

ONKYO® SERVICE MANUAL

Integrated Stereo Amplifier MODEL A-8051



UPV

230V AC, 50Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF PARTS.
WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

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ONKYO

AUDIO COMPONENTS

SPECIFICATIONS

Power Output :	60 watts per channel, min. RMS, at 8 ohms, both channels driven from 20 Hz to 20 kHz, with no more than 0.06% THD. 2 × 100 watt an 4 Ohm, 1 kHz (DIN) 2 × 70 watt an 8 Ohm, 1 kHz (DIN)
Total Harmonic Distortion :	0.06% at rated power
Intermodulation Distortion :	0.06% at rated power
Damping Factor :	150 at 8 ohms (1 kHz)
Input Sensitivity / Impedance:	Phono (MM): 2.5 mV / 50 kohms Phono (MC): 350 μ V / 220 ohms CD/Tuner/Line: 150 mV / 25 kohms Tape Play: 150 mV / 25 kohms
Output Sensitivity / Impedance :	Tape Rec: 150 mV / 3 kohms (Phono)
Phono Overload :	Phono (MM) : 135 mV RMS. at 1 kHz, 0.1% THD.
Tone Control :	BASS: ± 8 dB at 100 Hz TREBLE: ± 8 dB at 10 kHz Loudness Control: + 8 dB at 100 Hz + 8 dB at 10 kHz
Frequency Response :	CD, Tuner : 15 Hz ~ 50 kHz ± 1 dB
Signal to Noise Ratio (IHF-A) :	Phono (MM): 84 dB (5.0 mV input) Phono (MC): 74 dB (0.5 mV input) CD (DIRECT): 104 dB (0.5V input)
Power Supply :	AC 230V, 50 Hz
Dimensions (W×H×D) :	455×150×348 mm 17-15/16"×5-7/8"×13-11/16"
Weight :	8.3 kg, (18.3 lbs.)

Specifications and features are subject to change without notice

ADJUSTMENT PROCEDURES

Adjustments and Checking the Protection Circuitry

1. Preparations

- 1) Place the unit on the workbench. (There should be about 15 mm of space between the base plate of the unit and the work surface.)
- 2) Set up the unit as follows.

- (1) No load
- (2) No signal
- (3) Volume turned all the way down
- (4) Speaker switch OFF
- (5) Power switch OFF

Note) Check the following points before making adjustments

- (1) The power switch should be OFF.
- (2) The interior of the unit should not be warm.

2. Idling current adjustment

- 1) Turn the power switch ON and allow the unit to warm up for about 10 minutes.

- (1) Adjust R531 (R532) so that the voltage at test point VCT-ID on the NAAF-4838 circuit board is $9.5\text{mV} \pm 3.5\text{mV}$

NOTE) Semi-fixed resistors enclosed in parentheses () are for the right channel.

3. Check of operation of protection circuitry

- 1) Check of operation of protection relay .

- (1) Confirm that the relay turns ON approximately 5 seconds after the power switch is turned ON.
- (2) The relay should turn OFF approximately 0.5 seconds after the power switch is turned OFF.

- 2) Check of DC detection

- (1) Turn the power on with no load.
- (2) After the speaker relay turns ON, apply DC +1 ~ 1.5V to the CD input terminals. Confirm that the relay turns OFF.
- (3) Confirm that operation is the same as (2) above when an input of DC -1 ~ -1.5V is applied.

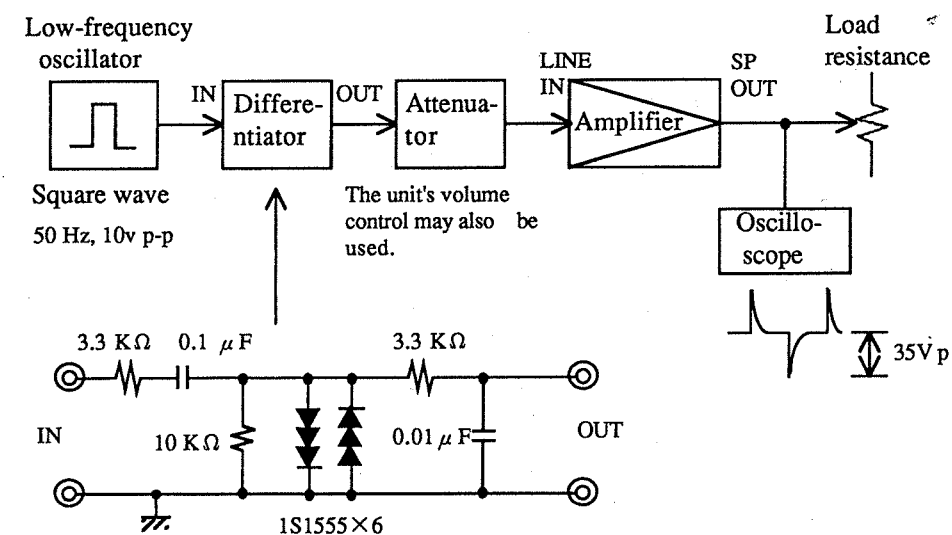
Note) Under no circumstances connect a load or short the speaker terminals when performing the above test.

- 3) Confirmation of current detection operation

- (1) Signal input from the circuit illustrated below with no load.
- (2) Confirm that the speaker relay does not turn OFF even when a 2 ohm load is connected when a peak value of 35Vp is output.
- (3) Next, confirm that when a 1 ohm load is connected the speaker relay switches OFF and ON a couple of times and then stays OFF.

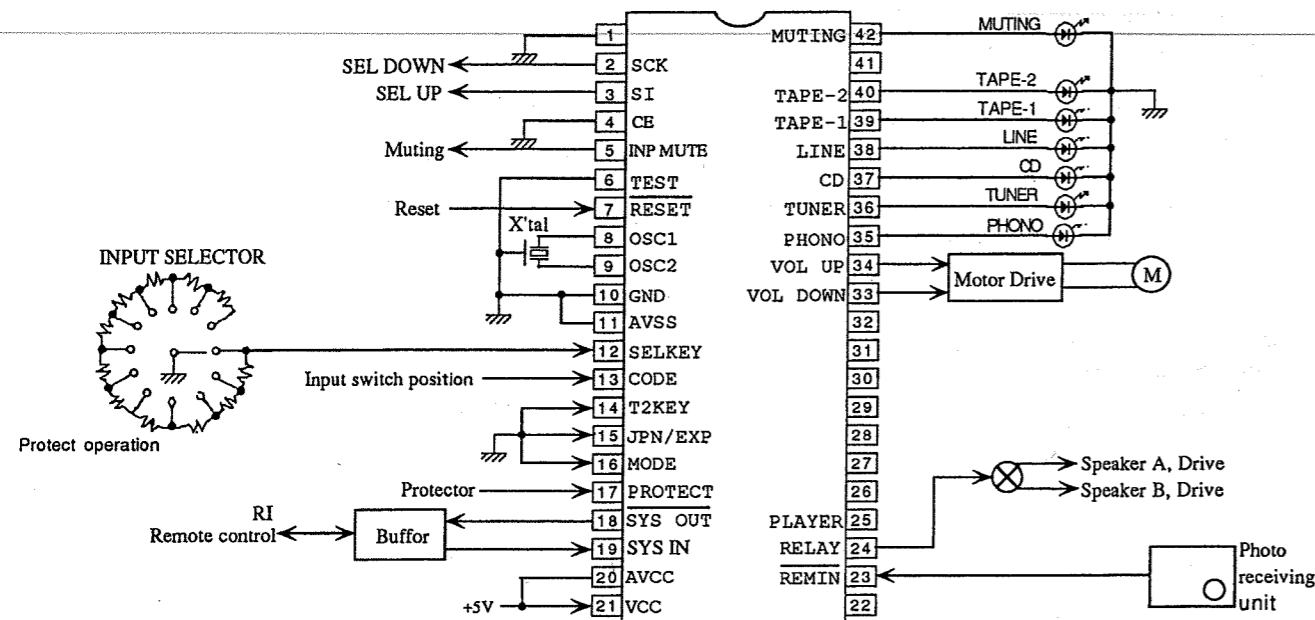
Note) The period before that relay stays OFF should not last for more than 10 second.

Relay OFF status can be canceled by switching the power OFF.



IC BLOCK DIAGRAM

HD404314A12S

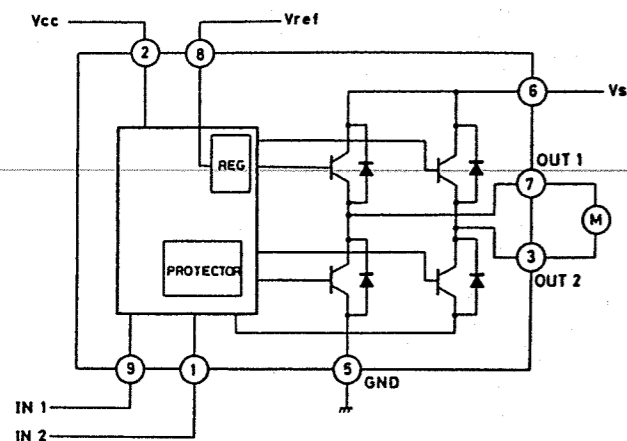


HD404314

Pin No.	CODE	FUNCTION	I/O	DESCRIPTION												
1	RA1/Vdisp	-----	----	Not used, To be connected with GND.												
2	R00/SCK	SEL DOWN / CL	OUT	<table border="1"> <thead> <tr> <th>OPERATION</th> <th>SEL UP</th> <th>SEL DOWN</th> </tr> </thead> <tbody> <tr> <td>STOP</td> <td>H</td> <td>H</td> </tr> <tr> <td>UP</td> <td>H</td> <td>L</td> </tr> <tr> <td>DOWN</td> <td>L</td> <td>H</td> </tr> </tbody> </table>	OPERATION	SEL UP	SEL DOWN	STOP	H	H	UP	H	L	DOWN	L	H
OPERATION	SEL UP	SEL DOWN														
STOP	H	H														
UP	H	L														
DOWN	L	H														
3	R01/SI	SEL UP / D1														
4	R02/SO	CE	----													
5	R03/TOC	INP MUT	OUT	Muting output terminal. Active "H".												
6	TEST	TEST	----	Shipment Test. To be connected with GND.												
7	RESET	RESET	IN	Input terminal for Reset signal. Active "L"												
8	OSC1	Xtal	----	Terminal for connecting with Ceramic oscillator (4MHz)												
9	OSC2	Xtal	----													
10	GND	GND	----	Ground terminal												
11	AVss	AVss	----	Ground terminal of A/D converter												
12	R30/AN0	SELKEY	IN	Input terminal for when changing over Input Selector. Through A/D conversion, the selector will be detector on its right or left rotation.												
13	R31/AN1	CODE	IN	Code input terminal for detecting position of Rotary switch of Motor drive.												
14	R32/AN2	T-2KEY	IN	Tape-2 Key entry terminal.												
15	R33/AN3	JPN/EXP	IN	Input terminal for change-over between Japan model and Export model.												

Pin No.	CODE	FUNCTION	I/O	DESCRIPTION															
16	R40/AN4	MODE	IN	Input terminal for initialization to change over operation mode.															
17	R41/AN5	PROTECT	IN	Input terminal for detecting protect operation.															
18	R42/AN6	SYS OUT	OUT	Output terminal for System Code.															
19	R43/AN7	SYS IN	IN	Input terminal for System Code.															
20	AVcc	AVcc	----	Analog reference voltage for A/D conversion.															
21	Vcc	+5V	----	Power(+5V) terminal .															
22	D0/INT0	POFF	IN	Input terminal for Detecting Power suspension. However, "L" 100 μ S or under shall be ignored.															
23	D1/INT1	REMIN	IN	Remote control signal input terminal															
24	D2/EVENB	RELAY	OUT	Output terminal for controlling relay. "H" when ON.															
25	D3/BUZZ	PLAYER	OUT	Output terminal for Player control. H" will be output for 200mS if input PLAY/REJECT code for Remote control and set Input selector for PHONO.															
26	D4/STOPC	-----	----	Not used															
27	D5																		
28	D6																		
29	D7																		
30	D8																		
31	R80																		
32	R81																		
33	R81	VOL DOWN	OUT	UP /DOWN output terminal for Volume. Active "H".															
34	R83	VOL UP																	
				<table border="1"> <thead> <tr> <th>OPERATION</th> <th>VOL UP</th> <th>VOL DOWN</th> </tr> </thead> <tbody> <tr> <td>STOP</td> <td>H</td> <td>H</td> </tr> <tr> <td>VOL UP</td> <td>H</td> <td>L</td> </tr> <tr> <td>VOL DOWN</td> <td>L</td> <td>H</td> </tr> <tr> <td>POWER OFF</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	OPERATION	VOL UP	VOL DOWN	STOP	H	H	VOL UP	H	L	VOL DOWN	L	H	POWER OFF	L	L
OPERATION	VOL UP	VOL DOWN																	
STOP	H	H																	
VOL UP	H	L																	
VOL DOWN	L	H																	
POWER OFF	L	L																	
35	R10	PHONO	OUT	Output terminal for Input selector LED. Active "H".															
36	R11	TUNER																	
37	R12	CD																	
38	R13	LINE																	
39	R20	TAPE-1																	
40	R21	TAPE-2																	
41	R22	-----	----	Not used															
42	R23	MUTING	OUT	Output terminal for Audio muting LED, Remote control															

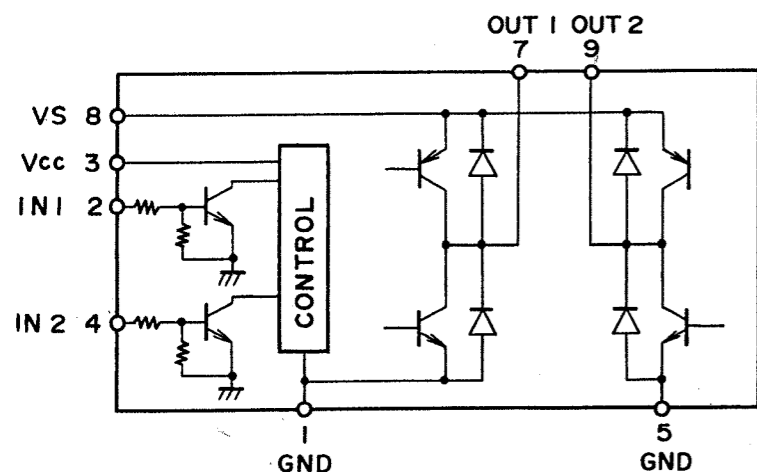
TA7291S (Volume Motor Drive)



INPUT		OUTPUT		MODE
IN 1	IN 2	OUT 1	OUT 2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

CCW: Counter clockwise direction
CW: Clockwise direction

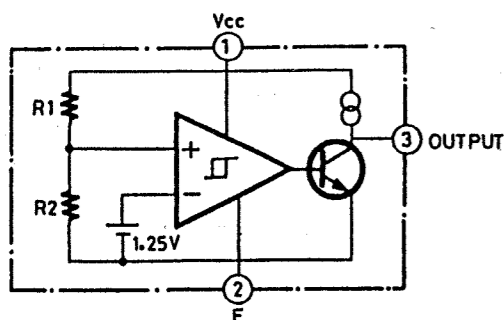
LB1631 (Motor Drive)



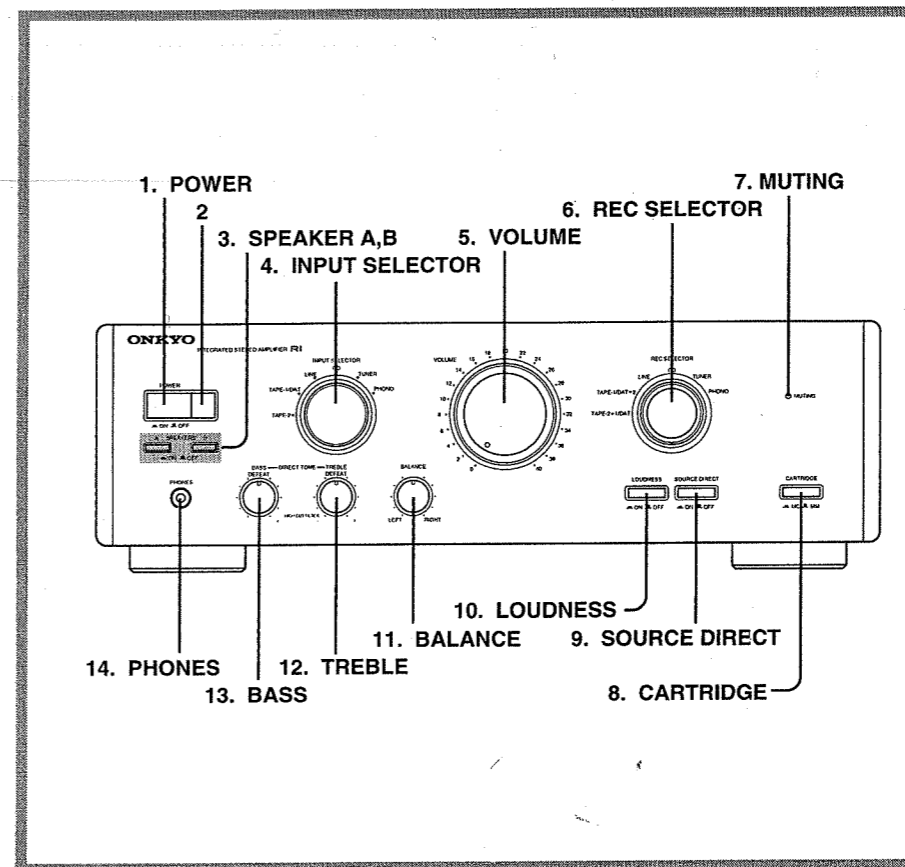
Truth Table

IN 1	IN 2	OUT 1	OUT 2	モード
H	L	H	L	NORMAL
L	H	L	H	REVERSE
H	H	L	L	BRAKE
L	L	OFF	OFF	WAIT

M51943BS (System Reset)



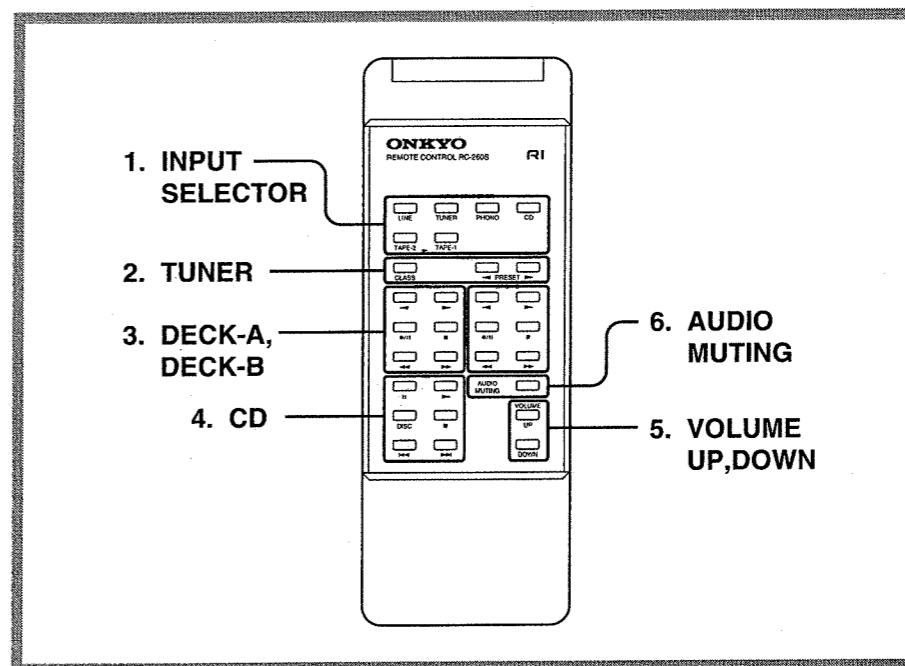
FRONT PANEL



Front panel

1. Power button
2. Remote control sensor
3. Speaker selector buttons
4. Input selector knob and indicator
5. Volume control knob
6. Recording selector knob
7. Muting indicator
8. Cartridge selector button
9. Source Direct button
10. Loudness button
11. Balance control knob
12. Treble control knob
13. Bass control knob
14. Headphone jack

REMOTE CONTROL



Remote control

1. Input selector buttons
2. Tuner operation buttons
CLASS : Class selector button
PRESET : Preset memory down/up
3. Tape operation buttons
◀ : Reverse play button
▶ : Forward play button
◀▶ : Fast rewind button
▶▶ : Fast forward button
■ : Stop button
●/|| : Record/pause button
4. CD operation buttons
|| : Pause button
▶ : Play button
DISC : Disc button for CD changer
◀◀ : Down button
▶▶ : Up button
5. Volume control buttons
6. Audio muting button

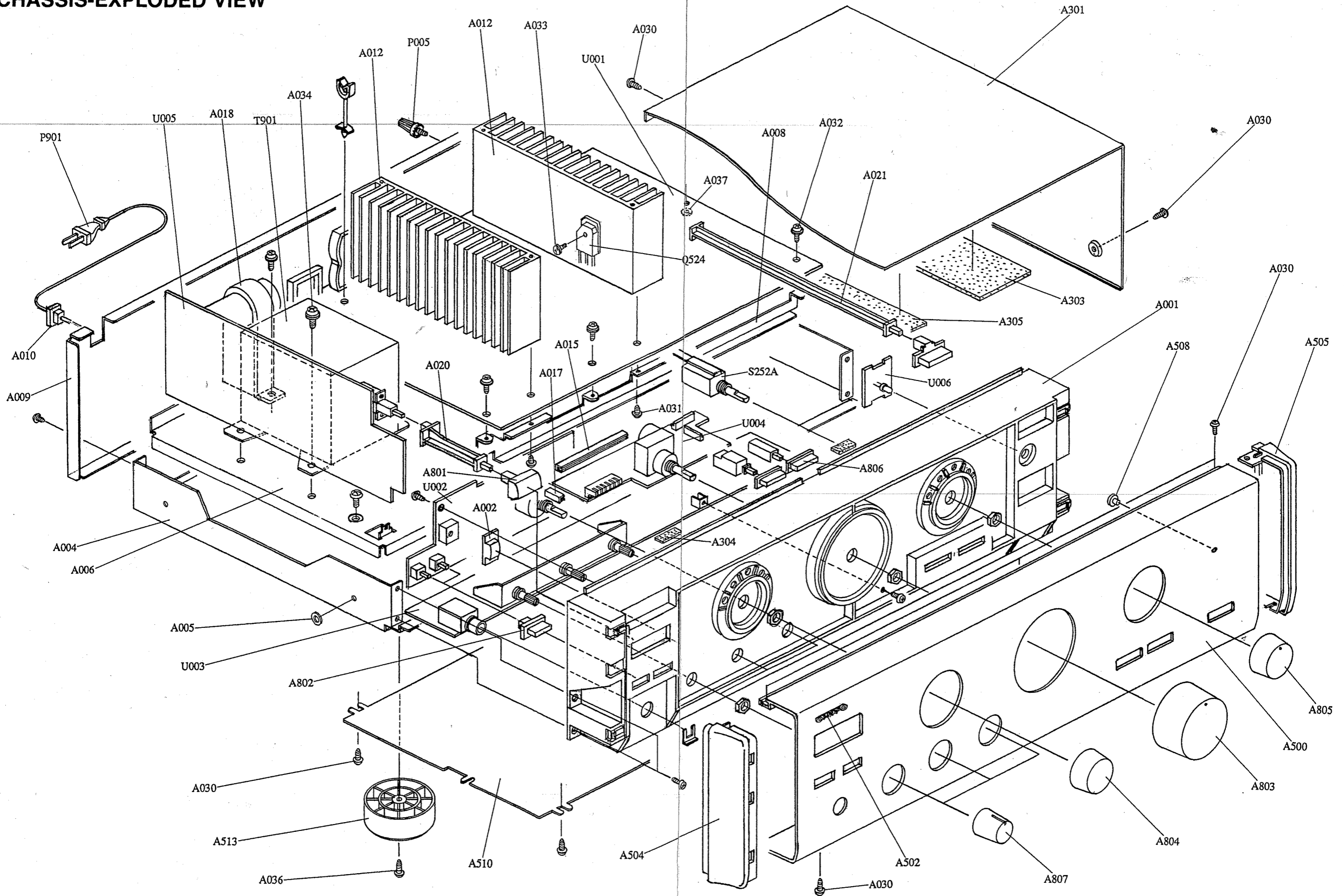
CHASSIS-EXPLODED VIEW – PARTS LIST

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A001	27110785A	FRONT BRACKET	U004	1A457541-1	NAETC-4841-1, VOLUME CONTROL CIRCUIT PC BOARD ASS'Y
A002	28191593-1	CLEAR PLATE (RE)	U005	1A457542-1A	NAPS-4842-1A, POWER SUPPLY CIRCUIT PC BOARD ASS'Y
A004	27100274	CHASSIS	U006	1A457543-1	NAETC-4843-1, MUTING INDICATOR PC BOARD ASS'Y
A005	27270375	10.2 × φ 3.8 × φ 9, SPACER			
A006	27130723	BRACKET (PT)			
A008	27130724	BRACKET (C)			
A009	27121793A	REAR PANEL			
A010	27300750	#2271, CORD BUSHING			
A012	27160328	HEAT SINK			
A015	28170039	CE-016, BUSHING			
A017	28170038	BUSHING			
A018	27190934A	HOLDER (CH)			
A020	27273155	JOINT (POW)			
A021	27273154A	JOINT (DIR)			
A030	834430088	3TTS+8B(BC), SCREW			
A031	834430108	3TTS+10B(BC), SCREW			
A032	831130088	3TTW+8B, SCREW			
A033	801433	3SMS8W.SW+14B(BC), SCREW			
A034	830440089	4TTC+8C(BC), SCREW			
A036	831430088	3TTW+8B(BC), SCREW			
A037	27270332	11.0 × φ 12 × φ 4, SPEACER			
A301	28184553A	COVER			
A303	28140898	11.5 × 70 × 140, CUSHION			
A304	28141288	3MS5-5832, CUSHION			
A305	28140782	11.5 × 25 × 170, CUSHION			
A500	1A458121	FRONT PANEL ASS'Y			
(A502)	28135199Y	BADGE			
(A503)	8910301	CS-3(SUS), CS RING			
(A504)	28125255 A	END CAP (L)			
	28125255-6	END CAP (L) [B L]			
(A505)	28125256 A	END CAP (R)			
	28125256-6	END CAP (R) [B L]			
(A506)	28198798	FACET(SEL)			
(A508)	28198778	FACET			
A510	28153118	BOTTOM BOARD			
A513	27175251-1	LEG ASS'Y			
A801	28324140	KNOB (POW)			
A802	28324882	KNOB (SP)			
A803	28324883	KNOB (VOL)			
A804	28324884	KNOB (SEL)			
A805	28324885	KNOB (REC)			
A806	28324886	KNOB (D)			
A807	28324887	KNOB (TONE)			
S252A	25030369A	NRSF-106-20BU, ROTARY SWITCH			
Q521,Q522	2201703	2SC3855-O OR			
	2201704	2SC3855-Y OR			
	2201706	2SC3855-P, TRANSISTOR			
Q523,Q524	2201693	2SA1491-O OR *			
	2201694	2SA1491-Y OR			
	2201696	2SA1491-P, TRANSISTOR			
△ T901	2300958A	NPT-1187P, POWER TRANSFORMER			
△ P901	253193HIT	AS-CEE, AC CORD			
△ F902	252075	2.5A-SE-EAK OR			
	252075CC	2.5A-SE-EAK, FUSE			
P005	25060044	GROUND TERMINAL			
U001	1A457538-1A	NAAF-4838-1A, MAIN CIRCUIT PC BOARD ASS'Y			
U002	1A457539-1	NADG-4839-1, MICROPROCESSOR PC BOARD ASS'Y			
U003	1A457540-1	NASW-4840-1, TONE CONTROL CIRCUIT PC BOARD ASS'Y			

NOTE: [B L]: BL MODEL ONLY

NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

CHASSIS-EXPLODED VIEW



PRINTED CIRCUIT BOARD PARTS LIST

MAIN CIRCUIT PC BOARD (NAAF-4838-1A)

CIRCUIT. NO.	PART NO.	DESCRIPTION	CIRCUIT. NO.	PART NO.	DESCRIPTION
Q105	ICs 22240191	NJM4565D-D	C101,C102	374721015	Capacitors 100 pF, 50V, Film(TF)
			C103,C104	374722224	2200 pF, 50V, Film(TF)
			C105,C106	393380477	4.7 μ F, 50V, Elect.(VX)
Q101-Q104	Transistors 2211782 or 2211783	2SA991-F 2SA991-E	C107,C108	374722215	220 pF, 50V, Film(TF)
Q501,Q503	2213677 or 2213678	2SC3067-G or 2SC3067-H	C109,C110	374723315	330 pF, 50V, Film(TF)
Q505-Q508	2211455 or 2214905	2SA1015-GR or 2PA1015-GR	C111,C112	374728224	8200 pF, 50V, Film(TF)
Q509,Q510	2211732 or 2211733	2SC1845-F or 2SC1845-E	C113,C114	393324717	470 μ F, 6.3V, Elect.(VX)
Q511,Q512	2211255 or 2214915	2SC1815-GR or 2PC1815-GR	C115,C116	374721134	0.011 μ F, 50V, Film(TF)
Q513,Q514	2211353 or 2211354	2SA949-O or 2SA949-Y	C117,C118	371123034	0.03 μ F, 50V, Mylar
Q515,Q516	2211633 or 2211634	2SC2229-O or 2SC2229-Y	C119,C120	393380477	4.7 μ F, 50V, Elect.(VX)
Q517,Q518	2212653 or 2212654	2SC3421-O or 2SC3421-Y	C121,C122	374721224	1200 pF, 50V, Film(TF)
Q519,Q520	2212643 or 2212644	2SA1358-O or 2SA1358-Y	C201-C206	374721015	100 pF, 50V, Film(TF)
Q525,Q526	2211732 or 2211733	2SC1845-F or 2SC1845-E	C213,C214		
Q527	2211792 or 2211793	2SA992-F or 2SA992-E	C215,C216		
Q528,Q529	2211732 or 2211733	2SC1845-F or 2SC1845-E	C501,C502	393380477	4.7 μ F, 50V, Elect.(VX)
Q531,Q532	2211183 or 2214915	2SC1740-R or 2PC1815-GR	C503,C504	374721015	100 pF, 50V, Film(TF)
Q601-Q603	2213650	DTD113ZS	C505,C506	374721015	100 pF, 50V, Film(TF)
Q903	2211455	2SA1015-GR	C507,C508	374721024	1000 pF, 50V, Film(TF)
Q904	2211255	2SC1815-GR	C509,C510	393342217	220 μ F, 16V, Elect.(VX)
Q905,Q906	2211945	2SK246-GR	C511,C512	393381017	100 μ F, 50V, Elect.(VX)
			C517-C520	374722234	0.022 μ F, 50V, Film(TF)
			C525,C526	374724734	0.047 μ F, 50V, Film(TF)
			C529-C532	393381017	100 μ F, 50V, Elect.(VX)
			C533,C534	374724734	0.047 μ F, 50V, Film(TF)
			C541-C544	374721024	1000 pF, 50V, Film(TF)
			C554	393380477	4.7 μ F, 50V, Elect.(VX)
			C555	393322217	220 μ F, 6.3V, Elect.(VX)
			C926,C927	393341007	10 μ F, 16V, Elect.(VX)
			C920,C921	393342217	220 μ F, 16V, Elect.(VX)
			C918,C919	393351027	1000 μ F, 25V, Elect.(VX)
					Resistors
			R527,R528	443522704	27 Ω , 1/2W, Metal oxide film
			R529,R530	443529104	91 Ω , 1/2W, Metal oxide film
			R531,R532	5210261	N06HR5KBC, Semi-fixed
			R535,R536	443522714	270 Ω , 1/2W, Metal oxide film
			R539-R542	4000076	0.22 Ω , 5W, Metal plate
			R543-R546	453530224	2.2 Ω , 1/2W, Metal
			R547,R548	453530824	8.2 Ω , 1/2W, Metal
			R549,R550	453530564	5.6 Ω , 1/2W, Metal
			R553-R556	443521014	100 Ω , 1/2W, Metal oxide film
			R571,R572	443623914	390 Ω , 1W, Metal oxide film
			R601,R602	443627514	750 Ω , 1W, Metal oxide film
			R603	443522724	2.7k Ω , 1/2W, Metal oxide film
					Switches
			S101	25035631	NPS-142-L587
			S201	25030370	NRS-3311-BA, Rotary
			S252	25065079	NSS-4643, Slide
					Relays
			RL601,RL602	25065339	NRL-2P5A-DC24V-46
			RL603	25065470	NRL-2P1A-DC24V-079
					Jumper sockets
			JL201b,JL571b	25050267	NSCT-3P95
			JL502b,JL703b		
			JL501b	25050271	NSCT-7P99
					Plugs
			P503,P504	25055038	NPLG-2P29
			P512a	25055167	NPLG-4P151

L101,L102
L201,L202
L501,L502

231133
230905
231209SY

NCH-1188
BL02RN1-R62
S-0.4A

S101 25035631 NPS-142-L587
S201 25030370 NRS-3311-BA, Rotary
S252 25065079 NSS-4643, Slide

RL601,RL602 25065339 NRL-2P5A-DC24V-46
RL603 25065470 NRL-2P1A-DC24V-079

JL201b,JL571b 25050267 NSCT-3P95
JL502b,JL703b
JL501b 25050271 NSCT-7P99

P503,P504 25055038 NPLG-2P29
P512a 25055167 NPLG-4P151

TONE CONTROL CIRCUIT PC BOARD (NASW-4840-1)

CIRCUIT. NO.	PART NO.	DESCRIPTION	CIRCUIT. NO.	PART NO.	DESCRIPTION
P101	Pin jacks 25045401	NPJ-2PDBL226	C301-C304	Capacitors 374721634	0.016 μ F, 50V, Film(TF)
P201	25045403	NPJ-2PDBL228	C305,C306	374721824	1800 pF, 50V, Film(TF)
P203,P251	25045354	NPJ-4PDBL200	C307,C308	374728234	0.082 μ F, 50V, Film(TF)
P252			C311,C312	374722724	2700 pF, 50V, Film(TF)
P801	Jack 25045330	NPJ-2PDBL184	R301	Resistors 5148107A	N16RGMC250KMN25, Variable
P501	Terminals 25060192	NTM-4PDMN114	R302	5142002	N16RGM11C100K25, Variable
P502	25060193	NTM-4PDMN115	R303	5144011	N16RQM11C70K88K25, Variable
	Plate 27141059	Ground	S301	Switches 25035407	NPS-122-L371
			S302	25035654A	NPS-162-L606
JL701a	Holder 25051113	NSCT-9P900, Wire holder	P571	Jack 25045164	HLJ4317-01-3020
	27190540-1	Clamp			Wire holder
MICROPROCESSOR PC BOARD (NADG-4839-1)			JL201a,JL571a	25051107	NSCT-3P894
CIRCUIT. NO.	PART NO.	DESCRIPTION	JL301a	25051114	NSCT-10P901
			JL501a	25051111	NSCT-7P898
Q751	Remote control sensor 24130007	GP1U571X		Plat 27150364	Shield
Q351	ICs 22240239	TA7291S	VOLUME CONTROL CIRCUIT PC BOARD (NAETC-4841-1)		
Q701	22240731	HD40431A12S	CIRCUIT. NO.	PART NO.	DESCRIPTION
Q704	222951	M51943BS	Q353,Q354	Transistors 2213631 or 2213632	RN1241-A or RN1241-B
Q711	22240358	LB1638	L351,L352	Coils 230905	BL02RN1-R62
Q702,Q703	Transistors 2213510	DTA114ES	R351(R352)	Resistors 5104329A	N16RGM50KBT25F, Variable
D351	Diodes 22380046 or 22380035	AM01Z or GP104003E	P701b	Socket 25051047	NSCT-13P834
D703	223163 or 223205 or 223222	1SS133 or 1SS270A or WG713A	JL301b	Jumper socket 25050274	NSCT-10P102
D704	224450562	MTZ5.6B, Zener	JL701b	25050273	NSCT-9P101
D711-D716	225291D	SEL4910D-D, LED	POWER SUPPLY CIRCUIT PC BOARD (NAPS-4842-1A)		
X701	Resonator 3010150	CST4.00MGW	CIRCUIT. NO.	PART NO.	DESCRIPTION
L701,L702	Coils 230905	BL02RN1-R62	Q901,Q902	ICs 222780055NEC	78M05HF
L703,L704			Q911	Transistors 2201945	2SD1763-E
C702	Capacitors 375524744	0.47 μ , 50V, Film(MMT)	Q912	2201935	2SB1186-E
C707	393380107	1 μ F, 50V, Elect.(VX)	D901	Diodes 22380038	RBV602
C708	393341007	10 μ F, 16V, Elect.(VX)	D902,D903	223208	6A2
S601,S602	Switches 25035653	NPS-122-L605	D904-D907	22380046 or 22380035	AM01Z or GP104003E
S701	25030359	NRSF-112-20RM, Rotary	D913,D914	224452003	MTZ220C, Zener
P701a	Plug 25055660	NPLG-13P616			
JL702a	Wire holder 25051109	NSCT-5P896			
JL706a	25051107	NSCT-3P894			

PARTS LIST OF PACKING

CIRCUIT. NO.	PART NO.	DESCRIPTION
L901	Coil 231069A	NCH-1119
	Capacitors	
△ C901	3500065A	0.01 μ F, AC400V/125V, Film(IS)
△ C902	3500163	WY2472MCMCF0K, Film(IS)
C903-C905	374503345	0.33 μ F, 125V, Film(ME)
C906,C907	3504261	10000 μ F, 50V, Elect.
C908	374721034	0.01 μ F, 50V, Film(TF)
C909	393342227	2200 μ F, 16V, Elect.(VX)
C914	374721034	0.01 μ F, 50V, Film(TF)
C915,C916	393382217	220 μ F, 50V, Elect.(VX)
C917,C918	393361007	10 μ F, 35V, Elect.(VX)
	Resistors	
R901,R902	353530224	2.2 Ω , 1/2W, Metal
R903	443521024	1 k Ω , 1/2W, Metal oxide film
R911,R912	443623924	3.9 k Ω , 1W, Metal oxide film
R913,R914	443621024	1 k Ω , 1W, Metal oxide film
	Switches	
△ S901	25035550	NPS-111-L51P
	Fuse holders	
△ F902a	25050065	YSH403T ³
	Plug	
△ P905	25055675	NPLG-2P631
	Wier holder	
JL502a,JL703a	25051107	NSCT-3P994
	Jumper socket	
JL702b	25050269	NSCT-5P97
	Socket ass'y	
P512	2009990301A	NSAS-4P0435
	Bus bar	
	27301781	

MUTING INDICATOR PC BOARD (NAETC-4843-1)

CIRCUIT. NO.	PART NO.	DESCRIPTION
D751	Diode 225291D	SEL4910D-D, LED
JL706	Wire holder 25051107	NSCT-3P894

NOTE:

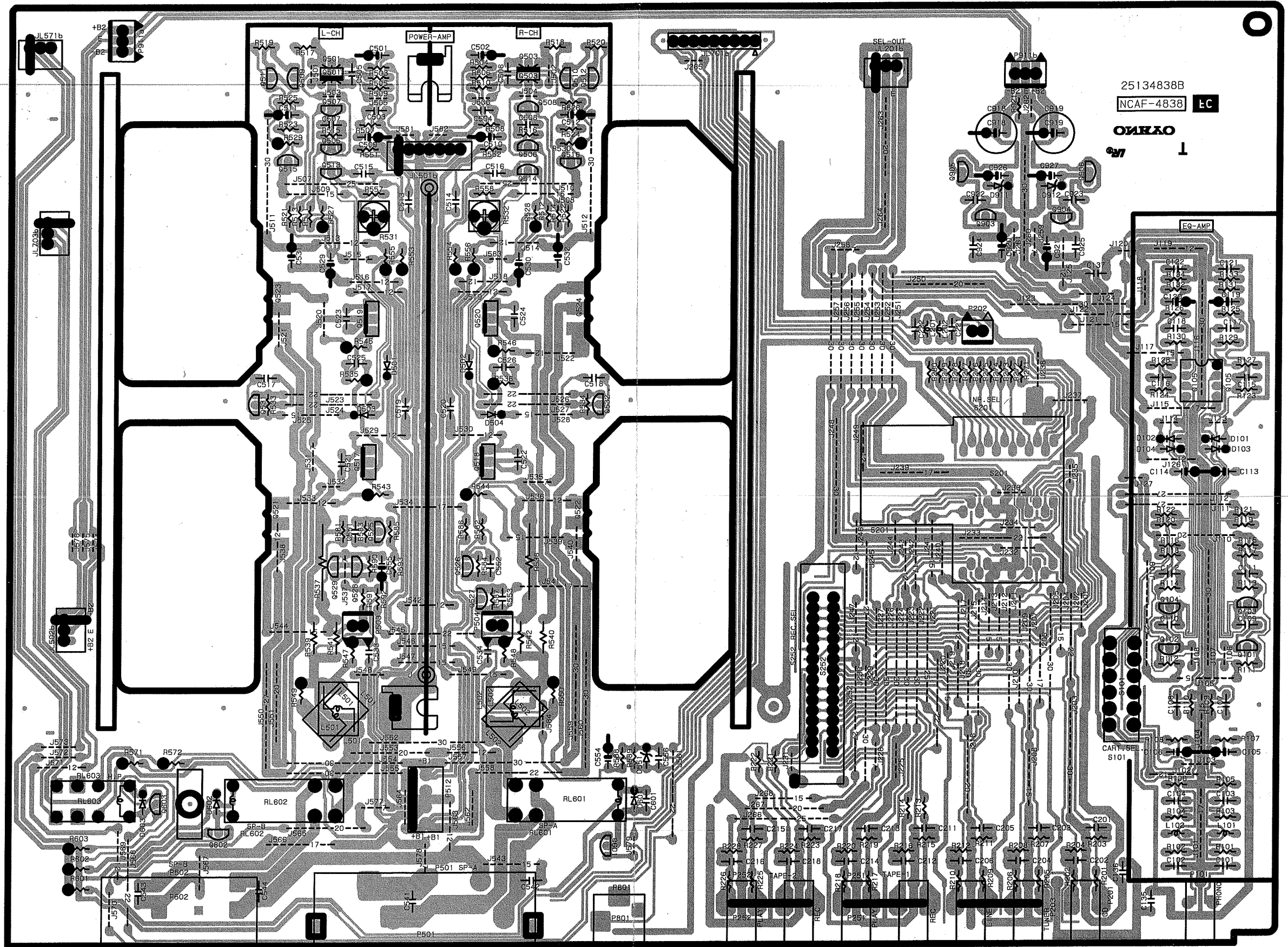
THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

REF.NO.	PART NO.	DESCRIPTION
A851	29052672	CARTON BOX
	29052672 -1	CARTON BOX [BL]
A853	29091638	PAD(L)
A854	29091639	PAD(R)
A857	261504	PAPER TAPE
A866	29100033A	POLY-VINYL BAG
A867	282311 or 282301	STAPLE or STAPLE
A868	29110071 or 29110077	PP TAPE or PP TAPE
	<ACCESSARY BAG ASS'Y>	
	29341882	INSTRUCTION MANUAL, -U6
	29365020H	WARRANTY CARD
	29100094B	POLY-VINYL BAG
	24140260	RC-260S, REMOTE CONTROL TRANSMITTER
	3010054	UM-3, TWO BATTERIES
	2010200	CONNECTION CABLE (3.5 MINI PLUG)
	29100097	320 \times 250, POLY-VINYL BAG

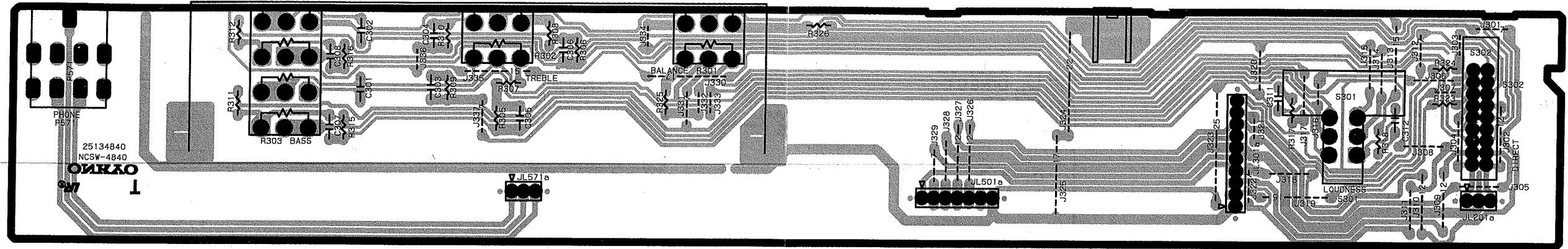
NOTE: [BL]: BL MODEL ONLY

PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE

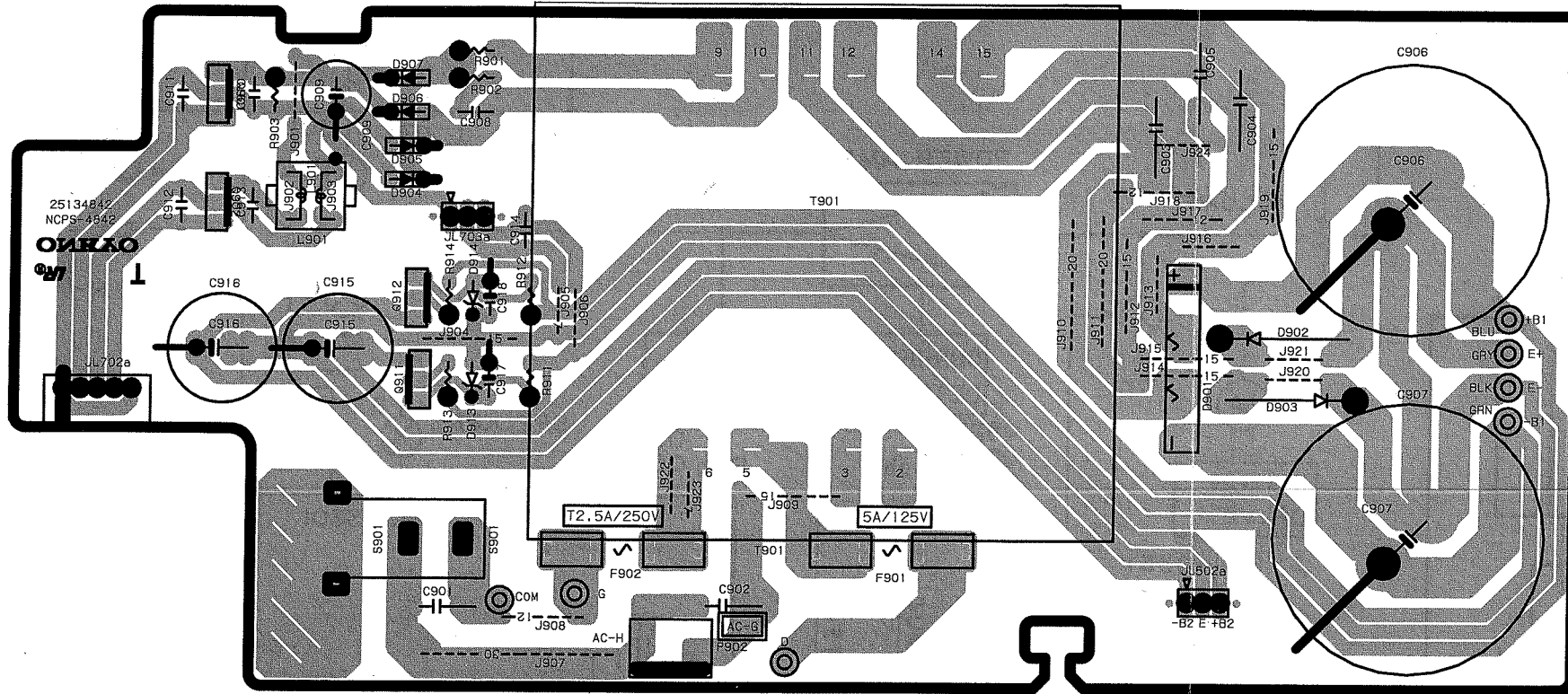
NAAF-4838 Main circuit



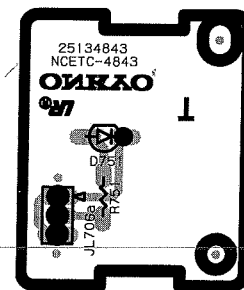
NASW-4840 Tone control circuit



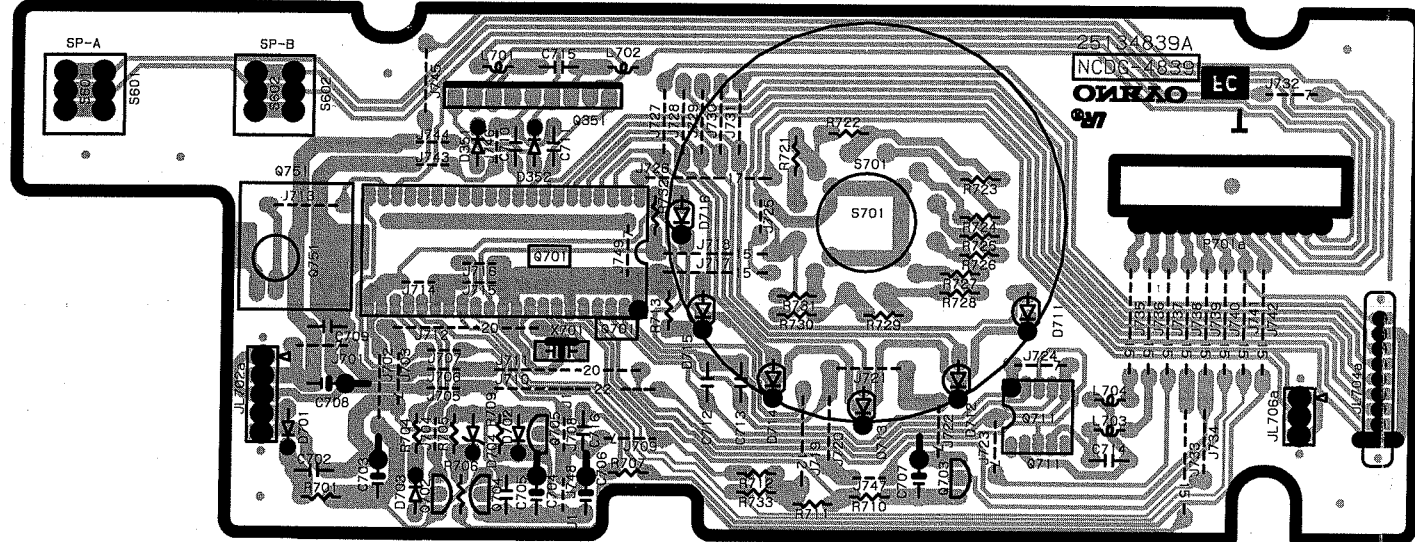
NAPS-4842 Power supply circuit



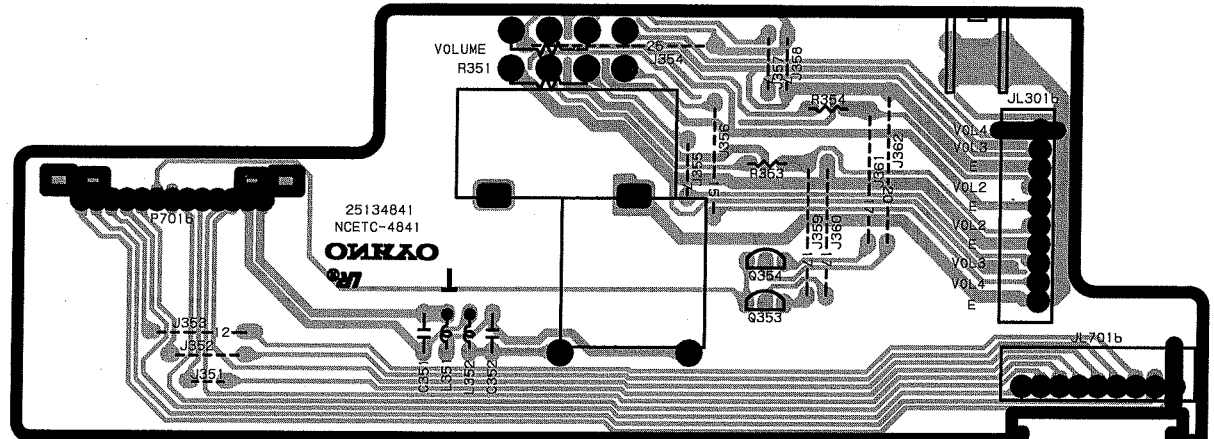
NAETC-4843 Muting Ind.



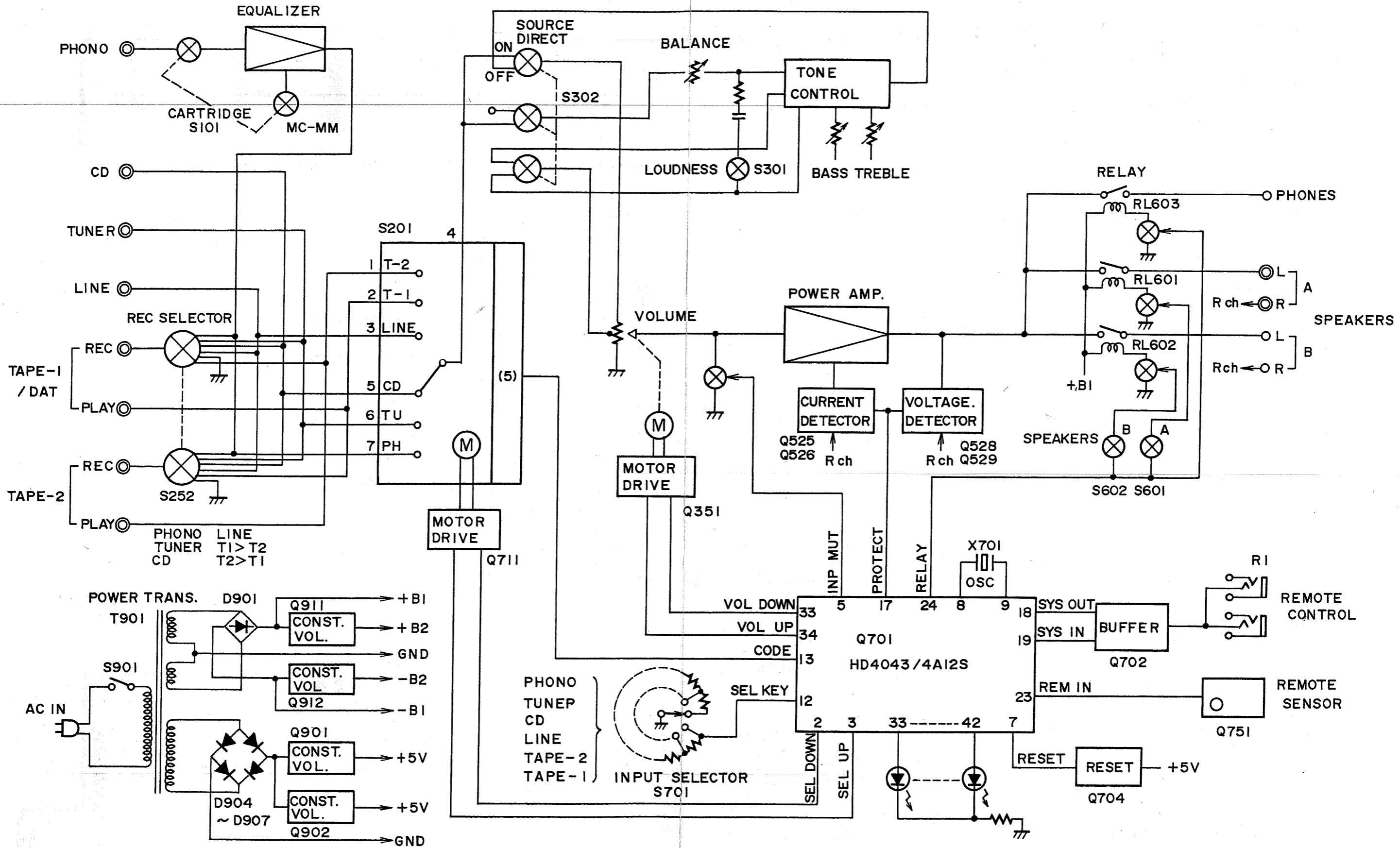
NADG-4839 Microprocessor circuit



NAETC-4841 Volume control circuit

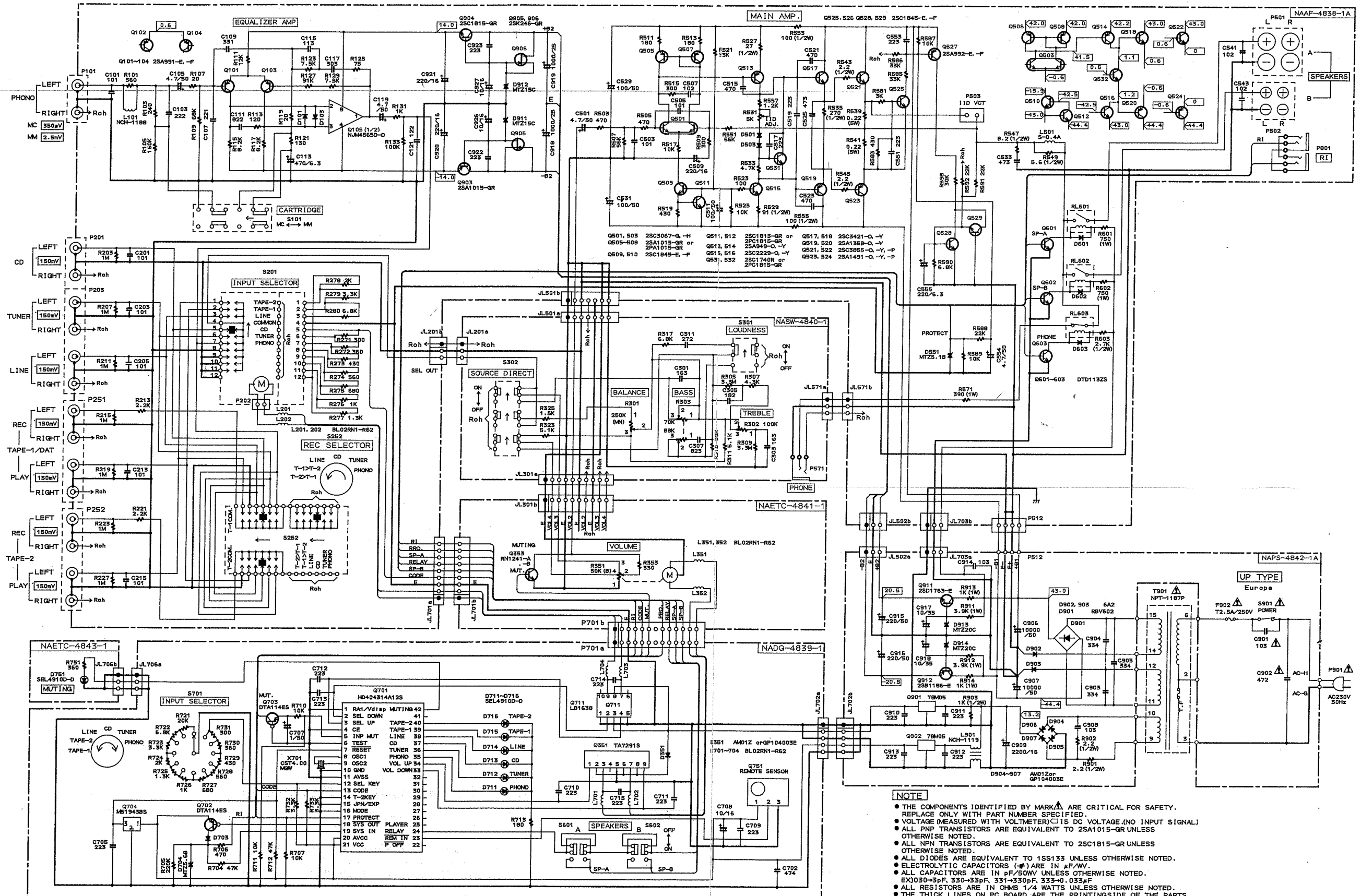


BLOCK DIAGRAM



SCHEMATIC DIAGRAM MODEL A-8051

1
2
3
4
5
6



NOTE

- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE (NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (E) ARE IN μ F/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
- EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033 μ F.
- ALL RESISTORS ARE IN OHMS 1/4 WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTINGSIDE OF THE PARTS.
- EX) \square PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

PRECAUTIONS

1. Replacing the fuses

For continued protection against risk fire, replace only with same type and same rating fuse.

CIRCUIT NO.	PART NO.	DESCRIPTION
F902	252075 or 252075CC	2.5A-SE-EAK or 2.5A-SE-EAK, Primary fuse

ONKYO CORPORATION

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