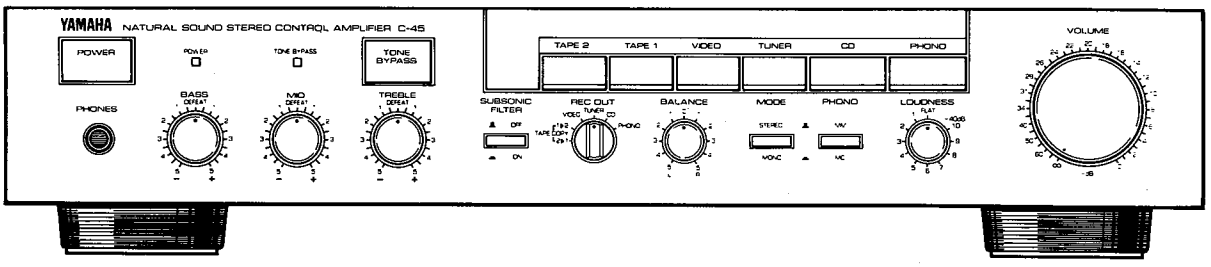
STEREO CONTROL AMPLIFIER

C-45

SERVICE MANUAL

■ FRONT PANEL



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 inherant 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: The 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 principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

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

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

■ CONTENTS

100026

SINCE 1887 YAMAHA

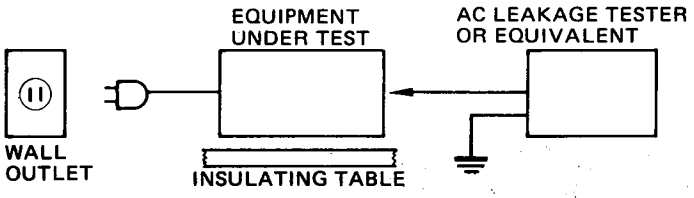
NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

2.86K-273 Printed in Japan '86.4

■ TO SERVICE PERSONNEL

1. Critical Components Information.
   Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
2. Leakage Current Measurement (For 120V Model Only).
   .When service has been completed, it is imperative that you verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohm shunted by 0.15μF.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.

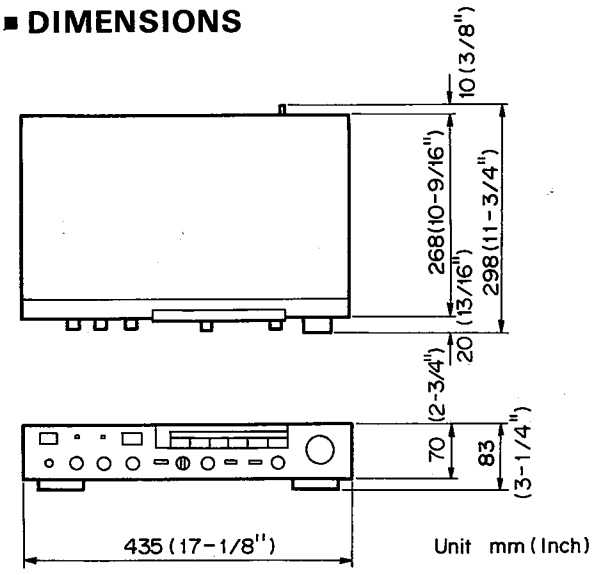


■ SPECIFICATIONS

Input Sensitivity/Impedance
Phono MC 100μV/100Ω
MM 2.5mV/47kΩ
CD/AUX/TAPE/TUNER 150mV/47kΩ
Input Sensitivity (New IHF)
Phono MC 33μV
MM 0.83mV
CD/AUX/TAPE/TUNER 50mV
Maximum-Input Signal
Phono MC 1kHz 0.03% THD 7mV
MM 0.01% THD 170mV
Output Level/Impedance
Rec Out . . . . . 150mV/330Ω (R.U.C.A.)
150mV/770Ω (G.B.)
Pre Out 1.5V/47Ω
Maximum Voltage Output
20Hz~20kHz 0.1% THD
Pre Out 11V
Headphone Jack Rated Output/Output Impedance
0.1% THD RL = 150Ω 4.2V/82Ω
Frequency Response (Tone Bypass ON)
CD/AUX/TAPE/TUNER 20Hz~20kHz . . . . . +0, –0.2dB
RIAA Equalization Deviation
20Hz ~ 20kHz (Phono MM/MC) . . . . . ±0.2/±0.3dB
10Hz ~ 100kHz (MM) . . . . . ±0.5dB
20Hz ~ 100kHx (MC) . . . . . ±0.5dB
Total Harmonic Distortion (20Hz~20kHz)
Phono MC to Rec Out 3V 0.002%
MM to Rec Out 3V 0.002%
CD/AUX/TAPE/TUNER to Pre Out 3V 0.002%
Intermodulation Distortion
CD/AUX/TAPE/TUNER . . . . . 5V Output 0.002%
Signal to Noise Ratio (IHF-A-Network)
Phono MC (S=500μV) 84dB
MM (S=5mV) 94dB
CD/AUX/TAPE/TUNER 106dB
Signal to Noise Ratio (New IHF)
Phono MC 79dB
MM 80dB
CD/AUX/TAPE/TUNER 92dB
Residual Noise (IHF-A-Network) 8μV
Channel Separation
Phone MC, MM 1kHz/10kHz, 80dB/70dB
CD/AUTX/TAPE/TUNER 1kHz/10kHz, 68dB/48dB
Tone Control Characteristics
BASS boost/cut . . . . . ±10dB (20Hz)
turnover frequency 350Hz
TREBLE boost/cut . . . . . ±10dB (20kHz)
tunover frequency 3.5kHz
MID boost/cut . . . . . ±10dB (1kHz)
Filter Characteristic
Subsonic 15Hz-12dB/out
Continuaus Loudness Control
Attenuation 40dB (1kHz)
Gain Tracking Error (0~–60dB) 2dB
Power Supply
AC120V, 60Hz (U.C.)
AC110/120/220/240V, 60/50Hz (R)
AC220~240V, 50Hz (G.B.)
AC240V, 50Hz (A)
Power Consumption . . . . . 30W (U.C.R.A.G.B.)
AC Outlet
Switched . . . . . 200W (max)
Unswitched . . . . . 200W (max)
Dimensions (W x H x D) . . . . . 435 x 83 x 298 mm
(17-1/8") x (3-1/4") x (11-3/4")
Weight 4.2kg
(9 lbs 4 oz)

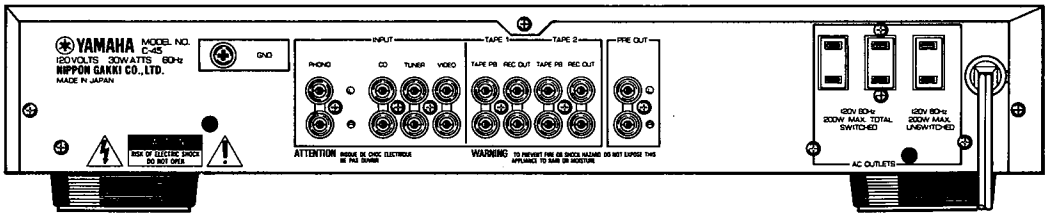
**Specifications subject to change without notice.*
(U) . . . . . U.S.A. model
(C) . . . . . Canadian model
(A) . . . . . Australian model
(B) . . . . . British model
(R) . . . . . Others model
(G) . . . . . European model

■ DIMENSIONS

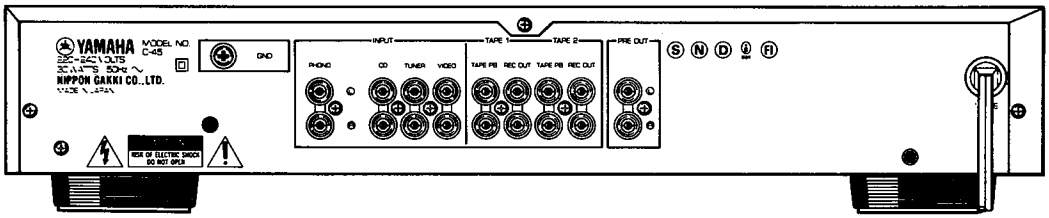


■ REAR PANELS

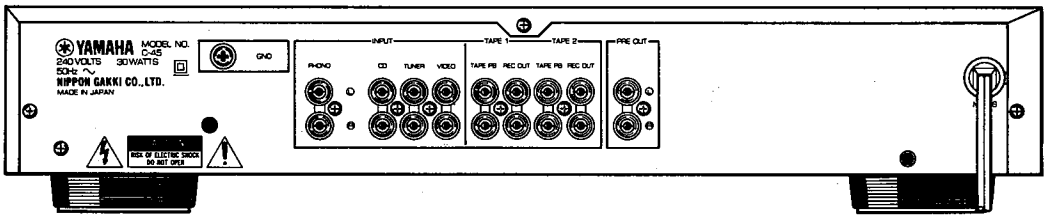
● U.S.A. & Canadian models



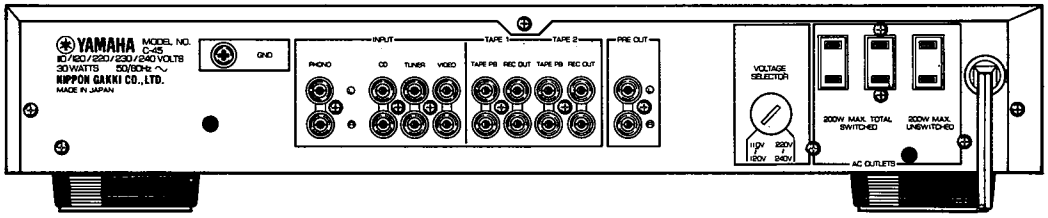
● European model



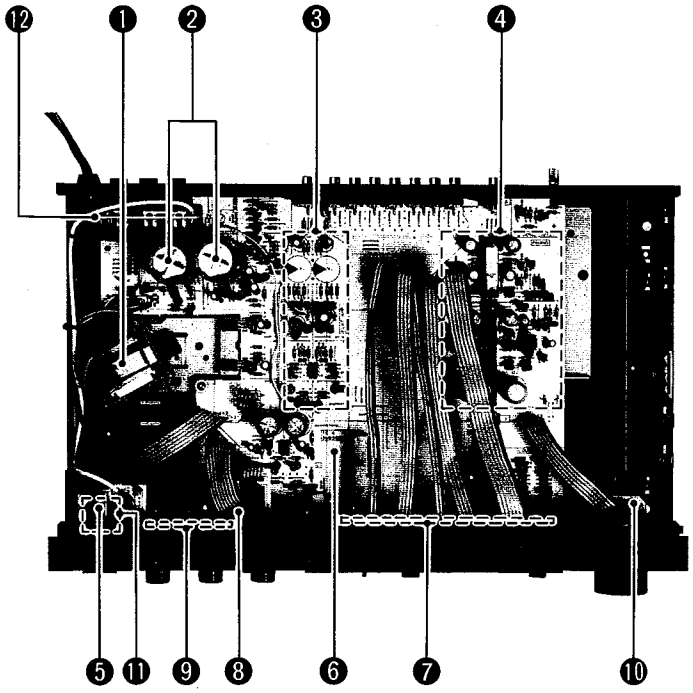
● Australian model



● Others model



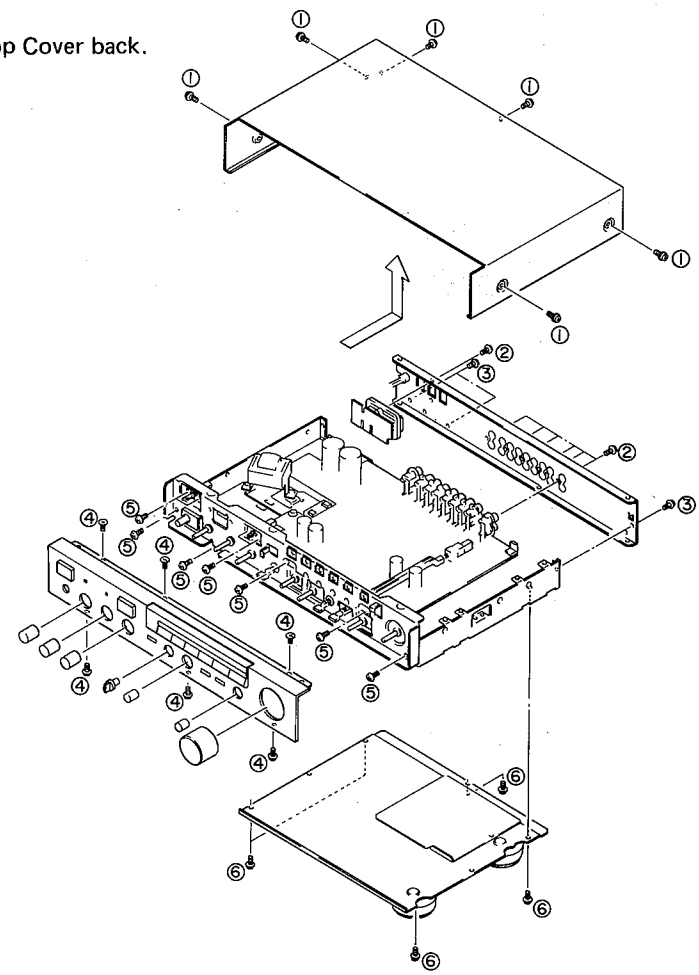
■ INTERNAL VIEW



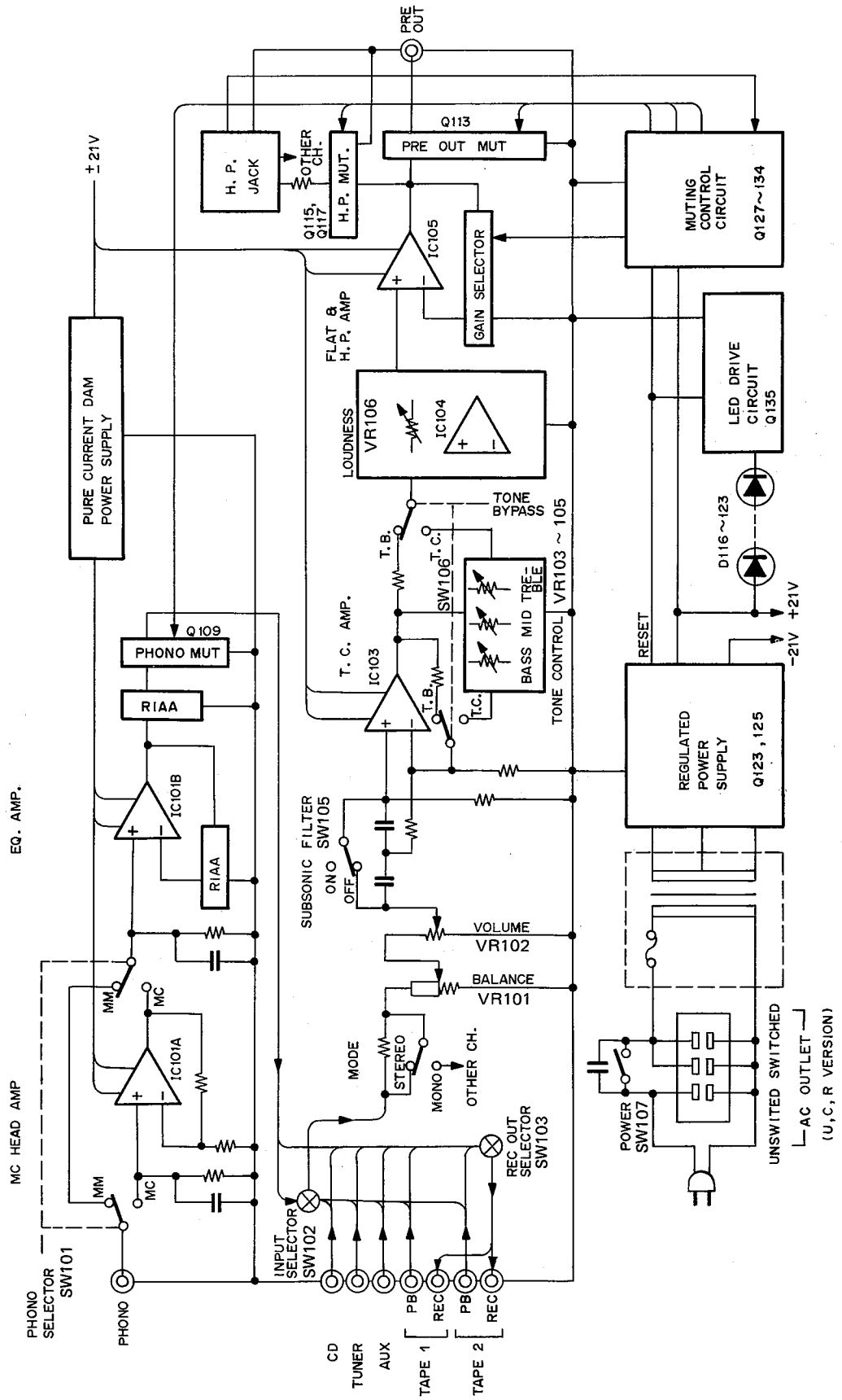
❶ POWER TRANSFORMER
General model: XA648001
U.S.A. & Canadian models: XA649001
Australian, European & British models: XA650001
❷ ELECTROLYTIC CAP.
❸ FLAT & HEADPHONE AMPLIFIER SECTION
❹ EQUALIZER SECTION
❺ POWER SWITCH
❻ MAIN CIRCUIT BOARD (1)
❼ MAIN CIRCUIT BOARD (2)
❽ MAIN CIRCUIT BOARD (3)
❾ MAIN CIRCUIT BOARD (4)
❿ MAIN CIRCUIT BOARD (5)
⓫ MAIN CIRCUIT BOARD (6)
⓬ MAIN CIRCUIT BOARD (7)

■ DISASSEMBLY PROCEDURES

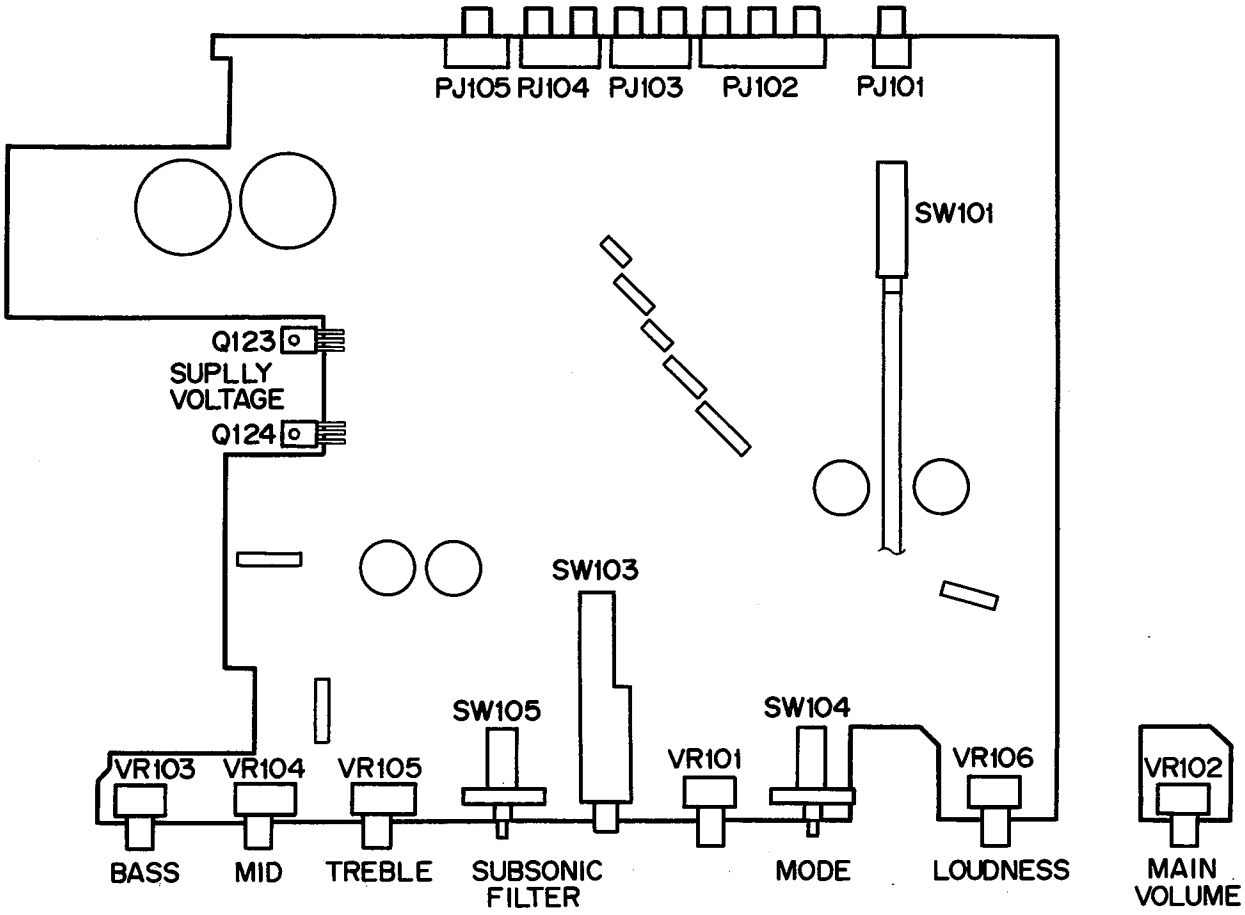
1. Removal of Top Cover.
a. Remove 6 screws (①) in Fig. 1. and slide the Top Cover back.
2. Removal of Rear Panel.
a. Remove 12 screws (②) in Fig. 1.
b. Remove 2 screws (③) in Fig. 1 (Side Panel).
c. Remove of knobs.
3. Removal of Front Panel.
a. Remove 6 screws (④) in Fig. 1.
b. Remove 10 screws (⑤) connector of the LED unit.
4. Removal of Bottom cover.
a. Remove 5 screws (⑥) in Fig. 1.

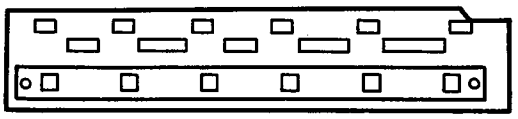


■ BLOCK DIAGRAM



■ ADJUSTMENT POINTS



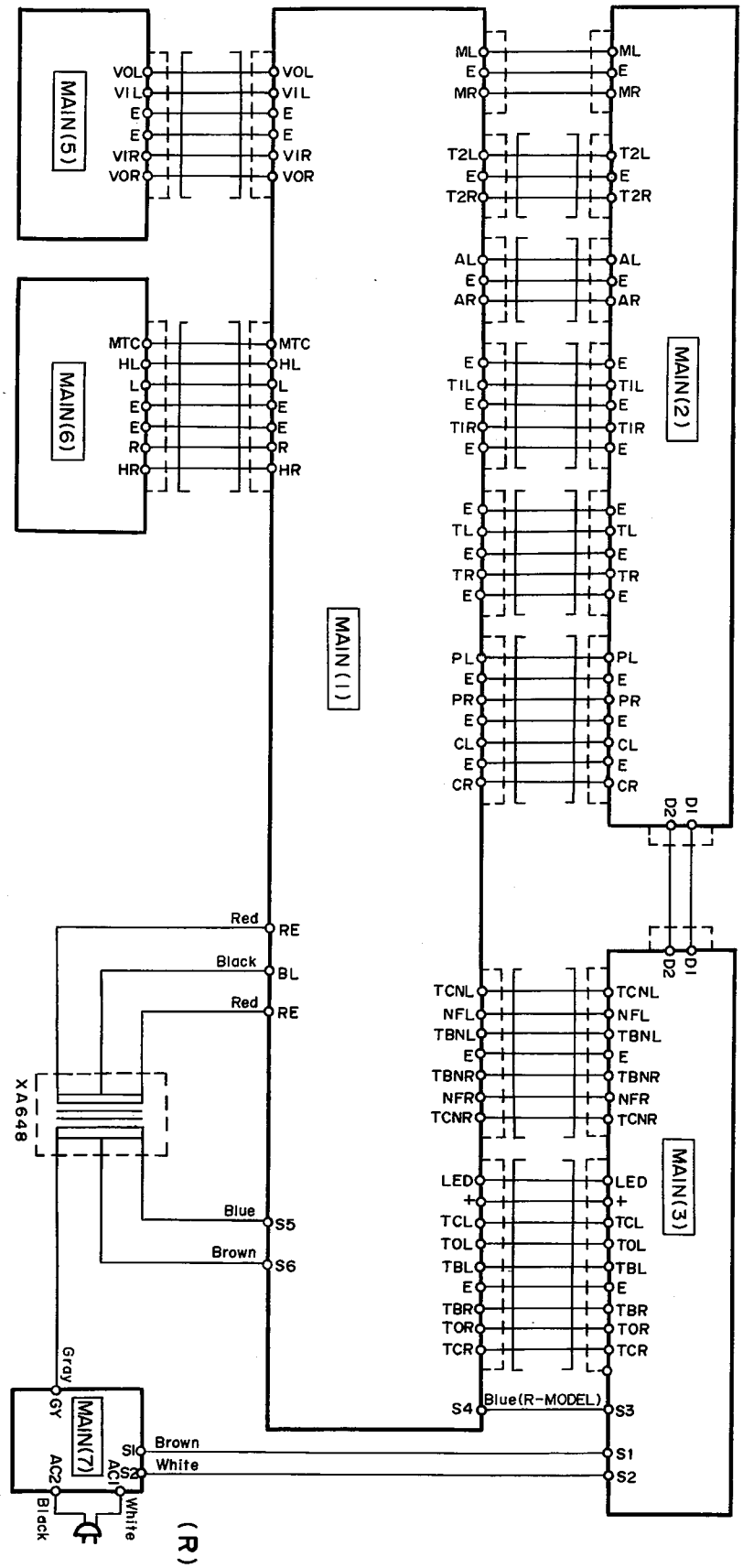


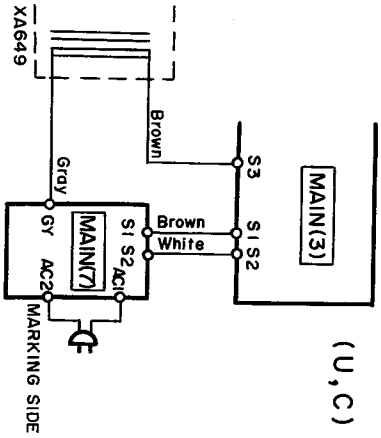
SW102
CD/PHONO
POSITION

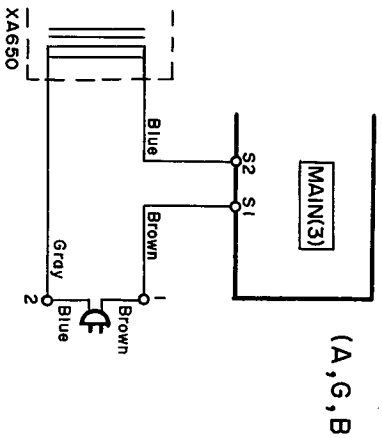
■ COMFIRMATIONS

Step	Item		Condition or procedure		Check point	Rated value	Measuring device	Reference
1	Connect the secondary wires, colors of RED, BLACK, and RED, from the Power Transformer to the TERMINALS of each corresponded color.							
2	Supply Voltage		Apply 120 ± 1V/60Hz AC to the primary of Power Transformer		Emitter of Q123 Emitter of Q124	21 ± 1V DC −21 ± 1V DC	DC VM	
3	Flat Amp. Output Voltage		(a) Apply 150 ± 10mV of 1kHz sine wave to the CD input on PJ102 (b) SW102: CD position (c) All other switches: OFF position (d) VR102 (Main VR) and VR106 (LOUDNESS): Fully clockwise (e) All other controls: Center position		PJ105 (Pre Out)	1.5 ± 0.2V	AC VM	
4	Loudness (Output voltage)		Same as STEP-3 except VR106 (LOUDNESS): Fully countereclockwise		PJ105 (Pre Out)	15 ± 2mV	AC VM	
5	Tone Control	BASS 20Hz	VR103	Full counterclockwise	PJ105 (Pre Out)	−9dB	AC VM	(a) All other conditions follow to STEP-3 (b) 1kHz 1.5V as 0dB
				Full clockwise		+9dB		
		MID 1kHz	VR104	Full counterclockwise		−11dB		
				Full clockwise		+9dB		
		TREBLE 20kHz	VR105	Full counterclockwise		−11dB		
				Full clockwise		+9dB		
6	Headphone Amp. Output Level		Same as STEP-3 except that a Headphone Plug (with 150Ω load) is pluged into the Headphone Jack		PJ105 (Pre Out) Headphone terminal	0 4.2 ± 0.5V	AC VM	
7	Muting		With the same conditions to STEP-3, turn off the AC 120V power supply. When turned it on again:		PJ105 (Pre Out)	The output must be recovered in 5 ± 1 second	AC VM	
8	Subsonic Filter		Same as STEP-3 except; (a) 15Hz input signal, and (b) SW105—ON		PJ105 (Pre Out)	−3 ± 2dB	AC VM	Output level with SW105—OFF as 0dB
9	Mode		With the same to STEP-3, apply 1kHz 1V test signal to L-ch only	SW104 (Mode) OFF ON	R-ch Output (PJ105)	Under 10mV 0.5 ± 0.1V	AC VM	The oposit channel should be the same
10	EQ Amp.		(a) Apply the test signal to PJ101 (b) SW102: Phone position	SW101: MM 1kHz 2.5mV SW101: MC 1kHz 100μV	PJ105 (Pre Out)	1.5 ± 0.2V 1.5 ± 0.2V	AC VM	All other conditions follow to STEP-3

■WIRING


MAIN(5)
VOL
VIL
E
E
VIR
VOR
MAIN(6)
MTC
HL
L
E
E
R
HR
MAIN(1)
MAIN(2)
ML
E
MR
T2L
E
T2R
AL
E
AR
E
TIL
E
TIR
E
E
TL
E
TR
E
PL
E
PR
E
CL
E
CR
D1
D2
MAIN(3)
TCNL
NFL
TBNL
E
TBNR
NFR
TCNR
LED
+
TCL
TOL
TBL
E
TBR
TOR
TCR
S4
Blue(R-MODEL)
S3
S1
S2
Red
RE
Black
BL
Red
RE
XA648
Blue
S5
Brown
S6
Gray
GY
MAIN(7)
SI
S2
AC1
AC2
Brown
White
Black
White
(R)


XA649
Brown
Gray
GY
MAIN(7)
S1 S2
AC1
AC2
MARKING SIDE
S3
S1 S2
MAIN(3)
Brown
White
(U,C)

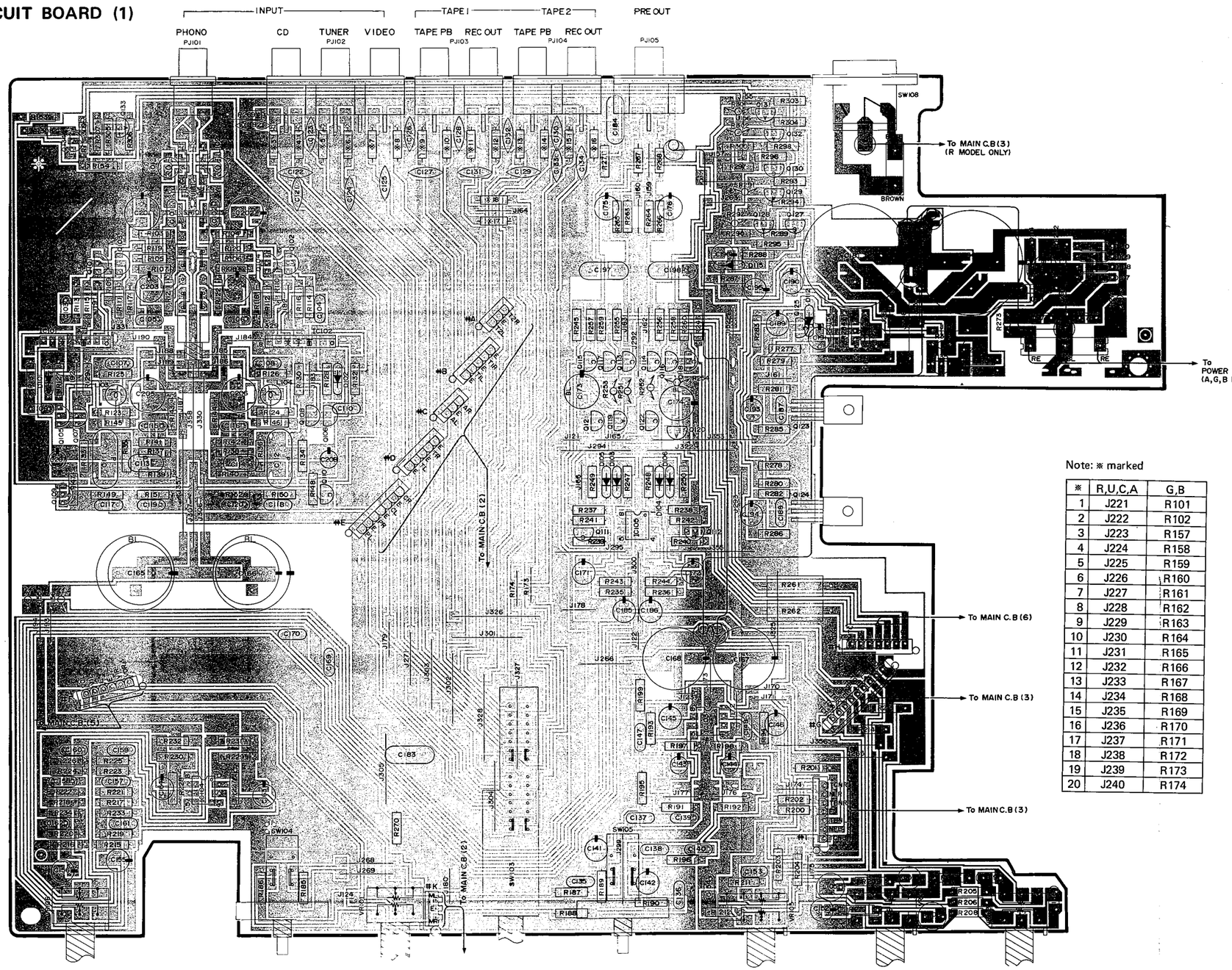

XA650
Blue
Brown
Gray
2
Blue
Brown
S2 S1
MAIN(3)
(A,G,B)

C-45

■PRINTED CIRCUIT BOARD (Pattern Side)

Note)
文字面：Letter side

MAIN CIRCUIT BOARD (1)



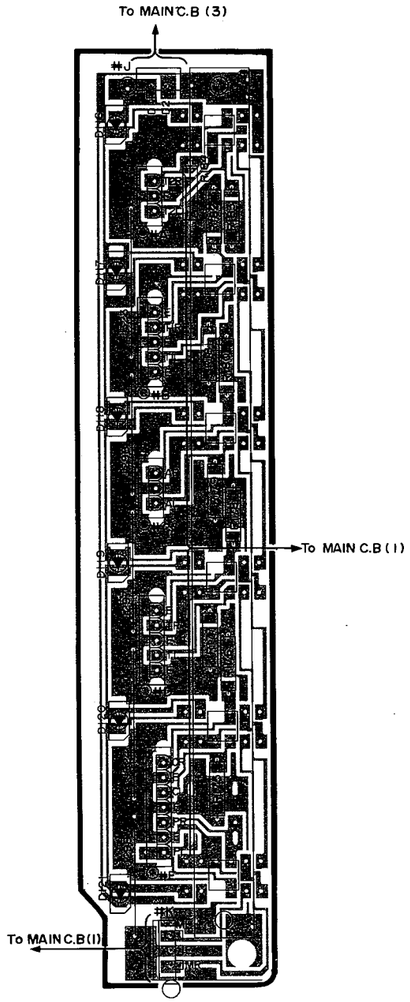
Note: ※ marked

※	R,U,C,A	G,B
1	J221	R101
2	J222	R102
3	J223	R157
4	J224	R158
5	J225	R159
6	J226	R160
7	J227	R161
8	J228	R162
9	J229	R163
10	J230	R164
11	J231	R165
12	J232	R166
13	J233	R167
14	J234	R168
15	J235	R169
16	J236	R170
17	J237	R171
18	J238	R172
19	J239	R173
20	J240	R174

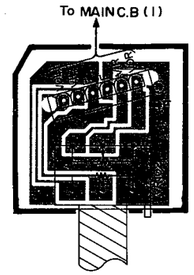
■PRINTED CIRCUIT BOARD (Pattern Side)

Note)
文字面：Letter side

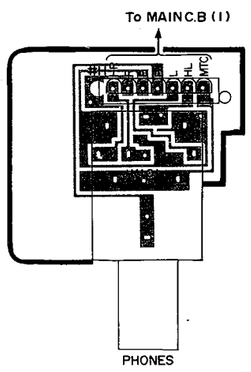
MAIN CIRCUIT BOARD (2)



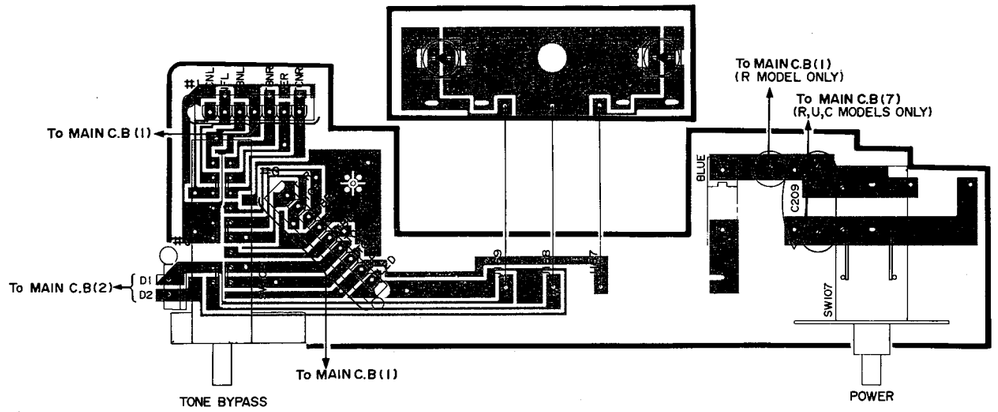
MAIN CIRCUIT BOARD (5)



MAIN CIRCUIT BOARD (6)

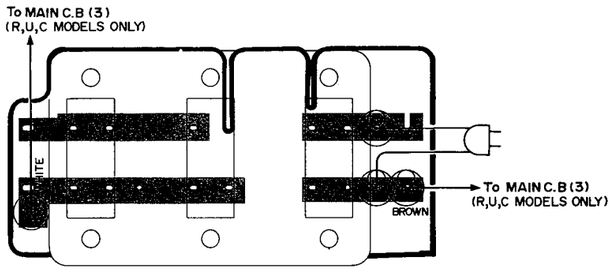


MAIN CIRCUIT BOARD (4)

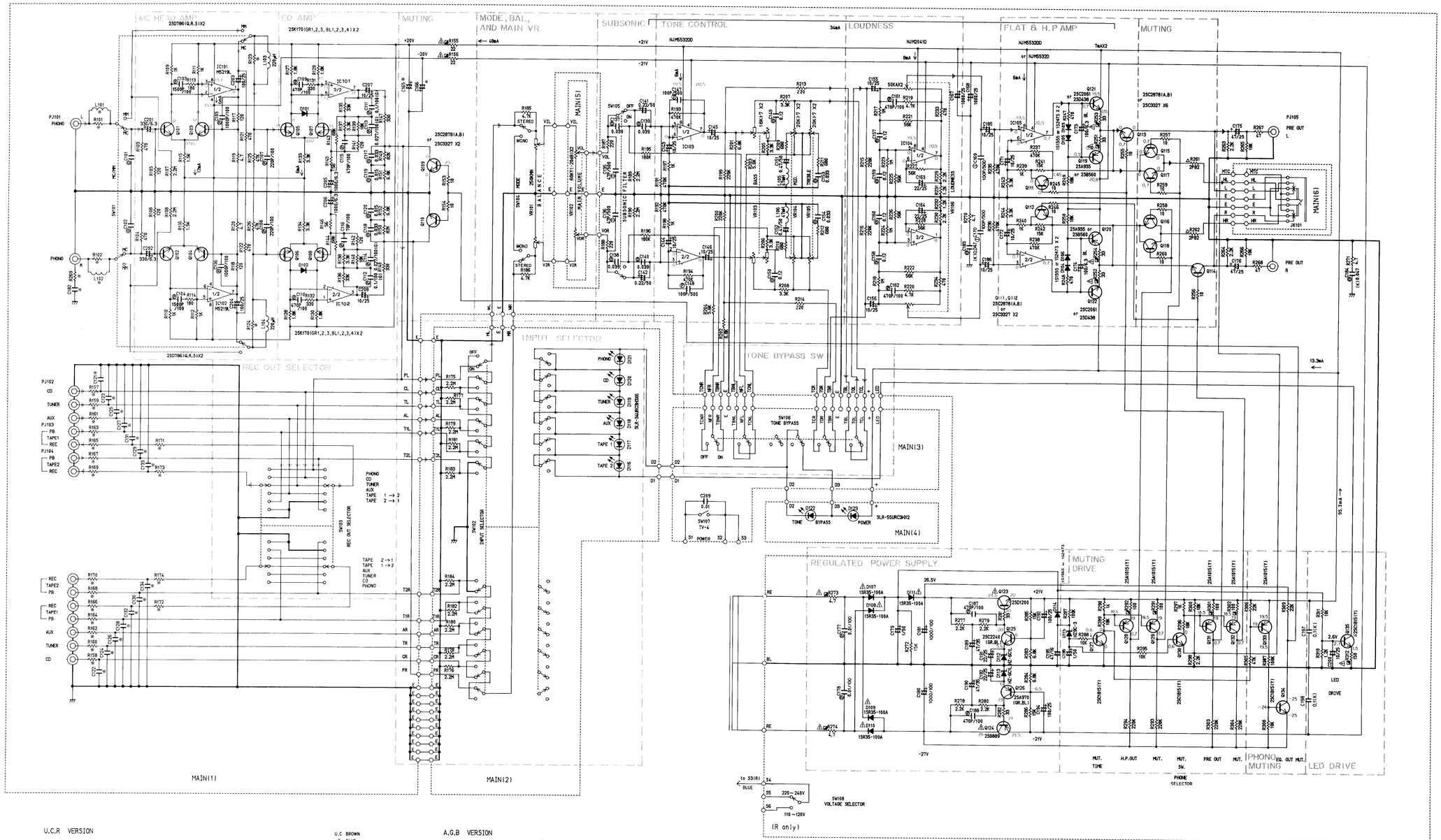


MAIN CIRCUIT BOARD (3)

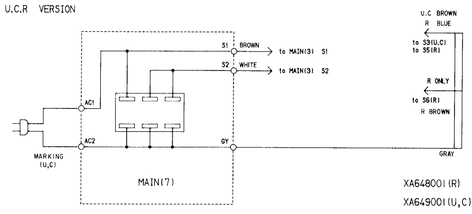
MAIN CIRCUIT BOARD (7)



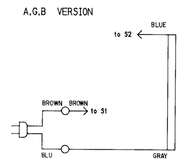
■SCHEMATIC DIAGRAM



U.C.R VERSION



A.G.B VERSION



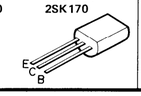
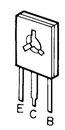
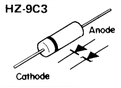
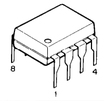
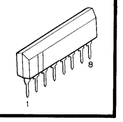
* MARKED

VERSION	R	U,C	A	G,B
L101,102	open	←	←	15μH
R101,102	short	←	←	1KΩ
R123,124	220Ω	←	←	2.2KΩ
R157~174	short	←	←	220Ω
R269	open	←	←	4.7
C101,102	◎0.01μF	←	←	◎0.022μF
C121~130	open	←	←	220PF
C132 C131~C134	open	←	←	100PF
C165,166	P 1000/25	←	B 1000/35	←

※) Unless otherwise specified , the diode is 1S1555 or 1S2473

	END	OUT
C	209	199
R	312	299,275,276
Q	135	
D	123	

■ PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODE AND ICS.

2SA935 or 2SB560 2SA970 2SA1015 2SC2240 / 2SC2878 or 2SC3327 2SD1200 2SD7861 2SK170	2SB889	1S1555 or 1S2473 1SR35-100A HZ-6C1L HZ-9C3	NJM2041D NJM5532D-D NJM5532D	M5219L
				

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	CERAMIC CAPACITOR
◎	POLYESTEL FILM CAPACITOR (MYLAR)
○	POLYSTYRENE FILM CAPACITOR
Ⓘ	MICA CAPACITOR
Ⓟ	POLY PROPYLENE FILM CAPACITOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	SEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
◰	1/6W CARBON FILMRESISTOR

CAUTION

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

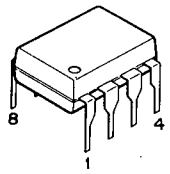
* *All voltages are measured with a 10MΩ/V DC electric volt meter.*

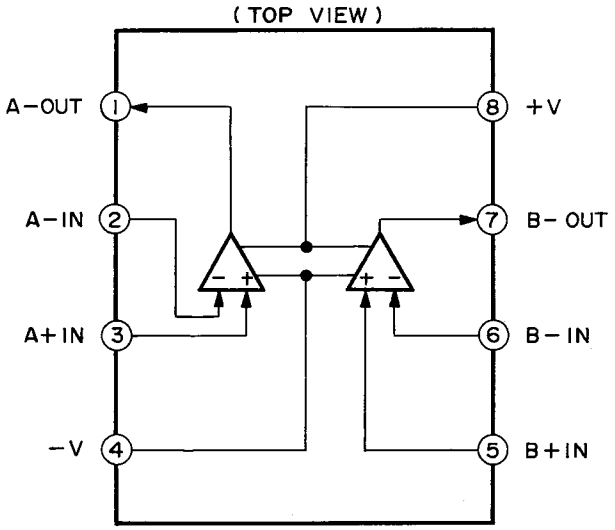
* *Schematic diagram is subject to change without notice.*

■ IC BLOCK DIAGRAM

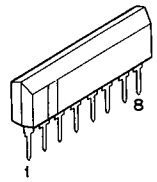
IC103
NJM5532D-D

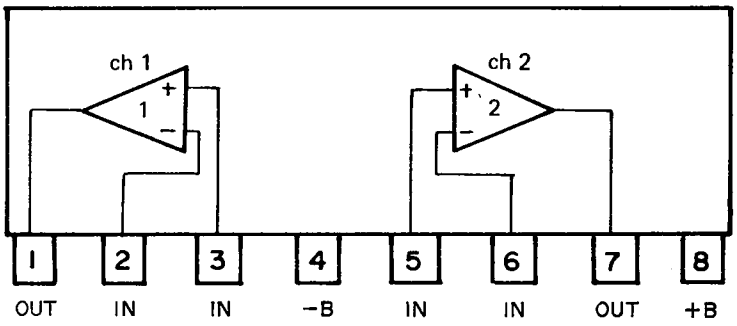
IC105
NJM5532 or NJM5532D-D



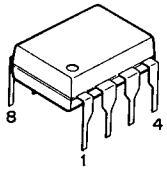


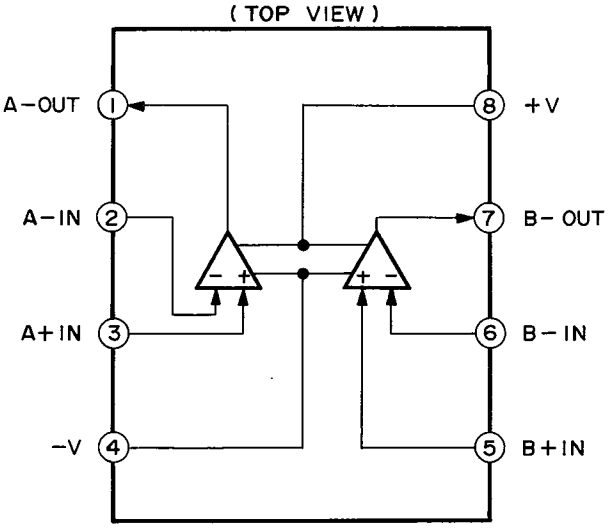
IC101, 102
M5219L





IC104
NJM2041D





PARTS LIST

■ELECTRICAL PARTS

	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク
※		***NA 08 99 00***	***Main Circuit Borad Ass'y***		メインシート			R	
※		***NA 08 99 10***	〃		〃			U,C	
※		***NA 08 99 20***	〃		〃			A	
※		***NA 08 99 30***	〃		〃			G,B	
		FG 21 21 00	Ceramic Cap.	100pF 50V	セラコン	C131~134,182		G,B	
		FG 21 22 20	〃	220pF 50V	〃	C121~130		G,B	
		FU 35 14 70	Mica Cap.FE	47pF 500V	FEマイカコン	C135,136			
		Fi 38 41 00	Ceramic Cap.	0.01μF VA-1	セラコン	C209 } Inter-changeable		A,G,B	
		Fi 50 41 00	〃	0.01μF DNS	〃	〃 } Inter-changeable		A,G,B	
		Fi 41 41 00	〃	0.01μF VA-1	〃	〃		R,U,C	
		FV 44 91 00	Electrolytic Cap.	1000μF 25V	プラスチックケミコン	C167,168			
		FV 44 91 00	〃	1000μF 25V	〃	C165,166 } Inter-changeable		R,U,C	
		FZ 00 74 50	〃	1000μF 35V	ブラックゲートコン(F)	〃 〃 } Inter-changeable		A,G,B	
		FZ 00 54 10	〃	100μF 6.3V	〃	C173,174			
		FZ 00 55 80	Mylar Cap.	0.047μF 50V	マイラーコン	C183,184			
		FZ 00 49 40	〃	0.1μF 50V	〃	C197,198			
		FZ 00 59 70	Electrolytic Cap.	1000μF 100V	オーディオケミコン	C180,181			
		UA 25 41 00	Mylar Cap.	0.01μF 50V	マイラーコン	C101,102 } Inter-changeable		R,U,A,C	
		UA 25 42 20	〃	0.022μF 50V	〃	〃 } Inter-changeable		G,B	
		FA 15 41 50	〃	0.015μF 50V	〃	C119,120			
		UA 25 43 30	〃	0.033μF 50V	〃	C117,118,153,154			
		UA 55 43 90	〃	0.039μF 50V	〃	C137~140			
		FA 15 51 20	〃	0.12μF 50V	〃	C149,150,157~160			
※		UM 02 83 30	Electrolytic Cap.	330μF 6.3V	オーディオコガタケミコン	C201,202			
※		UM 02 91 00	〃	1000μF 6.3V	〃	C205,206			
		UM 05 71 00	〃	10μF 25V	〃	C143,144,207,208			
		UM 05 74 70	〃	47μF 25V	〃	C175,176			
		UM 05 81 00	〃	100μF 25V	〃	C203,204			
		UT 46 42 70	Polypropylene Film Cap.	0.027μF 100V	ポリプロコン	C113,114			
		UT 46 51 00	〃	0.1μF 100V	〃	C111,112			
		UT 45 22 20	〃	220pF 100V	〃	C107,108			
		UT 45 21 00	〃	100pF 100V	〃	C147,148,169,170			
		UT 45 24 70	〃	470pF 100V	〃	C109,110,115,116,161,162,187,188			
		UT 45 31 00	〃	1000pF 100V	〃	C105,106			
		UT 45 31 50	〃	1500pF 100V	〃	C103,104			
		UT 45 41 00	〃	0.01μF 100V	〃	C177,178			
※		UH 23 74 70	Electrolytic Cap.	47μF 16V	超小型ケミコン	C195			
※		UH 24 71 00	〃	10μF 25V	〃	C145,146,155,156,171,172,185,186,200			
※		UH 24 72 20	〃	22μF 25V	〃	C163,164,191,192			
※		UH 24 81 00	〃	100μF 25V	〃	C193,194			
※		UH 25 74 70	〃	47μF 35V	〃	C189,190			
※		UH 26 52 20	〃	0.22μF 50V	〃	C141,142			
※		UH 26 54 70	〃	0.47μF 50V	〃	C151,152			
※		UH 26 61 00	〃	1μF 50V	〃	C179,196			
		GE 90 18 60	Coil	47mH	固定コイル	L105,106			
※		VA 98 35 00	〃	15μH	コイル	L101,102		G.B	
※		VA 98 36 00	〃	220μH	〃	L103,104			
		HL 32 48 20	Metal Oxide Film Resistor	82Ω 2W	酸金抵抗	R261,262			
		HV 45 34 70	Flame Proof Curbon Resistor	4.7Ω 1/4W	不燃可カーボン抵抗	R273,274			
		HV 45 42 20	〃	22Ω 1/4W	〃	R155,156			
		HV 45 43 30	〃	33Ω 1/4W	〃	R251~254			

※New Parts（新規部品）

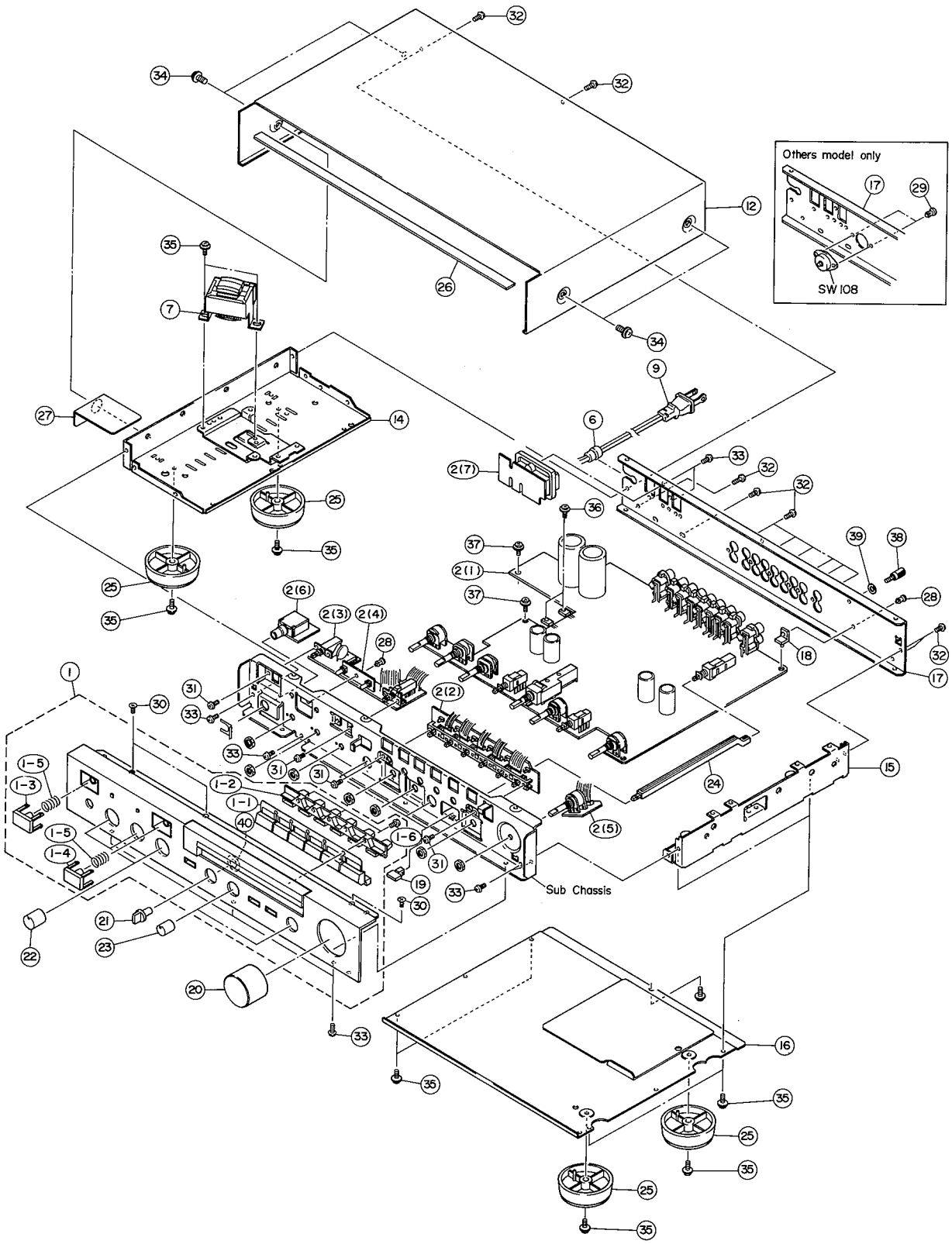
	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク
		HV 45 51 00	Flame Proof Curbon Resister	100Ω 1/4W	不燃可カーボン抵抗	R291,292,301,302			
		HV 45 51 50	〃	150Ω 1/4W	〃	R312			
※		VA 98 46 00	Potentiometer	50KΩ-A×2	可変抵抗器	VR106			
※		VA 98 47 00	〃	250KΩ×2	〃	VR101			
※		VA 98 48 00	〃	20KΩ×2	〃	VR104,105			
※		VA 98 49 00	〃	16KΩ×2	〃	VR103			
※		VA 98 50 00	〃	60KΩ-Y×2	〃	VR102			
		iA 09 70 00	Transistor	2SA970 (GR,BL)	トランジスター	Q126			
		iA 10 15 21	〃	2SA1015 (Y)	〃	Q128,129,131~133			
		iX 60 32 80	〃	2SA935	〃	Q119,120 } Inter-changeable			
※		iB 05 60 00	〃	2SB560	〃	〃 } Inter-changeable			
※		VA 93 31 00	〃	2SB889	〃	Q124			
		iC 18 15 20	〃	2SC1815 (Y)	〃	Q127,130,134,135			
		iC 22 40 00	〃	2SC2240 (GR,BL)	〃	Q125			
		iX 60 42 00	〃	2SC2878 (A,B)	〃	Q109~118 } Inter-changeable			
		iC 33 27 00	〃	2SC3327	〃	〃 } Inter-changeable			
※		iC 20 61 00	〃	2SC2061	〃	Q121,122 } Inter-changeable			
※		iD 04 38 00	〃	2SD438	〃	〃 } Inter-changeable			
		iD 07 86 00	〃	2SD786 (Q,R,S)	〃	Q101~104			
※		VA 93 30 00	〃	2SD1200	〃	Q123			
※		iE 10 24 80	FET	2SK170 (GR,1,2,3 / BL,1,2,3,4)	FET	Q105~108			
		iF 00 07 10	Diode	1S2473	ダイオード	D101~106,114 } Inter-changeable			
		iF 00 00 40	〃	1S1555	〃	〃 } Inter-changeable			
		iF 00 41 60	Zener Diode	HZ6C1L	ツェナーダイオード	D112,113			
		iF 00 33 20	〃	HZ9C3	〃	D115			
		iF 00 44 40	LED(Red)	SLV56URC3H	LED (赤)	D122,123			
		iF 00 87 30	LED	SLR-34URC3H3	LED	D116~121			
		iH 00 14 30	Diode	1SR-35-100A	ダイオード	D107~111			
		iG 09 21 00	IC	M5219L	IC	IC101,102			
		iG 12 14 00	〃	NJM2041D	〃	IC104			
		iG 14 28 00	〃	NJM5532D	〃	IC105 } Inter-changeable			
※		XA 67 30 01	〃	NJM5532DD	〃	〃 } Inter-changeable			
※		XA 67 30 01	〃	NJM5532DD	〃	IC103			
		KA 80 51 10	Push Switch	SUN 2-2NS	プッシュSW	SW104,105			
※		VA 98 38 00	〃	SUN 4-2NS	〃	SW101			
※		VA 98 39 00	〃	SUN 6-2S	〃	SW106			
※		VA 98 41 00	〃		6連プッシュSW	SW102			
※		VA 98 37 00	Rotary Switch	SRZ-V	ロータリSW	SW103			
		KA 80 51 50	Power Switch	ESB-8215V-F	パワーSW	SW107			
※		LA 00 58 10	Voltage Selector		電圧切換器	SW108		R	
		LB 20 26 10	Pin Jack	2P	ピンジャック	PJ105			
※		LB 20 29 00	〃	2P	〃	PJ101			
		LB 40 12 90	〃	4P	〃	PJ103,104			
※		VA 98 43 00	〃	6P	〃	PJ102			
※		VA 98 45 00	Headphones Jack		ヘッドホンジャック	JK101			
		CB 64 46 70	Cap.Cover	HY-0105	コンデンサカバー			A,G,B	
		LA 00 21 40	Wrapping Terminal Type-1	2P P=10	I型ラッピング端子板				
		LA 00 21 50	〃	3P P=10	〃				
※		VA 72 56 00	Parallel Holder	6P	パラレルホルダー				
※		VA 72 59 00	〃	9P	〃				

※New Parts (新規部品)

	Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
※		VA 72 53 00	Parallel Holder 3P	パラレルホルダー				
※		VA 72 55 00	〃 5P	〃				
※		VA 72 57 00	〃 7P	〃				
		LB 60 71 90	AC Outlet 3連	ＡＣアウトレット			R	
		LB 60 81 60	〃	〃			U,C	

※New Parts（新規部品）

■MECHANISM EXPLODED VIEW



■ MECHANISM PARTS

	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク
※	1	NB 63 32 90	Panel Unit		パネルユニット				
※	1-1	NB 63 33 60	Button Ass'y		ボタン Ass'y				
※	1-2	CB 65 13 30	Reflector		リフレクター				
	1-3	CB 63 51 30	Button P		ボタン P		A-520		
	1-4	CB 63 51 50	Button T		ボタン T		A-520		
	1-5	AA 62 20 80	Spring		スプリング		M-80		
	1-6	EX 60 02 00	Cap Screw	2×6 FCM3-Bl	鉄カップスクリューPタイト				
※	2	NA 08 99 00	Main Circuit Board		メインシート			R	
※	//	NA 08 99 10	//		//			U.C	
※	//	NA 08 99 20	//		//			A	
※	//	NA 08 99 30	//		//			G.B	
	5	LA 00 54 90	Circuit Board Terminal	834T-1100	ボードイン端子				
	6	CB 62 01 90	Cord Stopper	CM-22B	コードストッパ			R.A.G.B	
	//	CB 62 02 00	//	CM-22C	//			U.C	
※	7	XA 64 80 01	Power Transformer		電源トランス			A.G.B	
※	//	XA 64 90 01	//		//			U.C	
※	//	XA 65 00 01	//		//			A.G.B	
	8	LA 00 29 50	Terminal Board	2P MA0092A	中継端子台				
※	9	MG 00 23 10	Power Cord	7.5A 250V 2m	電源コード			A	
	//	MG 00 09 20	//	7.5A 250V 2.5m	//			A	
	//	MG 00 14 90	//	7.5A 250V 2.5m	//			A	
	//	MG 00 16 20	//	2.5A 250V 2m	//			G.B	
	//	MG 00 16 30	//	6A 250V 2m	//			R	
	//	MG 00 22 20	//	10A 125V 1.98m	//			U.C	
	10	CB 06 92 50	Binding Tie	BK-1	インシュロックタイ				
	11	LB 10 01 80			ショートピンプラグ				
※	12	AA 62 93 10	Top Cover		トップカバー				
※	14	AA 62 92 80	Frame L		フレーム L				
※	15	AA 62 93 80	Side Frame R		サイドフレーム R				
※	16	AA 62 92 90	Bottom Cover		ボトムカバー				
※	17	AA 62 92 30	Rear Panel		リヤパネル			R	
※	//	AA 62 92 40	//		//			U.C	
※	//	AA 62 92 50	//		//			G.B	
※	//	AA 62 92 60	//		//			A	
	18	CB 09 12 90	Holder Circuit Board		基板ホルダー				
※	19	CB 65 19 80	Button F		ボタン F				
※	20	BA 09 47 30	Knob		ノブ				
	21	CB 63 42 70	Switch Knob		スイッチノブ		K-720		
	22	BA 08 29 30	Knob		ツマミ		K-500		
	23	VA 74 02 00	//		//		SR-100X		
※	24	CB 65 13 40	Rod		ロッド				
	25	NB 62 01 40	Leg Ass'y		レッグ Ass'y		C-80		
※	26	CB 65 19 90	Damper		ダンパー				
※	27	CB 65 20 00	Spacer		スペーサ				
	28	CB 06 88 80	Plastic Rivet	No.1027	プラスチックリベット				
	29	CB 60 92 60	//	No.6206	//			R	
	30	Ei 33 00 66	Binding Head Tapping Screw	3×6 FCM3-Bl	鉄サラタップタイト(Bタイト)	PACK			
	31	ED 33 00 66	Binding Head Screw	M3×6 FCM3-Bl	鉄バインド小ネジ	PACK		R.C.A.G.C.B	
	32	EK 35 00 20	Pan Head Tapping Screw	3×8 FCM3-Bl	ナベタップタイトネジ				
	33	Ei 33 00 86	Binding Head	3×8 FCM3-Bl	鉄バインドBタイト	PACK		R.C.A.G.C.B	
	34	EK 96 60 70	BW Head Tapping Screw	4×8 ZMC2-Bl	鉄BWヘッドSタイト				
	35	EK 33 60 20	//						

※New Parts (新規部品)

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets	ランク
36	EX 60 02 40	BW Head Tapping Screw	3×8φ8FCM3-BI	鉄BWヘッドタッピング2種ミゾ			
37	EK 33 60 10	〃	3×8φ10 FCM3	〃			
38	AA 62 73 10	Ground Terminal	SPG 3×13 MFNi-II	GND ターミナル			
39	EV 90 13 60	Toothed Locked Washer	φ10 φ3.6 FNM3-3g	鉄セムス平座金			
40	CB 65 42 80	Spacer		スペーサ			

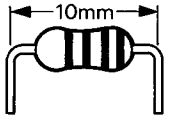
※New Parts（新規部品）

Parts List for Carbon Resistor

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ353100	※	12KΩ	HJ357120	HF857120
1.8 〃	HJ353180	※	15 〃	HJ357150	HF857150
2.2 〃	HJ353220	HF853220	18 〃	HJ357180	HF857180
3.3 〃	HJ353330	HF853330	22 〃	HJ357220	HF857220
4.7 〃	HJ353470	HF853470	27 〃	HJ357270	HF857270
5.6 〃	HJ353560	HF853560	33 〃	HJ357330	HF857330
10 〃	HJ354100	HF854100	39 〃	HJ357390	HF857390
15 〃	HJ354150	HF854150	47 〃	HJ357470	HF857470
22 〃	HJ354220	HF854220	56 〃	HJ357560	HF857560
27 〃	HJ354270	HF854270	68 〃	HJ357680	HF857680
33 〃	HJ354330	HF854330	82 〃	HJ357820	HF857820
39 〃	HJ354390	HF854390	91 〃	HJ357910	HF857910
47 〃	HJ354470	HF854470	100 〃	HJ358100	HF858100
56 〃	HJ354560	HF854560	120 〃	HJ358120	HF858120
68 〃	HJ354680	HF854680	150 〃	HJ358150	HF858150
82 〃	HJ354820	HF854820	180 〃	HJ358180	HF858180
100 〃	HJ355100	HF855100	220 〃	HJ358220	HF858220
110 〃	HJ355110	HF855110	270 〃	HJ358270	HF858270
120 〃	HJ355120	HF855120	330 〃	HJ358330	HF858330
150 〃	HJ355150	HF855150	390 〃	HJ358390	HF858390
160 〃	HJ355160	※	470 〃	HJ358470	HF858470
180 〃	HJ355180	HF855180	560 〃	HJ358560	HF858560
220 〃	HJ355220	HF855220	680 〃	HJ358680	HF858680
270 〃	HJ355270	HF855270	820 〃	HJ358820	HF858820
330 〃	HJ355330	HF855330	1.0MΩ	HJ359100	HF859100
390 〃	HJ355390	HF855390	1.2 〃	HJ359120	※
470 〃	HJ355470	HF855470	1.5 〃	HJ359150	HF859150
510 〃	※	HF855510	1.8 〃	HJ359180	HF859180
560 〃	HJ355560	HF855560	2.2 〃	HJ359220	HF859220
680 〃	HJ355680	HF855680	3.3 〃	HJ359330	HF859330
820 〃	HJ355820	HF855820	3.9 〃	HJ359390	※
910 〃	HJ355910	HF855910	4.7 〃	HJ359470	※
1.0KΩ	HJ356100	HF856100			
1.2 〃	HJ356120	HF856120			
1.5 〃	HJ356150	HF856150			
1.8 〃	HJ356180	HF856180			
2.0 〃	HJ356200	HF856200			
2.2 〃	HJ356220	HF856220			
2.4 〃	HJ356240	HF856240			
2.7 〃	HJ356270	HF856270			
3.0 〃	HJ356300	HF856300			
3.3 〃	HJ356330	HF856330			
3.6 〃	HJ356360	HF856360			
3.9 〃	HJ356390	HF856390			
4.7 〃	HJ356470	HF856470			
5.1 〃	HJ356510	HF856510			
5.6 〃	HJ356560	HF856560			
6.8 〃	HJ356680	HF856680			
8.2 〃	HJ356820	HF856820			
9.1 〃	HJ356910	HF856910			
10 〃	HJ357100	HF857100			

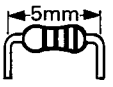
1/4W Type

HJ35○○○○



1/6W Type

HF85○○○○



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