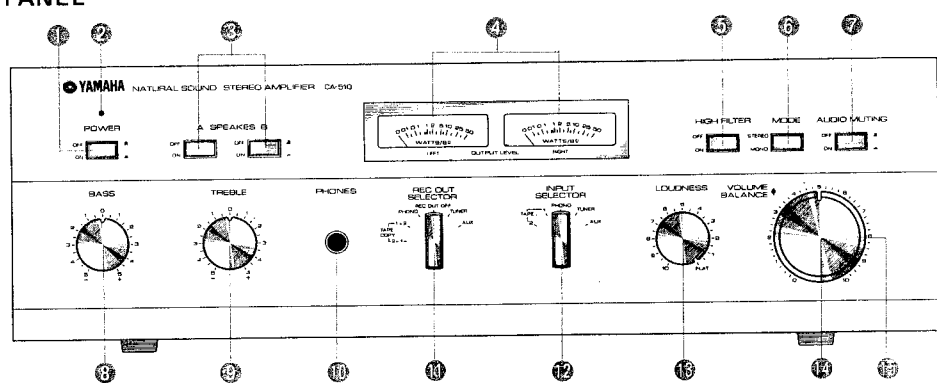


CA-510, 410II, V2

SERVICE MANUAL

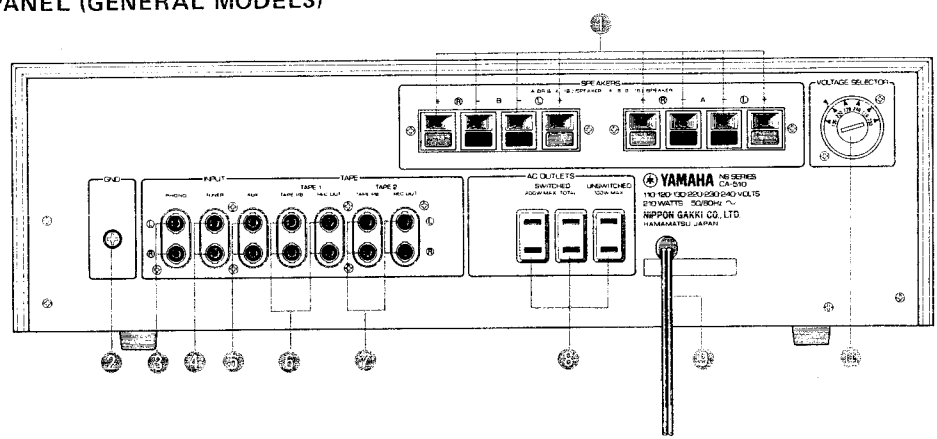
CA-510 : GENERAL, CANADIAN, AUSTRALIAN, EUROPEAN, BRITISH MODELS
 CA-410II : US MODEL
 CA-V2 : NORTH EUROPEAN, EUROPEAN, GENERAL, AUSTRALIAN MODELS

FRONT PANEL



- ① POWER SWITCH
- ② POWER INDICATOR (LED)
- ③ SPEAKER SELECTION SWITCH
- ④ OUTPUT LEVEL METERS
- ⑤ HIGH FILTER SWITCH
- ⑥ MODE SWITCH
- ⑦ AUDIO MUTING SWITCH
- ⑧ BASS CONTROL
- ⑨ TREBLE CONTROL
- ⑩ HEAD PHONE JACK
- ⑪ REC OUT SELECTOR
- ⑫ INPUT SELECTOR SWITCH
- ⑬ LOUDNESS CONTROL
- ⑭ VOLUME CONTROL
- ⑮ BALANCE CONTROL

REAR PANEL (GENERAL MODELS)



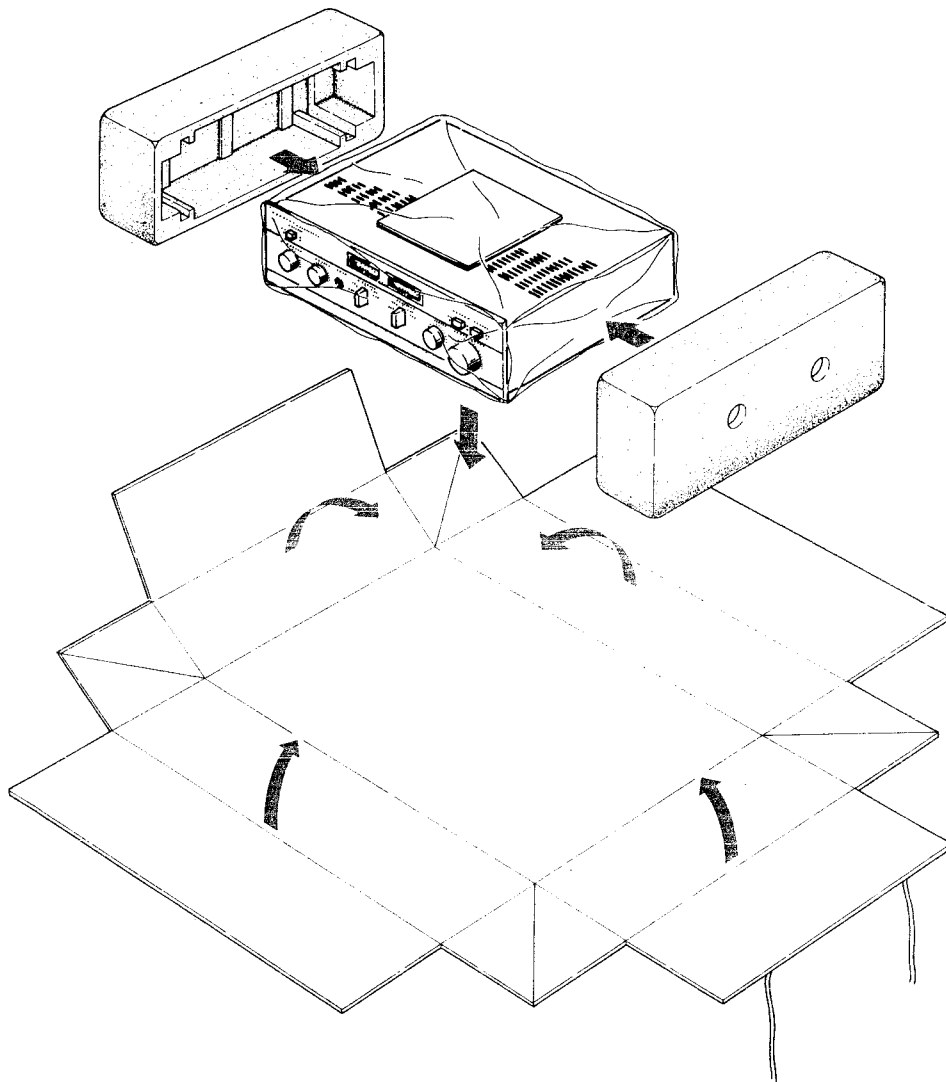
- ① SPEAKER OUTPUT TERMINALS
- ② GROUND TERMINAL
- ③ PHONO INPUT JACKS
- ④ TUNER INPUT JACKS
- ⑤ AUX INPUT JACKS
- ⑥ TAPE 1 PB AND REC OUT TERMINALS
- ⑦ TAPE 2 PB AND REC OUT TERMINALS
- ⑧ AC OUTLETS
- ⑨ AC CORD
- ⑩ VOLTAGE SELECTOR

004361

■ CONTENTS

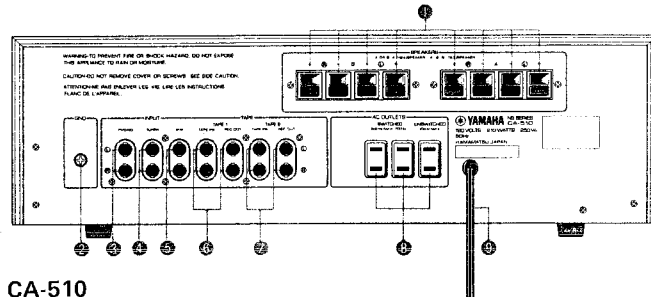
PACKAGE	2
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DISASSEMBLY PROCEDURES	5
BLOCK DIAGRAM	7
LEVEL DIAGRAM	7
ADJUSTMENT	8
PRINTED CIRCUIT BOARD/WIRING	9
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■ PACKAGE

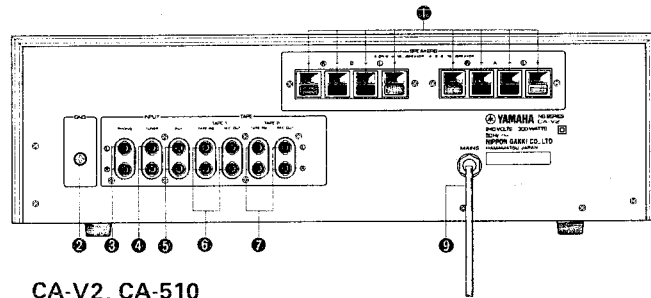


REAR PANEL

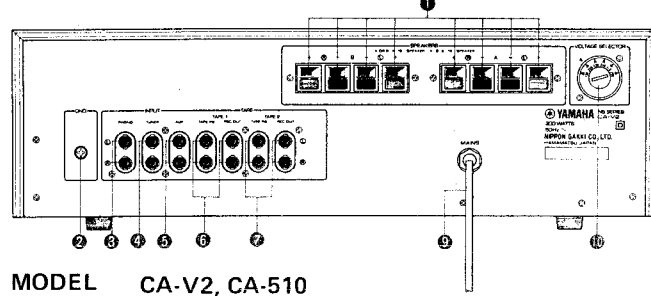
▼ US & CANADIAN MODELS US : CA-410II CANADIAN : CA-510



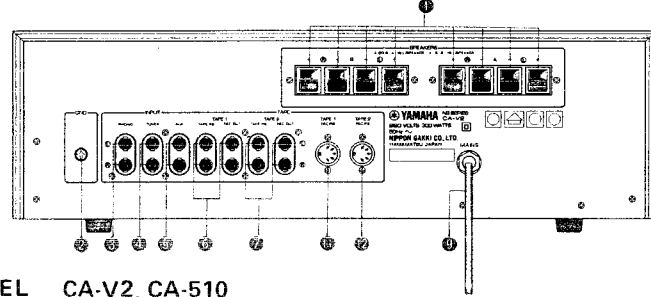
▼ BRITISH MODEL CA-510



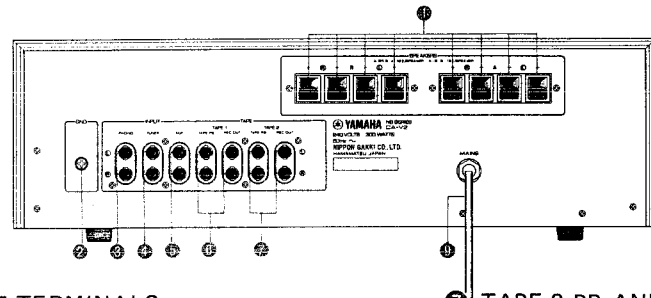
▼ EUROPEAN MODEL CA-V2, CA-510



▼ NORTH EUROPEAN MODEL CA-V2, CA-510



▼ AUSTRALIAN MODEL CA-V2, CA-510

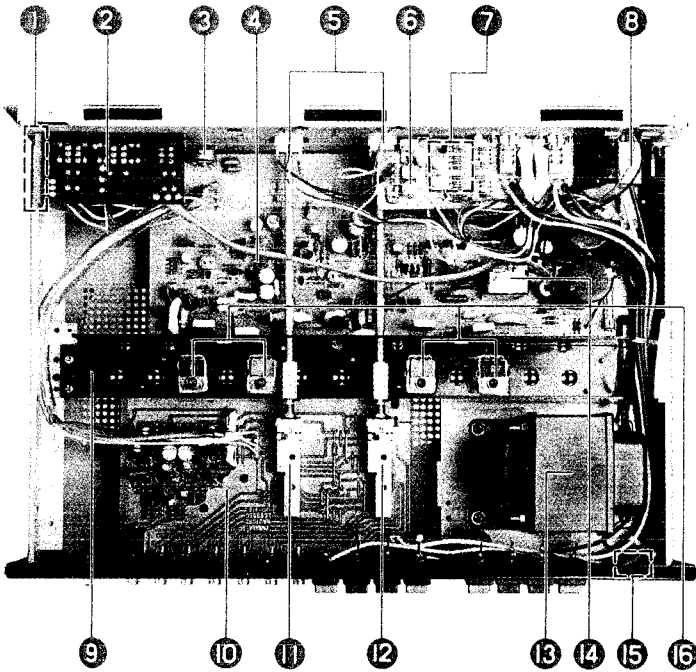


- ① SPEAKER OUTPUT TERMINALS
- ② GROUND TERMINAL
- ③ PHONO INPUT JACKS
- ④ TUNER INPUT JACKS
- ⑤ AUX INPUT JACKS
- ⑥ TAPE 1 PB AND REC OUT TERMINALS

- ⑦ TAPE 2 PB AND REC OUT TERMINALS
- ⑧ AC OUTLETS
- ⑨ AC CORD
- ⑩ VOLTAGE SELECTOR
- ⑪ TAPE 1 DIN PB AND REC OUT TERMINALS
- ⑫ TAPE 2 DIN PB AND REC OUT TERMINALS

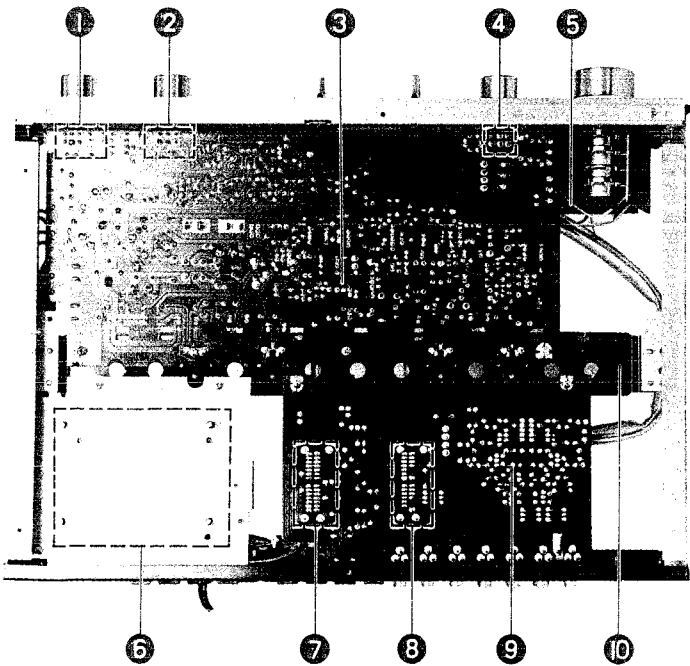
INTERNAL VIEW

1. TOP VIEW (GENERAL MODELS)



- ① MAIN CIRCUIT BOARD 2: (VOLUME)
- ② MAIN CIRCUIT BOARD 3
- ③ LOUDNESS CONTROL
- ④ MAIN CIRCUIT BOARD 1
- ⑤ OUTPUT LEVEL METERS
- ⑥ MAIN CIRCUIT BOARD 5
- ⑦ MAIN CIRCUIT BOARD 4
- ⑧ POWER SWITCH
- ⑨ HEAT SINK
- ⑩ FUNCTION CIRCUIT BOARD
- ⑪ INPUT SELECTOR SWITCH
- ⑫ REC OUT SELECTOR SWITCH
- ⑬ POWER TRANSFORMER
- ⑭ PROTECTION CIRCUIT RELAY
- ⑮ VOLTAGES ELECTOR
- ⑯ POWER TRANSISTORS

2. BOTTOM VIEW



- ① BASS CONTROL
- ② TREBLE CONTROL
- ③ MAIN CIRCUIT BOARD 1
- ④ LOUDNESS CONTROL
- ⑤ MAIN CIRCUIT BOARD 3
- ⑥ POWER TRANSFORMER
- ⑦ REC OUT SELECTOR SWITCH
- ⑧ INPUT SELECTOR SWITCH
- ⑨ FUNCTION CIRCUIT BOARD
- ⑩ HEAT SINK

DISASSEMBLY PROCEDURES

1. Top cover removal

- a. Undo the four cosmetic screws at the left and right sides of the top cover first and then remove the top cover.

* With the top cover removed, you can proceed to replace the fuse, exchange the meter lamps and other parts as well as make any necessary adjustments or provide any necessary servicing.

2. Bottom cover removal

- a. Stand the model on its side and remove the seven screws on the rear panel. There is no need to undo any of the screws which are not related to the bottom cover (these are for securing the front panel).

* With the bottom cover removed, you can proceed to replace parts which you could not otherwise reach directly on the sub-panel and you can also make any necessary check.

3. Front panel removal

- a. Remove all the knobs on the front panel.
Pull the volume, balance, loudness and tone control knobs toward you and remove. Loosen the setscrews of the input and REC OUT selector knobs with a 2 mm diameter hexagonal wrench and then remove the knobs.
- b. Remove the top and bottom covers. (Refer to Steps 1 and 2.)
- c. Remove screws (1) and (2) in Photo 1 and also the three screws used to secure the front panel and positioned at the rear. Now pull the front panel toward you and remove.

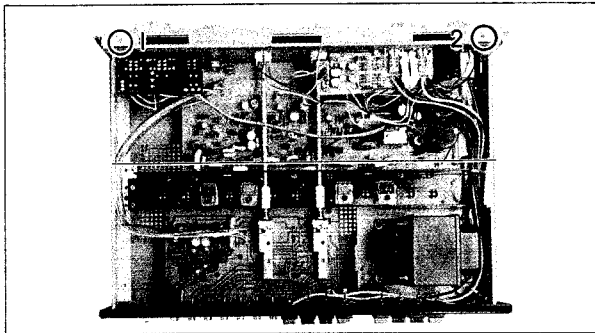


Photo 1

4. Main printed circuit board 1 (power supply, main amp section) removal

- a. Remove the front panel. (Refer to Step 3.)
- b. Remove nuts (1) to (3) in Photo 2, and also remove E rings (4) and (5).

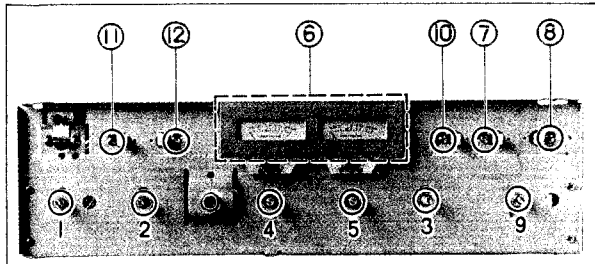


Photo 2

- c. Slide joints (A) and (B) in the direction indicated by the arrows in Photo 3, and remove the couplings between the switches and the shafts.
- d. Disconnect the lead wires which are connected to the main printed circuit board 1.
- e. Remove screws (1) to (4) in Photo 3 as well as screws (1) to (5) in Photo 4. Now remove the main printed circuit board 1 together with the heat sink.
* You will be able to remove the main printed circuit board easily if you first remove the screws [screws (1) to (6) in Photo 5] that secure the input terminals of the function printed circuit board.

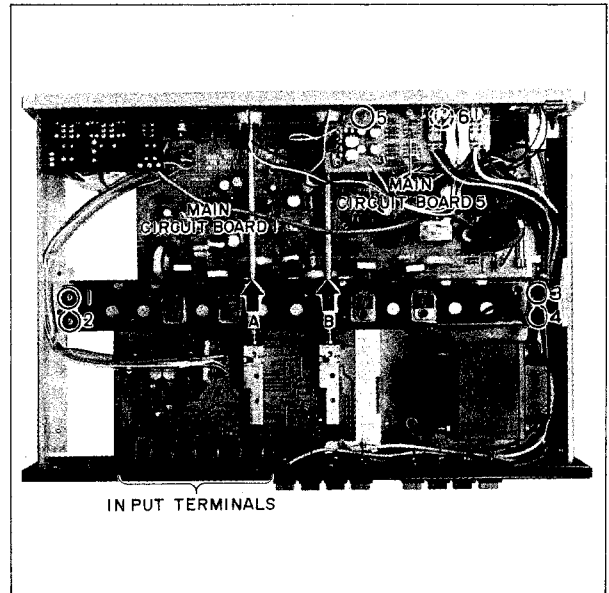


Photo 3

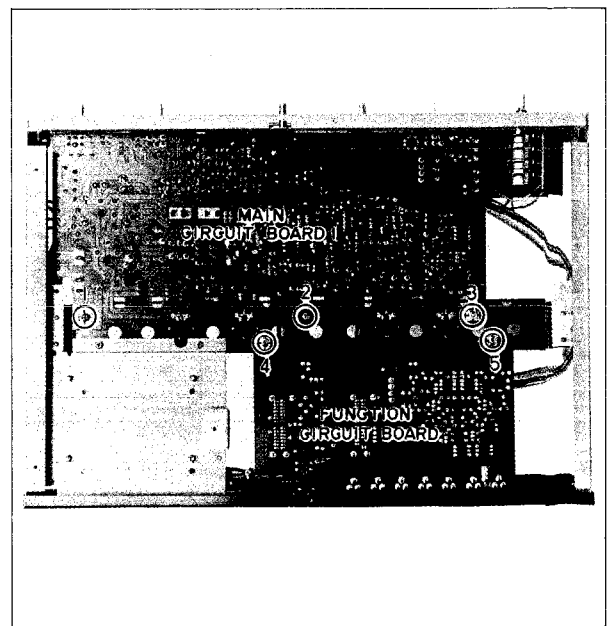


Photo 4

5. Function printed circuit board removal

- a. Remove the top and bottom covers. (Refer to Steps 1 and 2.)
- b. Remove screws (1) to (6) in Photo 5.
- c. Slide joints (A) and (B) in the direction indicated by the arrows in Photo 3, and remove the couplings between the switches and the shafts.
- d. Disconnect the lead wires which are connected to the function printed circuit board.
- e. Remove screws (4) and (5) in Photo 4, and then remove the function printed circuit board.

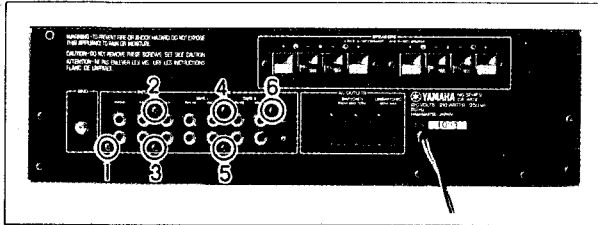


Photo 5

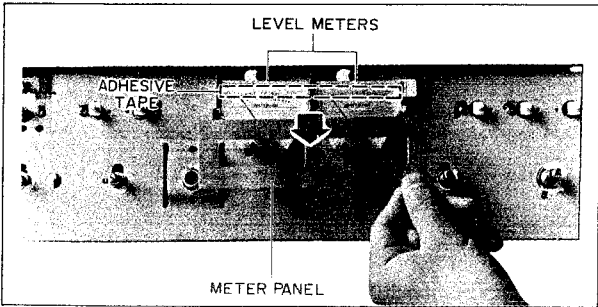


Photo 6

6. Level meter replacement

- a. Remove the front panel. (Refer to Step 3.)
 - b. Pull out the cosmetic panel of the level meters in Photo 6 gently.
 - c. Disconnect the lead wires of the level meters, and peel off the double-sided adhesive tape at the back of the meters together with the meters.
 - * Replace the adhesive tape, too, when you replace the meters.
- Refer to Photo 7 for the lead wire connections.

7. Main printed circuit board 2 removal

- a. Remove the front panel. (Refer to Step 3.)
- b. Remove screws (7), (8) and (10) as well as nut (9) in Photo 2, and then remove the printed circuit board.

8. Main printed circuit board 5 (meter amp section) removal

- a. Remove screws (5)(6) in Photo 3 as well as screws (11) and (12) in Photo 2.
- b. Remove the main printed circuit board 5.

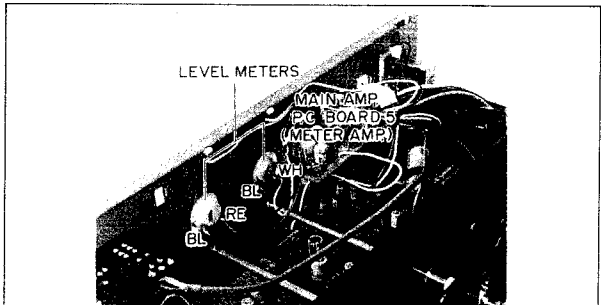
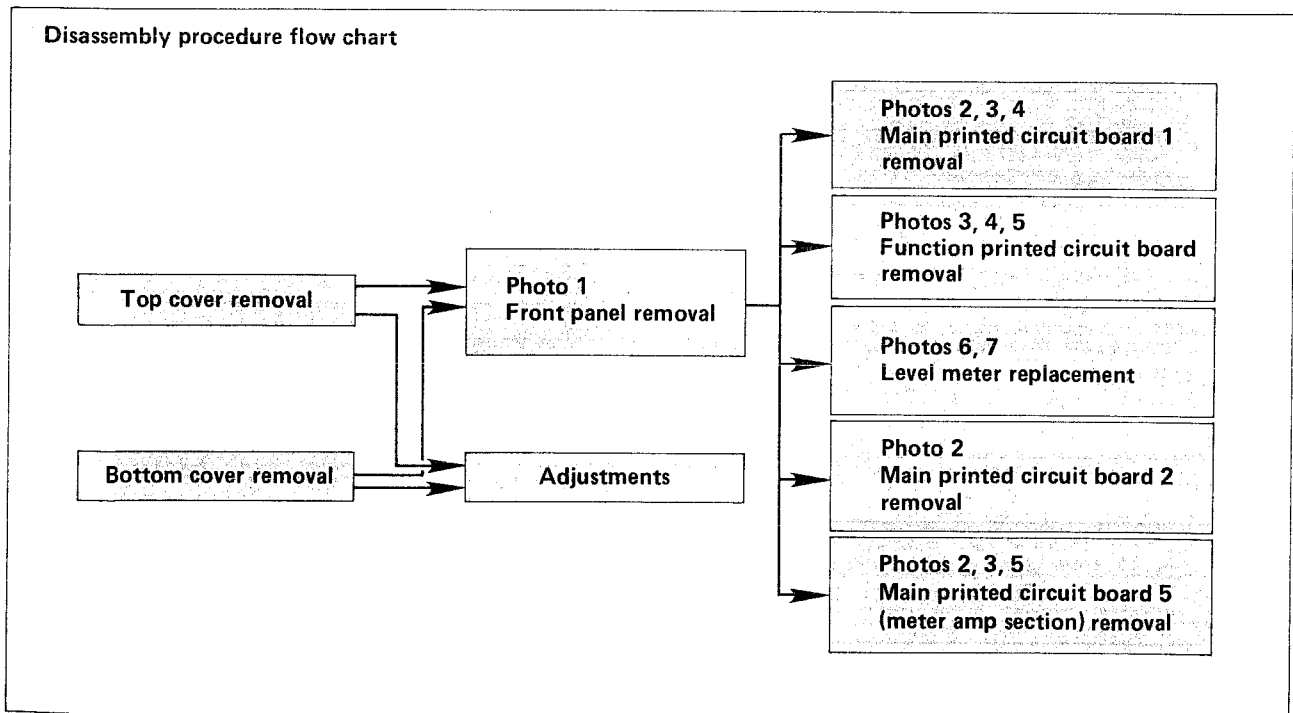
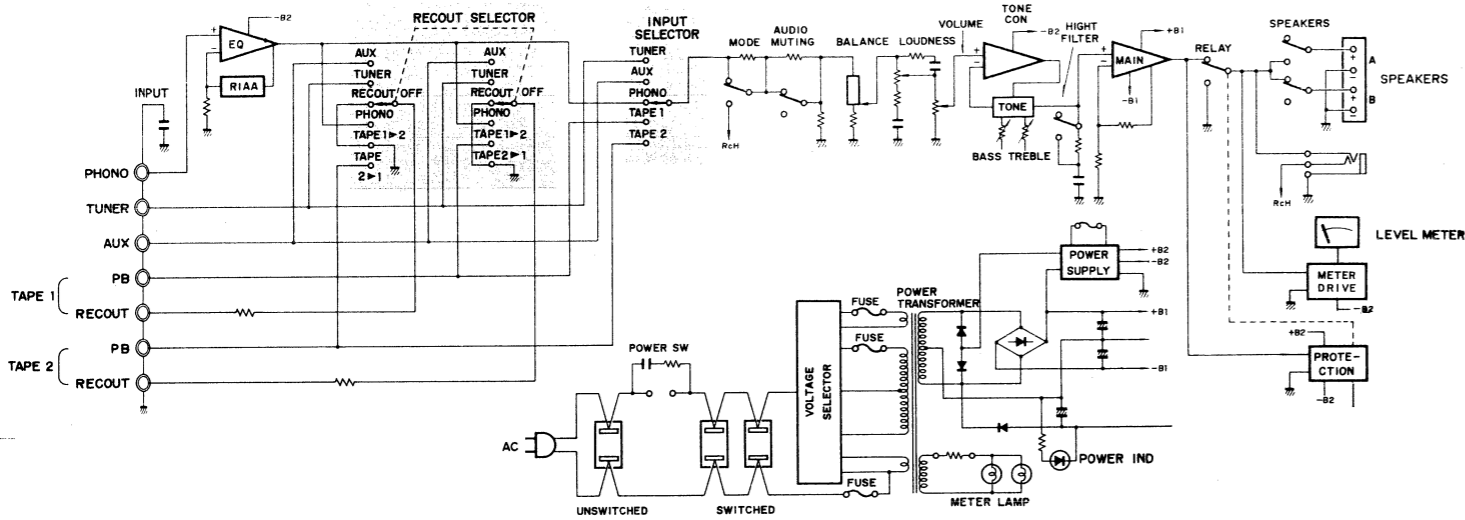


Photo 7



BLOCK DIAGRAM



ADJUSTMENT

1. Main amp adjustments

Before adjusting

- * Proceed with the adjustments about 3 or 4 minutes after the power has been switched on to enable the operation of the amplifier to stabilize.
- * Connect 8-ohm (over 40W) dummy loads to the speaker terminals.
- * Set the level controls, volume and loudness controls to their lowest positions.

a. Idling current adjustment

Left channel: Rotate VR407 on the main printed circuit board 1 and set so that the voltage across TP1 and TP3 comes within a range of $10 \pm 3\text{mV}$.

Right channel: Rotate VR408 on the main printed circuit board 1 and set so that voltage across TP2 and TP4 comes within a range of $10 \pm 3\text{mV}$.

Measurement precautions

- * Use a highly sensitive digital voltmeter for the measurement.
- * Rotate the adjustment variable resistors slowly.
- * Take note of the polarities of the test points.
 - TP3 and TP4 have a positive potential, while TP1 and TP2 have a negative potential.

* Repeat the above adjustments several times.

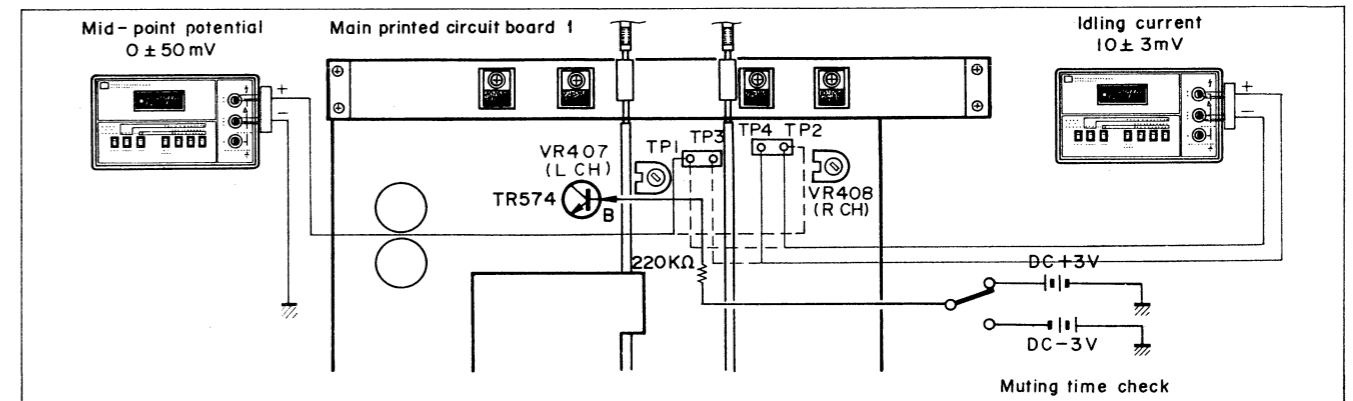
b. Mid-point potential adjustment

The potential difference between E and TP1 and E and TP2 of the main printed circuit board 1 should be less than $0 \pm 50\text{mV}$.

c. Speaker protection circuit check

The relay should come on 4 ± 1 seconds after the power has been switched on.

The relay should go off in less than 4 seconds when a DC $\pm 3\text{V}$ voltage is applied across E and TP1 of the main printed circuit board.



2. Level meter adjustments

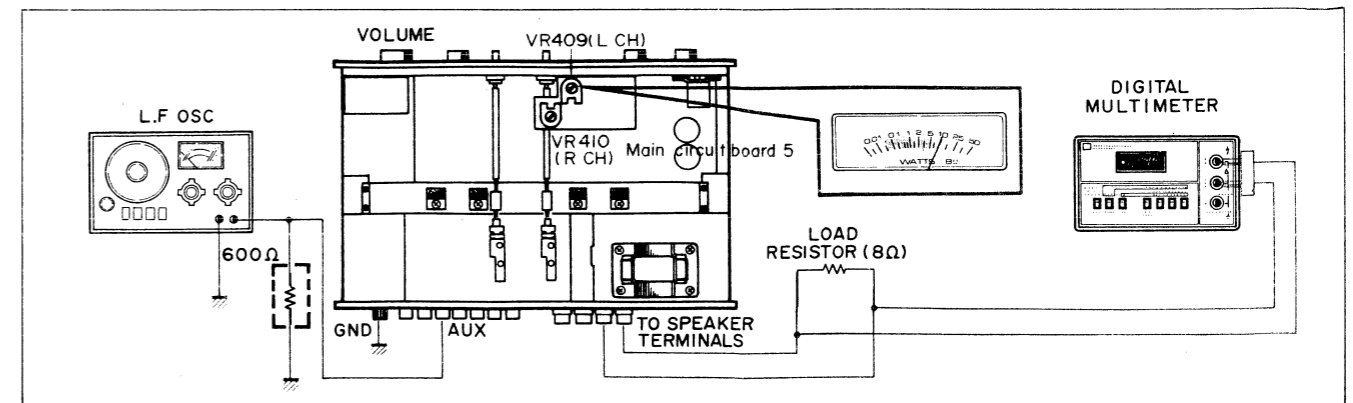
Before adjusting

- * Connect an 8-ohm (over 40W) dummy load and an electronic voltmeter in parallel to the output terminals.
- * Connect a low-frequency oscillator to the AUX input terminal through a 600-ohm resistance, and apply 1kHz sine waves.

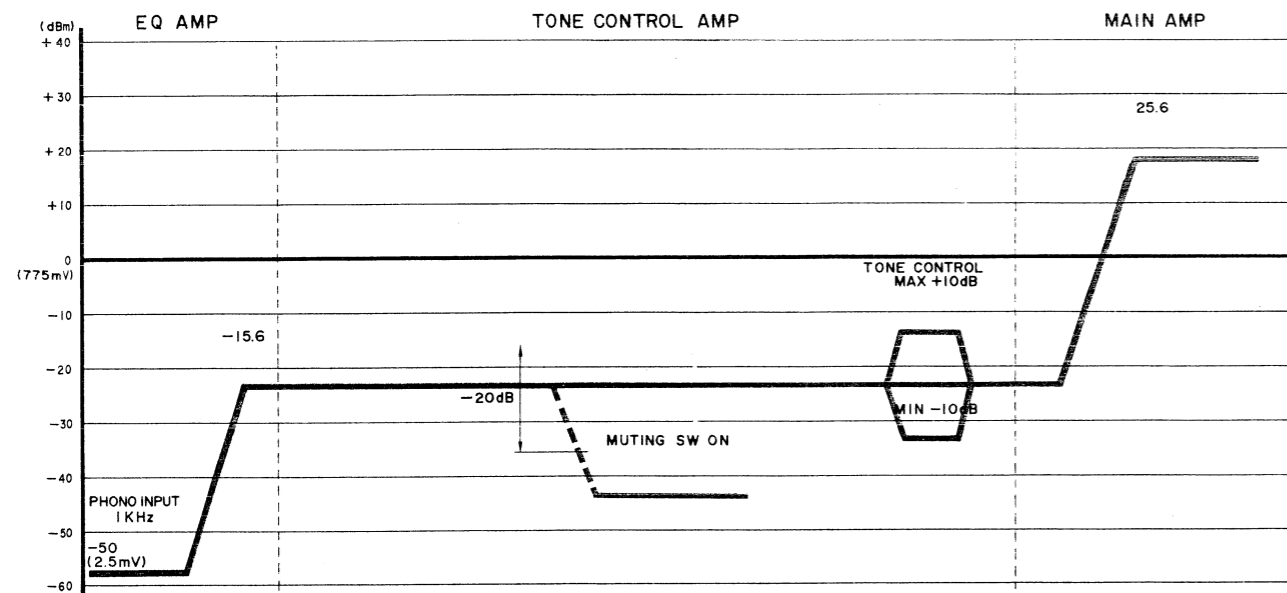
Main printed circuit board 5 (meter amp section)

- * Actuate the low-frequency oscillator, apply 1kHz signals and adjust the volume control to produce an output of 10W (8.94VRMS/8-ohm) at the left and right speaker output terminals.

* Next, rotate VR409 (left channel) and VR410 (right channel) on the main printed circuit board 4 and let so that the pointers of both the left and right level meters deflect to 10W.



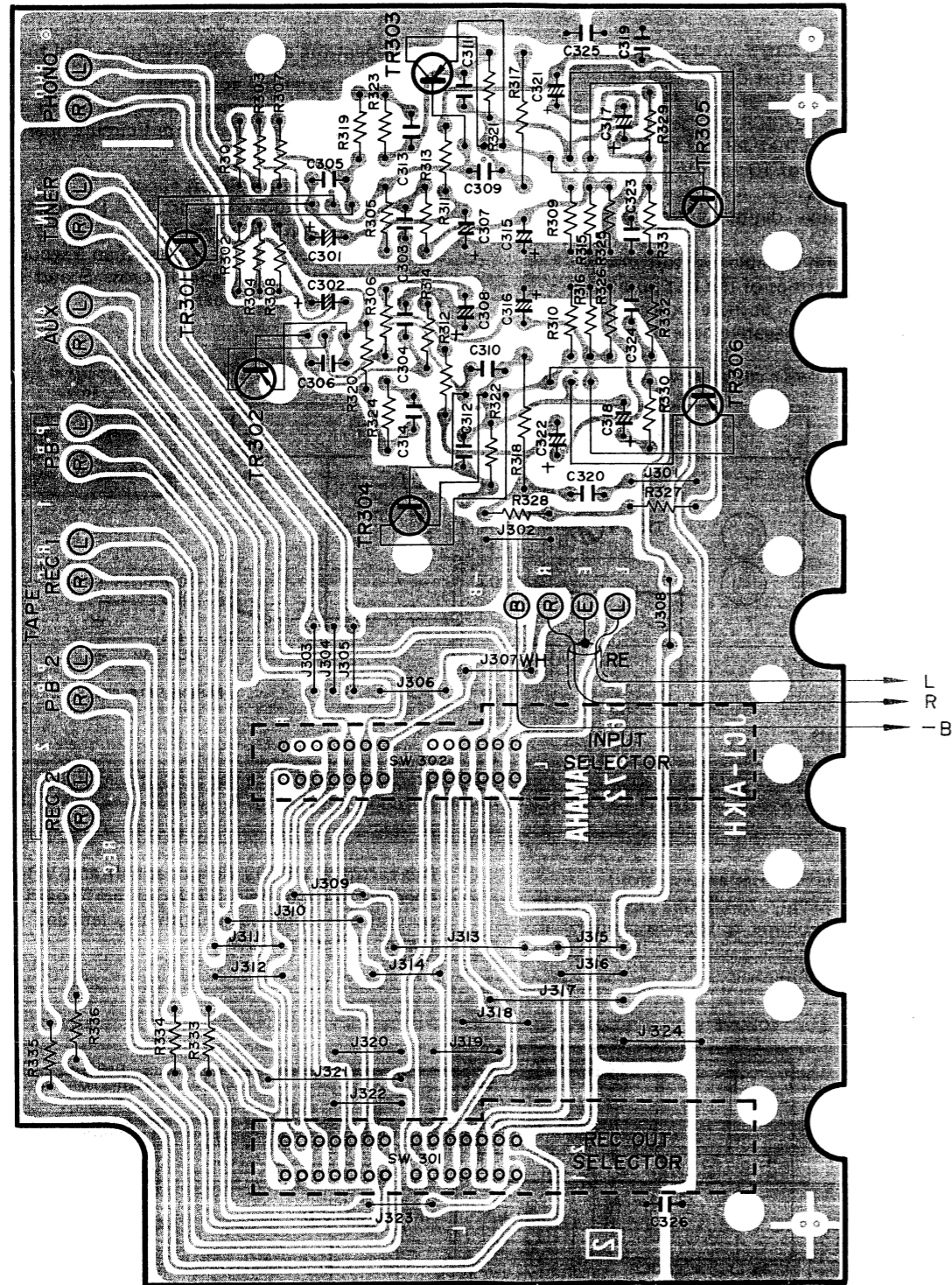
LEVEL DIAGRAM



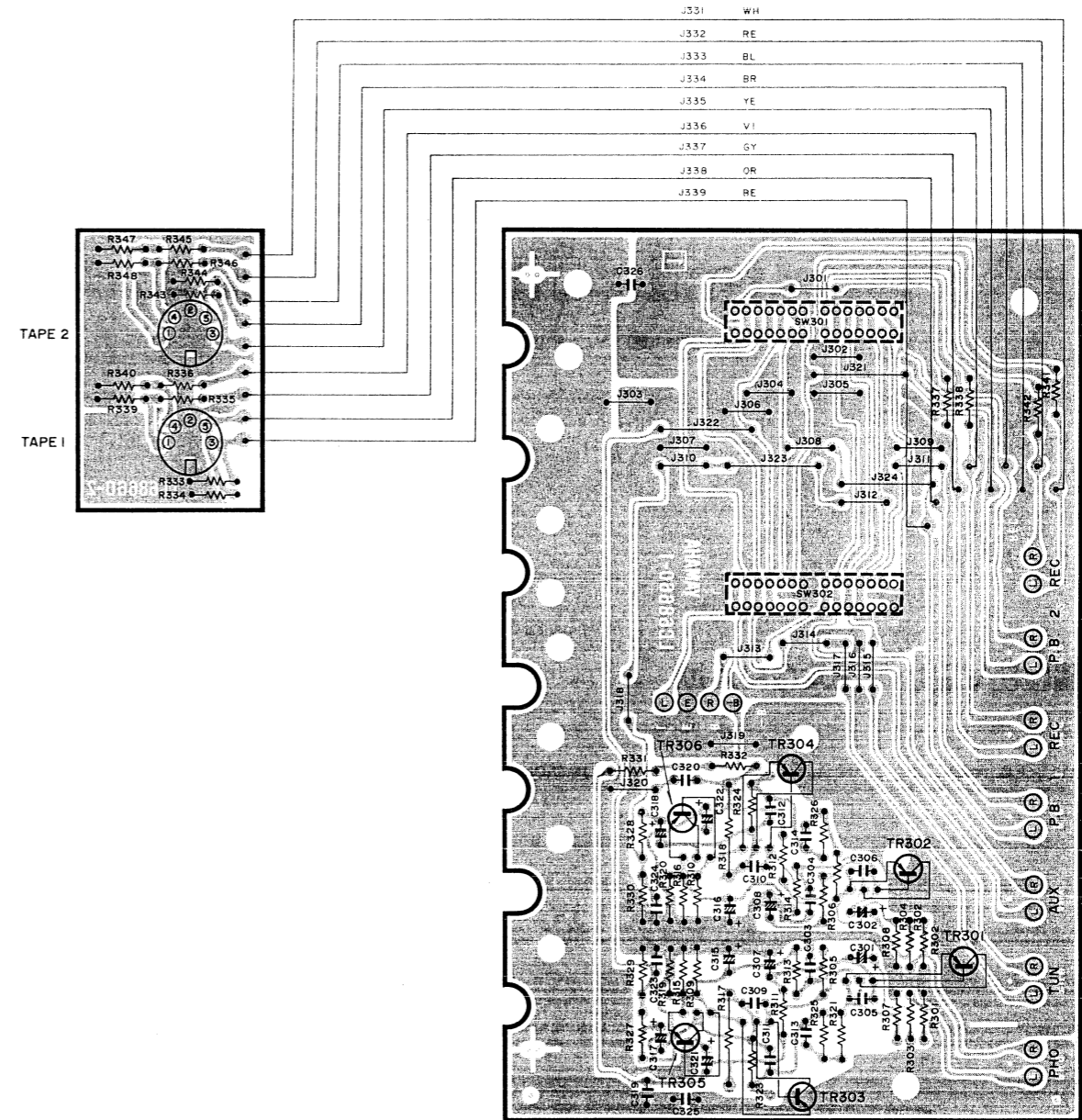
PRINTED CIRCUIT BOARD/WIRING

1. FUNCTION CIRCUIT BOARD

NA07082: US MODEL ONLY

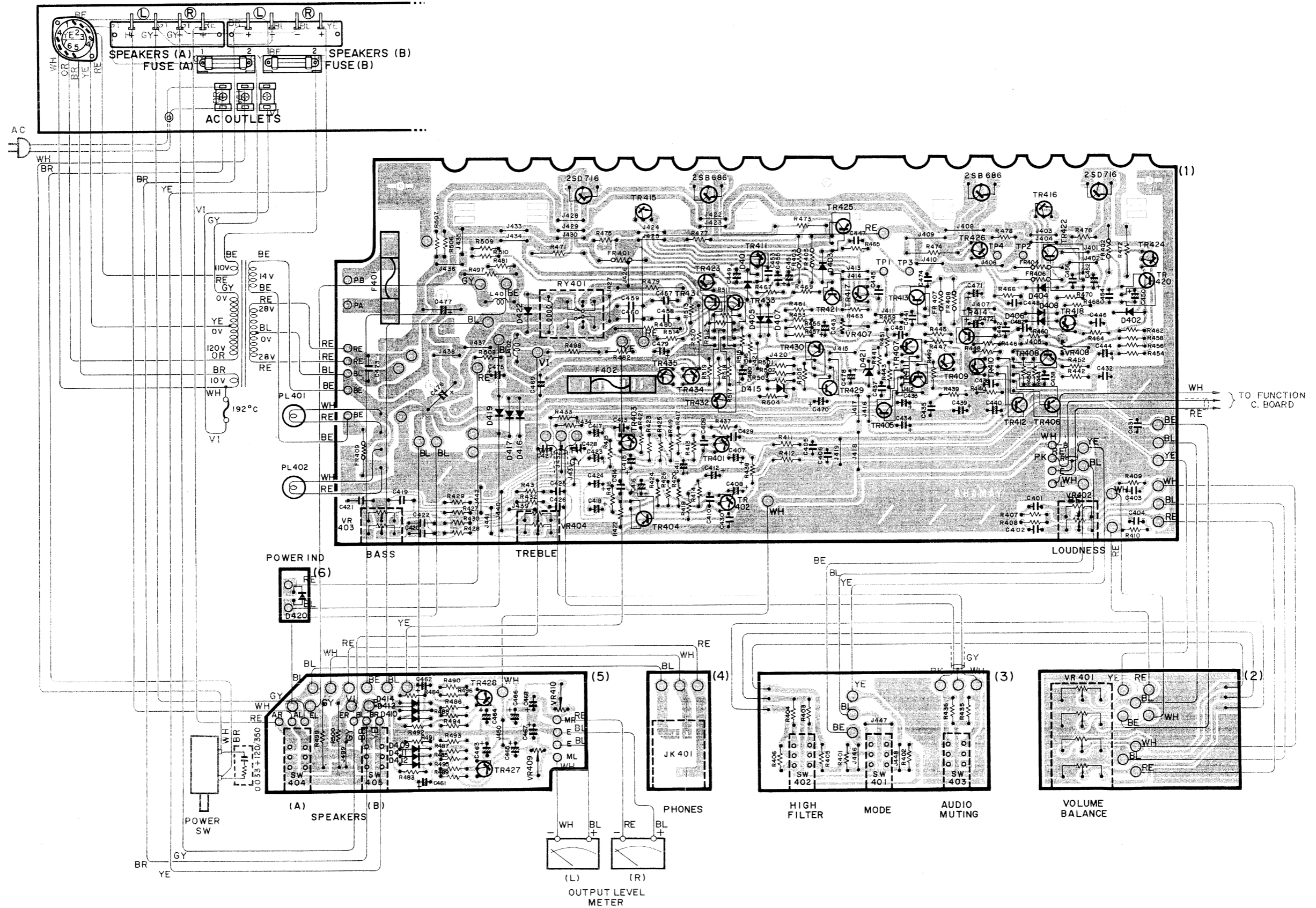


NA07083: EUROPEAN MODEL



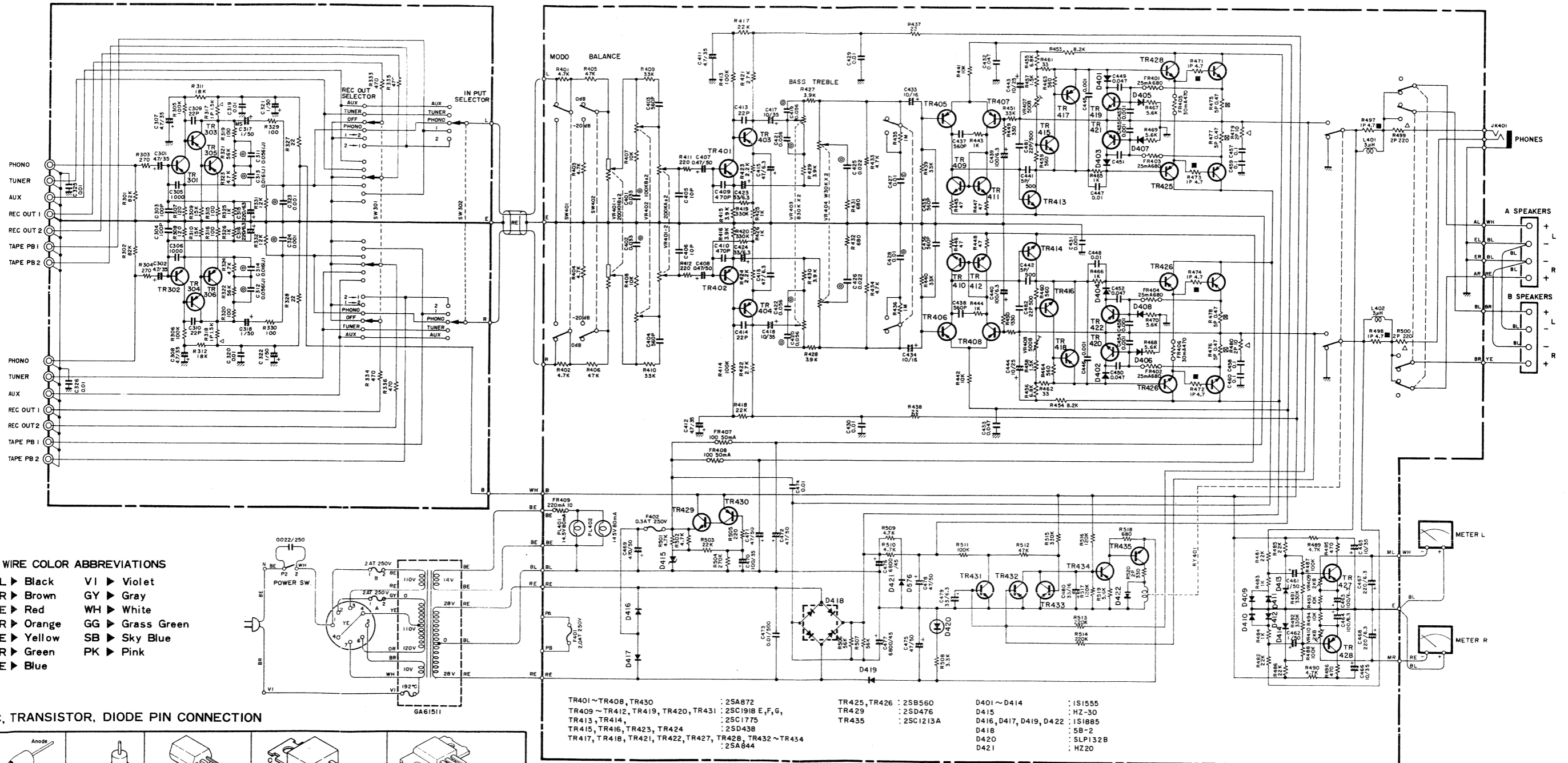
2. MAIN CIRCUIT BOARD

NA07105
REAR PANEL (GENERAL MODELS)



SCHEMATIC DIAGRAM

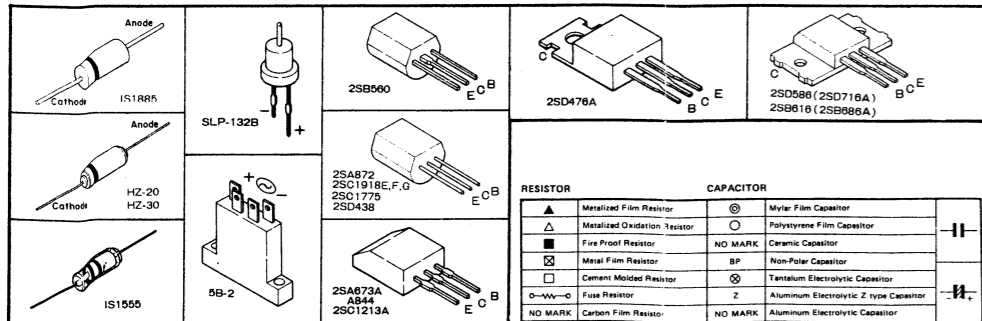
NA07003 (US Model: NA07082)



● WIRE COLOR ABBREVIATIONS

- BL ▶ Black
- BR ▶ Brown
- RE ▶ Red
- OR ▶ Orange
- YE ▶ Yellow
- GR ▶ Green
- BE ▶ Blue
- VI ▶ Violet
- GY ▶ Gray
- WH ▶ White
- GG ▶ Grass Green
- SB ▶ Sky Blue
- PK ▶ Pink

■ I.C. TRANSISTOR, DIODE PIN CONNECTION

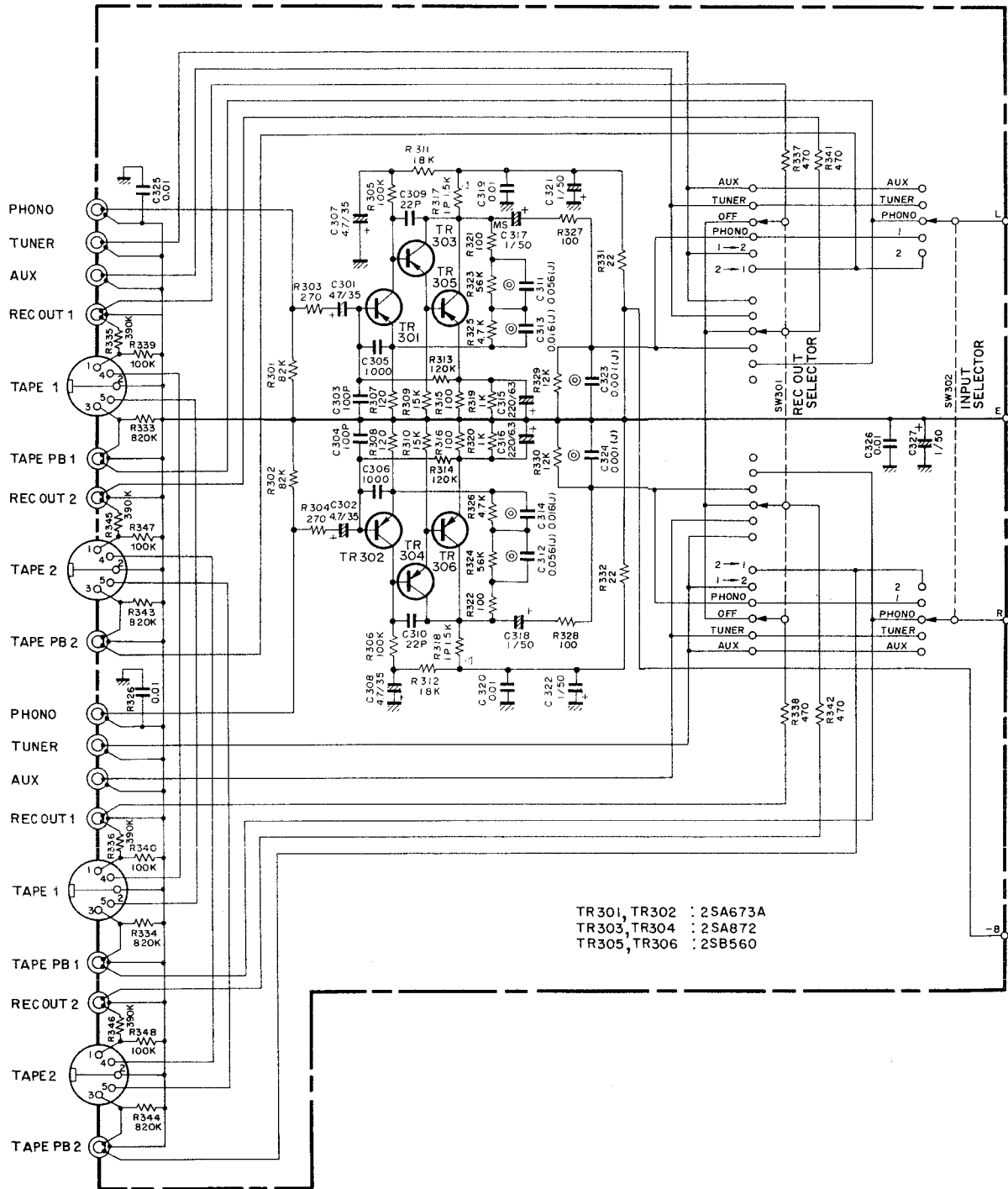


- TR401~TR408, TR430 : 2SA872
- TR409~TR412, TR419, TR420, TR431 : 2SC1918 E, F, G
- TR413, TR414 : 2SC1775
- TR415, TR416, TR423, TR424 : 2SD438
- TR417, TR418, TR421, TR422, TR427, TR428, TR432~TR434 : 2SA844

- TR425, TR426 : 2SB560
- TR429 : 2SD476
- TR435 : 2SC1213A

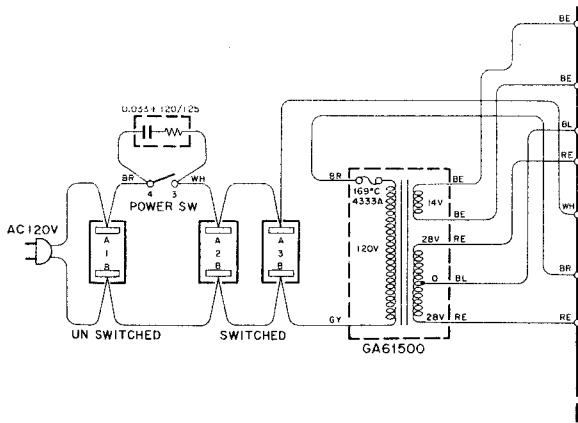
- D401~D414 : IS1555
- D415 : HZ-30
- D416, D417, D419, D422 : IS1885
- D418 : 5B-2
- D420 : SLP132B
- D421 : HZ20

NA07083: EUROPEAN MODEL

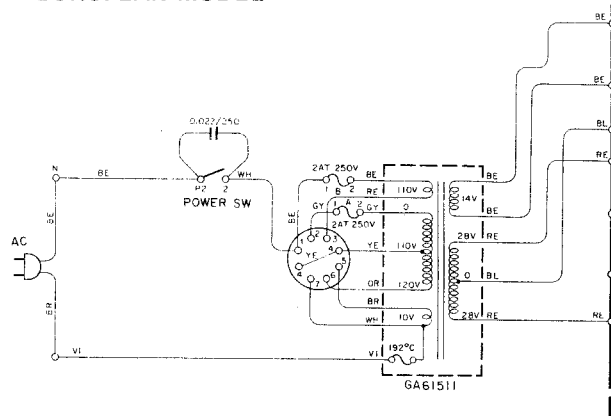


PARTIAL CHANGES MADE ACCORDING TO DESTINATION

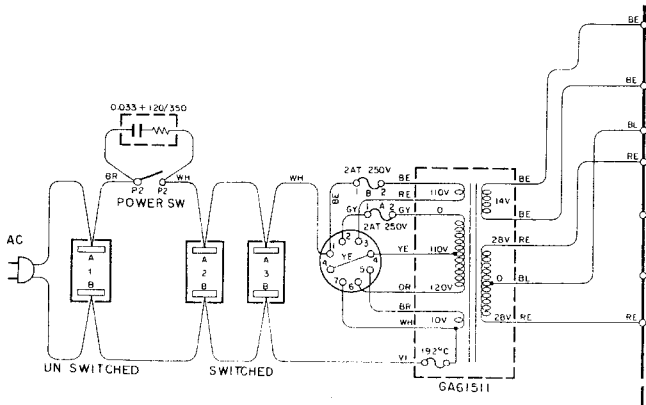
* US & CANADIAN MODELS



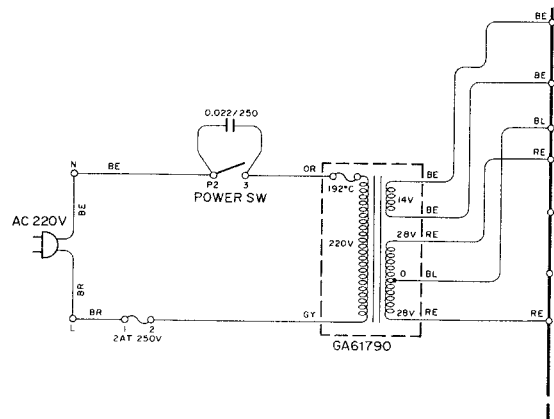
* EUROPEAN MODEL



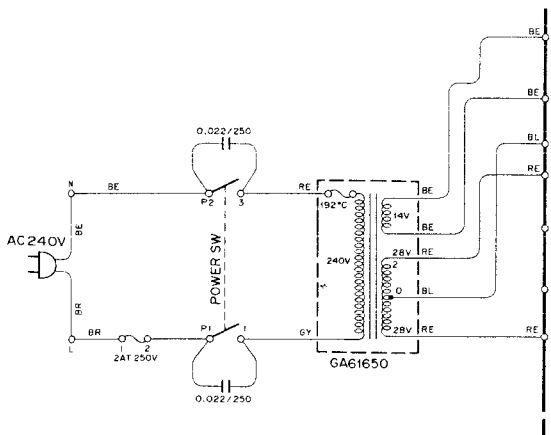
* GENERAL MODELS



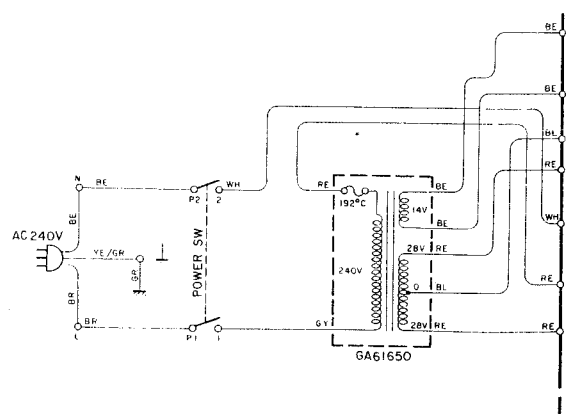
* AUSTRALIAN MODEL



* BRITISH MODEL



* NORTH EUROPEAN MODEL

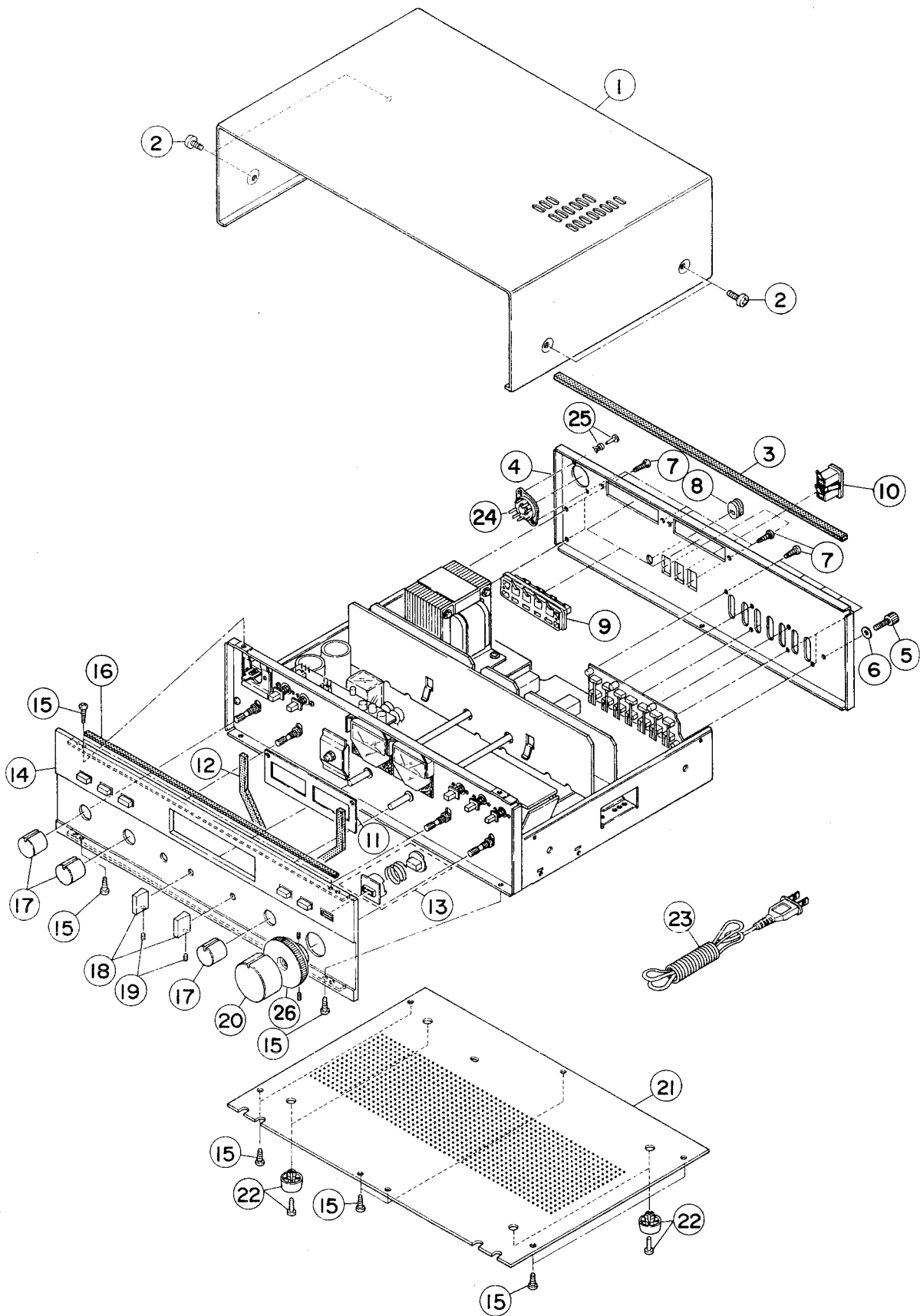


SPECIFICATIONS

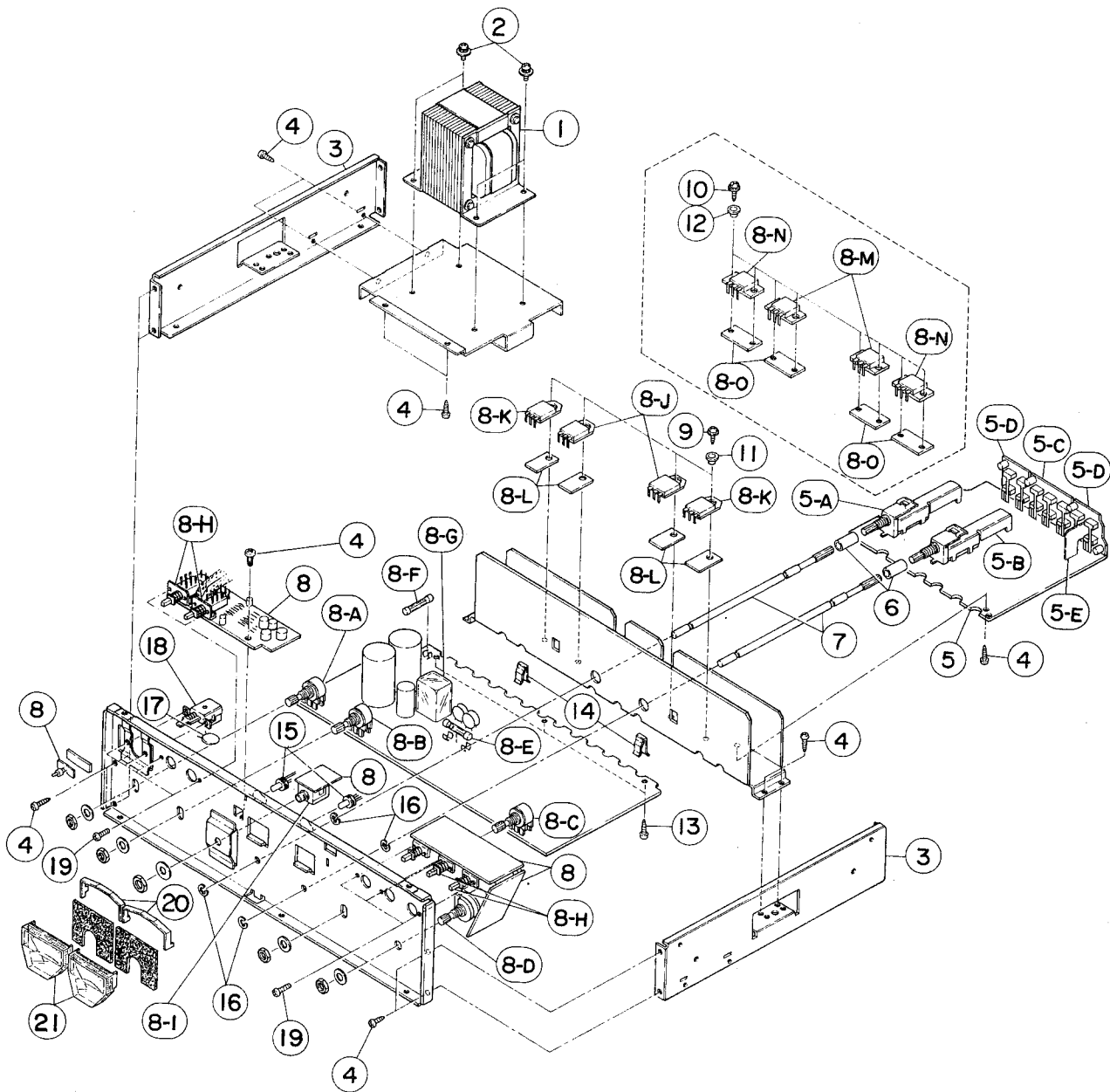
OUTPUT	8 Ω , 1KHz, T.H.D 0.05% 4 Ω , 1KHz, T.H.D 0.1%	40W + 40W 45W + 45W
POWER BAND WIDTH	8 Ω , 17.5W, T.H.D 0.005%	10Hz – 40KHz
DAMPING FACTOR		50
INPUT SENSITIVITY/ IMPEDANCE	PHONO TUNER AUX TAPE 1, TAPE 2, PB	3.0mV/47K Ω 150mV/47K Ω 150mV/47K Ω 150mV/47K Ω
PHONO MAXIMUM INPUT (0.05%)		135mV
OUTPUT VOLTAGE/IMPEDANCE	REC OUT DIN TERMINAL	150mV/600 Ω 30mV/80K Ω
FREQUENCY RESPONSE	RIAA EQUALIZATION PHONO – REC OUT 30Hz ~ 15KHz TUNER AUX, TAPE 1, 2 P. B – SP OUT	0 \pm 0.3dB 0 \pm 0.5dB
TOTAL HARMONIC DISTORTION	PHONO \rightarrow REC OUT, OUTPUT 1V, (20Hz ~ 20KHz) TUNER \rightarrow SP OUT, OUTPUT 17.5W (20Hz ~ 20KHz)	Less than 0.01%
IM DISTORTION	TUNER, AUX, TAPE 1, 2 – SP OUT 8 Ω , 17.5W, 60Hz: 7KHz = 4 : 1	Less than 0.02%
N.D.C.R	PHONO \rightarrow SP OUT, T.H.D, 0.1% VOL – 20dB	30mW ~ 35W
S/N	PHONO INPUT SHORT TUNER, AUX, TAPE 1, 2 INPUT SHORT, IHF. A	85dB 100dB
RESIDUAL NOISE	IHF. A	160 μ V
TONE CONTROL	BASS TURN OVER BASS BOOST/CUT TREBLE TURN OVER TREBLE BOOST/CUT	500Hz \pm 10dB (20Hz) 3KHz \pm 10dB (at 20KHz)
FILTER	SUBSONIC FILTER (EQ) HIGH FILTER	12Hz, –12dB/oct 8KHz, –6dB/oct
CHANNEL SEPARATION	PHONO – SP OUT, 1KHz TUNER – SP OUT, 1KHz	65dB 65dB
LOUDNESS CONTROL		
AUDIO MUTING		–20dB
SPEAKER LOAD IMPEDANCE		4 ~ 16 Ω
HEADPHONE OUTPUT	20Hz ~ 20KHz, 8 Ω	43mW
SEMICONDUCTORS	TRANSISTORS DIODES ZENER DIODES LED	45 23 2 1
AC OUTLETS	SWITCHED 2 UN SWITCHED 1	TOTAL 200W 100W
POWER SOURCE		AC 110V ~ 240V 50/60Hz
	210W: US & CANADIAN, GENERAL MODELS 300W: EUROPEAN, AUSTRALIAN, BRITISH MODELS	
DEMENSIONS (W x H x D)mm		435 x 139 x 333
WEIGHT		7.8 kg

*Specifications subject to change without notice.

■ PARTS LIST



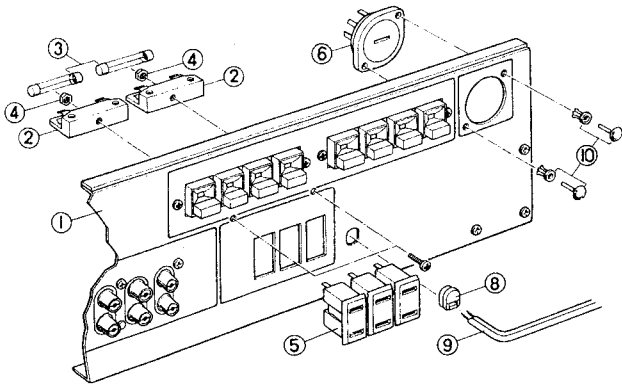
Ref. No.	Part No.	Description (部 品 名)	Market	Remarks
1	32:00:00:AA:08:92:60	Top cover	U, C	
	32:00:00:AA:08:23:50	- do. -	G, E, RA	CA-V2
	32:00:00:DC:61:95:10	- do. -	R, A, E, G, B	
2	42:00:00:ED:15:01:00	Bind head screw M5 x 10 FNM3-3g	U, C	
	42:00:00:EZ:00:14:10	BW head screw M5 x 10 FCM3-BI	R, A, E, B	
3	42:00:00:CB:07:58:90	Anti vibration tape		
4	32:00:00:AA:09:14:90	Rear panel	U	CA-410II
	32:00:00:AA:09:15:00	- do. -	E	CA-510
	32:00:00:AA:09:15:10	- do. -	R	- do. -
	32:00:00:AA:09:15:20	- do. -	A	- do. -
	32:00:00:AA:09:20:30	- do. -	B	- do. -
	32:00:00:AA:09:21:40	- do. -	G	- do. -
	32:00:00:AA:09:32:20	- do. -	C	- do. -
	32:00:00:AA:09:38:40	- do. -	G	CA-V2
	32:00:00:AA:09:39:10	- do. -	E	- do. -
5	32:00:00:AA:08:73:20	GND Terminal		
6	42:00:00:EV:90:13:60	Plain washer sems type φ3.6 FNM3-BI		
7	42:00:00:EN:33:00:10	Bind head tapping screw M3 x 8 FCM3-BI		
8	42:00:00:CB:06:86:30	Cord stopper SR-3P-4	R, U, C	
	CB:07:06:90	- do. - EA-5	A, E, G	
	42:00:00:CB:07:27:50	- do. - SR-4N-4	B	
9	42:00:00:LA:00:18:80	4P Push terminal		
10	42:00:00:LB:20:07:10	AC Socket	U, C	
	42:00:00:LB:20:09:10	- do. -	R	
11	32:00:00:BA:07:16:10	Meter panel		
	32:00:00:BA:07:41:40	- do. -	CA-V2	
12	42:00:00:CB:07:80:30	Shade tape		
13	32:00:00:NB:08:29:30	Push button assembly		
	32:00:00:NB:08:71:00	- do. -	CA-V2	
14	32:00:00:NB:08:50:10	Front panel assembly	R, A, E, G, B	
	32:00:00:NB:08:46:80	- do. -	U	
	32:00:00:NB:08:58:30	- do. -	C	
	32:00:00:NB:08:70:70	- do. -	CA-V2	
15	42:00:00:EN:03:00:20	Bind head tapping screw M3 x 8 ZCM2-Y		
16	42:00:00:CB:07:59:70	Anti vibration tape		
17	32:00:00:BA:07:16:30	Knob (Tone cont. Loudness cont.)		
	32:00:00:BA:07:41:00	- do. -	CA-V2	
18	32:00:00:BA:06:77:90	Knob (Switch)		
	32:00:00:BA:06:85:50	- do. -	CA-V2	
19	42:00:00:EZ:00:01:90	Hexagon socket screw		
20	32:00:00:BA:07:29:00	Knob (Volume) double TYPE		
	32:00:00:BA:07:41:10	- do. -	CA-V2	
21	32:00:00:AA:08:63:40	Bottom cover		
22	32:00:00:CB:08:03:50	Leg		
23	42:00:00:MG:00:08:40	AC Cord Black	R, U, C	
	42:00:00:MG:00:02:90	- do. - Gray	E, G	
	42:00:00:MG:00:05:00	- do. - Gray	A	
	42:00:00:MZ:07:28:90	- do. -	B	
24	42:00:00:LB:20:02:60	Voltage selector	R, E	
25	32:00:00:CB:06:88:80	Plastic rivet	R, E	
26	32:00:00:BA:07:29:10	Knob (Balance)		
	32:00:00:BA:07:41:10	- do. -		CA-V2



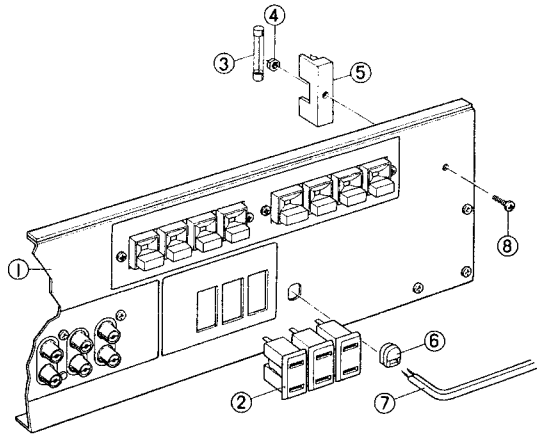
Ref. No.	Part No.	Description (部品名)	Markets	Remarks
1	42:00:00:GA:61:50:00	Power Transformer	電源トランス	U, C
	42:00:00:GA:71:29:00	- do. -	"	R
	42:00:00:GA:61:65:00	- do. -	"	A, B
	42:00:00:GA:72:57:00	- do. -	"	E
	42:00:00:GA:61:79:00	- do. -	"	G
2	42:00:00:EH:04:00:80	Pan head screw sems type M4 x 8 ZCM2-y	鉄セムスナベ小ネジ	
3	42:00:00:AA:08:11:50	Side frame	サイドフレーム	
4	42:00:00:EN:03:00:20	Bind head tapping screw M3 x 8 ZMC2-y	鉄バインドタッピングネジ 2種 ミミツ	
5	32:00:00:NA:07:00:30	Function C. Board	ファンクションシート	R, A, C, E, B
	32:00:00:NA:07:08:20	- do. -	"	U
	32:00:00:NA:07:08:30	- do. -	"	G
5-A	42:00:00:KA:50:09:20	Rotary switch SRZ-046N	ロータリー S W	

Ref. No.	Part No.	Description (部 品 名)	Markets	Remarks
5-B	42:00:00:KA:50:09:10	Rotary switch SRZ-045N		SW302
5-C	42:00:00:LB:60:19:30	L Type pin jack PC 6P		
5-D	42:00:00:LB:40:03:10	- do. - CP 4P		
5-E	32:00:00:AA:08:29:10	Isolation plate		
6	32:00:00:CB:07:13:80	Joint		
7	32:00:00:BA:07:16:80	Extension shaft		
8	32:00:00:NA:07:07:90	Main C. Board	U	
	32:00:00:NA:07:07:80	- do. -	A	
	32:00:00:NA:07:08:00	- do. -	E, B, G	
	32:00:00:NA:07:08:10	- do. -	C	
	32:00:00:NA:07:10:50	- do. -	R	
	32:00:00:NA:07:17:30	- do. -	E, G	CA-V2
	32:00:00:NA:07:18:20	- do. -	A	CA-V2
	32:00:00:NA:07:18:30	- do. -	R	CA-V2
8-A	42:00:00:HS:41:05:90	Variable resistor B30K x 2	V R	VR403
8-B	42:00:00:HS:41:06:00	- do. - W30K x 2	"	VR404
8-C	42:00:00:HS:41:05:80	- do. - 100KB x 2	"	VR402
8-D	42:00:00:HS:12:06:40	- do. - A200K x, Z200K x 2	"	VR401
8-E	42:00:00:KB:00:03:00	Fuse 0.3AT 250V	R, A	F402
	42:00:00:KB:00:06:40	- do. - 250mAT, 250V	E, B, G	" V2 (EG)
	42:00:00:KB:00:10:00	- do. - 0.3A, 250V	U, C	"
8-F	42:00:00:KB:00:03:50	- do. - 2.0AT, 250V	A	F401
8-G	42:00:00:KC:00:04:20	Relay FRL264 0024/02CK		RY571
8-H	42:00:00:KA:80:04:00	Push switch (shorting)		ショーティング SW, SW401, 402
8-I	42:00:00:LB:30:06:50	Phone jack SW H = 12.5		JK471
8-J	42:00:00:IB:06:86:00	Transistor 2SB686 O, R		
8-K	42:00:00:ID:07:16:00	- do. - 2SD716		
8-L	42:00:00:IL:00:04:10	Mica base		
8-M	42:00:00:IB:06:16:10	Transistor 2SB616A		
8-N	42:00:00:ID:05:86:10	- do. - 2SD586A		
8-O	42:00:00:IL:00:04:20	Mica base		
9	42:00:00	BW Head tapping screw M3 x 12 ZMC2-Y		鉄BWヘッドタッピングネジ 2種 ミズなし
10	42:00:00	- do. - M2.6 x 12 ZMC2-Y		"
11	42:00:00:IL:00:04:00	Bush insulator		絶縁ブッシュ
12	32:00:00:CB:07:28:80	- do. -		"
13	32:00:00:EN:33:00:10	Bind head tapping screw M3 x 8 ZMC3-BI		鉄バインドタッピングネジ 2種
14	32:00:00:BB:06:63:50	Transistor pusher		T R 押えバネ
15	42:00:00:JB:00:05:50	Pilot lamp, read type 14.5V 80mA		ランプロード式
16	42:00:00:EV:50:50:00	Retaning ring φ5		E リン グ
17	42:00:00:FZ:00:01:10	Spark Killer Capacitor 0.033 + 120/125V	U	
	42:00:00:FZ:00:05:40	- do. - 0.033 + 120/DC500V, AC350	R	
	42:00:00:FZ:00:06:90	- do. - 0.022/250V	E, G, B	
	42:00:00:FZ:00:11:20	- do. - 0.033 + 120/250V	C	
18	42:00:00:KA:80:03:60	Push switch SDV1P	R, U, C	
	42:00:00:KA:80:05:90	- do. - j-E 3005	A, R, E	
	42:00:00:KA:80:02:10	- do. - SDG 5P	G, B	
19	42:00:00:ED:03:00:60	Bind head screw M3 x 6 ZMC2-Y		鉄バインド小ネジ
20	32:00:00:AA:08:93:00	Reflection frame		反 射 板
21	42:00:00:Ji:00:07:60	Meter		メ - タ -
	42:00:00:Ji:00:09:10	- do. -		CA-V2 (EG)
5	32:00:00:NA:07:00:03	Function C. Board	R, A, E, C, B	
	32:00:00:NA:07:08:20	- do. -	U	
	32:00:00:NA:07:08:30	- do. -		G, V2 (G)

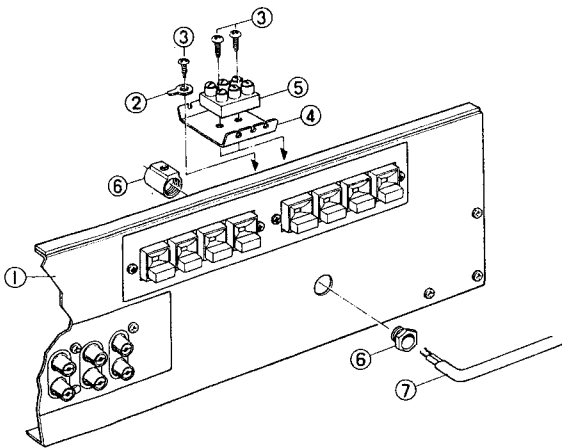
● GENERAL MODELS



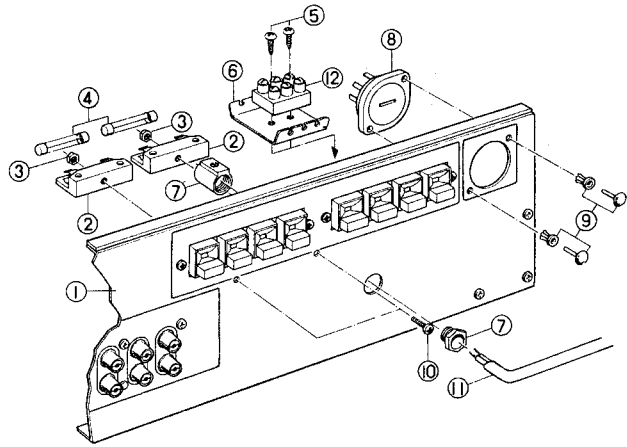
● US & CANADIAN MODELS



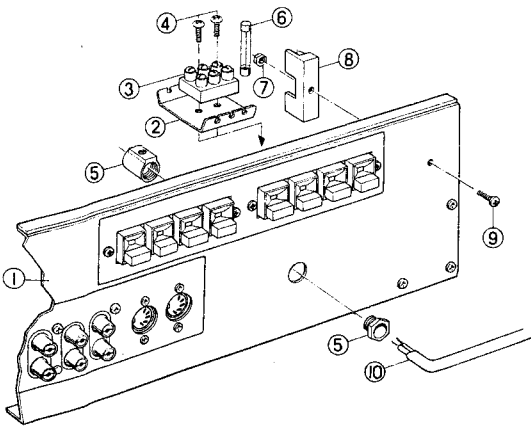
● AUSTRALIAN MODEL



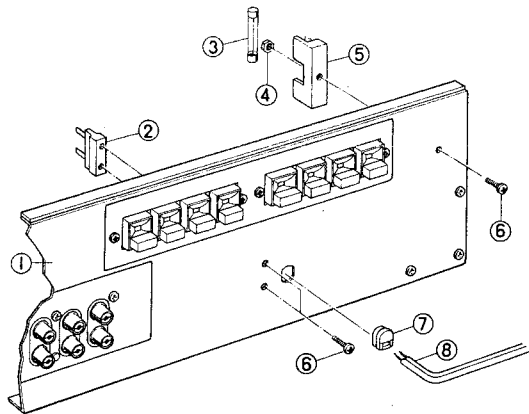
● EUROPEAN MODEL



● NORTH EUROPEAN MODEL



● BRITISH MODEL



Ref. No.	Part No.	Description (部 品 名)	Markets	Remarks
		GENERAL MODELS		
1	32:00:00:AA:09:15:10	Rear Panel	リ ア パ ネ ル	
	32:00:00:AA:09:40:20	- do. -	"	CA-V2
2	42:00:00:LB:20:12:10	Fuse Holder 1PFH	ヒューズホルダー	
3	42:00:00:KB:00:03:50	Fuse 2.0AT 250V	ヒューズ、耐ラッシュ	
4	42:00:00:EV:10:03:00	Hexagonal nut M3 ZMC2-Y	六角ナット	
5	42:00:00:LB:20:09:10	AC outlets socket	ACアウトレット (ワンタッチ)	
6	42:00:00:LB:20:02:60	Voltage Selector	電圧切換器	
7	42:00:00:ED:33:00:60	Bind Head Screw M3 x 6 FCM3-BI	鉄バインド小ネジ	
8	42:00:00:CB:06:86:30	Cord Stopper SR-3P-4	コードストッパー	
9	42:00:00:MG:00:08:40	AC Cord	電源コード	
10	32:00:00:CB:06:88:80	Plastic rivet	プラスチックリベット	
		US & CANADIAN MODELS		
1	32:00:00:AA:09:14:90	Rear Panel	リ ア パ ネ ル	u
	32:00:00:AA:09:32:20	- do. -	"	c
2	42:00:00:LB:20:07:10	AC outlets Socket S-16440	ACアウトレット(ハネ式)	
3	42:00:00:KB:00:10:50	Fuse SS-2 4.0A 250V	ヒューズ(UL)	
4	42:00:00:EV:10:03:00	Hexagonal nut M3	六角ナット	
5	42:00:00:LB:20:12:10	Fuse Holder 1PFH	ヒューズホルダー	
6	42:00:00:CB:06:86:30	Cord Stopper SR-3P-4	コードストッパー	
7	42:00:00:MG:00:08:40	AC Cord	電源コード	
8	42:00:00:ED:33:00:60	Bind Head Screw M3 x 6 FCM3-BI	鉄バインド小ネジ	
		AUSTRALIAN MODEL		
1	32:00:00:AA:09:15:20	Rear Panel	リ ア パ ネ ル	
	32:00:00:AA:09:40:30	- do. -	"	CA-V2
2	42:00:00:LA:00:02:80	Lug (for Earth)	アースラグ	
3	42:00:00:ED:03:00:40	Bind Head Screw M3 x 4 ZMC2-Y	鉄バインド小ネジ	
4	42:00:00:LA:00:21:90	Wire Holder	ワイヤーホルダー	
5	42:00:00:LA:00:10:40	3P Terminal Board	3P中継端子台(ボイボ)	
6	42:00:00:CB:07:06:90	Cord Stopper EA-5	コードストッパー	
7	42:00:00:MG:00:05:00	Ac Cord Gray	電源コード	
		EUROPEAN MODEL		
1	32:00:00:AA:09:05:00	Rear Panel	リ ア パ ネ ル	
	32:00:00:AA:09:39:10	- do. -	"	CA-V2
2	42:00:00:LB:20:14:70	Fuse Holder 1PFH-M	ヒューズホルダー	
3	42:00:00:EV:10:03:00	Hexagonal Nut M3 ZMC2-Y	六角ナット	
4	42:00:00:KB:00:13:30	Fuse 2AT 250V	ヒューズ⑤タイムラグ	
5	42:00:00:ED:03:00:40	Bind Head Screw M3 x 4	鉄バインド小ネジ	
6	42:00:00:LA:00:21:90	Wire Holder 1599-1	ワイヤーホルダー	
7	42:00:00:CB:07:06:90	Cord Stopper	コードストッパー	
8	42:00:00:LB:20:02:60	Voltage Selector	電圧切換器	
9	32:00:00:CB:06:88:80	Plastic rivet FCM3-BI	プラスチックリベット	
10	42:00:00:ED:33:00:60	Bind Head Screw M3 x 6	鉄バインド小ネジ	
11	42:00:00:MG:00:02:90	AC Cord Gray	電源コード	
12	42:00:00:LA:00:10:40	3P Terminal Board	3P中継端子台(ボイボ)	

Ref. No.	Part No.	Description (部 品 名)	Markets	Remarks
* C323 324	42:00:00:FA:65:31:00	Mylar capacitor 0.001/50V(J)	マイラーコン	
* C313 314	42:00:00:FA:05:41:60	- do. - 0.016/50V(J)	"	
* C311 312	42:00:00:FA:85:45:60	- do. - 0.056/50V(J)	"	
* C309 310	42:00:00:FG:01:12:20	Ceramic capacitor 22p/50V SL(K)	セラコン	
* C303 304	42:00:00:FG:01:21:00	- do. - 100P/50V SL(K)	"	
* C305 306	42:00:00:FG:01:31:00	- do. - 1000P/50V Y(K)	"	
* C319 320	42:00:00:FG:04:41:00	- do. - 0.01/50V YZ(Z)	"	
* C325 326	42:00:00:FG:04:41:00	- do. - 0.01/50V YZ(Z)	"	
* C315 316	42:00:00:FW:71:82:20	Electroritic capacitor 220/6.3	ケミコンタテ	
* C301 302	42:00:00:FW:35:64:70	- do. - 4.7/35	"	
* C307 308	42:00:00:FW:35:64:70	- do. - 4.7/35	"	
* C321 322	42:00:00:FW:36:51:00	- do. - 1/50	"	
* C317 318	42:00:00:FL:76:61:00	- do. - MS Type 1/50	"	
R317 318	42:00:00:HL:41:61:50	Metal oxide resistor 1.5K 1P	酸金抵抗	
TR 301	42:00:00:iA:06:73:10	Transistor 2SA673A	トランジスター	
TR 302	42:00:00:iA:06:73:10	- do. - 2SA673A	"	
TR 303	42:00:00:iA:08:72:00	- do. - 2SA872	"	
TR 304	42:00:00:iA:08:72:00	- do. - 2SA872	"	
TR 305	42:00:00:iB:05:60:00	- do. - 2SB560	"	
TR 306	42:00:00:iB:05:60:00	- do. - 2SB560	"	
B	32:00:00:NA:07:07:90	Main C. Board	メインシート	U
	32:00:00:NA:07:07:80	- do. -	"	A
	32:00:00:NA:07:08:00	- do. -	"	E, B, G
	32:00:00:NA:07:08:10	- do. -	"	C
	32:00:00:NA:07:10:50	- do. -	"	R
	32:00:00:NA:07:17:30	- do. -	"	E, G
	32:00:00:NA:07:18:20	- do. -	"	A
	32:00:00:NA:07:18:30	- do. -	"	R
* C412 422	42:00:00:FA:41:45:60	Mylar capacitor 0.056/50V(K)	マイラーコン	
* C419 420	42:00:00:FA:41:45:60	- do. - 0.056/50V(K)	"	
* C425 426	42:00:00:FA:41:42:20	- do. - 0.022/50V(K)	"	
* C401 402	42:00:00:FA:41:43:30	- do. - 0.033/50V(K)	"	
* C427 428	42:00:00:FA:41:41:00	- do. - 0.01/50V(K)	"	
* C405 406	42:00:00:FG:71:11:00	Ceramic capacitor 10P/50VSL(K)	セラコン	
* C413 414	42:00:00:FG:71:12:20	- do. - 22P/50V SL(K)	"	
* C409 410	42:00:00:FG:71:24:70	- do. - 470P/50V YB(K)	"	
* C403 404	42:00:00:FG:71:25:60	- do. - 560P/50V YB(K)	"	
* C435 ~438	42:00:00:FG:71:25:60	- do. - 560P/50V YB(K)	"	
* C431	42:00:00:FG:14:31:00	- do. - 1000P/50V YZ(Z)	"	
* C453 ~456	42:00:00:FG:14:31:00	- do. - 1000P/50V YZ(Z)	"	
* C445 446	42:00:00:FG:14:31:00	- do. - 1000P/50V YZ(Z)	"	
* C429 430	42:00:00:FG:14:41:00	- do. - 0.01/50V YZ(Z)	"	
* C447 448	42:00:00:FG:14:41:00	- do. - 0.01/50V YZ(Z)	"	
* C474	42:00:00:FG:14:41:00	- do. - 0.01/50V YZ(Z)	"	
* C457 ~460	42:00:00:FG:24:51:00	- do. - 0.1/50V Y(Z)	"	
* C432	42:00:00:FG:14:44:70	- do. - 0.047/50V Y	"	
* C481 482	42:00:00:FH:61:12:20	- do. - 22P/500V CH Type	"	

Ref. No.	Part No.	Description (部 品 名)	Markets	Remarks
C473	42:00:00:FH 23:41:00	Ceramic capacitor 0.01/500V YZ(P)	セラコン	
C441 442	42:00:00:FH 61:05:00	- do. - 5P/500V CH Type	"	
C423 424	42:00:00:FJ 31:73:30	Electrolytic capacitor 33/6.3	ケミコンタテ型	
C479	42:00:00:FJ 31:73:30	- do. - 33/6.3	"	
* C415 416	42:00:00:FJ 31:74:70	- do. - 47/6.3	"	
* C439 440	42:00:00:FJ 31:81:00	- do. - 100/6.3	"	
* C463 464	42:00:00:FJ 31:81:00	- do. - 100/6.3	"	
* C433 434	42:00:00:FJ 33:71:00	- do. - 10/16	"	
* C443 444	42:00:00:FJ 34:71:00	- do. - 10/25	"	
* C417 418	42:00:00:FJ 35:71:00	- do. - 10/35	"	
* C465 466	42:00:00:FJ 35:71:00	- do. - 10/35	"	
* C470	42:00:00:FJ 75:81:00	- do. - 100/35	"	
* C461 462	42:00:00:FJ 36:61:00	- do. - 1/50	"	
* C471 472	42:00:00:FJ 36:74:70	- do. - 47/50	"	
* C475 478	42:00:00:FJ 36:74:70	- do. - 470/50	"	
* C469	42:00:00:FJ 16:84:70	- do. - 470/50	"	
* C407 408	42:00:00:FJ 26:54:70	- do. - 0.47/50	"	
* C411 412	42:00:00:FJ 15:64:70	- do. - 4.7/35	"	
* C476 477	42:00:00:FJ 49:96:80	- do. - 6800/45	ケミコン基板型	
* C467 468	42:00:00:FM 44:82:20	- do. - 220/6.3	ケミコンタテ型(Z)	
* C480	42:00:00:FM 39:73:30	- do. - 33/16	"	
L401 402	42:00:00:GD 90:00:50	Coil 3μH	コイル	
R479 480	42:00:00:HL 62:41:00	Metal oxide resistor 2P 10	酸金抵抗	
R499 500	42:00:00:HL 42:52:20	- do. - 2P 220	"	
R520	42:00:00:HL 62:53:30	- do. - 2P 330	"	
FR 409	42:00:00:HW 10:41:00	Fuse resistor 220mA 10Ω	ヒューズ抵抗	C, R, A, E, B, G V2 (EG)
	42:00:00:HW 20:41:00	- do. - 220mA 10Ω	"	U
FR 407	42:00:00:HW 19:51:00	- do. - 50mA 100Ω	"	C, R, A, E, B, G 12 (EG)
FR 408	42:00:00:HW 19:51:00	- do. - 50mA 100Ω	"	C, R, A, E, B, G 12 (EG)
	42:00:00:HW 29:51:00	- do. - 50mA 100Ω	"	U
FR 405	42:00:00:HW 19:54:70	- do. - 23mA 470Ω	"	C, R, A, E, B, G V2 (EG)
FR 406	42:00:00:HW 19:54:70	- do. - 23mA 470Ω	"	C, R, A, E, B, G V2 (EG)
	42:00:00:HW 29:54:70	- do. - 23mA 470Ω	"	U
FR 401 FR 404	42:00:00:HW 10:56:80	- do. - 25mA 680Ω	"	C, R, A, E, B, G
	42:00:00:HW 10:56:80	- do. - 25mA 680Ω	"	C, R, A, E, B, G
	42:00:00:HW 20:56:80	- do. - 25mA 680Ω	"	U
R475	42:00:00:HZ 00:02:70	Metal film resistor 5P 0.47	金属板抵抗	
R476 ~478	42:00:00:HZ 00:02:70	- do. - 5P 0.47	"	
R497 498	42:00:00:HZ 00:07:10	Fir proof resistor 1P 4.7	不燃性抵抗	
VR 402	42:00:00:HS 41:05:80	Variable resistor 100KB x 2	ボリューム	
VR 403	42:00:00:HS 41:05:90	- do. - B30K x 2	"	
VR 404	42:00:00:HS 41:06:00	- do. - W30K x 2	"	
VR 401	42:00:00:HS 12:06:40	- do. - A200K x 2, 200K x 2	"	
VR 407	42:00:00:HT 37:00:40	Semi-fixed variable resistor V8K4-1B500	半固定VR	
VR 408	42:00:00:HT 37:00:40	- do. - V8K4-1B500	"	
VR 409	42:00:00:HT 37:00:60	- do. - V8K4-1B2K	"	
VR 410	42:00:00:HT 37:00:60	- do. - V8K4-1B3K	"	

Ref. No.	Part No.		Description (部 品 名)	Markets	Remarks
TR 417	42:00:00	iA 07:44:00	Transistor 2SA844		トランジスター
TR 418	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 421	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 422	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 427	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 428	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 432	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 434	42:00:00	iA 07:44:00	- do. - 2SA844		"
TR 401	42:00:00	iA 08:72:00	- do. - 2SA872		"
TR 408	42:00:00	iA 08:72:00	- do. - 2SA872		"
TR 430	42:00:00	iA 08:72:00	- do. - 2SA872		"
TR 409	42:00:00	iC 19:18:00	- do. - 2SC1918		"
TR 412	42:00:00	iC 19:18:00	- do. - 2SC1918		"
TR 419	42:00:00	iC 19:18:00	- do. - 2SC1918		"
TR 420	42:00:00	iC 19:18:00	- do. - 2SC1918		"
TR 431	42:00:00	iC 19:18:00	- do. - 2SC1918		"
TR 435	42:00:00	iC 12:13:10	- do. - 2SC1213 AC, D		"
TR 429	42:00:00	iD 04:76:10	- do. - 2SD476A		"
TR 425	42:00:00	iB 05:60:00	- do. - 2SB560		"
TR 426	42:00:00	iB 05:60:00	- do. - 2SB560		"
TR 415	42:00:00	iD 04:38:00	- do. - 2SD438		"
TR 416	42:00:00	iD 04:38:00	- do. - 2SD438		"
TR 423	42:00:00	iD 04:38:00	Transistor 2SD438		トランジスター
TR 424	42:00:00	iD 04:38:00	- do. - 2SD438		"
TR 413	42:00:00	iC 17:75:00	- do. - 2SC1775		"
TR 414	42:00:00	iC 17:75:00	- do. - 2SC1775		"
D401 ~414	42:00:00	iF 00:00:40	Diode 1S1555		ダイオード
D415	42:00:00	iF 00:06:60	Zener diode HZ-30		ツェナーダイオード
D412	42:00:00	iF 00:10:00	- do. - HZ-20		"
D420	42:00:00	iF 00:06:80	L.E.D SLP132B		L . E . D
D418	42:00:00	iH 00:01:10	Diode 5B-2		ダイオード
D416 417	42:00:00	iH 00:02:40	- do. - 1S1885		"
D419 422	42:00:00	iH 00:02:40	- do. - 1S1885		"
	42:00:00	LB 20:09:00	Fuse holder pin PCYSH402P		ヒューズホルダーピン R, U, C, A
	42:00:00	LB 20:10:60	- do. -		" E, B, G