

SERVICE MANUAL



MODEL 5100

4 CHANNEL ADD AMPLIFIER

DIMENSIONS : H-5 $\frac{7}{8}$ ", W-10 $\frac{5}{16}$ ", D-14" WEIGHT : 17.4 lbs.

SPECIFICATIONS

Total Dynamic Power :	100W (50W+50W) 4Ω IHF 68W (34W+34W) 8Ω IHF
Continuous Power :	66W (33W+33W) 4Ω 52W (26W+26W) 8Ω
Load Impedance :	4~16Ω
THD at Rated Power :	Less than 0.5% at 1kHz
IM Distortion at Rated Power :	1%
Power Band Width :	30~30Hz
Frequency Response :	20~50kHz
Damping Factor :	50 (1kHz)
Input Sensitivity :	Tape 180mV Aux 180mV Ch1, 3 IN 500mV Ch2, 4 Main IN 500mV
Output Level :	Recording OUT 180mV Ch2, 4 Pre OUT 500mV
Signal to Noise Ratio :	AUX -70dB
SFCS :	Phase inverse scatter circuit
S. E. A. SECTION	
S. E. A. Center Frequency :	40Hz, 250Hz, 1kHz, 5kHz, 15kHz
S. E. A. Control Range :	±12dB
Power Consumption :	85W (maximum Power)
Power Source :	100, 120, 220, 240V Selectable 50/60Hz

REMOVAL OF CHASSIS

- ① Loosen 5 screws from the bottom of the wooden case.
- ② Pull out the chassis in the arrow direction lifting it up slightly with both hands. Also lift up with both hands in case of closing chassis into the cabinet.

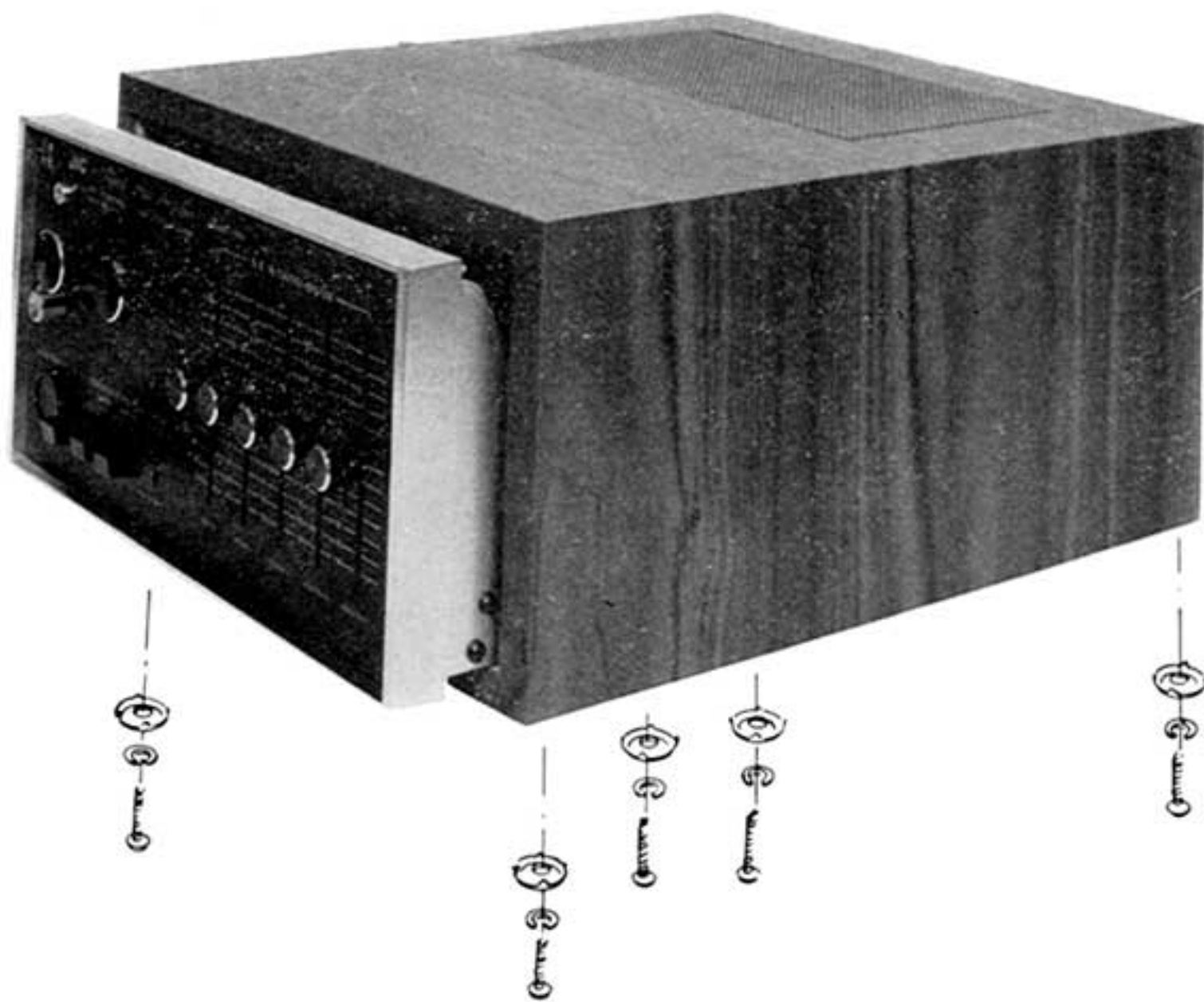


Fig. 1

MAIN PARTS ARRANGEMENT

FRONT VIEW

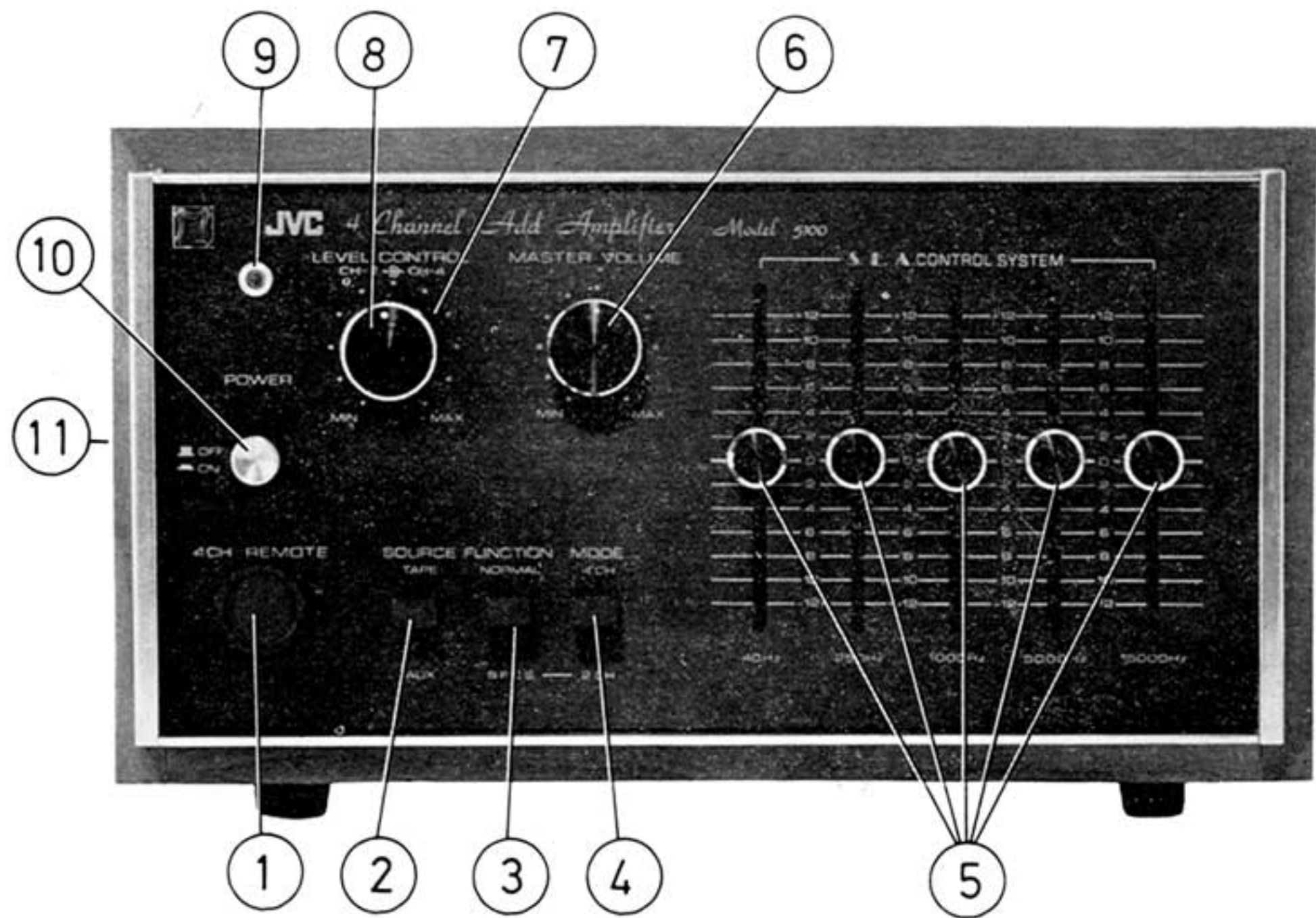


Fig. 2

Dwg. No.	Parts No	Parts Name	Dwg. No.	Parts No.	Parts Name
1	E46642-002	Balance Remote Cap Ass'y	7	E46826-001	Level Control CH-4 Knob
2	E42997-001	Source Knob	8	E46824-001	Level Control CH-2 Knob
3	//	Function Knob	9	E41427-1	Rabbit Eye
4	//	Mode Knob	10	E46606-001	Power Switch Knob
5	E46604-001	Slide Knob	11	DL-ED1261	Wooden Case
6	E46607-001	Master Volume Knob			

MAIN PARTS ARRANGEMENT

UPPER VIEW

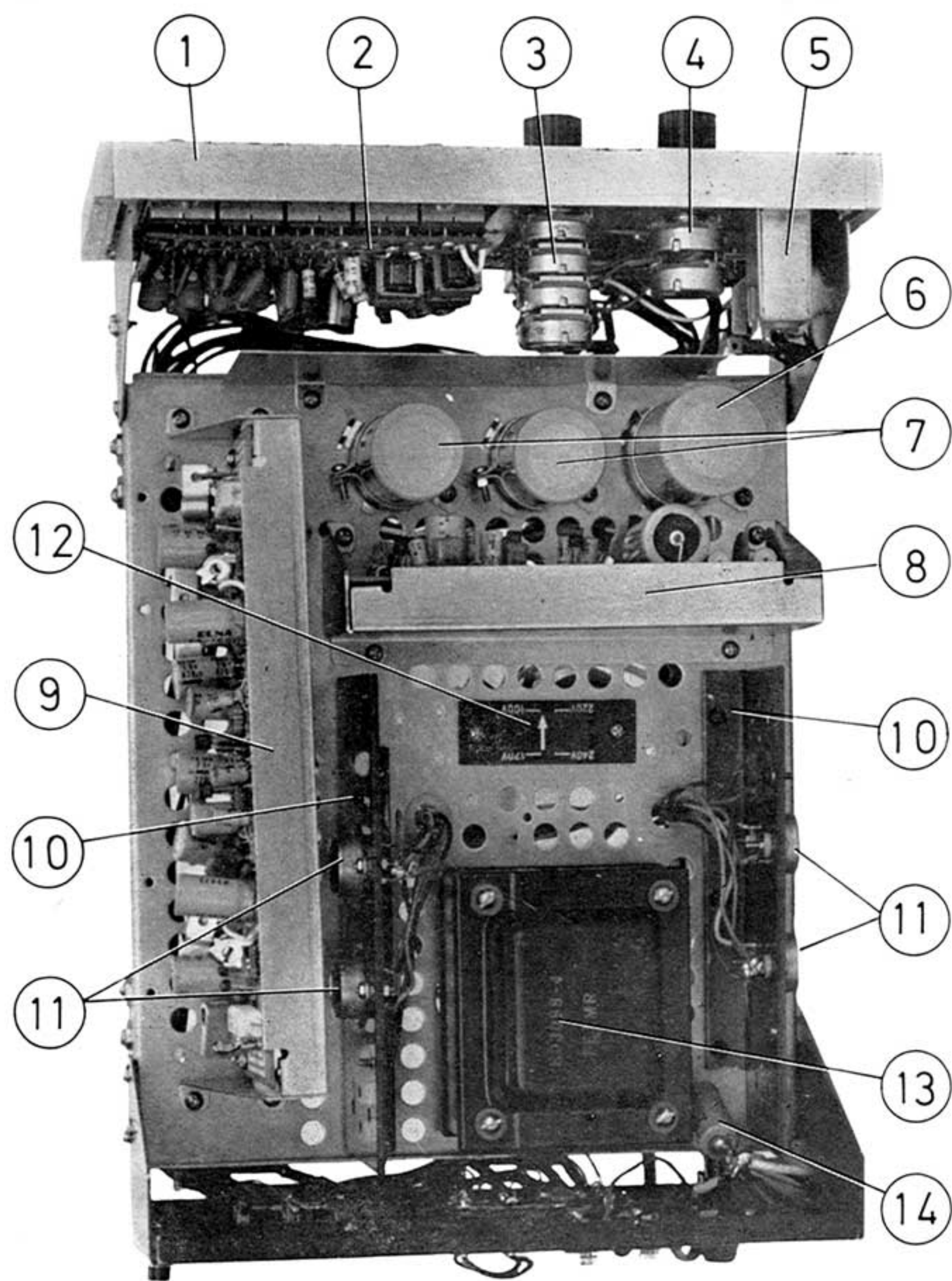


Fig. 3

Dwg. No.	Parts No.	Parts Name	Dwg. No.	Parts No.	Parts Name
1	E32805-001	Front Panel Sub Ass'y	8	TAP-106B	{ Power Source Protector & SFCS Circuit Board Ass'y Drive Amp. Circuit Board Ass'y
2	TAC-129C	S. E. A. Circuit Board Ass'y	9	TAD-76	
3	Q30385-002	Master Volume	10	E30375-DS	
4	E0352-17	Level Control Volume	11	2SC1030	Power Transistor
5	Q04967-9	Pilot Lamp	12	E04085	Voltage Selector Plug
6	Q03600-21	Electrolytic Capacitor	13	E03098-4	Power Transformer
7	Q03592-21	Electrolytic Capacitor	14	Q03212-103M	O. F. T. Capacitor

POWER TRANSFORMER CIRCUIT

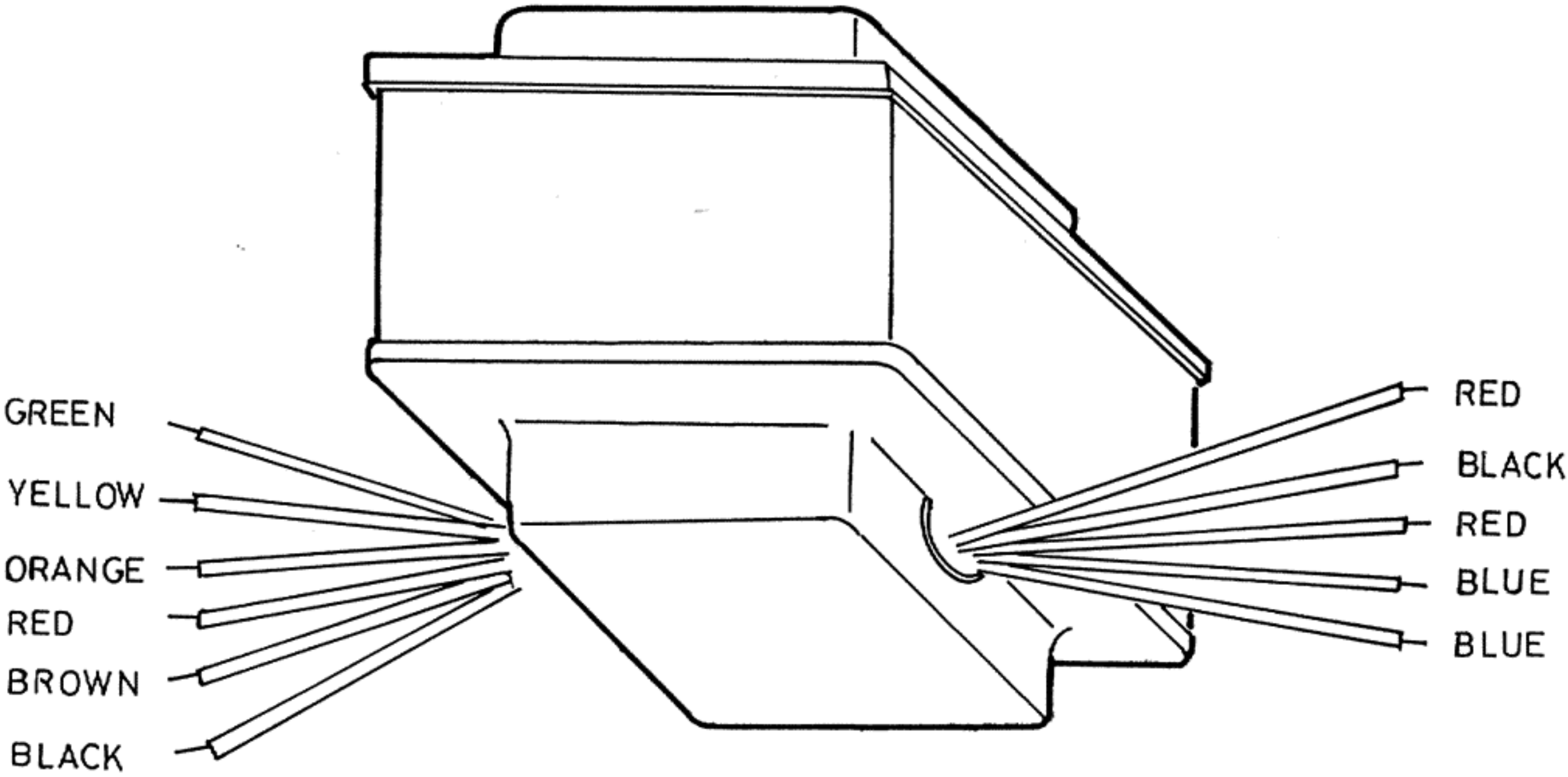


Fig. 4

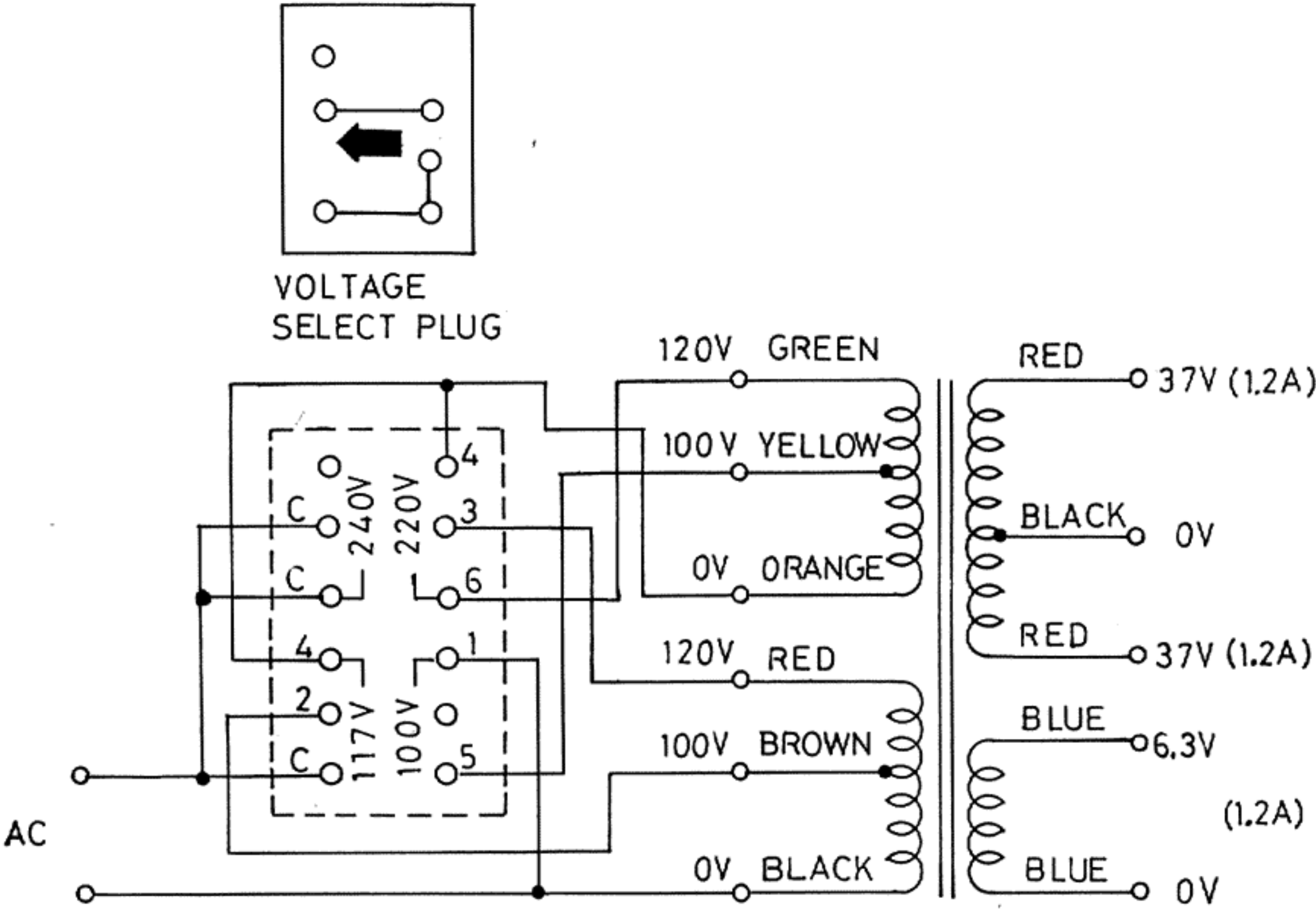


Fig. 5

USED TRANSISTOR

2SC458LC



X805, 806

2SC458LGC



X601~604
X701, 702
X801~804

2SA545



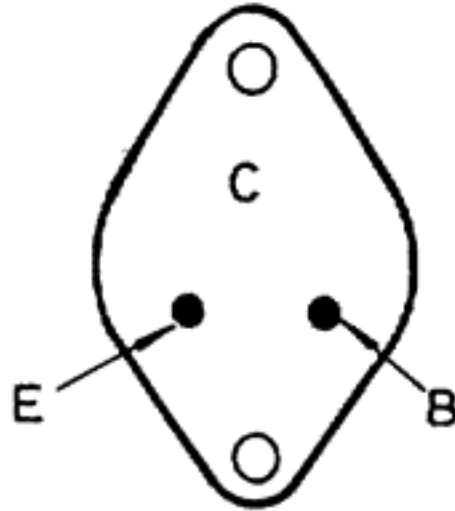
X707~708

2SC853



X703~706

2SC1030



X1~4

Fig. 6

EXPLODED VIEW OF FRONT PANEL PARTS ASS'Y

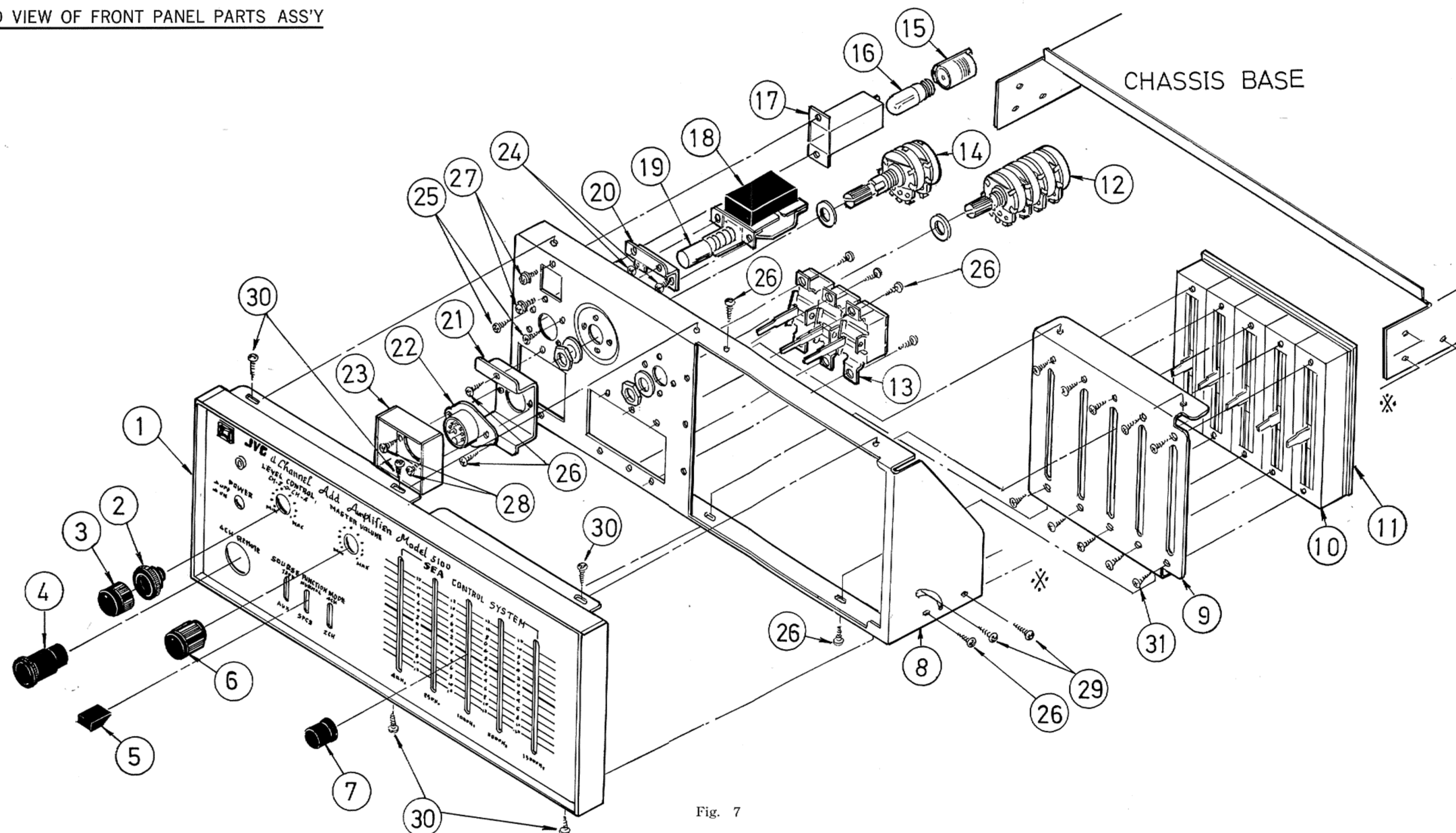


Fig. 7

No.	Parts No.	Parts Name	Description
1	E32805-001	Front Panel Sub Ass'y	
2	E46826-001	Double Knob	Level Control CH-4
3	E46824-001	"	Level Control CH-2
4	E46642-002	Balance Remote Cap Ass'y	4-CH Remote
5	E42997-001	Lever Knob	Source, Function, Mode
6	E46607-001	Knob	Master Volume
7	E46604-001	Slide Knob	S. E. A.
8	E20879-001	Front Bracket	
9	E32807-001	Slide Volume Holder	
10	E03306-001S	Slide Variable Resistor	
11	TAC-129C	S. E. A. Circuit Board Ass'y	
12	Q30385-002	Variable Resistor	Master Volume
13	Q03082-001	Lever Switch	Source, Function, Mode
14	E0352-17	Variable Resistor	Level Control
15	Q30110-A	Lamp Socket Ass'y	
16	Q04967-9	Pilot Lamp	

No.	Parts No.	Parts Name	Description
17	E44653-001S	Light Shield	
18	Q03885-001S	Push Switch	Power Switch
19	E46606-001	Push Button Knob	"
20	E46914-001	Push Switch Bracket	
21	E46819-001	Balance Remote Holder	
22	E03380-001	8P Socket	4 CH Remote
23	E46820-001	Balance Remote Cover	
24	E44865-001S	Screw	
25	SBSB3006N	Tapping Screw	
26	SSSB3006N	"	
27	LPSP3006NS	Ass'y Screw	
28	SBSB3006M	Tapping Screw	
29	SSSB3006C	"	
30	SSSB3008C	"	
31	SSSP3005ZS	Screw	

EXPLODED VIEW OF REAR PANEL PARTS ASS'Y

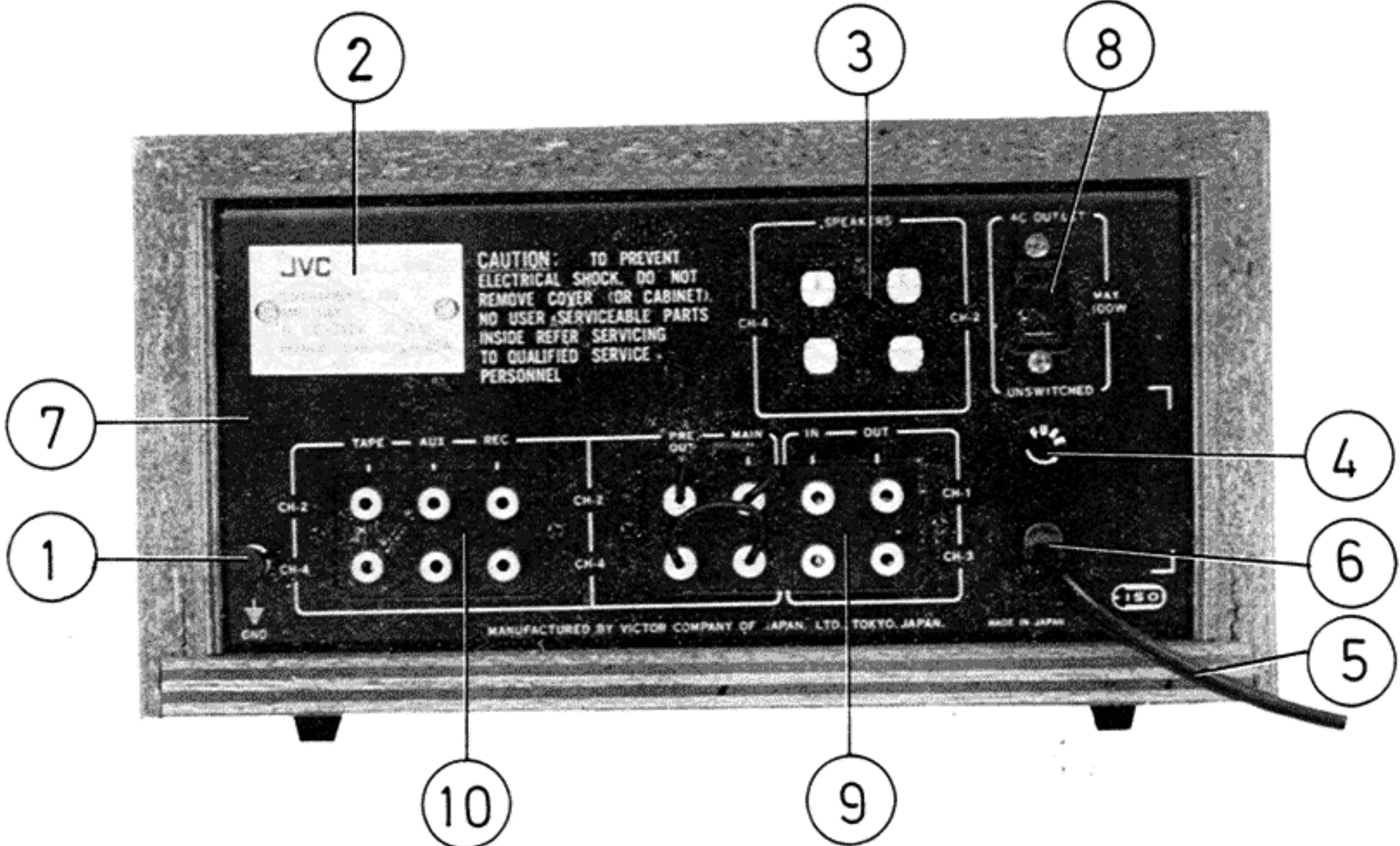
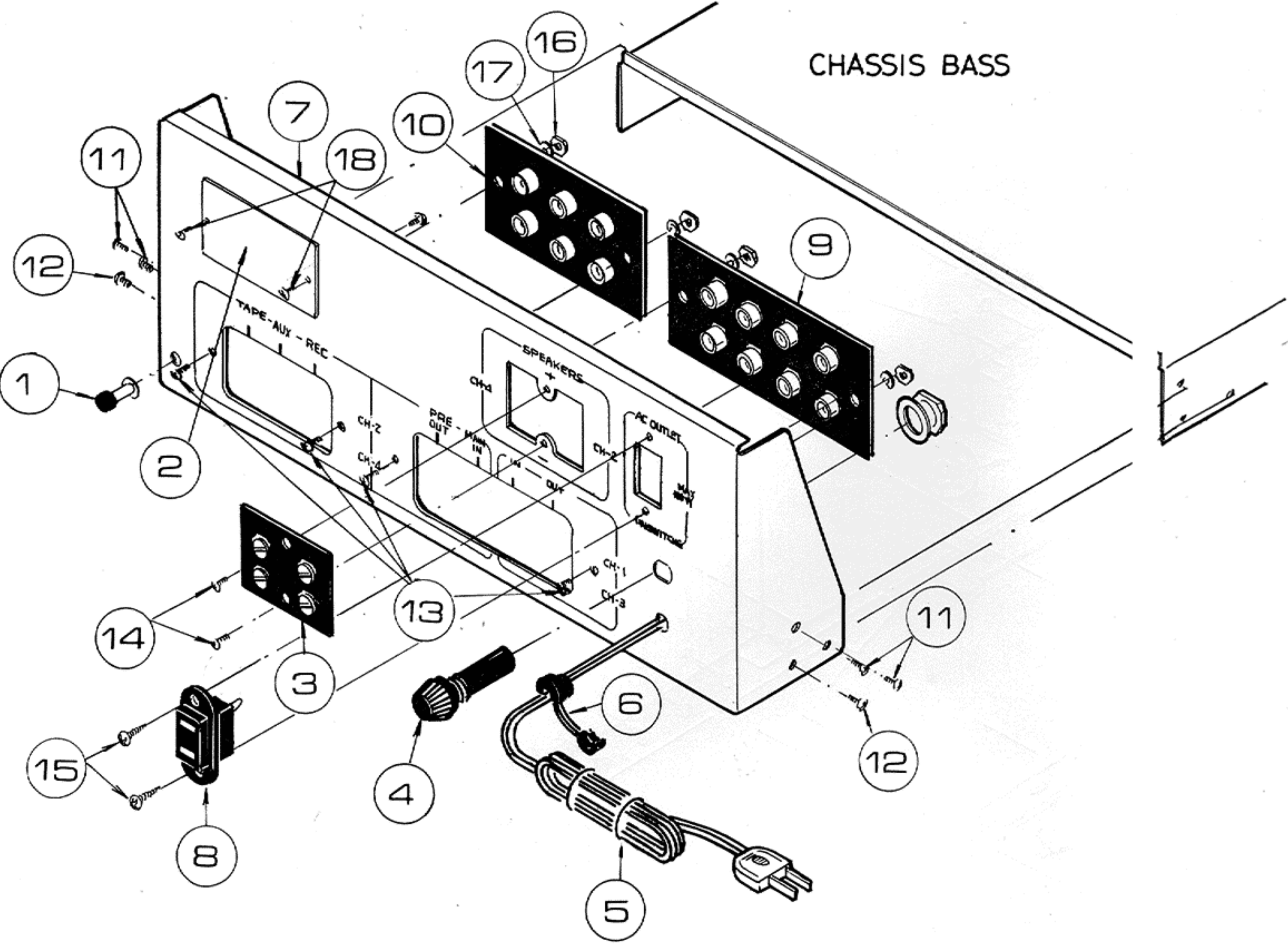


Fig. 8

No.	Parts No.	Parts Name	Description
1	E04069	Push Terminal	GND
2	E46369-014	Rating Plate	
3	Q30156-001	Terminal Board Ass'y	
4	Q30210-001	Fuse Socket Ass'y	
5	Q03056-14	Power Cord with Plug	UL
6	E31704-001	Power Cord Stopper	
7	E32806-001	Rear Panel	
8	Q30120-001	AC Socket	
9	E03043-80	Pin Jack Ass'y	

No.	Parts No.	Parts Name	Description
10	E03043-60	Pin Jack Ass'y	
11	SBSB3006C	Tapping Screw	
12	SBSB3006M	"	
13	SPSP3008MS	Screw	
14	SBSB3008M	Tapping Screw	
15	SBSB3008M	Tapping Screw	
16	NNB3000NS	Nut	
17	WLS3000	Lock Washer	
18	SBSB3006N	Tapping Screw	

WIER CONNECTION

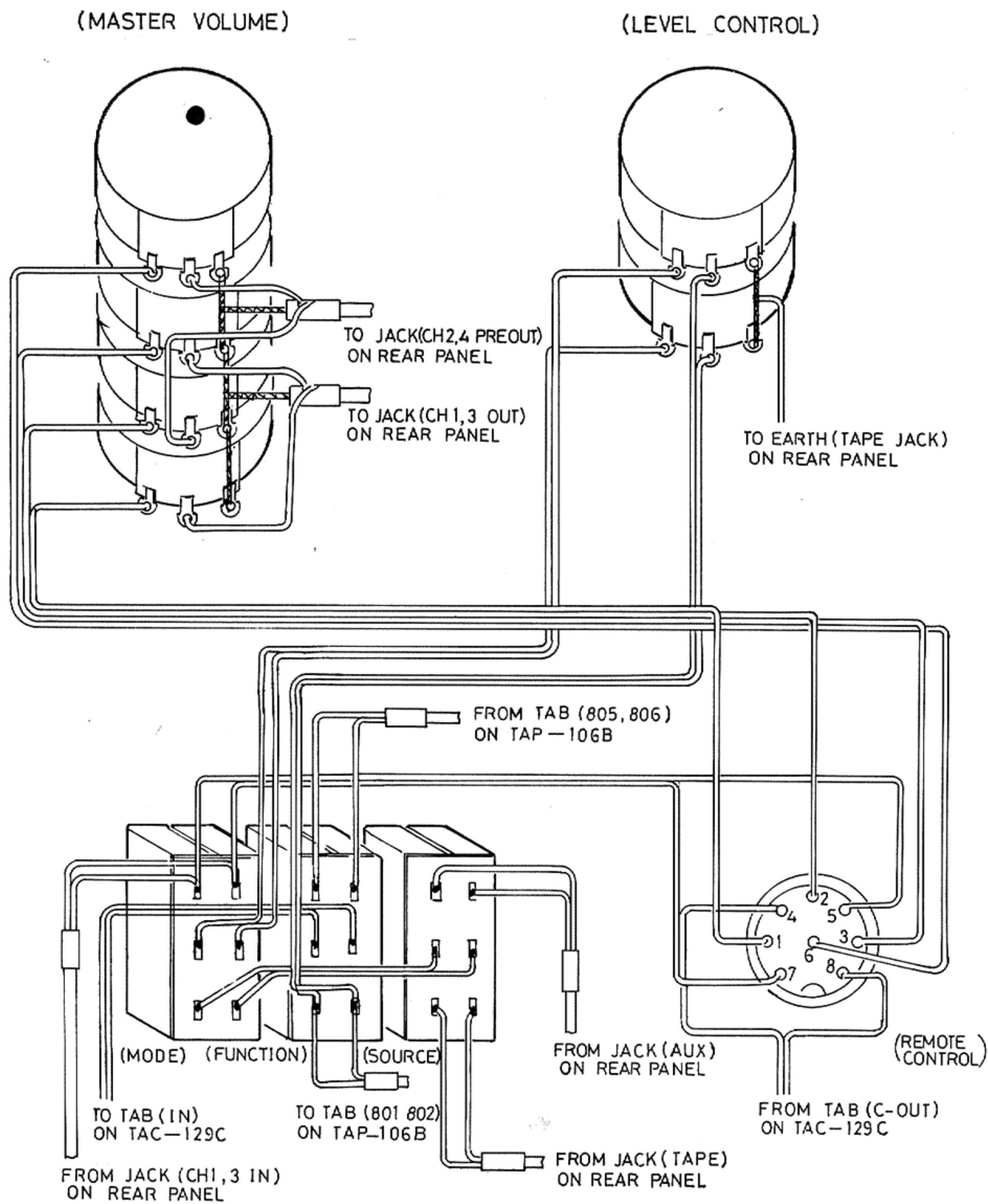


Fig. 10

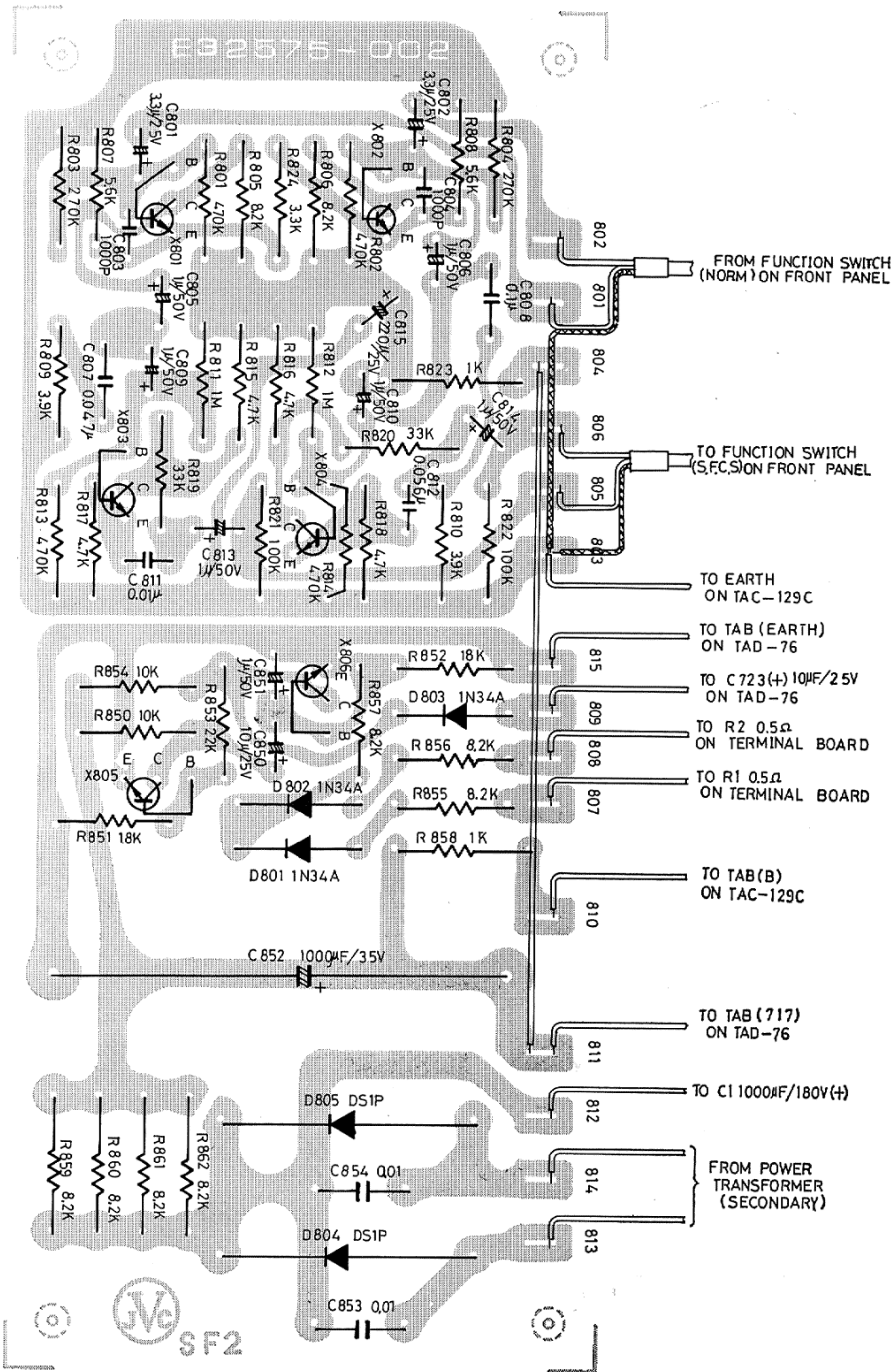


Fig. 11

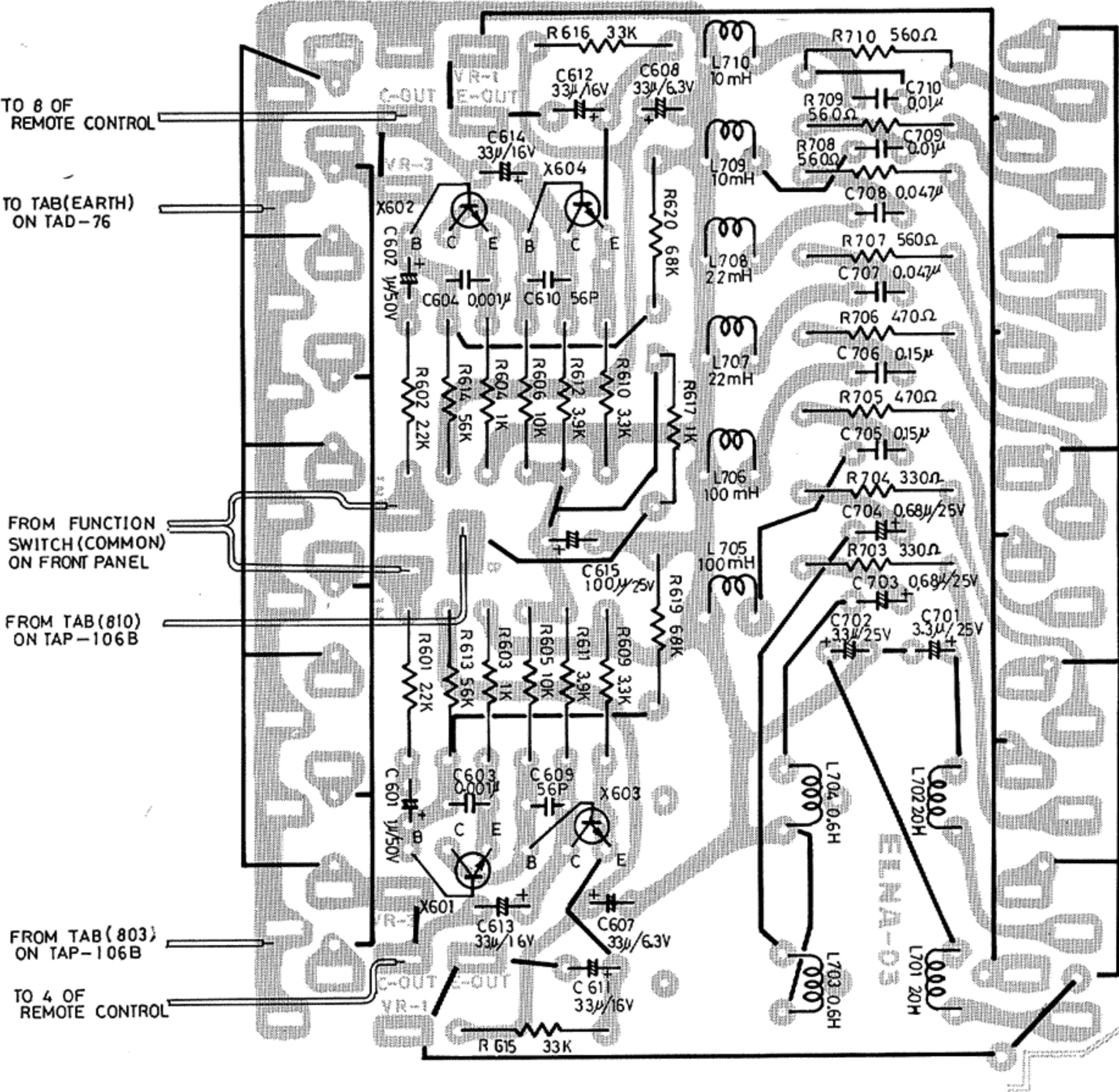


Fig. 12

MAKER'S NAME OF USED TRANSISTOR, IC AND DIODE

2SC458LGC or LC	Hitachi
2SC1030	
1N34A	
2SC853M or L	NEC
2SA545M or L	
DS410	Sanyo
SDT-20	
DS-1P	Fuji

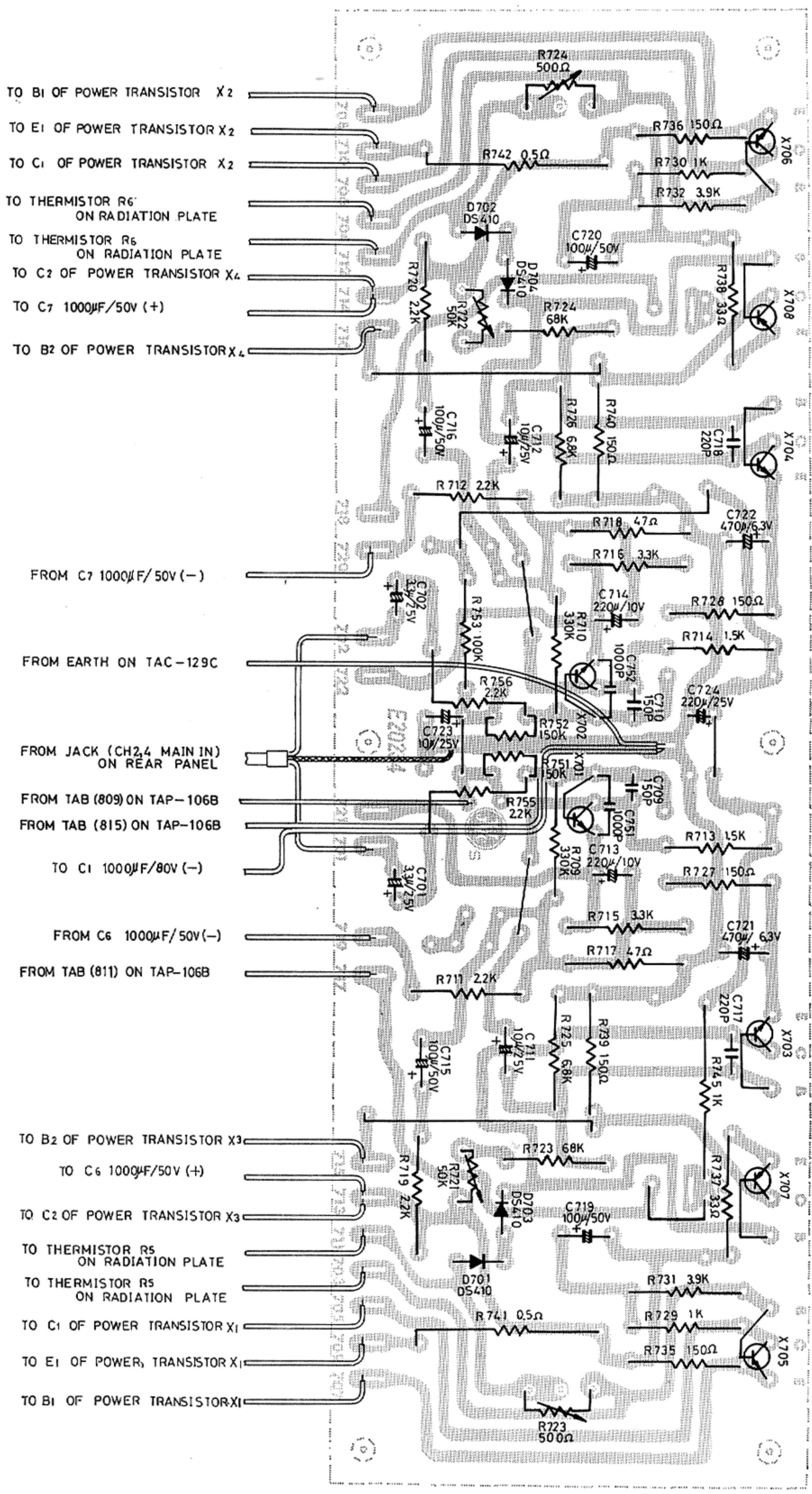


Fig. 13

The List of Main Parts for Replacement

Parts No.	Parts Name	Description
Cabinet Parts		
DL-ED1261	Wooden Case	
E7857-1	Mounting Washer	
LPSP4025ZS	Ass'y Screw	
Front Panel Ass'y		
E32805-001	Front Panel Sub Ass'y	
E41302-003	Escutcheon Ring	
E41427-1	Rabbit Eye	
E45302-001	Washer	
E50571-2	Special Nut	
Knob		
E46607-001	Knob	For Master Volume
E46824-001	Double Knob	For CH-2 Level Control
E46826-001	//	For CH-4 Level Control
E42997-001	Lever Knob	For Source, Function, Mode
E46604-001	Slide Knob	For S. E. A.
E46606-001	Push Button Knob	For Power Switch
E46642-002	Balance Remote Cap Ass'y	For Remote Control
Volume & Switch		
Q30385-002	Variable Resistor	For Master Volume
E0352-17	//	For Level Control
E03306-001S	Slide Variable Resistor	For S. E. A.
Q03885-001S	Push Switch	For Power Switch
Q03082-001	Lever Switch	For Source, Function, Mode
Socket, Jack, Plug & Terminal		
Q30110-A	Lamp Socket Ass'y	
E03380-001	8P Socket	For Remote Control
E04085	Voltage Selector Plug	
E04084	Voltage Selector Socket	
Q30210-001	Fuse Socket Ass'y	
Q30120-001	AC Socket	UL
E03043-60	Pin Jack Ass'y	
// -80	//	
Q30156-001	Terminal Board Ass'y	For Speaker
E04069	Push Terminal	For GND
E46310-001	Terminal Board	
Q03001-31	Lug Strip Ass'y	
E41490-3	Pin Plug Ass'y	
Transformer		
E03098-4	Power Transformer	
Pilot Lamp & Fuse		
Q04967-9	Pilot Lamp	8V 0.3A
04112-1.8	Fuse	For Used 220~240V
// -3.3	//	For Used 100~120V
Capacitor		
Q03203-103M	O. F. T. Capacitor	0.01 μ F C3
Q03212-103M	//	0.01 μ F C2
Q03600-21	Electrolytic Capacitor	1000 μ F/80V C1
Q03592-21	//	1000 μ F/50V C6, 7
Q42309-4700	Ceramic Capacitor	4700pF C4, 5
Q46962-1000	//	1000pF C10
Q03244-333	Mylar Capacitor	0.033 μ F C8, 9

Parts No.	Parts Name	Description
Transistor & Thermistor		
2SC1030	Power Transistor	X1~4
E41542-8	Insulator Film	
E41541-7	Spacer	
SPBP3012NS	Screw	
WLS3000N	Lock Washer	
E41543-1	Earth Lug	
NNB3000NS	Nut	
E41250-1	Thermistor Supportor	
E04026-4	Thermistor	R5, 6 (SDT-20)
E41251-1	Spring	
SBSB3008N	Tapping Screw	
Power Cord		
Q03056-14	Power Cord	
E31704-001	Power Cord Stopper	
Drive Amp. Circuit		
Board Ass'y		
TAD-76	Drive Amp. Circuit Board with Parts	
2SC853-M or L	Transistor	X703~706
2SA545-M or L	"	X707, 708
2SC458LGC	"	X701, 702
E03125-001	Varistor	DS410, D701~704
Q03110-200	Electrolytic Capacitor	220 μ F/25V C724
Q03106-200	"	220 μ F/10V C713, 714
Q03110-10	"	10 μ F/25V C711, 712, 723
" -3	"	3.3 μ F/25V C701, 702
Q03112-100	"	100 μ F/50V C715, 716, 719, 720
Q03111-10	"	10 μ F/50V C727, 728
Q03104-500	"	470 μ F/6.3V C721, 722
Q46962-1000	Ceramic Capacitor	C751, 752
Q04052-150	"	C709, 710
" -220	"	C717, 718
E04117-3-0.5	Unflamable Resistor	R741, 742
Q04842-6	Variable Resistor	500 Ω R723, 724
Q04848-3	"	50K Ω R721, 722
S. E. A. Circuit		
Board Ass'y		
TAC-129C	S.E.A. Circuit Board with Parts	
2SC458LGC	Transistor	X601~604
Q03104-30	Electrolytic Capacitor	33 μ F/6.3V C607, 608
Q03108-30	"	33 μ F/16V C611, 612
Q03110-30	"	33 μ F/25V C613, 614
Q03112-1	"	1 μ F/50V C601, 602
Q03110-100	"	100 μ F/25V C615
Q04052-56	Ceramic Capacitor	C609, 610
Q46962-1000	"	C603, 604
E03131-10	Tantal Capacitor	10 μ F/25V C701, 702
" -0.68	"	0.68 μ F/25V C703, 704
Q03244-103	Mylar Capacitor	C709, 710
" -473	"	C707, 708
" -224	"	C705, 706
E03108-12	Choke Coil	2.0H L701, 702
" -13	"	0.6H L703, 704
E0747-11	Ferri Inductor	100mH L705, 706
" -9	"	10mH L709, 710
" -10	"	22mH L707, 708

Parts No.	Parts Name	Description
Power Source, Protector & SFCS Circuit Board Ass'y		
TAP-106B	Power Source, Protector & SFCS Circuit Board with Parts	
2SC458LC	Transistor	X805, 806
2SC458LGC	"	X801~804
DS-1P	Ge Diode	D804, 805
1N34A	"	D801~803
Q03137-1000	Electrolytic Capacitor	1000 μ F/35V C852
Q03110-200	"	220 μ F/25V C815
" -10	"	10 μ F/25V C850
" -3	"	3.3 μ F/25V C801, 802
Q03112-1	"	1 μ F/50V C805, 806, 809, 810, 813, 814, 851
Q42309-01	Celamic Capacitor	C853, 854
Q46962-1000	"	C803, 804
Q03244-103	Mylar Capacitor	C811
" -563	"	C812
" -473	"	C807
" -104	"	C808

NOTE : A sort of Resistor's Parts Number shown below.

PARTS NO.	SORT OF RESISTOR	
Q04804-	Carbon Resistor	$\frac{1}{2}$ W
Q04800-	"	$\frac{1}{4}$ W
04091-	Composition Resistor	$\frac{1}{2}$ W

When you order Resistor, write required Resistor value in addition to the right hand of hyphen.
For example : Q04804-1K=Carbon Resistor 1K Ω $\frac{1}{2}$ W.

ACCESSORIES

04112-1.8	Fuse	1	
04112-3.3	Fuse	1	
E7958-D	Fuse Label	1	
E64208-001	Envelope	1	
E64103-001	Polishing Cloth	1	
E30580-236A	Instruction Book	1	
E30539-290A	Schematic Diagram	1	
E64213-002	Warranty Card	1	(For JVC America Inc. only)
E64212-014	Warranty Card	1	(For US Militaly Parsonnal only)
E30660-175	Signal Cord with Plug	2	
E64207-001	Envelope	1	

Requirement to Customers

- ◎ For the purpose of prompt supply of service parts, inscribe parts number, parts name, and model name correctly when you order.
- ◎ If possible please give an order for spare cabinet in early opportunity since it is very difficult to remanufacture cabinet case after production of the set was discontinued.

The List of **JVC NIVICO** Service Manual

(Phonograph)

No.	Model	No.	Model	No.	Model	No.	Model	No.	Model
2081	4TR-3U	2091	ARC-30A, 30B	2101	N760ME, N99U	2111(B)	STC-707C (R#-2)	2121	5007
2082	N-55T	2092	4TR-55	2102	SRP-472E	2112	SST-61	2122	L-21M
2083	SRE-103E	2093	{N670, N770 4TR-99u, etc	2103	SRP-469E	2113	{FRS-103EH.V (R#-2)	2123	ARC-10 Series
2084	N590F, 4TR-590F	2094	STP-7LA	2104	ARC-10L	2114	STP-808C	2124(B)	5003 (Revised)
2085	ARC-40A	2095	TRE-26C	2105	{BLA-204, 208 BLA-304, 30E	2115	SSL-95E	2125	L-311C
2086	TRE-12F	2096	STP-7F	2106	AST-140E	2116	MSL-16T	2126	5204
2087	SRP-467E	2097	N-880 (R#-2)	2107	ARC-12C, E	2117	AST-215E	2127	{4210, 4220, 4230 & (R#-2)
2088	SRP-468E	2098	N-163	2108	CSL-1E	2118	SRC-700U	2128	5305
2089	ECA-101E	2099	4TR-6U	2109	MSL-8E	2119	AST-102E	2129	TRE-12T
2090	STC-19	2100	MSL-15E	2110	SST-31	2120	No. 200E Series	2130	5304

No.	Model	No.	Model	No.	Model	No.	Model	No.	Model
2131	STP-808A	2141	5320, 5340	2151(B)	5040 (R#-2)	2161	4333U	2171	5202
2132	ARC-41, 42	2142	L-311D	2152	{SSL-46E SSL-46EA	2162	MPX-18B	2172	5220
2133	TRE-666C	2143	6102, 6103, 6104	2153	MSL-300ES	2163	MCA-104E	2173	ARC-15A
2134(B)	4TR-990DX (a)	2144	ARC-10	2154	4330	2164	SEA-100E/5100	2174	4344, 4344U
2135	5001	2145	{5011/PST-1000E 5012/MST-1000E	2155	N-404, N-404Y	2165	5240B	2175(B)	4450, 4450U
2136	SRP-B30E/5230	2146	5201	2156(B)	MSL-501E	2166	4330U	2176	CSL-130SE
2137	N-65F	2147	MSL-300E	2157	N202, 303	2167	MCA-105E/5107	2177	5020/5020U
2138	4TR-511D, L511D	2148	5310	2158	4211	2168	5030/5030U	2178	MTR-10ME
2139(B)	SRP-B40E/5240	2149	MSL-110S	2159(B)	4333U, 4333	2169	SRC-900	2179	5010L
2140	5203	2150	5205	2160	5010	2170	5200	2180	4TR-1000

No.	Model	No.	Model	No.	Model	No.	Model	No.	Model
2181(B)	4400, 4400U	2191	MCM-105E/5111	2201	MSL-201L	2211	BLA-500E		
2182	ARC-50	2192	5395	2202	MSL-201S	2212	MCT-V7E		
2183	MCT-105E/5108	2193	MSL-201E	2203	4431	2213	5306		
2184	SCR-500	2194	MCA-V7E	2204	4310	2214	N203/Run No. 2		
2185	4330M	2195	SRC-800	2205	N-303YE	2215	5250U		
2186	N-404F Series	2196	5301/GB-2E	2206	5500	2216	5444/5444U		
2187	5325, 5335	2197	5390	2207	5540	2217	5910		
2188	MSL-501L	2198	5321	2208	MTR-15ME	2218			
2189	MSA-404E	2199	5341/5341K	2209	5550/5550U	2219			
2190	N-202FMY	2200	5331/5331K	2210	5351/5351K	2220			

No.	Model	No.	Model	No.	Model	No.	Model	No.	Model