

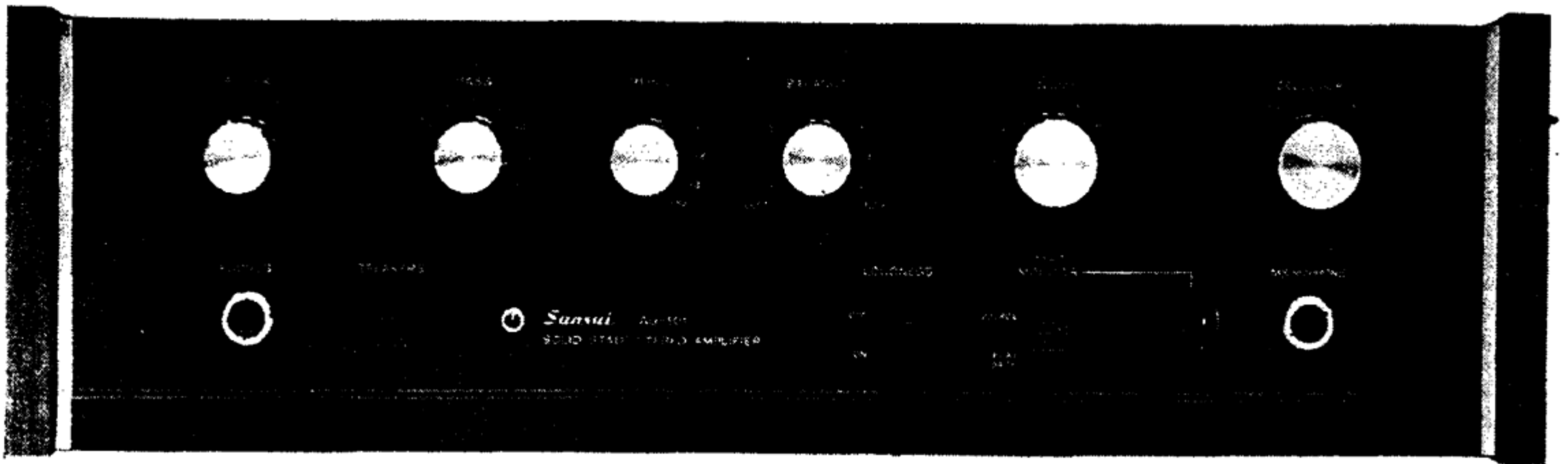
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OPERATING INSTRUCTIONS & SERVICE MANUAL

SOLID-STATE STEREO AMPLIFIER

SANSUI AU-101



Sansui

SANSUI ELECTRIC CO., LTD.

OPERATIONS

Congratulations, you are now the owner of a new Sansui AU-101 control amplifier manufactured by Sansui, the world's foremost audio-only specialist.

The AU-101 incorporates many of state-of-the-art features of the more powerful Sansui AU-555A, including an all silicon solid state design, professional arrangement of controls and a satin-black control panel. Like all other AU series amplifiers, the AU-101's tonal quality has been perfected and proved not only by precision electronic measuring instruments, but also by repeated listening tests in a wide variety of environments.

These manual and operating sheet have been prepared to guide you in operating and caring for your AU-101 correctly. Please read them carefully and retain for future reference.

RECORD PLAYER

Listening to a Record

1. Set the SELECTOR switch to PHONO.
2. Make appropriate settings of controls on the record player.
3. Adjust the BALANCE control for equal sound from both right and left speakers.
4. Use all other controls and switches according to your personal taste and room acoustics.

TUNER

Listening to a Radio Program

1. Set the SELECTOR switch to AUX.
2. Use tuning controls to reach the desired station. Make appropriate settings of controls on the tuner.
3. Adjust the amplifier's front panel controls and switches according to your personal taste and room acoustics.

MICROPHONE

Use high-impedance (10 kilo-ohms or more) dynamic microphones for optimum performance.

Operation

1. Set the SELECTOR switch to MIC.
2. Use all other controls and switches according to taste and listening conditions.

TAPE DECK

Recording on Tapes

1. Set the SELECTOR switch to the program to be recorded.
2. Make appropriate settings of controls on the tape deck.

Listening to Tapes

1. Set the TAPE MONITOR switch to PLAYBACK.
2. Make appropriate settings of controls on the tape deck.
3. Use the amplifier's front panel controls and switches according to your personal taste and listening conditions.

Tape Monitoring

Monitoring is possible only with a tape deck which has its own playback preamplifier as well as separate recording and playback heads. To monitor, proceed in the same manner as indicated in the section entitled 'Listening to Tapes'.

NOTE:

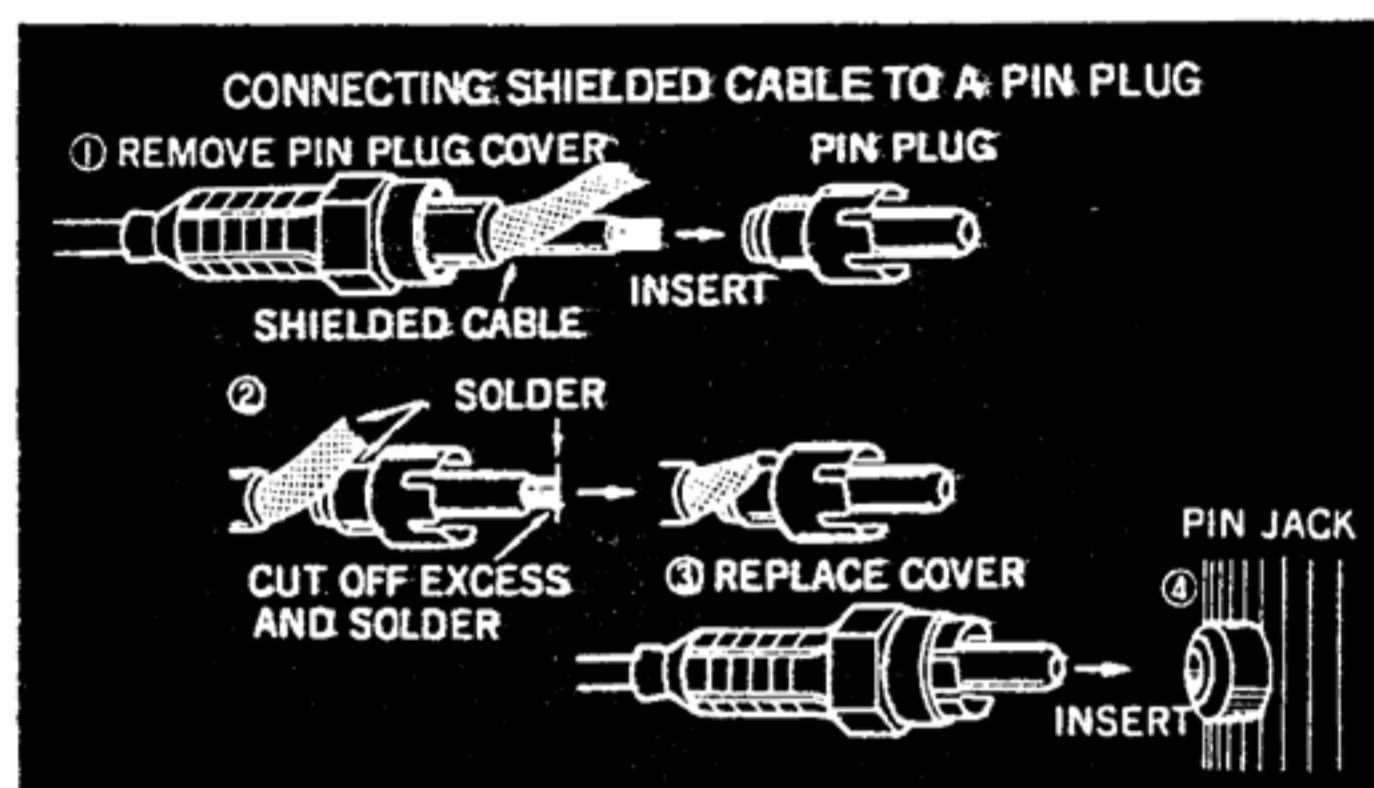
1. Tape decks referred to in this section include only those with built-in playback preamplifiers.
2. Tape recorded sound cannot be controlled by the switches and controls on the front panel of the amplifier. They control sound from the speakers only.

MAINTENANCE

Wire Connections

When connecting tape decks, record player or other components to the AU-101, be sure to use shielded wire. The use of an ordinary cord or vinyl wire may cause humming and buzzing. The length of the shielded wire should be shorter than 5 feet. Be sure that all lead wires between the amplifier and components are properly connected. If the connections are loose or in touch with other parts, the amplifier will not function properly, may pickup noise, and even breakdown over a period of time. Also, be sure to read the manufacturer's instructions for any component before connecting it to the AU-101.

The shielded wire is made up for use as illustrated below:

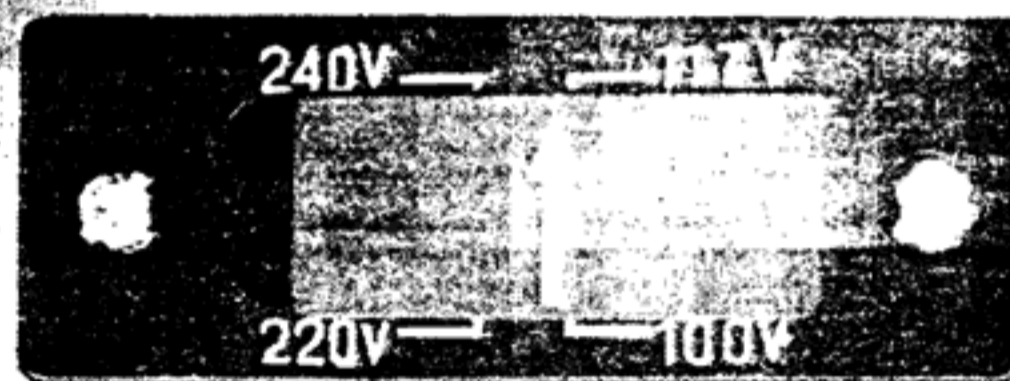


Power Fuse

Should the amplifier fail to operate and the power indicator fail to light up when the POWER switch is turned on, the probable cause is either a power stoppage or a blown fuse. To check, remove the AU-101's line cord from its a.c. outlet, turn the fuse holder on the rear panel counterclockwise, and remove the fuse. If it is blown, replace it with a new glass-tubed fuse of the same capacity (100~117V—2A, 220~240V—1.5A) after determining and eliminating the trouble source that caused the fuse to blow. Using wire or a fuse of a different capacity as a stop-gap measure is dangerous and should be avoided.

Voltage Adjustment

This plug has been set to the voltage of your area prior to shipment. If the amplifier is ever moved to an area with another voltage requirement, this plug must be changed to the proper voltage of the new area. To change, remove the cramp from the back panel, remove the plug from the voltage socket you have been using, and plug the arrow head into the appropriate voltage requirement of 100, 117, 220 or 240 volts.



Quick-Acting Fuses

If, after the POWER switch is turned on and the power indicator lights up, neither channel operates or only one operates normally, is either because one or both quick-acting fuses have blown. In this case, remove the line cord from its a.c. outlet and remove the bonnet from the chassis to check to see if the fuses are blown. If the fuses are faulty, replace them with identical 1.5A fuses (supplied) after finding and eliminating the source of trouble that caused them to blow. The trouble is probably by short at the output circuit or excessive input fed into the input circuit.

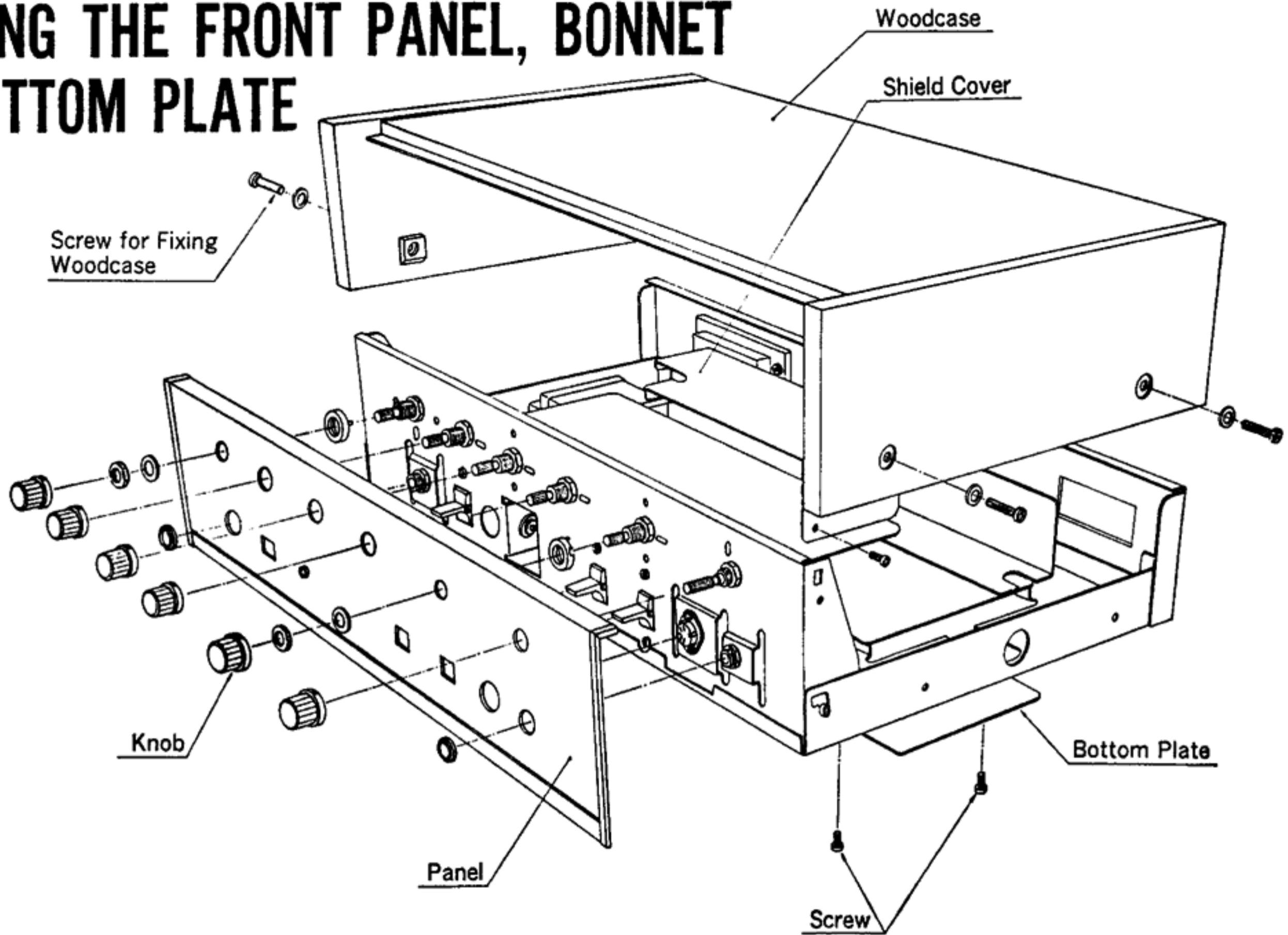
A.C. Outlets

The AU-101 is provided with two A.C. outlets on its rear panel. One outlet (marked SWITCHED) is switched on and off by the POWER switch on the front panel.

Caution: The maximum capacity of this outlet is 50VA, and the other (marked UNSWITCHED) is 150VA. Never use either beyond their rated capacity. The voltage supplied by the AC outlets is the same as the power supply voltage used.

DISASSEMBLY PROCEDURE / SPECIFICATIONS

REMOVING THE FRONT PANEL, BONNET AND BOTTOM PLATE



SPECIFICATIONS

POWER OUTPUT

MUSIC POWER (IHF):	50W	at 4 ohms load
	44W	at 8 ohms load
CONTINUOUS POWER:	18/18W	at 4 ohms load
	15/15W	at 8 ohms load
TOTAL HARMONIC DISTORTION:	less than 0.8% at rated output	

POWER BANDWIDTH (IHF):

25 to 40,000Hz

FREQUENCY RESPONSE (at normal listening level)

20 to 60,000Hz ± 2 dB

CHANNEL SEPARATION (at 1,000Hz, rated output)

PHONO:	better than 45dB
AUX:	better than 45dB

HUM AND NOISE (IHF)

PHONO:	better than 65dB
AUX:	better than 75dB

INPUT SENSITIVITY (at 1,000Hz, rated output)

PHONO:	3mV (50k ohms)
MIC (MONO):	4mV (50k ohms)
AUX:	200mV (50k ohms)
TAPE MON (pin):	200mV (50k ohms)
TAPE RECORDER (DIN):	200mV (50k ohms)

RECORDING OUTPUT

TAPE REC (pin):	200mV
TAPE RECORDER (DIN):	30mV
LOAD IMPEDANCE:	4 to 16 ohms
EQUALIZER PHONO:	RIAA NF type
MIC:	flat NF type

TONE CONTROLS

BASS:	± 13 dB at 50Hz
TREBLE:	± 10 dB at 10,000Hz
LOUDNESS CONTROL:	+8dB at 50Hz, +3dB at 10,000Hz

SWITCHES

SELECTOR:	MIC, PHONO, AUX
TAPE MONITOR:	SOURCE, PLAY BACK
SPEAKER:	ON, OFF

SEMICONDUCTORS: Transistors; 18 Diodes; 4

POWER REQUIREMENTS

POWER VOLTAGE:	100, 117, 220, 240V 50/60Hz
POWER CONSUMPTION:	30W (rated)
DIMENSIONS:	407mm(16")W, 115mm(4 $\frac{1}{2}$ ")H, 278mm(10 $\frac{15}{16}$ ")D
WEIGHT:	5.9kg (13 lbs.)

PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

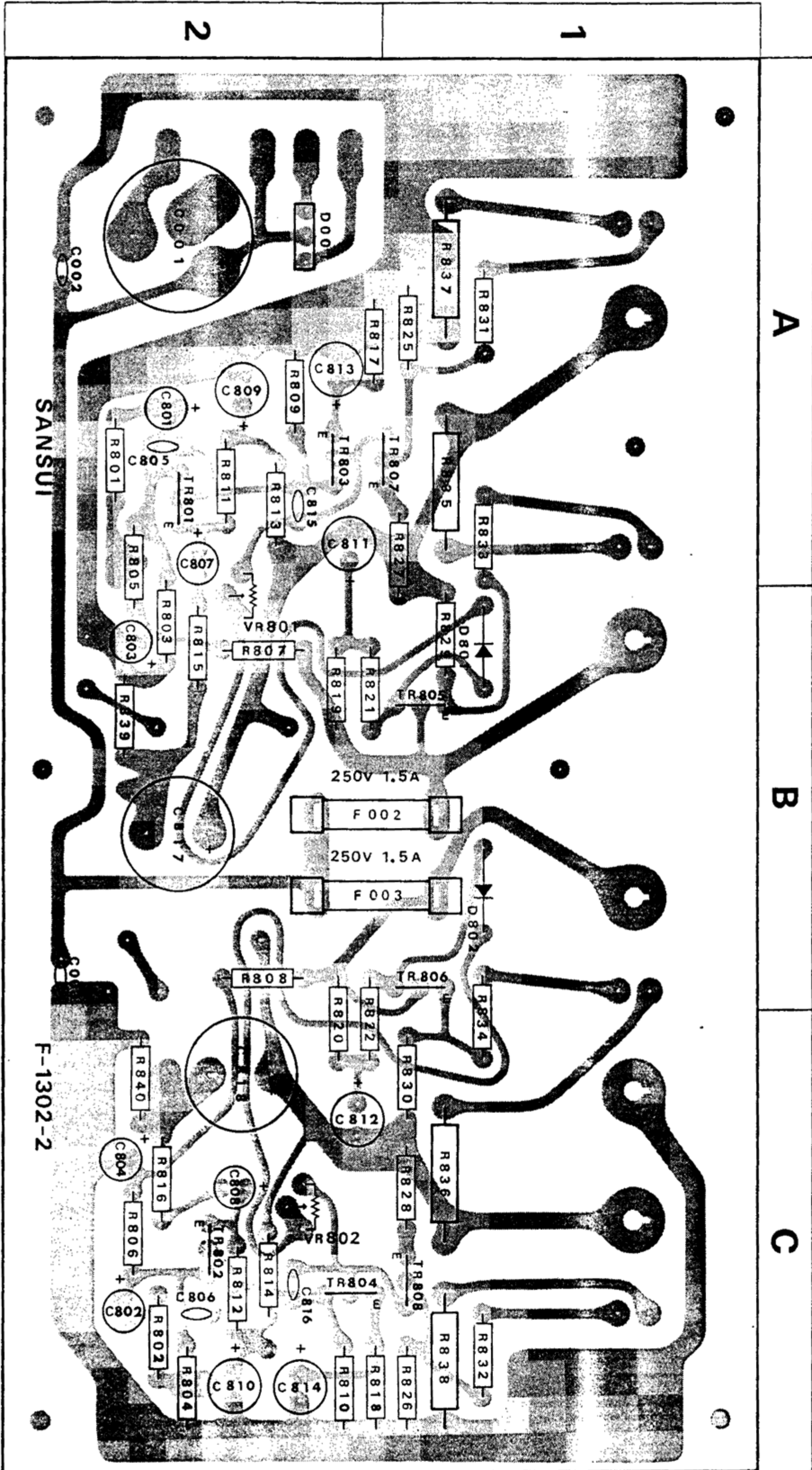
MAIN AMP. BLOCK <F-1302-2>

W	X	Y	Z	
R801	2.2k Ω	0101222	2A	
R802	2.2k Ω		2C	
R803	100k Ω	0101104	2B	
R804	100k Ω		2C	
R805	270k Ω	0101274	2A, B	
R806	270k Ω		2C	
R807	220k Ω	0101224	2B	
R808	220k Ω		2B	
R809	1.8k Ω	0101182	2A	
R810	1.8k Ω		2C	
R811	150 Ω	0101151	2A	
R812	150 Ω		2C	
R813	12k Ω	0101123	2A	
R814	12k Ω		2C	
R815	6.8k Ω	0101682	2B	
R816	6.8k Ω		2C	
R817	220 Ω	0101221	2A	
R818	220 Ω		2C	
R819	1k Ω	0101102	2B	
R820	1k Ω		2B, C	
R821	3.3k Ω	0101332	2B	
R822	3.3k Ω		2B, C	
R825	220 Ω	0101221	1A	
R826	220 Ω		1C	
R827	27 Ω	0101270	1A	
R828	27 Ω		1C	
R829	220 Ω	0101221	1B	
R830	220 Ω		1C	
R831	10 Ω	0101100	1A	
R832	10 Ω		1C	
R833	10 Ω		1A	
R834	10 Ω		1B, C	
R835	0.5 Ω	0152508	1A	
R836	0.5 Ω		1C	
R837	0.5 Ω		1A	
R838	0.5 Ω		1C	
R839	470 Ω	0111471	2B	
R840	470 Ω		2C	
VR801	200 Ω (B)	1032021, 2	2A, B	
VR802			1, 2C	
C001	1000 μ F	50 V EC.	0549104	2A
C002	0.01 μ F	+100% -0% 50 V CC.	0650103	2A
C801	1 μ F	50 V EC.	0515109	2A
C802	1 μ F		2C	
C803	4.7 μ F		2B	
C804	4.7 μ F		2C	
C805	47pF	±10% 50 V CC.	0660470	2A
C806	47pF		2C	
C807	10 μ F	16 V EC.	0512100	2A
C808	10 μ F		2C	
C809	100 μ F	16 V EC.	0512101	2A
C810	100 μ F		2A	
C811	100 μ F	25 V EC.	0513101	2A
C812	100 μ F		2C	

W	X	Y	Z	
C813	47 μ F	6.3 V EC.	0510470	2A
C814	47 μ F		2C	
C815	100pF	50 V EC.	0660101	2A
C816	100pF		2C	
C817	1000 μ F	35 V EC.	0549004	2B
C818	1000 μ F		2C	
C819	0.047 μ F	+80% -20% CC.	0657473	2B
TR801	XA-495BL (B, C, D)	0300161, 2, 3	2A	
TR802			2C	
TR803			2A	
TR804		2SC634A (5, 6) or CDC8000-1 (B, C)	0305890, 1	2C
TR805			or 0305691, 2	1B
TR806		1B		
TR807		2SA678 (5, 6) or CDC9000-1 (B)	0300290, 1	1, 2A
TR808			or 0300201	1C
TR809		2SC1060 (B, C)	0305711, 2	
TR810				
TR811				
TR812				
D001	10-DC-1	00310680	2A	
D801	SV-02	0310490	1B	
D802			1B	
F002	1.5A Quick Acting Fuse	0430101	1, 2B	
F003			1, 2B	

CR: Carbon Resistor
 SR: Solid Resistor
 CeR: Cement Resistor
 MC: Mylar Capacitor
 EC: Electrolytic Capacitor

OC: Oil Capacitor
 CC: Ceramic Capacitor
 MPC: Metallized Polyester Capacitor



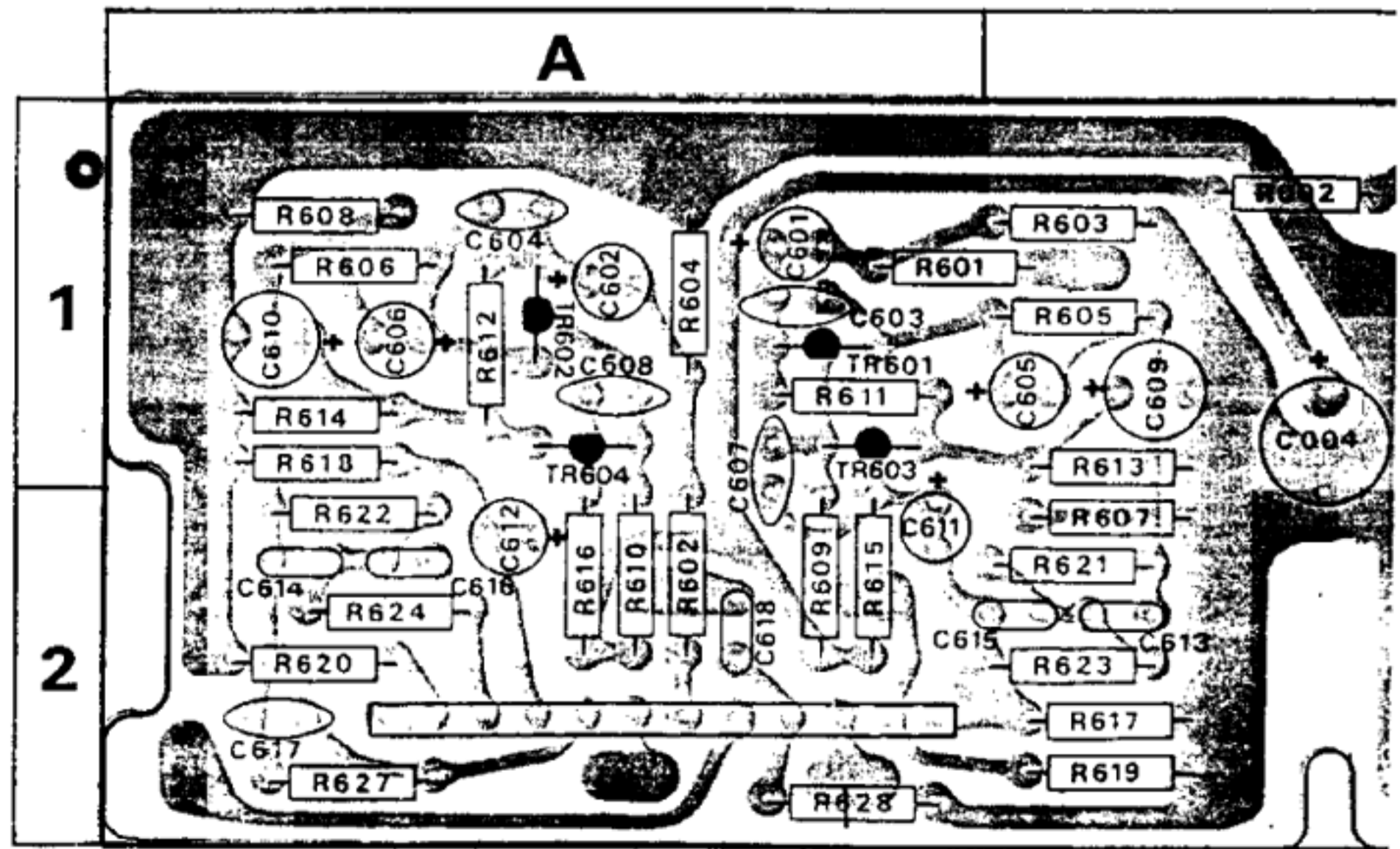
PRINTED CIRCUIT BOARDS AND PARTS LIST

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EQUALIZER/TONE CONTROL BLOCK <F-1303>

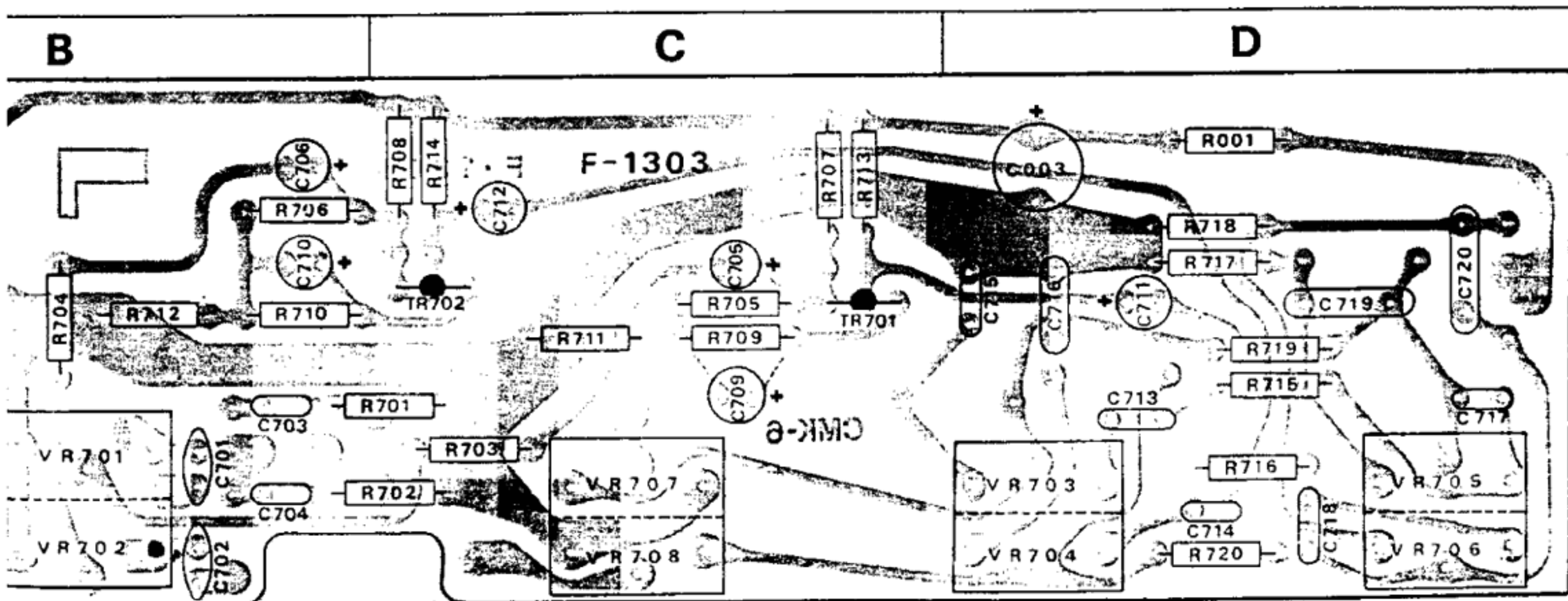
W	X	Y	Z
R001	1.5kΩ	±10% 1/2W SR.	0111152 1 D
R002	2.2kΩ		0111222 1 B
R601	2.2kΩ	0101222 1 A, B	
R602	2.2kΩ	0101222	
R603	56kΩ	0101563 1 B	
R604	56kΩ	0101563 1 A	
R605	3.9kΩ	0101392 1 B	
R606	3.9kΩ	0101392 1 A	
R607	330Ω	0101331 2 B	
R608	330Ω	0101331 1 A	
R609	180kΩ	0101184 2 A	
R610	180kΩ	0101184 2 A	
R611	390kΩ	0101394 1 A	
R612	390kΩ	0101394 1 A	
R613	680Ω	±10% 1/4W CR.	0101681 2 B
R614	680Ω		0101681 1 A
R615	6.8kΩ	0101682 2 A	
R616	6.8kΩ	0101682 2 A	
R617	100kΩ	0101104 2 B	
R618	100kΩ	0101104 1 A	
R619	470kΩ	0101474 2 B	
R620	470kΩ	0101474 2 A	
R621	220kΩ	0101224 2 B	
R622	220kΩ	0101224 2 A	
R623	18kΩ	0101183 2 B	
R624	18kΩ	0101183 2 A	
R627	18kΩ	0101183 2 A	
R628	470kΩ	0101474 2 A	

W	X	Y	Z
R701	27kΩ	±10% 1/4W CR.	0101273 2 B, C
R702	27kΩ		0101273 2 B, C
R703	2.2kΩ	0101222 2 C	
R704	2.2kΩ	0101222 1, 2 B	
R705	56kΩ	0101563 1 C	
R706	56kΩ	0101563 1 B	
R707	470kΩ	0101474 1 C	
R708	470kΩ	0101474 1 C	
R709	1kΩ	0101102 1 C	
R710	1kΩ	0101102 1 B	
R711	330Ω	0101331 1 C	
R712	330Ω	0101331 1 B	
R713	5.6kΩ	0101562 1 C	
R714	5.6kΩ	0101562 1 C	
R715	12kΩ	0101123 2 D	
R716	12kΩ	0101123 2 D	
R717	1.8kΩ	0101182 1 D	
R718	1.8kΩ	0101182 1 D	
R719	2.7kΩ	0101272 1, 2 D	
R720	2.7kΩ	0101272 2 D	
VR701,702	250kΩ(B) × 2	Volume Control	1010610 2 B
VR703,704	100kΩ(A) × 2	Treble Control	1010600 2 D
VR705,706	100kΩ(A) × 2	Bass Control	1010600 2 D
VR707,708	100kΩ(HB)	Balance Control	1010590 2 C
C003	470μF	35 V EC.	0514471 1 D
C004	470μF	25 V EC.	0513471 1, 2 B



W	X	Y	Z
C601	1 μ F	50 V EC.	0515109 1A
C602	1 μ F		0515109 1A
C603	68 pF	$\pm 10\%$ 50 V CC.	0660680 1A
C604	68 pF		0660680
C605	10 μ F	16 V EC.	0512100 1A, B
C606	10 μ F		0512100 1A
C607	68 pF	$\pm 10\%$ 50 V CC.	0660680 1, 2A
C608	68 pF		0660680 1A
C609	10 μ F	16 V EC.	0512100 1B
C610	10 μ F		0512100 1A
C611	4.7 μ F	16 V EC.	0512479 1, 2A
C612	4.7 μ F		0512479 2A
C613	0.012 μ F	$\pm 10\%$ 50 V MC.	0601127 2B
C614	0.012 μ F		0601127 2A
C615	0.004 μ F	$\pm 10\%$ 50 V MC.	0601406 2A, B
C616	0.004 μ F		0601406 2A
C617	220 pF	$\pm 10\%$ 50 V CC.	0660221 2A
C618	0.033 μ F	$\pm 10\%$ 50 V MC.	0601337 2A
C701	150 pF	$\pm 10\%$ 50 V CC.	0660151 2B
C702	150 pF		0660151 2B
C703	0.02 μ F	$\pm 10\%$ 50 V MC.	0601207 2B
C704	0.02 μ F		0601207 2B
C705	1 μ F	50 V EC.	0515109 1C
C706	1 μ F		0515109 1B
C709	47 μ F	6.3 V EC.	0510470 2C
C710	47 μ F		0510470 1B
C711	1 μ F	50 V EC.	0515109 1D
C712	1 μ F		0515109 1C

W	X	Y	Z
C713	0.002 μ F	$\pm 10\%$ 50 V MC.	0601206 2D
C714	0.002 μ F		0601206 2D
C715	0.02 μ F		0601207 1D
C716	0.02 μ F		0601207 1D
C717	0.022 μ F		0601227 2D
C718	0.022 μ F		0601227 2D
C719	0.22 μ F		0601228 1D
C720	0.22 μ F		0601228 1D
TR601	2SC871R (E, F)		0305474,5 1A
TR602	2SC871R (E, F)		0305474,5 1A
TR603	2SC871 (E, F)	0305471,2 1A	
TR604	2SC871 (E, F)	0305471,2 1A	
TR701	2SC871R (E, F)	0305474,5 1C	
TR702	2SC871R (E, F)	0305474,5 1C	
SI(e~d)	Selector Switch 1-4-3	1101240 2A	



OTHER PARTS AND THEIR POSITION ON CHASSIS

W: Parts No. X: Parts Name Y: Stock No.

W	X	Y
R625	470k Ω }	0101474
R626	470k Ω }	0101474
R629	220k Ω }	0101224
R630	220k Ω }	0101224
R631	100k Ω }	0101104
R632	100k Ω }	0101104
R841	330 Ω }	0111331
R842	330 Ω }	0111331
	$\pm 10\%$ $\frac{1}{4}$ W CR.	
	$\pm 10\%$ $\frac{1}{2}$ W SR.	
C005	0.022 μ F $\pm 20\%$ 250V MPC.	0605227
S2(a, b)	Tape Monitor Switch	1170060
S3(a, b)	Loudness Switch	1170060
S4(a, b)	Speaker Switch	1170090
S5	Power Switch	1190011
T001	Power Transformer 400-5467	4000800
CO001,002	AC Outlet	2450010
J601	DIN Socket marked TAPE MONITOR on the front Panel	2430050
F001	2A Power Fuse (100~120V)	0430131
	1.5A Power Fuse (220~240V)	0430021
	Power Fuse Holder	2300060
F004	2A } Wired in Fuse	0431840
F005	2A }	0431840
F006	1A }	0431820
PL001	6.3V 0.25A Pilot Lamp	0400090

Accessories List

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