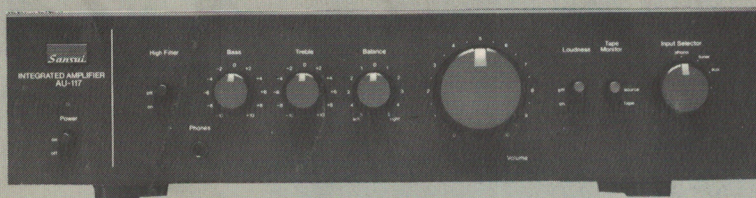


SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

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

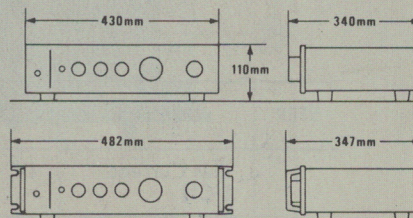
Dimensions . . . 430 mm (16-15/16") W

. . . 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



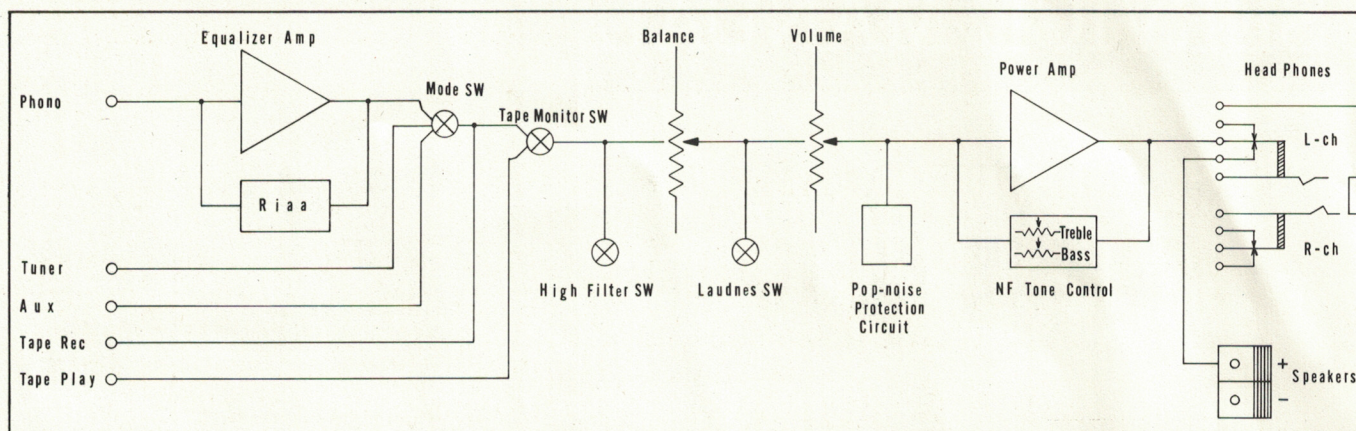
* Design and specifications subject to changes without notice for improvements.

* In order to simplify the explanation illustrations may sometimes differ from the originals.

Sansui

SANSUI ELECTRIC CO., LTD.

1. BLOCK DIAGRAM



2. ADJUSTMENTS

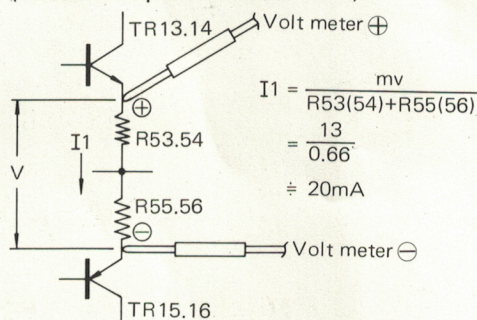
1) Bias Current Adjustment (See the picture of Bottom View on page 2)

- 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)

(Measure Output On both channel)



$$I1 = \frac{mv}{R53(54)+R55(56)}$$

$$= \frac{13}{0.66}$$

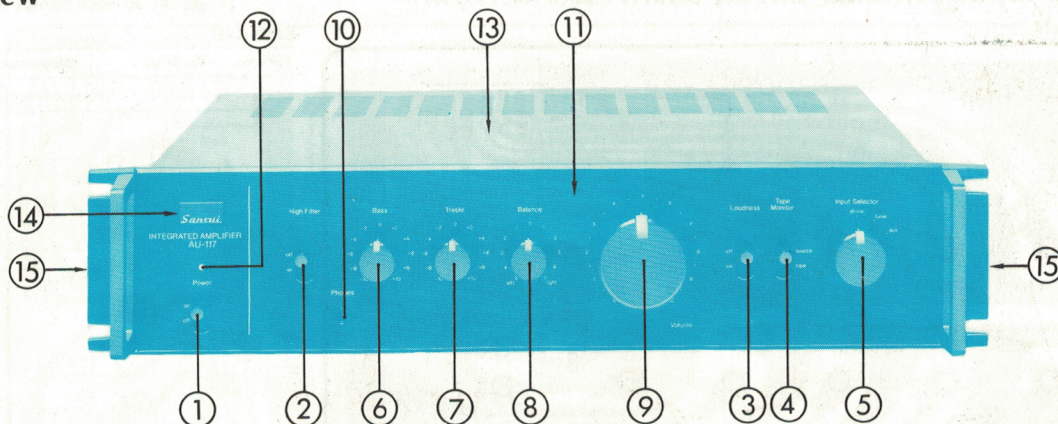
$$\div 20mA$$

(F-2728 Tone Control & Driver Circuit Board)

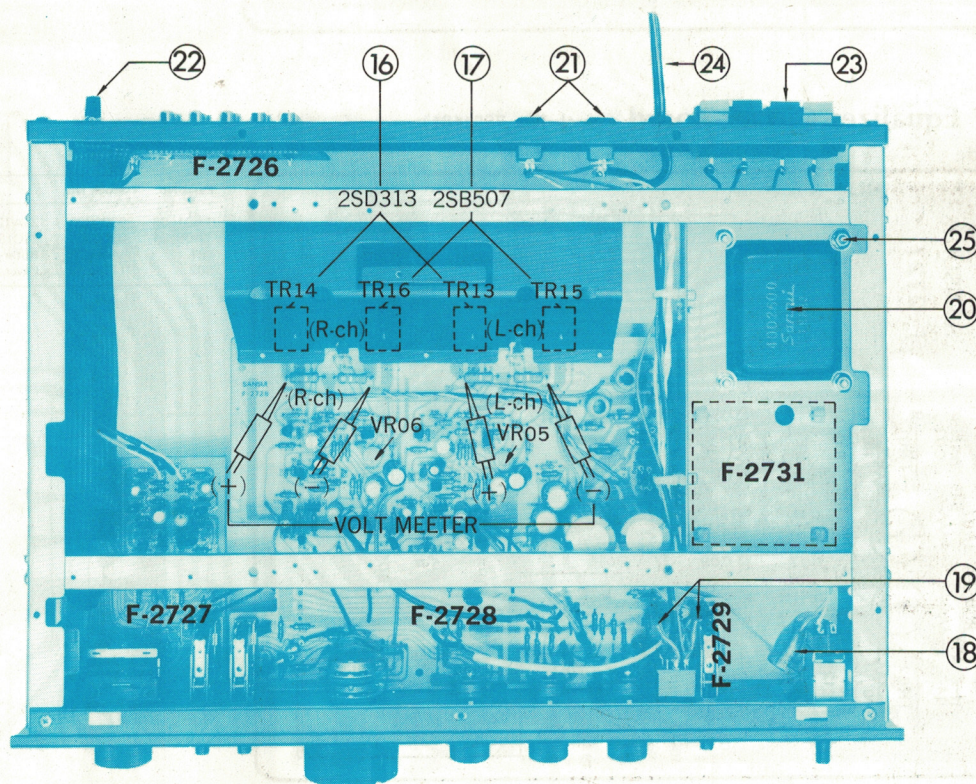
STEP	SUBJECT	EQUIPMENT	MEASURE OUTPUT	ADJUST	ADJUST FOR
1	Bias Current L-CH	DC Volt meter	※See above	VR05 F-2728	13mV ±1mV (20mA)
2	Bias Current R-CH	DC Volt meter	※See above	VR06 F-2728	13mV ±1mV (20mA)

3. OTHER PARTS

Front View



Bottom View



Parts List

Parts No.	Stock No.	Description
1	5326611	Lever Switch Knob
	1171640	Lever Switch, power
2	5326611	Lever Switch Knob
	1171020	Lever Switch, high filter
3	5326611	Lever Switch Knob
	1171020	Lever Switch, loudness
4	5326611	Lever Switch Knob
	1171050	Lever Switch, tape monitor
5	5318920	M-10 TY Knob
	1101800	Rotary Switch, input selector
	5048040	Masking Sheet (B)
6	5318930	S-14 TY Knob
	1015260, 1	100k Ω (C) x 2 Bass Volume
	5048020	Masking Sheet (D)
	5289230	Plate For VR (M7)
7	5318930	S-14 TY Knob

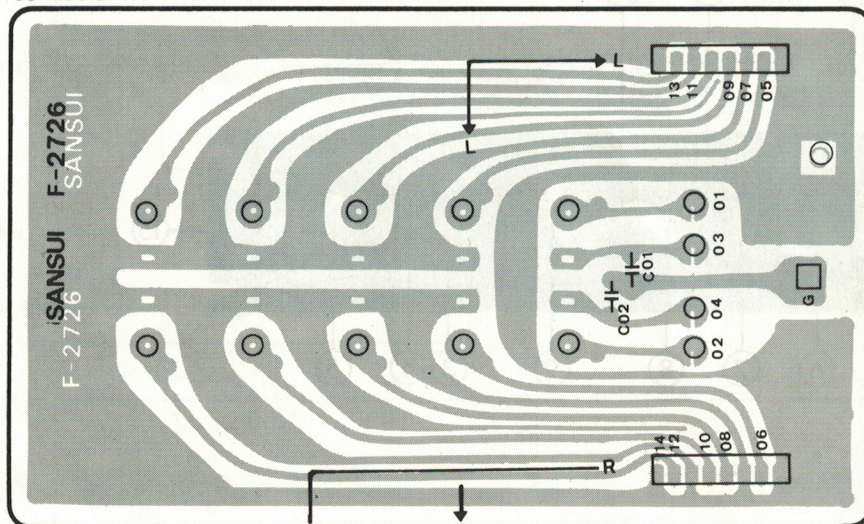
Parts No.	Stock No.	Description
	1015260, 1	100k Ω (C) x 2 Treble Volume
	5048020	Masking Sheet (D)
	5289230	Plate For VR (M7)
8	5318930	S-14 TY Knob
	1015270, 1	250k Ω (MN) x 2 Balance Volume
	5048020	Masking Sheet (D)
	5289230	Plate For VR (M7)
9	5318910	Volume Knob
	1011120, 1	250k Ω x 2 Volume
	5048050	Masking Sheet (A)
	5288960	Plate For VR (M8)
10	2430300	Head Phone Jack
11	7007620	Front Panel Ass'y
12	0319120	LED
13	5006700	Bonnet
14	5336680	Sansui Mark

Parts No.	Stock No.	Description
15	5396350	Rack-mount Adaptor (Small)
16	0308391, 2	2SD313 (D, E) } Transistor
17	0303231, 2	2SB507 (D, E) }
18	0659802	0.0047 μ F 150V C.C.
19	0201221	220 Ω 1W N.I.L.
20	4002600	Power Transformer
21	2450060	AC Outlet
22	2230150	Ground Terminal
23	2290190	Speaker Terminal
24	3800014	Power Cord
25	5110903	Flange Nut
	5058770	Bottom Plate
	5507070	Leg
	5109926	M2.6 x 8
	5109928	M4 x 16 (Black)
	5120191	M5x12x1.6 Washer

4. PARTS LOCATION & PARTS LISTS

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

Conductor Side



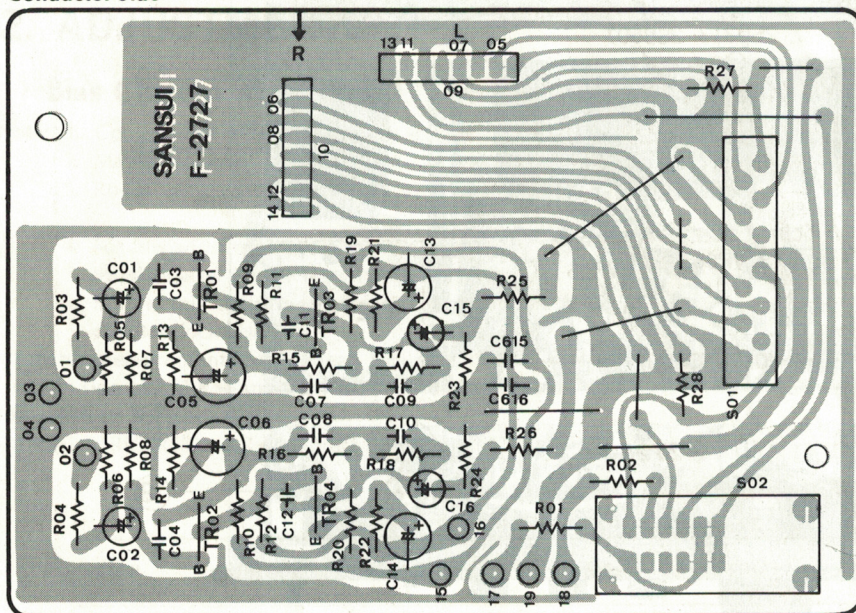
Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the common parts list for capacitors & resistors which was appended previously to each Sansui Manual.

Parts List

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

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

Conductor Side

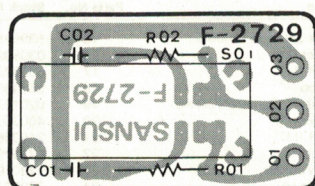


Parts List

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

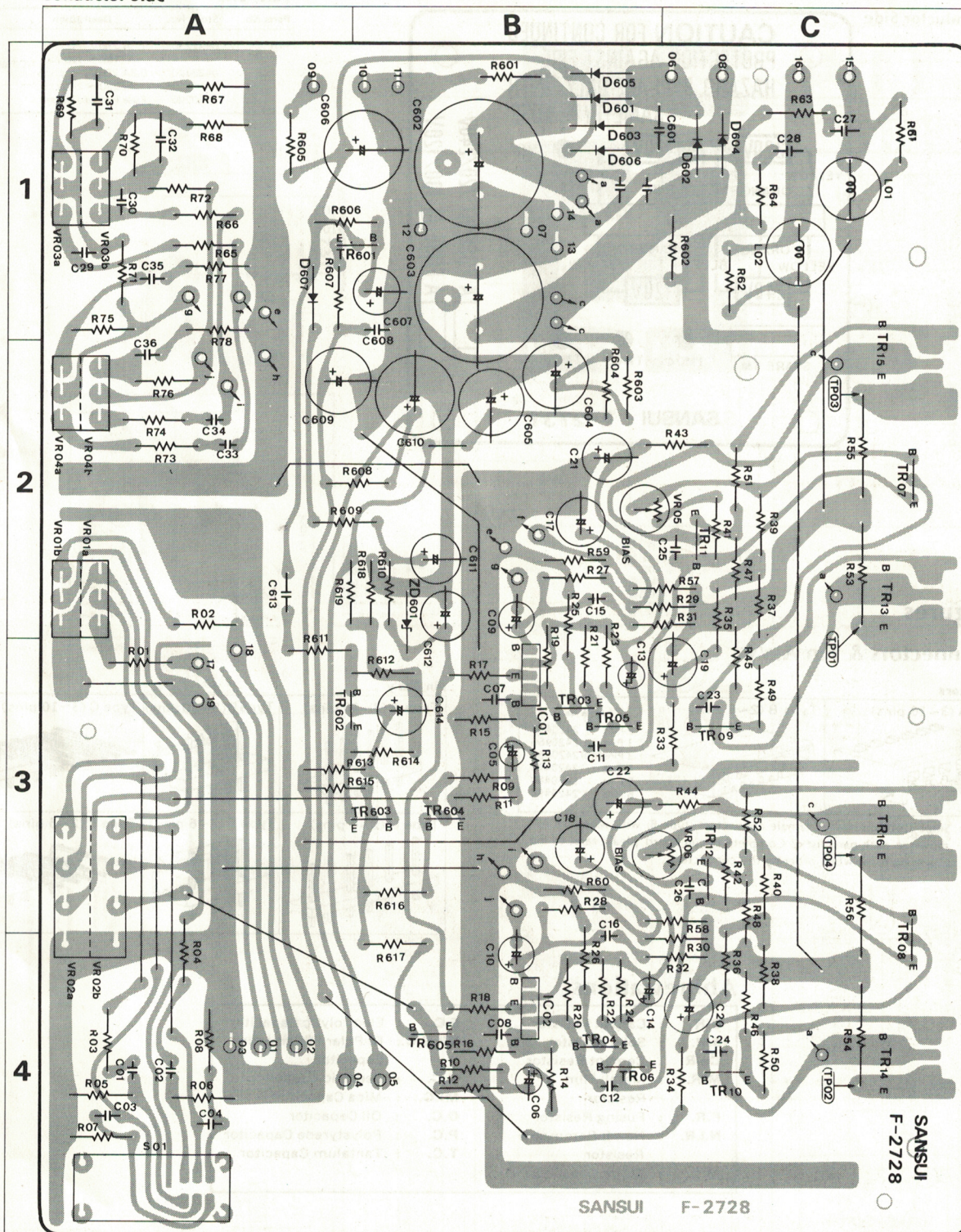


Parts List

Parts No.	Stock No.	Description
	1171020	Lever Switch

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

Conductor Side



Parts List

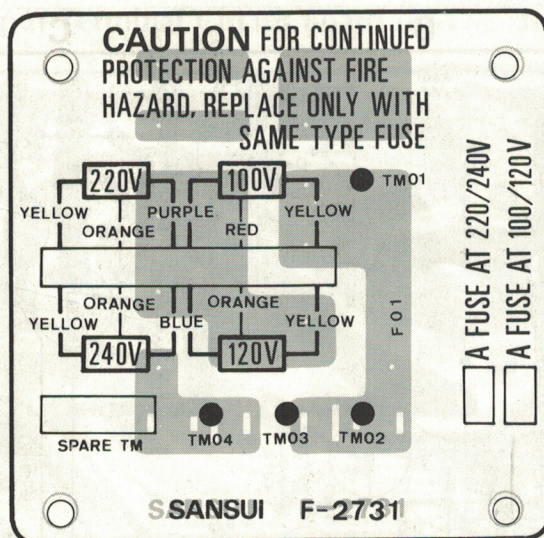
Parts No.	Stock No.	Description	Position
TR03 ~ 06	0306370, 1	2SC1175 (D, E)	3B, 4B
TR07, 08	0305731	2SC711 (E)	2C, 4C
TR09, 10	0305930, 1	2SC1211 (C, D)	3C, 4C
TR11, 12	0300310, 1	2SA697 (C, D)	2C, 3C
TR13, 14	0308391, 2	2SD313 (D, E)	2C, 4C
TR15, 16	0303231, 2	2SB507 (D, E)	2C, 3C
TR601	0306131, 2	2SC1364 (6, 7)	1B
TR602~605	0305951, 2	2SC945 (Q, P)	3B
IC01, 02	0360290, 1	2SA798 (F, G)	3B, 4B
D601 ~ 606	0310340	10D1	1B, 1C
D607	0311160	1S2473D	1A

Parts No.	Stock No.	Description	Position
ZD601	0315970	EQA0113R	Zener Diode 2B
C01, 02	0621391	390pF, P.C.	4A
C601	0655103	0.01 μ F 500V	1B
C602, 603	0549008	4700 μ F 35V	E.C. 1B
R43, 44	0191101	100 Ω	2C, 3C
R45 ~ 48	0191221	220 Ω	F.R. 2 ~ 4C
R49 ~ 52	0191689	6.8 Ω	3C, 4C
R53 ~ 56	0212338	0.33 Ω 2W	N.I.R. 2 ~ 4C
R61 ~ 64	0210479	4.7 Ω $\frac{1}{2}$ W	N.I.R. 1C
R601, 602	0210472	4.7k Ω $\frac{1}{2}$ W	N.I.R. 1B, 1C
R603	0191471	470 Ω $\frac{1}{2}$ W	F.R. 2B

Parts No.	Stock No.	Description	Position
R605	0210152	1.5k Ω $\frac{1}{2}$ W	N.I.R. 1A
R607	0191220	22 Ω	$\frac{1}{2}$ W F.R. 1A
R608	0191181	180 Ω	F.R. 2B
L01, 02	4210290	RF Coil 1.5 μ H	1C
VR01	1015270, 1	250k Ω M.N.	2A
VR02	1011120, 1	250k Ω (A) x 2	3A
VR03, 04	1015260, 1	100k Ω (C) x 2	1A, 2A
VR05, 06	1035050	470 Ω B	
S01	1171020	Lever Switch	4A

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 A (3~10 pins)	Type B (2~6 pins)	Stock No.
		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

Type A (3~10 pins)	Type B (3~10 pins)	Type C (3~10 pins)
Type D (2~6 pins)	Type E (2~6 pins)	Type F (2~6 pins)

Abbreviations

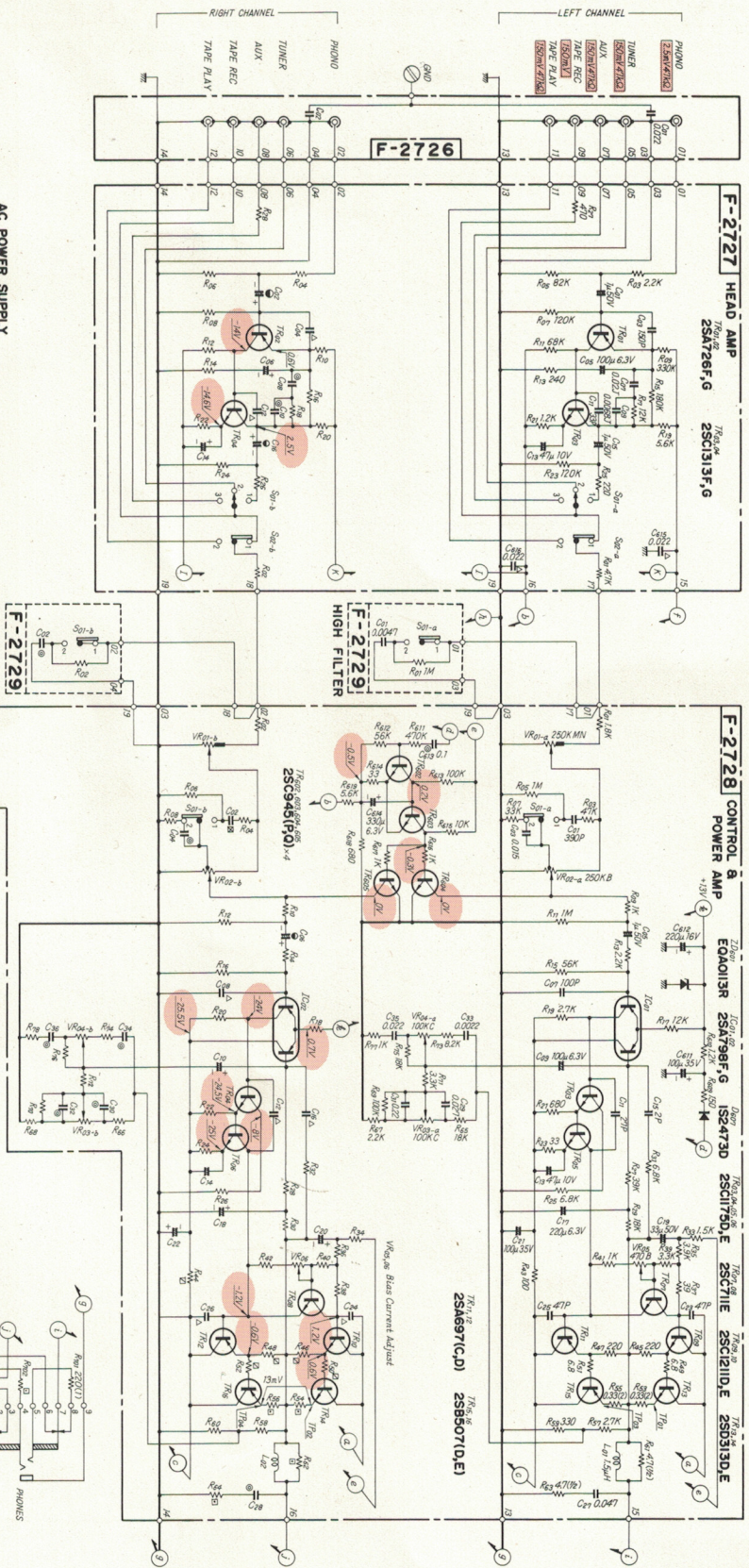
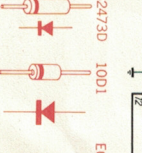
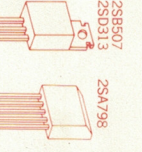
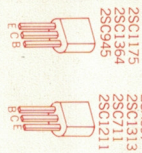
C.R. : Carbon Resistor	E.C. : Electrolytic Capacitor
S.R. : Solid Resistor	BP.E.C. : Bi-Polar Electrolytic Capacitor
Ce.R. : Cement Resistor	C.C. : Ceramic Capacitor
M.R. : Metal Film Resistor	Mi.C. : Mica Capacitor
F.R. : Fusing Resistor	O.C. : Oil Capacitor
N.I.R. : Non-Inflammable Resistor	P.C. :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

A

B

C

D



SWITCHES & CONTROLS	
INPUT	F-2172
ON/OFF	F-2172
1. TUNER	F-2172
2. MODE	F-2172
3. BAND	F-2172
4. SOURCE	F-2172
5. TUNE	F-2172
6. H/1	F-2172
7. H/2	F-2172
8. 0W	F-2172
9. 2.0W	F-2172
10. 4.0W	F-2172
11. 6.0W	F-2172
12. 8.0W	F-2172
13. 10.0W	F-2172
14. 12.0W	F-2172
15. 14.0W	F-2172
16. 16.0W	F-2172
17. 18.0W	F-2172
18. 20.0W	F-2172
19. 22.0W	F-2172
20. 24.0W	F-2172
21. 26.0W	F-2172
22. 28.0W	F-2172
23. 30.0W	F-2172
24. 32.0W	F-2172
25. 34.0W	F-2172
26. 36.0W	F-2172
27. 38.0W	F-2172
28. 40.0W	F-2172
29. 42.0W	F-2172
30. 44.0W	F-2172
31. 46.0W	F-2172
32. 48.0W	F-2172
33. 50.0W	F-2172
34. 52.0W	F-2172
35. 54.0W	F-2172
36. 56.0W	F-2172
37. 58.0W	F-2172
38. 60.0W	F-2172
39. 62.0W	F-2172
40. 64.0W	F-2172
41. 66.0W	F-2172
42. 68.0W	F-2172
43. 70.0W	F-2172
44. 72.0W	F-2172
45. 74.0W	F-2172
46. 76.0W	F-2172
47. 78.0W	F-2172
48. 80.0W	F-2172
49. 82.0W	F-2172
50. 84.0W	F-2172
51. 86.0W	F-2172
52. 88.0W	F-2172
53. 90.0W	F-2172
54. 92.0W	F-2172
55. 94.0W	F-2172
56. 96.0W	F-2172
57. 98.0W	F-2172
58. 100.0W	F-2172
59. 102.0W	F-2172
60. 104.0W	F-2172
61. 106.0W	F-2172
62. 108.0W	F-2172
63. 110.0W	F-2172
64. 112.0W	F-2172
65. 114.0W	F-2172
66. 116.0W	F-2172
67. 118.0W	F-2172
68. 120.0W	F-2172
69. 122.0W	F-2172
70. 124.0W	F-2172
71. 126.0W	F-2172
72. 128.0W	F-2172
73. 130.0W	F-2172
74. 132.0W	F-2172
75. 134.0W	F-2172
76. 136.0W	F-2172
77. 138.0W	F-2172
78. 140.0W	F-2172
79. 142.0W	F-2172
80. 144.0W	F-2172
81. 146.0W	F-2172
82. 148.0W	F-2172
83. 150.0W	F-2172
84. 152.0W	F-2172
85. 154.0W	F-2172
86. 156.0W	F-2172
87. 158.0W	F-2172
88. 160.0W	F-2172
89. 162.0W	F-2172
90. 164.0W	F-2172
91. 166.0W	F-2172
92. 168.0W	F-2172
93. 170.0W	F-2172
94. 172.0W	F-2172
95. 174.0W	F-2172
96. 176.0W	F-2172
97. 178.0W	F-2172
98. 180.0W	F-2172
99. 182.0W	F-2172
100. 184.0W	F-2172
101. 186.0W	F-2172
102. 188.0W	F-2172
103. 190.0W	F-2172
104. 192.0W	F-2172
105. 194.0W	F-2172
106. 196.0W	F-2172
107. 198.0W	F-2172
108. 200.0W	F-2172
109. 202.0W	F-2172
110. 204.0W	F-2172
111. 206.0W	F-2172
112. 208.0W	F-2172
113. 210.0W	F-2172
114. 212.0W	F-2172
115. 214.0W	F-2172
116. 216.0W	F-2172
117. 218.0W	F-2172
118. 220.0W	F-2172
119. 222.0W	F-2172
120. 224.0W	F-2172

lence
Q. M. M. Q.

	VOLUME	PLANCE
	CLASS	
	NUMBER	

$\begin{matrix} \Gamma_1 \\ \Gamma_2 \\ \Gamma_3 \\ \Gamma_4 \end{matrix}$
 $\begin{matrix} a,b \\ a,b \\ a,b \\ a,b \end{matrix}$

Each of the three shows a measurement of the voltage across the battery.

AMERS
15W+15W
ONES
13m H+13
Channel
S CURRENT
20mA

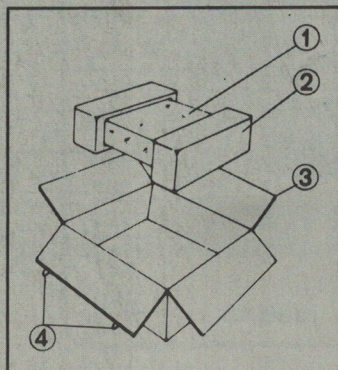
Age measurements
of desert annual plants
in the Sonoran Desert
of Arizona

202-7784 /

3. $V = 1$ $S = 5$

6. PACKING LIST

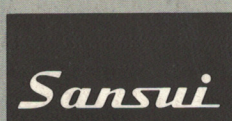
Parts No.	Stock No.	Description
1	9116153	Vinyl Cover (Small)
2	9028080	Stylofoam Packing
3	9009730	Carton Case
4	5990680	Curl Stopper



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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