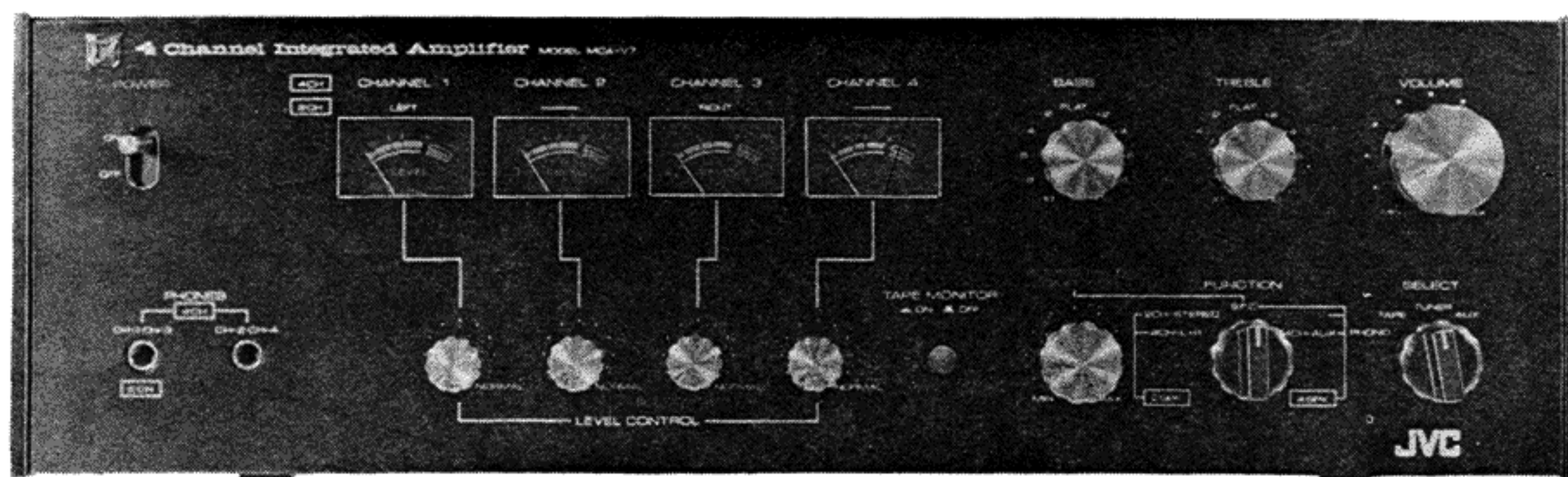


SERVICE MANUAL



MODEL MCA-V7E

SOLID STATE 4-CHANNEL INTEGRATED AMPLIFIER

DIMENSIONS : Hight 5½", Width 17", Depth 12" WEIGHT : 22 lbs.

SPECIFICATIONS

[MAIN AMPLIFIER SECTION]

Total Dynamic Power :	90W (45W+45W) 2CH. IHF 8Ω
	60W (15W×4) 4CH. IHF 8Ω
Continuous Power :	50W (25W+25W) 2CH. 8Ω
	50W (12.5W×4) 4CH. 8Ω
Load Impedance :	8~16Ω
THD at Rated Power :	Less than 0.2% at 1kHz
Power Bandwidth :	30~30kHz -3dB
Damping Factor :	50 at 8Ω
Protector Circuit :	Overcurrent protector

[PRE-AMPLIFIER SECTION]

Phono Equalizer :	RIAA
Frequency Response :	20~40 kHz $\begin{matrix} + & 0\text{dB} \\ - & 1.5\text{dB} \end{matrix}$ (Aux)
Tone Control :	Bass -10dB~+10dB 100Hz Trebel -10dB~+10dB 10kHz
SFC :	Phase inverse scatter circuit
S/N :	Phono 80dB Tape 85dB Tuner 85dB Aux 85dB
Input Sensitivity :	2 CH. Phono 80dB at 1kHz (1 mV) Tape 46dB at 1kHz (500 mV) Tuner 46dB at 1kHz (500 mV) Aux 46dB at 1kHz (500 mV) 4 CH. Disc 46dB at 1kHz (500 mV) Aux 46dB at 1kHz (500 mV) Tape 46dB at 1kHz (500 mV)
Power Consumption :	Non signal 12W maximum power 160W
Power Source :	100, 120, 220, 240V Selectable 50/60Hz

PARTS ARRANGEMENT (Top View)

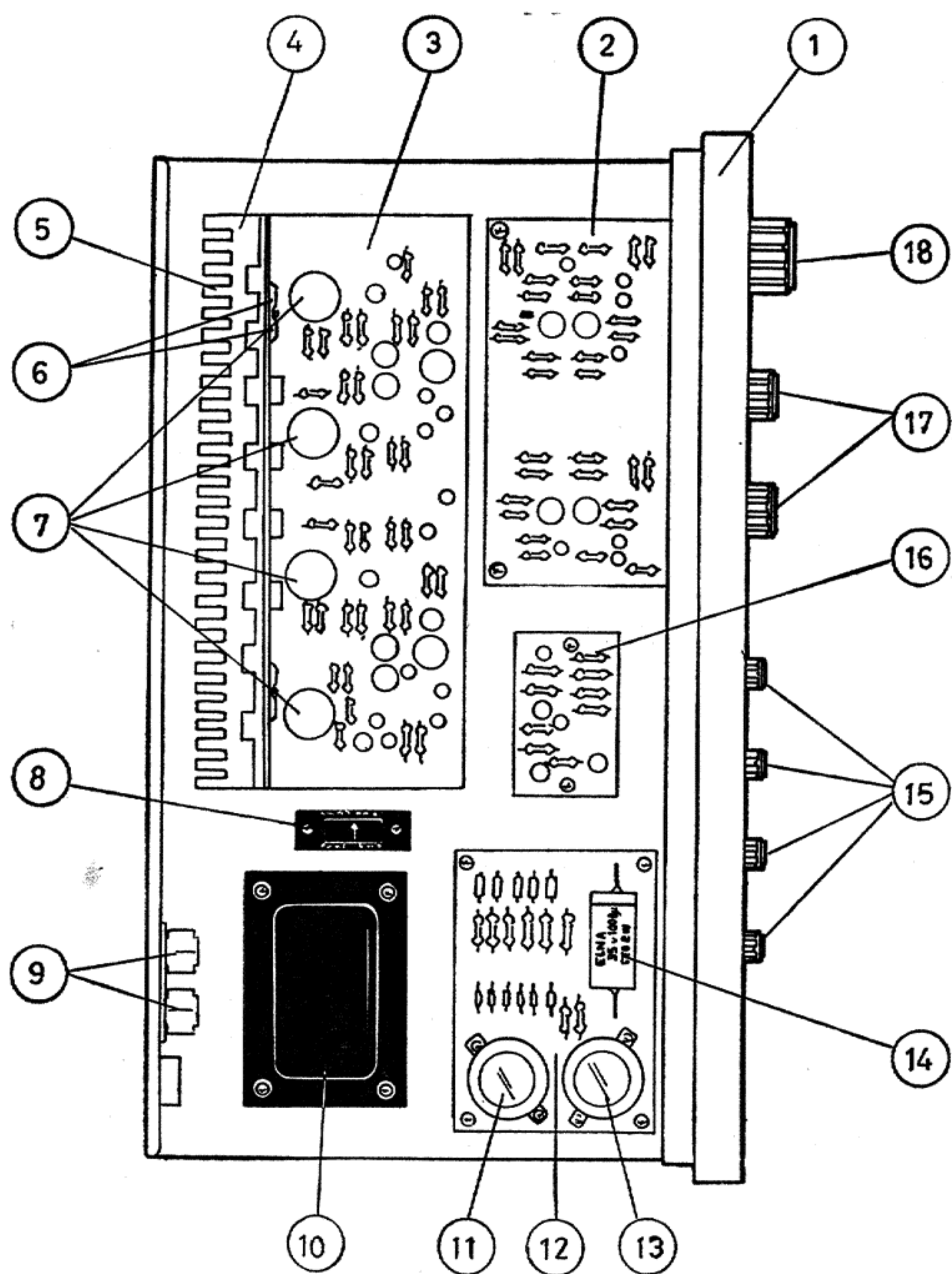


Fig. 1

I'll No.	Parts No.	Parts Name	I'll No.	Parts No.	Parts Name
①	E20683-001	Front Panel Ass'y	⑩	E03098-20	Power Transformer
②	TAC-138	Tone Control Circuit Board Ass'y	⑪	Q03593-21	Electrolytic Capacitor
③	TAD-72	Main Amplifier Circuit Board Ass'y	⑫	TAP-95	Power Supply Circuit Board Ass'y
④	E32493-001	Heat Sink	⑬	Q03593-21	Electrolytic Capacitor
⑤	//	//	⑭	Q03137-1000	//
⑥	E04026-4	Thermistor (Holder E42567-001)	⑮	E46025-001	Knob (For Sub ATT)
⑦	Q03588-11	Electrolytic Capacitor	⑯	TAC-139	S. F. C. Circuit Board Ass'y
⑧	E04084	Voltage Selector (Plug E04085)	⑰	E46022-001	Knob (For S. F. C.)
⑨	E03085-3	Circuit Braker	⑱	E46020-001	Knob (For Volume)

PARTS ARRANGEMENT (Bottom View)

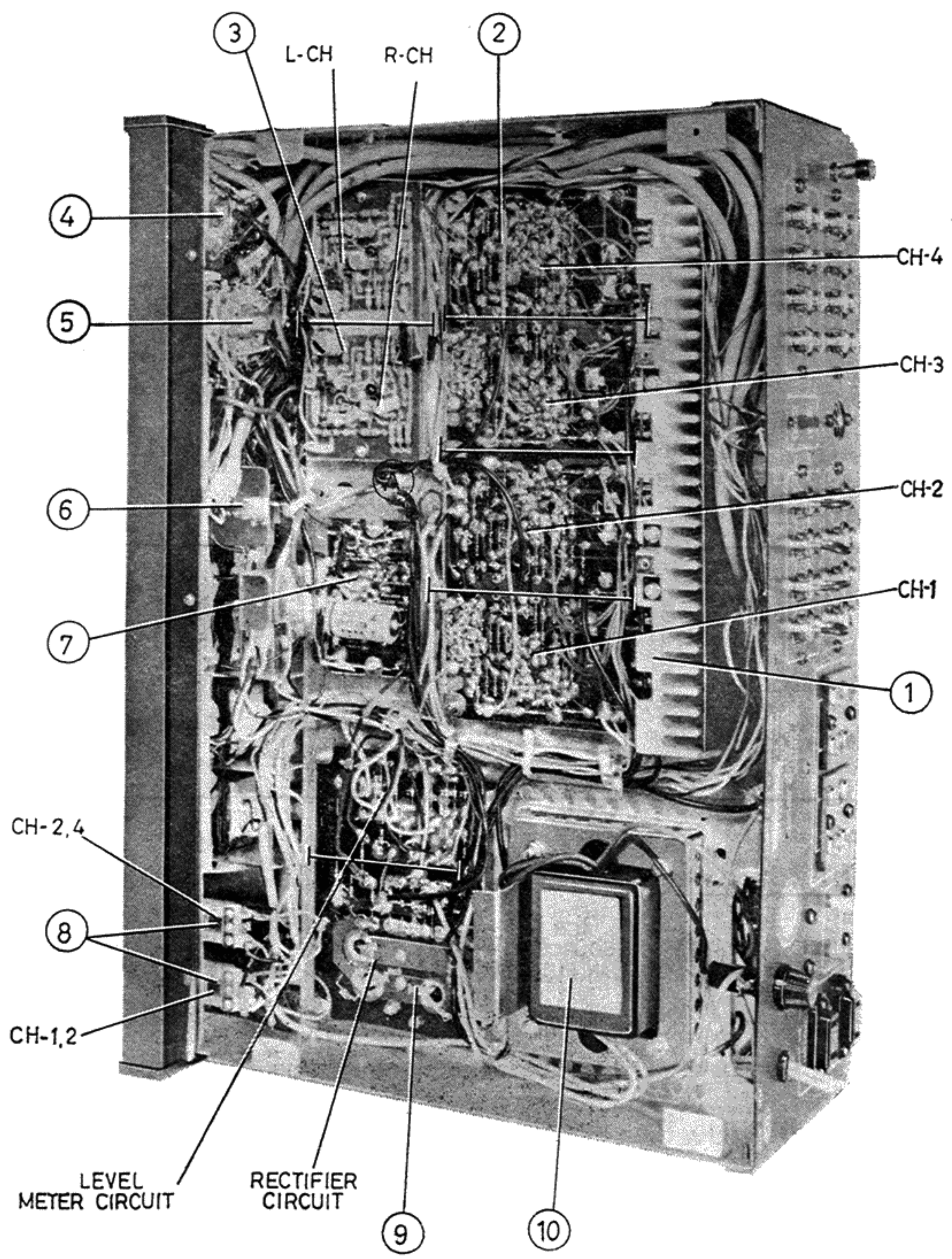


Fig. 2

I'll No.	Parts No.	Parts Name	I'll No.	Parts No.	Parts Name
①	E32493-001	Heat Sink	⑥	Q03789-001	Push Switch
②	TAD-72	Main Amplifier Circuit Board Ass'y	⑦	TAC-139	S. F. C. Circuit Board Ass'y
③	TAE-44	Equalizer Circuit Board Ass'y	⑧	Q03789-001	Head Phone Jack
④	Q03714-1	Rotary Switch	⑨	TAP-95	Power Supply Circuit Board Ass'y
⑤	Q03734-003	//	⑩	E03098-20	Power Transformer

PARTS ARRANGEMENT (Front View)

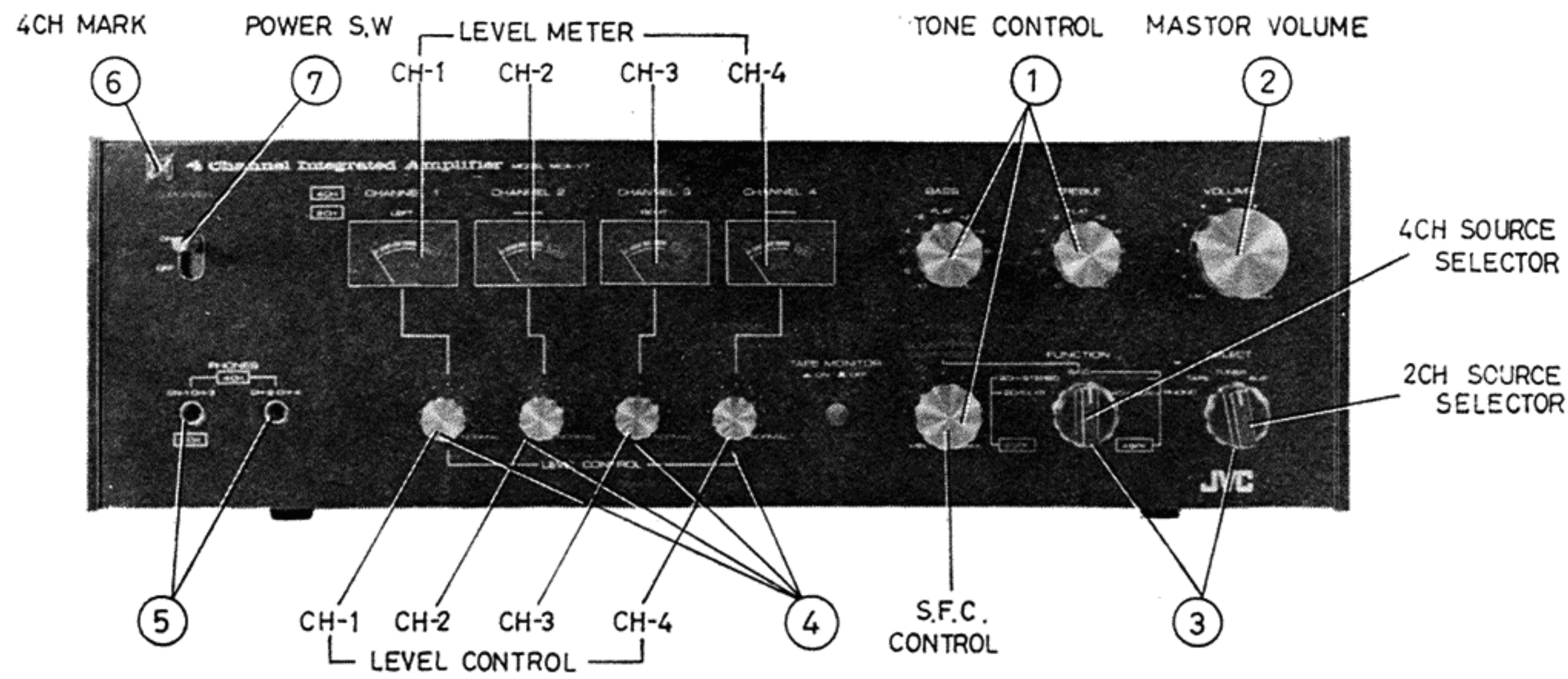


Fig. 3

I'll No.	Parts No.	Parts Name	I'll No.	Parts No.	Parts Name
①	E46022-001	Knob	⑤	Q03963-001	Head Phone Jack
②	E46020-001	Volume Knob	⑥	E46116-001	4ch Mark
③	E46021-001	Select Knob	⑦	Q03085-003	Lever Switch
④	E46025-001	Knob			

PARTS ARRANGEMENT (Back View)

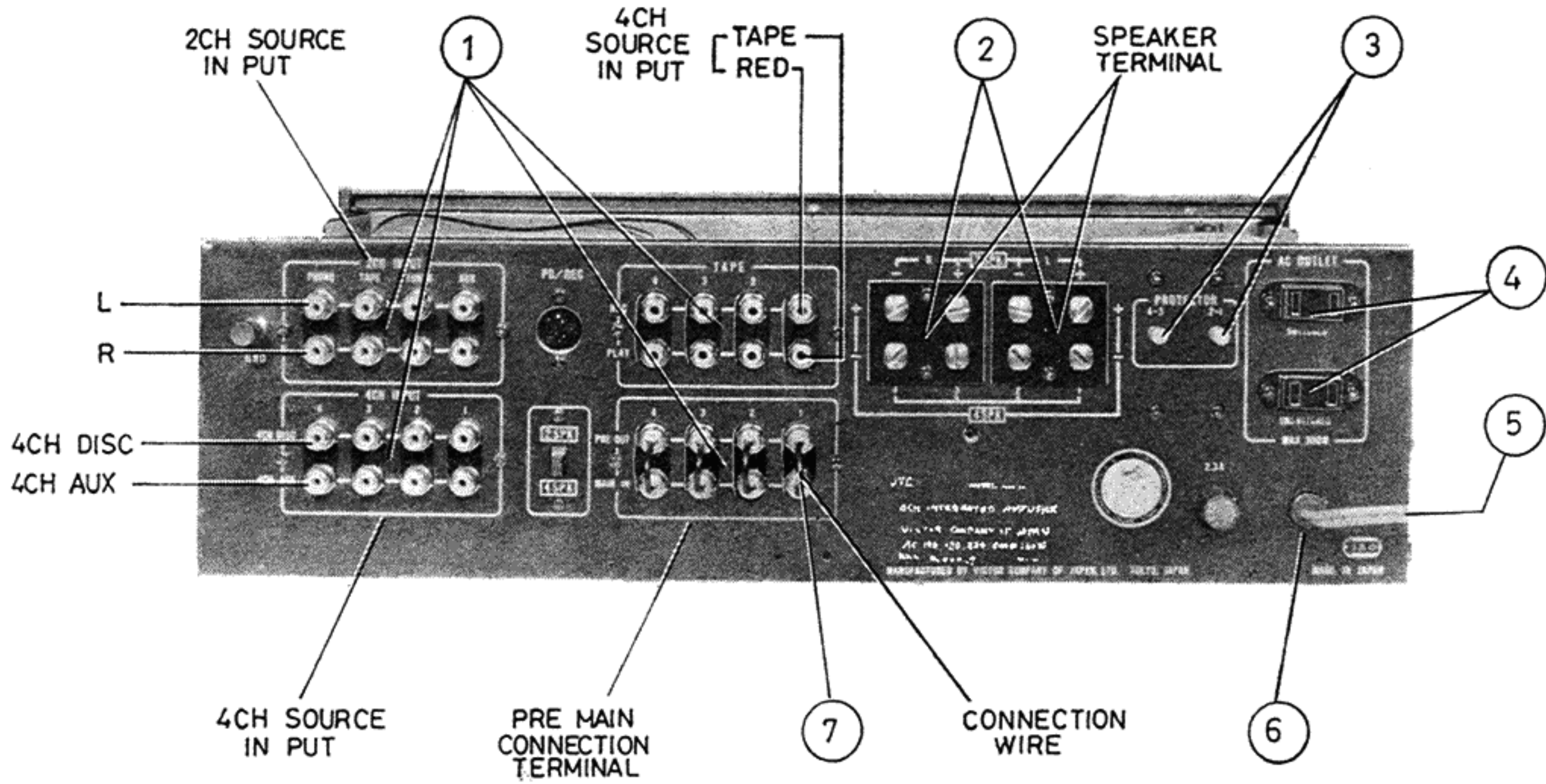


Fig. 4

I'll No.	Parts No.	Parts Name	I'll No.	Parts No.	Parts Name
①	E03043-80	Pin Jack Ass'y	⑤	Q03056-14	AC Cord with Plug
②	Q30156-001	Terminal	⑥	E31704-001	Cord Stopper
③	E03085-3	Circuit Barker	⑦	E41490-4	Connection Wire
④	Q30121-001	AC Socket			

POWER SWITCH (Q03085-3)

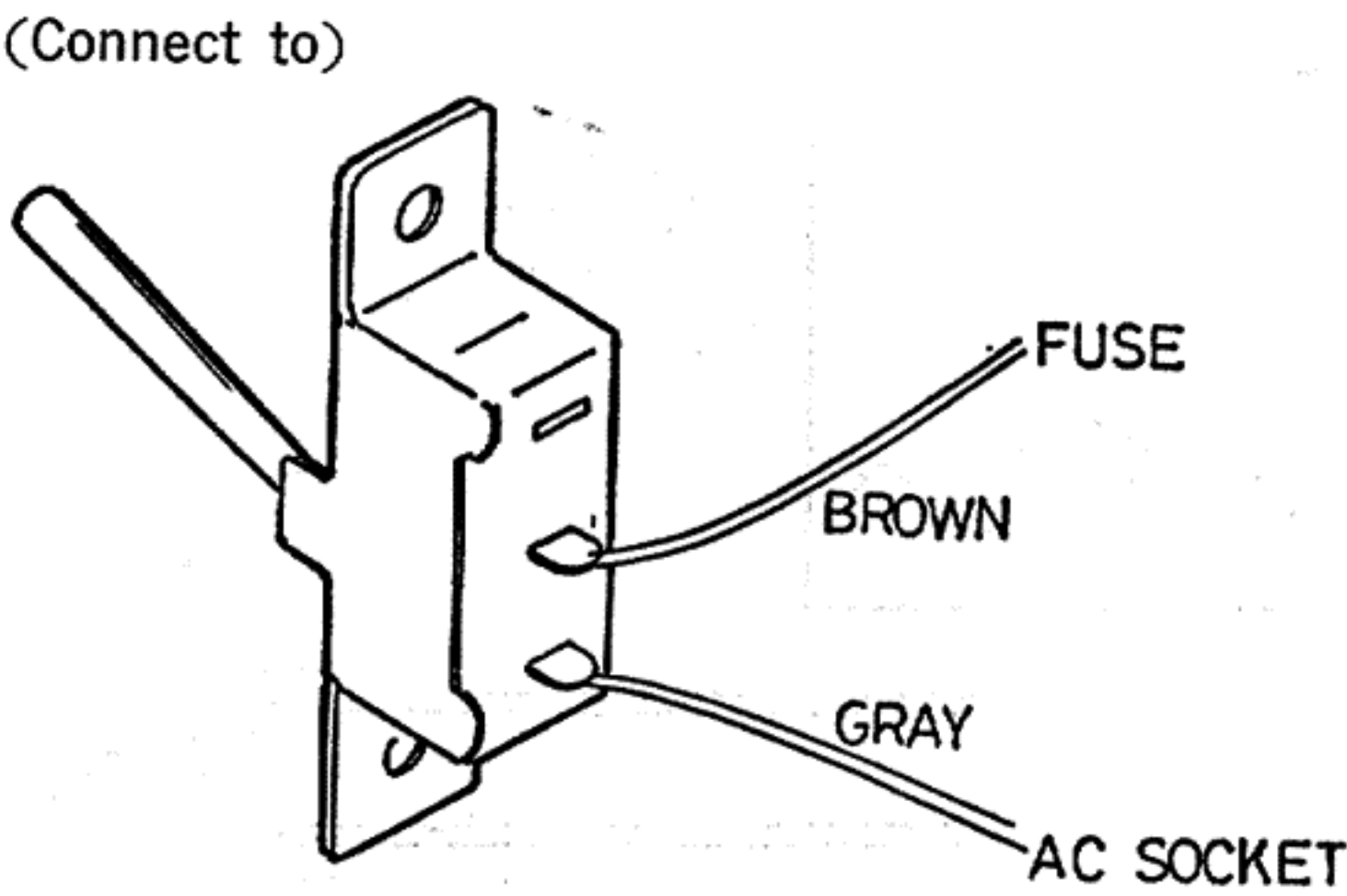


Fig. 5

SELECT SWITCH S1 (Q03714-1)

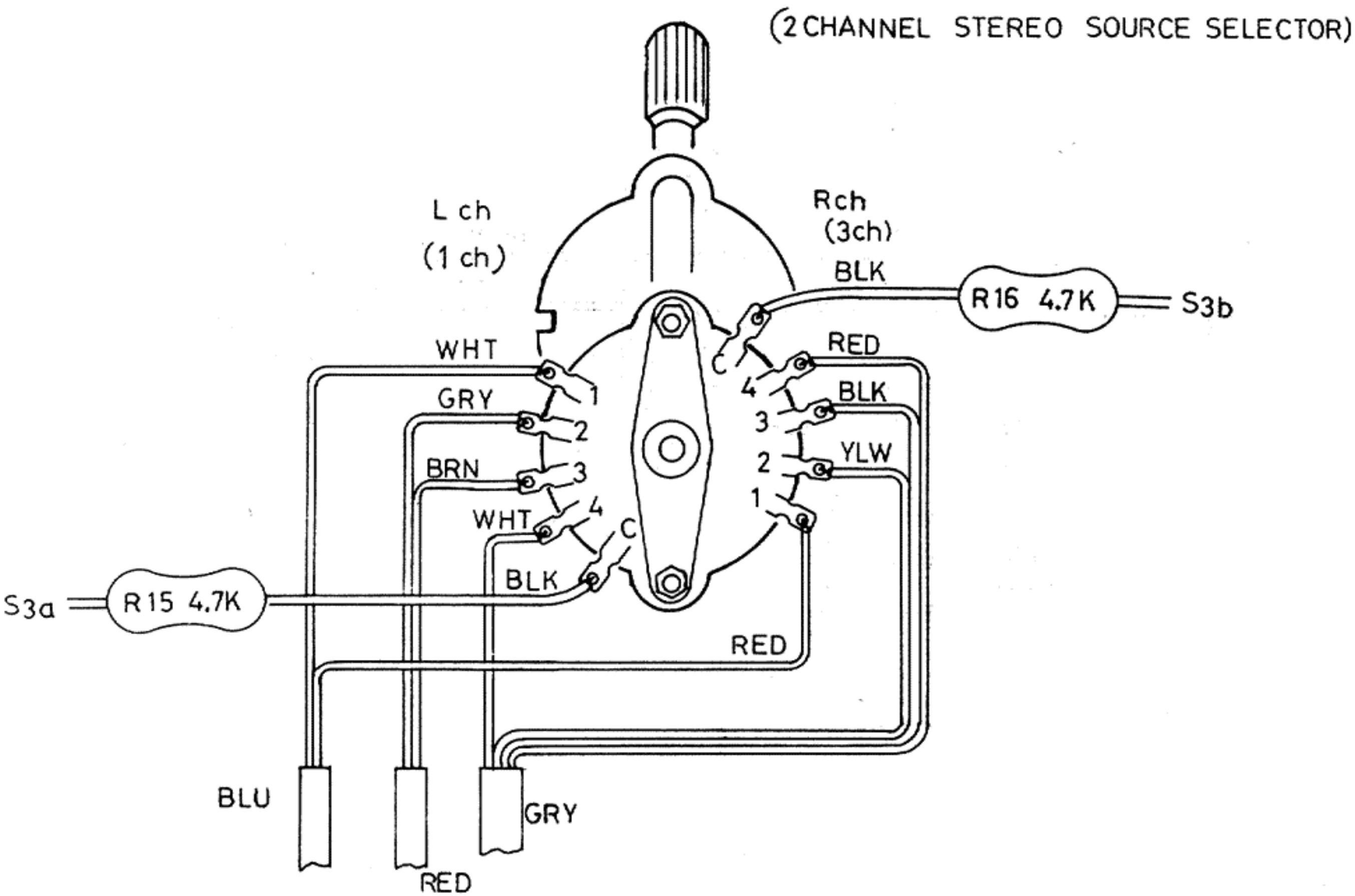


Fig. 6

I'll No.	Function	Wire Color		Connect to	
		R CH.	L CH.	R CH.	L CH.
1	PHONO	RED	WHITE	C113 on TAE-44	C114 on TAE-44
2	TAPE	YELLOW	GRAY	PIN JACK ASS'Y of 2 CHANNEL INPUT ON REAR PANEL.	
3	TUNER	BLACK	BROWN		
4	AUX	RED	WHITE		
C	COMMON	BLACK	BLACK	S3b 3, 4, 5	S3a 3, 4, 5

METER CIRCUIT (E03176-004) (Back View)

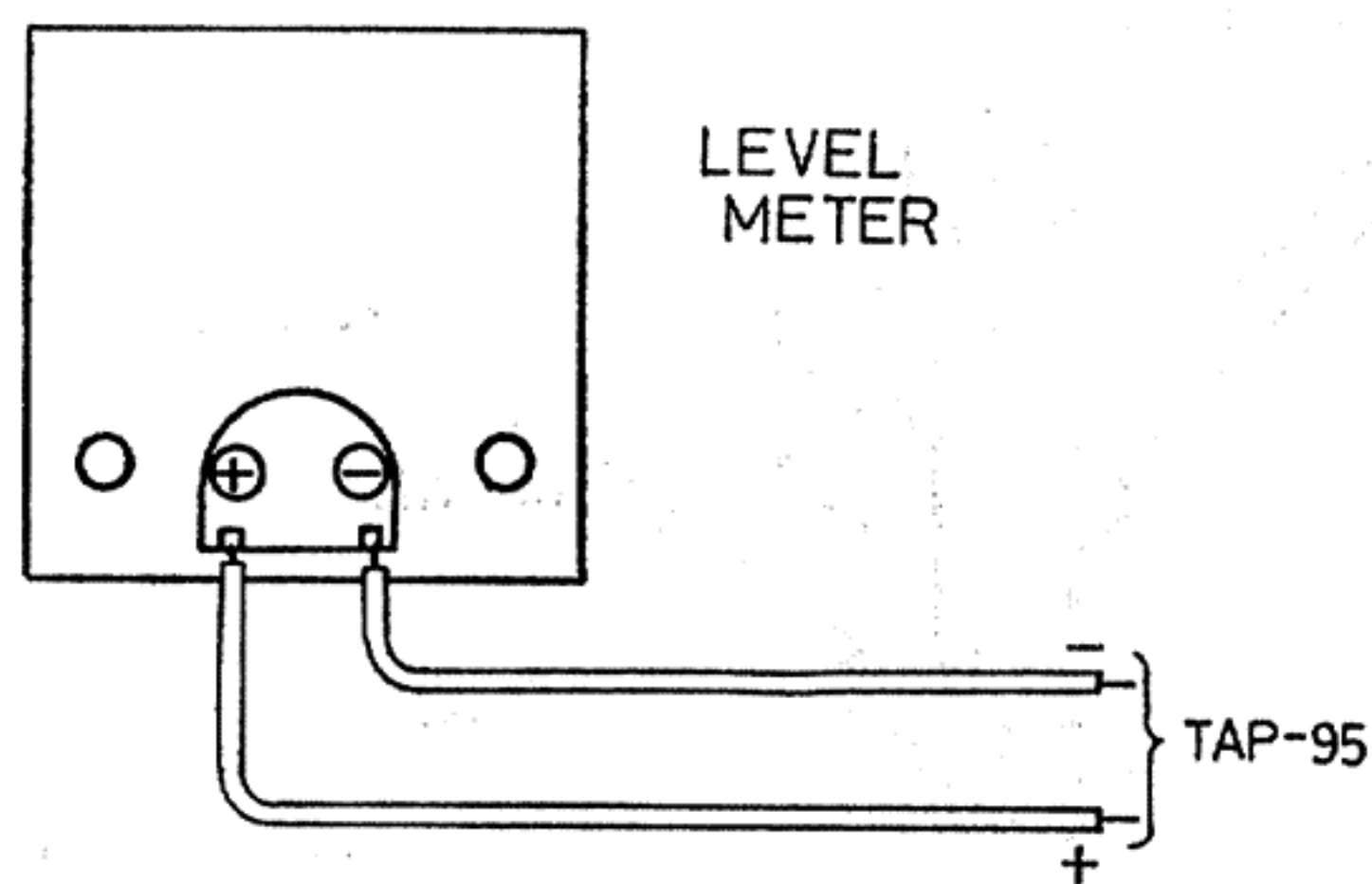


Fig. 7

See Fig. 25

2SPK-4SPK SWITCH (S4) (Q03753-1)

(Back View)

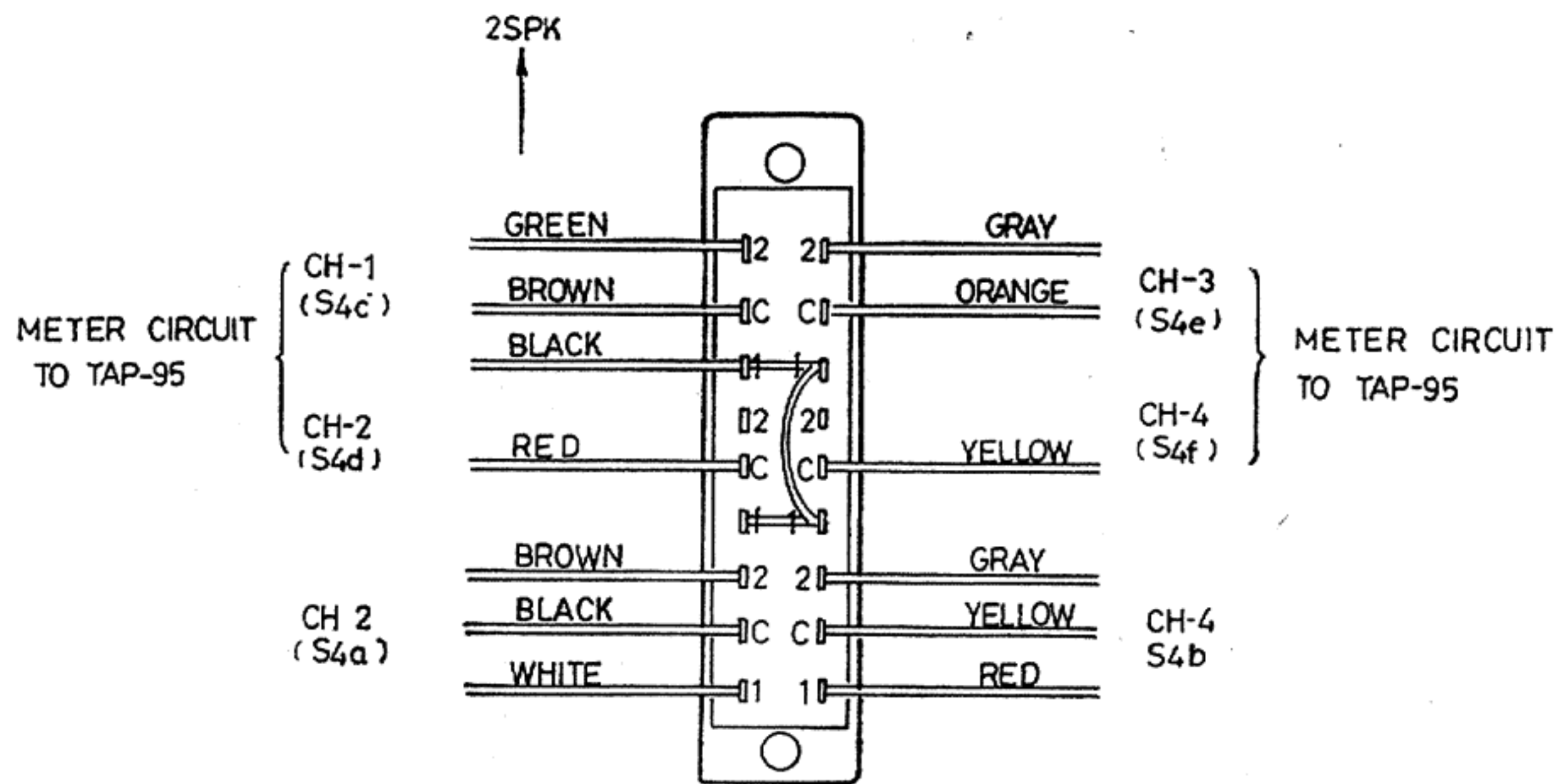


Fig. 8

CH.	S4	Pin No.	Wire Color	Connect to	CH.	S4	Pin No.	Wire Color	Connect to
1	S4C	2	GREEN	R609 1KΩ ON TAP-95	4	S4f	2		
		C	BROWN	R605 2.7KΩ ON TAP-95			C	YELLOW	R608 2.7kΩ ON TAP-95
		1	BLACK	EARTH			1		EARTH
2	S4d	2			2	S4a	2	BROWN	C404 1μF/25V ON TAD-72
		C	RED	R606 2.7KΩ ON TAP-95			C	BLACK	S3e 4, 5
		1		EARTH			1	WHITE	CH-2 MAIN IN and S3e 1,2,3
3	S4e	2	GRAY	R611 1KΩ ON TAP-95	4	S4b	2	GRAY	C454 1μF/25V ON TAD-72
		C	ORANGE	R607 2.7KΩ ON TAP-95			C	YELLOW	S3f 4, 5
		1		EARTH			1	RED	CH-4 MAIN IN and S3f 1,2,3

SUB VOLUME (04069-63) and TAPE MONITOR SWITCH (Q03789-001) CIRCUIT

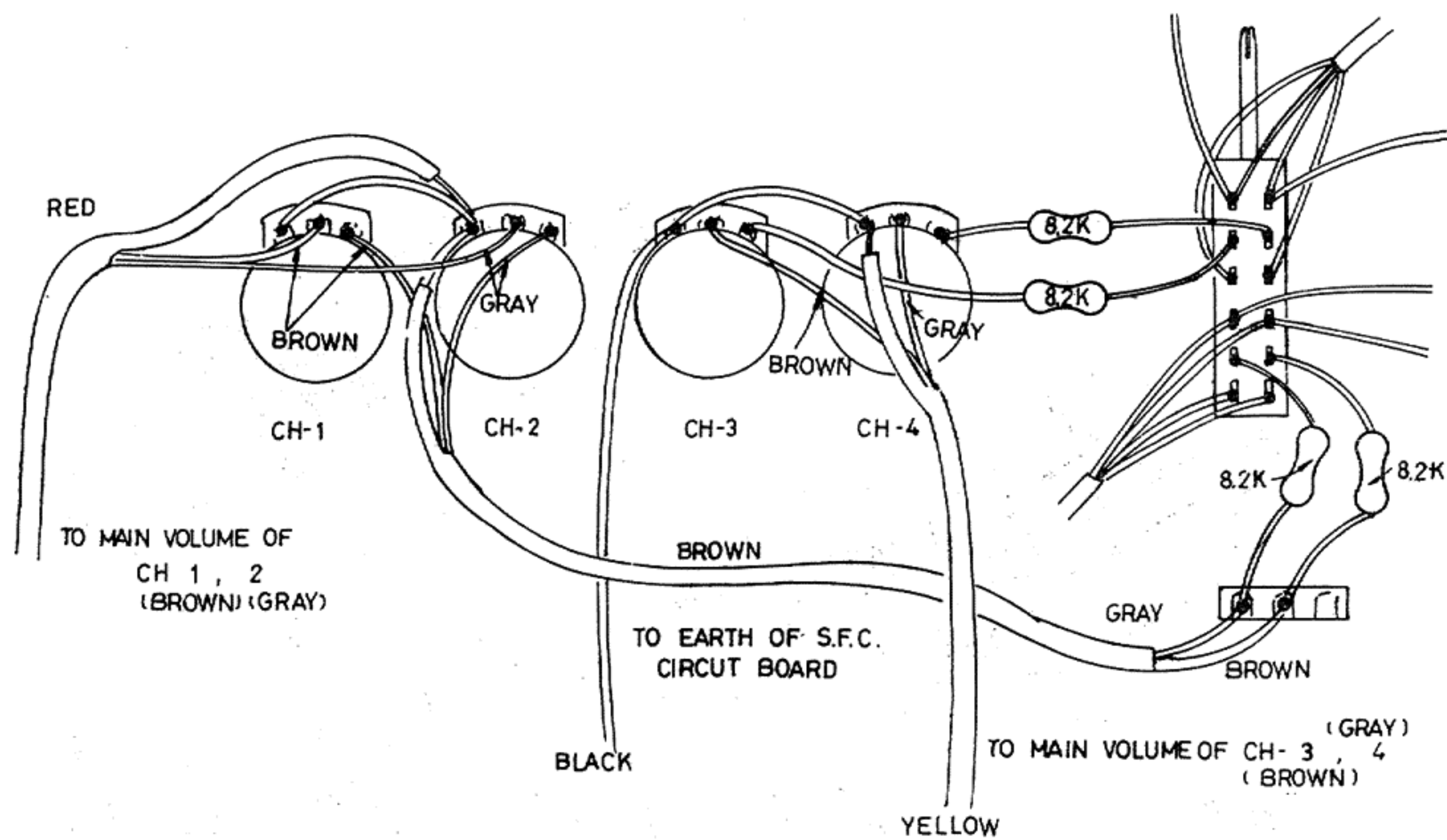


Fig. 9

TAPE MONITOR SWITCH (S2) CIRCUIT (Q03789-001)

CH.	SW. No.	I'll No.	Wire Color	Connect to	Description
1	S2a	1	YELLOW	CH-1 REC	PIN JACK ASS'Y ON REAR PANEL.
			RED	S3a, c	
		C	BLACK	R3 8.2K	VR1 THROUGH R3 8.2KΩ.
			RED	CH-1 PLAY	PIN JACK ASS'Y ON REAR PANEL.
3	S2b	1	WHITE	CH-3 REC	PIN JACK ASS'Y ON REAR PANEL.
			ORANGE	S3b, c	
		C	BLACK	R4 8.2K	VR2 THROUGH R4 8.2KΩ.
			BLACK	CH-3 PLAY	PIN JACK ASS'Y ON REAR PANEL.
2	S2c	1	YELLOW	CH-2 REC	PIN JACK ASS'Y ON REAR PANEL.
			BROWN	S3c, c	
		C	BLACK	R5 8.2K	VR3 THROUGH R5 8.2KΩ.
			RED	CH-2 PLAY	PIN JACK ASS'Y ON REAR PANEL.
4	S2d	1	WHITE	CH-4 REC	PIN JACK ASS'Y ON REAR PANEL.
			GRAY	S3d, c	
		C	BLACK		VR4 THROUGH R6 8.2KΩ.
			BLACK	CH-4 PLAY	PIN JACK ASS'Y ON REAR PANEL.

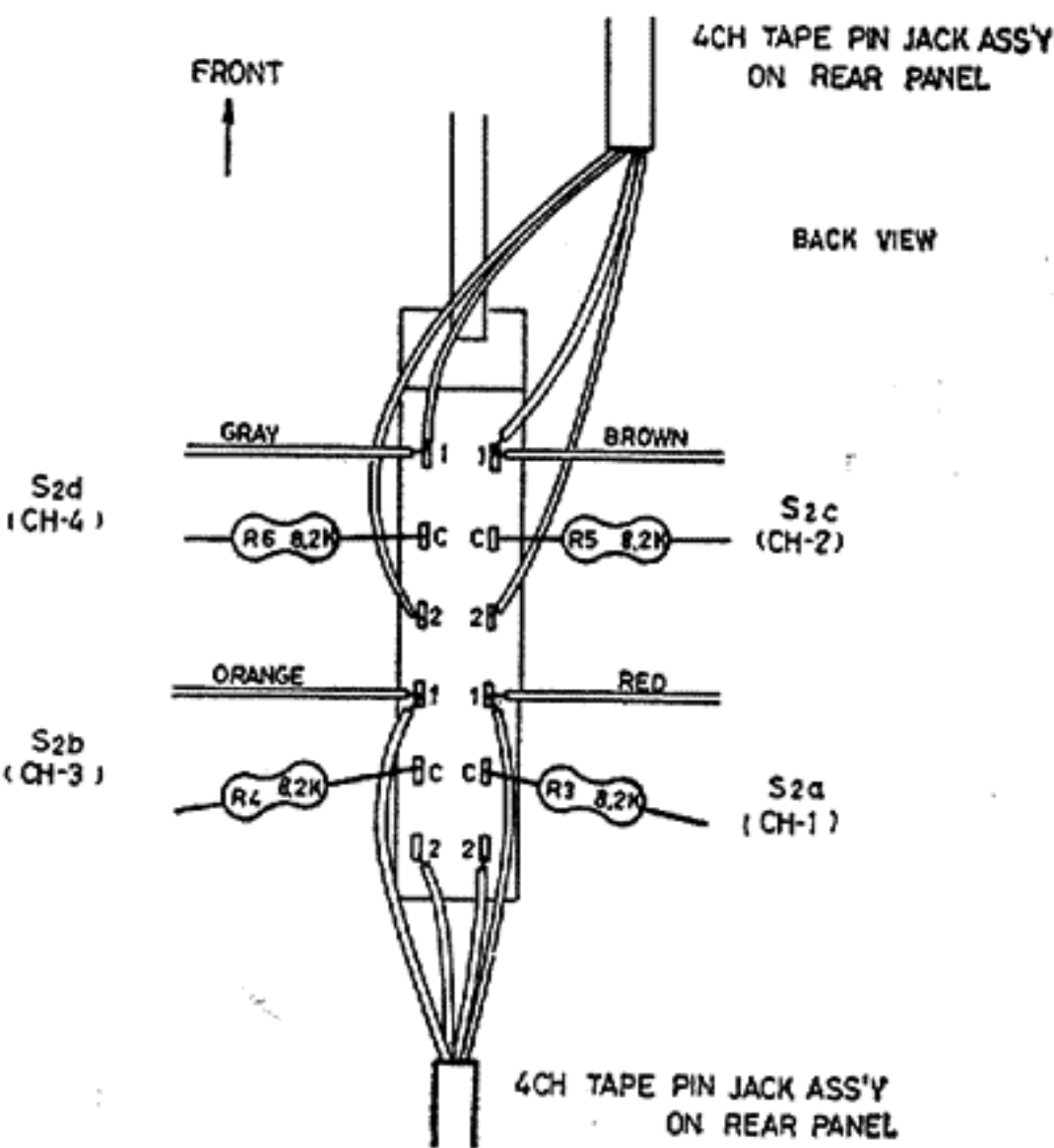


Fig. 10

HEAD PHONE JACK CIRCUIT (Q03963-001)

(Back View)

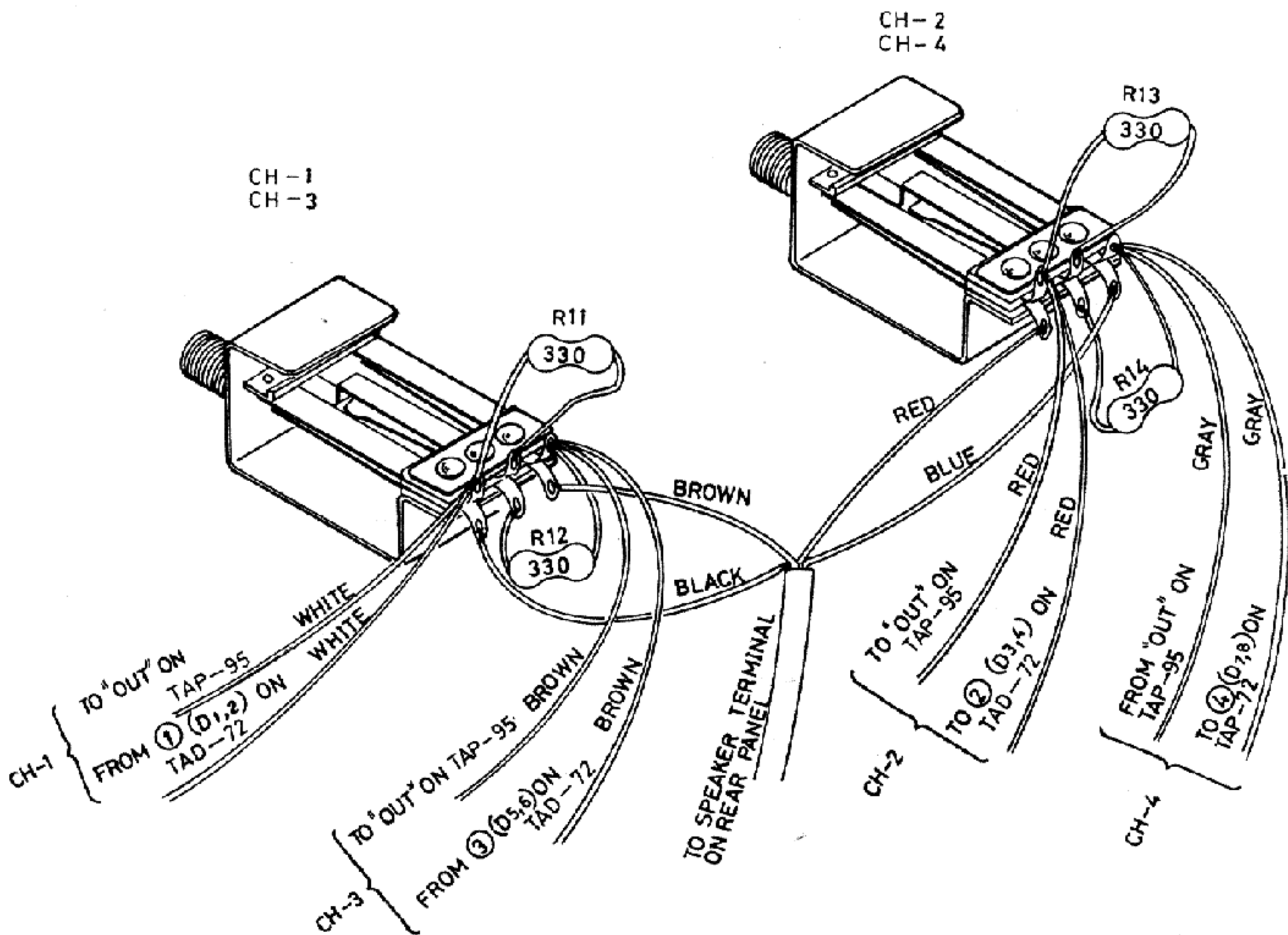


Fig. 11

See Fig. 25

METER LAMP CIRCUIT

- Q04967-9 PILOT LAMP
- Q30110-A PILOT LAMP SOCKET

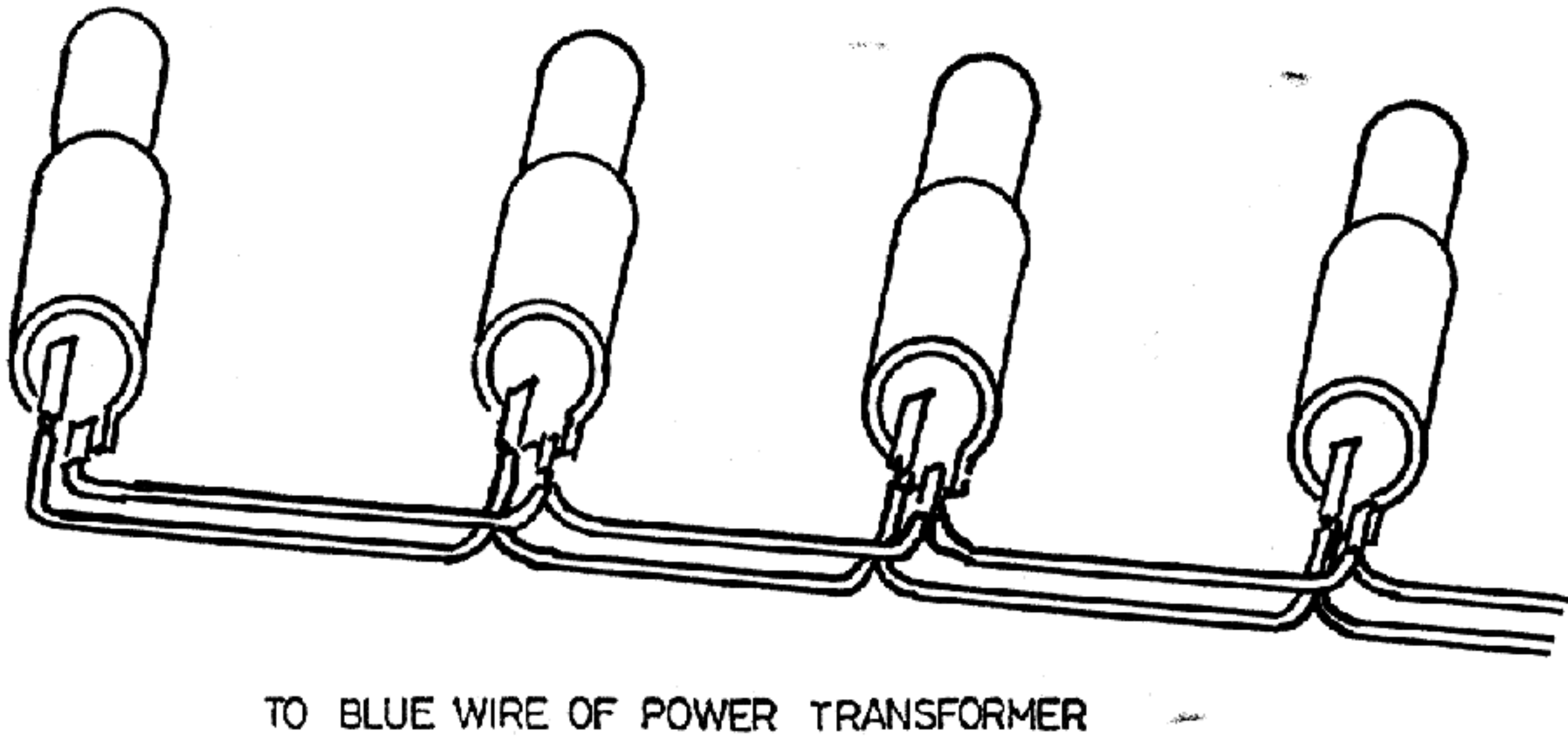


Fig. 12

FUNCTION S3 CIRCUIT (Q03734-003)

(Back View)

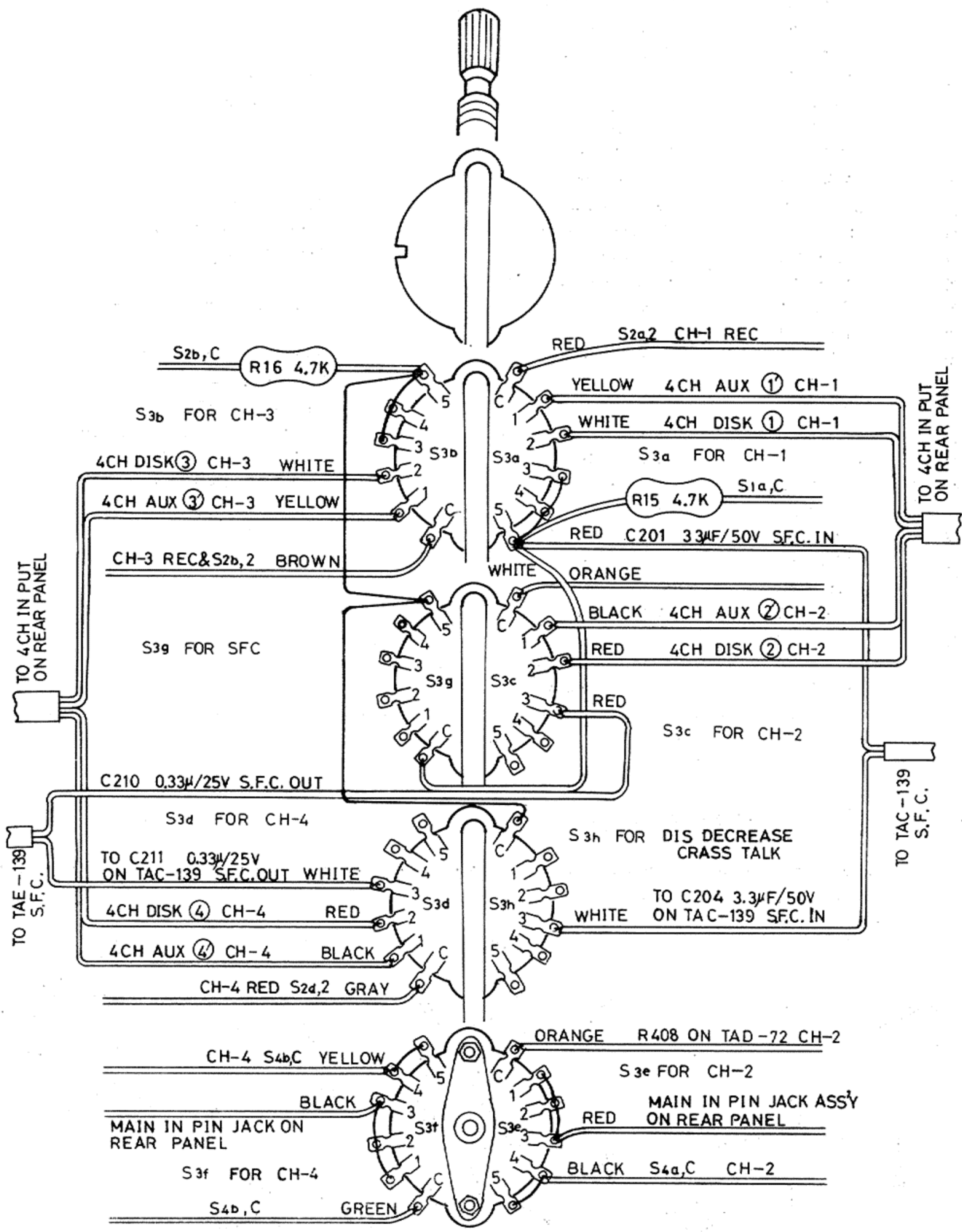


Fig. 13

MCA-V7E FRONT PANEL PARTS

I'll No.	Parts No.	Parts Name	Description
①	E20683-002	Front Panel Ass'y	
②	SBSB3008C	Tapping Screw	
⑦	E20685-001	Front Bracket	
⑪	E46025-001	Knob	Sub Control
⑫	E46022-001	"	S. F. C. Control
⑬	E43099-001	Push Knob	
⑭	E46021-001	Select Knob	
⑮	E46020-001	Volume Knob	
⑯	Q03085-003	Lever Switch	Power Switch
⑰	04069-63	Variable Resistor	(Sub Volume) 250KΩ B
⑱	Q03789-001	Push Switch	Tape Monitor
⑳	E46096-001S	Push Switch Bracket	
㉑	LPSP2604N	Screw	Fixed Push Switch Bracket
㉒	E44865-001S	"	"
㉓	04068-34	Variable Resistor	100KΩ (B) For S. F. C.
㉔	Q03714-1	Rotary Switch	Selector (2C 4P)
㉕	Q03734-003	"	Fanction (8C 5P)
㉖	E32491-001	Variable Resistor Bracket	Fixed Tone Control Circuit Board
㉗	Q30386-001	Variable Resistor	250KΩ (A) Trabel Control
㉘	Q30335-001	"	100KΩ (B) Bass Control
㉙	Q30110-A	Pilot Lamp Socket	
㉚	Q04967-9	Pilot Lamp	8V 150mA
㉛	E03176-004	Level Meter	
㉜	E32529-001	Meter Holder	
㉝	E45977-001	Meter Bracket	
㉞	E45977-002	"	
㉟	Q03963-001	Head Phone Jack	
㊱	Q03001-51	Lug Strip Ass'y	

HOW TO REMOVE FRONT PANEL ASS'Y

- ① To remove Front Panel Ass'y, take off all the knobs except power switch and Tape Monitor Knob on Front Panel.
- ② Loosen 6 Screws ② and pull it toward you.

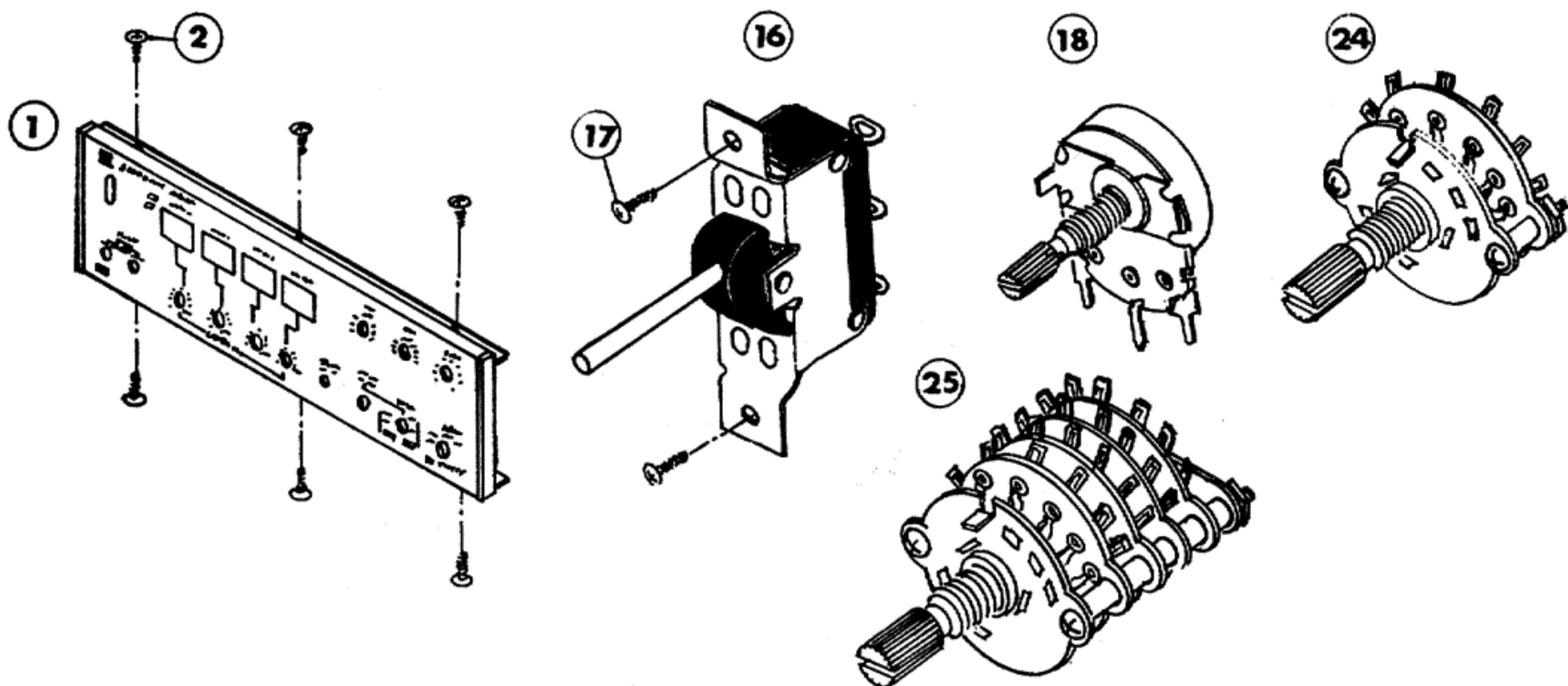


Fig. 14

MCA-V7E BACK PANEL PARTS

I'll No.	Parts No.	Parts Name	Description
③	E20686-001	Back Panel	
④	E20471-003	Cover	Case Cover
⑤	Q03093-108	Washer	For Cover Screws
⑥	SDSP4008RS	Screw	Fixed Cover
⑧	20457-003S	Bottom Plate	
⑨	Q05905-1	Foot	Rubber Foot
⑩	SBSB3014N	Tapping Screw	Fixed Foot
29	Q03753-1	Slide Switch	For Select 4 or 2 speaker
30	SPSP2604M	Screw	Fixed Slide Switch
31	Q30121	AC Socket	AC Outlet
32	SBSB3008M	Tapping Screw	Fixed AC Sockets, Speaker Terminals & Circuit Braker Braket
33	Q30210-001	Fuse Socket	
34	E03085-3	Circuit Braker	2A (For Protector)
35	E45980-001	Bracket	For Circuit Braker
36	Q30156-001	Terminal	Speaker Terminal
37	E03043-80	Pin Jack Ass'y	8P Terminal
38	SPSP3008MS	Screw	Fixed DIN Connector
39	WLS3000N	Lock Washer	//
40	NNB300NS	Nut	//
41	Q03967	DIN Socket	For Tape Recorder
42	SPSP3008MS	Screw	Same as ③⑧
43	E04069S	Push Terminal	For Grand
44	LPLP3005NS	Screw	For Push Terminal
65	E32493-001	Heat Sink	For Power Transistor
66	Q03963-001	Head Phone Jack	
68	Q03051-E	AC Cord With Plag	
69	04112-2.3	Fuse	2.3A (AC 100~120V)
	04112-1.2	//	1.2A (AC 200~240V)
70	E41490-4	Connection Wire	Connect Pre-Main
71	E31704-001	Cord Stopper	

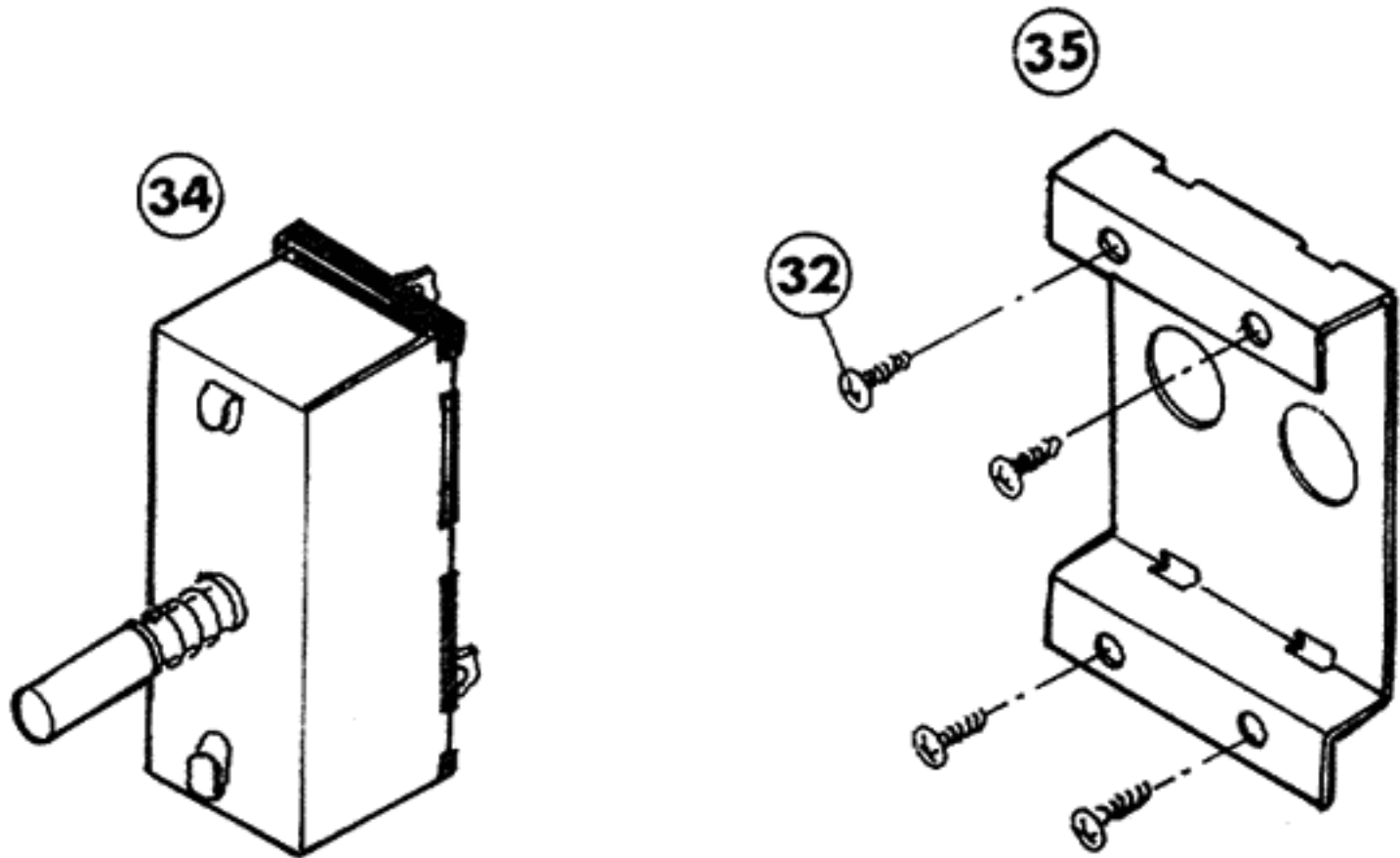


Fig. 17

TAE-44 EQUALIZER CIRCUIT BOARD ASS'Y AND WIRES CONNECTION (Top View)

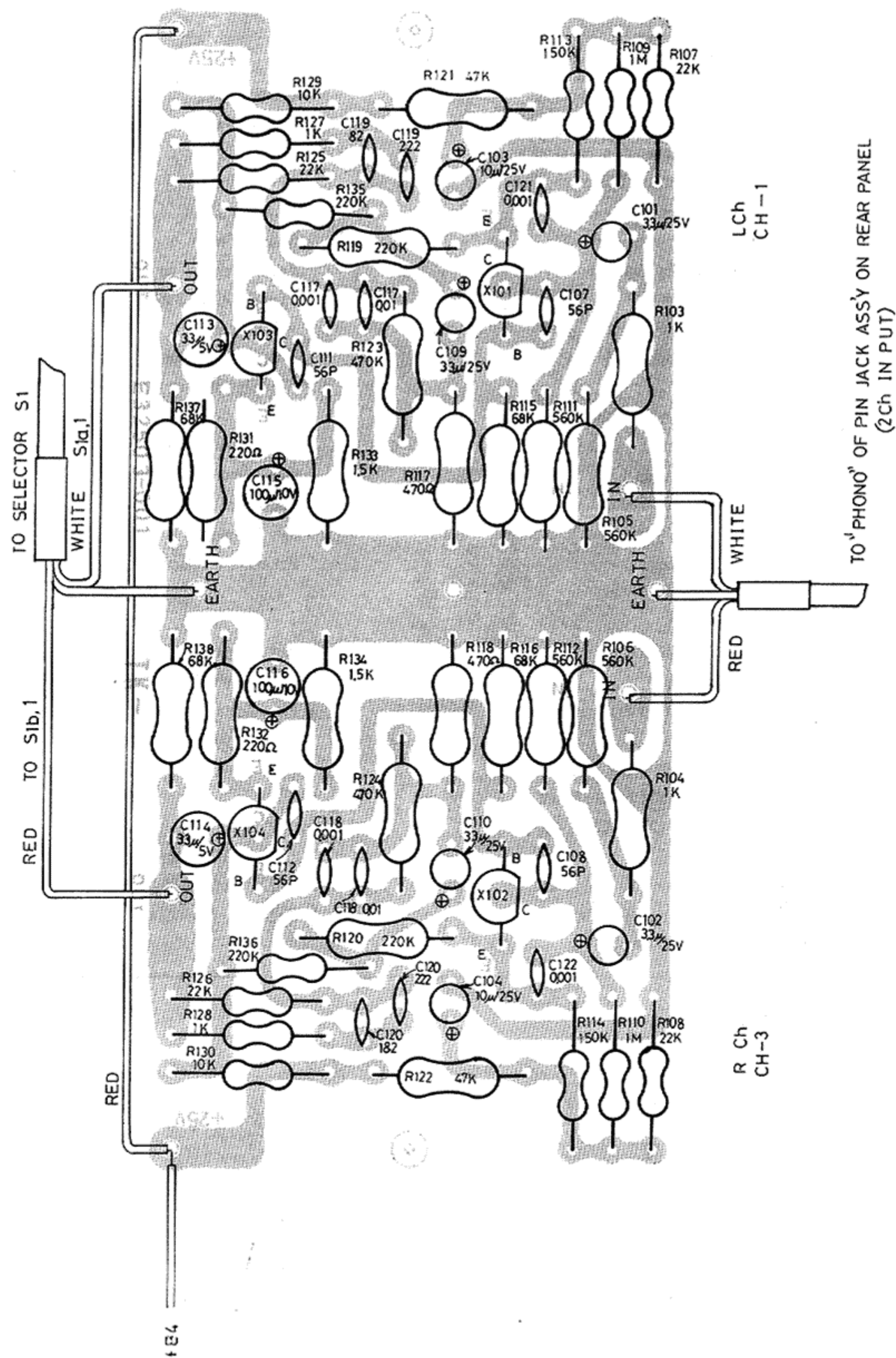


Fig. 18

Parts No.	Parts Name	Description	Parts No.	Parts Name	Description
CS4248	Si Transistor	X101, 102	Q03246-152	Mylar Cap.	C119, 120
2SC458LGC	"	X103, 104	" -222	"	C119, 120
Q03110-30	E. Cap.	33μF/25V C109, 110	" -102	"	C121, 122
" -10	"	10μF/25V C103, 104	" -103	"	C117, 118
Q03112-3	"	3.3μF/50V C113, 114	" -332	"	C117, 118
Q03106-100	"	100μF/10V C115, 116	Q04052-56	Ceramic Cap.	C107, 108, 111, 112
E03137-3.3	Tantal Cap.	3.3μF/25V C101, 102	Q04800-2.2K	Carbon Resistor	R127, 128

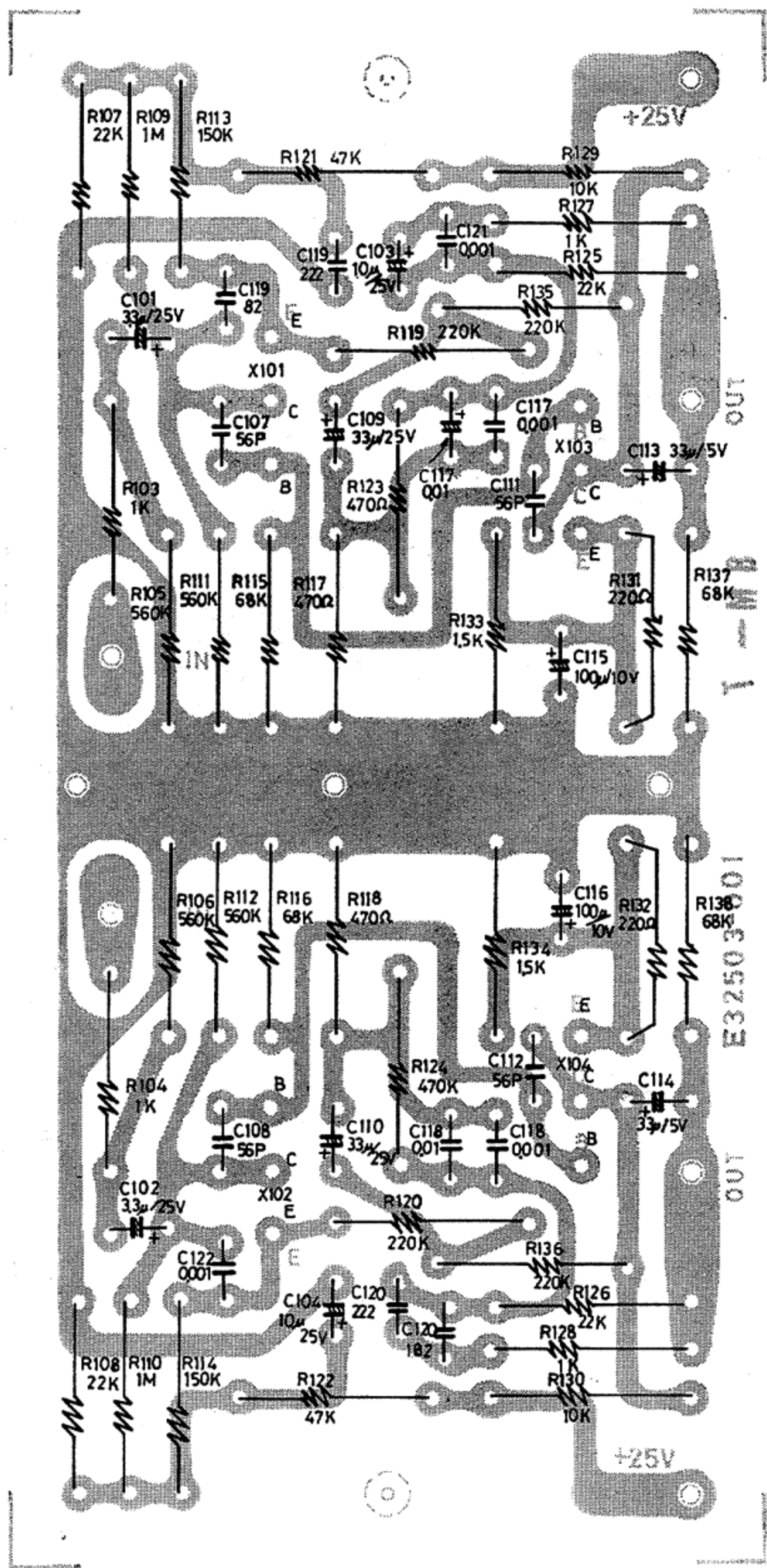


Fig. 19

Parts No.	Parts Name	Description	Parts No.	Parts Name	Description
Q04800-820K	Carbon Resistor	R123, 124	Q04800-47K	Carbon Resistor	R121, 122
// -22K	//	R107, 108, 125, 126	// -1.5K	//	R133, 134
// -560K	//	R105, 106	// -18K	//	R125, 126
// -1M	//	R109, 110	// -10K	//	R129, 130
// -68K	//	R115, 116	// -68K	//	R137, 138
// -150K	//	R113, 114	// -1K	//	R103, 104
// -470	//	R117, 118	// -560K	//	R111, 112
// -470K	//	R119, 135			

TAC-139 SOUND FEILD COMPOSER (S. F. C.) CIRCUIT AND WIRES CONNECTION (Bottom View)

※ NOTE : Be going to change new Circuit Board Ass'y OF S. F. C. on a nearday, but electric circuit is same as new circuit. CR number in () on Fig. 19 is new CR number on New Circuit Board Ass'y.

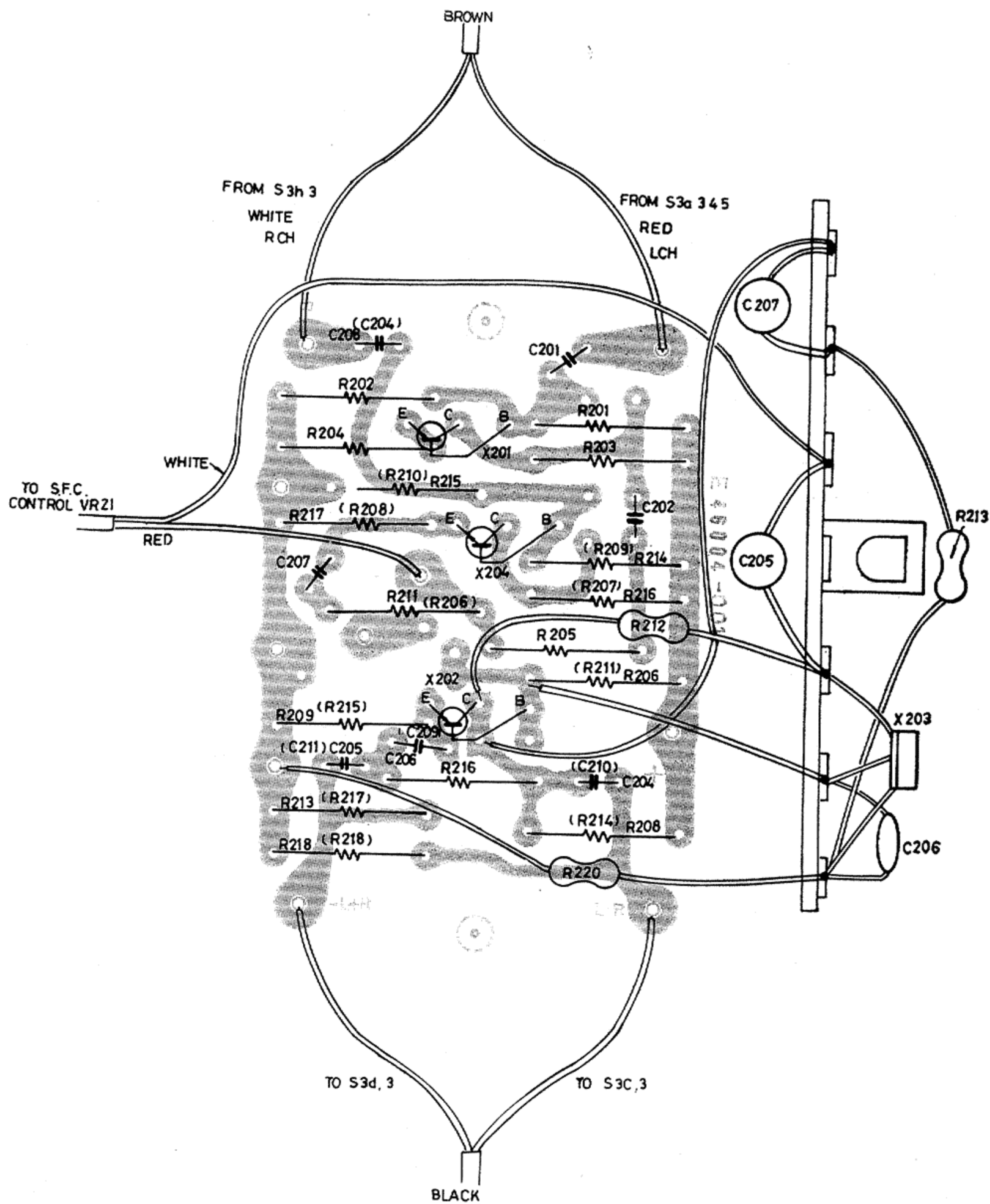


Fig. 21

TAC-138 TONE CONTROL CIRCUIT BOARD ASS'Y AND WIRES CONNECTION (Top View)

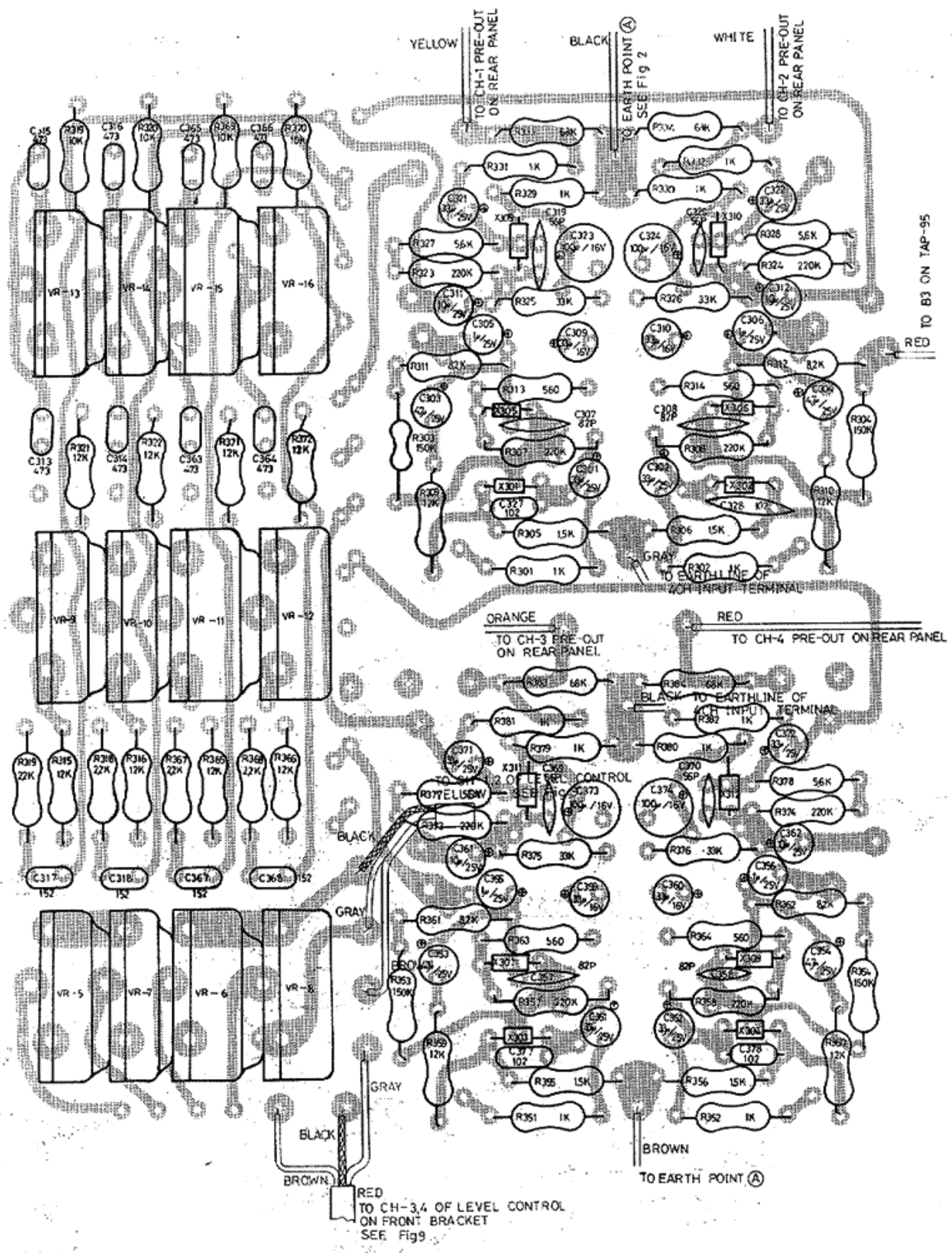


Fig. 22

Parts No.	Parts Name	Description
2SC458LGC	Si Transistor	X301~312
Q03110-4.7	E. Cap.	C303, 304, 353, 354 4.7μF/25V
// -3	//	C321, 322, 371, 372 3μF/25V
// -10	//	C311, 312, 361, 362 10μF/25V
Q03108-30	//	C309, 310, 359, 360 33μF/16V
// -100	//	C323, 324, 373, 374 100μF/16V
E03137-3.3	Tantal Cap.	C301, 302, 351, 352 3.3μF/25V
Q03112-1	E. Cap.	C305, 306, 355, 356 1μF/25V
Q03246-152	Mylar Cap.	C317, 318, 367, 368
// -473	//	C313, 316, 363, 366
// -102	//	C327, 328, 377, 378
Q04052-82	Ceramic Cap.	C307, 308, 357, 358
// -56	//	C319, 320, 369, 370
Q04800-1K	Carbon Resistor	R301, 302, 351, 352, 331, 332, 329, 330, 379 380, 381, 382

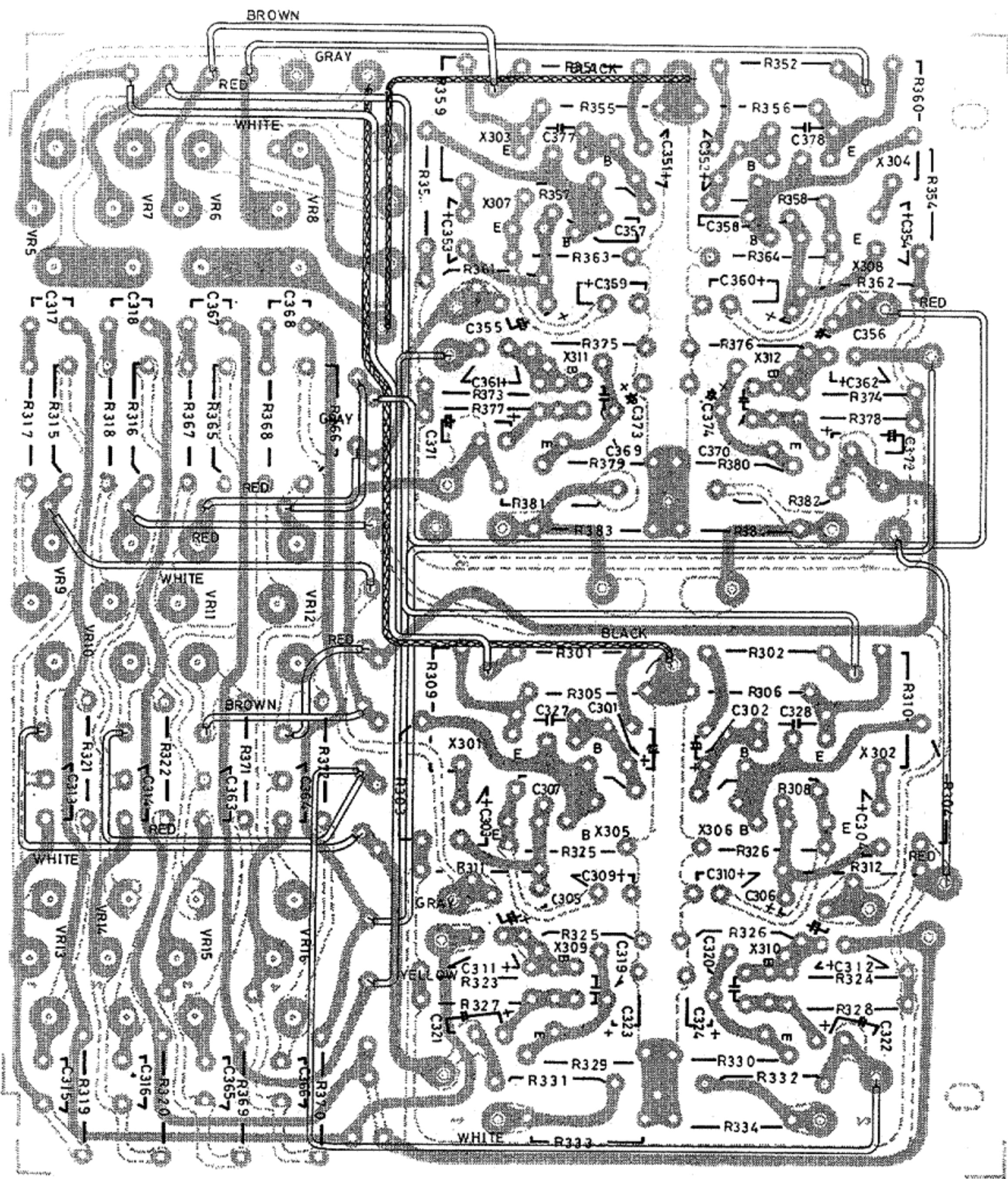


Fig. 23

Parts No.	Parts Name	Description
Q04800-1K	Carbon Resistor	R305, 306, 355, 356
// -150K	//	R303, 304, 353, 354
// -220K	//	R307, 308, 357, 358
// -12K	//	R315, 316, 321, 322, 309, 310, 365, 366, 371, 372, 359, 360
// -82K	//	R311, 312, 361, 362
// -560K	//	R313, 314, 363, 364
// -2. 2K	//	R317, 318, 367, 368
// -10K	//	R319, 320, 369, 370
// -33K	//	R325, 326, 375, 376
// -220K	//	R323, 324, 373, 374
// -5. 6K	//	R327, 328, 377, 398
// -6. 8K	//	R333, 334, 383, 384
Q30386-001	Variable Resistor	VR5~VR8 250KΩ (A)
Q30385-001	//	VR9~VR16 100KΩ (B)

TAP-95 POWER SUPPLY CIRCUIT BOARD ASS'Y (Top View)

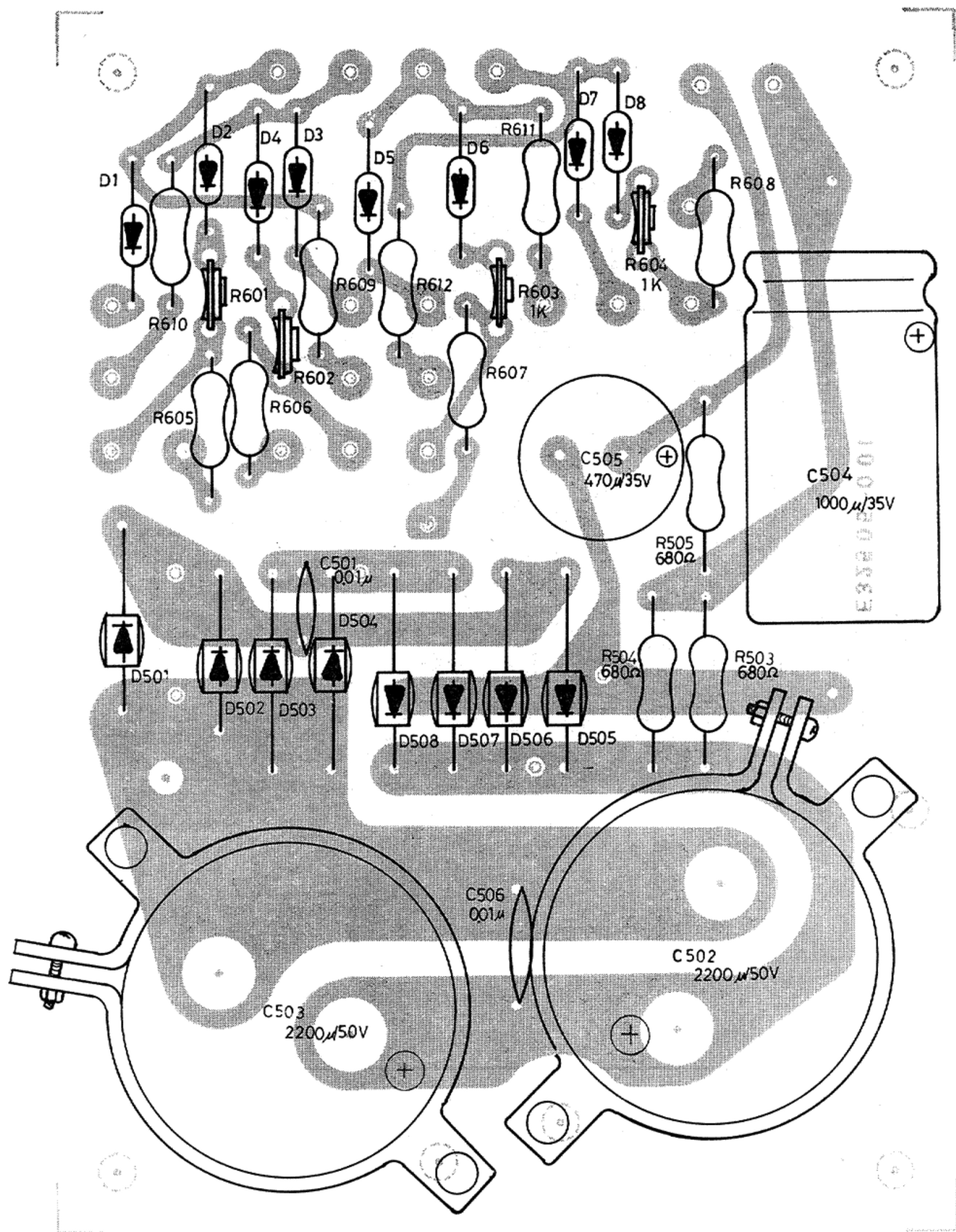


Fig. 24

Parts No.	Parts Name	Description
FR2-02	Diode	D501~508
Q03593-21	Electrolytic Capacitor	C502, 503 2200 μ F/50V
Q03138-470	"	C505 470 μ F/35V
Q03137-1000	"	C504 1000 μ F/35V
Q04803-680	Carbon Resistor	R505 680 Ω 1/2W
// -820	"	

TAP-95 POWER SUPPLY CIRCUIT AND WIRES CONNECTION (Bottom View)

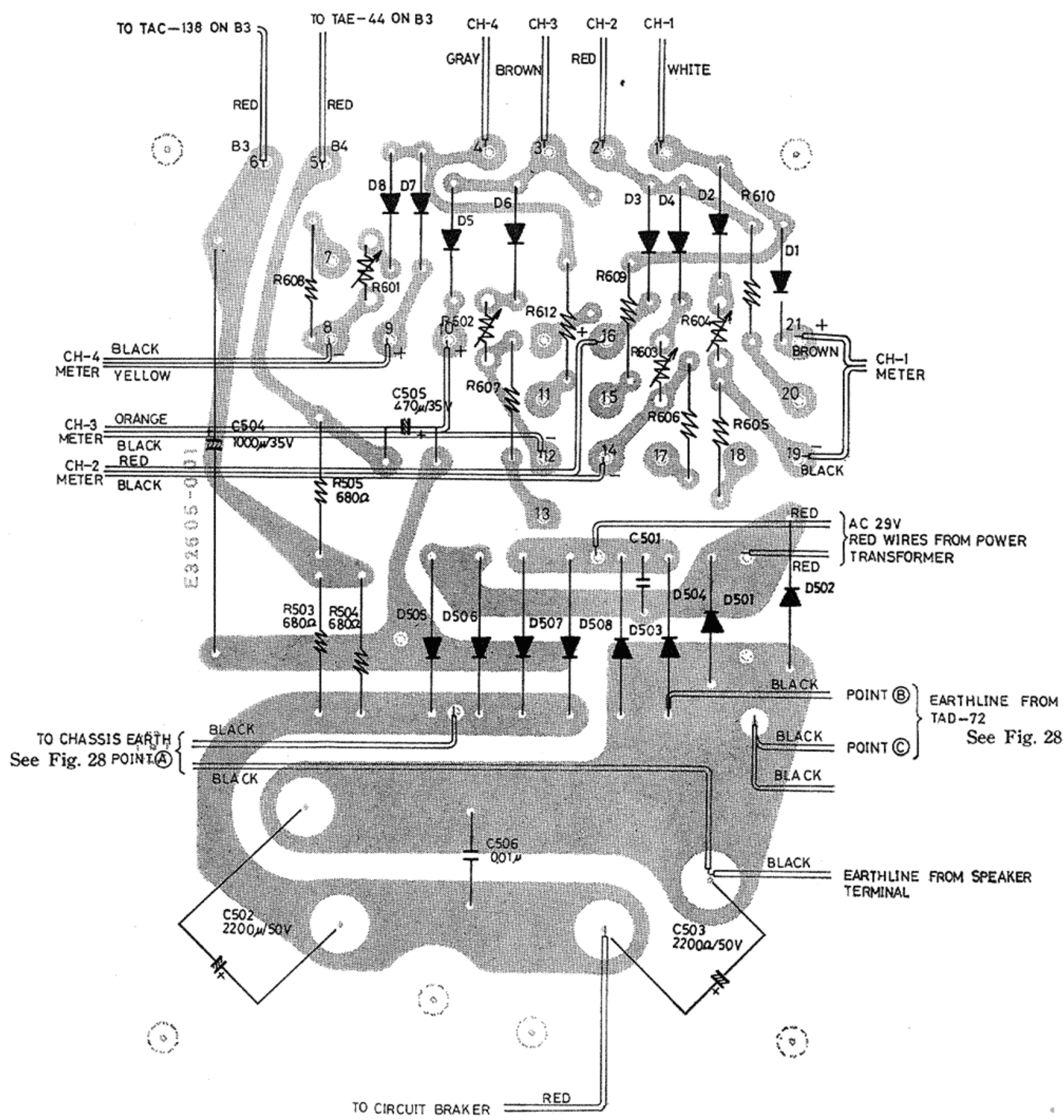


Fig. 25

Parts No.	Parts Name	Descrtption
Q42309-01	Ceramic Capacitor	C501, 506 0.01µF
1S188AM	Diode	D1~8
Q04843-4	Variable Resistor	R601~604
// -4.7K	Carbon Resistor	R605~608
// -2.2K	"	R609~612

How to adjustment of R601, 602, 603, 604 Function : 4 CH AUX Signal : 1kHz

2SPK-4SPK Switch (S4) Position	Output Voltage on Speaker Terminal	Adjust R601, 602, 603, 604
4 Spk	5V at 8Ω dummy load	0VU ±1dB

POWER TRANSFORMER AND WIRE CONNECTION

(E03098-20)

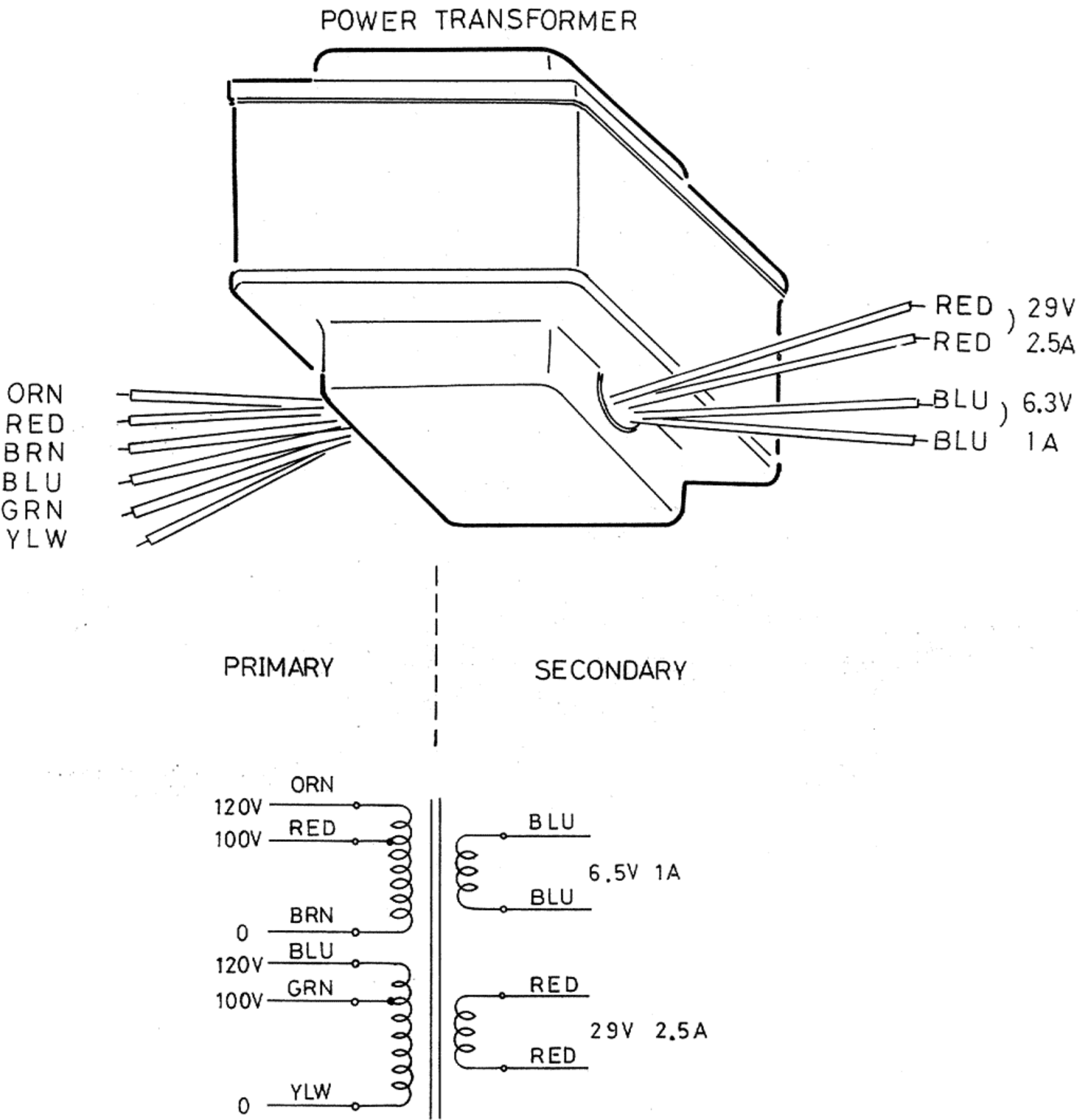


Fig. 26

TRANSISTORS

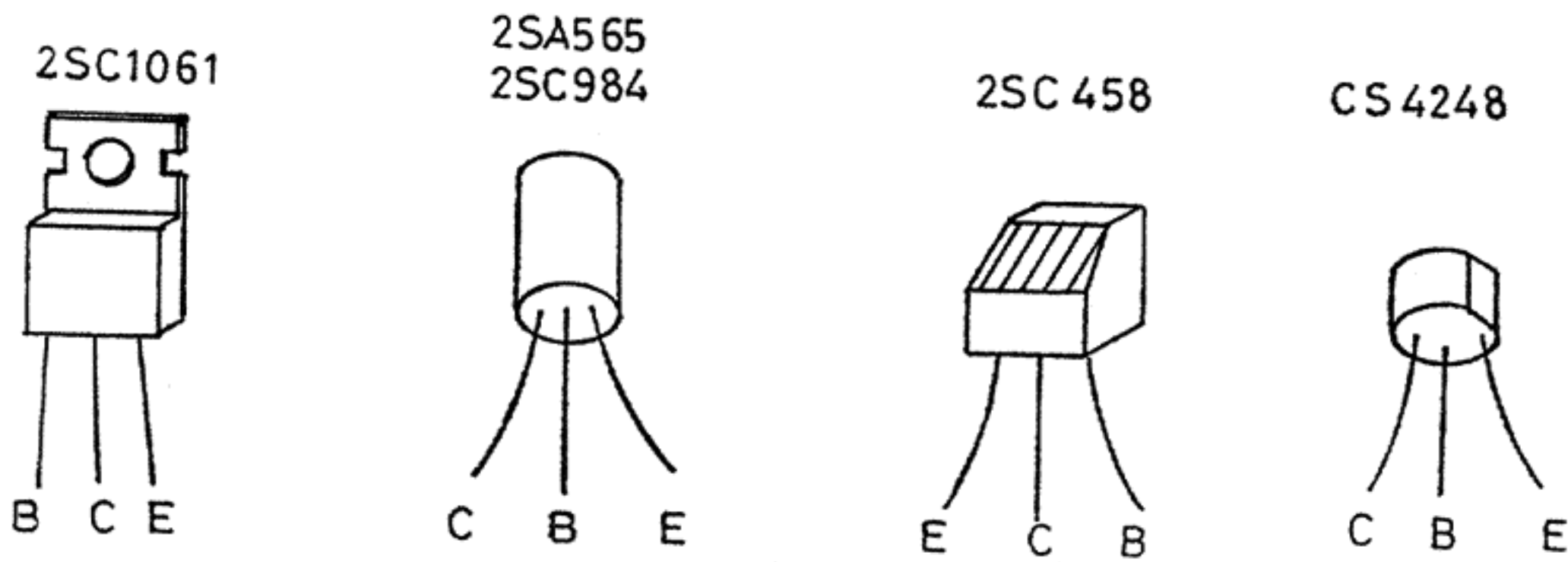


Fig. 30

ACCESSORIES

- | | |
|---------------------|---|
| ① E30580-238 | Instruction Book |
| ② E64207-001 | Envelope |
| ③ E64103-001 | Polyshing Cloth |
| ④ 04112-2.3 | Fuse |
| // -1.2 | // |
| ⑥ E64213-001 | Warranty Card (For JVC America Inc. only) |
| ⑦ E64212-009 or 014 | // (For US Militaly Parsonnal only) |

FINUL PACKING ASS'Y (E-37840-123)

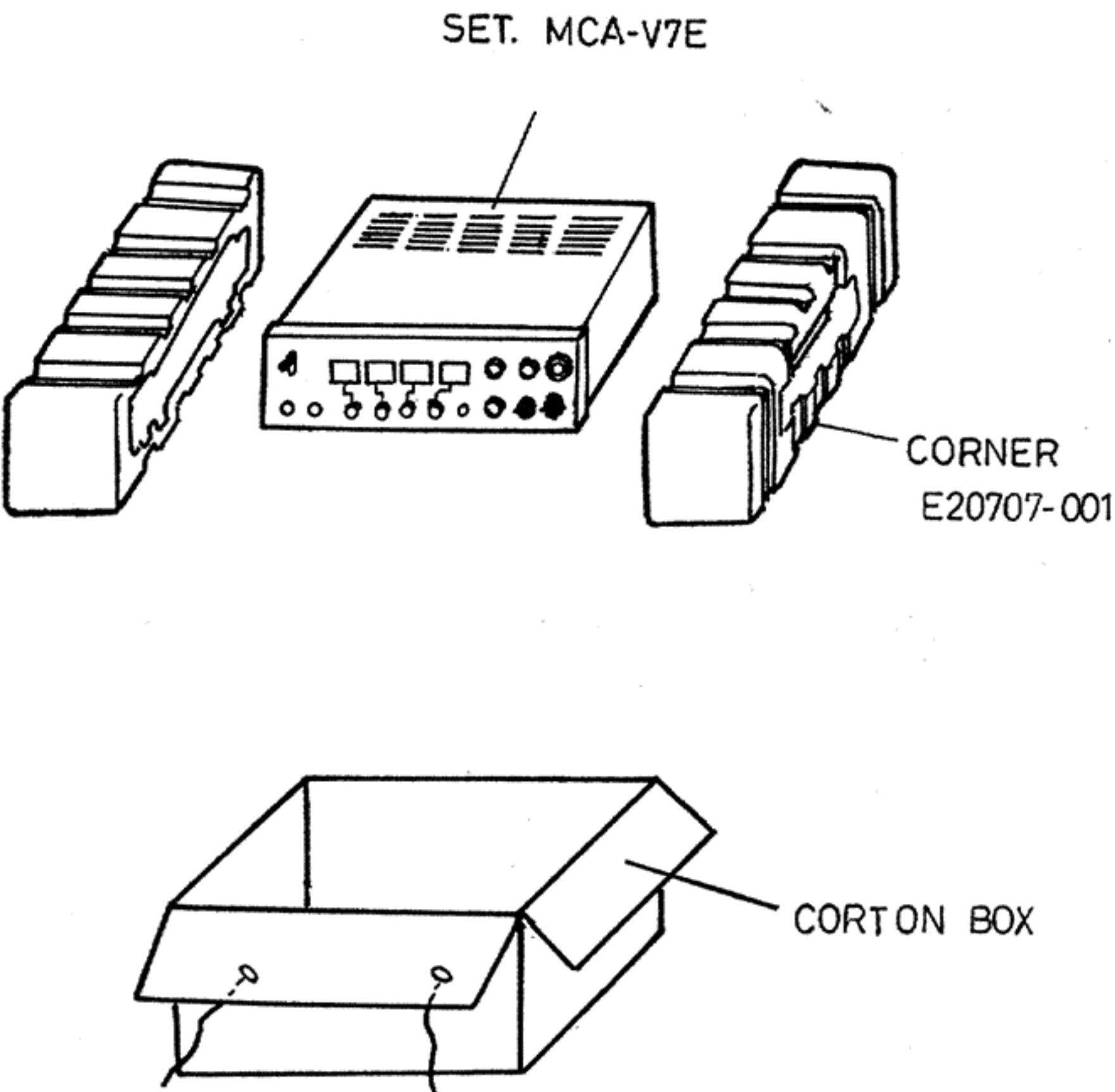


Fig. 31

The List of JVC NIVICO Service Manual

(Phonograph)

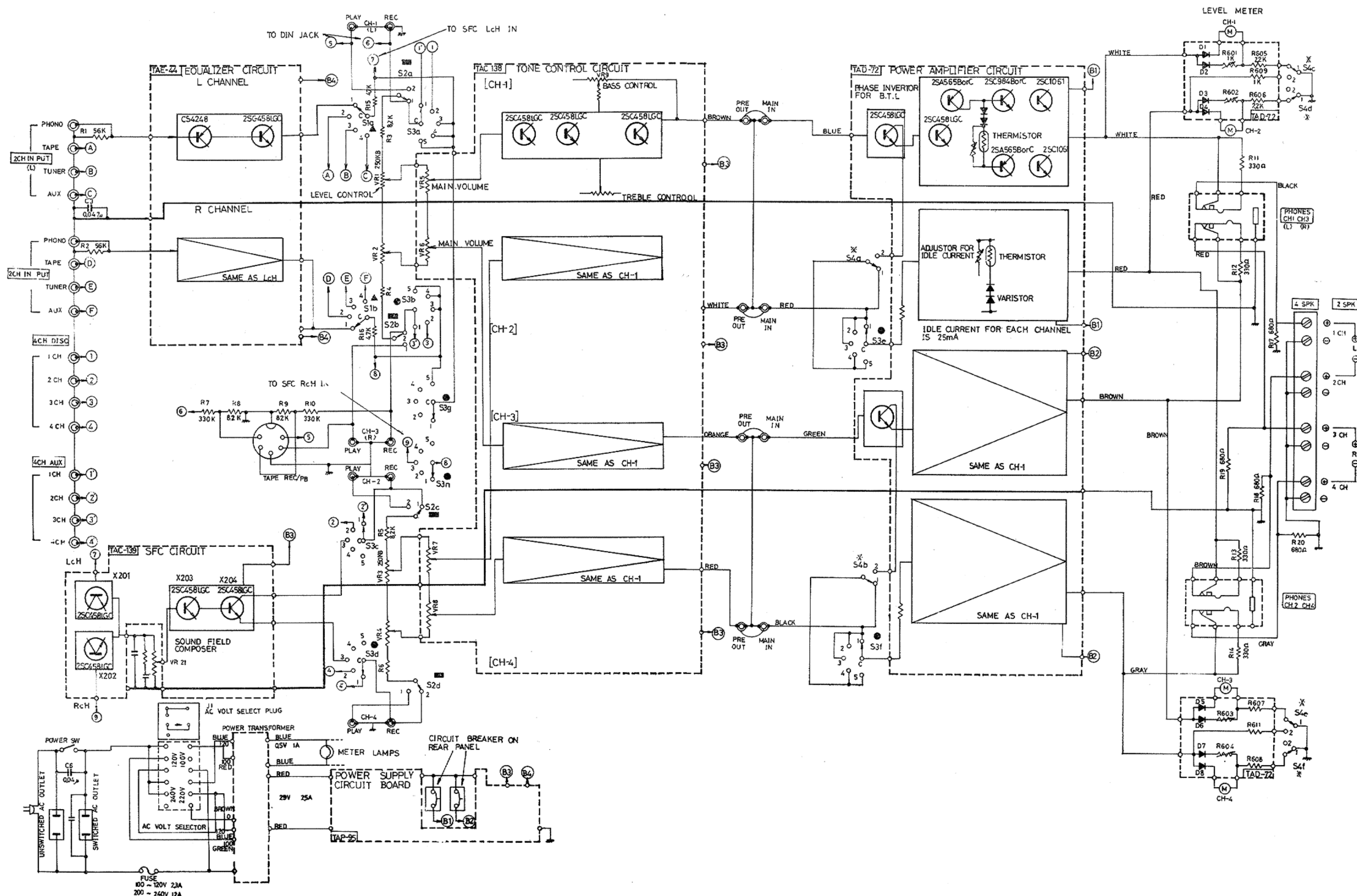
No.	Model	No.	Model	No.	Model	No.	Model	No.	Model
2081	4TR-3U	2091	ARC-30A, 30B	2101	N760ME, N99U	2111(B)	STC-707C(R#-2)	2121	5007
2082	N-55T	2092	4TR-55	2102	SRP-472E	2112	SST-61	2122	L-21M
2083	SRE-103E	2093	{N670, N770 4TR-99u, etc	2103	SRP-469E	2113	{FRS-103EH.V (R#-2)	2123	ARC-10 Series
2084	N590F, 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						
2182	ARC-50	2192	5395						
2183	MCT-105E/5108	2193	MSL-201E						
2184	SCR-500	2194	MCA-V7E						
2185	4330M	2195							
2186	N-404F Series	2196							
2187	MTR-10ME	2197							
2188	MSL-501L	2198							
2189	MSA-404E	2199							
2190	N-202FMY	2200							

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

BLOCK DIAGRAM OF MCA-V7E



- ▲ S1 a ~ b 2 Channel Source Selector
- S2 a ~ d Tape Monitor Switch
- S3 a ~ f Function Selector
- ※ S4 a ~ f 2~4 Speaker Selector For B. T. L.

- 2 Circuit 4 point 1. Phono 2. Tape 3. Tuner 4. Aux
- 4 Circuit 2 point 1. OFF 2. ON
- 6 Circuit 5 point 1. 4ch Aux 2. 4ch Disk 3. 2ch S.F.C. 4. 2ch stereo 5. 2ch L+R
- 6 Circuit 2 point 1. 4 Speaker 2. 2 Speaker

- See Fig. 6
- See Fig. 10
- See Fig. 13
- See Fig. 8

EXPLODED VIEW OF MECHANICAL PARTS (Front Panel Ass'y & Front Bracket Ass'y)

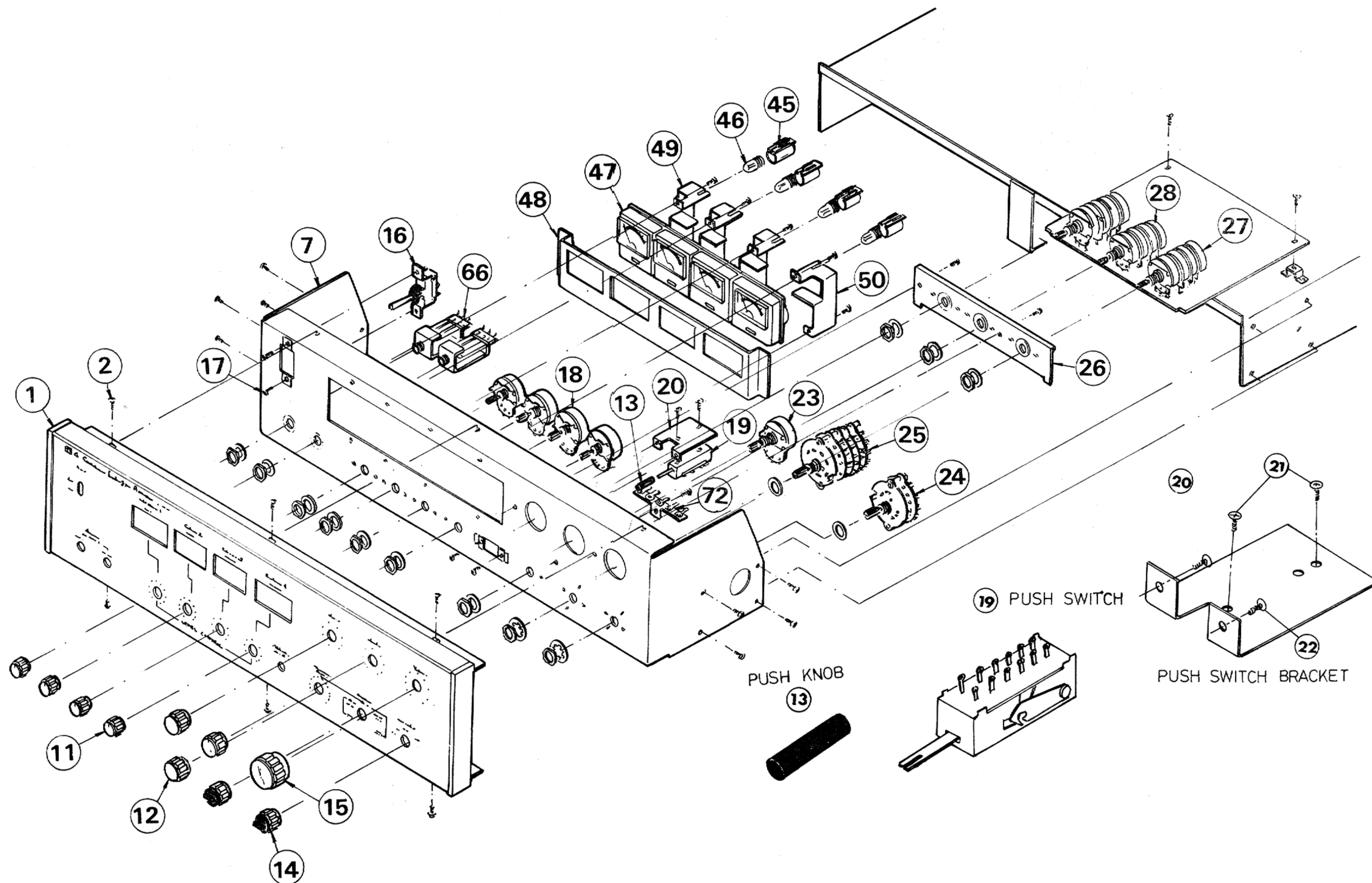


Fig. 15

EXPLODED VIEW OF MECHANICAL PARTS (Back Panel Ass'y, Cover & Bottom Plate)

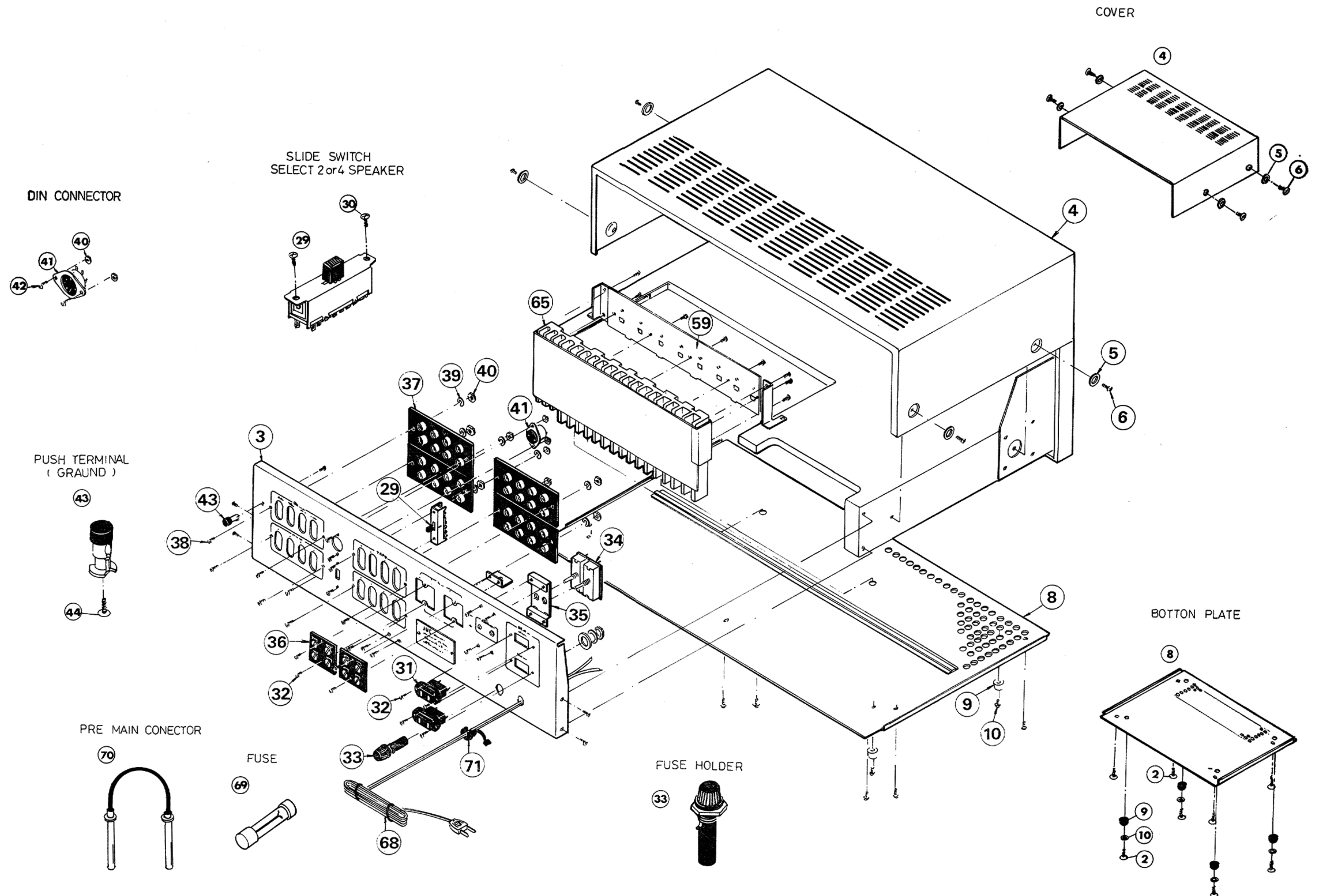


Fig. 16

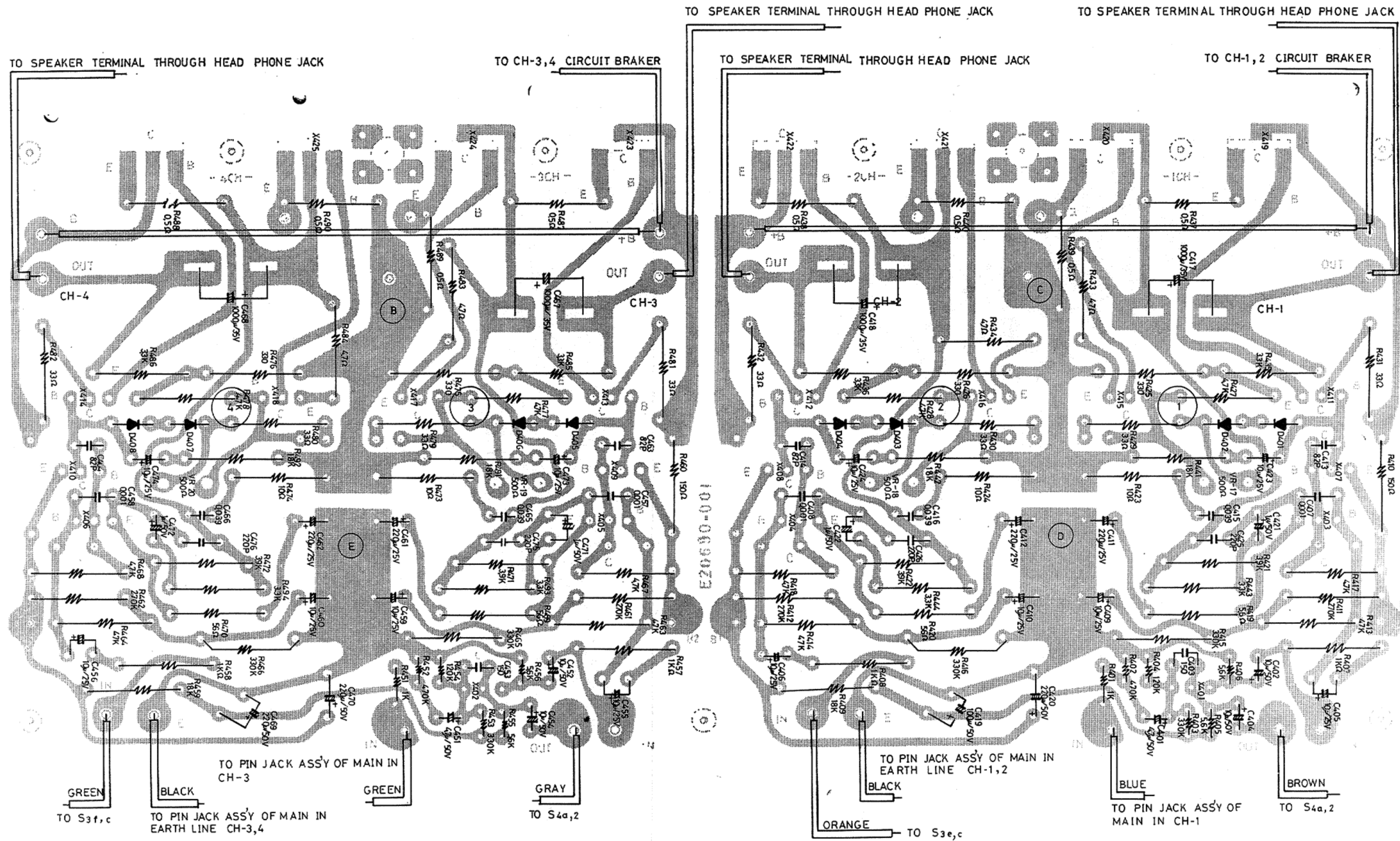


Fig. 28

Parts No.	Parts Name	Description
Q03588-11	Electrolytic Capacitor	C417, 418, 467, 468
Q03112-1	"	C421, 422, 471, 472
Q03110-10	"	C423, 424, 473, 474
Q03246-393	Mylar Capacitor	C415, 416, 465, 466
" -102	"	C407, 408, 457, 458
Q04052-22	Ceramic Capacitor	C413, 414, 463, 464
" -220	"	C425, 426, 475, 476
Q04800-470K	Carbon Resistor	R402, 452
" -18K	"	R441, 442, 419, 492
" -1K	"	R407, 408, 457, 458
" -270K	"	R411, 412, 461, 462
" -390K	"	R415, 416, 465, 466
" -47K	"	R413, 414, 463, 464

Parts No.	Parts Name	Description
Q04800-4.7K	Carbon Resistor	R417, 418, 467, 468, 427, 428, 477, 478
" -56	"	R419, 420, 469, 470
" -3.9K	"	R421, 422, 471, 472
" -10K	"	R423, 424, 473, 474
" -33	"	R431, 432, 481, 482
" -330	"	R425, 426, 475, 476
" -3.3K	"	R435, 436, 485, 486
" -4.7K	"	R433, 434, 483, 484
" -3.3K	"	R443, 444, 493, 494
Q04842-4	Variable Resistor	VR17~20 500Ω
04091-150	Comp. Resistor	R410, 460 150Ω
E03347-001	Metalized Film Resistor	R437~440, 487~490

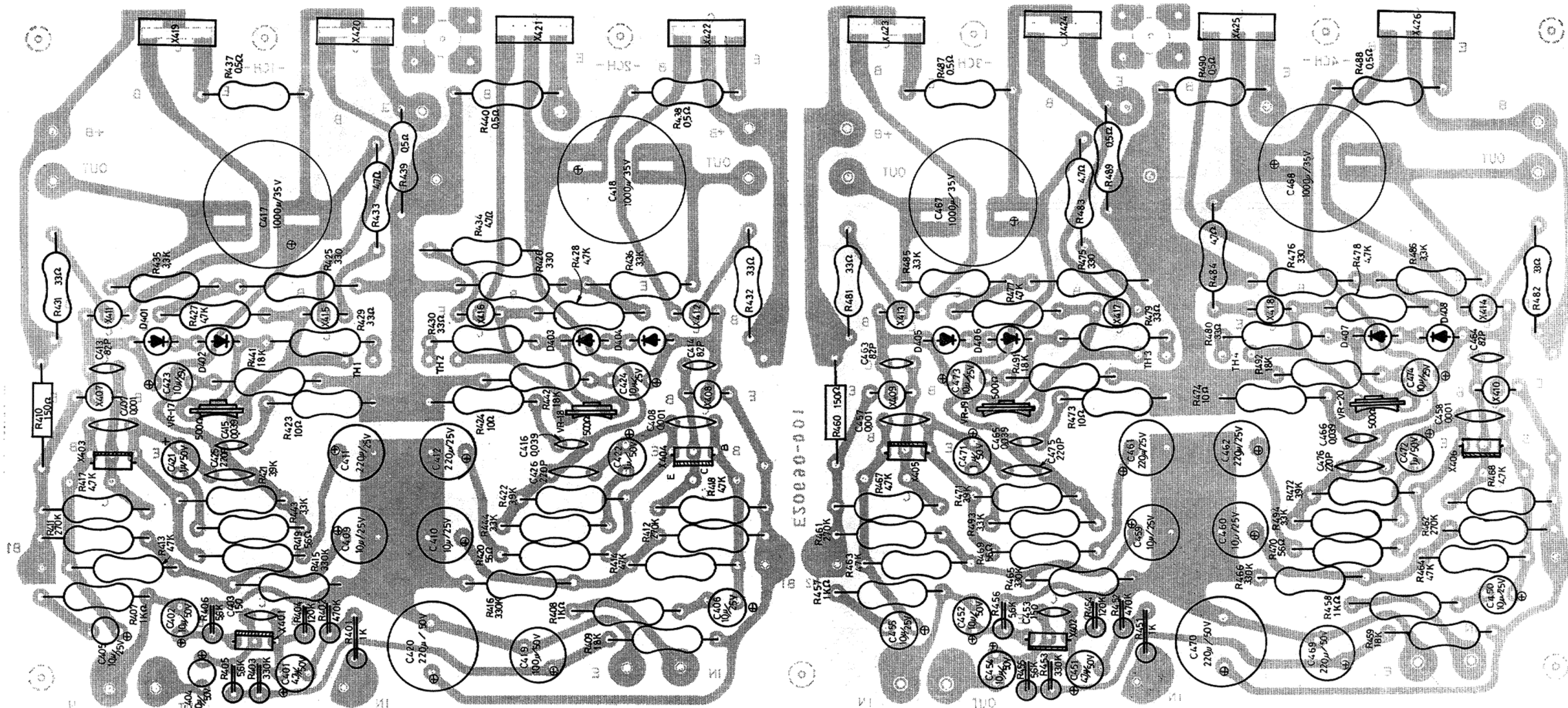
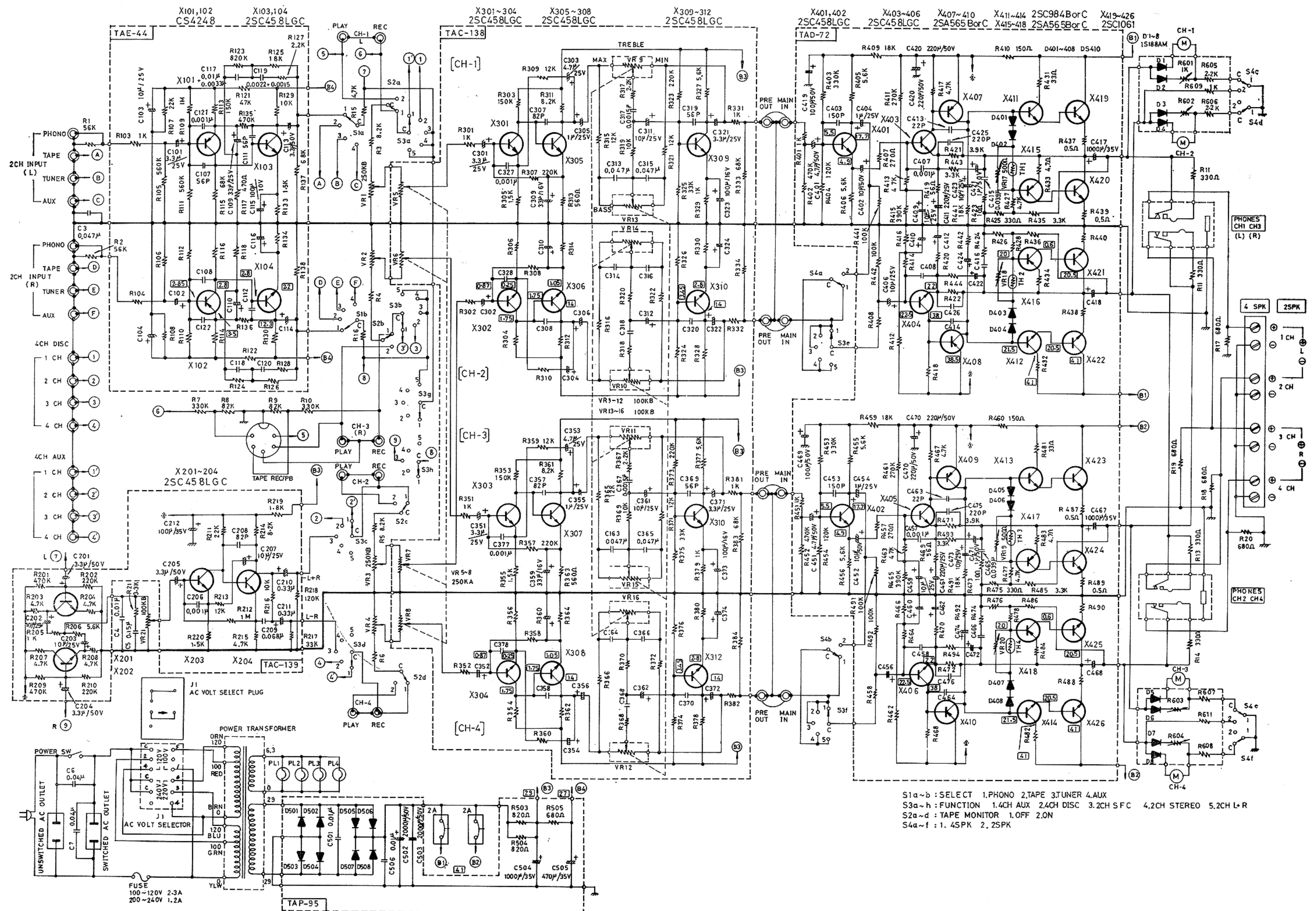


Fig. 27

Parts No.	Parts Name	Description
2SC458LGC	Si Transistor	X401, 402
Q03112-100	Electrolytic Capacitor	C419, 469
Q03112-5	"	C401, 451
" -10	"	C402, 452
E03137-1	Tantal Capacitor	C404, 454
Q04052-150	Ceramic Capacitor	C403, 453
Q04800-100	Carbon Resistor	
" -330K	"	R403, 453
" -120K	"	R404, 454
" -5.6K	"	R405, 406, 455, 456
" -1.8K	"	R409, 459
" -1K	"	R401, 451
E32502-001	Sub Heat Sink	

Parts No.	Parts Name	Description
2SC1061	Si Transistor Ⓑ or Ⓒ	X419~426
E46114-001S	Insulator Nut	
E45069-001	Insulator Film	
LPSP3008NS	Ass'y Screws	
2SC984B or C	Si Transistor	X411~414
2SA565B or C	"	X415~419
"	"	X407~410
2SA458ALGC	"	X403~406
E03125-001	Varistor	D401~408
E04026-4	Thermistor	TH1~4
Q03110-10	Electrolytic Capacitor	C405, 406, 455, 456, 409, 410, 459, 460
Q03112-200	"	C420, 472
Q03110-200	"	C411, 461, 412, 462



SCHAMATIC DIAGRAM OF MCA-V7E