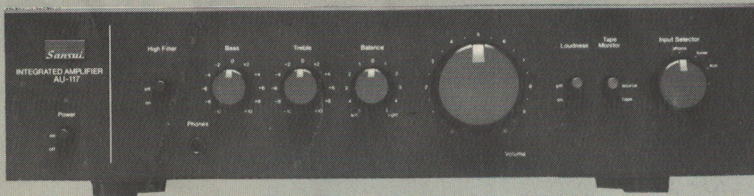


SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

1136

SANSUI AU-117



SPECIFICATIONS

Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz, with no more than 0.17% total harmonic distortion
15 watts per channel into 8 ohms

Load impedance 8 ohms

Power bandwidth 20 to 20,000 Hz at or below rated min. RMS power output and total harmonic distortion

Total harmonic distortion

. less than 0.17% at or below rated min. RMS power output

Intermodulation distortion (70 Hz: 7 kHz = 4:1 SMPTE method) less than 0.17%

Frequency response (at 1 watt)

. 10 to 40,000 Hz +0.5dB -2 dB

Damping factor approximately 50 at 8 ohms load

RIAA curve deviation (PHONO)

. +0.5 dB -0.5 dB (30 to 15,000 Hz)

Input sensitivity and impedance (1 kHz, for rated power output)

PHONO 2.5 mV/47 kilohms (Max. input capability: 150 mV at 1 kHz, less than 0.2% total harmonic distortion)

AUX, TAPE 150 mV/47 kilohms

Output level (1,000 Hz)

TAPE REC (pin jack) 150 mV/47 kilohms

Channel separation (1 kHz, at rated power output)

PHONO better than 65 dB

AUX better than 68 dB

Hum and noise (short-circuit, A-network)

PHONO 76 dB

AUX 94 dB

Controls

BASS ±12 dB (50 Hz)

TREBLE ±11 dB (15 kHz)

HIGH FILTER -3 dB (7 kHz), 6 dB/oct

LOUDNESS (-30 dB)

. 8 dB at 50 Hz

. 6 dB at 10 kHz

Power requirements

Power voltage 100, 120, 220, 240V (50/60 Hz)

. 120V (Usable 110 - 130V)

. 60 Hz (for U.S.A. for Canada only)

Power consumption

Maximum consumption 150 watts

Rated consumption 82 watts 100 VA

Dimensions

. 430 mm (16-15/16") W

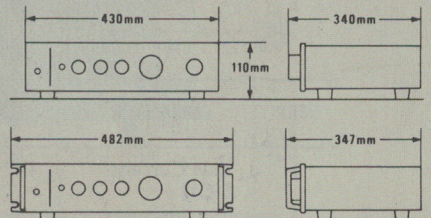
. 110 mm (4-3/8") H

. 340 mm (13-3/8") D

Weight

. 6.6 kg (14.6 lbs) net

. 7.8 kg (17.2 lbs) packed

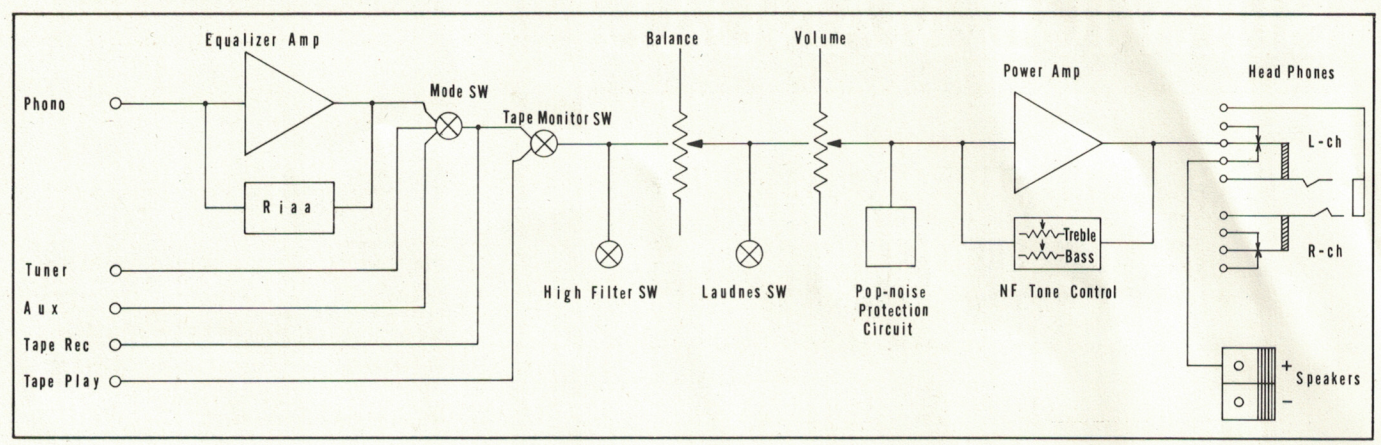


* Design and specifications subject to changes without notice for improvements.
* In order to simplify the explanation illustrations may sometimes differ from the originals.



SANSUI ELECTRIC CO., LTD.

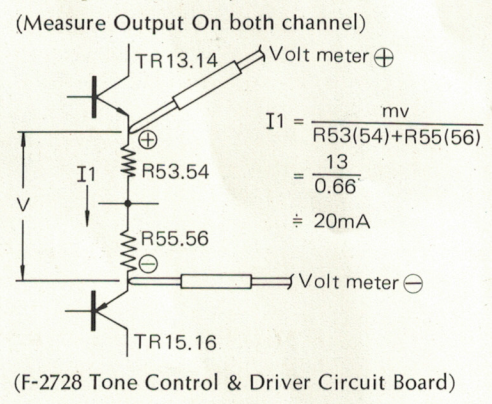
1. BLOCK DIAGRAM



2. ADJUSTMENTS

1) Bias Current Adjustment (See the picture of Bottom View on page 2)

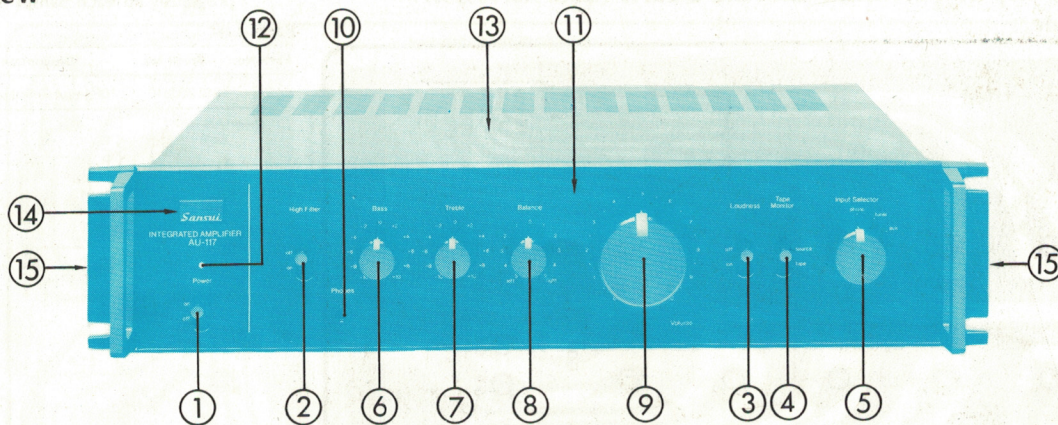
- Note:**
1. Confirm the AC Power Supply voltage.
 2. Master VolumeMinimum
 3. Room Temperature18° C~28° C
(65° F~83° F)
 4. For this adjustment, run the unit for more than 3 minutes after power is switched ON.
 5. Before this adjustment turn VR05 and VR06 fully counterclockwise.
- *For this measurement, put the lead (+) side of volt meter to (+) side of R53 R54 and the lead (-) side to (-) side of R55, R56 on F-2728.
(L-CH...R53, R55 and R-CH...R54, R56)



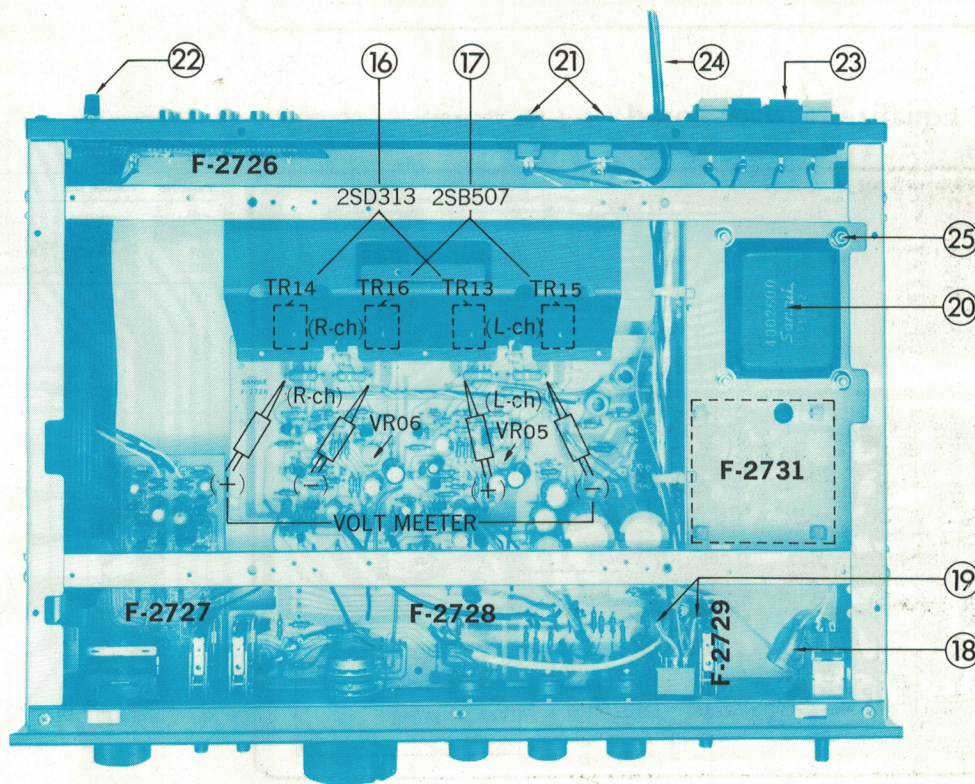
STEP	SUBJECT	EQUIPMENT	MEASURE OUTPUT	ADJUST	ADJST FOR
1	Bias Current L-CH	DC Volt meter	※See above	VR05 F-2728	13mV ± 1mV (20mA)
2	Bias Current R-CH	DC Volt meter	※See above	VR06 F-2728	13mV ± 1mV (20mA)

3. OTHER PARTS

Front View



Bottom View



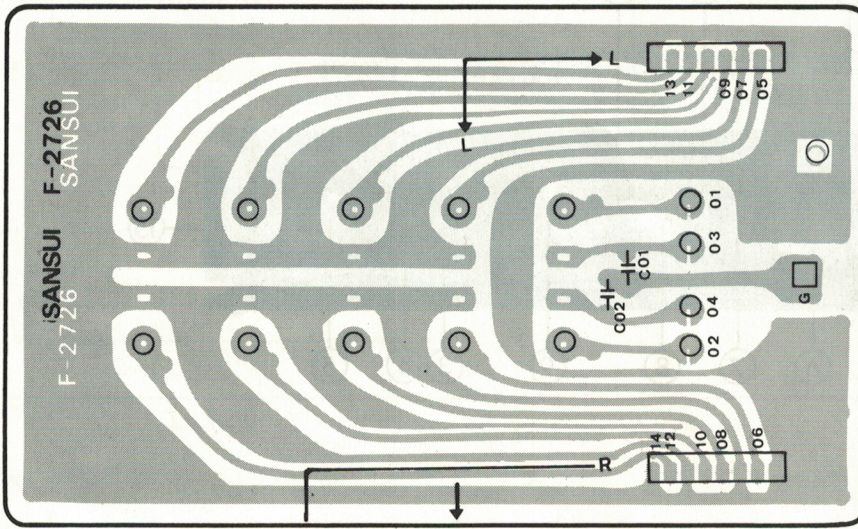
Parts List

Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
1	5326611	Lever Switch Knob	1015260, 1	100 kΩ (C) x 2 Treble Volume	15	5396350	Rack-mount Adaptor (Small)	
	1171640	Lever Switch, power	5048020	Masking Sheet (D)	16	0308391, 2	2SD313 (D, E) } Transistor	
2	5326611	Lever Switch Knob	5289230	Plate For VR (M7)	17	0303231, 2	2SB507 (D, E) }	
	1171020	Lever Switch, high filter	5318930	S-14 TY Knob	18	0659802	0.0047 μF 150V C.C.	
3	5326611	Lever Switch Knob	1015270, 1	250 kΩ (MN) x 2 Balance Volume	19	0201221	220Ω 1W N.I.L.	
	1171020	Lever Switch, loudness	5048020	Masking Sheet (D)	20	4002600	Power Transformer	
4	5326611	Lever Switch Knob	5289230	Plate For VR (M7)	21	2450060	AC Outlet	
	1171050	Lever Switch, tape monitor	5318910	Volume Knob	22	2230150	Ground Terminal	
5	5318920	M-10 TY Knob	1011120, 1	250 kΩ x 2 Volume	23	2290190	Speaker Terminal	
	1101800	Rotary Switch, input selector	5048050	Masking Sheet (A)	24	3800014	Power Cord	
	5048040	Masking Sheet (B)	5288960	Plate For VR (M8)	25	5110903	Flange Nut	
6	5318930	S-14 TY Knob	2430300	Head Phone Jack		5058770	Bottom Plate	
	1015260, 1	100 kΩ (C) x 2 Bass Volume	11	7007620		5507070	Leg	
	5048020	Masking Sheet (D)	12	0319120	LED	5109926	M2,6 x 8	
	5289230	Plate For VR (M7)	13	5006700	Bonnet	5109928	M4 x 16 (Black)	
7	5318930	S-14 TY Knob	14	5336680	Sansui Mark	5120191	M5x12x1.6 Washer	

4. PARTS LOCATION & PARTS LISTS

1) F-2726 Input Terminal Circuit Board (Stock No. 7595341)

Conductor Side

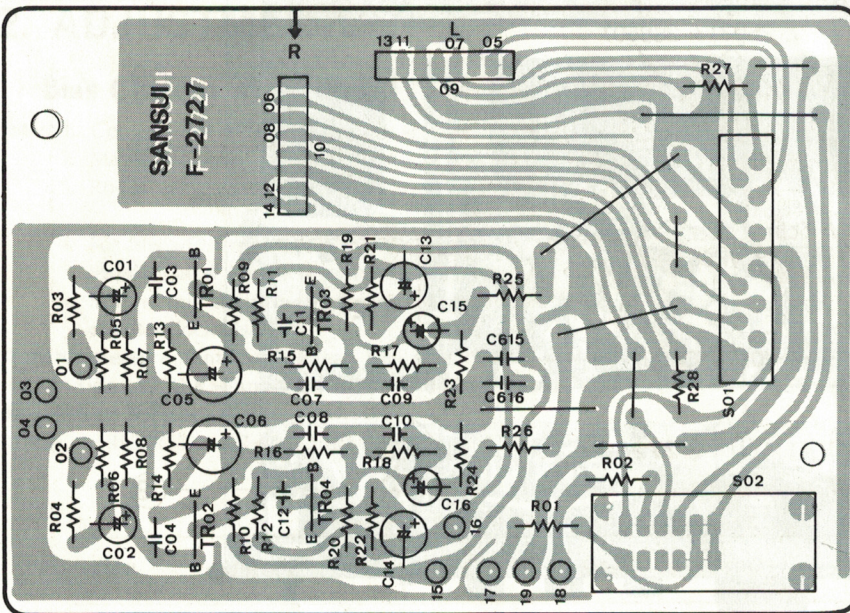


Parts List

Parts No.	Stock No.	Description
	2200510	10P Input Terminal

2) F-2727 Equalizer Circuit Board (Stock No. 7551181)

Conductor Side

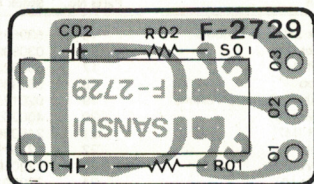


Parts List

Parts No.	Stock No.	Description
TR01, 02	0300920, 1	2SA726 (F, G) } Transistor
TR03, 04	0306070, 1	2SC1313 (F, G) }
S01	1101800	Rotary Switch
S02	1171050	Lever Switch

3) F-2729 High Filter Circuit Board (Stock No. 7595351)

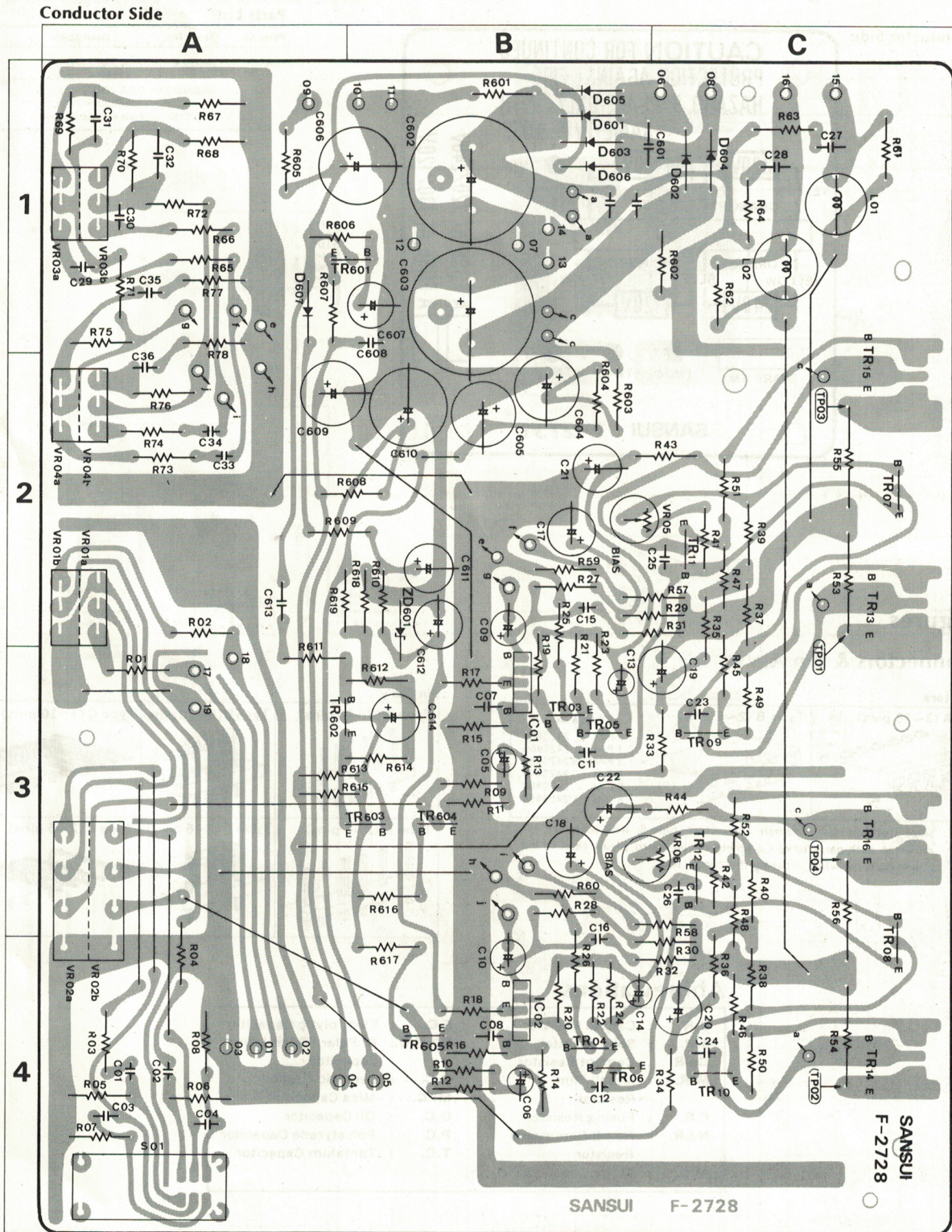
Conductor Side



Parts List

Parts No.	Stock No.	Description
	1171020	Lever Switch

4) F-2728 Tone Control & Driver Circuit Board (Stock No. 7571761)

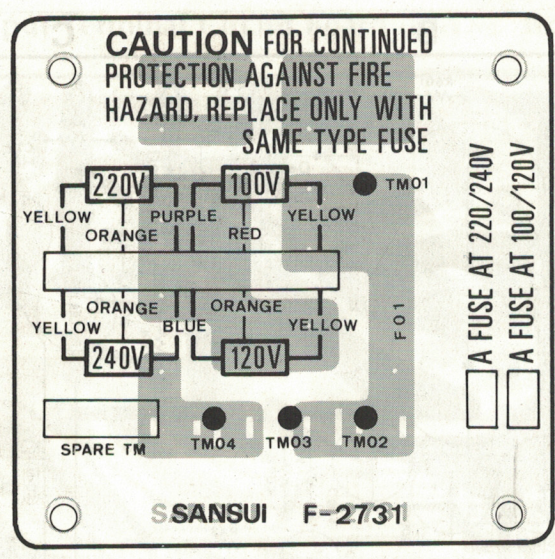


Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position		
TR03 ~ 06	0306370, 1	2SC1175 (D, E)	3B, 4B	ZD601	0315970	EQAO113R	Zener Diode	2B	R605	0210152	1.5kΩ ½W	N.I.R.	
TR07, 08	0305731	2SC711 (E)	2C, 4C	C01, 02	0621391	390pF, P.C.	4A	R607	0191220	22Ω	½W	F.R.	
TR09, 10	0305930, 1	2SC1211 (C, D)	3C, 4C	C601	0655103	0.01 μF 500V	C.C.	1B	R608	0191181	180Ω	½W	F.R.
TR11, 12	0300310, 1	2SA697 (C, D)	2C, 3C	C602, 603	0549008	4700 μF 35V	E.C.	1B	L01, 02	4210290	RF Coil 1.5 μH	1C	
TR13, 14	0308391, 2	2SD313 (D, E)	2C, 4C	R43, 44	0191101	100Ω	½W	2C, 3C	VR01	1015270, 1	250kΩ M.N.	2A	
TR15, 16	0303231, 2	2SB507 (D, E)	2C, 3C	R45 ~ 48	0191221	220Ω	½W	F.R.	VR02	1011120, 1	250kΩ (A) x 2	3A	
TR601	0306131, 2	2SC1364 (6, 7)	1B	R49 ~ 52	0191689	6.8Ω	½W	3C, 4C	VR03, 04	1015260, 1	100kΩ (C) x 2	1A, 2A	
TR602 ~ 605	0305951, 2	2SC945 (Q, P)	3B	R53 ~ 56	0212338	0.33Ω 2W	N.I.R.	2 ~ 4C	VR05, 06	1035050	470Ω B	4A	
IC01, 02	0360290, 1	2SA798 (F, G)	3B, 4B	R61 ~ 64	0210479	4.7Ω ½W	N.I.R.	1C	S01	1171020	Lever Switch	4A	
D601 ~ 606	0310340	10D1	1B, 1C	R601, 602	0210472	4.7kΩ ½W	N.I.R.	1B, 1C					
D607	0311160	1S2473D	1A	R603	0191471	470Ω ¼W	F.R.	2B					

5) F-2731 Voltage Selector Circuit Board (Stock No. 7595361)

Conductor Side



Parts List

Parts No.	Stock No.	Description
F01	0432230	1.5A 250V (AC100 ~ 120V)
	0432420	0.8A 250V (AC220 ~ 240V)
	2310220	Fuse Holder (Large)

● Figures

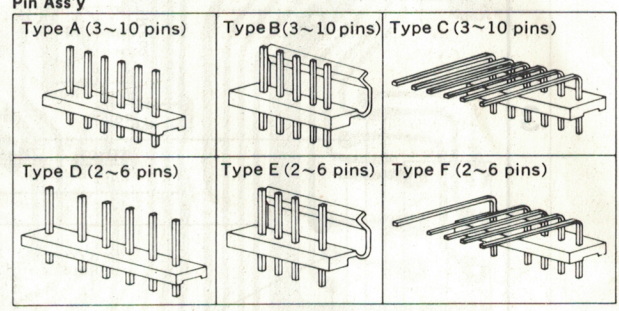
Connectors & Pin Ass'y

Connectors

Type	Stock No.
Type A (3~10 pins)	2 Pins 2420450
	3 Pins 2420460
	3 Pins (RED) 2420650
	4 Pins 2420470
	5 Pins 2420480
	6 Pins 2420490

NOTE: Since stock number of female connectors (type B) with wires are not shown in each parts list of Complete circuit board, please refer to the above parts list when ordering the connector.

Pin Ass'y



Abbreviations

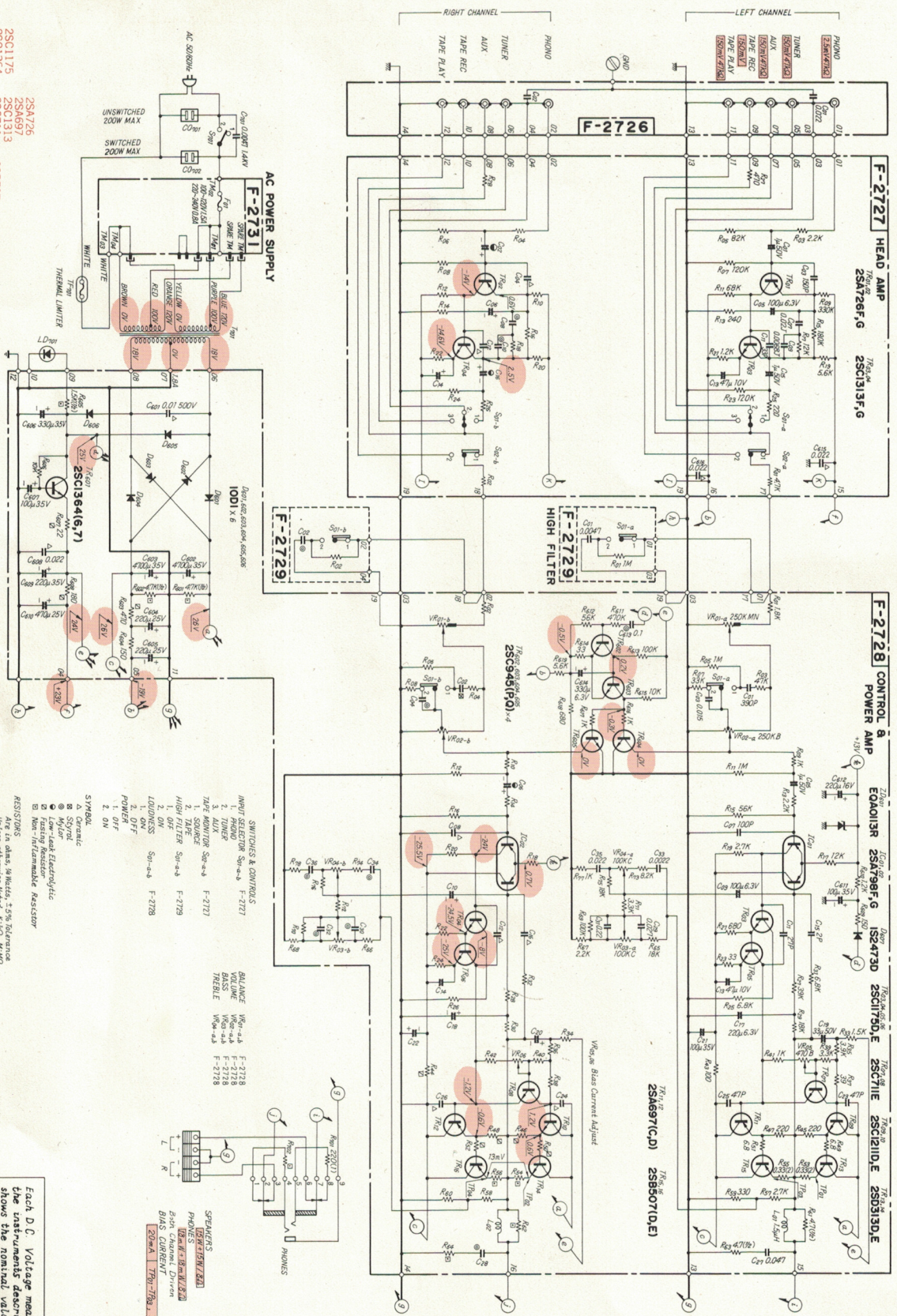
C.R. : Carbon Resistor	E.C. : Electrolytic Capacitor
S.R. : Solid Resistor	BP.E.C. : Bi-Polar Electrolytic Capacitor
Ce.R. : Cement Resistor	C.C. : Ceramic Capacitor
M.R. : Metal Film Resistor	Mi.C. : Mica Capacitor
F.R. : Fusing Resistor	O.C. : Oil Capacitor
N.I.R. : Non-Inflammable Resistor	P.C. : Polystyrene Capacitor
M.C. : Mylar Capacitor	T.C. : Tantalum Capacitor

La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 Änderungen, die dem technischen Fortschritt dienlich, bleiben vorbehalten.
 Design and specifications subject to change without notice for improvement.

A B C D

5. SCHEMATIC DIAGRAM

- 2SC1175
- 2SC1364
- 2SC1945
- ECB
- 2SA726
- 2SC1313
- 2SC1211
- BCE
- 2SB807
- 2SD313
- 2SA798
- 1SC2430
- 1001
- EQM01138



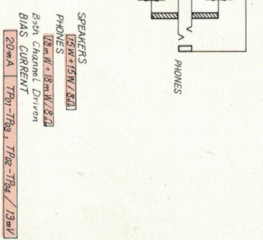
SYMBOLS
 Δ Ceramic
 ○ Mylar
 ● Low-leak Electrolytic
 □ Resistor
 B Resistor (variable)
 R Resistor (variable)

RESISTORS
 Values in Ω , μ , k , M , unless otherwise noted. K=10³, M=10⁶

CAPACITORS
 Values in μ , unless otherwise noted. P=pF

TOLERANCE
 J=5%, G=12%, F=1%

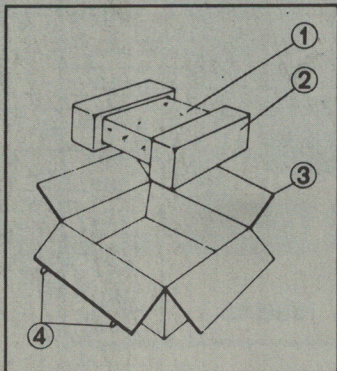
Each D.C. Voltage measured by the instruments described below shows the nominal value in Volts at no input signal. Measuring instruments Volt Meter DC20MS/V



1
2
3
4
5

6. PACKING LIST

Parts No.	Stock No.	Description
1	9116153	Vinyl Cover (Small)
2	9028080	Stylofoam Packing
3	9009730	Carton Case
4	5990680	CurI Stopper



7. ACCESSORY PARTS LIST

Parts No.	Stock No.	Description
	9203110	Operating Instructions
	9237570	Schematic Diagram
	5396350	Rack-mount Adaptor (Small)
	5192082	Hexagon Wrench (1.5 mm)
	9116580	Vinyl Bag For Wrench

MEMO

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Sansui