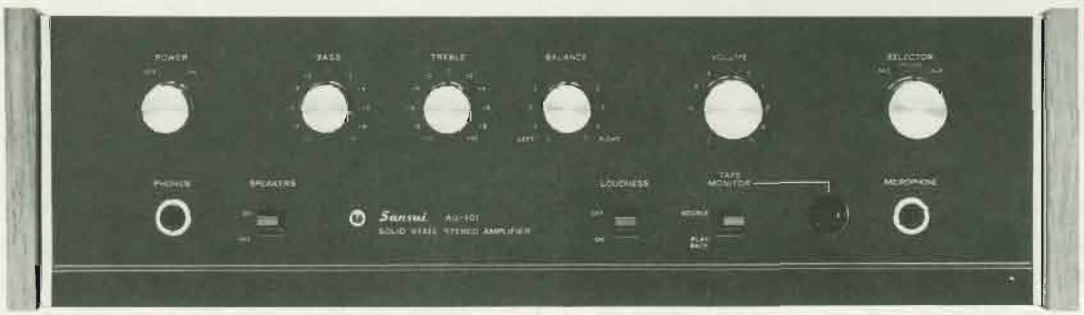
OPERATING INSTRUCTIONS & SERVICE MANUAL

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 PLAY-BACK.
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

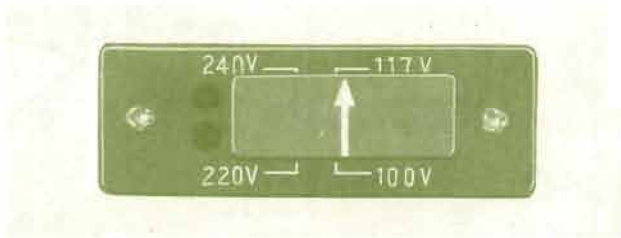
When connecting tape decks, record player or other components to the AU-101, be sure to use shielded wire. The use of an ordinary cord or vinyl wire may cause humming and buzzing. The length of the shielded wire should be shorter than 5 feet. Be sure that all lead wires between the amplifier and components 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.

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.

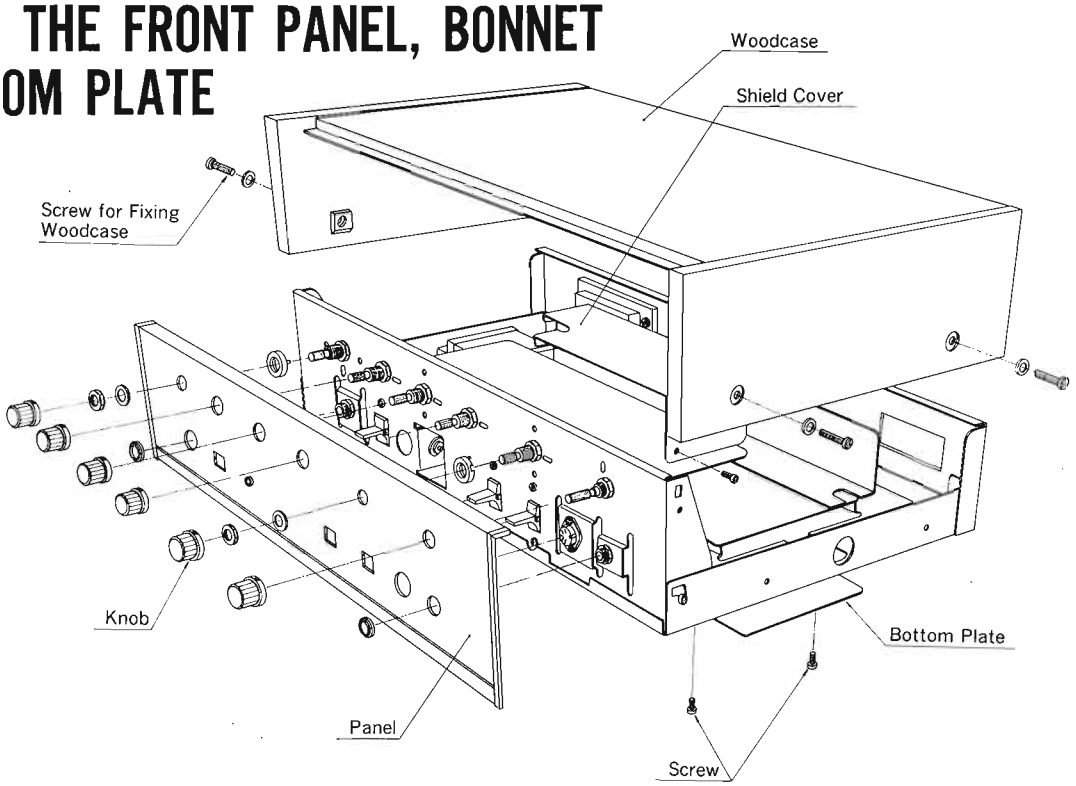
A.C. Outlets

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

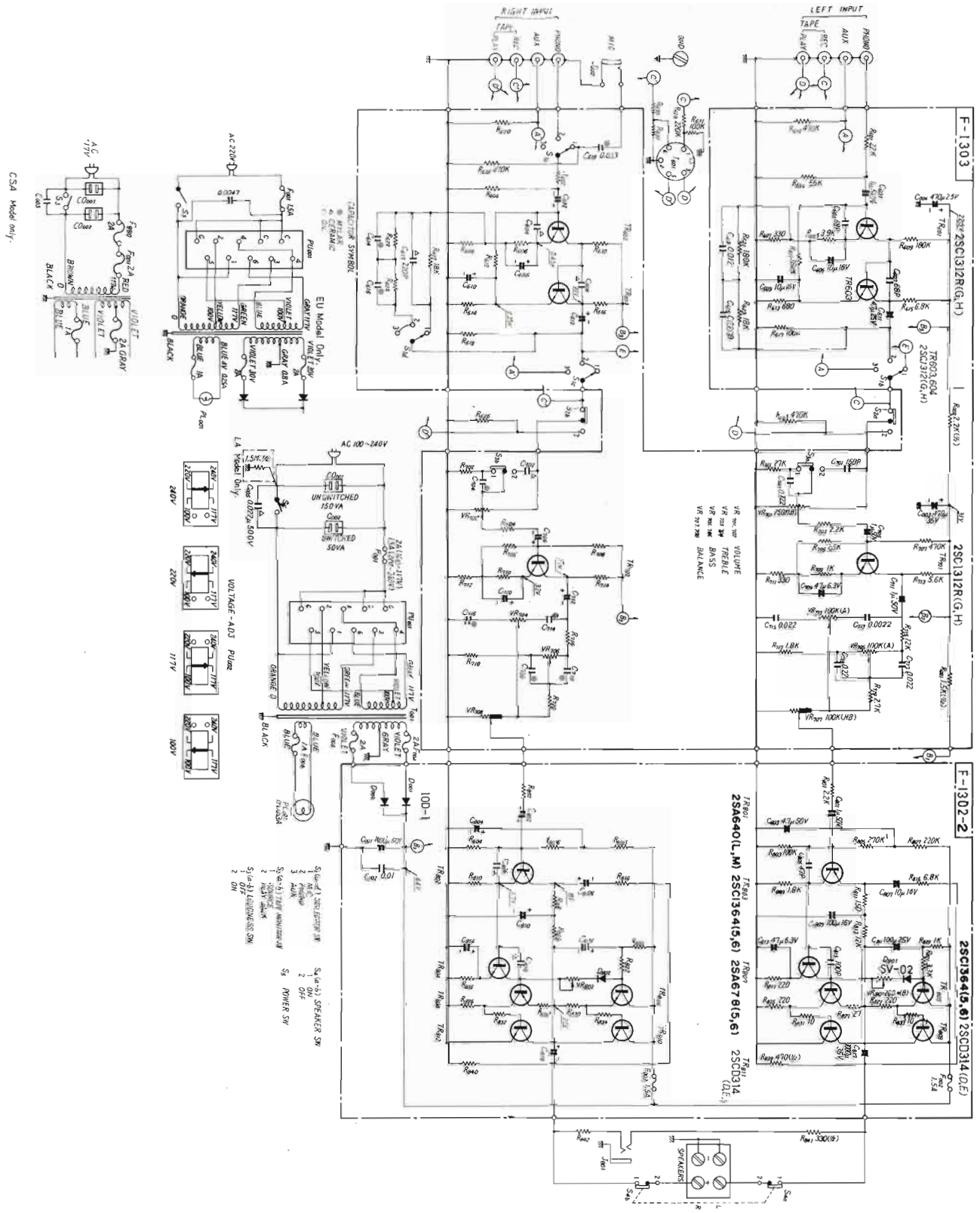
REMOVING THE FRONT PANEL, BONNET AND BOTTOM PLATE



SPECIFICATIONS

POWER OUTPUT
- CONTINUOUS RMS POWER OUTPUT: 12 Watts per channel × 2 (both channels driven)
- LOAD IMPEDANCE: 8 ohms
- POWER BAND: 40 to 20,000Hz
- TOTAL HARMONIC DISTORTION: less than 1.0% (from AUX)
- Music power (IHF): 50W (4 ohms 1,000Hz) 44W (8 ohms 1,000Hz)
- Continuous rms power output: 15+15W (8 ohms 1,000Hz)
- FREQUENCY RESPONSE (at normal listening level) 20 to 60,000Hz ±2dB
- 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
- EQUALIZER PHONO: RIAA NF type
  - MIC: flat NF type
- TONE CONTROLS
  - BASS: ±13dB at 50Hz
  - TREBLE: ±10dB 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), 70W (max.), 80VA (max.)
- DIMENSIONS: 407mm(16″)W, 115mm(4 17/32″)H, 278mm(10 15/16″)D
- WEIGHT: 5.9kg (13 lbs.)

SCHEMATIC DIAGRAM



PRINTED CIRCUIT BOARDS AND PARTS LIST

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

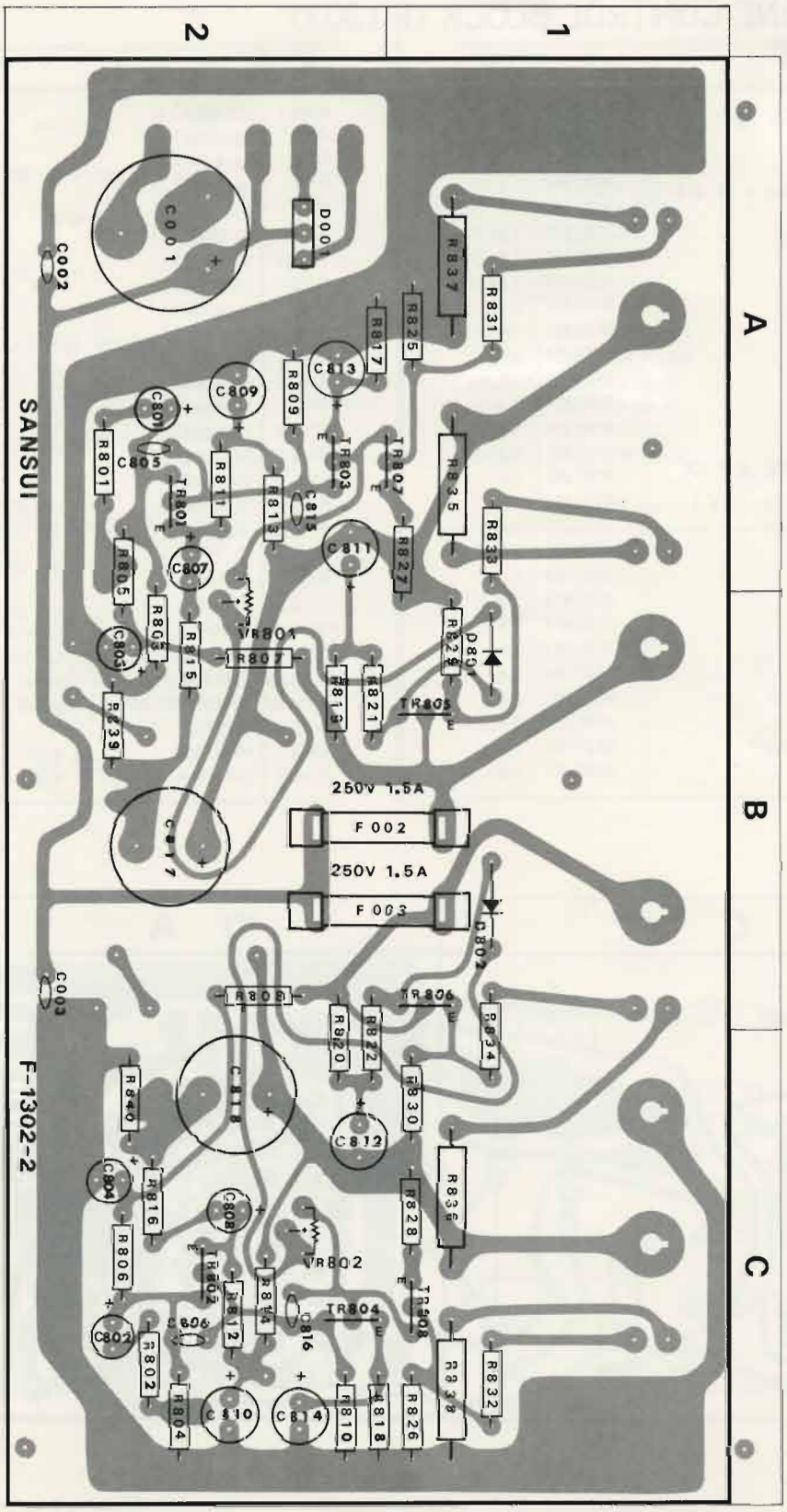
MAIN AMP. BLOCK ⟨F-1302-2⟩

W	X	Y	Z
R801	2.2kΩ	0101222	2A
R802	2.2kΩ		2C
R803	100kΩ	0101104	2B
R804	100kΩ		2C
R805	270kΩ	0101274	2A, B
R806	270kΩ		2C
R807	220kΩ	0101224	2B
R808	220kΩ		2B
R809	1.8kΩ	0101182	2A
R810	1.8kΩ		2C
R811	150Ω	0101151	2A
R812	150Ω		2C
R813	12kΩ	0101123	2A
R814	12kΩ		2C
R815	6.8kΩ	0101682	2B
R816	6.8kΩ		2C
R817	220Ω ±10% ¼W CR.	0101221	2A
R818	220Ω		2C
R819	1kΩ	0101102	2B
R820	1kΩ		2B, C
R821	3.3kΩ	0101332	2B
R822	3.3kΩ		2B, C
R825	220Ω	0101221	1A
R826	220Ω		1C
R827	27Ω	0101270	1A
R828	27Ω		1C
R829	220Ω	0101221	1B
R830	220Ω		1C
R831	10Ω	0101100	1A
R832	10Ω		1C
R833	10Ω		1A
R834	10Ω		1B, C
R839	470Ω ±10% ½W SR.	0111471	2B
R840	470Ω		2C
VR801	200Ω (B)	1032220	2A, B
VR802			1, 2C
C001	1000μF 50 V EC.	0549104	2A
C002	0.01μF $^{+100}_{-0}$% 50 V CC.	0650103	2A
C801	1μF	0515109	2A
C802	1μF 50 V EC.		2C
C803	4.7μF	0515479	2B
C804	4.7μF		2C
C805	47pF ±10% 50 V CC.	0660470	2A
C806	47pF		2C
C807	10μF 16 V EC.	0512100	2A
C808	10μF		2C
C809	100μF 16 V EC.	0512101	2A
C810	100μF		2A
C811	100μF 25 V EC.	0513101	2A
C812	100μF		2C
C813	47μF 6.3 V EC.	0510470	2A
C814	47μF		2C
C815	100pF 50 V EC.	0660101	2A
C816	100pF		2C

W	X	Y	Z
C817	1000μF 35 V EC.	0549004	2B
C818	1000μF		2C
C819	0.047μF $^{+80}_{-20}$% CC.	0657473	2B
TR801	2SA640 (L, M)	0300301, 2	2A
TR802			2C
TR803	2SC1364 (5, 6)	0306130, 1	2A
TR804			2C
TR805			1B
TR806			1B
TR807	2SA678 (5, 6)	0300290, 1	1, 2A
TR808			1C
TR809	2SD314 (D, E)	0308411, 2	
TR810			
TR811			
TR812			
D001	10D-1	0310340	2A
D002			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



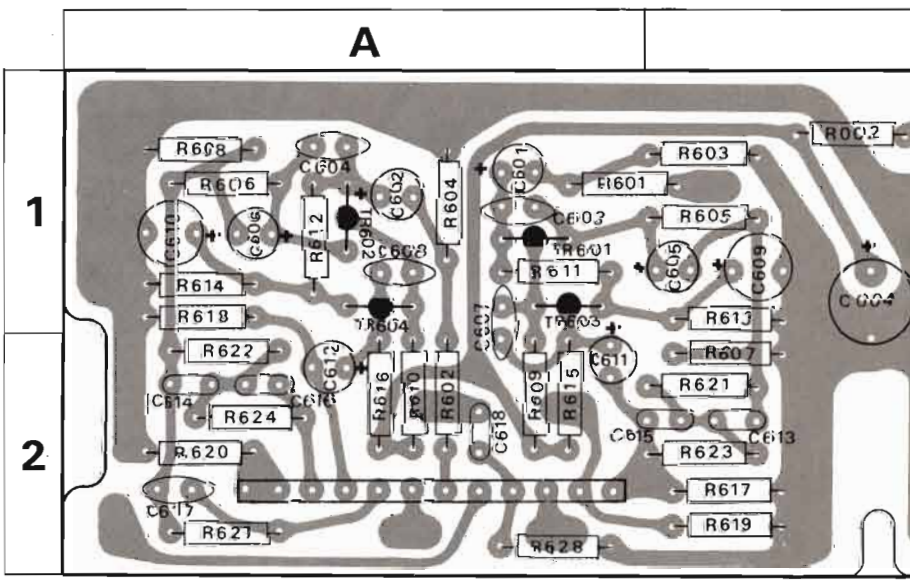
PRINTED CIRCUIT BOARDS AND PARTS LIST

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

EQUALIZER/TONE CONTROL BLOCK 〈F-1303〉

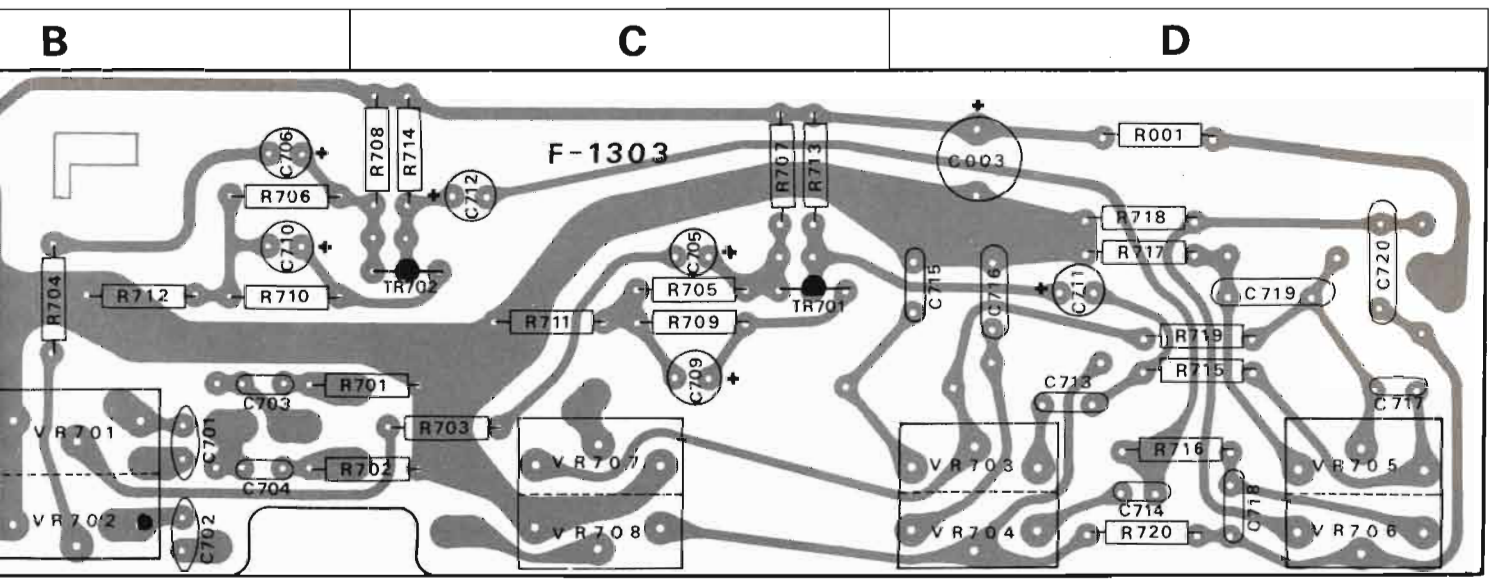
W	X	Y	Z
R001	1.5kΩ } ±10% ½W SR.	0111152	1 D
R002	2.2kΩ }	0111222	1 B
R601	2.2kΩ	0101222	1 A, B
R602	2.2kΩ	0101222	
R603	56kΩ	0101563	1 B
R604	56kΩ	0101563	1 A
R605	3.9kΩ	0101392	1 B
R606	3.9kΩ	0101392	1 A
R607	330Ω	0101331	2 B
R608	330Ω	0101331	1 A
R609	180kΩ	0101184	2 A
R610	180kΩ	0101184	2 A
R611	390kΩ	0101394	1 A
R612	390kΩ	0101394	1 A
R613	680Ω	0101681	2 B
R614	680Ω } ±10% ¼W CR.	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	180kΩ	0101184	2 B
R622	180kΩ	0101184	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	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 } ±10% ¼W CR.	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 μF } 50 V EC.	0515109	1 A
C602	1 μF }	0515109	1 A
C603	68 pF } ±10% 50 V CC.	0660680	1 A
C604	68 pF }	0660680	
C605	10 μF } 16 V EC.	0512100	1 A, B
C606	10 μF }	0512100	1 A
C607	68 pF } ±10% 50 V CC.	0660680	1, 2 A
C608	68 pF }	0660680	1 A
C609	10 μF } 16 V EC.	0512100	1 B
C610	10 μF }	0512100	1 A
C611	4.7 μF } 25 V E.C.	0513479	1, 2 A
C612	4.7 μF }	0513479	2 A
C613	0.012 μF }	0601127	2 B
C614	0.012 μF } ±10% 50 V MC.	0601127	2 A
C615	0.0039 μF }	0601396	2 A, B
C616	0.0039 μF }	0601396	2 A
C617	220 pF ±10% 50 V CC.	0660221	2 A
C618	0.033 μF ±10% 50 V MC.	0601337	2 A
C701	150 pF } ±10% 50 V CC.	0660151	2 B
C702	150 pF }	0660151	2 B
C703	0.022 μF } ±10% 50 V MC.	0601227	2 B
C704	0.022 μF }	0601227	2 B
C705	1 μF } 50 V EC.	0515109	1 C
C706	1 μF }	0515109	1 B
C709	47 μF } 6.3 V EC.	0510470	2 C
C710	47 μF }	0510470	1 B
C711	1 μF } 50 V EC.	0515109	1 D
C712	1 μF }	0515109	1 C

W	X	Y	Z
C713	0.0022 μF }	0601226	2 D
C714	0.0022 μF }	0601226	2 D
C715	0.022 μF }	0601227	1 D
C716	0.022 μF } ±10% 50 V MC.	0601227	1 D
C717	0.022 μF }	0601227	2 D
C718	0.022 μF }	0601227	2 D
C719	0.22 μF }	0601228	1 D
C720	0.22 μF }	0601228	1 D
TR601	2SC1312R (G, H)	0306091, 2	1 A
TR602	2SC1312R (G, H)	0306091, 2	1 A
TR603	2SC1312 (G, H)	0306161, 2	1 A
TR604	2SC1312 (G, H)	0306161, 2	1 A
TR701	2SC1312R (G, H)	0306091, 2	1 C
TR702	2SC1312R (G, H)	0306091, 2	1 C
S1(a~d)	Selector Switch 1-4-3	1101240	2 A



OTHER PARTS AND THEIR POSITIONS ON CHASSIS

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

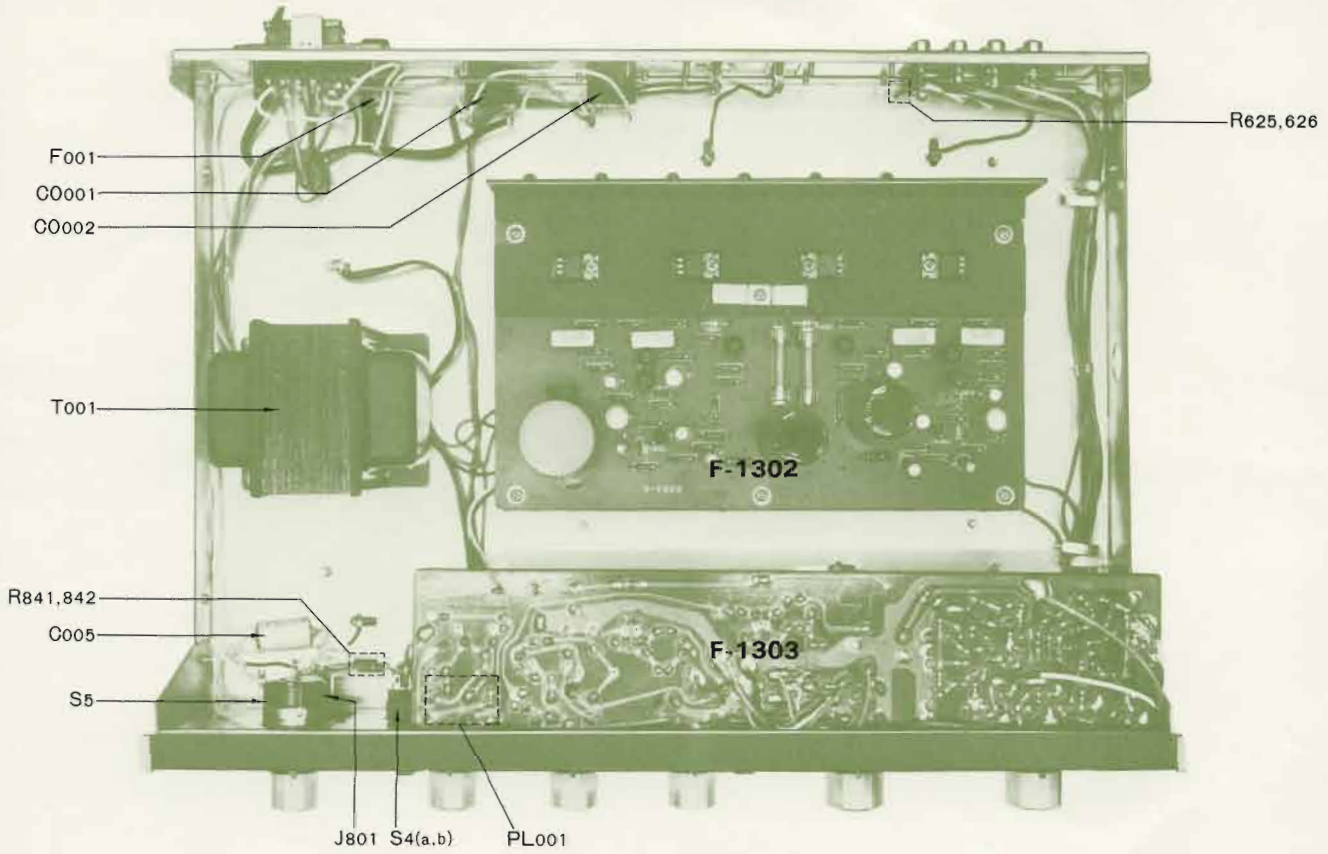
W	X	Y
R625	470kΩ }	0101474
R626	470kΩ	0101474
R629	220kΩ } ±10% ¼W CR.	0101224
R630	220kΩ	0101224
R631	100kΩ	0101104
R632	100kΩ }	0101104
R841	330Ω } ±10% ½W SR.	0111331
R842	330Ω }	0111331
C005	0.022μF ±20% 500V CC.	0659012
S2(a, b)	Tape Monitor Switch	1170060
S3(a, b)	Loudness Switch	1170060
S4(a, 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 }	0431840
F005	2A } Wired in Fuse	0431840
F006	1A }	0431820
PL001	7V 0.3A Pilot Lamp	0400250

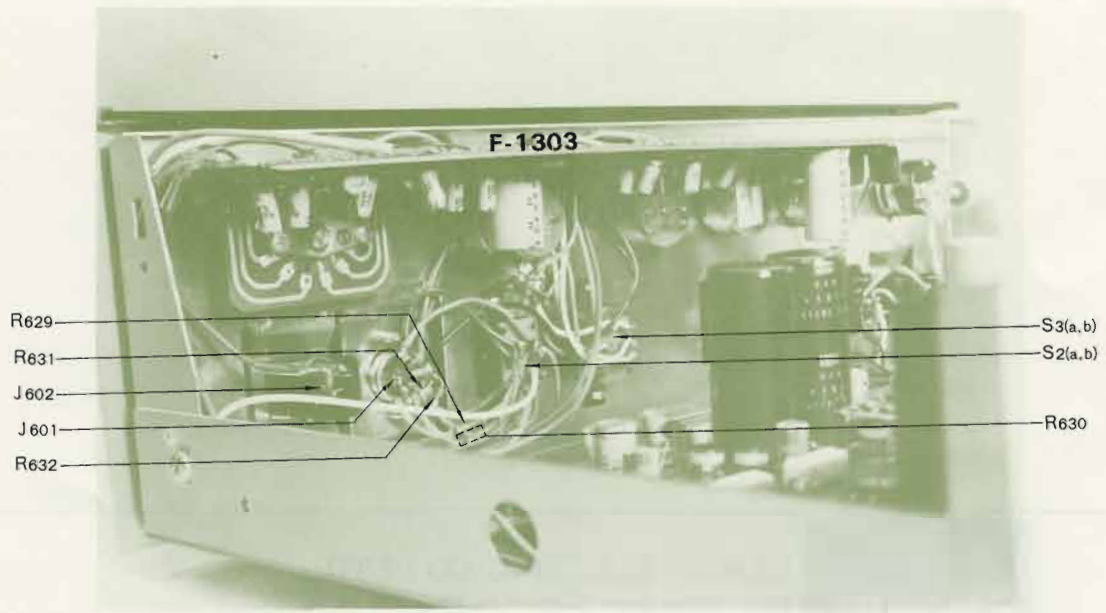
Accessories List

1. OPERATING INSTRUCTIONS & SERVICE MANUAL 1
2. OPERATING SHEET 1
3. QUICK-ACTING FUSES (1.5 A) 2

Operating Instructions **Stock No. 9206290**

* Design and specifications subject to change without notice for improvements.





Sansui

SANSUI ELECTRIC CO., LTD.
14-1, 2-chome, Izumi, Suginami-ku, Tokyo 168, Japan.
TELEPHONE: (03) 323-1111/TELEX: 232-2076

(94M31-11)