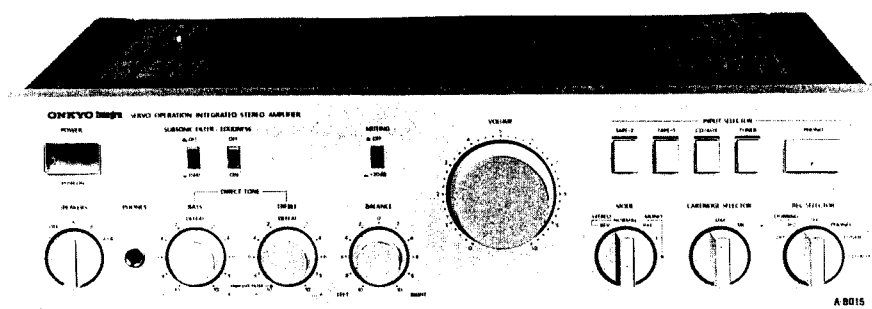


ONKYO SERVICE MANUAL

SUPER SERVO INTEGRATED STEREO AMPLIFIER A-8015



UDN, UD	120V AC, 60 Hz
UGV, UG	220V AC, 50 Hz
UW	120V or 220V AC, 50/60 Hz

SAFETY-RELATED COMPONENT

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO 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

Music Power Output: 2 x 140 watts at 4 ohms, 1kHz (DIN)
 2 x 90 watts at 8 ohms, 1kHz (DIN)

Continuous Power Output: 2 x 90 watts at 4 ohms, 1kHz (DIN)
 2 x 65 watts at 8 ohms, 1kHz (DIN)
 60 watts per channel min. RMS at 8 ohms both channels driven, from 20Hz to 20kHz, with no more than 0.018% THD.

Total Harmonic Distortion: 0.018% at rated power
 IM Distortion: 0.005% at rated power
 Damping Factor: 50 at 8 ohms
 Frequency Response: 2 - 50,000 Hz ± 1 dB
 RIAA Deviation (MM): 20 - 20,000 Hz ± 0.5 dB

Sensitivity and Impedance: Phono (MM): 2.5 mV/50 kohms
 Phono (MC): 350 μ V/330 ohms
 Tuner: 150 mV/50 kohms
 Tape Play: 150 mV/50 kohms
 Tape Rec: 150 mV/3.3 kohms (phono)

Phono Overload: 180 mV RMS at 1 kHz, 0.018% THD
 Bass Control: ± 8 dB at 70 Hz

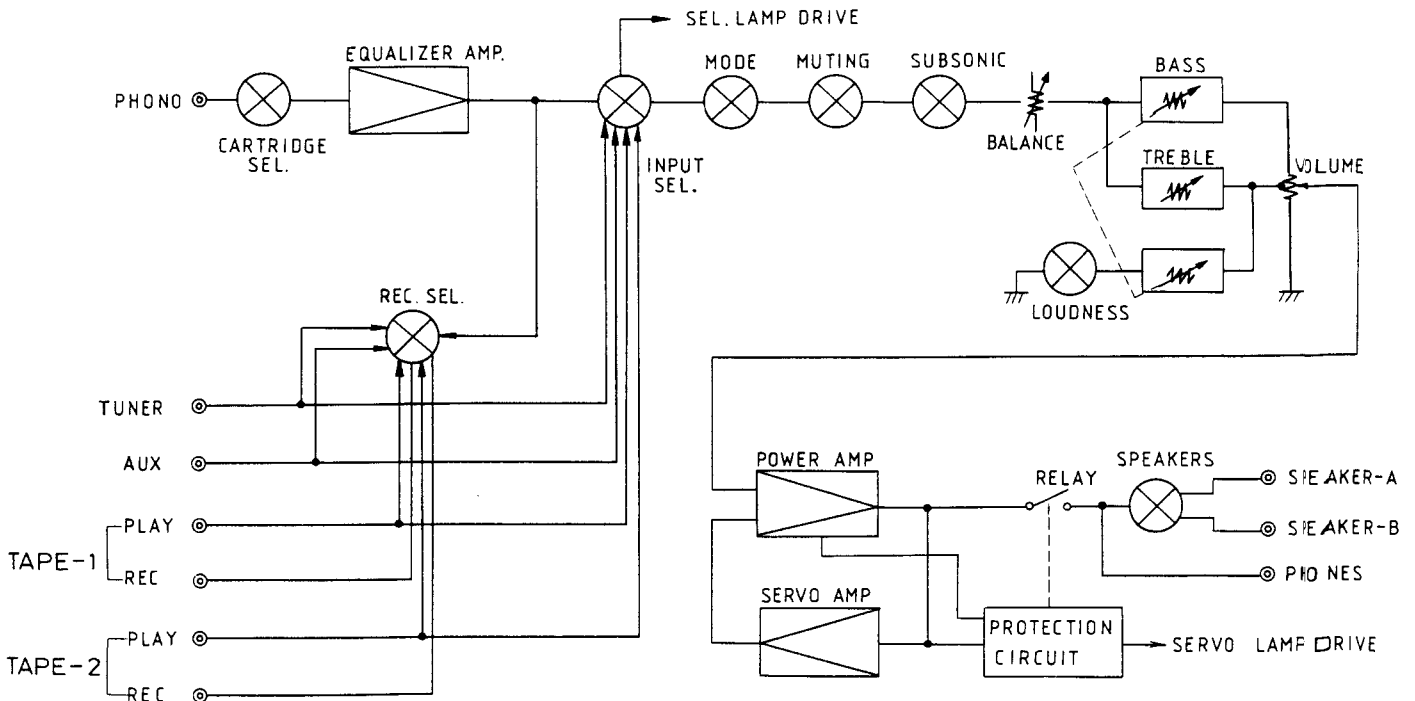
Treble Control: ± 8 dB at 20,000 Hz
 Signal to Noise Ratio: Phono (MM): 80 dB (1HF A-202, 5 mV input, 1 watt output)
 Phono (MC): 67 dB (1HF A-202, 0.5mV input, 1 watt output)
 Tuner & Tape: 84 dB (1HF A-202, 0.5 V input, 1 watt output)

Muting: -20 dB
 Loudness Control: +6 dB at 70 Hz, +5 dB at 20 kHz
 Subsonic Filter: 15 Hz (6 dB/Oct.)
 High Cut (TREBLE MIN): 6 kHz (6 dB/Oct.)

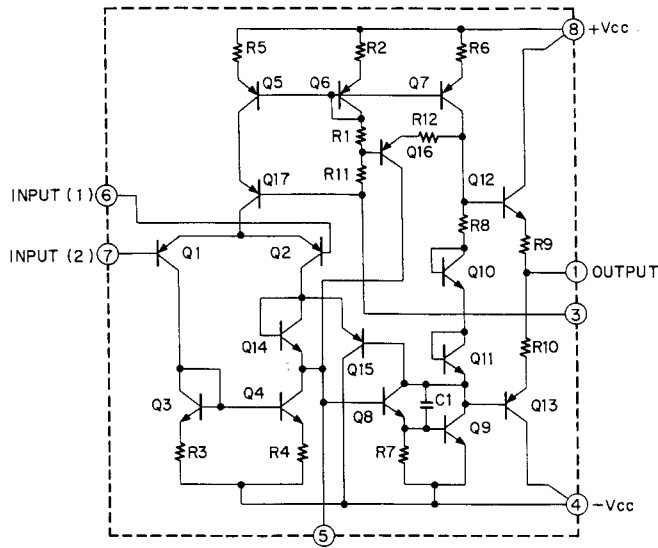
General
 Semiconductors: IC: 5 TR: 37 Diode: 26
 Dimensions: 435(W) x 122(H) x 392(D) mm
 17-1/8" x 4-13/16" x 15-7/16"
 Weight: 9 kg. (19.9 lbs.)

Specifications and features are subject to change without notice.

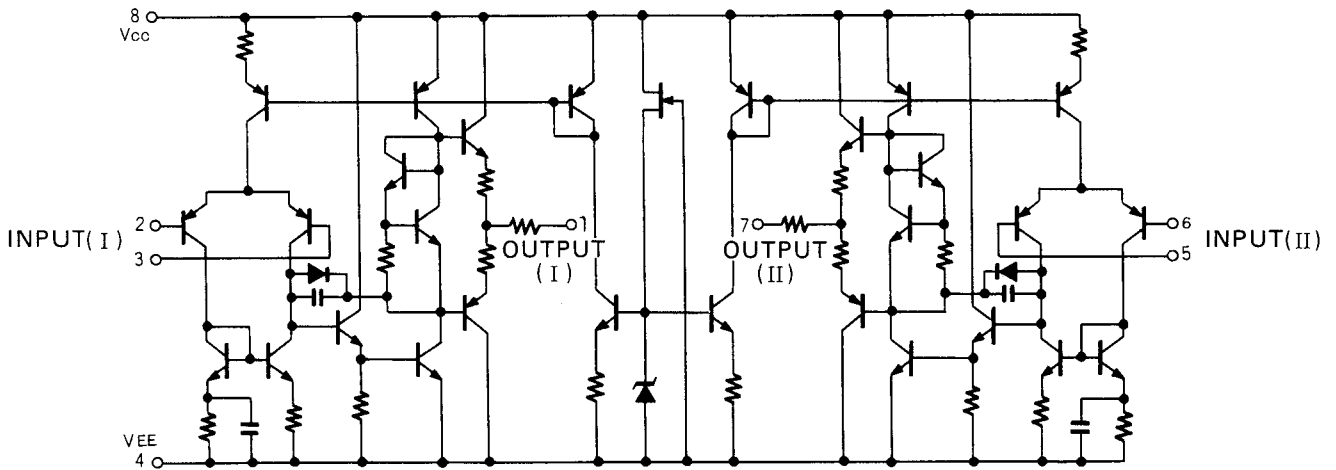
BLOCK DIAGRAM



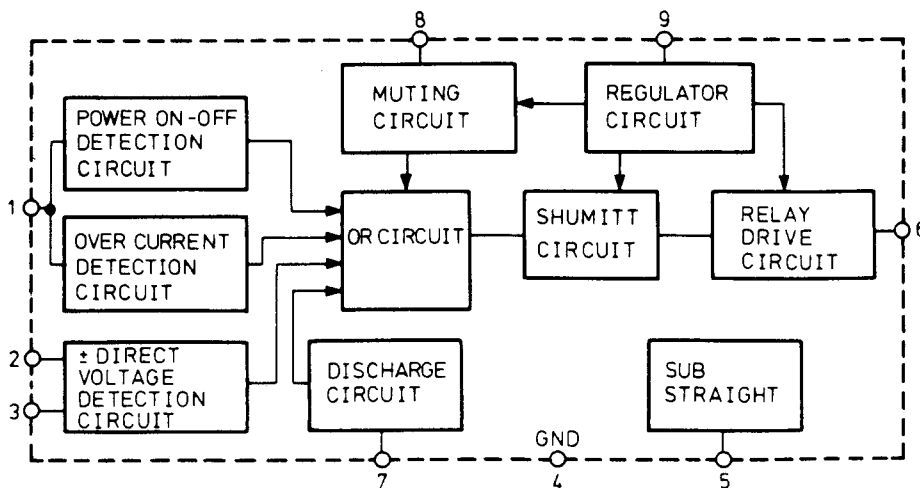
IC BLOCK DIAGRAM
HA12017



NJM4558DX



TA7317P



PRECAUTIONS

1. Replacing the fuses

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

CIRCUIT NO.	PARTS NO.	DESCRIPTION
F901	252051	6A(ST-6), AC fuse (120V model)
F901	252055	6A-T, AC fuse (120V/220V model)
F902	252076	3.15A-SE-EAK, AC fuse (120V, 120V/220V model)
F701	252070	1A-SE-EAK, AC fuse (220V model)
F1, F2	252078	5A-SE-EAK, DC fuse (220V model)

2. Replacing the lamps

This unit uses the lamps listed below.

CIRCUIT NO.	PARTS NO.	DESCRIPTION
PL303	210250	PL14V 0.06AW-1.0, Phono selector indicator
PL304, PL305	210146	PL14V 0.06AW-1.0, Tuner, CD/AUX selector indicator
PL306, 307	210147	PL14V 0.06AW-1.0, Tape 1/2 selector indicator

PL701	210148	PL14V 0.06AW-2.0, Power indicator
PL702	210151	PL14V 0.08AW-1.5, Servo indicator

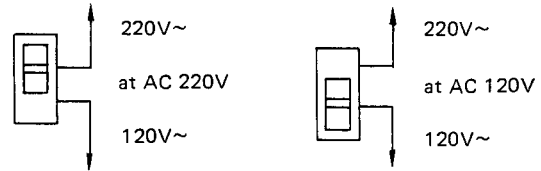
3. Insulation resistance measurement

Connect the insulating-resistance tester between the plug of power supply cable and the terminal GND specifications;

D model 500V 100MΩ
G/W model 500V more than 100MΩ

4. Voltage selector (rear panel)

Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on. Voltage is changed by sliding the groove in the switch with a screwdriver or similar instrument to the up or down position. Confirm that the switch has been moved all the way to the up or down before turning the power switch on. If there is no voltage selector switch on the unit you have purchased, it can only be used in areas where the power supply voltage is the same as that of the unit.



MAIN AMPLIFIER ADJUSTMENT

1. Set the all control knobs to standard position.

INPUT SELECTOR TUNER
 VOLUME Minimum
 BALANCE Center
 MODE NORMAL
 CART SEL. MM
 REC SEL. OFF
 MUTING, SUBSONIC FIL., LOUDNESS OFF
 BASS, TREBLE DEFEAT
 SPEAKER A

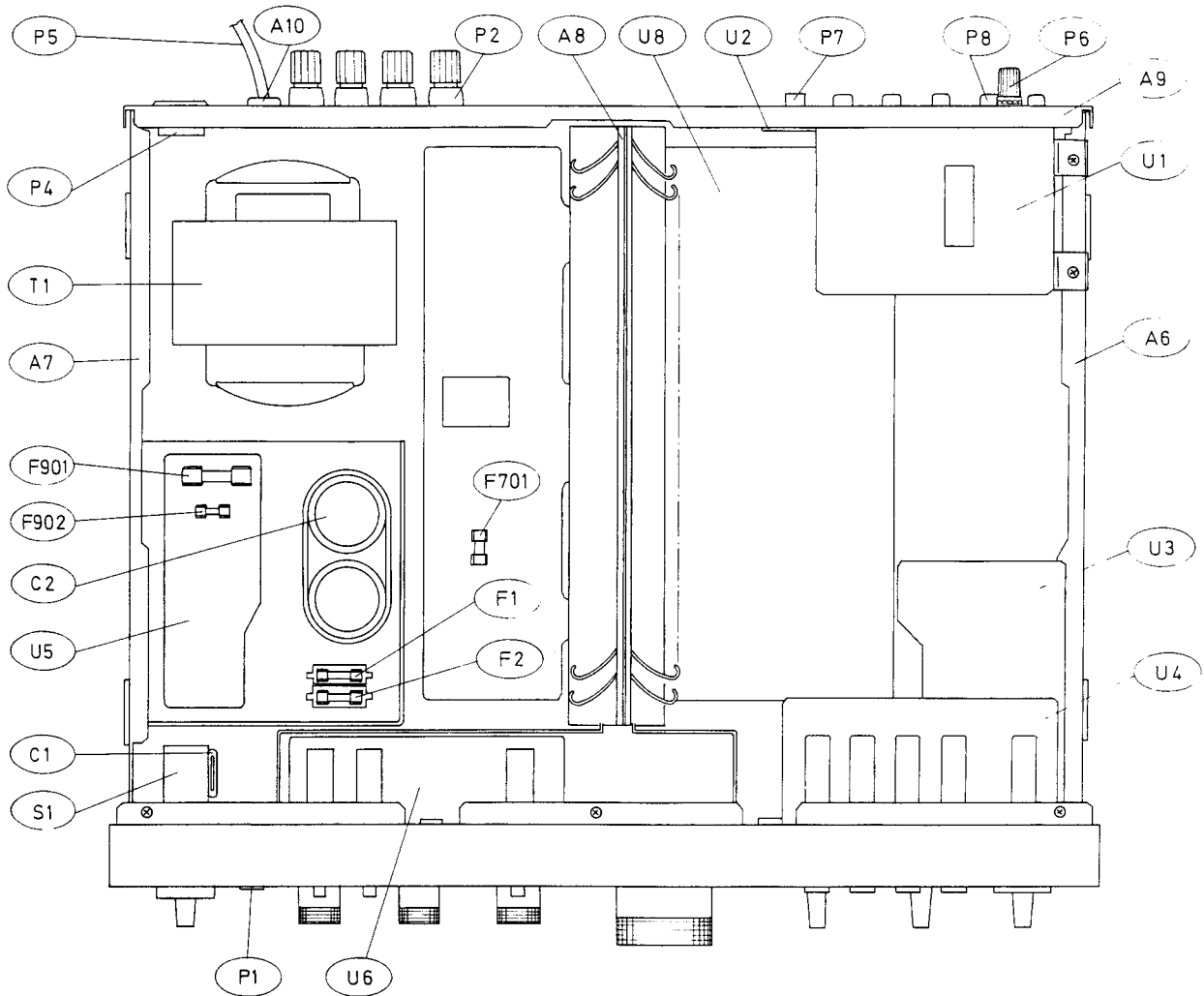
2. Idling current adjustment

- 1 Connect the DC voltmeter between I_{ID} and V_{CT} terminals
- 2 Adjust the voltage to 12 ± 5 mV with semi-fixed resistor of R538 and R415

NOTES: Adjust after switching on for 5 minutes.

VOLUME Minimum
 LOAD Open

COMPONENT LOCATION



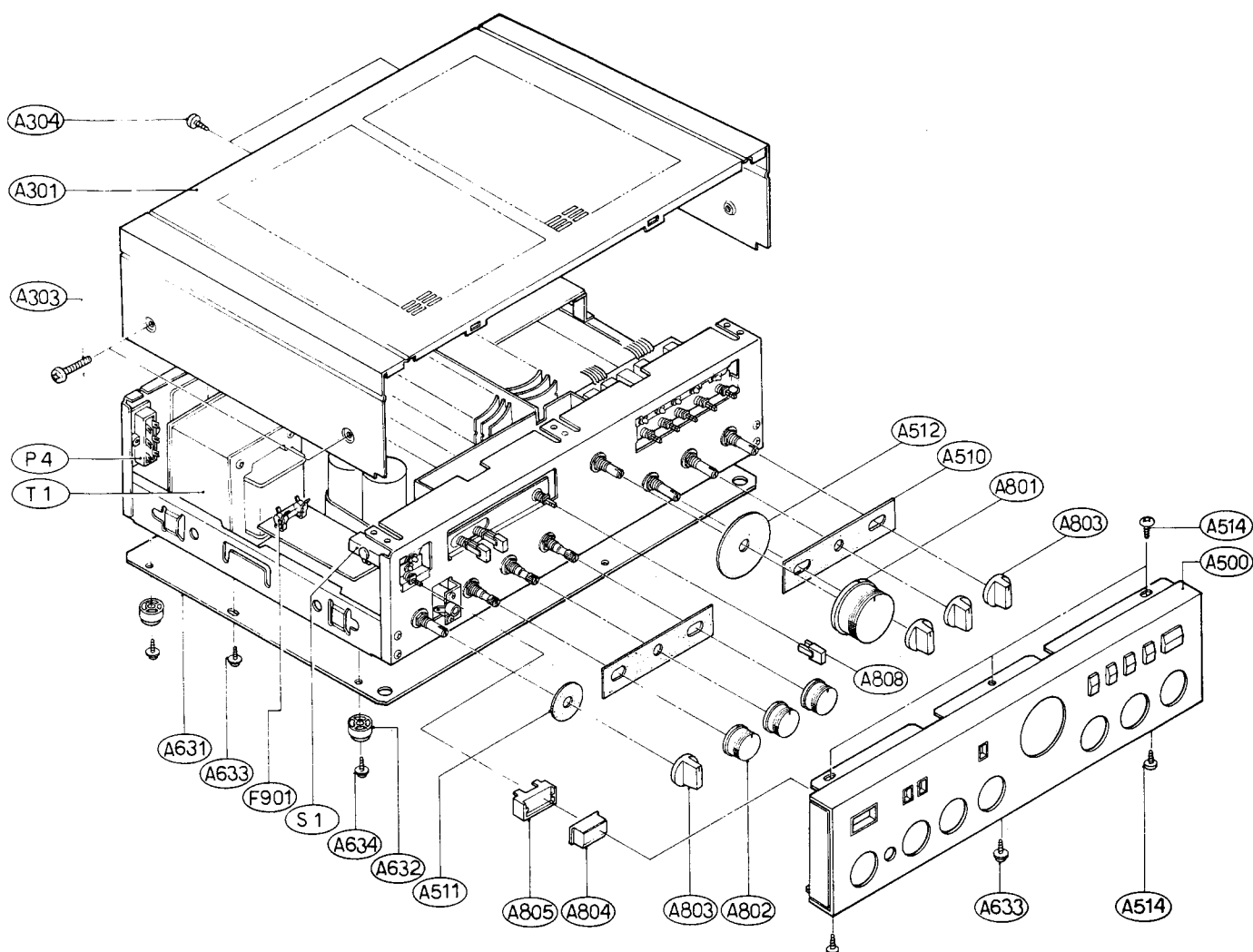
△ F901	252051	6A (ST-6), AC fuse (D)
	252055	6A-T, AC fuse (W)
△ F902	252076	3.15A-SE-EAK, AC fuse (G) (W)
△ F701	252070	1A-SE-EAK, AC fuse (G)
△ F1, F2	252078	5A-SE-EAK, DC fuse (G)
P1	25045018	LJ-100-H, Stereo headphone terminal
P2	25060051	NTM-4PRMN20, Speaker terminal
△ P4	25050139	NSCT-6P38, AC outlet (D)
	25108010	LG-2C, Terminal (G) (W)
△ P5	253112	AS-UC-4#18, Power supply cable (D)
	253083-1	AS-CEE, Power supply cable (G)
	253092-1	AS-CEE-2, Power supply cable (W)
P6	25060044	Ground terminal
P7	25045072	NPJ-6PDBL36, Input terminal
P8	25045087	NPJ-2PDBL44, Phono input terminal
U1	12328563A	NAEQ-1163a, Equalizer amplifier pc board ass'y (D) (W)
	12334563B	NAEQ-1163b, Equalizer amplifier pc board ass'y (G)
U2	12941568	NAPJ-1468, Input terminal pc board ass'y
U3	12940569A	NASW-1469a, Rec. Selector switch pc board ass'y

U4	12941570	NASW-1470, Input selector switch pc board ass'y
U5	12941571	NAPS-1471, Rectifier circuit pc board ass'y (D)
	12334571B	NAPS-1471b, Rectifier circuit pc board ass'y (G)
	12330571C	NAPS-1471c, Rectifier circuit pc board ass'y (W)
U6	12941572	NASW-1472, Switch circuit pc board ass'y
U7	12328574B	NATC-1474b, Tone control pc board ass'y
U8	12328576C	NAMA-1476c, Power amplifier pc board ass'y (D) (W)
	12334576D	NAMA-1476d, Power amplifier pc board ass'y (G)

NOTE
 (D) : only 120V model
 (G) : only 220V model
 (W) : only 120V/220V model
 (B) : Black type

The components identified by mark △ are critical for risk of fire and electric shock. Replace only with parts number specified.

EXPLODED VIEW



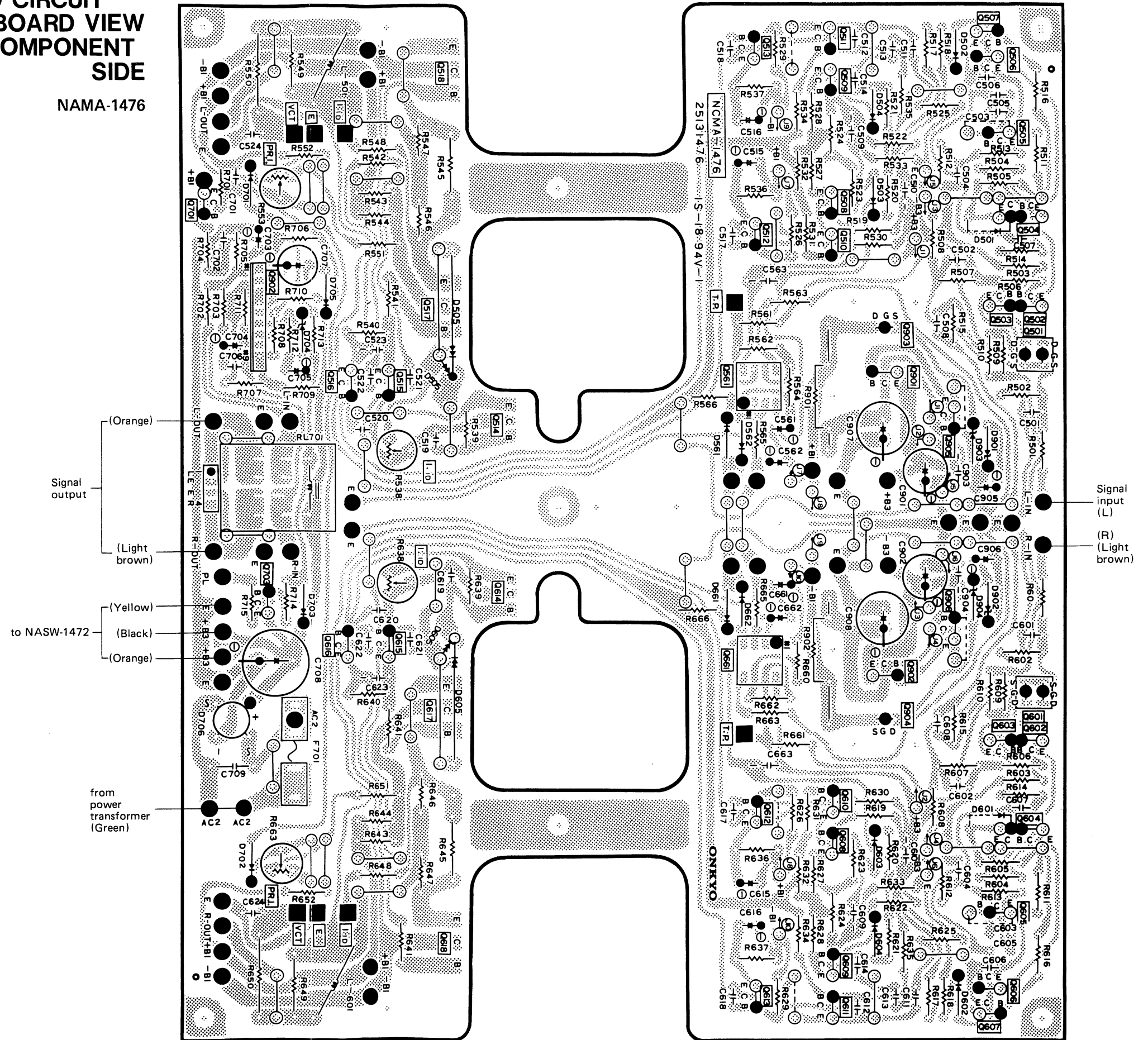
PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION
A6	27115132A	Side bracket, Right
A7	27115089C	Side bracket, Left
A8	27160117	Heatsink
A9	27120470B	Back panel (D)
	27120471A	Back panel (G)
	27120475A	Back panel (W)
A10	270280	SR-4K-4, Strainrelief
A301	28184186	Top cover
	28184179	Top cover (B)
A303	838440089	4TTB+8C (BC), Tapping screw
A304	934430068	3TTS+6B (BC), Tapping screw
A500	12328121	Front panel ass'y
	12314121	Front panel ass'y (B)
A510	28140205	Cushion (TONE)
A511	28140185	Cushion
A512	28140206	Cushion
A514	834430068	3TTS+6B (BC), Tapping screw
A631	27170108B	Bottom board
A632	27175009A	Bottom leg
A633	831430088	3TTW+8B (BC), Tapping screw
A634	834430108	3TTS+10B (BC), Tapping screw
A801	28320831A	Knob, Volume
	28321012	Knob, Volume (B)
A802	28320832B	Knob, Balance
	28321013	Knob, Balance (B)
A803	28320833	Knob, Speaker
	28321014	Knob, Speaker (B)
A804	28321100	Knob ass'y, Power
	28321101	Knob ass'y Power (B)
A805	28320828C	Knob, Base
A808	28320836	Knob, Push
	28321018	Knob, Push (B)
△ T1	230686	NPT-732D, Power transformer (D)
	230687	NPT-732G, Power transformer (G)
	230688	NPT-732DG, Power transformer (W)
△ S1	25035015A	NPS-111-LA3, Power switch
△ S2	25065123	NSS-1258P, Slide switch (W)
△ C1	3500065A	0.01μF, AC400V, Capacitor IS
C2	3504172	15000μF, 50V, Capacitor, Elect.

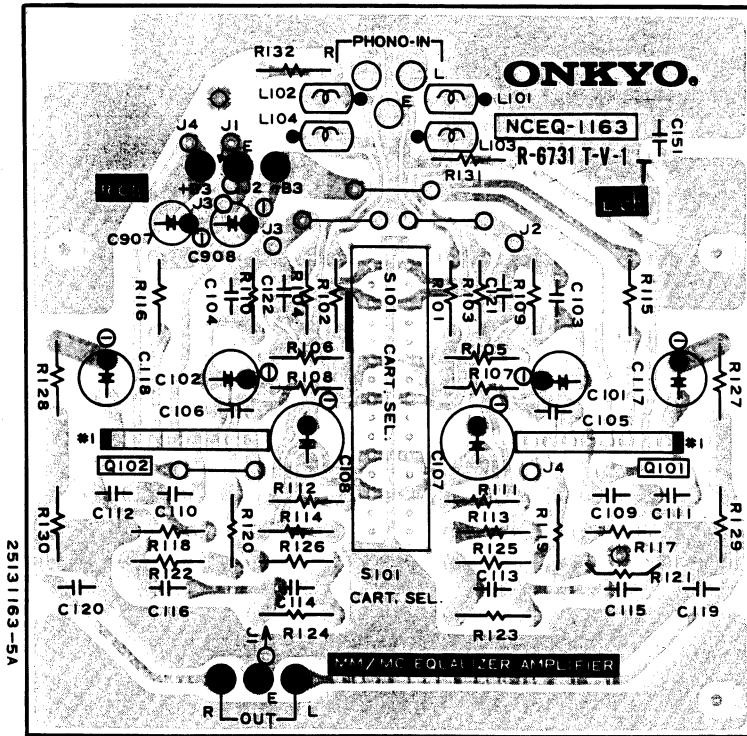
PRINTED CIRCUIT BOARD VIEW FROM COMPONENT SIDE

NAMA-1476

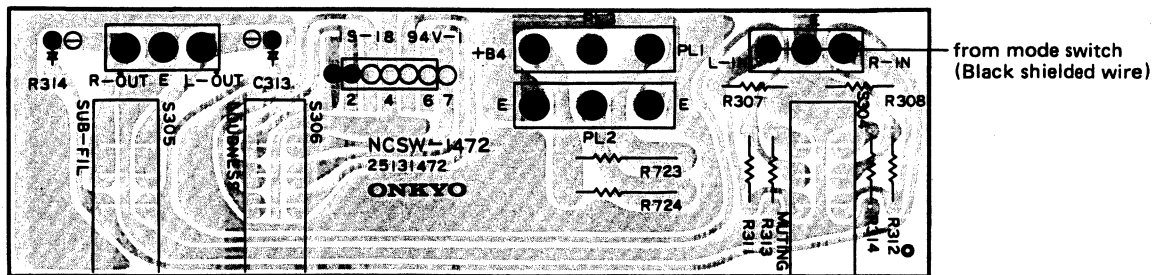
Resistors		
R526, R529	442524314	430Ω, 1/2W, Metal oxide film
R626, R629		
R527, R528	442526204	62Ω, 1/2W, Metal oxide film
R627, R628		
R536, R537	442521814	180Ω, 1/2W, Metal oxide film
R636, R637		
R538, R638	5225015	N10HR10KBD, Semi-fixed
R540, R640	442521014	100Ω, 1/2W, Metal oxide film
R541, R542	442520274	2.7Ω, 1/2W, Metal oxide film
R641, R642		
R543, R544	4000063	0.47Ω, 2W, Metal plate
R546, R547		
R643, R644		
R646, R647		
R545, R645	441620104	1Ω, 1W, Metal oxide film
R549, R649	441620564	5.6Ω, 1W, Metal oxide film
R550, R650	441721004	10Ω, 2W, Metal oxide film
R715	442522704	27Ω, 1/2W, Metal oxide film
R901, R902	441521614	160Ω, 1/2W, Metal oxide film
Relay		
RL701	25065036	NRL-4P3A-DC12-01
Fuseholder		
	25050065	YSH403T



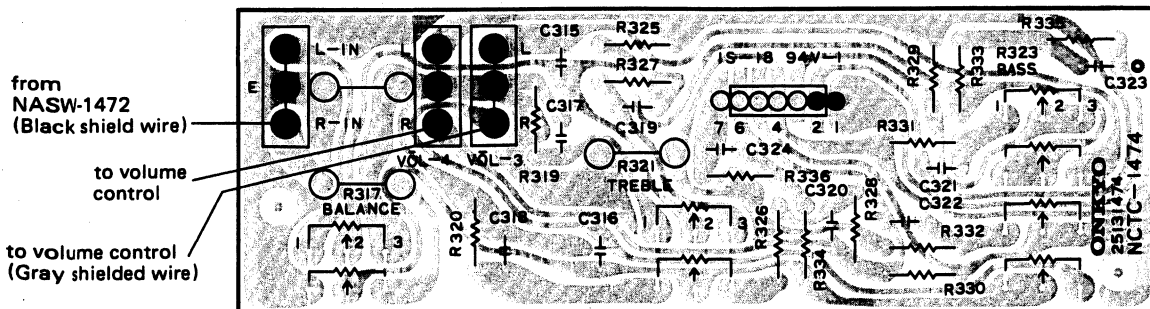
NAEQ-1163



NASW-1472



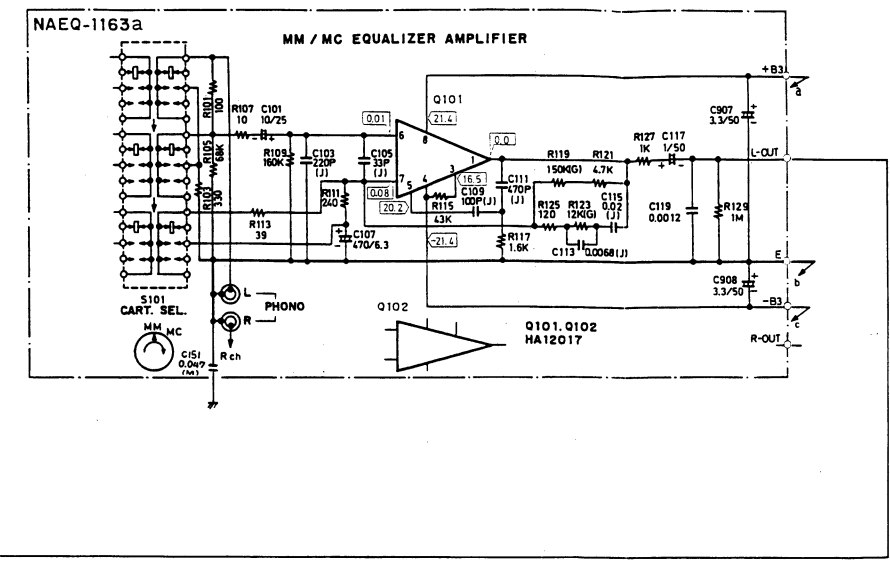
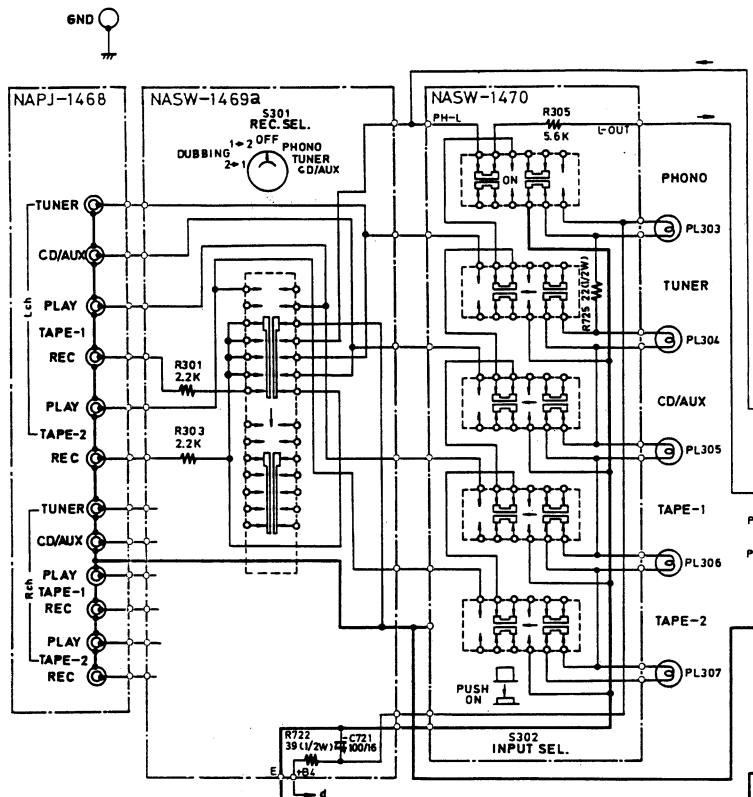
NATC-1474



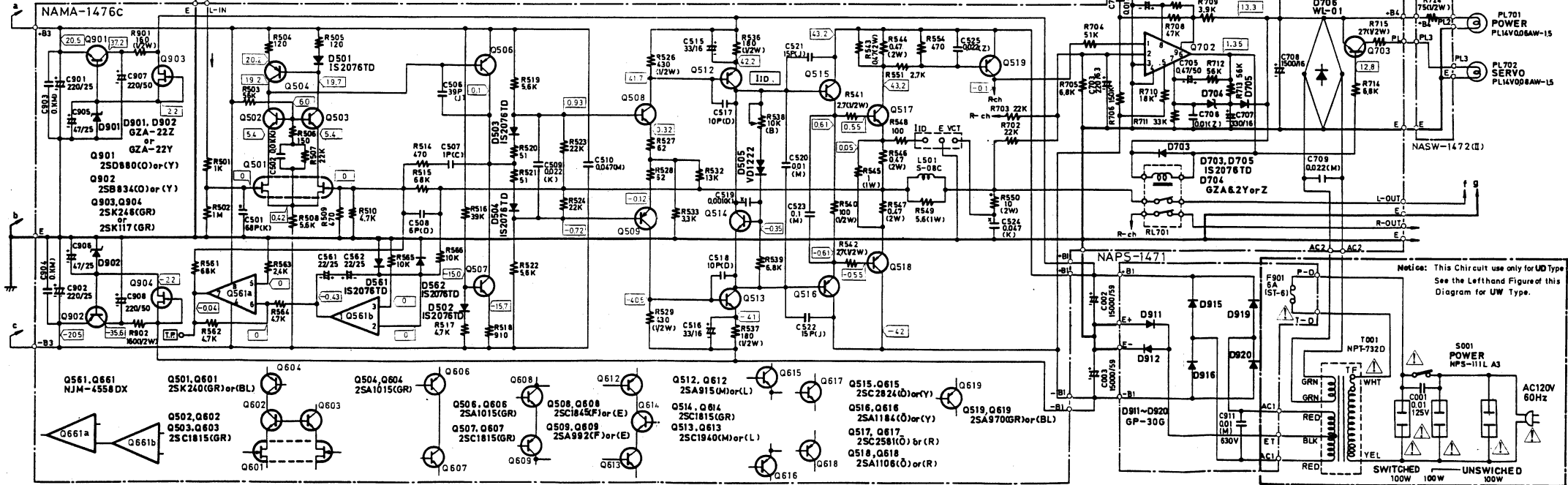
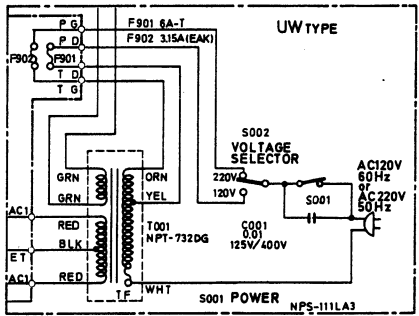
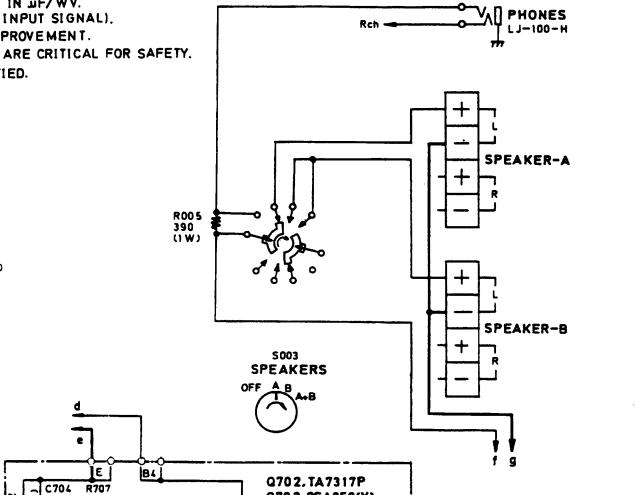
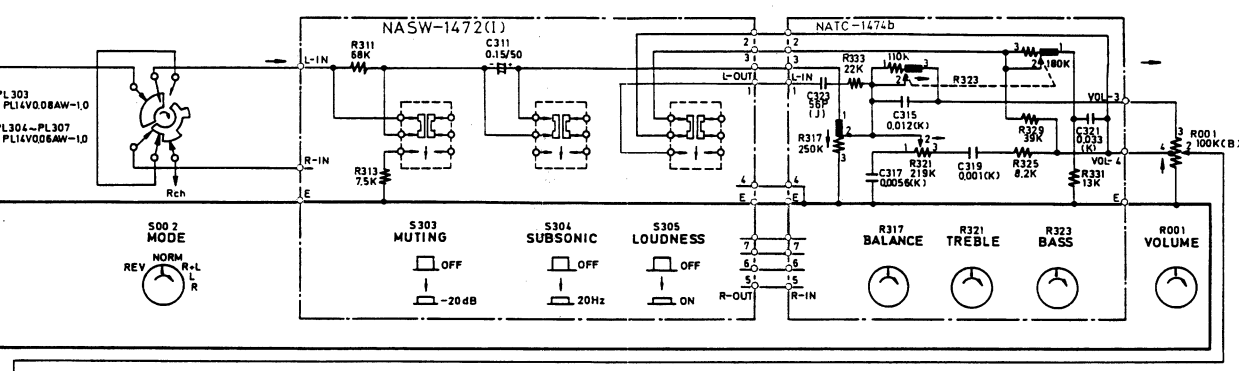
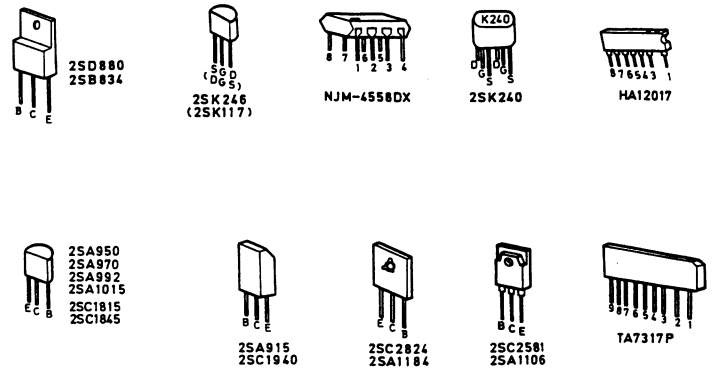
SCHEMATIC DIAGRAM

120V Model, 120V/220V Model

1
2
3
4
5

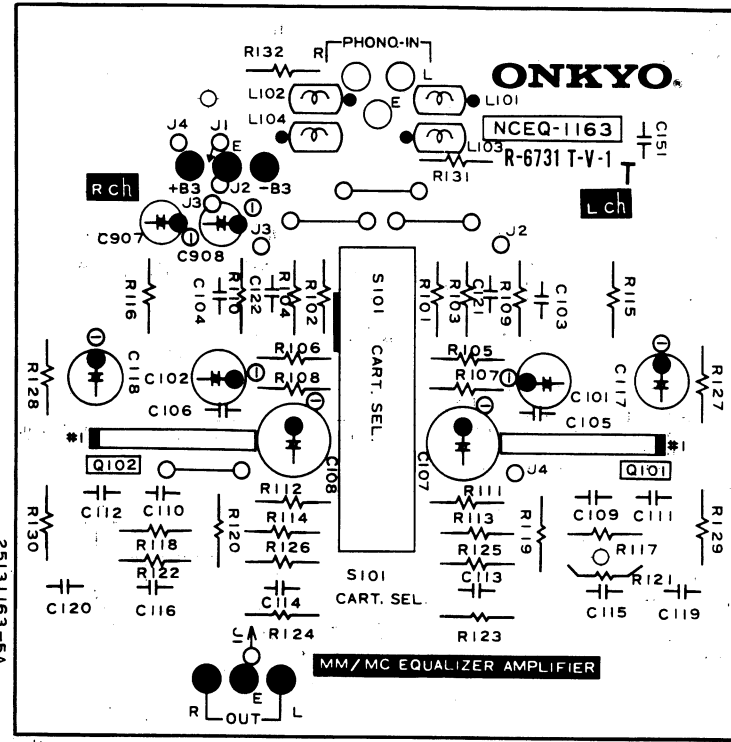


NOTES:
 *ALL RESISTORS ARE IN OHMS, 1/4 WATT UNLESS OTHERWISE NOTED.
 *ALL CAPACITORS ARE IN μ F, 50WV UNLESS OTHERWISE NOTED.
 *ELECTROLYTIC CAPACITORS (—E—) ARE IN μ F/WV.
 *VOLTAGE (MEASURED WITH V.T.V.M.) (NO INPUT SIGNAL).
 *CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
 *THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.

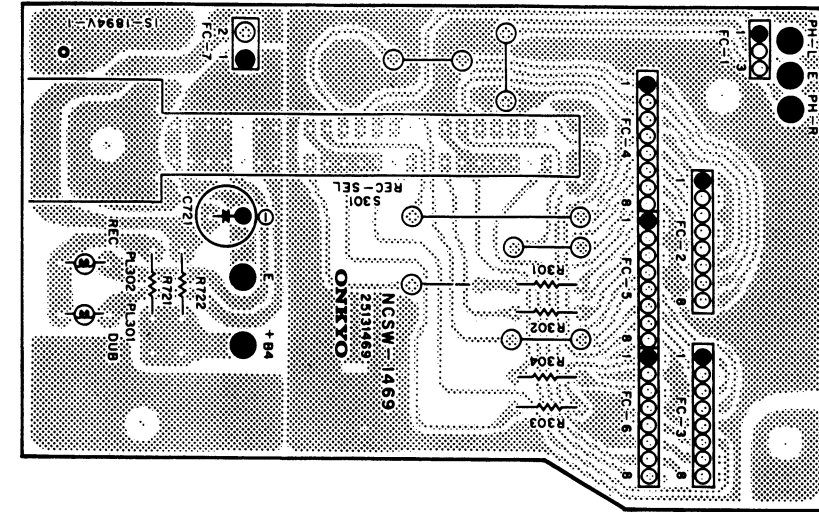


A-8015UD+UW
 SCHEMATIC DIAGRAM
 RC-201431

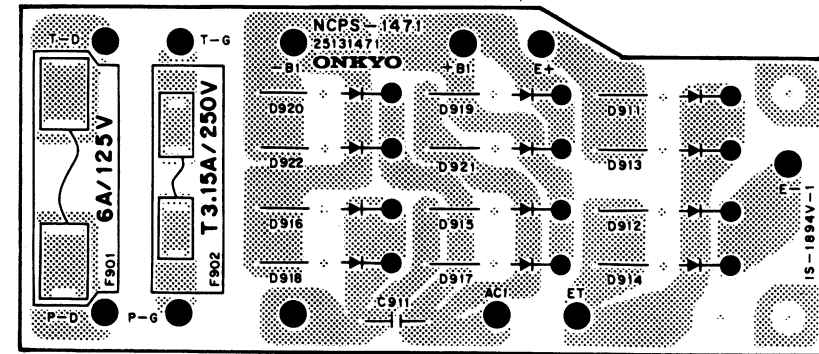
NAEQ-1163



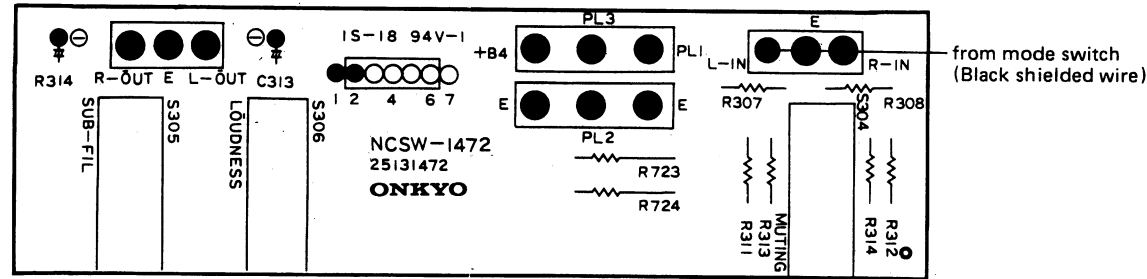
NASW-1469



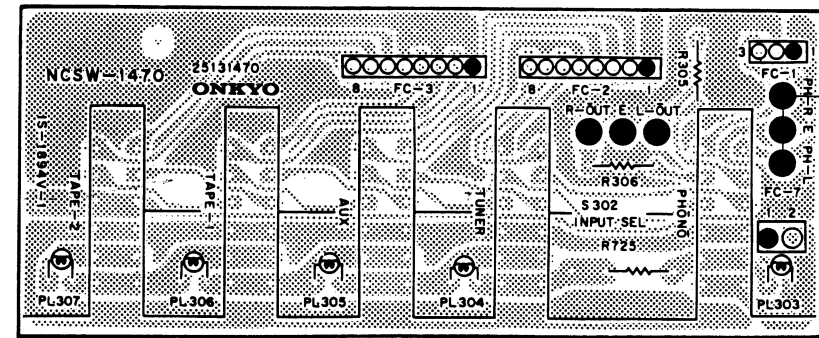
NAPS-1471



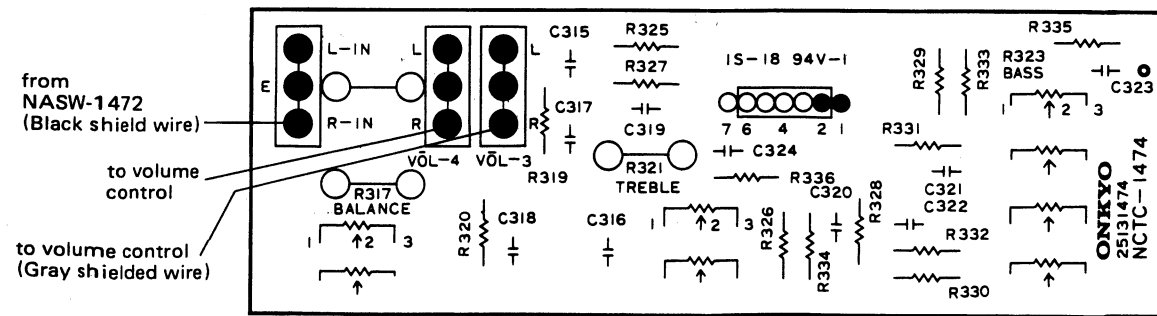
NASW-1472



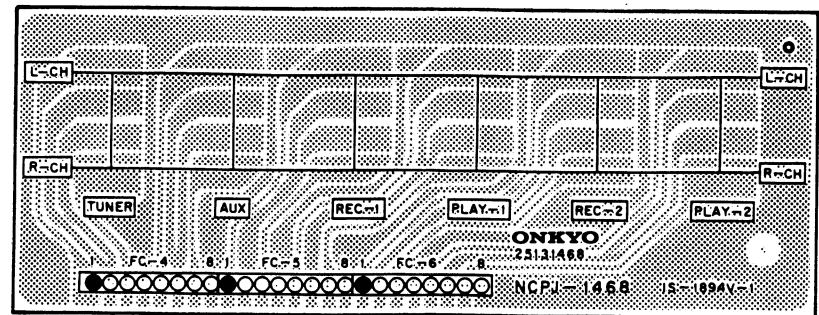
NASW-1470



NATC-1474



NAPJ-1468



SCHEMATIC DIAGRAM

220V Model

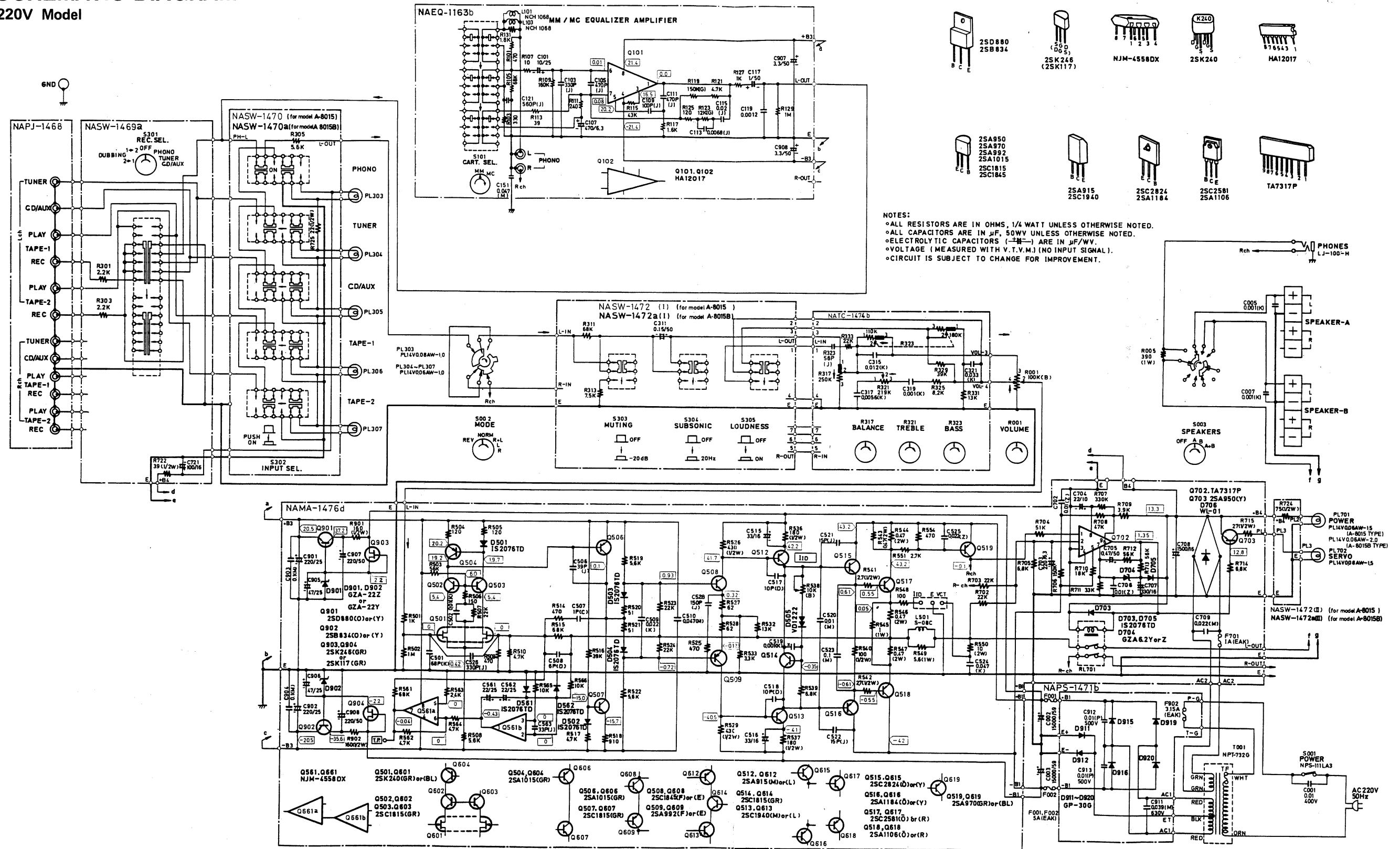
1

2

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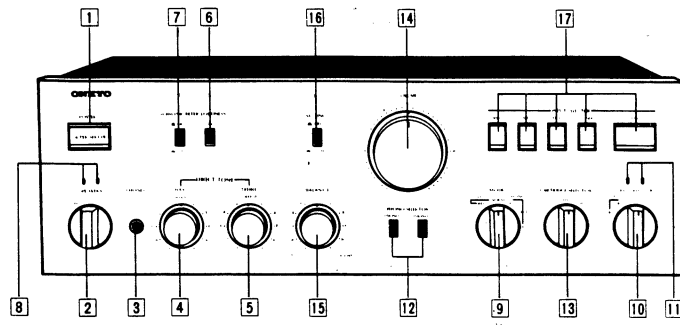


NOTES:
 *ALL RESISTORS ARE IN OHMS, 1/4 WATT UNLESS OTHERWISE NOTED.
 *ALL CAPACITORS ARE IN μ F, 50V UNLESS OTHERWISE NOTED.
 *ELECTROLYTIC CAPACITORS (—) ARE IN μ F/WV.
 *VOLTAGE (MEASURED WITH V.T.V.M.) (NO INPUT SIGNAL).
 *CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

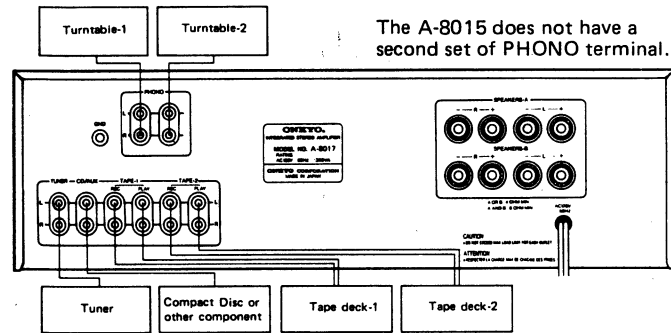
A 8015UG
 A-8015BUG
 SCHEMATIC DIAGRAM
 RC-201432

ONKYO CORPORATION

FRONT PANEL

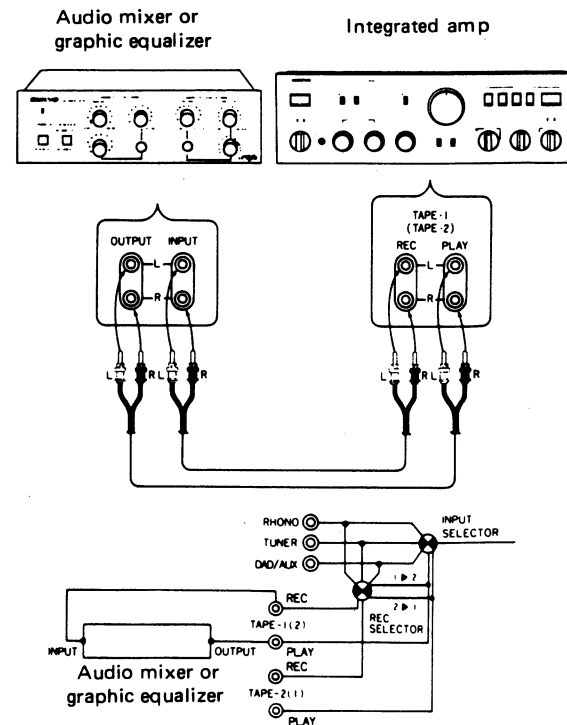


SYSTEM CONNECTIONS

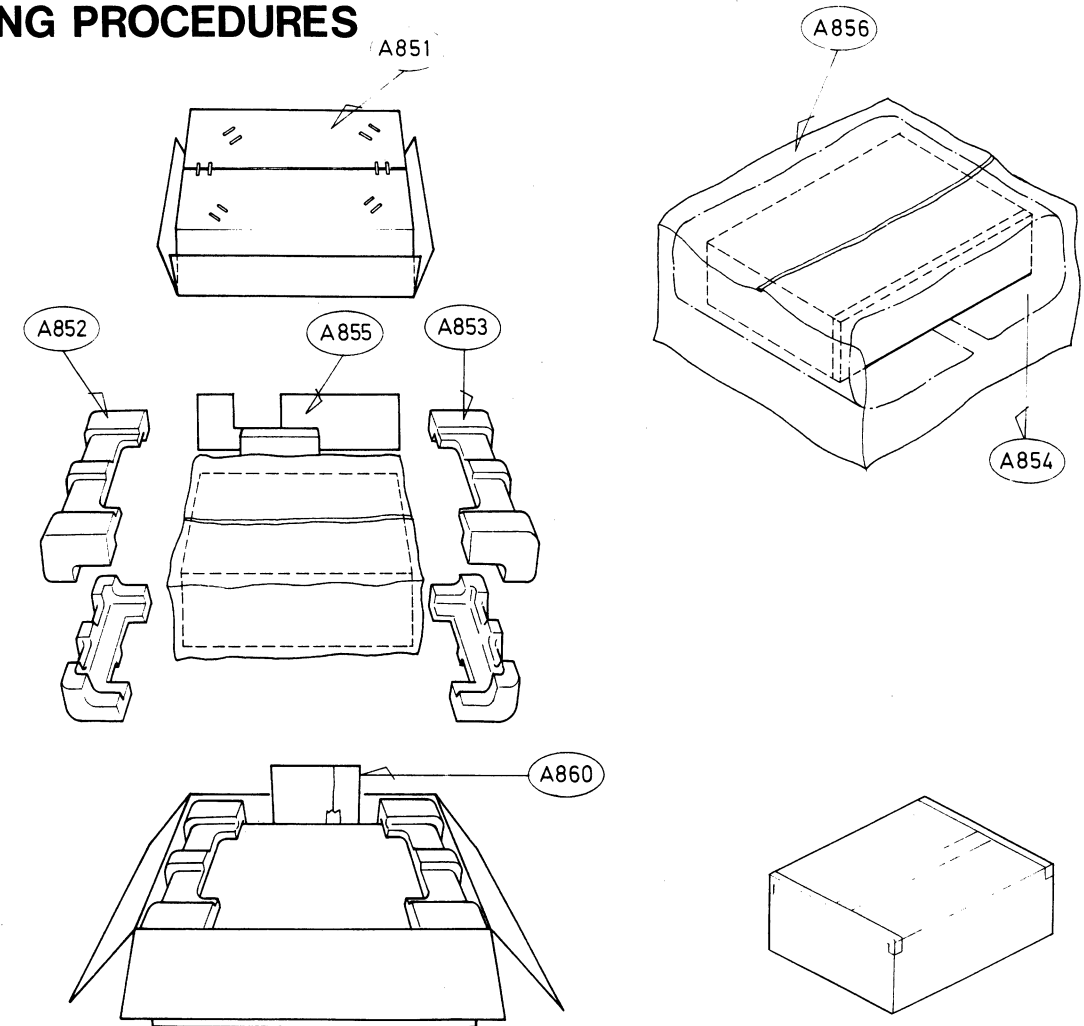


NOTE:
Using a mixing Console or Graphic Equalizer

A mixing console or graphic equalizer can be connected to the TAPE-1 (or TAPE-2) terminals as shown below. The input selector is then set to the TAPE-1 (or 2) setting depending on the terminals to which the mixing console or equalizer is connected and the recording source selector to the program source to be used with mixing or equalization. To perform mixing or equalization with a tape deck program, set the recording source selector to 2 ► 1 (or 1 ◀ 2) for equalizing or mixing the tape program from tape deck 2 (or tape deck 1).



PACKING PROCEDURES



PACKING PROCEDURES PARTS LIST

REF NO.	PARTS NO.	DESCRIPTION	
A851	29050645	Master carton box	29358004 Service station list (V)
	29050647	Master carton box (B)	29365010 Caution label C (U)
A852	29090362A	Pad L	29365011 Label (U)
A853	29090361	Pad R	29100006A 350x250, Poly bag
A854	29095012-1	500x800, Protection sheet	25055018 CV-K-1, Conversion plug (W)
A856	2900038A	720x950, Poly bag	29100002A 80x150, Poly bag (W)
A855	29095282	Pad S	
A860	Accessory bag ass'y		
	29340673	Instruction manual (D) (U)	NOTE
	29340674	Instruction manual (G) (V) (W)	(U): only U.S.A. model
	29365006-5	Warranty card (U)	(V): only West Germany model
	29365005-3A	Warranty card (V)	(D): only 120V model
	29358002	Service station list (U)	(G): only 220V model
			(W): 120V/220V model
			(B): Black type

ONKYO CORPORATION

International Division: No. 24 Mori Bldg., 23-5, 3-chome, Nishi-Shinbashi, Minato-ku, Tokyo, Japan
Telex: 2423551 ONKYO J. Phone: 03-432-6981

ONKYO U.S.A. CORPORATION

200 Williams Drive, Ramsey, N.J. 07466
Telex: 25-710-988-1033 Tel. 201-825-7950

ONKYO DEUTSCHLAND GMBH, ELECTRONICS

8034 münchen-Germering, Industriestrasse 18, West Germany. Telex: 521726 Telefon: (089)-84-3071