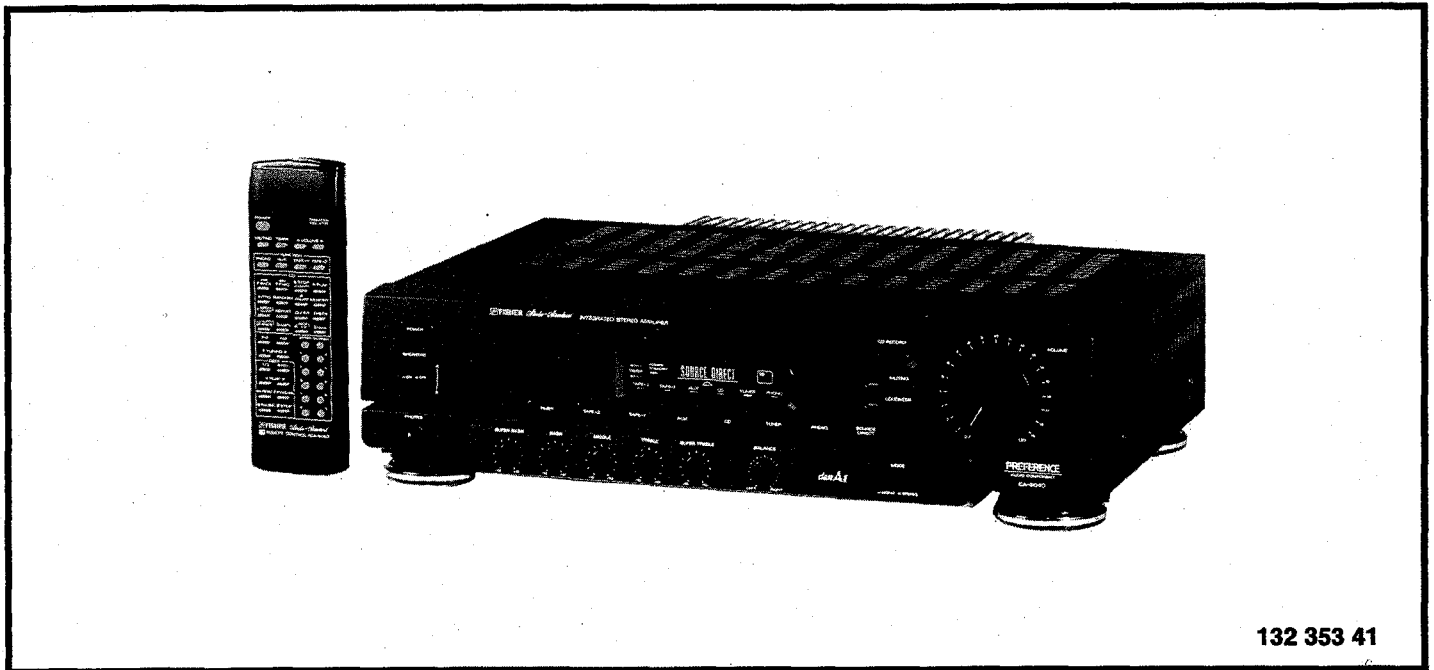


SERVICE MANUAL

**INTEGRATED STEREO
AMPLIFIER WITH RCA-9040
WIRELESS REMOTE CONTROL**

CA-9040

(EUROPE)



132 353 41

SPECIFICATIONS

RCA-9040
Wireless Remote Control 49 Functions

POWER AMPLIFIER SECTION

Minimum RMS sine wave power per channel
within the stated bandwidth at no more than the stated
distortion and with an 8-ohm load DIN 80 Watts
Power Bandwidth 40 Hz - 12.5 kHz
Total Harmonic Distortion 0.05 %
I.M. Distortion 0.05 %
Speaker Damping > 30

PREAMPLIFIER SECTION

Frequency Response
Phono (RIAA) ± 1 dB
AUX (20 Hz - 20 kHz) ± 1 dB
Input Sensitivity and Impedance
Phono 2.5 mV/50 k Ω
Tape Monitor 1,2 150 mV/50 k Ω
Tuner/AUX/CD 150 mV/50 k Ω

Phono Maximum Input Capability 160 mV
Tone Control
Super Bass ± 10 dB
Bass ± 10 dB
Middle ± 10 dB
Treble ± 10 dB
Super Treble ± 10 dB
Loudness Contour (100 Hz/10 kHz) + 8 dB/+ 4 dB
Hum and Noise (IHF Short Circuit, A Network)
Phono 70 dB
Tape Monitor 1,2 90 dB
Tuner/AUX/CD 90 dB
Source Direct (AUX) 95 dB

GENERAL

Power Requirements AC 220 V
(50 Hz) 400 W
AC Outlets (Switched) 2
Dimensions (WxHxD) 440" x 112" x 335"
Weight (Approximate) 7.8 kg

— Specifications and design are subject to change without notice. —

POWER AMPLIFIER ADJUSTMENT

BEFORE ADJUSTMENT

Unplug the AC power cord and set the front panel controls as follows:

- Power switch to OFF position.
- Set the SPEAKERS switch to the OFF position.
- Turn the MASTER VOLUME Control to minimum.
- IDLING CURRENT ADJUSTMENT VR401/VR402 (on the Main P.C.Board) setting to mechanical center position.
- Connect the AC power cord and Power switch to the ON position.

IDLING CURRENT ADJUSTMENT

This adjustment is very sensitive to changes in ambient temperature. Allow set to operate for 2 minutes before attempting this alignment.

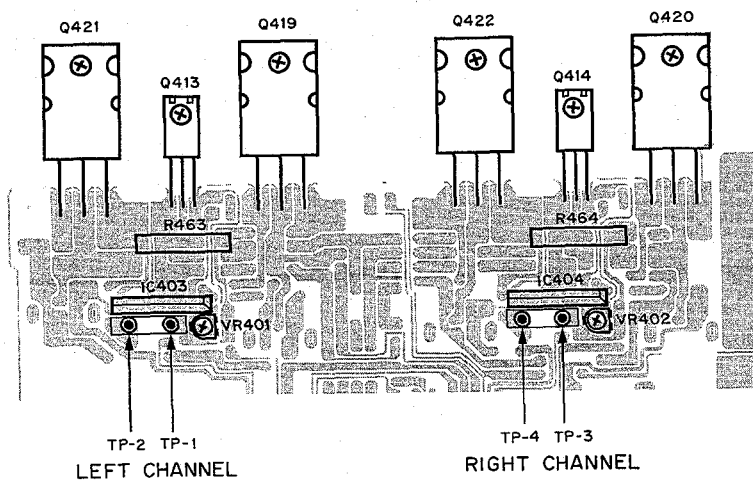
LEFT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between Test Pins TP-2 and TP-1 on the Main P.C.Board.
2. Adjust the VR401 for an indication of $5\text{mV} \pm 0.5\text{mV}$ on the DC Voltmeter.

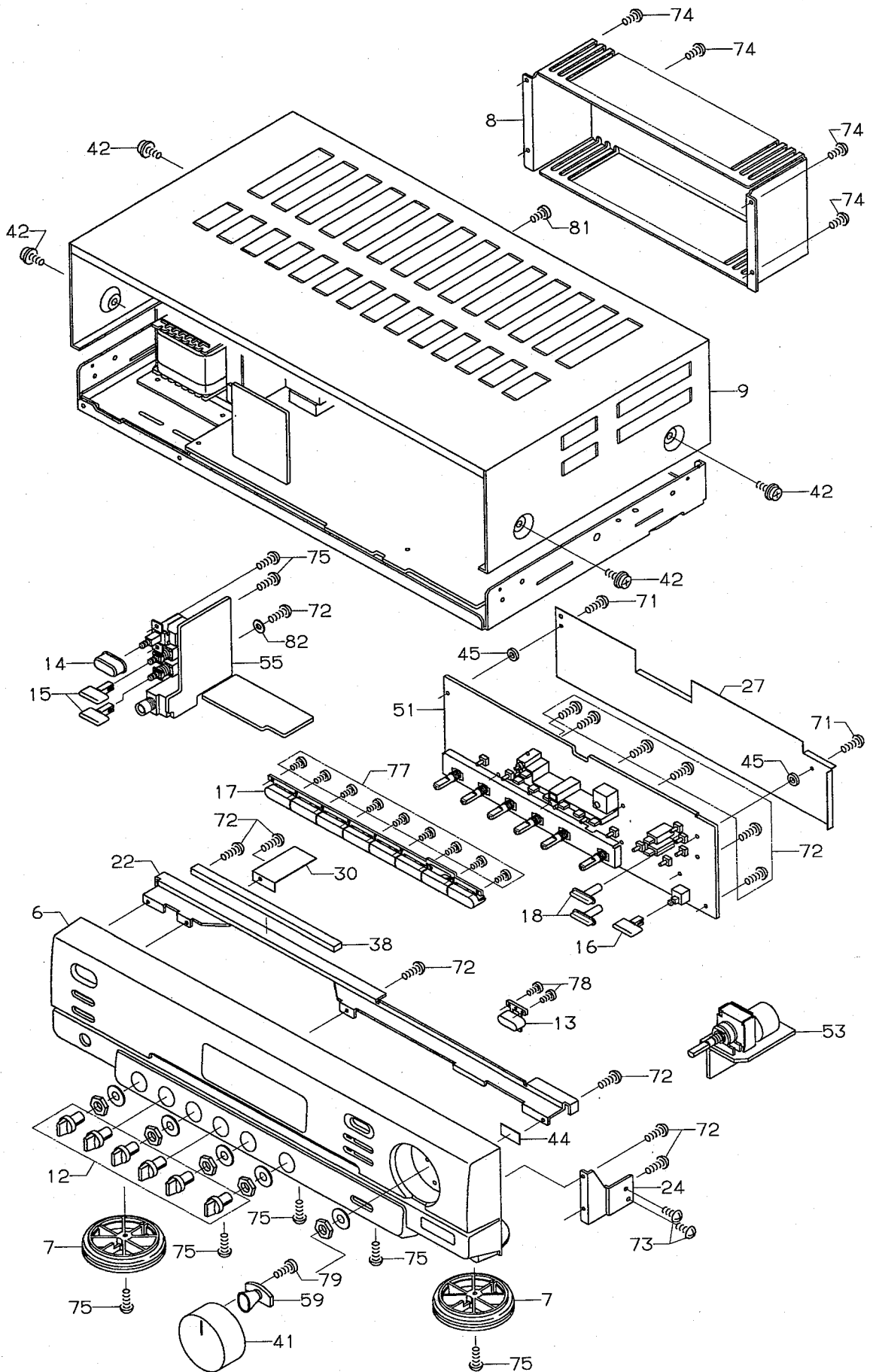
RIGHT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between Test Pins TP-4 and TP-3 on the Main P.C.Board.
2. Adjust the VR402 for an indication of $5\text{mV} \pm 0.5\text{mV}$ on the DC Voltmeter.

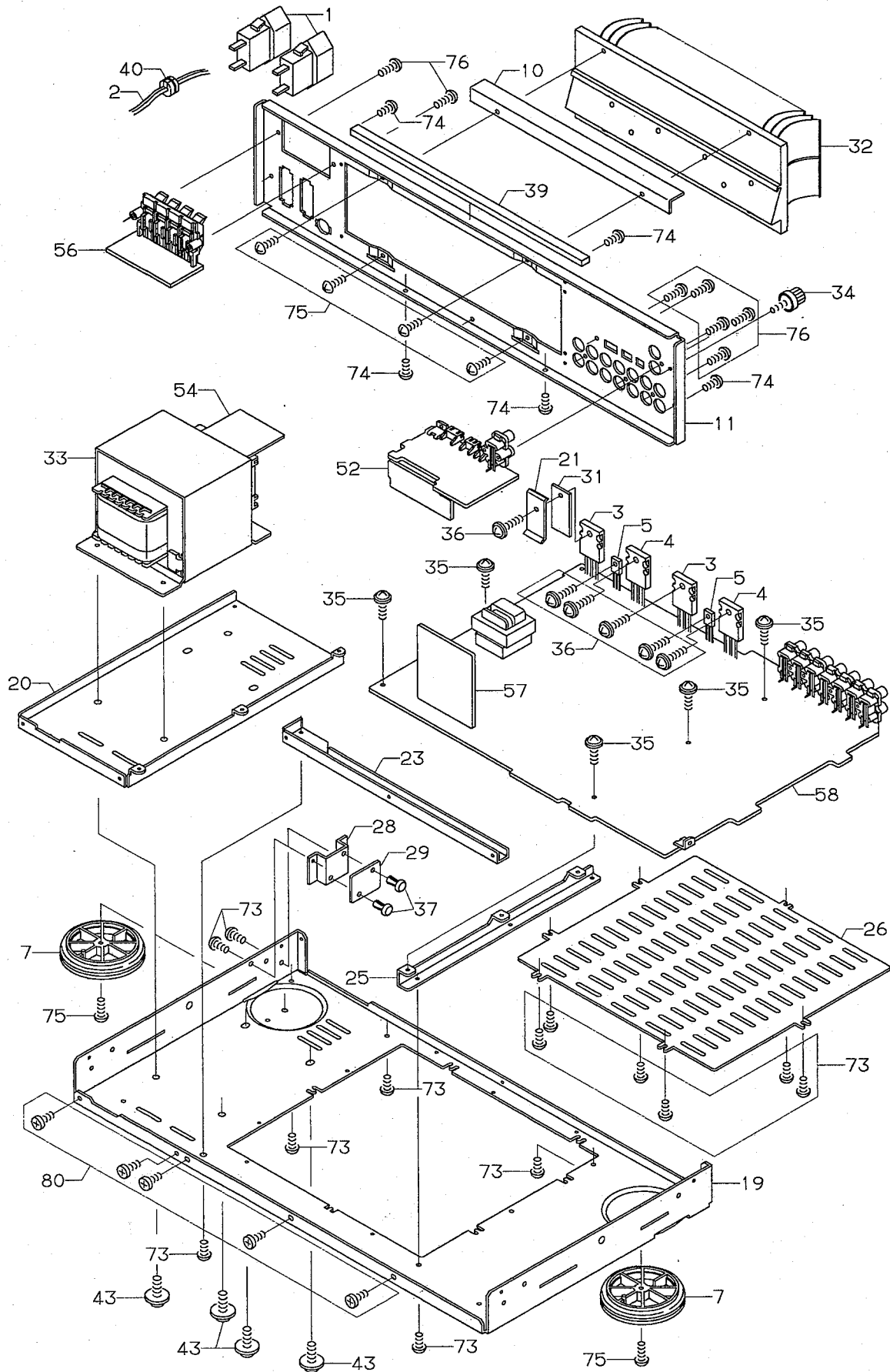
ADJUSTMENT POINTS



CABINET & CHASSIS EXPLODED VIEW (1)



CABINET & CHASSIS EXPLODED VIEW (2)



CABINET & CHASSIS PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
PACKAGE				54	620 208 9355	Assy,PCB,Fuse	1
	620 210 1293	Inner Carton	1	55	620 208 9362	Assy,PCB,Power Switch	1
	620 210 0050	Pad,Left	1	56	620 208 9386	Assy,PCB,Speaker Terminal	1
	620 210 0067	Pad,Right	1	57	620 205 3066	Assy,PCB,U-CON Connect	1
	620 210 0166	Pad	1	58	620 208 9393	Assy,PCB,Main Amplifier	1
	620 059 6596	Patching Sheet	1	59	620 205 3097	Assy,PCB,Volume IND.	1
	620 148 8012	Sheet Polyethylene	1				
	620 152 7452	Serial No. Sheet	2	71	411 020 5201	SCR S-TPG BRZ 2.6X10	2
ACCESSORIES				72	411 020 5706	SCR S-TPG BRZ 2.6X8	13
	620 209 1778	Assy,Poly Cover	1	73	411 020 7700	SCR S-TPG BRZ 3X6	15
	620 209 1792	Instruction Manual	1	74	411 099 9704	SCR S-TPG BRZ 3X6	9
	620 057 8783	Bag Fan	1	75	411 020 8004	SCR S-TPG BRZ 3X8	13
	620 062 0543	Serial No. Sheet	1	76	411 099 9803	SCR S-TPG BRZ 3X8	7
	620 152 2624	Certificate Card	1	77	411 021 0601	SCR S-TPG BIN 2X5	9
	620 209 1785	Remocon,RCA-9040	1	78	411 021 0809	SCR S-TPG BIN 2X6	2
	620 209 1594	Label,Barcode	1	79	411 021 3107	SCR S-TPG BIN 2.6X8	1
				80	411 021 5705	SCR S-TPG BIN 3X6	5
CABINET				81	411 021 5903	SCR S-TPG BIN 3X6	1
	620 125 8424	Wire Band	13	82	412 038 0707	SPECIAL WASHER	1
	620 152 7452	Serial No. Sheet	1				
1	△ 620 017 1212	AC Socket	2	NOTES:			
2	△ 620 023 7550	Power Cord	1	1.	Parts order must contain Model Number, Part Number and Description.		
3	405 003 3902	TR 2SA1301-O [Q421]	1	2.	Ordering quantity of screws and resistors must be multiple of 10 pcs.		
or	405 031 2106	TR 2SA1301-R [Q421]	1				
3	405 003 3902	TR 2SA1301-O [Q422]	1				
or	405 031 2106	TR 2SA1301-R [Q422]	1				
4	405 017 7705	TR 2SC3280-O [Q419]	1				
or	405 033 3309	TR 2SC3280-R [Q419]	1				
4	405 017 7705	TR 2SC3280-O [Q420]	1				
or	405 033 3309	TR 2SC3280-R [Q420]	1				
5	405 022 8209	TR 2SD1682-T [Q413]	1				
or	405 022 8001	TR 2SD1682-S [Q413]	1				
5	405 022 8209	TR 2SD1682-T [Q414]	1				
or	405 022 8001	TR 2SD1682-S [Q414]	1				
6	620 209 0009	Assy,Cabinet	1				
7	620 198 6969	Assy,Foot	4				
8	620 208 9775	Cover,Heat Sink	1				
9	620 207 6614	Cover,Top	1				
10	620 210 1187	Cover	1				
11	620 208 9829	Panel,Rear	1				
12	620 204 7270	Knob,Rotary	6				
13	620 204 7317	Knob,Touch (CD Record)	1				
14	620 198 0622	Button,Power	1				
15	620 198 0752	Button,Push (Speakers)	2				
16	620 204 7294	Button,Push (Mode)	1				
17	620 209 0412	Button,Function	1				
18	620 199 4025	Button (Muting Loudness)	2				
19	620 204 7348	Chassis	1				
20	620 204 7355	Chassis,SUB	1				
21	620 210 1620	Bracket-E,TR	1				
22	620 203 6526	Bracket-M	1				
23	620 207 5839	Bracket-M,Chassis	1				
24	620 208 7306	Bracket-M	1				
25	620 204 5764	Mount-M,Chassis	1				
26	620 204 7331	Plate,Bottom	1				
27	620 207 6263	Insulator	1				
28	620 208 9805	Insulator	1				
29	620 208 9812	Insulator	1				
30	620 209 8869	Insulator	1				
31	620 210 1651	Insulator,TR	1				
32	620 208 9799	Heat Sink	1				
33	△ 620 208 8099	Power Trans,SEV,160VA	1				
34	620 051 2152	Screw Ground	1				
35	620 051 3708	Screw Braz. HD. + M3X8	5				
36	620 051 3739	Screw 3.0X12 Z SMS	6				
37	620 191 2746	Rivet 3.5	2				
38	620 052 6142	Cushion	1				
39	620 052 6159	Cushion	1				
40	620 053 2136	Bushing (Power Cord)	1				
41	620 186 6711	Knob Volume Assy	1				
42	620 123 0284	SCR TPG BIN + M4.0X8	4				
43	620 123 0833	SCR Bind TAP-B + M4X10	4				
44	620 123 7658	Sheet	1				
45	620 125 4990	Washer,M3.0X8.0X2.0	2				
51	620 205 2991	Assy,PCB,U-CON	1				
52	620 208 9348	Assy,PCB,Input	1				
53	620 205 3011	Assy,PCB,Motor Volume	1				

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
ASSY,PCB,U-CON							
51	620 205 2991	Assy,PCB,U-CON	1	D723	407 125 8209	DIODE HSS271	1
	411 022 8408	SCR S-TPG PAN 2X8	2	or	407 012 4208	DIODE 1SS131-T-77	1
	620 204 7324	Shield,Cover	1	or	407 008 0405	DIODE GMB01-BT	1
	620 204 7362	Spacer,LED	1	D724	407 005 3805	DIODE DS442-BT	1
	620 052 0195	Spacer	2	D725	407 125 8209	DIODE HSS271	1
CN701	620 200 1548	Connector-S,9P	1	or	407 012 4208	DIODE 1SS131-T-77	1
CN702	620 205 5435	Connector-S,6P	1	or	407 008 0405	DIODE GMB01-BT	1
CN703	620 205 5435	Connector-S,6P	1	D726	407 125 8209	DIODE HSS271	1
CN704	620 205 5862	Connector-S,6P,52170	1	or	407 012 4208	DIODE 1SS131-T-77	1
CN705	620 205 5879	Connector-S,7P,52170	1	or	407 008 0405	DIODE GMB01-BT	1
CN706	620 205 5879	Connector-S,7P,52170	1	D727	407 028 9105	LED SLP-173B-50	1
CR701	620 202 2062	Resonator,Ceram,4.19MHz	1	D728	407 005 3805	DIODE DS442-BT	1
RA701	620 004 5186	Resistor 9X10K J	1	C701	403 001 1906	CERAMIC 0.01U M 16V	1
RA702	620 004 5513	Resistor 7X10K	1	C702	404 039 4402	ELECT 100U M 10V	1
RC701	620 200 0909	Converter,Remote,DET	1	C703	403 069 1504	CERAMIC 1000P K 50V	1
SW701	620 016 7796	Tact Switch (PHONO)	1	C705	403 001 1906	CERAMIC 0.01U M 16V	1
SW702	620 016 7796	Tact Switch (TUNER)	1	C706	403 057 2100	POLYESTER 0.1U J 50V	1
SW703	620 016 7796	Tact Switch (CD)	1	or	403 057 3503	POLYESTER 0.1U K 50V	1
SW704	620 016 7796	Tact Switch (AUX)	1	C707	403 049 1708	ELECT 1U M 50V	1
SW705	620 016 7796	Tact Switch (TAPE-1)	1	C708	403 049 1708	ELECT 1U M 50V	1
SW706	620 016 7796	Tact Switch (TAPE-2)	1	C709	404 039 4303	ELECT 2200U M 10V	1
SW707	620 016 7796	Tact Switch (MUTE)	1	C710	403 073 7004	CERAMIC 470P K 50V	1
SW708	620 016 7796	Tact Switch (L.C)	1	C711	403 038 7209	ELECT 220U M 6.3V	1
SW709	620 016 7796	Tact Switch (C.R)	1	C714	403 038 2402	ELECT 100U M 6.3V	1
SW710	620 016 7796	Tact Switch (TIMER)	1	R701	401 020 0801	CARBON 470 JA 1/4W	1
SW711	620 016 7796	Tact Switch (S.D)	1	R702	401 027 5007	CARBON 68 JA 1/6W	1
SW712	620 016 6904	Push Switch 1 Key (MODE)	1	R703	401 016 2604	CARBON 220 JA 1/4W	1
VR701	620 206 8466	VR,Rotary,2X250KSW,L=17.5	1	R704	401 016 2604	CARBON 220 JA 1/4W	1
VR702	620 206 8466	VR,Rotary,2X250KSW,L=17.5	1	R705	401 024 7004	CARBON 1K JA 1/6W	1
VR703	620 206 8466	VR,Rotary,2X250KSW,L=17.5	1	R706	401 024 7004	CARBON 1K JA 1/6W	1
VR704	620 206 8466	VR,Rotary,2X250KSW,L=17.5	1	R707	401 026 3905	CARBON 330 JA 1/6W	1
VR705	620 206 8466	VR,Rotary,2X250KSW,L=17.5	1	R708	401 026 9600	CARBON 470 JA 1/6W	1
VR706	620 206 8473	VR,Rotary,200KW,L=17.5	1	R709	401 012 7009	CARBON 10K JA 1/4W	1
W701	620 020 5887	Connector 1P Assy	1	R710	401 012 7009	CARBON 10K JA 1/4W	1
IC701	410 096 0905	IC TMP47C670N-1214	1	R711	401 012 8105	CARBON 100K JA 1/4W	1
Q701	405 019 3804	TR 2SC536-G-NP-AA	1	R712	401 012 8105	CARBON 100K JA 1/4W	1
or	405 019 2708	TR 2SC536-F-NP-AA	1	R713	401 024 7400	CARBON 10K JA 1/6W	1
Q702	405 018 2501	TR 2SC3399-AC	1	R714	401 027 0309	CARBON 47K JA 1/6W	1
or	405 035 0801	TR DTC144-ES-TP	1	R715	401 027 5908	CARBON 68K JA 1/6W	1
Q703	405 019 3804	TR 2SC536-G-NP-AA	1	R716	401 027 5908	CARBON 68K JA 1/6W	1
or	405 019 2708	TR 2SC536-F-NP-AA	1	R717	401 027 0309	CARBON 47K JA 1/6W	1
Q704	405 018 2501	TR 2SC3399-AC	1	R718	401 024 7707	CARBON 100K JA 1/6W	1
or	405 035 0801	TR DTC144-ES-TP	1	R719	401 027 0507	CARBON 470K JA 1/6W	1
Q705	405 018 2600	TR 2SC3400-AC	1	R720	401 024 7004	CARBON 1K JA 1/6W	1
or	405 034 9706	TR DTC124-ES-TP	1	R721	401 027 0309	CARBON 47K JA 1/6W	1
Q706	405 018 2600	TR 2SC3400-AC	1	R722	401 026 4308	CARBON 3.3K JA 1/6W	1
or	405 034 9706	TR DTC124-ES-TP	1	R723	401 025 7805	CARBON 2.2K JA 1/6W	1
Q707	405 003 7603	TR 2SA1345-AC	1	R724	401 025 0608	CARBON 1.3K JA 1/6W	1
or	405 068 4609	TR DTA144-ES-TP	1	R725	401 026 9600	CARBON 470 JA 1/6W	1
Q708	405 003 7603	TR 2SA1345-AC	1	R726	401 027 0309	CARBON 47K JA 1/6W	1
or	405 068 4609	TR DTA144-ES-TP	1	R727	401 020 0801	CARBON 470 JA 1/4W	1
Q709	405 019 3804	TR 2SC536-G-NP-AA	1	R728	401 020 0801	CARBON 470 JA 1/4W	1
or	405 019 2708	TR 2SC536-F-NP-AA	1	R731	401 024 7707	CARBON 100K JA 1/6W	1
Q710	405 019 3804	TR 2SC536-G-NP-AA	1	ASSY,PCB,INPUT			
or	405 019 2708	TR 2SC536-F-NP-AA	1	52	620 208 9348	Assy,PCB,Input	1
Q711	405 019 3804	TR 2SC536-G-NP-AA	1		620 201 6146	Jack,RCA PIN,2P,WH/RE	1
or	405 019 2708	TR 2SC536-F-NP-AA	1		620 050 2450	Metal Mount Antenna	1
Q712	405 004 4502	TR 2SA608-F-NP-AA	1	CN101	620 017 5067	Socket 13P	1
or	405 004 3901	TR 2SA608-E-NP-AA	1	CN102	620 021 6548	Plug 2P	1
Q713	405 004 4502	TR 2SA608-F-NP-AA	1	CN103	620 021 6524	Plug 3P	1
or	405 004 3901	TR 2SA608-E-NP-AA	1	CN104	620 021 6555	Plug 4P	1
Q714	405 019 3804	TR 2SC536-G-NP-AA	1	IC101	409 057 4403	IC UPC4570C	1
or	405 019 2708	TR 2SC536-F-NP-AA	1	D101	407 005 3805	DIODE DS442-BT	1
D701	407 028 9105	LED SLP-173B-50	1	D102	407 005 3805	DIODE DS442-BT	1
D702	407 031 5705	LED SLP-273B-50	1	C101	403 071 6207	CERAMIC 220P K 50V	1
D703	407 031 5705	LED SLP-273B-50	1	C102	403 071 6207	CERAMIC 220P K 50V	1
D704	407 031 5705	LED SLP-273B-50	1	C103	403 051 2106	ELECT 4.7U M 50V	1
D705	407 031 5705	LED SLP-273B-50	1	C104	403 051 2106	ELECT 4.7U M 50V	1
D706	407 031 5705	LED SLP-273B-50	1	C105	403 071 6207	CERAMIC 220P K 50V	1
D707	407 031 5705	LED SLP-273B-50	1	C106	403 071 6207	CERAMIC 220P K 50V	1
D709	407 108 1104	LED SLC-26VR3F	1	C107	403 068 9402	CERAMIC 100P K 50V	1
D710	407 108 1104	LED SLC-26VR3F	1	C108	403 068 9402	CERAMIC 100P K 50V	1
D711	407 102 7706	LED SEL2813A	1	C109	403 059 0401	POLYESTER 0.018U K 50V	1
D712	407 028 9105	LED SLP-173B-50	1	C110	403 059 0401	POLYESTER 0.018U K 50V	1
D713	407 005 3805	DIODE DS442-BT	1	C111	403 061 8709	POLYESTER 4700P K 50V	1
D721	407 125 8209	DIODE HSS271	1	C112	403 061 8709	POLYESTER 4700P K 50V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C113	403 044 0300	ELECT 47U M 16V	1
or	407 008 0405	DIODE GMB01-BT	1	C114	403 044 0300	ELECT 47U M 16V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
C115	403 051 2106	ELECT 4.7U M 50V	1	CN715	620 017 5050	Socket 6P	1
C116	403 051 2106	ELECT 4.7U M 50V	1	CN716	620 017 5050	Socket 6P	1
C117	403 047 4305	ELECT 47U M 25V	1	C712	403 049 1708	ELECT 1U M 50V	1
C118	403 047 4305	ELECT 47U M 25V	1	ASSY,PCB,MAIN AMPLIFIER			
C119	403 143 2809	CERAMIC 0.047U Z 50V	1	58	620 208 9393	Assy,PCB,Main Amplifier	1
R101	401 025 7805	CARBON 2.2K JA 1/6W	1		620 022 2587	EC Terminal 1P	2
R102	401 025 7805	CARBON 2.2K JA 1/6W	1	△	620 190 7858	Power Trans	1
R103	401 024 7707	CARBON 100K JA 1/6W	1	△	423 006 4702	FUSE 250V T2.5A	1
R104	401 024 7707	CARBON 100K JA 1/6W	1		411 020 8004	SCR S-TPG BRZ 3X8	5
R105	401 024 7707	CARBON 100K JA 1/6W	1		620 201 6153	Jack,RCA PIN,4P,WH/RE	2
R106	401 024 7707	CARBON 100K JA 1/6W	1		620 201 6160	Jack,RCA PIN,6P,WH/RE	1
R107	401 025 8703	CARBON 220K JA 1/6W	1		620 207 9158	Fuse Holder,Taping	2
R108	401 025 8703	CARBON 220K JA 1/6W	1		620 202 3472	Terminal,Wrapper,2P	1
R109	401 025 1902	CARBON 15K JA 1/6W	1		620 203 9909	Terminal,Wrapper,5P	1
R110	401 025 1902	CARBON 15K JA 1/6W	1		620 209 4212	Terminal,I-104NA,4P	1
R111	401 026 3905	CARBON 330 JA 1/6W	1		620 207 0735	Terminal,Wrapper,4P,I-504	1
R112	401 026 3905	CARBON 330 JA 1/6W	1		620 206 8237	Relay,Power,1P-1T,12V,TV5	1
R113	401 024 7707	CARBON 100K JA 1/6W	1		620 200 6109	Relay,2P-1T 24VDC	1
R114	401 024 7707	CARBON 100K JA 1/6W	1		620 050 2450	Metal Mount Antenna	1
R115	401 024 7004	CARBON 1K JA 1/6W	1		620 053 9241	Plate Heat Sink	5
R116	401 024 7004	CARBON 1K JA 1/6W	1		620 055 1045	Label Fuse	1
R117	401 019 1000	CARBON 390 JA 1/4W	1		620 186 7275	Plate Earth	1
R118	401 019 1000	CARBON 390 JA 1/4W	1	CN111	620 022 0811	Plug 13P	1
R119	401 024 7004	CARBON 1K JA 1/6W	1	CN201	620 206 8374	Connector-P,10P,5512-10A	1
R120	401 026 9600	CARBON 470 JA 1/6W	1	CN204	620 022 1931	Plug 9P	1
R121	401 012 5708	CARBON 1K JA 1/4W	1	CN205	620 022 0828	Plug 6P	1
R122	401 012 5708	CARBON 1K JA 1/4W	1	CN206	620 022 0828	Plug 6P	1
R123	401 012 5708	CARBON 1K JA 1/4W	1	CN304	620 205 5930	Connector-P,6P,53114	1
R124	401 012 5708	CARBON 1K JA 1/4W	1	CN305	620 205 5947	Connector-P,7P,53114	1
R125	401 012 5708	CARBON 1K JA 1/4W	1	CN306	620 205 5947	Connector-P,7P,53114	1
ASSY,PCB,MOTOR VOLUME				L401	620 027 1240	AF Coil	1
53	620 205 3011	Assy,PCB,Motor Volume	1	L402	620 027 1240	AF Coil	1
	620 200 2613	Socket,Holder,2P	1	RA201	620 004 5551	Resistor 3X10K J	1
CN221	620 206 8367	Connector-S,10P,5513-10AP	1	R463	620 208 6675	Resistor,Cement 0.33X2 P	1
PC201	620 205 5756	Wire,Parallel,2P-70	1	R464	620 208 6675	Resistor,Cement 0.33X2 P	1
VR201	620 209 6469	VR,Rotary,2X100KA,Motor	1	VR401	620 006 1346	Potentiometer 220B	1
C229	403 001 7601	CERAMIC 4700P M 16V	1	VR402	620 006 1346	Potentiometer 220B	1
ASSY,PCB,FUSE				IC201	409 109 5105	IC LC7821	1
54	620 208 9355	Assy,PCB,Fuse	1	IC202	409 070 7108	IC RC4558	1
△	423 005 0507	FUSE 250V T1A	2	IC203	409 161 3101	IC TC9214P	1
△	423 007 4404	FUSE 250V T5A	2	IC204	409 161 3101	IC TC9214P	1
	620 207 9158	Fuse Holder,Taping	8	IC205	409 114 4803	IC LB1641	1
	620 203 9909	Terminal,Wrapper,5P	1	IC301	409 070 7108	IC RC4558	1
ASSY,PCB,POWER SWITCH				IC401	409 018 5203	IC LA6462D	1
55	620 208 9362	Assy,PCB,Power Switch	1	IC403	409 079 9509	IC LA2500	1
	620 205 2953	PCB,Power Switch	1	IC404	409 079 9509	IC LA2500	1
	620 205 5091	Socket,Holder,6P	1	IC501	409 195 0503	IC NJM78M18FA	1
	620 199 4568	Jack,Headphone,3P, (D6.43)	1	Q201	405 018 2501	TR 2SC3399-AC	1
	620 202 8033	Terminal,I-102NA,2P	1	or	405 035 0801	TR DTC144-ES-TP	1
△	620 207 7550	Switch,Push,1P-1T,TV-3	1	Q301	405 010 9201	TR 2SC1570-G-NP-AA	1
PC601	620 208 6590	Wire,Parallel,6P,L=270	1	or	405 010 9102	TR 2SC1570-F-NP-AA	1
SW601	620 188 8393	Push 1Key (SP-A)	1	Q302	405 010 9201	TR 2SC1570-G-NP-AA	1
SW602	620 188 8393	Push 1Key (SP-B)	1	or	405 010 9102	TR 2SC1570-F-NP-AA	1
R601	401 068 7701	OXIDE-MT 560 JB 2W	1	Q303	405 010 9201	TR 2SC1570-G-NP-AA	1
R602	401 068 7701	OXIDE-MT 560 JB 2W	1	or	405 010 9102	TR 2SC1570-F-NP-AA	1
R603	401 017 0807	CARBON 270 JA 1/4W	1	Q304	405 010 9201	TR 2SC1570-G-NP-AA	1
R604	401 017 0807	CARBON 270 JA 1/4W	1	or	405 010 9102	TR 2SC1570-F-NP-AA	1
R605	401 017 0807	CARBON 270 JA 1/4W	1	Q305	405 018 0200	TR 2SC3331-U-AA	1
R606	401 017 0807	CARBON 270 JA 1/4W	1	or	405 018 0101	TR 2SC3331-T-AA	1
ASSY,PCB,SPEAKER TERMINAL				Q306	405 018 0200	TR 2SC3331-U-AA	1
56	620 208 9386	Assy,PCB,Speaker Terminal	1	or	405 018 0101	TR 2SC3331-T-AA	1
	620 185 1953	Push Terminal 8P	1	Q307	405 018 0200	TR 2SC3331-U-AA	1
or	620 022 2952	Speaker 8P Terminal	1	or	405 018 0101	TR 2SC3331-T-AA	1
	620 205 5091	Socket,Holder,6P	1	Q308	405 018 0200	TR 2SC3331-U-AA	1
C601	403 069 1207	CERAMIC 1000P K 50V	1	or	405 018 0101	TR 2SC3331-T-AA	1
C602	403 069 1207	CERAMIC 1000P K 50V	1	Q309	405 018 0200	TR 2SC3331-U-AA	1
C603	403 069 1207	CERAMIC 1000P K 50V	1	or	405 018 0101	TR 2SC3331-T-AA	1
C604	403 069 1207	CERAMIC 1000P K 50V	1	Q310	405 018 0200	TR 2SC3331-U-AA	1
ASSY,PCB,U-CON CONNECT				or	405 018 0101	TR 2SC3331-T-AA	1
57	620 205 3066	Assy,PCB,U-CON Connect	1	Q401	405 039 5802	TR 2SC3792-AA	1
CN711	620 205 5411	Connector-P,9P	1	Q402	405 039 5802	TR 2SC3792-AA	1
CN712	620 205 5350	Connector-P,6P	1	Q403	405 016 9007	TR 2SC3066-G	1
CN713	620 205 5350	Connector-P,6P	1	or	405 016 8901	TR 2SC3066-F	1
CN714	620 018 1877	Socket 9P	1	Q404	405 016 9007	TR 2SC3066-G	1
				or	405 016 8901	TR 2SC3066-F	1
				Q405	405 002 9202	TR 2SA1209-T	1
				or	405 002 9103	TR 2SA1209-S	1
				Q406	405 002 9202	TR 2SA1209-T	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
or	405 002 9103	TR 2SA1209-S	1	or	407 012 4208	DIODE 1SS131-T-77	1
Q407	405 016 4002	TR 2SC2911-T	1	or	407 008 0405	DIODE GMB01-BT	1
or	405 016 3906	TR 2SC2911-S	1	D412	407 125 8209	DIODE HSS271	1
Q408	405 016 4002	TR 2SC2911-T	1	or	407 012 4208	DIODE 1SS131-T-77	1
or	405 016 3906	TR 2SC2911-S	1	or	407 008 0405	DIODE GMB01-BT	1
Q409	405 019 2708	TR 2SC536-F-NP-AA	1	D413	407 005 3805	DIODE DS442-BT	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	D414	407 005 3805	DIODE DS442-BT	1
Q410	405 019 2708	TR 2SC536-F-NP-AA	1	D415	407 049 9504	ZENER DIODE GZA20Y-BT	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	D417	407 004 9709	DIODE DSK10C-BT	1
Q411	405 004 4502	TR 2SA608-F-NP-AA	1	D501	407 004 9709	DIODE DSK10C-BT	1
or	405 004 3901	TR 2SA608-E-NP-AA	1	D502	407 004 9709	DIODE DSK10C-BT	1
Q412	405 004 4502	TR 2SA608-F-NP-AA	1	D503	407 004 9709	DIODE DSK10C-BT	1
or	405 004 3901	TR 2SA608-E-NP-AA	1	D504	407 004 9709	DIODE DSK10C-BT	1
Q415	405 017 2700	TR 2SC3117-T	1	D505	407 088 3105	DIODE DSC30TC-KD2	1
or	405 017 2601	TR 2SC3117-S	1	D506	407 088 3105	DIODE DSC30TC-KD2	1
Q416	405 017 2700	TR 2SC3117-T	1	D507	407 088 3105	DIODE DSC30TC-KD2	1
or	405 017 2601	TR 2SC3117-S	1	D508	407 088 3105	DIODE DSC30TC-KD2	1
Q417	405 003 1700	TR 2SA1249-T	1	D509	407 004 9105	DIODE DSF10C-BT	1
or	405 003 1601	TR 2SA1249-S	1	D510	407 004 9105	DIODE DSF10C-BT	1
Q418	405 003 1700	TR 2SA1249-T	1	D511	407 004 9105	DIODE DSF10C-BT	1
or	405 003 1601	TR 2SA1249-S	1	D512	407 004 9105	DIODE DSF10C-BT	1
Q423	405 003 7900	TR 2SA1348-AC	1	D513	407 050 6301	ZENER DIODE GZA6.2Z-BT	1
or	405 068 4609	TR DTA144-ES-TP	1	D514	407 004 9709	DIODE DSK10C-BT	1
Q425	405 019 2807	TR 2SC536-F-SPA-AC	1	D516	407 049 7807	ZENER DIODE GZA18Y-BT	1
or	405 019 2005	TR 2SC536-E-SPA-AC	1	TH401	407 109 6702	THERMISTOR 300D-5	1
Q426	405 019 2807	TR 2SC536-F-SPA-AC	1	TH402	407 109 6702	THERMISTOR 300D-5	1
or	405 019 2005	TR 2SC536-E-SPA-AC	1	C201	403 071 6207	CERAMIC 220P K 50V	1
Q427	405 036 3108	TR 2SA1503-AC	1	C202	403 071 6207	CERAMIC 220P K 50V	1
or	405 100 9807	TR DTA123-YS-TP	1	C203	403 071 6207	CERAMIC 220P K 50V	1
Q428	405 019 2708	TR 2SC536-F-NP-AA	1	C204	403 071 6207	CERAMIC 220P K 50V	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	C205	403 071 6207	CERAMIC 220P K 50V	1
Q501	405 019 2708	TR 2SC536-F-NP-AA	1	C206	403 071 6207	CERAMIC 220P K 50V	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	C207	403 071 6207	CERAMIC 220P K 50V	1
Q502	405 019 2708	TR 2SC536-F-NP-AA	1	C208	403 071 6207	CERAMIC 220P K 50V	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	C209	403 071 6207	CERAMIC 220P K 50V	1
Q503	405 019 2708	TR 2SC536-F-NP-AA	1	C210	403 071 6207	CERAMIC 220P K 50V	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	C211	403 071 6207	CERAMIC 220P K 50V	1
Q504	405 019 2708	TR 2SC536-F-NP-AA	1	C212	403 071 6207	CERAMIC 220P K 50V	1
or	405 019 1909	TR 2SC536-E-NP-AA	1	C213	403 071 6207	CERAMIC 220P K 50V	1
Q505	405 023 8505	TR 2SD438-F-MP	1	C214	403 071 6207	CERAMIC 220P K 50V	1
or	405 023 8307	TR 2SD438-E-MP	1	C215	403 051 2106	ELECT 4.7U M 50V	1
Q506	405 007 5308	TR 2SB560-F-MP	1	C216	403 051 2106	ELECT 4.7U M 50V	1
or	405 007 5100	TR 2SB560-E-MP	1	C217	403 068 9402	CERAMIC 100P K 50V	1
Q507	405 018 2501	TR 2SC3399-AC	1	C218	403 068 9402	CERAMIC 100P K 50V	1
or	405 035 0801	TR DTC144-ES-TP	1	C219	403 051 2106	ELECT 4.7U M 50V	1
D201	407 051 6508	ZENER DIODE GZS4.7Y-BT	1	C220	403 051 2106	ELECT 4.7U M 50V	1
or	407 070 6206	ZENER DIODE GZS4.7Z-BT	1	C221	403 071 6207	CERAMIC 220P K 50V	1
or	407 065 8000	ZENER DIODE GZS4.7X-BT	1	C222	403 071 6207	CERAMIC 220P K 50V	1
D401	407 125 8209	DIODE HSS271	1	C223	403 062 0900	POLYESTER 0.047U K 50V	1
or	407 012 4208	DIODE 1SS131-T-77	1	or	403 062 0801	POLYESTER 0.047U K 50V	1
or	407 008 0405	DIODE GMB01-BT	1	C224	403 062 0900	POLYESTER 0.047U K 50V	1
D402	407 125 8209	DIODE HSS271	1	or	403 062 0801	POLYESTER 0.047U K 50V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C225	403 047 4305	ELECT 47U M 25V	1
or	407 008 0405	DIODE GMB01-BT	1	C226	403 047 4305	ELECT 47U M 25V	1
D403	407 125 8209	DIODE HSS271	1	C227	403 049 1708	ELECT 1U M 50V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C228	403 069 1207	CERAMIC 1000P K 50V	1
or	407 008 0405	DIODE GMB01-BT	1	C230	403 073 7004	CERAMIC 470P K 50V	1
D404	407 125 8209	DIODE HSS271	1	C231	403 044 0300	ELECT 47U M 16V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C232	403 044 0300	ELECT 47U M 16V	1
or	407 008 0405	DIODE GMB01-BT	1	C233	403 049 1708	ELECT 1U M 50V	1
D405	407 125 8209	DIODE HSS271	1	C301	403 050 1308	ELECT 2.2U M 50V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C302	403 050 1308	ELECT 2.2U M 50V	1
or	407 008 0405	DIODE GMB01-BT	1	C303	403 048 7701	ELECT 0.47U M 50V	1
D406	407 125 8209	DIODE HSS271	1	C304	403 048 7701	ELECT 0.47U M 50V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C305	403 063 7809	POLYESTER 0.082U K 50V	1
or	407 008 0405	DIODE GMB01-BT	1	C306	403 063 7809	POLYESTER 0.082U K 50V	1
D407	407 125 8209	DIODE HSS271	1	C307	403 003 3700	CERAMIC 0.022U Z 25V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C308	403 003 3700	CERAMIC 0.022U Z 25V	1
or	407 008 0405	DIODE GMB01-BT	1	C309	403 001 7601	CERAMIC 4700P M 16V	1
D408	407 125 8209	DIODE HSS271	1	C310	403 001 7601	CERAMIC 4700P M 16V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C311	403 003 0600	CERAMIC 0.018U K 25V	1
or	407 008 0405	DIODE GMB01-BT	1	C312	403 003 0600	CERAMIC 0.018U K 25V	1
D409	407 125 8209	DIODE HSS271	1	C313	403 001 9704	CERAMIC 8200P M 16V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C314	403 001 9704	CERAMIC 8200P M 16V	1
or	407 008 0405	DIODE GMB01-BT	1	C315	403 001 7601	CERAMIC 4700P M 16V	1
D410	407 125 8209	DIODE HSS271	1	C316	403 001 7601	CERAMIC 4700P M 16V	1
or	407 012 4208	DIODE 1SS131-T-77	1	C317	403 001 4006	CERAMIC 1500P M 16V	1
or	407 008 0405	DIODE GMB01-BT	1	C318	403 001 4006	CERAMIC 1500P M 16V	1
D411	407 125 8209	DIODE HSS271	1	C319	403 074 9205	CERAMIC 680P K 50V	1

P.C.BOARD PARTS LIST (Continued)

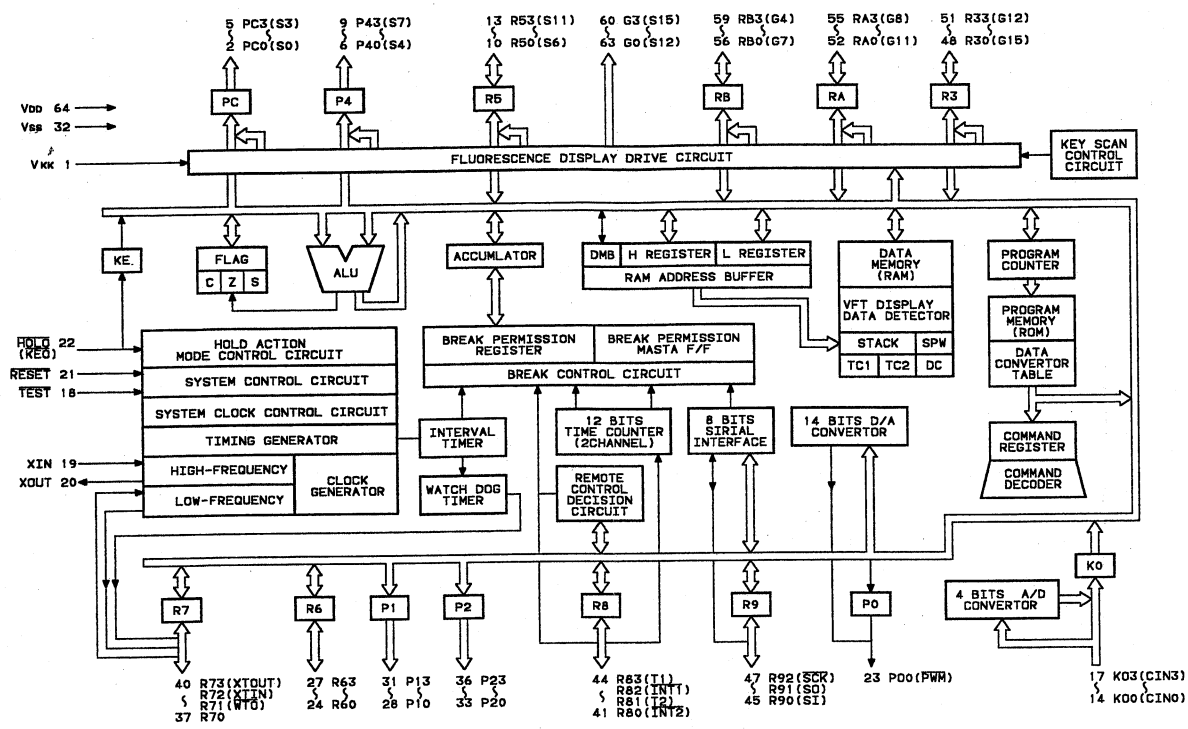
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
C320	403 074 9205	CERAMIC 680P K 50V	1	C520	403 051 2106	ELECT 4.7U M 50V	1
C321	403 051 2106	ELECT 4.7U M 50V	1	C521	403 047 4305	ELECT 4.7U M 25V	1
C322	403 051 2106	ELECT 4.7U M 50V	1	C599	403 051 2106	ELECT 4.7U M 50V	1
C323	403 071 6207	CERAMIC 220P K 50V	1	R201	401 024 7004	CARBON 1K JA 1/6W	1
C324	403 071 6207	CERAMIC 220P K 50V	1	R202	401 024 7004	CARBON 1K JA 1/6W	1
C325	403 068 9402	CERAMIC 100P K 50V	1	R205	401 024 7004	CARBON 1K JA 1/6W	1
C326	403 068 9402	CERAMIC 100P K 50V	1	R206	401 024 7004	CARBON 1K JA 1/6W	1
C327	403 009 1809	CERAMIC 10P J 50V	1	R209	401 024 7004	CARBON 1K JA 1/6W	1
C328	403 009 1809	CERAMIC 10P J 50V	1	R210	401 024 7004	CARBON 1K JA 1/6W	1
C329	403 051 2106	ELECT 4.7U M 50V	1	R213	401 024 7004	CARBON 1K JA 1/6W	1
C330	403 051 2106	ELECT 4.7U M 50V	1	R214	401 024 7004	CARBON 1K JA 1/6W	1
C331	403 047 4305	ELECT 4.7U M 25V	1	R217	401 024 7004	CARBON 1K JA 1/6W	1
C332	403 047 4305	ELECT 4.7U M 25V	1	R218	401 024 7004	CARBON 1K JA 1/6W	1
C401	403 051 2106	ELECT 4.7U M 50V	1	R221	401 024 7004	CARBON 1K JA 1/6W	1
C402	403 051 2106	ELECT 4.7U M 50V	1	R222	401 024 7004	CARBON 1K JA 1/6W	1
C403	403 071 6207	CERAMIC 220P K 50V	1	R225	401 024 7004	CARBON 1K JA 1/6W	1
C404	403 071 6207	CERAMIC 220P K 50V	1	R226	401 024 7004	CARBON 1K JA 1/6W	1
C405	403 068 9402	CERAMIC 100P K 50V	1	R229	401 024 7707	CARBON 100K JA 1/6W	1
C406	403 068 9402	CERAMIC 100P K 50V	1	R230	401 024 7707	CARBON 100K JA 1/6W	1
C407	403 068 9402	CERAMIC 100P K 50V	1	R231	401 024 7707	CARBON 100K JA 1/6W	1
C408	403 068 9402	CERAMIC 100P K 50V	1	R232	401 024 7707	CARBON 100K JA 1/6W	1
C409	403 038 2402	ELECT 100U M 6.3V	1	R233	401 025 8703	CARBON 220K JA 1/6W	1
C410	403 038 2402	ELECT 100U M 6.3V	1	R234	401 025 8703	CARBON 220K JA 1/6W	1
C411	403 051 2106	ELECT 4.7U M 50V	1	R235	401 024 7004	CARBON 1K JA 1/6W	1
C412	403 051 2106	ELECT 4.7U M 50V	1	R236	401 024 7004	CARBON 1K JA 1/6W	1
C415	403 051 2106	ELECT 4.7U M 50V	1	R237	401 022 3107	CARBON 6.8K JA 1/4W	1
C416	403 051 2106	ELECT 4.7U M 50V	1	R238	401 027 5502	CARBON 6.8K JA 1/6W	1
C417	403 047 4305	ELECT 4.7U M 25V	1	R239	401 012 7009	CARBON 10K JA 1/4W	1
C418	403 047 4305	ELECT 4.7U M 25V	1	R240	401 012 7009	CARBON 10K JA 1/4W	1
C419	403 071 6207	CERAMIC 220P K 50V	1	R241	401 024 7400	CARBON 10K JA 1/6W	1
C420	403 071 6207	CERAMIC 220P K 50V	1	R242	401 027 0309	CARBON 47K JA 1/6W	1
C421	403 071 6207	CERAMIC 220P K 50V	1	R243	401 027 0507	CARBON 470K JA 1/6W	1
C422	403 071 6207	CERAMIC 220P K 50V	1	R244	401 012 3407	CARBON 10 JA 1/4W	1
C423	403 071 6207	CERAMIC 220P K 50V	1	R245	401 019 1000	CARBON 390 JA 1/4W	1
C424	403 071 6207	CERAMIC 220P K 50V	1	R246	401 019 1000	CARBON 390 JA 1/4W	1
C425	403 046 4603	ELECT 33U M 25V	1	R247	401 015 2704	CARBON 1.8K JA 1/4W	1
C426	403 046 4603	ELECT 33U M 25V	1	R301	401 024 9305	CARBON 1.2K JA 1/6W	1
C427	403 016 2004	CERAMIC 2.2P K 50V	1	R302	401 024 9305	CARBON 1.2K JA 1/6W	1
C428	403 016 2004	CERAMIC 2.2P K 50V	1	R303	401 024 9305	CARBON 1.2K JA 1/6W	1
C429	403 035 2207	CERAMIC 15P K 500V	1	R304	401 024 9305	CARBON 1.2K JA 1/6W	1
C430	403 035 2207	CERAMIC 15P K 500V	1	R305	401 025 1605	CARBON 1.5K JA 1/6W	1
C433	403 061 8709	POLYESTER 4700P K 50V	1	R306	401 025 1605	CARBON 1.5K JA 1/6W	1
or	403 061 8501	POLYESTER 4700P K 50V	1	R307	401 025 1605	CARBON 1.5K JA 1/6W	1
C434	403 061 8709	POLYESTER 4700P K 50V	1	R308	401 025 1605	CARBON 1.5K JA 1/6W	1
or	403 061 8501	POLYESTER 4700P K 50V	1	R309	401 025 1605	CARBON 1.5K JA 1/6W	1
C435	403 052 2808	ELECT 33U M 63V	1	R310	401 025 1605	CARBON 1.5K JA 1/6W	1
C436	403 052 2808	ELECT 33U M 63V	1	R311	401 025 2305	CARBON 150K JA 1/6W	1
C437	403 052 2808	ELECT 33U M 63V	1	R312	401 025 2305	CARBON 150K JA 1/6W	1
C438	403 052 2808	ELECT 33U M 63V	1	R313	401 024 7707	CARBON 100K JA 1/6W	1
C439	403 049 1708	ELECT 1U M 50V	1	R314	401 024 7707	CARBON 100K JA 1/6W	1
C440	403 049 1708	ELECT 1U M 50V	1	R315	401 026 7408	CARBON 39K JA 1/6W	1
C441	403 049 1708	ELECT 1U M 50V	1	R316	401 026 7408	CARBON 39K JA 1/6W	1
C442	403 049 1708	ELECT 1U M 50V	1	R317	401 026 4605	CARBON 33K JA 1/6W	1
C443	403 034 9900	CERAMIC 100P K 500V	1	R318	401 026 4605	CARBON 33K JA 1/6W	1
C444	403 034 9900	CERAMIC 100P K 500V	1	R319	401 025 8208	CARBON 22K JA 1/6W	1
C445	403 034 9900	CERAMIC 100P K 500V	1	R320	401 025 8208	CARBON 22K JA 1/6W	1
C446	403 034 9900	CERAMIC 100P K 500V	1	R321	401 026 6609	CARBON 390 JA 1/6W	1
C447	403 062 0900	POLYESTER 0.047U K 50V	1	R322	401 026 6609	CARBON 390 JA 1/6W	1
or	403 062 0801	POLYESTER 0.047U K 50V	1	R323	401 026 6609	CARBON 390 JA 1/6W	1
C448	403 062 0900	POLYESTER 0.047U K 50V	1	R324	401 026 6609	CARBON 390 JA 1/6W	1
or	403 062 0801	POLYESTER 0.047U K 50V	1	R325	401 026 6609	CARBON 390 JA 1/6W	1
C449	403 049 5508	ELECT 10U M 50V	1	R326	401 026 6609	CARBON 390 JA 1/6W	1
C450	403 051 2106	ELECT 4.7U M 50V	1	R327	401 026 6609	CARBON 390 JA 1/6W	1
C451	403 038 2402	ELECT 100U M 6.3V	1	R328	401 026 6609	CARBON 390 JA 1/6W	1
C453	403 035 4508	CERAMIC 2P C 500V	1	R329	401 026 6609	CARBON 390 JA 1/6W	1
C454	403 035 4508	CERAMIC 2P C 500V	1	R330	401 026 6609	CARBON 390 JA 1/6W	1
C501	403 143 2809	CERAMIC 0.047U Z 50V	1	R331	401 027 8602	CARBON 8.2K JA 1/6W	1
C502	403 177 3902	CERAMIC 0.01U Z 500V	1	R332	401 027 8602	CARBON 8.2K JA 1/6W	1
C503	403 177 3902	CERAMIC 0.01U Z 500V	1	R333	401 027 8602	CARBON 8.2K JA 1/6W	1
C508	403 044 3004	ELECT 470U M 16V	1	R334	401 027 8602	CARBON 8.2K JA 1/6W	1
C509	403 051 2106	ELECT 4.7U M 50V	1	R335	401 027 8602	CARBON 8.2K JA 1/6W	1
C510	403 039 0605	ELECT 330U M 6.3V	1	R336	401 027 8602	CARBON 8.2K JA 1/6W	1
C511	404 043 0001	ELECT 6800U M 63V	1	R337	401 027 8602	CARBON 8.2K JA 1/6W	1
C512	404 043 0001	ELECT 6800U M 63V	1	R338	401 027 8602	CARBON 8.2K JA 1/6W	1
C513	403 052 9609	ELECT 1000U M 35V	1	R339	401 027 8602	CARBON 8.2K JA 1/6W	1
C514	403 054 2608	ELECT 470U M 35V	1	R340	401 027 8602	CARBON 8.2K JA 1/6W	1
C516	403 047 4305	ELECT 4.7U M 25V	1	R341	401 025 8703	CARBON 220K JA 1/6W	1
C518	403 051 2106	ELECT 4.7U M 50V	1	R342	401 025 8703	CARBON 220K JA 1/6W	1
C519	403 042 3600	ELECT 100U M 16V	1	R343	401 025 8703	CARBON 220K JA 1/6W	1

P.C.BOARD PARTS LIST (Continued)

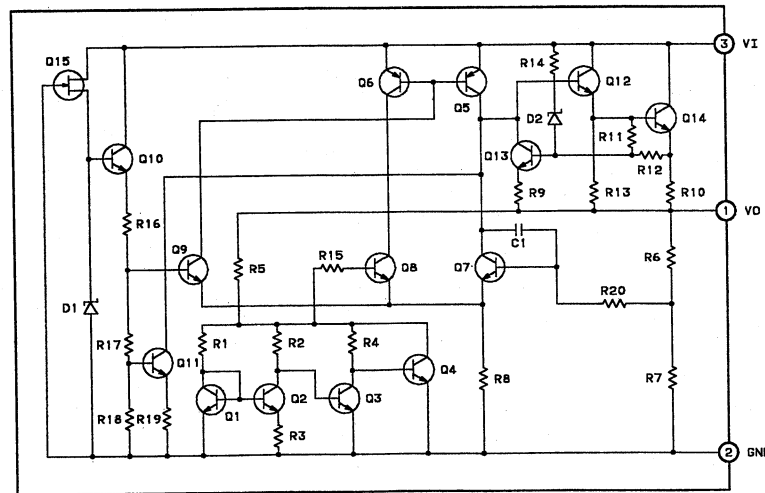
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
R344	401 025 8703	CARBON 220K JA 1/6W	1	R471	401 099 1600	OXIDE-MT 6.8K JB 1W	1
R345	401 026 9907	CARBON 4.7K JA 1/6W	1	or	402 039 8406	OXIDE-MT 6.8K JB 1W	1
R346	401 026 9907	CARBON 4.7K JA 1/6W	1	R472	401 025 8208	CARBON 22K JA 1/6W	1
R347	401 026 9907	CARBON 4.7K JA 1/6W	1	R473	401 027 5502	CARBON 6.8K JA 1/6W	1
R348	401 026 9907	CARBON 4.7K JA 1/6W	1	R474	401 024 7004	CARBON 1K JA 1/6W	1
R353	401 016 2208	CARBON 220 JA 1/4W	1	R476	401 026 7002	CARBON 3.9K JA 1/6W	1
R354	401 016 2208	CARBON 220 JA 1/4W	1	R478	401 020 2003	CARBON 4.7K JA 1/4W	1
R401	401 012 5708	CARBON 1K JA 1/4W	1	R479	401 026 9907	CARBON 4.7K JA 1/6W	1
R402	401 012 5708	CARBON 1K JA 1/4W	1	R481	402 037 1409	FUSIBLE RES 2.2 JA 1/4W	1
R403	401 025 8703	CARBON 220K JA 1/6W	1	R482	402 037 1409	FUSIBLE RES 2.2 JA 1/4W	1
R404	401 025 8703	CARBON 220K JA 1/6W	1	R483	402 037 1409	FUSIBLE RES 2.2 JA 1/4W	1
R405	401 025 4606	CARBON 18K JA 1/6W	1	R484	402 037 1409	FUSIBLE RES 2.2 JA 1/4W	1
R406	401 025 4606	CARBON 18K JA 1/6W	1	R502	401 019 1000	CARBON 390 JA 1/4W	1
R407	401 025 4200	CARBON 1.8K JA 1/6W	1	R504	401 066 6003	OXIDE-MT 220 JB 2W	1
R408	401 025 4200	CARBON 1.8K JA 1/6W	1	or	402 040 2004	OXIDE-MT 220 JB 2W	1
R409	401 026 4308	CARBON 3.3K JA 1/6W	1	R505	401 019 1901	CARBON 3.9K JA 1/4W	1
R410	401 026 4308	CARBON 3.3K JA 1/6W	1	R506	401 015 2704	CARBON 1.8K JA 1/4W	1
R411	401 024 7707	CARBON 100K JA 1/6W	1	R508	401 058 2600	OXIDE-MT 100 JB 1W	1
R412	401 024 7707	CARBON 100K JA 1/6W	1	or	402 039 9700	OXIDE-MT 100 JB 1W	1
R413	401 019 1901	CARBON 3.9K JA 1/4W	1	R509	401 014 4105	CARBON 1.5K JA 1/4W	1
R414	401 019 1901	CARBON 3.9K JA 1/4W	1	R510	401 020 2003	CARBON 4.7K JA 1/4W	1
R415	401 024 7004	CARBON 1K JA 1/6W	1	R511	401 023 1706	CARBON 820 JA 1/4W	1
R416	401 024 7004	CARBON 1K JA 1/6W	1	R512	401 056 2909	OXIDE-MT 47 JB 1/2W	1
R417	401 019 1000	CARBON 390 JA 1/4W	1	or	402 040 3506	OXIDE-MT 47 JB 1/2W	1
R418	401 019 1000	CARBON 390 JA 1/4W	1	R513	401 024 7400	CARBON 10K JA 1/6W	1
R419	401 027 5908	CARBON 68K JA 1/6W	1	R514	401 026 4308	CARBON 3.3K JA 1/6W	1
R420	401 027 5908	CARBON 68K JA 1/6W	1	R515	401 026 4308	CARBON 3.3K JA 1/6W	1
R421	401 016 3809	CARBON 2.2K JA 1/4W	1				
R422	401 016 3809	CARBON 2.2K JA 1/4W	1				
R423	401 016 3809	CARBON 2.2K JA 1/4W	1				
R424	401 016 3809	CARBON 2.2K JA 1/4W	1				
R425	401 014 5201	CARBON 15K JA 1/4W	1				
R426	401 014 5201	CARBON 15K JA 1/4W	1				
R427	401 026 5800	CARBON 3.6K JA 1/6W	1				
R428	401 026 5800	CARBON 3.6K JA 1/6W	1				
R429	401 027 5908	CARBON 68K JA 1/6W	1				
R430	401 027 5908	CARBON 68K JA 1/6W	1				
R431	402 037 1201	FUSIBLE RES 82 JA 1/4W	1				
R432	402 037 1201	FUSIBLE RES 82 JA 1/4W	1				
R433	402 037 1201	FUSIBLE RES 82 JA 1/4W	1				
R434	402 037 1201	FUSIBLE RES 82 JA 1/4W	1				
R435	401 021 3009	CARBON 5.6K JA 1/4W	1				
R436	401 021 3009	CARBON 5.6K JA 1/4W	1				
R437	402 037 1300	FUSIBLE RES 47 JA 1/4W	1				
R438	402 037 1300	FUSIBLE RES 47 JA 1/4W	1				

IC BLOCK DIAGRAM

IC701 TMP47C670N-1214 BLOCK DIAGRAM
(System Control Micon)

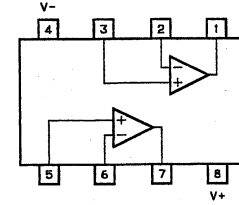


IC501 NJM78M18FA BLOCK DIAGRAM
(Constant Voltage Regulated Power Supply)

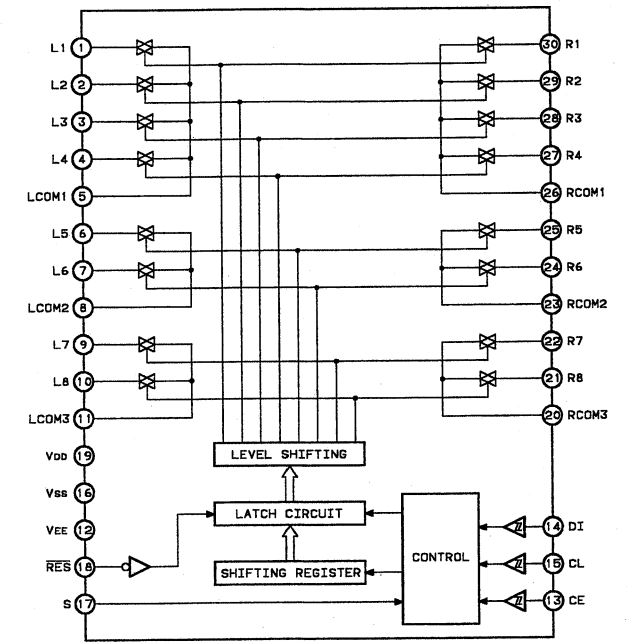


IC BLOCK DIAGRAM (Continued)

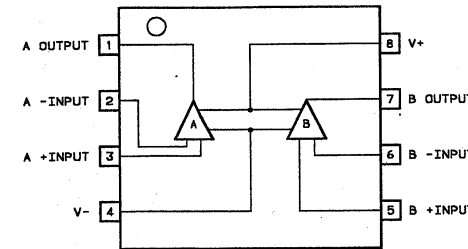
IC401 LA6462D BLOCK DIAGRAM
(Dual Operational Amp.)



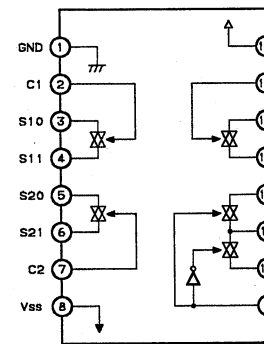
IC201 LC7821 BLOCK DIAGRAM
(Function Selector)



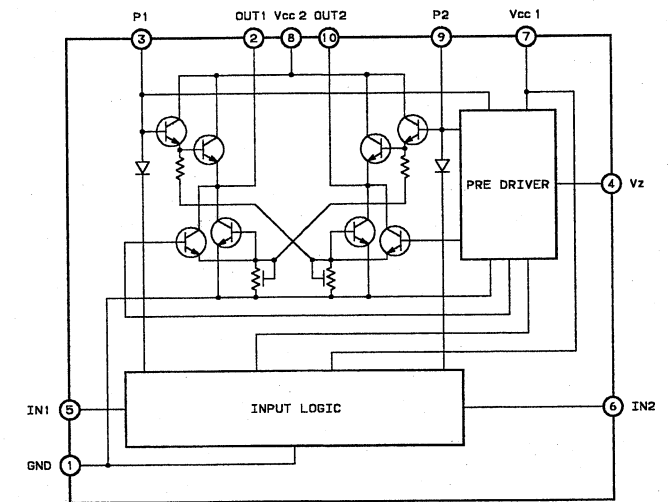
IC202/301 RC4558 BLOCK DIAGRAM
(Dual Operational Amp.)



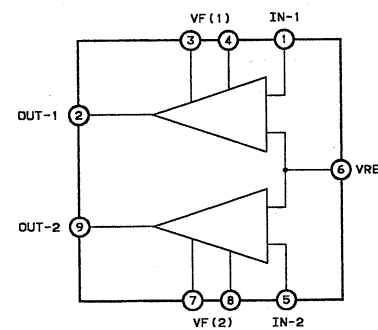
IC203/204 TC9214P BLOCK DIAGRAM
(Loudness/Source Direct Selector)



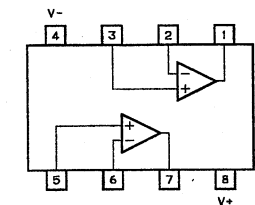
IC205 LB1641 BLOCK DIAGRAM
(Motor Driver)



IC403/404 LA2500 BLOCK DIAGRAM
(Class A Bias)



IC101 UPC4570C BLOCK DIAGRAM
(Dual Operational Amp.)

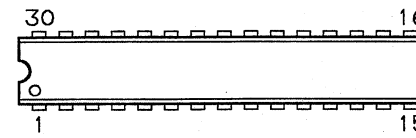


IC & TRANSISTOR LEAD IDENTIFICATION

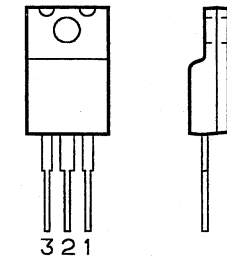
TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SC1570 2SC3331 2SC3792 2SC536			2SB560 2SD438		
2SA1209 2SC2911			2SA1249 2SC3117		
2SA1301 2SC3280			2SA1345 2SA1348 2SA1503 2SC3399 2SC3400 2SC536		
2SC3066			2SD1682		
TERMINAL NAME					
B → BASE C → COLLECTOR E → EMITTER					

IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

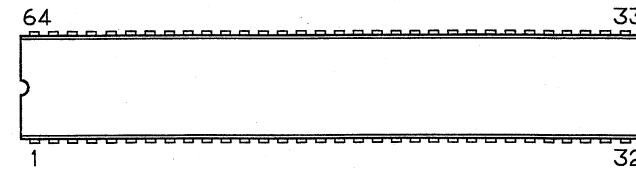
LC7821 TOP VIEW



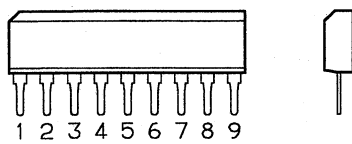
NJM78M18FA TOP/SIDE VIEWS



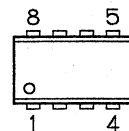
TMP47C670N-1214 TOP VIEW



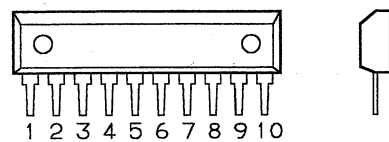
LA2500 FRONT/SIDE VIEWS



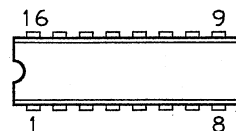
LA6462D TOP VIEW
RC4558 TOP VIEW



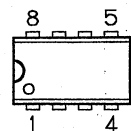
LB1641 FRONT/SIDE VIEWS



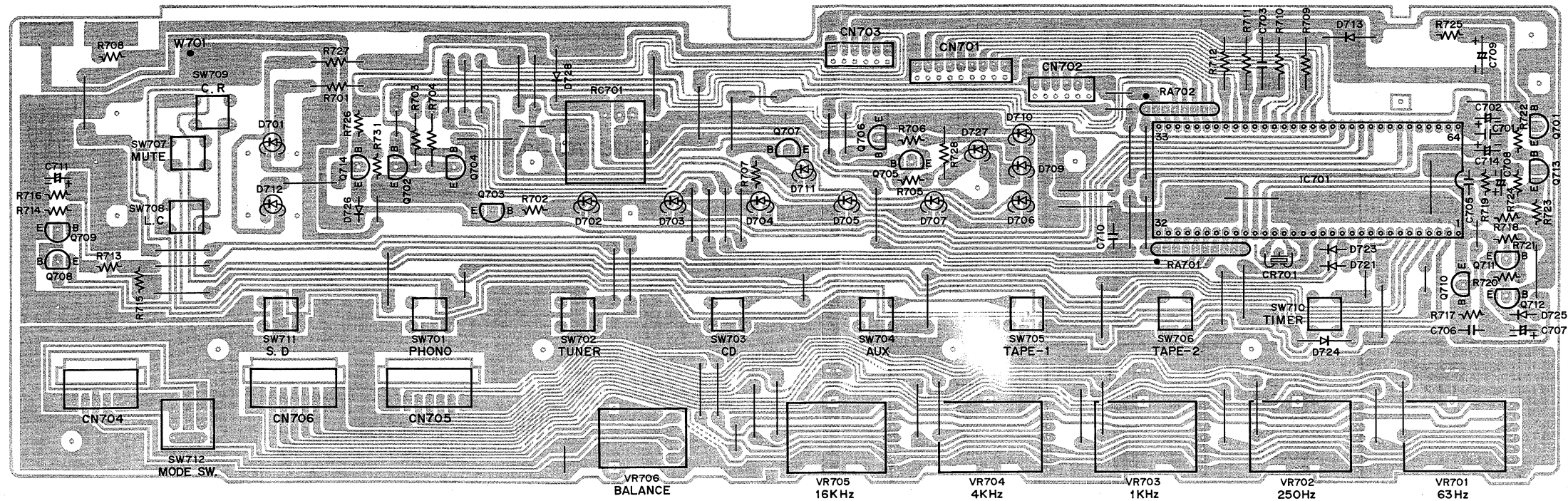
TC9214P TOP VIEW



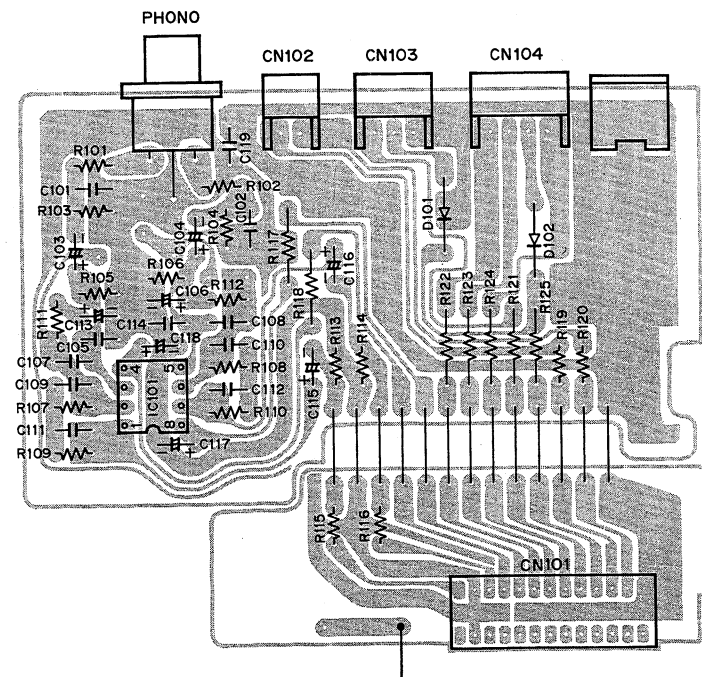
UPC4570C TOP VIEW



U-COM PRINTED CIRCUIT BOARD (BOTTOM VIEW)



INPUT PRINTED CIRCUIT BOARD (BOTTOM VIEW)



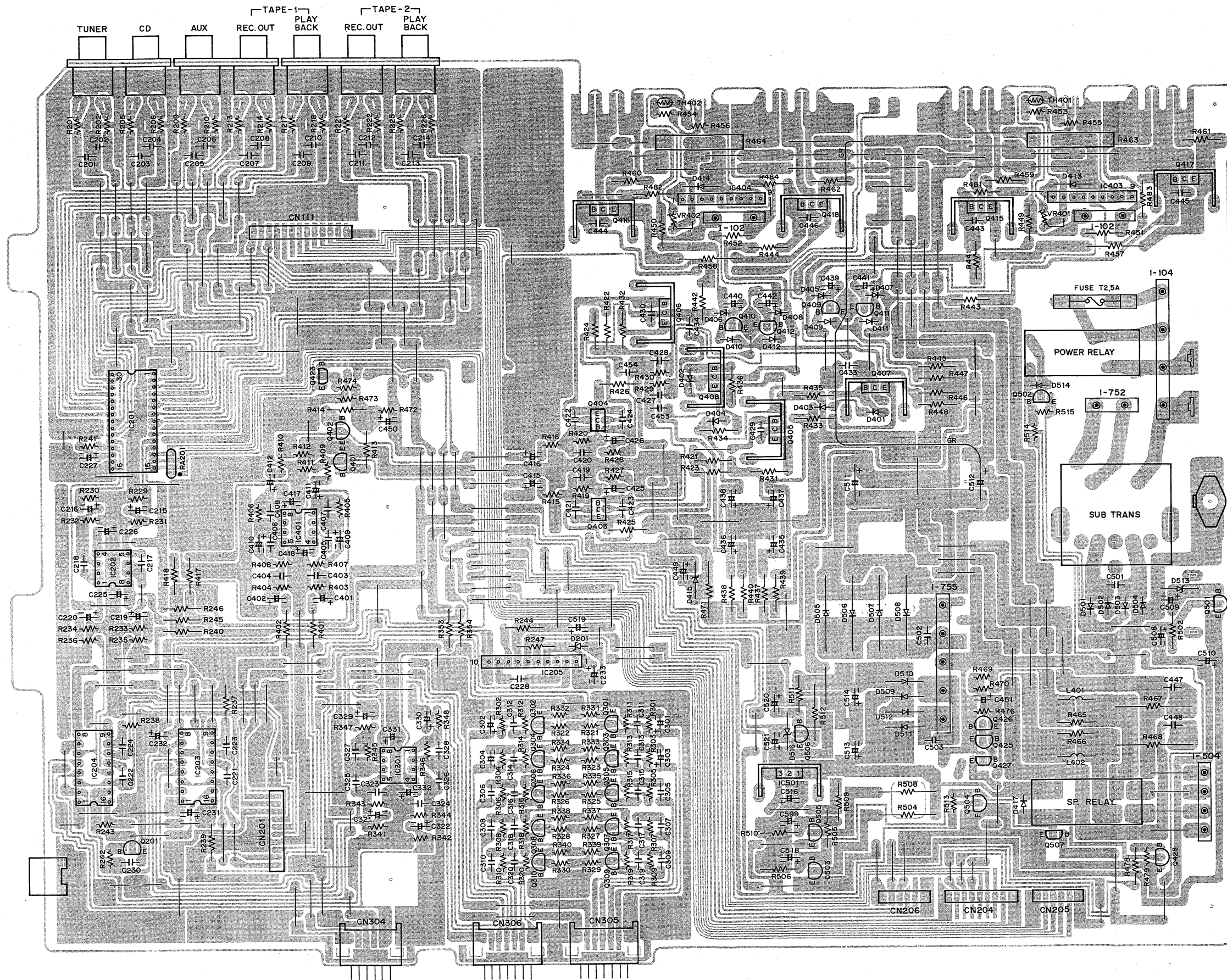
IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
IC101	UPC4570C	0V	0V	0V	-16.9V	0V	0V	0V	16.9V	0V	0V	0V	-17.2V	0V	0V	0V	0V	0V	17.1V	17.2V	0V	
IC201	LC7821	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
		0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
		0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
IC202	RC4558	0V	0V	0V	-17.2V	0V	0V	0V	17.2V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC203,204	TC9214P	0V	4.6V	0V	0V	0V	0V	4.6V	-14.0V	0V	0V	0V	0V	0V	0V	0V	10.6V	0V	0V	0V	0V	
IC205	LB1641	0V	0.5V	0.7V	4.6V	0V	0V	12.9V	12.9V	0.7V	0.5V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC301	RC4558	0V	0V	0V	-13.7V	0V	0V	0V	13.8V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC401	LA6462D	0V	0V	0V	-15.9V	0V	0V	0V	15.9V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC403,404	LA2500	1.1V	0.4V	1.0V	1.0V	-1.0V	0V	-0.5V	-0.5V	-0.3V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC501	NJM78M18FA	18.0V	0V	24.8V	0V	0V	0V	0V	0V	0V	1.2V	1.2V	1.2V	1.2V	0.1V	2.2V	0V	0V	0V	2.3V	2.3V	
IC701	TMP47C670N	0V	0V	0V	0V	0V	0V	0.2V	0V	0V	1.2V	1.2V	1.2V	1.2V	0.1V	2.2V	0V	0V	0V	2.3V	2.3V	
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
		4.8V	4.6V	0V	0V	0V	0V	0V	5.0V	5.0V	0V	0V	0V	0V	4.6V	5.0V	0V	0V	5.0V	0V	5.0V	0V
		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
		4.9V	0V	5.0V	0V	0V	0V	5.0V	4.8V	4.8V	0V	0V	0V	0V	3.8V	0V	0V	0V	0V	0V	0V	0V
		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
0V	0V	0V	4.9V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	

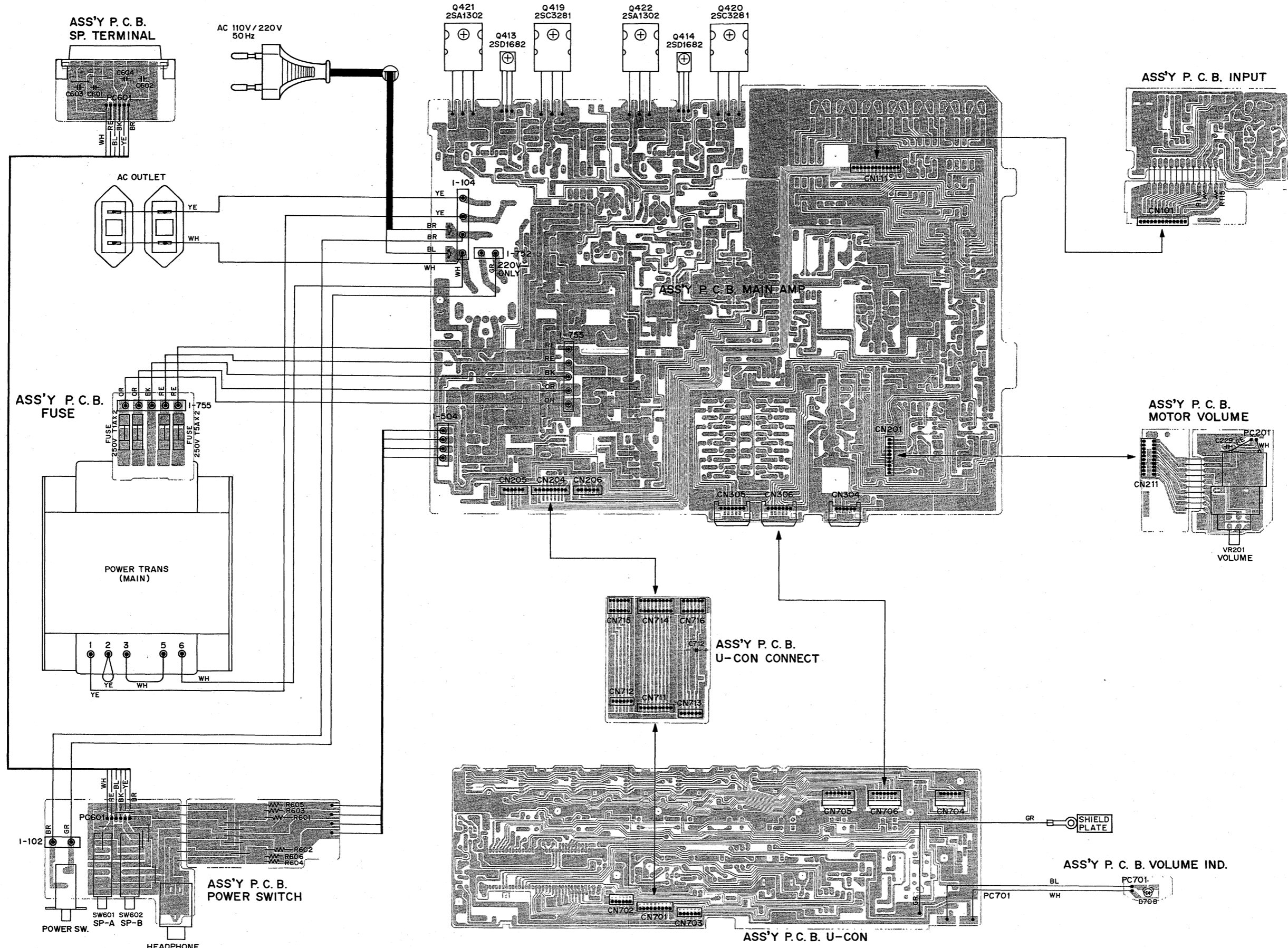
TRANSISTOR DC VOLTAGES

Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q201	2SC3399	2.6V	0V	0V	Q419,420	2SC3280	0.5V	51.6V	0V	Q702	2SC3399	4.9V	0.1V	0V
Q301,302	2SC1570	-0.9V	13.2V	-1.6V	Q421,422	2SA1301	-0.4V	-51.7V	0V	Q703	2SC536	0.7V	0V	0V
Q303,304	2SC1570	-0.6V	13.2V	-1.2V	Q423	2SA1348	5.0V	-4.2V	5.0V	Q704	2SC3399	0V	3.5V	0V
Q305,306	2SC3331	-0.1V	13.2V	-0.7V	Q425	2SC536	0V	5.0V	0V	Q705	2SC3400	0V	3.6V	0V
Q307,308	2SC3331	-0.1V	13.2V	-0.7V	Q426	2SC536	0V	5.0V	0V	Q706	2SC3400	0V	3.6V	0V
Q309,310	2SC3331	-0.1V	13.2V	-0.7V	Q427	2SA1503	5.0V	0V	5.0V	Q707	2SA1345	4.6V	-0.2V	0V
Q401,402	2SC3792	-4.2V	0V	0V	Q428	2SC536	0.7V	0V	0V	Q708	2SA1345	0V	0.1V	0V
Q403,404	2SC3066	0V	49.6V	-0.6V	Q501	2SC536	6.3V	10.6V	5.7V	Q709	2SC536	0V	0V	0V
Q405,406	2SA1209	49.3V	1.4V	51.2V	Q502	2SC536	0.7V	0V	0V	Q710	2SC536	0.1V	0.9V	0V
Q407,408	2SC2911	-50.6V	-1.3V	-51.4V	Q503	2SC536	5.6V	24.5V	5.0V	Q711	2SC536	0V	4.6V	0V
Q409,410	2SC536	0V	1.3V	0V	Q504	2SC536	0V	5.6V	0V	Q712	2SA608	5.7V	0V	5.4V
Q411,412	2SA608	0V	-1.3V	0V	Q505	2SD438	13.5V	23.7V	12.9V	Q713	2SA608	4.9V	0V	2.1V
Q413,414	2SD1682	0.2V	0.3V	-0.3V	Q506	2SB560	-18.7V	-23.3V	-18.0V	Q714	2SC536	0V	3.5V	0V
Q415,416	2SC3117	1.1V	52.5V	0.5V	Q507	2SC3399	4.8V	0V	0V					
Q417,418	2SA1249	-1.0V	-52.3V	-0.4V	Q701	2SC536	5.7V	4.9V	5.7V					

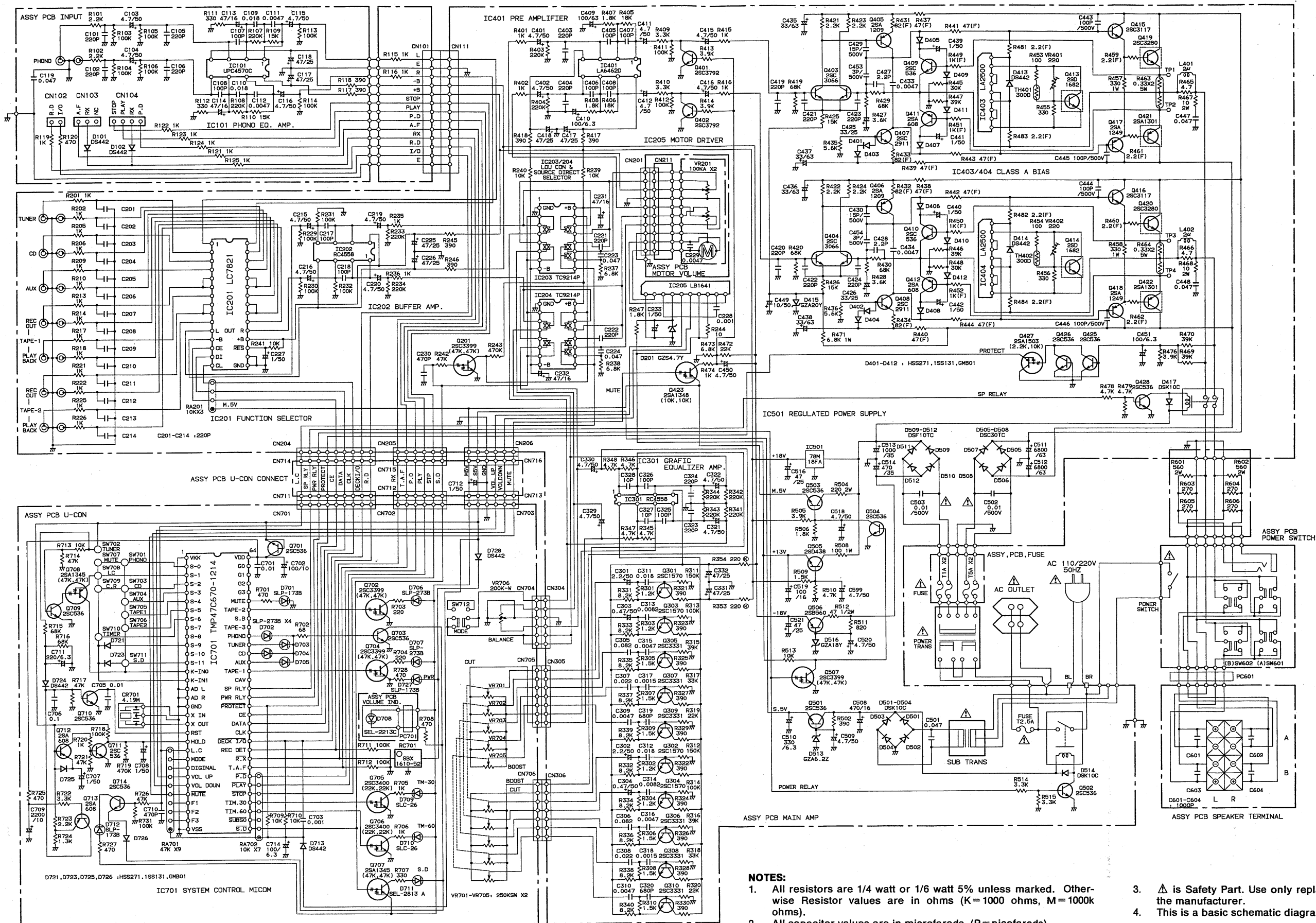
MAIN PRINTED CIRCUIT BOARD (BOTTOM VIEW)



POINT TO POINT WIRING DIAGRAM



SCHEMATIC DIAGRAM



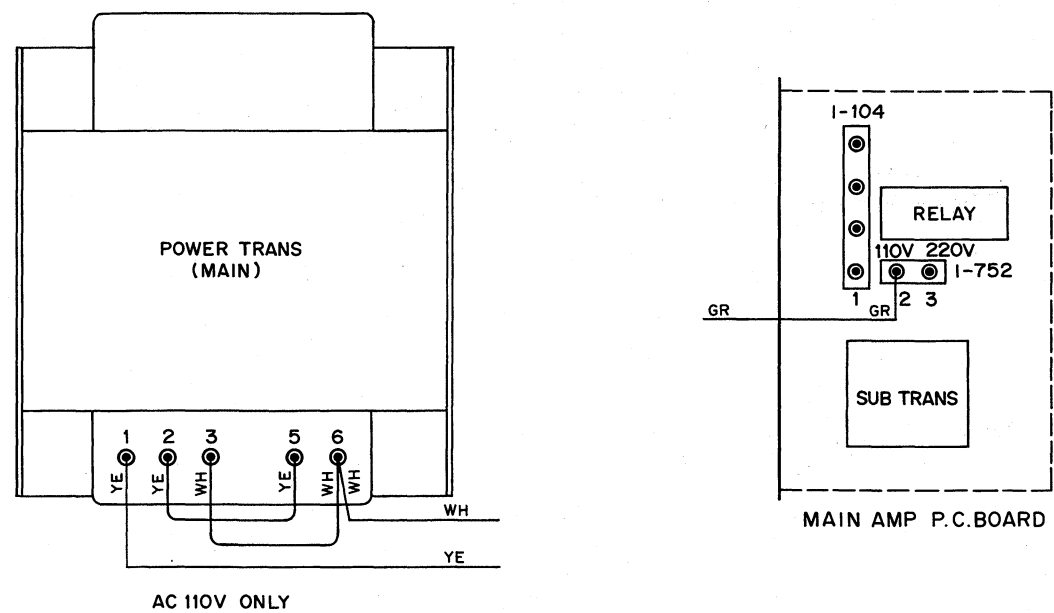
- NOTES:**
1. All resistors are 1/4 watt or 1/6 watt 5% unless marked. Otherwise Resistor values are in ohms (K=1000 ohms, M=1000k ohms).
 2. All capacitor values are in microfarads. (P=picofarads).
 3. Δ is Safety Part. Use only replacement parts recommended by the manufacturer.
 4. This is a basic schematic diagram.

IMPORTANT NOTE

The Amplifier has been Factory-adjusted for operation on 220 V AC. The voltage can be changed for operation on 110 V AC by making the following changes on the Amplifier inside.

1. Remove the AC plug from the wall outlet.
2. Remove the screws securing the cover.
3. Disconnect White lead from Power Trans (Main) Terminal No. 5, and then connect it to Power Trans (Main) Terminal No 6.
4. Disconnect one of the Yellow leads from the Power Trans (Main) Terminal No. 2, and connect its lead to the Power Trans (Main) Terminal No. 5.
5. Disconnect Green lead from Power Trans (Sub) Terminal No. 3, and then connect it to Power Trans (Sub) Terminal No. 2.

The Amplifier is now ready 110 V operation. DO NOT attempt to operate the Amplifier on 220 V. Damage will result !



SERVICE MANUAL



FISHER

INTEGRATED STEREO AMPLIFIER WITH RCA-9040 WIRELESS REMOTE CONTROL

CA-9040

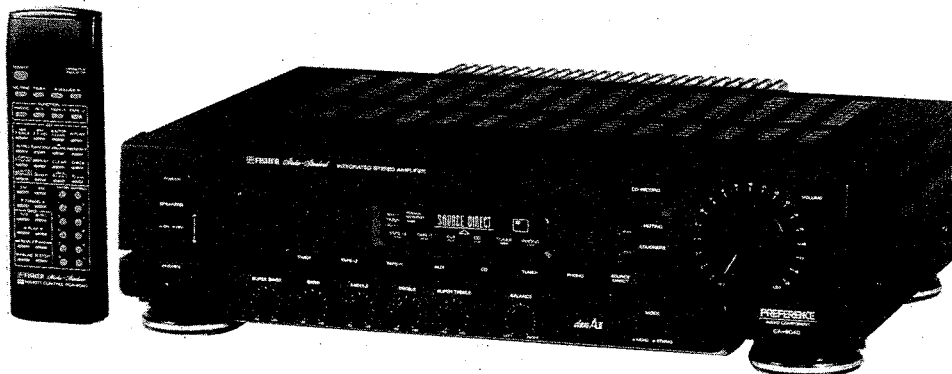
(EUROPE)

132 353 45

The original service manual of model CA-9040 reflects the Black version only. This supplement is intended to add the Titan Gray version to the original service manual of WM-570559.

Ref.No.	CA-9040 (Black)	CA-9040 (Titan Gray)	Description	Q'ty
	PACKAGE 620 210 1293	620 212 5121	Inner Carton	1
	ACCESSORIES 620 209 1594	620 212 5190	Label,Barcode	1
	CABINET			
6	620 209 0009	620 212 4933	Assy,Cabinet,Front	1
7	620 198 6969	620 212 3943	Assy,Foot	4
9	620 207 6614	620 212 4995	Cover,Top	1
12	620 204 7270	620 212 5022	Knob,Rotary	6
13	620 204 7317	620 212 5053	Knob,Touch	1
14	620 198 0622	620 212 4162	Button,Power	1
15	620 198 0752	620 212 4919	Button,Push	2
16	620 204 7294	620 212 5077	Button,Push	1
17	620 209 0412	620 212 5084	Button,Function	1
18	620 199 4025	620 212 5091	Button	2
41	620 186 6711	— — — —	Knob Volume Assy	1
	— — — —	620 212 5510	Assy,Knob,Rotary	1
55	620 208 9362	620 210 2443	Assy,PCB,Power Switch	1
58	620 208 9393	620 210 2412	Assy,PCB,Main Amplifier	1

Add this sheet Model CA-9040 Service Manual (WM-570559).



FISHER Hi-Fi Europa Vertriebs GmbH
Stahlgruberring 4 Tel: 089/420 45-0
8000 München 82 Tlx: 524033
March/'91/1,500/H

REFERENCE No. WM-570681

