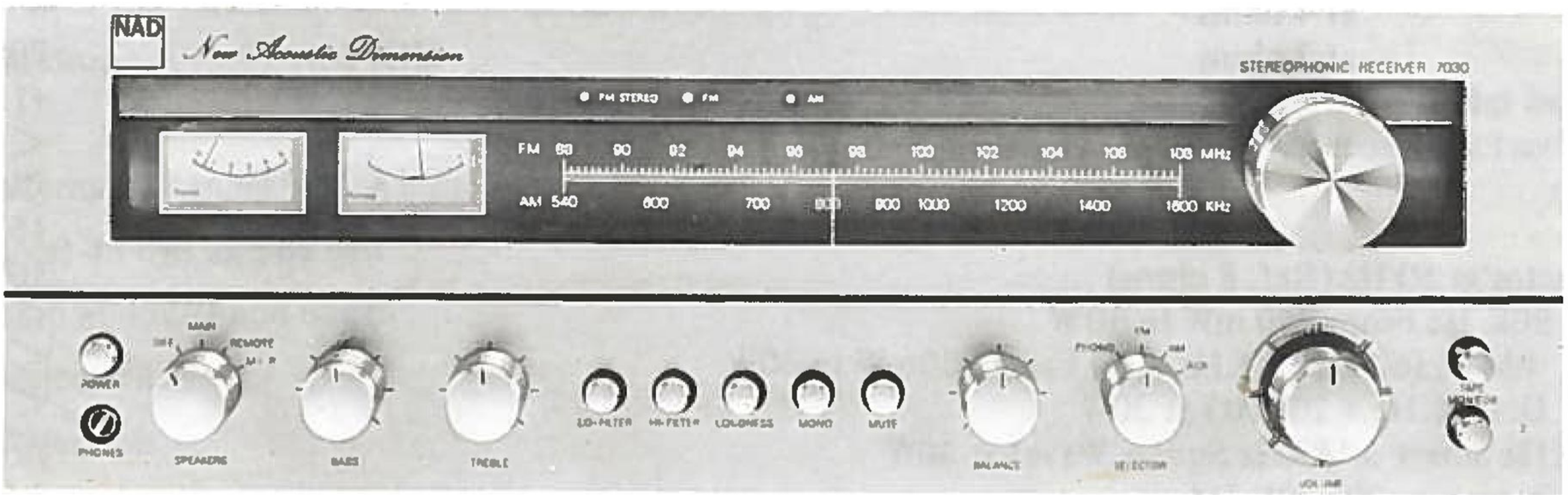
SERVICE MANUAL

NAD MODEL 7030

AM/FM STEREO RECEIVER



CONTENTS

SPECIFICATION	PAGE 2,3
ALIGNMENT (AUDIO)	PAGE 4,5
ALIGNMENT (TUNER)	PAGE 6,7
INSIDE VIEW OF UNIT	PAGE 8
PCB PARTS LOCATION	PAGE 9
WIRING DIAGRAM	PAGE 10
CIRCUIT DIAGRAM	PAGE 11
PARTS LIST	PAGE 12,13,14

www.hifiengine.com

SPECIFICATION

* Measurements identified by an asterisk are taken in accordance with the new IHF A-202 amplifier measurement standard.

Power Amplifier Section

*	Continuous average power output at 8 ohms 20–20K Hz both channel driven		30W
	Rated distortion, 20–20K Hz		< 0.09%
*	Clipping headroom	at 8 ohms	+ 1.2dB
	Clipping power	at 8 ohms	40W
		at 4 ohms	50W
		at 2 ohms	60W
	Dynamic headroom	at 8 ohms	+2.2dB
	Dynamic power	at 8 ohms	50W
		at 4 ohms	60W
		at 2 ohms	70W
*	Reactive load rating		+1.7dB
*	Transient Overload Recovery Time		< 1μsec.
*	Slew Factor		> 50
	Slew Rate		15V/μsec.
	Damping factor at 50 Hz (Ref. 8 ohms)		50
	T.H.D. 20–20K Hz From 250 mW to 30 W		< 0.09%
	S.M.P.T.E. I.M.D. (60 Hz + 7KHz, 4:1) From 250mW to 30W		< 0.09%
	I.H.F. I.M.D. (19KHz + 20KHz) at 30W		< 0.09%
	T.I.M. (15KHz Sine + 3.18KHz Square Wave) at 30W		< 0.09%
	Frequency Response, 20–20K HZ		± 0.5dB
	Frequency Response Range ± 3dB		5–45K Hz

Preamplifier Section

*	Input Impedance	Resistance/Capacitance	47KΩ/47PF
	Input Sensitivity (1KHz)	* For 1 watt out	0.5mV
		30 Watt out	2.5mV
	Input Overload at	1KHz	190mV
		20 Hz	19mV
		20 KHz	1.9 V
	THD (20–20K Hz) and IMD at + 30dB input level		< 0.02%
	RIAA Response Accuracy		± 0.3dB
	Siqnal to Noise Ratio A–weighted		
	(a) with phono cartridge connected	Ref 10mV	> 80dB
		* Ref 5mV	> 74dB
	(b) with short-circuit input	Ref 10mV	> 84dB

High level input

*	Input impedance	Resistance/Capacitance	50KΩ/100PF
	Input sensitivity	* For 1 watt out	30mV
		For 30 watt out	150mV
*	Maximum input signal		infinite
	Rrequency Response, 20–20K Hz		± 0.5dB

Controls

Bass control, range at 50 Hz		± 10dB
Treble control, range at 10 KHz		± 10dB
Infrasonic filter	Turn over frequency	20 Hz
	Slope (dB/octave)	12
High filter	Turn over frequency	7 KHz
	Slope (dB/octave)	6

www.hifiengine.com

SPECIFICATION

FM Tuner Section

Input Sensitivity	IHF, 30dB quieting		1.9μV
	IHF, 50dB S/N Mono		3.5μV
	IHF, 50dB S/N Stereo		45μV
Signal to Noise Ratio (A Weighted, at 65 dBf) mono			72dB
			68dB
Frequency Response, 30–15K Hz			+0.5dB
De-emphasis Accuracy 75 μsec			+0.3dB
Channel Separation	1 KHz		40dB
	30 – 15 KHz		30dB
Selectivity, alternate channel (400 KHz)			62dB
Capture Ratio at 45 dBf and 65 dBf			1.5dB
AM Suppression at 45dBf and 65dBf			60dB
Image Rejection			50dB
I. F. Rejection			50dB
SCA Rejection			70dB
Pilot Signal Suppression			55dB
THD at 100% Modulation	1 KHZ	Mono	0.2%
		Stereo	0.3%
	100 HZ	Mono	0.2%
		Stereo	0.3%
	6 KHZ	Mono	0.3%
		Stereo	0.4%
THD, Stereo, 1 KHZ	50%	Modulation	0.3%
	150%	Modulation	0.4%

AM Tuner Section

Usable Sensitivity		300μV
Selectivity		30dB
Image Rejection		50dB
I. F. Rejection		40dB

Physical Specification

Dimensions	Width x Height x Depth	17.7 x 14.2 x 5.5 inch
Net Weight		24.2 lbs/11kg
Shipping Weight		30 lbs/13.6 kg
Power Consumption	at 1 Watt out	30VA
	30 Watt out	200VA

www.hifiengine.com

ALIGNMENT (AUDIO)

1. IDLE CURRENT ALIGNMENT

1. 5 Minutes minimum pre-heating is necessary for idle current alignment.
2. Set the volume control at minimum position.
3. Speaker switch should be set at off position.
4. Connect DC voltmeter across R629 for right channel and across R630 for left channel. (see fig. 1)
5. Record the reading of DC voltmeter and refer to the following chart to find the appropriate value resistor to connect in parallel with R639 (right channel), or R640 (left channel) on the bottom side (pattern side) of PCB.

* Important notice: The power switch must be in the off position when soldering is done.

Reading of DC Voltmeter	Parallel Resistor	Reading of DC Voltmeter	Parallel Resistor
0.4 to 0.8 mV	1k ohm	3.1 to 4.0 mV	2k2 ohm
0.9 to 1.2 mV	1k2 ohm	4.1 to 5.0 mV	2k7 ohm
1.3 to 2.0 mV	1k5 ohm	5.1 to 6.0 mV	3k3 ohm
2.1 to 2.4 mV	1k8 ohm	6.1 to 7.0 mV	3k9 ohm
2.5 to 3.0 mV	2k ohm	7.1 to 10 mV	4k7 ohm

6. Read the DC voltage across to R631 (right channel) and R632 (left channel) again.
7. If the DC voltage were between 10 mV and 20 mV, then the alignment is completed.
8. If the DC voltage were less than 10 mV, the value of parallel resistor should be increased until the DC voltage is between 10 mV and 20 mV.
9. If the DC voltage were more than 20 mV, the value of parallel resistor should be reduced until the DC voltage is between 10 mV and 20 mV.

2. DC OFFSET ALIGN MENT

1. 5 minutes minimum pre-heating is necessary for DC offset adjustment.
2. Set the volume control at minmum position.
3. Speaker switch should be set to "main" position.
4. Connect a DC milli-voltmeter to the "main speaker" terminals of each channel. The meter sensitivity should be set for 100-300mV full scale deflection. The positive input of the meter should be connected to the red (+) speaker terminal.
5. If the readings are within + 50mV, then no adjustment is necessary.
6. If the reading is more than + 50mV then refer to Table I to find the appropriate value resistor to connect from point A (right) to C (right) on the bottom side (pattern side) of PCB. (see fig. 1)
   B (left) to D (left)
7. If the reading is less than -50mV then also refer to Table I to find the appropriate value resistor to connect from point A (left) to E (left) one the bottom side (pattern side) of PCB. (see fig. 1)
   B (right) to F (right)
8. Use a piece of insulating sleeve on the resistor legs to avoid shorting to PC board tracks, and make sure the resistor is not pressed against a sharp cut edge of a component leg.

* Important notice: The power button must be in the off position when soldering is done.

Table I

Reading of DC Milli Voltmeter	*Resistor
50 to 60 mV	330k ohm
60 to 75 mV	270k ohm
75 to 90 mV	220k ohm
90 to 110 mV	180k ohm
110 to 135 mV	150k ohm
135 to 165 mV	120k ohm
165 to 200 mV	100k ohm
to mV	ohm

9. After having soldered in the resistor, repeat steps 1 through 5.

www.hifiengine.com

ALIGNMENT (AUDIO)

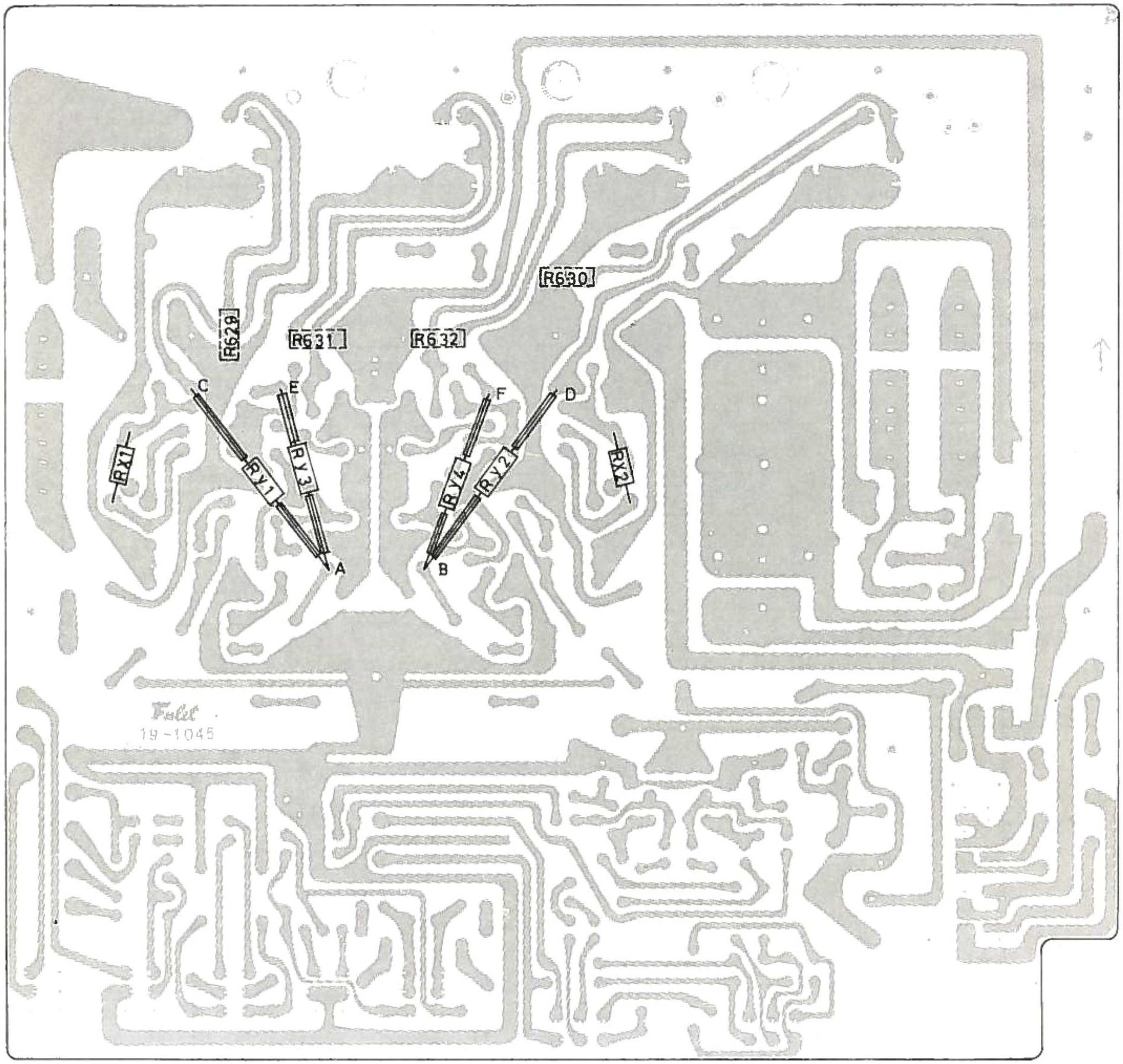


Fig. 1

www.hifiengine.com

ALIGNMENT (TUNER)

1. AM ALIGNMENT: 1. Selector switch in AM position
2. AC line voltage at rated voltage
3. Monitor output at REC OUT (TAPE 1 or TAPE 2)

Section		AM SG Connection	AM SG Carrier Freq.	AM SG Modulation	Dial Setting	Indicator	Adjustment Point	Adjust for
AM IF		Hot side of SG output through 200 pF to AM antenna trimmer Terminal (TP 1)	455 KHz	30% Mod. 400 Hz	Point of non-interference	V. T. V. M. or Oscilloscope	LT 102	Maxinum output
AM RF	1	Hot side of SG output through 200 pF to EXT AM antenna Terminal on rear panel	600KHz	30% MOD. 400 Hz	600KHz	V.T.V.M or Oscilloscope	LA 101	Maximum output
	2		1400 KHz	30% MOD 400Hz	1400KHz		TC – 2	
	3		Repeat Step 4 and Step 2					

2. FM ALIGNMENT: 1. Selector switch in FM position and Mode switch in stereo position
2. AC line voltage at rated voltage
3. Monitor output at REC OUT (TAPE 1 or TAPE 2)

Section		FM SG Connection	FM SG Carrier Freq.	FM SG Modulation	Dial Setting	Indicator	Adjustment Point	Adjust for
FM IF		–	–	–	Point of non-interference	Tuning Meter of set	LT 101 (Discri. IFI) primay A	Center Indication
FM RF	1	Connect to FM 300 ohm antenna Terminal on the rear panel through FM dumy antenna	90MHz	100% Mod	90 MHz	V. T. V. M. or Oscilloscope	L – 1	Maximum output
	2		106MHz	400 Hz	106 MHz		TC–1, TC-3	
	3		Repeat Step 1 and Step 2					
FM Mono Distortion	1		98MHz	100% Mod 400Hz	98MHz	Distortion Meter	LT upper side	Minimum Distortion
	2		Repeat FMIF and FM MONO DISTORTION STEP 1.					

3. FM MPX ALIGNMENT: 1. Same as FM ALIGNMENT 1, 2, 3
2. FM SG is external modulated by stereo SG and connected to FM 300Ω antenna terminal on the rear panel through FM dumy antenna

Section	Step	FM SG	Stereo SG	Dial Setting	Indicator	Adjustment	Adjust for
MPX pilot	1	—	—	Point of no signal received	Connet frequency count counter through look Ωto TP10	VR 201	19KHZ ± 30HZ
	2	98MHz	10% 19KHz Pilot 90% L + R, L – R	98MHz	—	VR201	Stereo LED Light
Separation	1	98MHz	10% 19KHz Pilot L.only	98MHz	Connect VTI VTIM or oscilloscope to R REC out	VR202	Minimum output
	2		10% 19KHz Pilot R.only	98MHz	Connect VTVM or oscilloscipe to L REC out	VR202	
	3		Repeat Step 1 and Step 2				
	4		If there is an excessive difference between leak-free effects of both channels, slightly adjust VR 202 so that the levels of signal leakage of both channels are equal				

www.hifiengine.com

ALIGNMENT (TUNER)

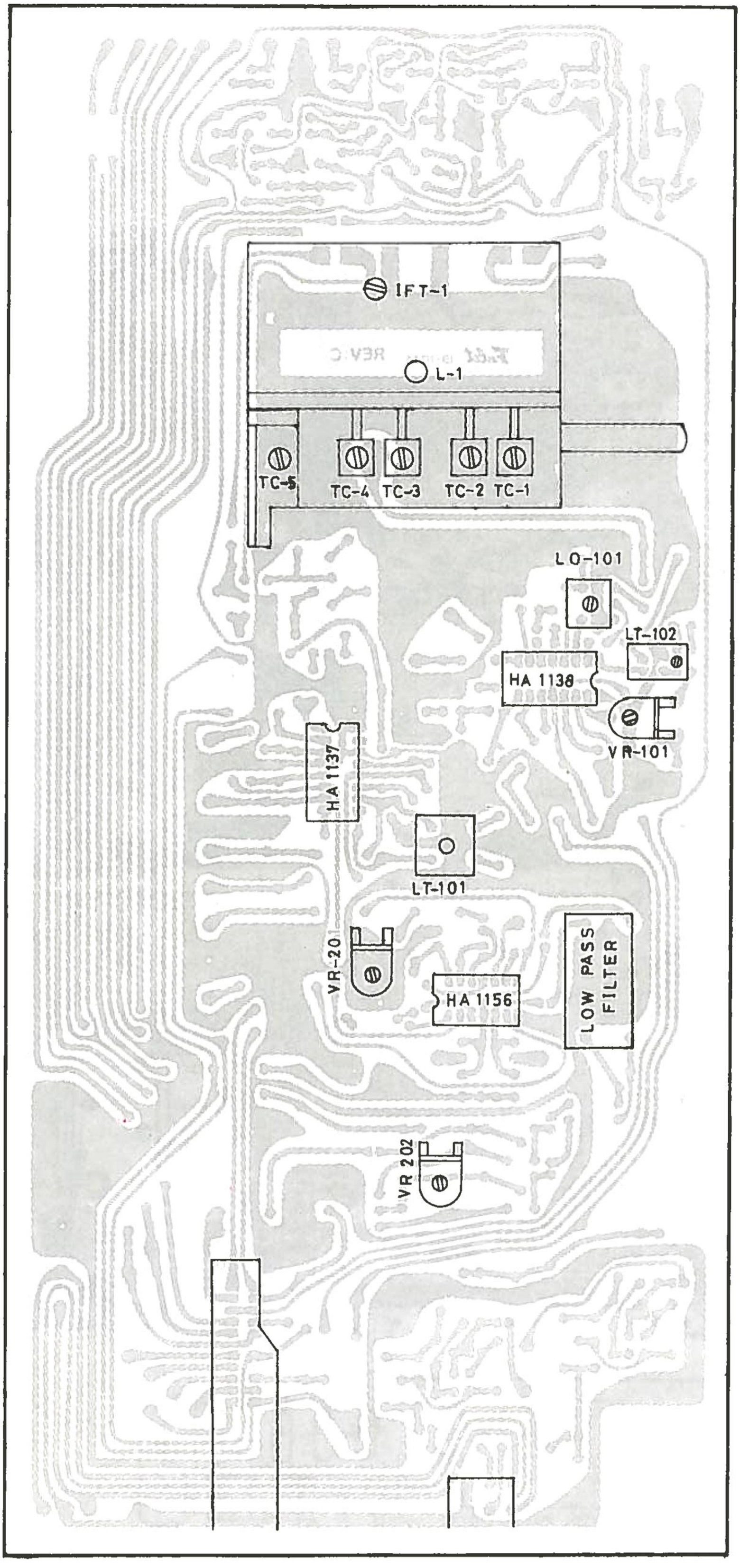


Fig. 2

www.hifiengine.com

INSIDE VIEW OF UNIT

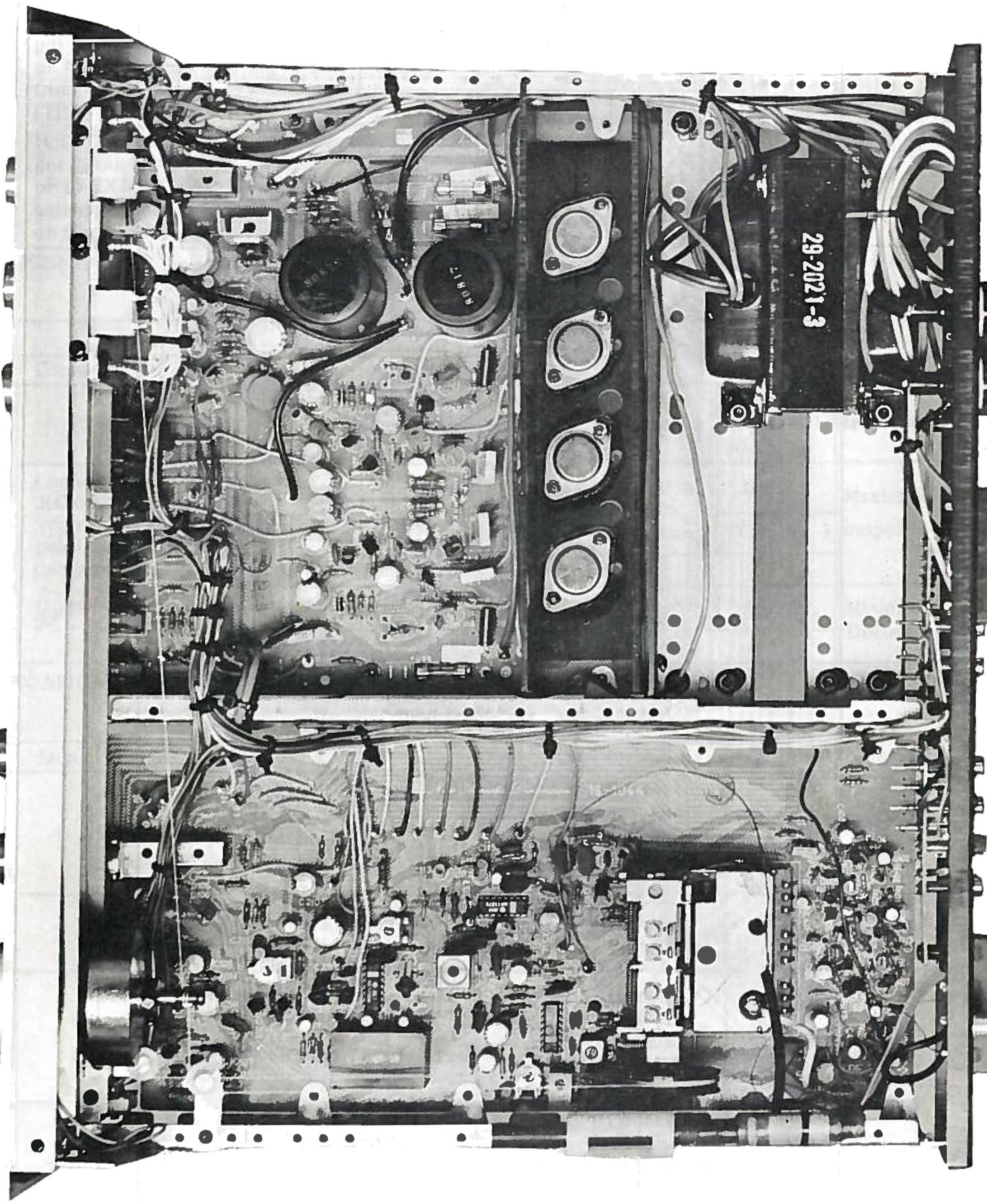
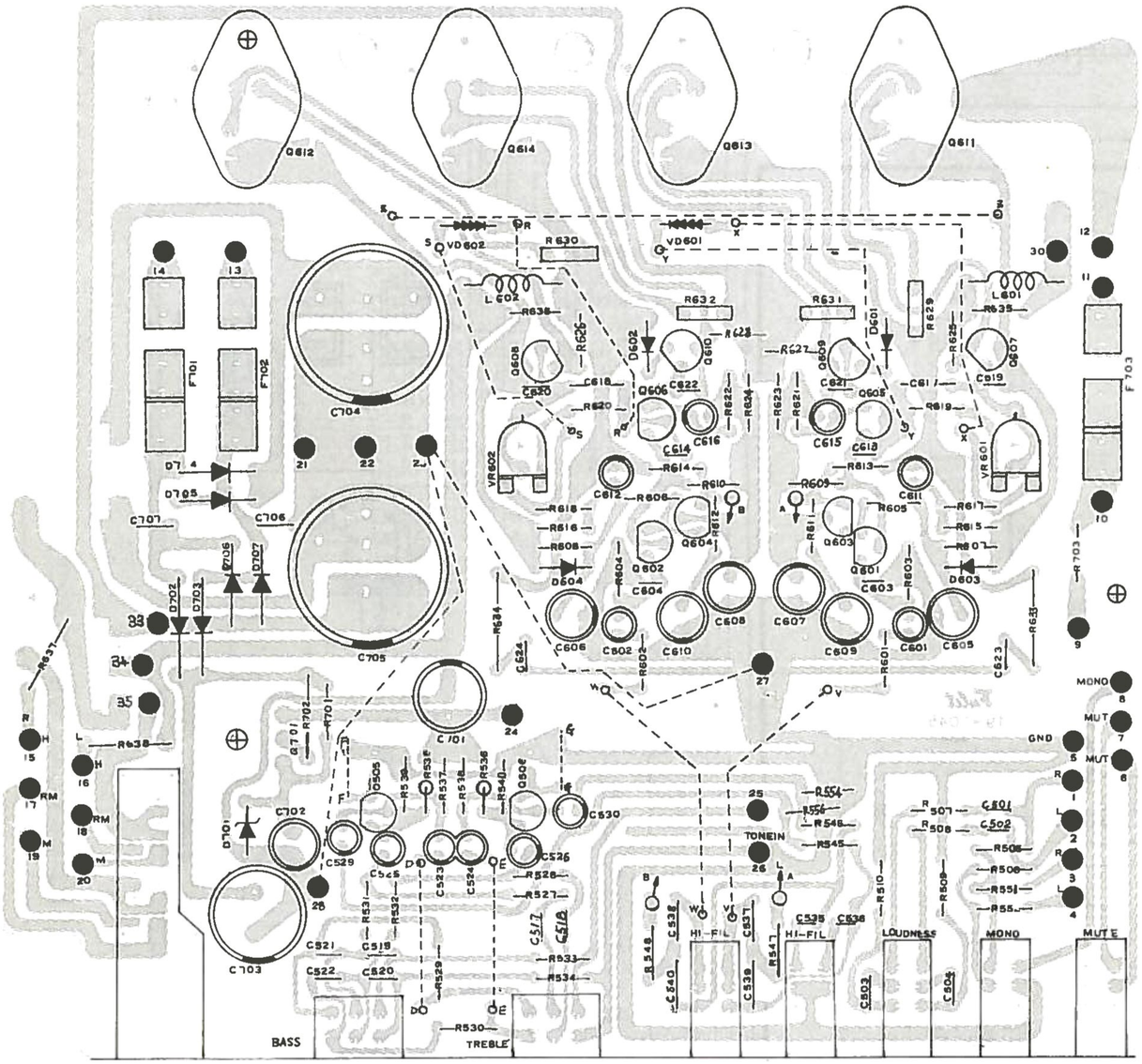
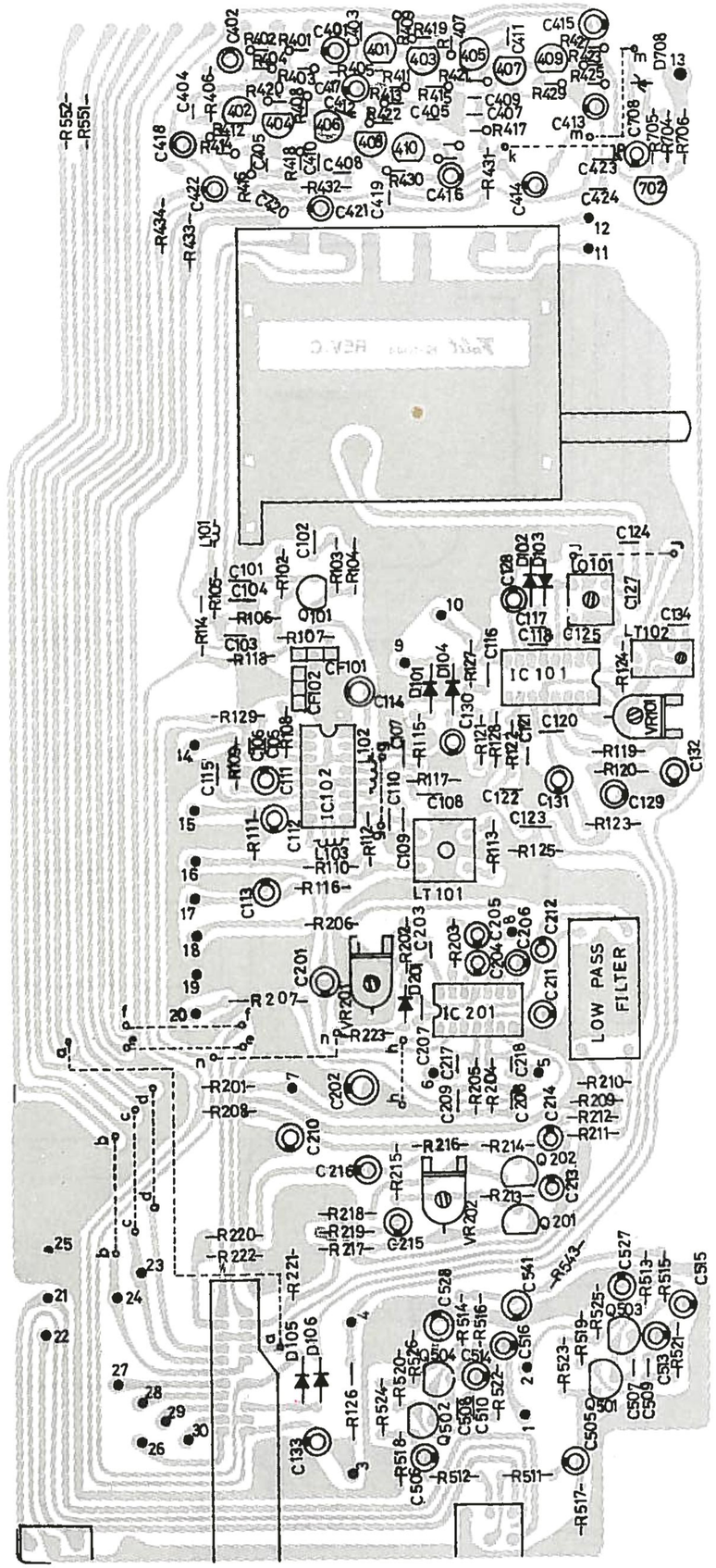


Fig. 3

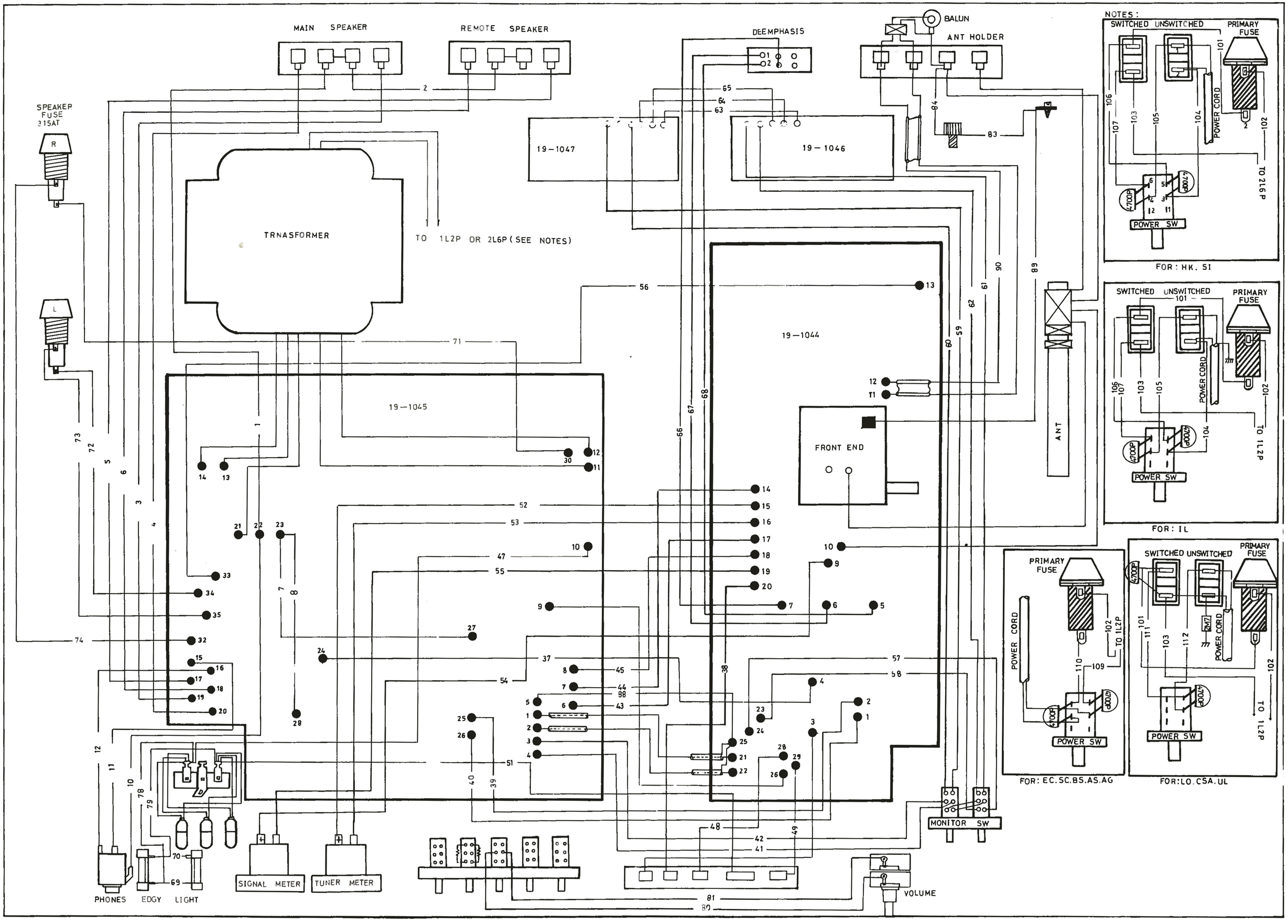
www.hifiengine.com

PCB PARTS LOCATION

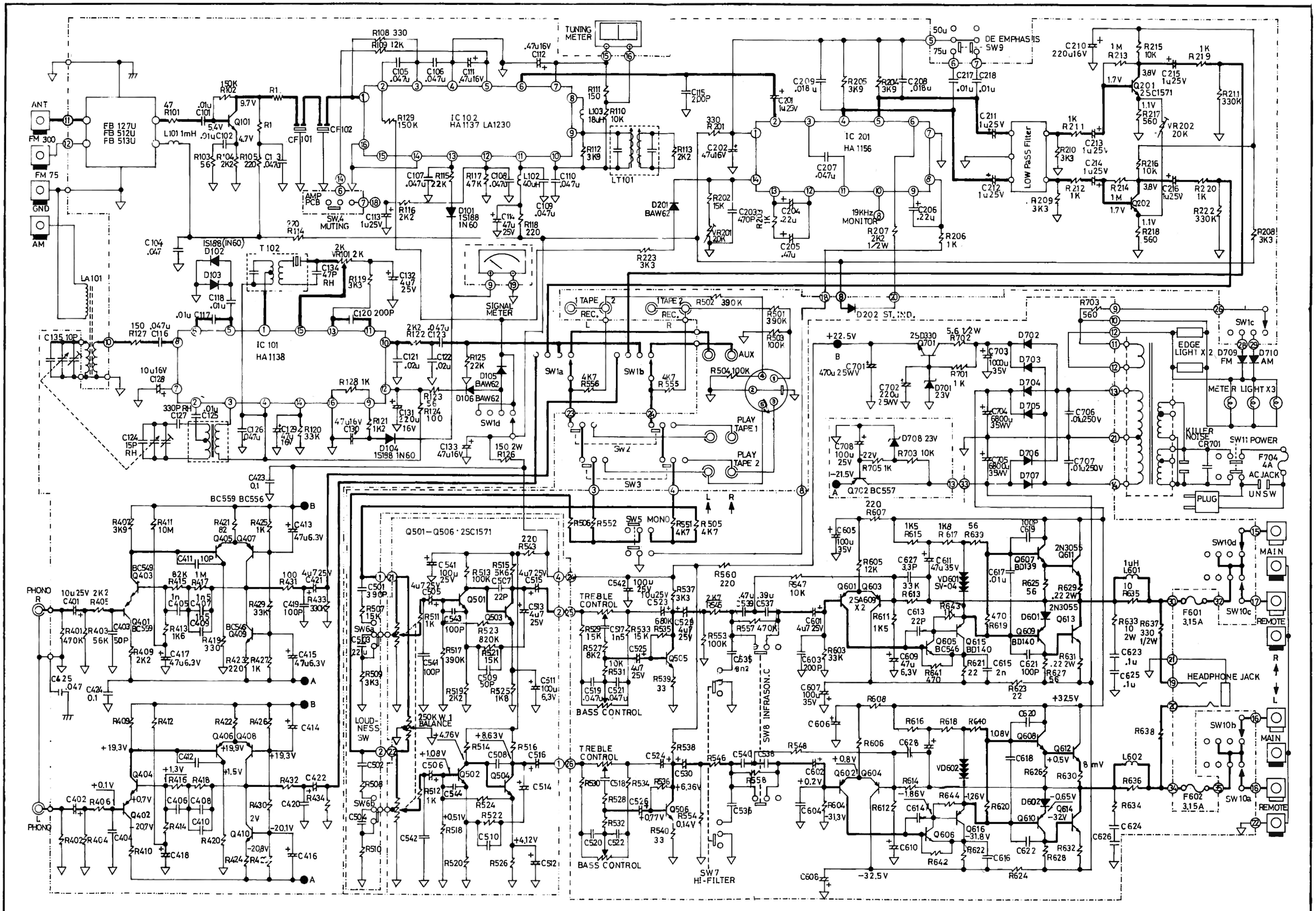




WIRING DIAGRAM



CIRCUIT DIAGRAM



PARTS LIST

ITEM	PARTS NO	DESCRIPTION	Q'TY	SYMBOL NO
90–1045				
1	16–2BR22K	CEMENT RES. 0.22 OHM ± 10% 2W	4	R629, 630, 631, 632
2	16–2A100J	METAL OXIDE RES. 10 OHM ± 5% 2W	2	R605, 606
3	16–½C5R6J	CARBON RES. 5.6 OHM ± 5% ½W	1	R702
4	16–¼CM100J	CARBON RES. 10 OHM ± 5% ¼W	2	R635, 636
5	16–¼CN470J	CARBON RES. 47 OHM ± 5% ¼W	2	R621, 622
6	16–¼CN560J	CARBON RES. 560 OHM ± 5% ¼W	6	R625, 626, 627, 628, 539, 540
7	16–¼CN101J	CARBON RES. 100 OHM ± 5% ¼W	2	R623, 624
8	16–¼CM221J	CARBON RES. 220 OHM ± 5% ¼W	2	R607, 608
9	16–½C331J	CARBON RES. 330 OHM ± 5% ¼W	2	R637, 638
10	16–¼CM471J	CARBON RES. 470 OHM ± 5% ¼W	2	R619, 620
11	16–¼CM561J	CARBON RES. 560 OHM ± 5% ¼W	1	R703
12	16–¼CM102J	CARBON RES. 1K OHM ± 5% ¼W	5	R601, 602, 609, 610, 701, R615, 616, 611, 612
13	16–¼CM152J	CARBON RES. 1.5K OHM ± 5% ¼W	4	
14	16–¼CM182J	CARBON RES. 1.8K OHM ± 5% ¼W	2	R617, 618
15	16–¼CM472J	CARBON RES. 4.7K OHM ± 5% ¼W	8	R505, 506, 551, 552. 545, 546, 537, 538
16	16–¼CM562J	CARBON RES. 5.6K OHM ± 5% ¼W	2	R509, 510
17	16–¼CM822J	CARBON RES. 8.2K OHM ± 5% ¼W	2	R527, 528
18	16–¼CM103J	CARBON RES. 10K OHM ± 5% ¼W	2	R531, 532
19	16–¼CM123J	CARBON RES. 12K OHM ± 5% ¼W	2	R605, 606
20	16–¼CM153J	CARBON RES. 15K OHM ± 5% ¼W	4	R529, 530, 533, 534
21	16–¼CM273J	CARBON RES. 27K OHM ± 5% ¼W	2	R547, 548
22	16–¼CM333J	CARBON RES. 33K OHM ± 5% ¼W	2	R613, 614
23	16–¼CM393J	CARBON RES. 39K OHM ± 5% ¼W	2	R603, 604
24	16–¼CM473J	CARBON RES. 47K OHM ± 5% ¼W	2	R507, 508
25	16–¼CM104J	CARBON RES. 100K OHM ± 5% ¼W	2	R553, 554
26	16–¼CM224J	CARBON RES. 220K OHM ± 5% ¼W	2	R539, 540
27	16–¼CM474J	CARBON RES. 470K OHM ± 5% ¼W	2	R557, 558
28	16–¼CU684J	CARBON RES. 680K OHM ± 5% ¼W	2	R535, 536
29	17–5D500K	CERAMIC CAPA. 50PF ± 10% 50V	2	C613, 614
30	17–5D101K	CERAMIC CAPA. 100PF ± 10% 50V	4	C619, 620, 621, 622
31	17–5D201K	CERAMIC CAPA. 200PF ± 10% 50V	4	C603, 604, 501, 502,
32	17–5D103M	CERAMIC CAPA. 0.01μF ± 20% 50V	2	C706, 707
33	17–5D104M	CERAMIC CAPA. 0.1μF ± 20% 50V	4	C623, 624, 625, 626
34	17–5F152J	MYLAR CAPA. 0.0015μF ± 5% 50V	2	C517, 518
35	17–5F822J	MYLAR CAPA. 0.0082μF ± 5% 50V	2	C535, 536
36	17–5F103M	MYLAR CAPA. 0.01μF ± 20% 50V	2	C617, 618
37	17–5F473K	MYLAR CAPA. 0.047μF ± 10% 50V	4	C519, 520, 521, 522
38	17–5F104K	MYLAR CAPA. 0.1μF ± 10% 50V	2	C503, 504
39	17–5F274K	MYLAR CAPA. 0.27μF ± 10% 50V	2	C537, 538
40	17–5F334K	MYLAR CAPA. 0.33μF ± 10% 50V	2	C539, 540
41	17–2.5E475Y	ELEC. CAPA. 4.7μF +50 –10% 25V	8	C523, 524, 525, 526, 529, 530, 601, 602
42	17–1.6E476Y	ELEC. CAPA. 47μF + 50 –10% 16V	2	C609, 610
43	17–3.5E476Y	ELEC. CAPA. 47μF +50 –10% 35V	2	C611, 612
44	17–0.63E107Y	ELEC. CAPA. 100μF +50 –10% 6.3V	2	C615, 616
45	17–3.5E107Y	ELEC. CAPA. 100μF +50 –10% 35V	4	C605, 606, 607, 608
46	17–2.5E477Y	ELEC. CAPA. 470μF +50 –10% 25V	2	C701, 702
47	17–3.5E108Y	ELEC. CAPA. 1000μF +50 –10% 35V	1	C703
48	17–3.5E688Y	ELEC. CAPA. 6800μF +50 –10% 35V	2	C704, 705
49	19–1045	P. C. B. (Main AMP)	1	PB–1
50	29–1040	INDUCTOR 0.6 x 6mm (ϕ) x 15T	2	L601, 602
51	29–4028	VOLUME CONTROL GM70E–50KB x 2	2	VR–501, VR–502
52	30–1002	DIODE IN4002	4	D702, 703, 601, 602
53	30–1016	ZENER DIODE 23V 500mW ± 10%	1	D701
54	30–1017–1	DIODE G3B HI–FI Special 100V	4	D704, 705, 706, 707
55	30–1024	VARISTOR SV–04	2	VD601, 602
56	30–2082	TRANSISTOR BD140	2	Q609, 610
57	30–2083	TRANSISTOR BD139	4	Q605, 606, 607, 608
58	30–2078	TRANSISTOR 2SD330	1	Q701
59	30–2081	TRANSISTOR 2SA608E	4	Q601, 602, 603, 604
60	30–2101	TRANSISTOR 2SC1571G	2	Q505, 506
62	30–2004R	TRANSISTOR 2N3055	4	Q611, 612, 613, 614
62	31–1024	SELECTOR SW SRZ VO–44N (12.5)	1	SW–1
63	31–1040	PUSH SW 5KEYS	1	SW–2
90–1044				
64	16–1A151J	METAL OXIDE RES. 150 OHM ± 5% 1W	1	R126
65	16–¼CM560J	CARBON RES. 56 OHM ± 5% ¼W	3	R103, 107, 123
66	16–¼CN820J	CARBON RES. 82 OHM ± 5% ¼W	2	R421, 422

www.hifiengine.com

ITEM	PARTS NO	DESCRIPTION	Q'TY	SYMBOL NO
67	16–¼CM101J	CARBON RES. 100 OHM ± 5% ¼W	4	R431, 432, 124, 706
68	16–¼CM151J	CARBON RES. 150 OHM ± 5% ¼W	2	R127, 111
69	16–¼CN221J	CARBON RES. 220 OHM ± 5% ¼W	6	R423, 424, 543, 105, 114, 118
70	16–¼CN331J	CARBON RES. 300 OHM ± 5% ¼W	4	R108, 201, 419, 420
71	16–¼CM471J	CARBON RES. 470 OHM ± 5% ¼W	1	R106
72	16–¼CM561J	CARBON RES. 560 OHM ± 5% ¼W	2	R217, 218
73	16–¼CM102J	CARBON RES. 1K OHM ± 5% ¼W	10	R511, 512, 128, 206, 705, 220, 219, 211, 212, 203
74	16–¼CU102J	CARBON RES. 1K OHM ± 5% ¼W	4	R425, 426, 427, 428
75	16–¼CM122J	CARBON RES. 1.2K OHM ± 5% ¼W	1	R121
76	16–¼CU162J	CARBON RES. 1.6K OHM ± 5% ¼W	2	R413, 414
77	16–¼CM182J	CARBON RES. 1.8K OHM ± 5% ¼W	2	R525, 526
78	16–½C222J	CARBON RES. 2.2K OHM ± 5% ½W	1	R207
79	16–¼CM222J	CARBON RES. 2.2K OHM ± 5% ¼W	9	R519, 520, 405, 406, 410, 104, 116, 113, 122
80	16–¼CU222J	CARBON RES. 2.2K OHM ± 5% ¼W	1	R409
81	16–¼CM332J	CARBON RES. 3.3K OHM ± 5% ¼W	5	R119, 223, 208, 209, 210
82	16–¼CM392J	CARBON RES. 3.9K OHM ± 5% ¼W	3	R112, 204, 205
83	16–¼CU392J	CARBON RES. 3.9K OHM ± 5% ¼W	2	R407, 408
84	16–¼CM472J	CARBON RES. 4.7K OHM ± 5% ¼W	2	R551, 552
85	16–¼CM562J	CARBON RES. 5.6K OHM ± 5% ¼W	2	R515, 516
86	16–¼CM103J	CARBON RES. 10K OHM ± 5% ¼W	4	R704, 110, 215, 216
87	16–¼CM123J	CARBON RES. 12K OHM ± 5% ¼W	1	R109
88	16–¼CM153J	CARBON RES. 15K OHM ± 5% ¼W	3	R521, 522, 202
89	16–¼CM223J	CARBON RES. 22K OHM ± 5% ¼W	2	R115, 125
90	16–¼CU333J	CARBON RES. 33K OHM ± 5% ¼W	2	R429, 430
91	16–¼CM333J	CARBON RES. 33K OHM ± 5% ¼W	1	R120
92	16–¼CM473J	CARBON RES. 47K OHM ± 5% ¼W	1	R117
93	16–¼CU563J	CARBON RES. 56K OHM ± 5% ¼W	2	R403, 404
94	16–¼CU823J	CARBON RES. 82K OHM ± 5% ¼W	2	R415, 416
95	16–¼CM104J	CARBON RES. 100K OHM ± 5% ¼W	2	R513, 514
96	16–¼CM154J	CARBON RES. 150K OHM ± 5% ¼W	2	R129, 102
97	16–¼CM334J	CARBON RES. 330K OHM ± 5% ¼W	2	R221, 222
98	16–¼CU334J	CARBON RES. 330K OHM ± 5% ¼W	2	R433, 434
99	16–¼CM394J	CARBON RES. 390K OHM ± 5% ¼W	2	R517, 518
100	16–¼CU474J	CARBON RES. 470K OHM ± 5% ¼W	2	R401, 402
101	16–¼CM824J	CARBON RES. 820K OHM ± 5% ¼W	2	R523, 524
102	16–¼CM105J	CARBON RES. 1M OHM ± 5% ¼W	2	R213, 214
103	16–¼CU105J	CARBON RES. 1M OHM ± 5% ¼W	2	R417, 418
104	16–¼CU106K	CARBON RES. 10M OHM ± 5% ¼W	2	R411, 412
105	17–5D100K	CERAMIC CAPA. 10PF ± 10% 50V	2	C411, 412
106	17–5D220K	CERAMIC CAPA. 22PF ± 10% 50V	2	C507, 508
107	17–5D500K	CERAMIC CAPA. 50PF ± 10% 50V	4	C509, 510, 403, 404
108	17–5D101K	CERAMIC CAPA. 100PF ± 10% 50V	2	C419, 420
109	17–5D103M	CERAMIC CAPA. 0.01μF ± 20% 50V	5	C102, 117, 118, 125, 101
110	17–5D203M	CERAMIC CAPA. 0.02μF ± 20% 50V	2	C121, 122
111	17–5D473M	CERAMIC CAPA. 0.047μF ± 20% 50V	12	C116, 123, 108, 107, 109, 110, 105, 106, 103, 104, 126, 425
112	17–5D104M	CERAMIC CAPA. 0.1μF ± 20% 50V	2	C423, 424
113	17–5F102J	MYLAR CAPA. 0.001μF ± 5% 50V	2	C405, 406
114	17–5F152J	MYLAR CAPA. 0.0015μF ± 5% 50V	4	C407, 408, 409, 410
115	17–5F103J	MYLAR CAPA. 0.01μF ± 5% 50V	2	C217, 218
116	17–5F183J	MYLAR CAPA. 0.018μF ±5% 50V	2	C208, 209
117	17–5F473K	MYLAR CAPA. 0.047μF ± 5% 50V	1	C207
118	17–1.6E474Y	ELEC. CAPA. 0.47μF +50 –10% 16V	2	C111, 112
119	17–2.5E105Y	ELEC. CAPA. 1μF +50 –10% 25V	5	C113, C213, C214, C215, C216
120	17–2.5E475Y	ELEC. CAPA. 4.7μF +50 –10% 25V	10	C421, 422, 201, 505, 506, 515, 516, 132, 513, 514
121	17–1.6E106Y	ELEC. CAPA. 10μF +50 –10% 16V	1	C128
122	17–2.5E106Y	ELEC. CAPA. 10μF +50 –10% 25V	2	C401, 402
123	17–0.63E476Y	ELEC. CAPA. 47μF +50 –10% 6.3V	6	C417, 418, 413, 414, 415, 416
124	17–1.6E476Y	ELEC. CAPA. 47μF +50 –10% 16V	3	C114, 129, 130
125	17–0.63E107Y	ELEC. CAPA. 100μF +50 –10% 6.3V	2	C511, 512
126	17–2.5E107Y	ELEC. CAPA. 100μF +50 –10% 25V	2	C541, 708
127	17–1.6E227Y	ELEC. CAPA. 220μF +50 –10% 16V	2	C131, 210
128	17–1.6E108Y	ELEC. CAPA. 1000μF +50 –10% 16V	1	C202
129	17–1.6O224M	TANTALUM CAPA. 0.22μF ± 20% 16V	2	C204, 205
130	17–1.60 474M	TANTALUM CAPA. 0.47μF ± 20% 16V	1	C206
131	17–5U471J	STYROLENE CAPA. 470μF ± 5% 50V	1	C203
132	17–5V100K	CERAMIC CAPA. 10PF ± 10% 50V (RH)	1	C124
133	17–5V470K	CERAMIC CAPA. 47PF ± 10% 50V (RH)	1	C134
134	17–5W201K	CERAMIC CAPA. 200PF ± 10% 50V (SL)	2	C115, 120
135	17–5W100K	CERAMIC CAPA. 10PF ± 10% 50V (SL)	1	C135
136	17–5M331J	SILVER MICA CAPA. 330PF ± 5% 50V	1	C127

www.hifiengine.com

TEM	PARTS NO	DESCRIPTION	Q'TY	SYMBOL NO
37	19–1044	P. C. B. (RF)	1	PB–2
38	29–1037	INDUCTOR 1mH ± 10%	1	L101
39	29–1038	INDUCTOR 40μH ± 10%	1	L102
40	29–1039	INDUCTOR 18μH ± 10%	1	L103
41	29–3027	CERAMIC FILTER SFE 10.7MA8	2	CF101, 102
42	29–3008T	FM DET COIL 10.7MHZ HL–139	1	LT101
43	29–3016–1	L. P. F.	1	LPF–1
44	29–3017	CERAMIC FILTER SFL 455A	1	LT102
45	29–3018	AM OSC. L–39	1	LO101
46	29–4021–1	SEMI–FIXED RES. TR14R 2K OHM	1	VR101
47	29–4023–1	SEMI–FIXED RES. TR14R 20K OHM	2	VR201, 202
48	29–4032	VOLUME CONTROL GM80E–100KB x 2	1	VR–503
49	29–4045	VOLUME CONTROL VM10E–250KW	1	VR–504
50	30–1016	ZENER DIODE 23V 500mW ± 10%	1	D708
51	30–1010	DIODE 1N60	4	D101, 102, 103, 104
52	30–1019	DIODE BAW62	3	D105, 106, 201
53	30–2019	TRANSISTOR 2SC930C	1	Q101
54	30–2090–2	TRANSISTOR BC546B	2	Q409, 410
55	30–2096	TRANSISTOR BC556A	2	Q407, 408, 702
56	30–2084–3	TRANSISTOR BC549C	2	Q403, 404
57	30–2085–2	TRANSISTOR BC559B	4	Q401, 402, 405, 406,
58	30–2101	TRANSISTOR 2SC1571G	6	Q201, 202, 501, 502, 503, 504
59	30–3015	I. C. HA –1156	1	IC201
60	30–3017	I. C. HA–1137	1	IC102
61	30–3018	I. C. HA–1138	1	IC101
62	31–1024	SELECTOR SW. SRZ–VO–44N (12.5)	1	SW–3
63	35–2010	TUNER FROUD END FB–127U	1	FE–1
Others				
64	19–1047	P. C. B. for DIN IN/OUT	1	PB–3
65	16–¼CM104J	CARBON RES. 100K OHM ± 5% ¼W	2	R503, 504
66	16–¼CM394J	CARBON RES. 390K OHM ± 5% ¼W	2	R501, 502
67	12–2021	SOCKET ASSEMBLY	1	SO–1
68	19–1046	P. C. B.	1	PB–4
69	12–2022	SOCKET ASSEMBLY	1	SO–2
70	19–1063	L. E. D. P. C. B.	1	PB–5
71	30–1026	L. E. D. 3φ Yellow	2	LED–1
72	30–1027	L. E. D. 3φ Green	1	LED–2
73	12–2007	SPEAKER TERMINAL	2	T–1, T–2
74	12–2008	PHONE JACK (WIRE TYPE)	1	J–1
75	12–2012	ANT TERMINAL	1	T–3
76	12–2015	DIN TERMINAL	1	T–4
77	31–1002	SWITCH 6P	1	SW–4
78	31–1025T	PUSH SWITCH 2KEYS	1	SW–5
79	31–2008	LAMP 6V 150mA	3	LP701, 702, 703
80	31–2014	LAMP FUSE TYPE 6V 250mA	2	LP704, 705
81	35–1011	TUNING METER	1	M–1
82	35–1012	SIGNAL METER	1	M–2
83	18–1016–1	BALUN	1	B–1
84	12–1029	CONNECTOR W/NUT	1	For EC, SC, IL, UK, AS, AG
85	12–1032	CONNECTOR W/NUT	1	For UL, SI, HK, CSA
86	12–2006	A. C. OUTLET	2	For IL, UL, SI, HK, CSA
87	17–2001	CERAMIC CAPA. ECK–DHS472MD	1	For EC, SC, IL, SI' HK, AG
88	17–2003	CERAMIC CAPA. ECK–DEL472ZE	1	For UL, CSA
89	17–2004	CERAMIC CAPA. ECK–DGS472MD4	1	For UK, AS
90	29–2021	Transformer (M. V.)	1	For SI, HK
91	29–2021–1	TRANSFORMER (117V)	1	For UL
92	29–2021–2	TRANSFORMER (240V)	1	For UK, AS
93	29–2021–3	TRANSFORMER (220V)	1	For EC, SC, IL, AG
94	29–2021–4	TRANSFORMER (117V) With Thermal Fuse	1	For CSA
95	31–1072A	POWER SWITCH SDU3P TV–5	1	For UL, CSA
96	31–1073A	POWER SWITCH SDU3P 5A/80A	1	For EC, SC, IL, UK, AS, SI, HK, AG
97	32–2001	FUSE HOLDER	3	For UL, SI, HK
98	32–2003	FUSE HOLDER	3	For EC, SC, IL, UK, AS, AG
99	32–2005	FUSE HOLDER	3	For CSA
200	32–13151SS	FUSE 3.15At SEMKO	4	For EC, SC, IL, UK, AS, AG
201	32–11001SS	FUSE 1At SEMCO	2	For SC
202	32–12001SS	FUSE 2At SEMCO	2	For EC, IL, UK, AS, AG
203	32–13001UT	FUSE 3A UL	4	For UL, CSA, SI, HK
204	32–12001UT	FUSE 2A UL	2	For SI, HK
205	32–14001UT	FUSE 4A UL	2	For UL, CSA

www.hifiengine.com