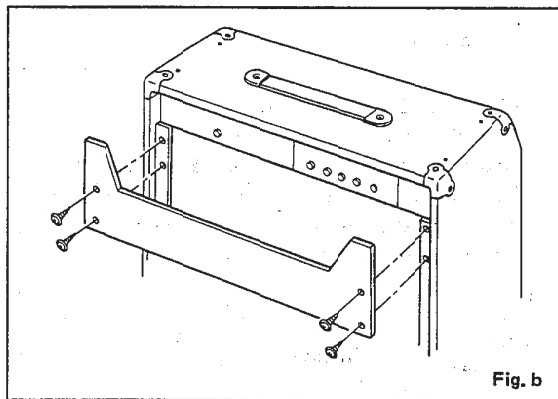
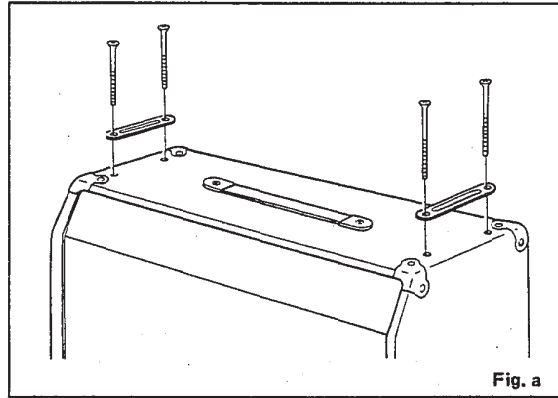
11. DIRECT OUT TERMINAL

- Put the unit in the condition specified in Tables 1 & 2.
- Feed in a 1kHz input signal and adjust it so that the output will be 0dB .
- At the DIRECT OUT terminal, an output of $-38\pm 2\text{dB}$ (or $-35\pm 2\text{dB}$ for Model G50-112II) should be obtained.

NOTE: When dB represents a specific voltage, 0dB is referenced to 0.775V .

DISMANTLING PROCEDURE

- Remove the screws shown in Figs. a and b. Remove the back panel and the chassis body.



FREQUENCY RESPONSE DIAGRAM G50-112II G100-112

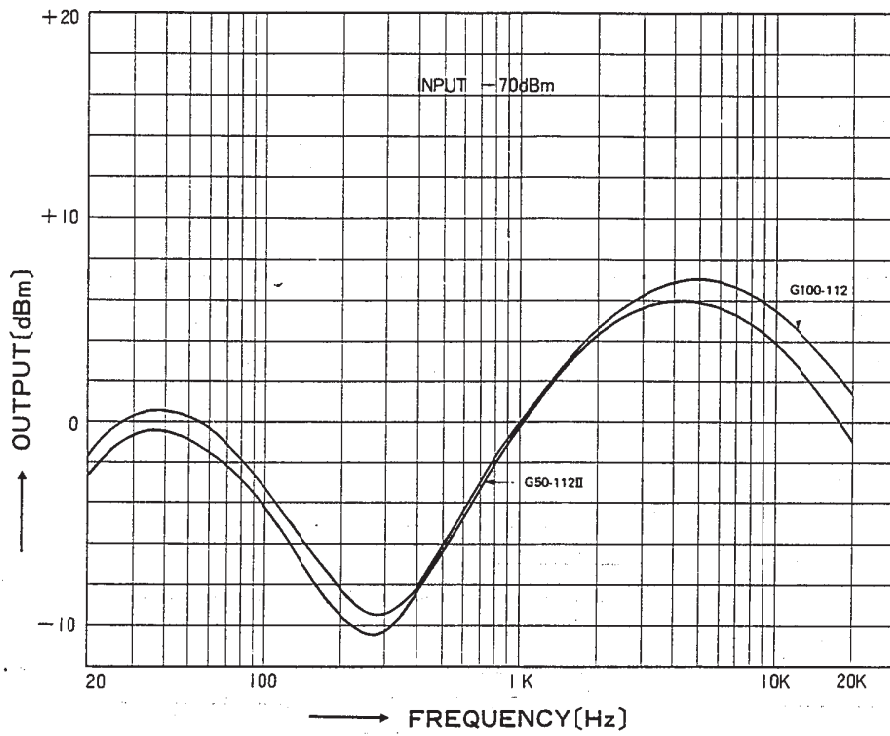


Fig. 1-1

G100-115II G100-210 G100-212II

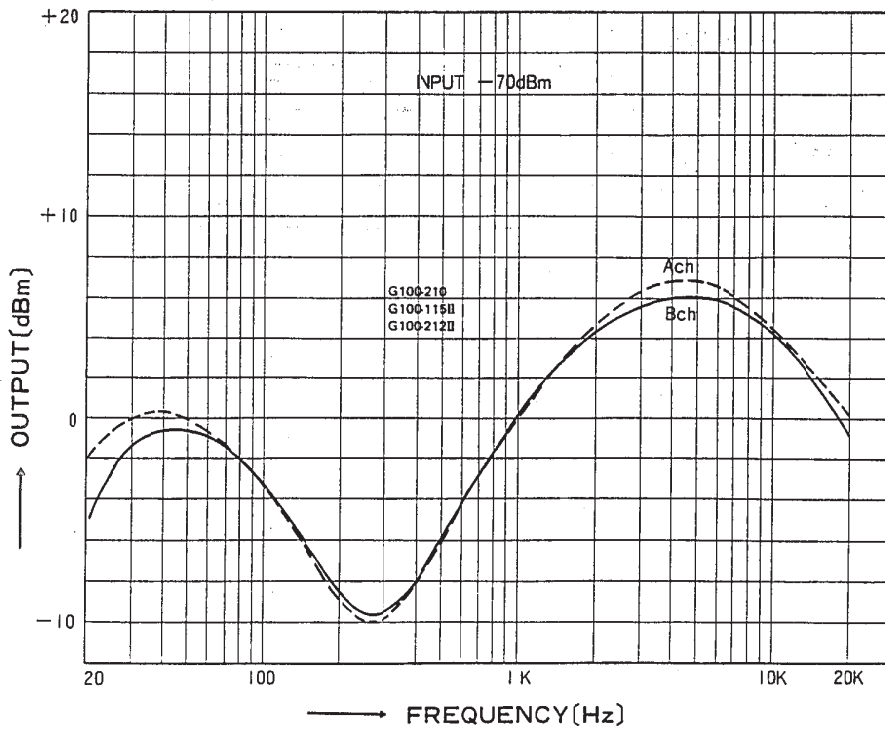
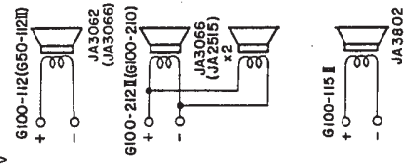
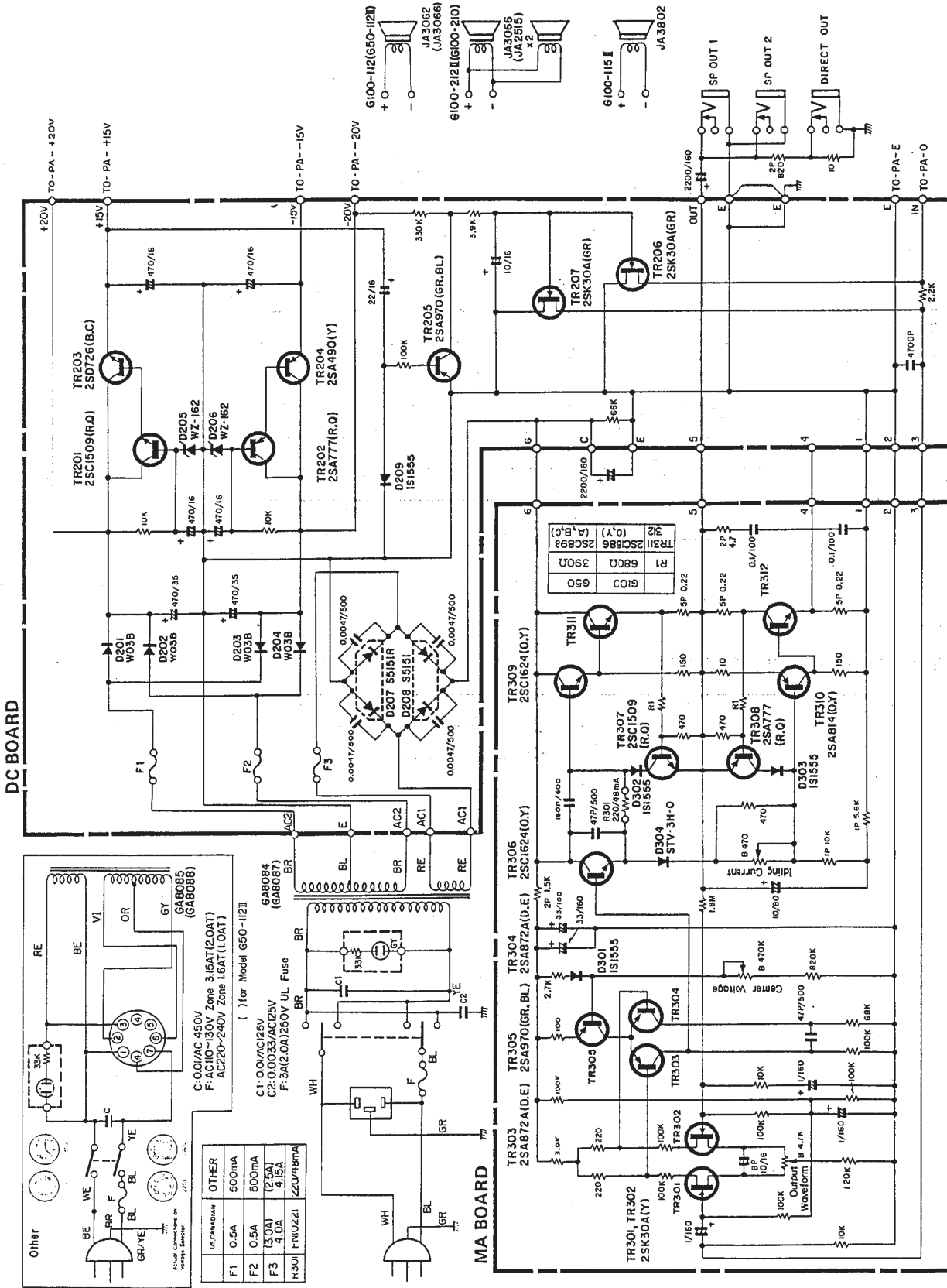


Fig. 1-2

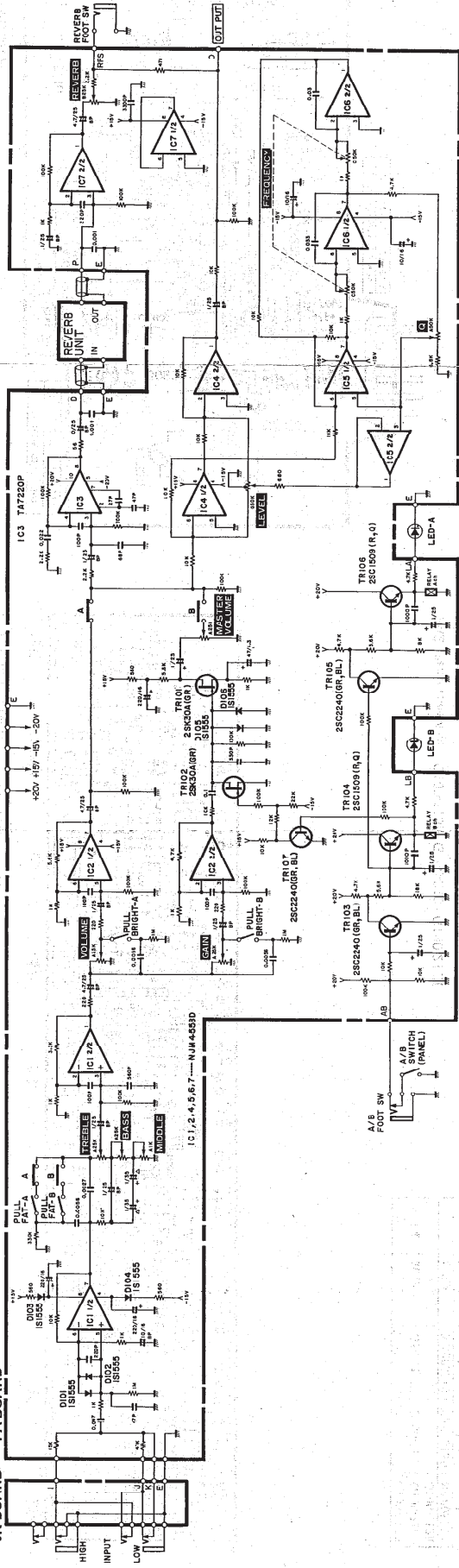
SCHEMATIC DIAGRAM Power Supply and Main Amplifier Sections
 G50-112II, G100-112, G100-115II, G100-210, G100-212II



SCHEMATIC DIAGRAM Preamplifier Sector

G50-112II, G100-112

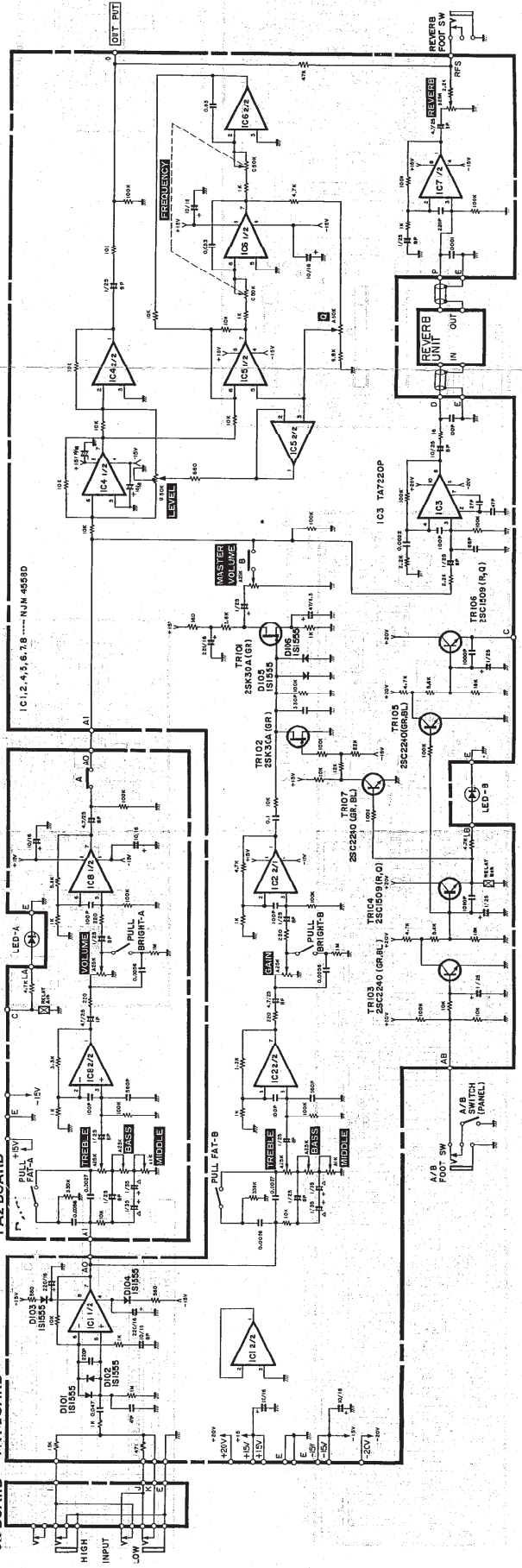
JK BOARD PA BOARD



G100-115II, G100-210, G100-212II

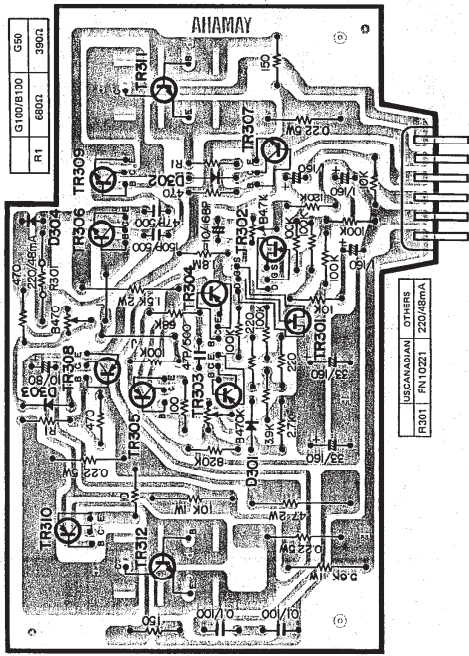
JK BOARD PA1 BOARD

PA2 BOARD

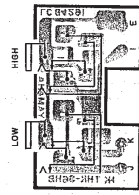


PRINTED CIRCUIT BOARDS G50-112II, G100-112, G100-115II, G100-210, G100-212II

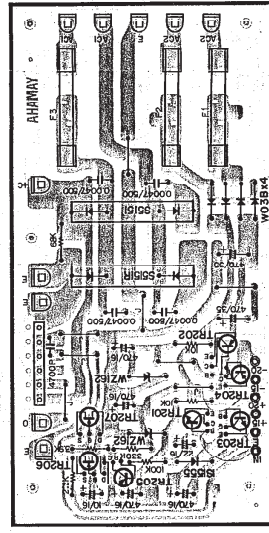
MA Parts side view



JK Parts side view



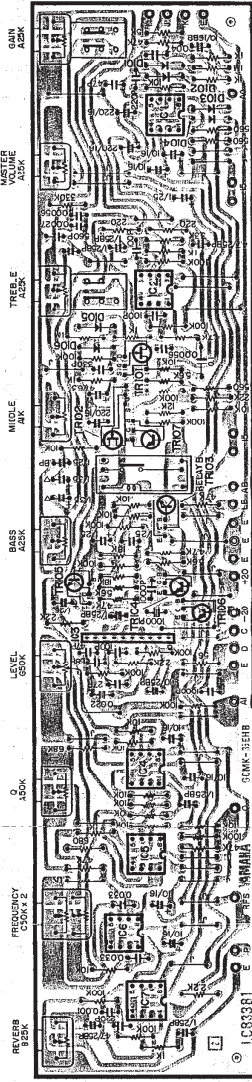
DC Parts side view



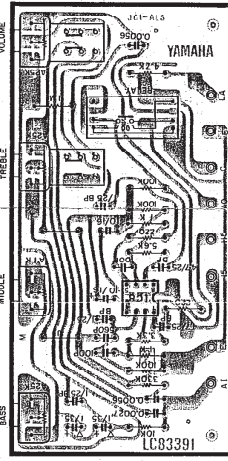
MARKING	OTHER
F1	0.001MFD
F2	0.001MFD
F3	0.001MFD
F4	0.001MFD
F5	0.001MFD

1 3/4" Min. (G50-112II)

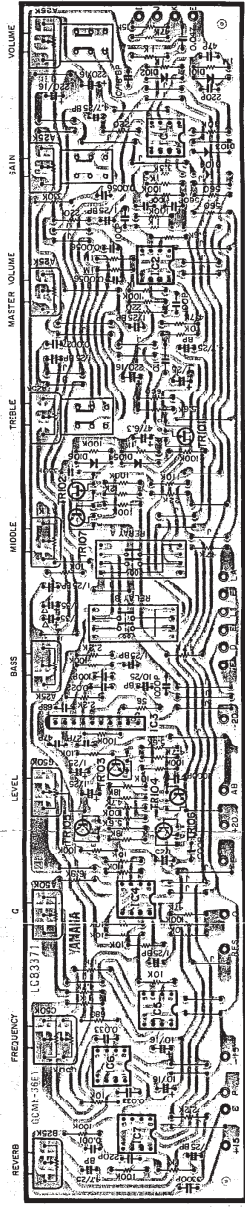
PA1 Pattern side view G100-115II G100-210 G100-212II



PA2 Pattern side view G100-115II G100-210 G100-212II



PA Pattern side view G50-112II G100-112



Board	Market:	G50-112II	G100-112	G100-115II	G100-210	G100-212II
MA	U.S.A.	NA805510	NA805150	NA805150	NA805150	NA805150
	Canadian	-do.-	-do.-	-do.-	-do.-	-do.-
DC	U.S.A.	NA805520	NA805160	NA805160	NA805160	NA805160
	Others	NA805360	NA805180	NA805180	NA805180	NA805180
	U.S.A.	NA805350	NA805170	NA805170	NA805170	NA805170
	Canadian	NA805370	NA805190	NA805190	NA805190	NA805190
	Others	-do.-	-do.-	-do.-	-do.-	-do.-
PA1	U.S.A.	-do.-	-do.-	-do.-	-do.-	-do.-
	Canadian	-do.-	-do.-	-do.-	-do.-	-do.-
	Others	-do.-	-do.-	-do.-	-do.-	-do.-
PA2	U.S.A.	-do.-	-do.-	-do.-	-do.-	-do.-
	Canadian	-do.-	-do.-	-do.-	-do.-	-do.-
	Others	-do.-	-do.-	-do.-	-do.-	-do.-
PA	U.S.A.	NA805200	NA805200	NA805200	NA805200	NA805200
	Canadian	-do.-	-do.-	-do.-	-do.-	-do.-
	Others	-do.-	-do.-	-do.-	-do.-	-do.-

■ PARTS LIST MA Unit, MA Board

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
※	30:54:00 NB:81:26:20	MA UNIT	MAユニット	} G100		U,C
※	30:54:00 NB:81:26:30	"	"			O
※	30:54:00 NB:81:38:90	"	"		} G50	
※	30:54:00 NB:81:39:00	"	"			O
※	30:54:00 NA:80:51:50	MA Board #83333	MAシート	} G100		U,C
※	30:54:00 NA:80:51:60	" #83343	"			O
※	30:54:00 NA:80:55:10	" #8497C	"		} G50	
※	30:54:00 NA:80:55:20	" #8498C	"			O
※	30:54:00 BA:80:38:60	Heat Sink	放熱板	G100		
※	30:54:00 BA:80:38:90	"	"	G50		
※	30:54:00 AA:81:17:20	Holder	シートホルダー			
	40:10:00 EA:04:01:00	Pan Head Screw 4×10 ZMC2-Y	ナベ小ネジ			
	40:10:00 ED:03:00:60	Bind Head Screw 3×6 ZMC2-Y	バインド小ネジ			
	40:10:00 Ei:03:01:00	Bind Head Tapping Screw 3×10 ZMC2-Y	バインドタッピングネジ			
	40:10:00 EV:20:00:30	Flat Washer A3S	平座金			
	40:10:00 iC:15:86:00	Transistor	トランジスター	G100		
	40:10:00 iC:08:98:00	"	"	G50		
	40:10:00 iL:00:04:40	Mica Base	マイカベース			
	40:10:00 EA:03:01:60	Pan Head Screw 3×16 ZMC2-Y	ナベ小ネジ			
※	30:54:00 AA:81:05:00	Transister Cover	トランジスタカバー			
	40:10:00 Ei:03:00:60	Bind Head Tapping Screw 3×6 ZMC2-Y	バインドタッピングネジ			
※	30:54:00 AA:81:04:90	MA Board Cover	保護カバー			
	30:54:00 CB:81:44:20	Spacer	スペーサー			
	40:10:00 LB:60:26:70	Socket	トランジスタソケット			
		MA BOARD	MAシート			
	40:10:00 HL:32:34:70	Metal Oxide Film Resistor 4.7Ω,2P	サンキン抵抗			
	40:10:00 HL:32:61:50	" 1.5KΩ,2P	"			
	40:10:00 HL:31:65:60	" 5.6KΩ,1P	"			
	40:10:00 HL:31:71:00	" 10KΩ,1P	"			
	40:10:00 HM:85:22:20	" 0.22Ω,5P	セメント抵抗			
	40:10:00 HW:80:52:20	Fuse Resistor 220Ω,48mA	ヒューズ抵抗			O
	40:10:00 HW:90:52:20	" 220Ω	"			U,C
	40:10:00 HT:41:00:40	Variable Resistor B4.7KΩ	半固定ボリューム			
	40:10:00 HT:41:01:10	" B470KΩ	"			
	40:10:00 HT:41:01:20	" B470Ω	"			
	40:10:00 iE:00:00:10	FET 2SK30A(Y)	FET			
	40:10:00 iA:08:72:10	Transistor 2SA872A(D,E)	トランジスタ			
	40:10:00 iA:09:70:00	" 2SA970(IGR,BL)	"			
	40:10:00 iC:16:24:00	" 2SC1624(O,Y)	"			
	40:10:00 iC:15:09:30	" 2SC1509(R,Q)	"			
	40:10:00 iA:07:77:30	" 2SA777(R,Q)	"			
	40:10:00 iA:08:14:00	" 2SA814(Y)	"			
	40:10:00 iF:00:04:50	Varistor STV-3H-O	バリスタ			
	40:10:00 iF:00:00:40	Diode 1S1555	ダイオード			
	40:10:00 LB:60:07:90	Connector Plug	ライトアングルワエハーピン			

※ : New Part (新部品) DESTINATION ABBREVIATIONS U : US, C : Canada, O : Other (except for US, Canada models)

DC Board PA1 Board/PA2 Board

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
※	30:54:00 NA:80:51:70	DC BOARD #83362	DCシート	G100		C
※	30:54:00 NA:80:51:80	" #84821	"	"		U
※	30:54:00 NA:80:51:90	" #83352	"	"		O
※	30:54:00 NA:80:53:50	DC BOARD #85002	DCシート	G50		C
※	30:54:00 NA:80:53:60	" #85012	"	"		U
※	30:54:00 NA:80:53:70	" #84992	"	"		O
	40:10:00 i H:00:02:10	Diode S5151	ダイオード			
	40:10:00 i H:00:02:20	" S5151R	"			
	40:10:00 i F:00:00:40	" 1S1555	"			
	40:10:00 i H:00:07:20	" W03B	"			
	40:10:00 i F:00:06:50	Zener Diode WZ-162	ツェナーダイオード			
	40:10:00 i C:15:09:30	Transistor 2SC1509(R,Q)	トランジスター			
	40:10:00 i A:09:70:00	" 2SA970(GR,BL)	"			
	40:10:00 i D:07:26:00	" 2SD726(B,C)	"			
	40:10:00 i A:04:90:10	" 2SA490(Y)	"			
	40:10:00 i A:07:77:30	" 2SA777(R,Q)	"			
	40:10:00 i E:00:00:20	FET 2SK30A(G,R)	FET			
	40:10:00 LB:20:15:70	Fuse Holder Pin	ヒューズホルダーピン	G100		
	40:10:00 KB:00:03:10	Fuse 0.5A,250V	ヒューズ	"		C
	40:10:00 KB:00:03:80	" 4.0A,250V	"	"		C
	40:10:00 KB:00:10:10	" UL 0.5A,250V	UL ヒューズ	"		U
	40:10:00 KB:00:10:50	" " 4.0A,250V	"	"		U
	40:10:00 KB:00:07:10	" Mini 500mAT,250V	ミニヒューズ	"		O
	40:10:00 KB:00:07:60	" " 3.15AT,250V	"	"		O
	40:10:00 LB:20:15:30	Fuse Hoder Pin	ヒューズホルダーピン	G50		
	40:10:00 KB:00:03:10	Fuse 0.5A 250V	ヒューズ	"		
	40:10:00 KB:00:10:10	" UL 0.5A 250V	"	"		
	40:10:00 KB:00:07:10	" mini 500mAT 250V	ミニヒューズ	"		
	40:10:00 KB:00:03:60	" 3A 250V	ヒューズ	"		
	40:10:00 KB:00:10:40	" UL 3A 250V	"	"		
	40:10:00 KB:00:06:90	" mini 2.5AT 250V	"	"		
	40:10:00 LB:60:05:20	Connector Housing 2415-6B	コネクタハウジング			
	30:54:00 NA:80:52:10	PA1 BOARD #83382	PA1 シート	115 II, 212 II 210		
	40:10:00 FM:22:61:00	BP Capacitor 1/25	バイポーラケミコン			
	40:10:00 FM:22:64:70	" 4.7/25	"			
	40:10:00 FM:09:71:00	" 10/16	"			
	40:10:00 FM:22:71:00	" 10/25	"			
	40:10:00 FP:35:61:00	Tantalum Capacitor 1/35	タンタルコン			
	40:10:00 i F:00:00:40	Diode 1S1555	ダイオード			
	40:10:00 i C:22:40:00	Transistor 2SC2240(GR,BL)	トランジスタ			
	40:10:00 i C:15:09:30	" 2SC1509(R,Q)	"			
	40:10:00 i E:00:00:20	FET 2SK30A(GR)	FET			
	40:10:00 i G:00:13:90	IC NJM4558D	IC			
	40:10:00 i G:02:74:00	" TA7220P	"			
	40:10:00 KC:00:06:20	Relay FRL644D12/2AS	リレー			
	40:10:00 HS:31:07:50	Variable Resistor A1K Ω	ボリューム			
	40:10:00 HS:31:07:60	" A25K Ω	"			
	40:10:00 HS:31:07:70	" With Switch A25K Ω	" (SW付)			
	40:10:00 HS:31:07:80	" C50K Ω ×2	" (2連)			
	40:10:00 HS:31:07:90	" A50K Ω	"			
	40:10:00 HS:31:08:00	" Center Click G50K Ω	"			
	40:10:00 HS:31:08:60	" B25K Ω	"			

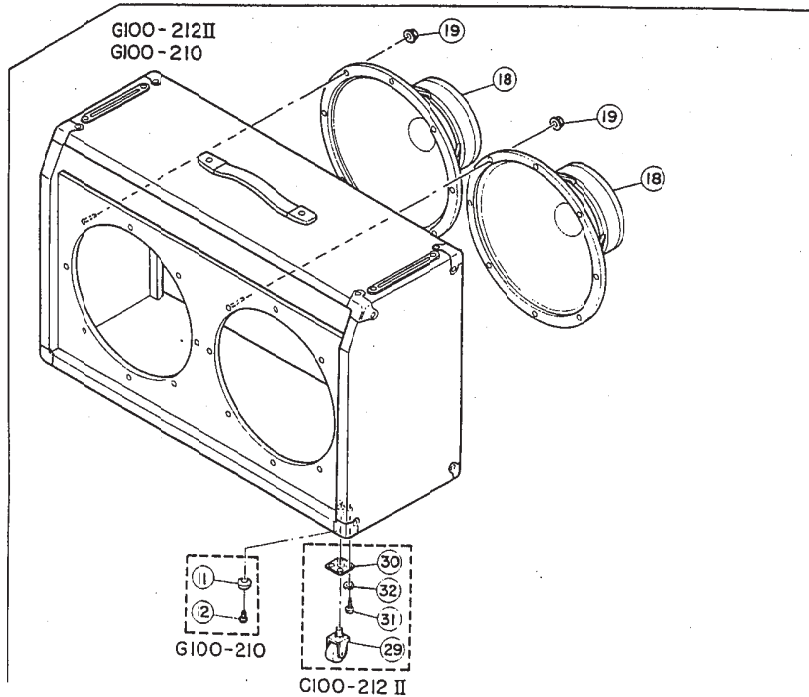
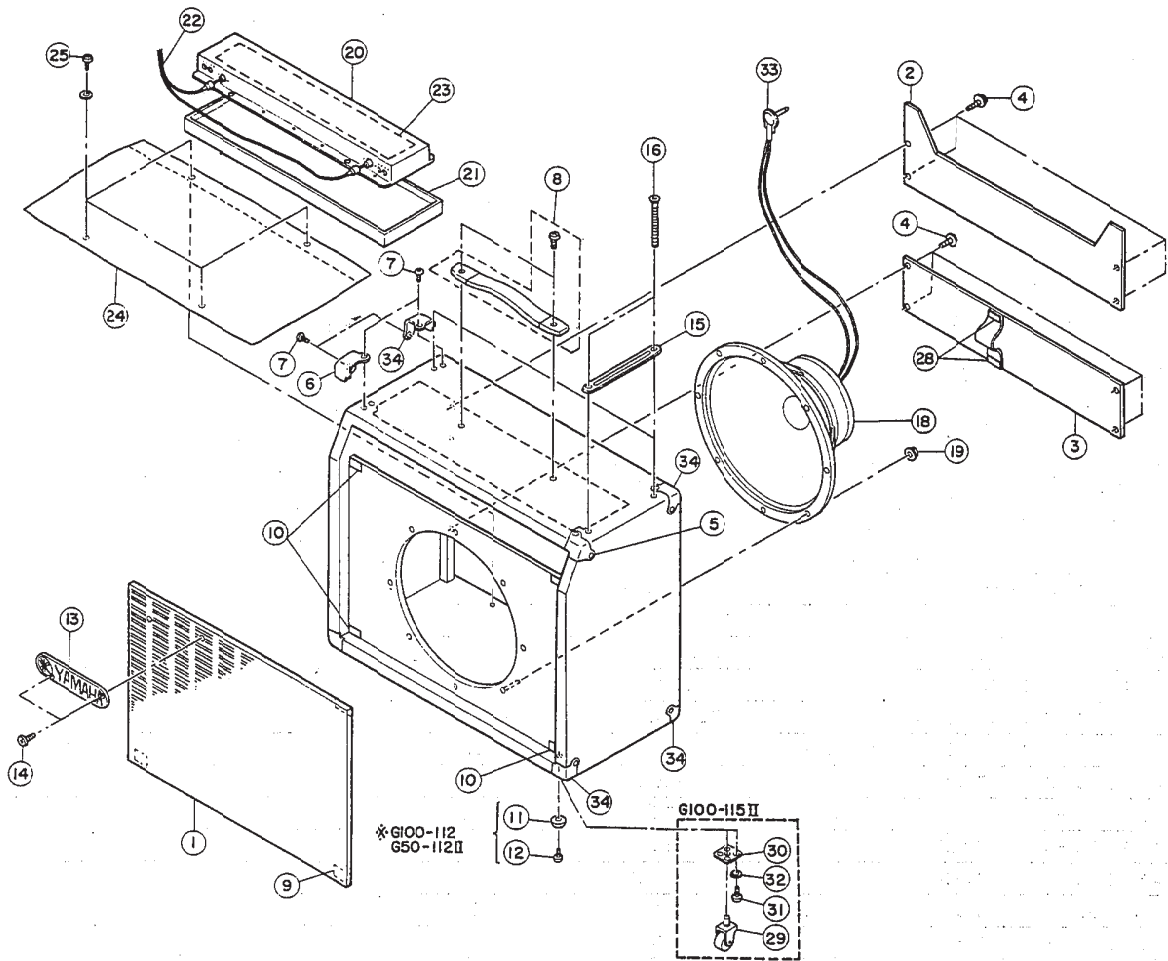
* : New Part (新部品)

PA Board/JK Writing Board

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
	30:54:00 NA:80:52:20	PA2 BOARD #83392	PA2 シート	G100-115 II 210,212 II		
	40:10:00 FM:22:61:00	BP Capacitor 1/25	バイポーラケミコン	〃		
	40:10:00 FM:22:64:70	〃 4.7/25	〃	〃		
	40:10:00 FP:35:61:00	Tantalum Capacitor 1/35	タンタルコン	〃		
	40:10:00 iG:00:13:90	IC NJM4558D	IC	〃		
	40:10:00 KC:00:06:20	Relay FRL644D12/2AS	リレー	〃		
	40:10:00 HS:31:07:50	Variable Resistor A1K Ω	ボリューム	〃		
	40:10:00 HS:31:07:60	〃 A25K Ω	〃	〃		
	40:10:00 HS:31:07:70	〃 (With Switch) A25K Ω	(SW付)	〃		
※	30:54:00 NA:80:52:00	PA BOARD	PAシート	G50-112 II G100-112		
	40:10:00 FM:22:61:00	BP Capacitor 1/25	バイポーラケミコン			
	40:10:00 FM:22:64:70	〃 4.7/25	〃			
	40:10:00 FM:09:71:00	〃 10/16	〃			
	40:10:00 FM:22:71:00	〃 10/25	〃			
	40:10:00 FP:35:61:00	〃 1/35	タンタルコン			
	40:10:00 iF:00:00:40	Diode 1S15555	ダイオード			
	40:10:00 iC:22:40:00	Transistor 2SC2240(GR,BL)	トランジスタ			
	40:10:00 iC:15:09:30	〃 2SC1509(R,Q)	〃			
	40:10:00 iE:00:00:20	FET 2SK30A(GR)	FET			
	40:10:00 iG:00:13:90	IC NJM4558D	IC			
	40:10:00 iG:02:74:00	〃 TA7220P	〃			
	40:10:00 KC:00:06:20	Relay FRL644D12/2AS	リレー			
	40:10:00 HS:31:07:50	Variable Resistor A1K Ω	ボリューム			
	40:10:00 HS:31:07:60	〃 A25K Ω	〃			
	40:10:00 HS:31:07:70	〃 With Switch A25K Ω	〃SW付			
	40:10:00 HS:31:07:80	〃 C50K Ω x2	〃 2連			
	40:10:00 HS:31:07:90	〃 A50K Ω	〃			
	40:10:00 HS:31:08:00	〃 Center Click G50K Ω	〃 (センタークリック)			
	40:10:00 HS:31:08:60	〃 B25K Ω	〃			
	40:10:00 LC:84:29:10	JK WRITEING BOARD	JK基板			
	40:10:00 LB:20:15:40	Jack	ホーンジャック			

※ : New Part (新部品)

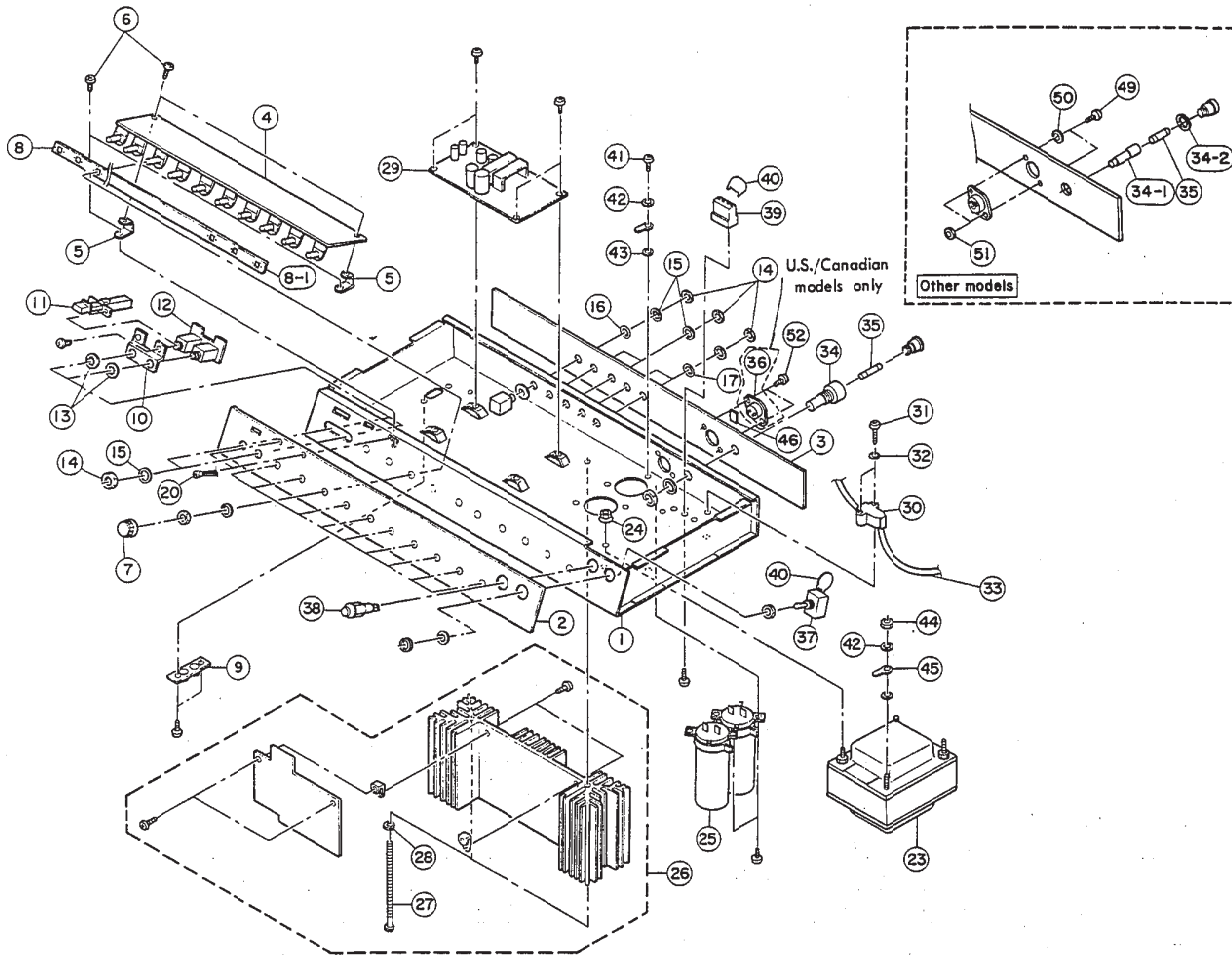
EXPLODED VIEW



Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets	
※	30:54:40	00:00:00:10	Cabinet	外装組上り	G100-212 II		
※	30:54:39	00:00:00:10	"	"	G100-112		
※	30:54:41	00:00:00:10	"	"	G100-115 II		
※	30:54:42	00:00:00:10	"	"	G100-210		
※	30:54:01	00:00:00:10	"	"	G50-112 II		
※	1	30:54:40	DA:80:38:80	Front Grille	前板集成	G100-212 II	
※	"	30:54:39	DA:80:39:20	"	"	G100-112 G50-112II	
※	"	30:54:41	DA:80:40:90	"	"	G100-115 II	
※	"	30:54:42	DA:80:42:50	"	"	G100-210	
※	2	30:54:40	DB:81:15:50	Back Board (Upper)	裏板 (上)	G100-212 II	
※	"	30:54:39	DB:81:16:50	"	"	G100-112 G50-112II	
※	"	30:54:41	DB:81:20:50	"	"	G100-115 II	
※	"	30:54:42	DB:81:24:40	"	"	G100-210	
※	3	30:54:40	DB:81:15:60	Back Board (Lower)	裏板 (下)	G100-212 II	
※	"	30:54:39	DB:81:16:60	"	"	G100-112 G50-112II	
※	"	30:54:41	DB:81:20:60	"	"	G100-115 II	
※	"	30:54:42	DB:81:24:50	"	"	G100-210	
※	4	40:10:00	E K:80:08:00	Screw 4x25 FNM3-3g	山型ワッシャ付丸皿タッ ピングネジ		
※	5	30:54:00	AA:80:76:40	Metal Corner (Right)	コーナー金具 (右)		
※	6	30:54:00	AA:80:76:50	" (Left)	" (左)		
※	7	40:10:00	E R:23:51:30	Oval Head Wood Screw 3.5x13 FNM3-3g	丸皿木ネジ		
※	8	30:54:00	NB:81:26:40	Handle Assembly	取手Ass'y		
※	9	40:10:00	CA:80:15:20	Velcro Tape	マジックテープ (オス)		
※	10	40:10:00	CA:80:15:30	"	" (メス)		
※	11	30:10:00	CB:02:32:00	Slip Fitting	滑り座 (黒)		
※	12	40:10:00	E B:34:02:50	Flat Head Screw 4x25 ZMC2-B#	皿小ネジ		
※	13	30:54:00	CB:81:37:90	Name Plate	ネームプレート		
※	14	40:10:00	E R:33:11:30	Oval Head Wood Screw 3.1x13 FUM3-B#	丸皿木ネジ		
※	15	30:54:00	AA:80:76:70	Fixing Plate	ユニット吊り金具		
※	16	40:10:00	E K:80:08:70	Sharp Tip Oval Head Screw 5x90 FNM3-3g	尖先丸皿小ネジ		
※	18	30:54:00	J A:30:66:00	Speaker 8Ω 30cm(12')	スピーカー	G100-212 II G50-112II	
※	"	30:54:00	J A:30:62:00	" " "	"	G100-112	
※	"	30:10:00	J A:38:02:00	" " 38cm(15')	"	G100-115 II	
※	"	30:54:00	JA:25:15:00	" 8Ω 25cm(10')	"	G100-210	
※	19	40:10:00	E K:80:06:40	Flange Nut 5S	フランジナット		
※	20	40:10:00	J H:00:01:40	Reverb Unit	リバーブユニット		
※	21	30:54:00	CB:81:37:10	Reverb Unit Base	RV台		
※	22	40:10:00	Mi:80:10:80	Reverb Unit Cord	線材キット (RV用)		
※	23	30:54:00	CB:81:44:20	Spacer	スペーサー		
※	24	30:54:00	CB:81:37:00	Reverb Unit Cover	RV収納袋		
※	25	40:10:00	E Q:03:51:60	Round Head Wood Screw 3.5x16 ZMC2-Y	丸木ネジ		
※	26	40:10:00	E V:20:00:40	Flat Washer 4S	平座金		
※	27	30:54:00	CB:80:08:30	Cord Holder	コード止め		
※	28	40:10:00	CA:80:01:30	Washer	コード止めワッシャ		
※	29	30:54:00	AA:80:16:80	Caster	キャスター		
※	30	30:54:00	AA:80:16:90	Caster Socket	キャスターソケット		
※	31	40:10:00	E D:35:02:00	Bind Head Screw 5x20 ZMC2-B#	バインド小ネジ		
※	32	40:10:00	E V:30:35:00	Spring Lock Washer 5S	バネ座金		
※	33	40:10:00	Mi:80:10:70	Speaker Cord W/Jack	L型プラグ付コード		
※	34	30:54:00	AA:80:76:60	Metal Corner	コーナー金具		

※ : New Part (新部品)

EXPLODED VIEW



PARTS LIST

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
※ 1	30:54:00 A A:80:98:50	Chassis	シャーシ	G100-212 II		
※	30:54:00 A A:80:98:70	"	"	G100-112 G50-112 II		
※	30:54:00 A A:80:98:60	"	"	G100-210 G100-115 II		
2	Refer to page 18 Note 1	Panel	パネル			
3	Refer to page 18 Note 2	Back Panel	バックパネル			
※ 4	30:54:00 N A:80:52:10	PA1 Board	PA1 シート	G100-212 II G100-115 II		
※	" 30:54:00 N A:80:52:20	PA2 Board	PA2 シート	G100-210		
※	" 30:54:00 N A:80:52:00	PA Board	PA シート	G100-112 G50-112 II		
※ 5	30:54:00 A A:81:04:50	Fixing Metal For C,B	シート固定金具			
※ 6	40:10:00 E I:03:00:60	Bind Head Tapping Screw	3×6 ZMC2-Y	バインドタッピングネジ		
※ 7	30:54:00 C B:81:17:80	Knob	ツマミ			
8	30:54:00 A A:81:04:20	Spacer	スペーサー	G100-212 II 115 II, 210		
8-1	30:54:00 A A:81:04:30	"	"	"		
"	30:54:00 A A:81:04:40	"	"	G100-112 G50-112 II		

※ : New Part (新部品)

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
9	40:10:00LB:20:07:90	2P Pin Jack	ピンジャック			
10	30:54:00AA:81:04:60	Push Switch Holder	プッシュSW 取付金具			
11	40:10:00KA:80:12:60	Push Switch	プッシュスイッチ			
12	40:10:00LC:84:29:10	JK Board	JK基板			
13	40:10:00EV:41:00:90	Toothed Lock Washer A9S	歯付座金			
14	40:10:00LX:20:00:60	Hexagonal Nut A9S	特殊六角ナット			
15	40:10:00LX:20:00:10	Plain Washer 9S	特殊平座金			
16	30:56:00CB:81:00:90	Insulation Nut	絶縁ナット			
17	30:54:00CB:81:40:00	"	"			
18	40:10:00CB:81:37:50	Damper	緩衝材			
19	40:10:00CB:81:37:60	"	"			
20	40:10:00IF:00:13:10	LED	LED			
21	40:10:00HL:32:58:20	Metal Oxide Film Resistor 820Ω 2P	サンキン抵抗			
22	30:54:00AA:81:07:40	Fixing Metal For C,B	シート固定金具	G100-212 II		
23	Refer to page 18 Note3	Power Transformer	電源トランス			
24	40:10:00EK:80:06:20	Flange Nut M4	フランジナット			
25	40:10:00FL:10:92:20	Electrolytic Capacitor 2200/160	コンデンサ			
26	Refer to page 18 Note4	MA Unit	MAユニット			
27	40:10:00EK:00:09:80	Sharp Tip Pan Head Screw 5×10 7S	尖先ナベ小ネジ			
28	40:10:00EV:43:00:50	Toothed Lock Washer AB5S ZMC2-Y	歯付座金			
29	Refer to page 18 Note5	DC Board	DCシート			
30	30:54:00CB:81:37:70	Cord Stopper	コード押え			
31	40:10:00EA:03:01:60	Pan Head Screw 3×16 ZMC2-Y	ナベ小ネジ			
32	40:10:00EV:20:00:30	Flat Washer 3S	平座金			
33	Refer to page 18 Note6	AC Cord	電源コード			
34	Refer to page 18 Note7	Fuse Holder	ヒューズホルダー			
35	"	Fuse	ヒューズ(タイラッシュ)			
36	40:10:00LB:30:02:50	3P AC Outlet	AC OUTLET(3P)			U,C
37	Refer to page 18 or Note8	Power Switch	パワースイッチ			
38	40:10:00JB:00:07:20	Lamp Holder	ランプホルダー			
39	40:10:00LA:00:07:60	Lug	カラー端子板			
40	40:10:00FZ:00:20:30	Spark Killer	スパークキラーコンデンサ			
41	40:10:00ED:04:00:80	Bind Head Screw 4×8 ZMC2-Y	バインド小ネジ			
42	40:10:00EV:46:00:40	Toothed Lock Washer B4S "	歯付座金			
43	40:10:00EV:30:00:40	Spring Lock Washer 4S ZMC2-Y	バネ座金			
44	40:10:00EV:10:00:40	Hexagonal Nut 4S "	六角ナット			
45	40:10:00LA:00:02:90	Ground Lug 4S	アースラグ			
46	40:10:00CA:80:19:90	Isolation Cover	絶縁カバー			U,C
47	40:10:00Fi:18:33:30	Ceramic Capacitor 0.0033/125	セラミックコンデンサー			U,C
48	40:10:00LB:20:02:50	Voltage Selector	電圧切替器			O
49	40:10:00EA:30:08:20	Pan Head Screw 3×8S ZMC2-B ₂	ナベ小ネジ			O
50	40:10:00EW:31:03:20	Toothed Lock Washer A3S	歯付座金			O
51	40:10:00EY:11:03:20	Hexagonal Nut 3S	六角ナット			O
52	40:10:00EA:30:10:30	Pan Head Screw 3×10S FCM3-B ₂	ナベ小ネジ			U,C

* : New Part (新部品)

Ref. No.	Part No.		Description	(部 品 名)	Remarks	Common model	Markets
※	Note 1						
※	2	30:54:00 AA:81:00:70	Panel	パネル	G100-212II		U,C
※	〃	30:54:00 AA:81:00:80	〃	〃			O
※	〃	30:54:00 AA:81:01:00	Panel	パネル	G100-112		U,C
※	〃	30:54:00 AA:81:01:10	〃	〃			O
※	〃	30:54:00 AA:81:07:70	Panel	パネル	G50-112II		U,C
※	〃	30:54:00 AA:81:07:80	〃	〃			O
※	〃	30:54:00 AA:81:C1:30	Panel	パネル	G100-115II		U,C
※	〃	30:54:00 AA:81:C1:40	〃	〃			O
※	〃	30:54:00 AA:81:C1:60	Panel	パネル	G100-210		U,C
※	〃	30:54:00 AA:81:C1:70	〃	〃			O
※	Note 2						
※	3	30:54:00 AA:81:02:00	Back Panel	バックパネル	G100-212II		U
※	〃	30:54:00 AA:81:02:10	〃	〃			C
※	〃	30:54:00 AA:81:02:30	〃	〃			O
※	3	30:54:00 AA:81:02:60	Back Panel	バックパネル	G100-112		U
※	〃	30:54:00 AA:81:02:70	〃	〃			C
※	〃	30:54:00 AA:81:02:90	〃	〃			O
※	3	30:54:00 AA:81:09:00	Back Panel	バックパネル	G50-112II		U
※	〃	30:54:00 AA:81:09:10	〃	〃			C
※	〃	30:54:00 AA:81:09:30	〃	〃			O
※	〃	30:54:00 AA:81:03:20	Back Panel	バックパネル	G100-115II		U
※	〃	30:54:00 AA:81:03:30	〃	〃			C
※	〃	30:54:00 AA:81:03:50	〃	〃			O
※	〃	30:54:00 AA:81:03:80	Back Panel	〃	G100-210		U
※	〃	30:54:00 AA:81:03:90	〃	〃			C
※	〃	30:54:00 AA:81:04:10	〃	〃			O
※	Note 3						
※	23	40:10:00 GA:80:84:00	Power Transformer	電源トランス	G100		U,C
※	〃	40:10:00 GA:80:85:00	〃	〃			O
※	〃	40:10:00 GA:80:87:00	〃	〃	G50		U,C
※	〃	40:10:00 GA:80:88:00	〃	〃			O
※	Note 4						
※	26	30:54:00 NB:81:26:20	MA-Unit	MAユニット	G100		U,C
※	〃	30:54:00 NB:81:26:30	〃	〃			O
※	〃	30:54:00 NB:81:38:90	〃	〃	G50		U,C
※	〃	30:54:00 NB:81:39:00	〃	〃			O
※	Note 5						
※	29	30:54:00 NA:80:51:70	DC Board	DCシート	G100		C
※	〃	30:54:00 NA:80:51:80	〃	〃			U
※	〃	30:54:00 NA:80:51:90	〃	〃			O
※	〃	30:54:00 NA:80:53:50	〃	〃	G50		C
※	〃	30:54:00 NA:80:53:60	〃	〃			U
※	〃	30:54:00 NA:80:53:70	〃	〃			O
※	Note 6						
※	33	40:10:00 MG:00:04:50	AC Cord	電源コード			O
※	〃	40:10:00 MG:00:02:70	〃	〃			U,C

※ : New Part (新部品)

