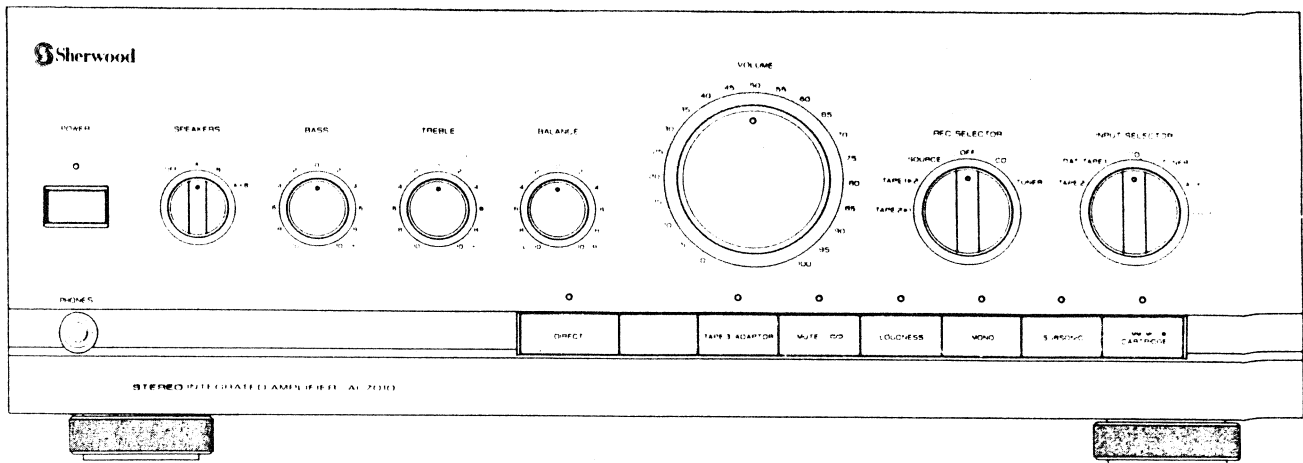


SERVICE MANUAL

AI-7010 STEREO INTEGRATED AMPLIFIER



■ CONTENTS

Safety Precaution	2
Specification	3
Block Diagram	5
P.C. Boards (Top & Bottom Views)	7
Wiring Diagram	11

Exploded View (Cabinet & Chassis)	13
Electrical Parts List	15
Mechanical Parts List (Cabinet & Chassis)	19
Schematic Diagram	Separate Sheet

 **Sherwood**

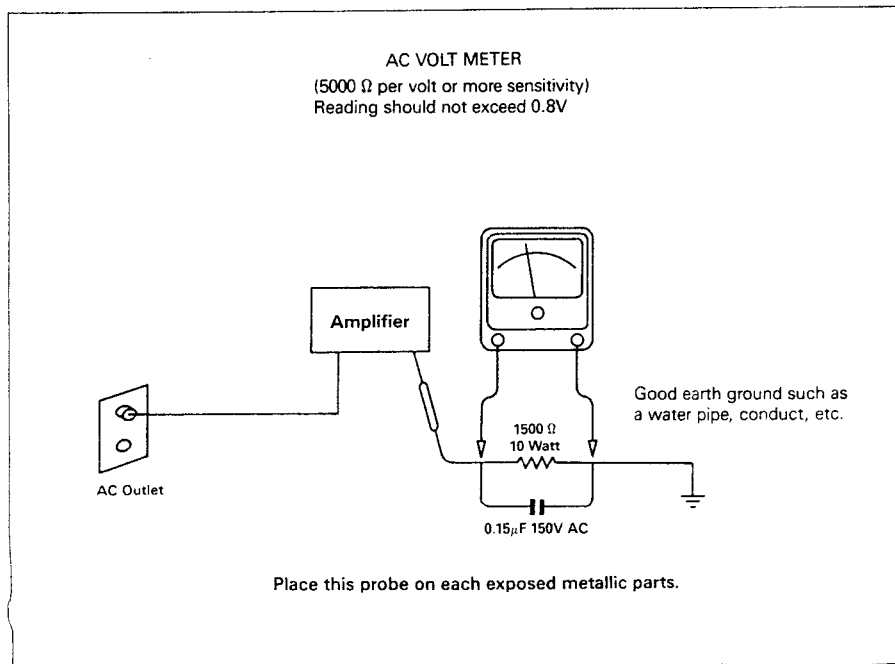
Safety Precaution

WARNING

Service should not be attempted by anyone unfamiliar with the necessary precautions on this player. The following precautions are necessary during servicing.

1. Many electrical and mechanical parts in this player have special characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristic are identified in this manual and its supplements: electrical components having such features are identified by a Δ in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.
2. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as

terminals, screwheads, metal overlays, etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (120V Version only). (Do not use a line isolation transformer during this check.) Use an AC voltmeter having 5000 Ω per volt or more sensitivity in the following manner: Connect a 1500 Ω 10 watt resistor paralleled by a 0.15 μ F, 150V AC capacitor, between a known good earth ground (water pipe, conduct, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 Ω resistor and 0.15 μ F capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



Specifications

USA/Canadian version

Power output/ch.

Minimum continuous average both channels driven with no more than 0.04% THD.

at 8 ohms 1kHz	100W
at 8 ohms 20Hz to 20kHz	95W

Intermodulation Distortion, 60Hz: 7kHz=4:1 Smpte

95W, output into 8 ohms	0.01%
-------------------------	-------

Damping Factor at 1 kHz into 8 ohms

	150
--	-----

Input Sensitivity for 95W output, 8 ohms at 1 kHz

Phono MC/MM	0.3/2.5mV
-------------	-----------

Aux/Tuner

	150mV
--	-------

Phono Preamp input overload;

at 1 kHz, 0.1% THD. MC/MM	18/170mV
---------------------------	----------

at 10 kHz, 0.1% THD. MM

	7V
--	----

Signal to Noise ratio, IHF "A" wtd./unwtd.;

Phono MC	68/60dB
----------	---------

Phono MM	76/72dB
----------	---------

Aux CD/Tuner	96/89dB
--------------	---------

Frequency Response

Phono, RIAA 40-20,000 Hz	± 0.5 dB
--------------------------	--------------

Aux at 1W, -3dB	5Hz-80kHz
-----------------	-----------

Loudness Contour at loudness point

at 100 Hz	+5dB
-----------	------

at 10 kHz	+3dB
-----------	------

Tone Control at loudness point

Bass at 100Hz	± 8 dB
---------------	------------

Treble at 10kHz	± 8 dB
-----------------	------------

Function Crosstalk

Aux $\rightarrow$ Phono: 1kHz	66dB
-------------------------------	------

Phono $\rightarrow$ Aux: 1kHz	68dB
-------------------------------	------

Power Consumption	590W
-------------------	------

Power Requirements;

A: 120V 60Hz for USA/Canadian version

B: 120/220V 60/50Hz for multi-voltage version (switchable)

C: 220V 50Hz for General European version

D: 230V 50Hz for Germanian & Italian version

E: 240V 50Hz for British & Australian version

F: 230V 50Hz for Swiss & Scandinavian version

Dimensions (W $\times$ H $\times$ D) 440(W) $\times$ 140(H) $\times$ 280(D)mm

17.3(W) $\times$ 5.5(H) $\times$ 11(D)inches

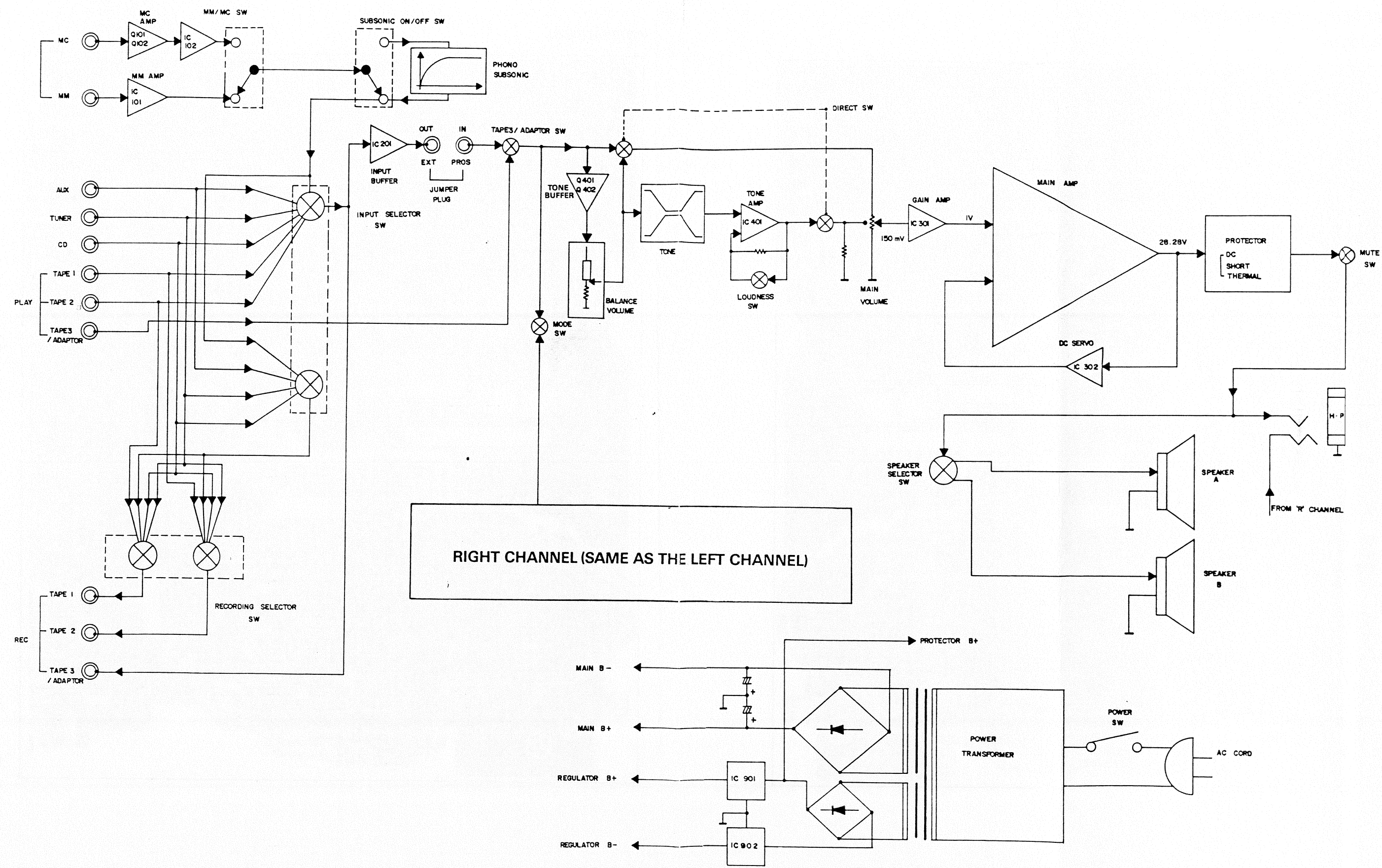
Weight(net) 13kg (14lbs, 4.8oz)

European version

Power output/ch.	
IEC standard 63Hz to 12.5kHz 8 ohms	105W
DIN standard 1kHz 8 ohms	110W
Total Harmonic Distortion at -6dB rated output 1kHz 8 ohms	0.01%
Intermodulation Distortion at -6dB rated output 8 ohms	0.01%
Damping Factor at 1 kHz into 8 ohms	150
Input Sensitivity for 100W output at 1 kHz 8 ohms	
Phono MC/MM	0.3/2.5mV
Aux/Tuner	150mV
Phono Preamp input overload;	
at 1 kHz, 0.1% THD, MM/MC	170/18mV
Signal to Noise ratio, IEC "A" wtd. unwtd.;	
Phono MM: 5mV input 2.2kohm shorted and vol. adj. to 100W	74/66dB
AUX: 500mV input 2.2kohm shorted and vol. adj. to 100W	95/88dB
Frequency Response	
Phono, RIAA 40-20,000 Hz	±0.5dB
Aux at 1W, -3dB	5Hz-80kHz
Loudness Contour (at loudness point)	
at 100 Hz	+5dB
at 10 kHz	+3dB
Tone Control (at loudness point)	
Bass at 10 Hz	±8dB
Treble at 10kHz	±8dB
Power Consumption	590W
Power Requirements;	
A: 120V 60Hz for USA/Canadian version	
B: 120/220V 60/50Hz for multi-voltage version (switchable)	
C: 230V 50Hz for General European version	
D: 230V 50Hz for Germanian & Italian version	
E: 240V 50Hz for British & Australian version	
F: 230V 50Hz for Swiss & Scandinavian version	
Dimensions (W×H×D)	440(W)×140(H)×280(D)mm
	17.3(W)×5.5(H)×11(D)inches
Weight(net)	13kg (14lbs, 4.8oz)

Note: Specifications and design subject to change without notice for improvements. Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the European standard, and provides information on regional circuit modification through use of alternate schematic or wiring diagram, and information on regional component variations through use of parts list.

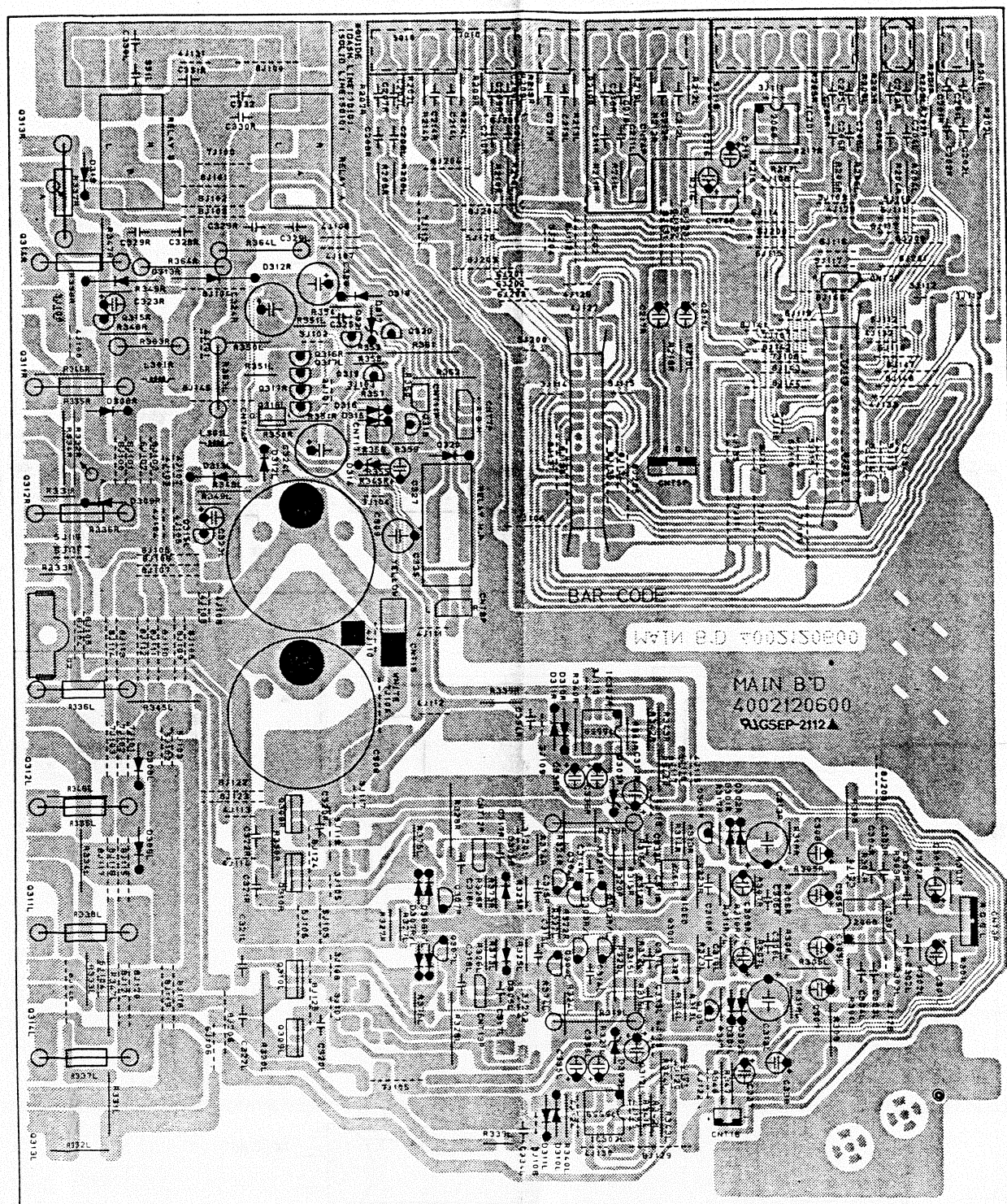
Block Diagram



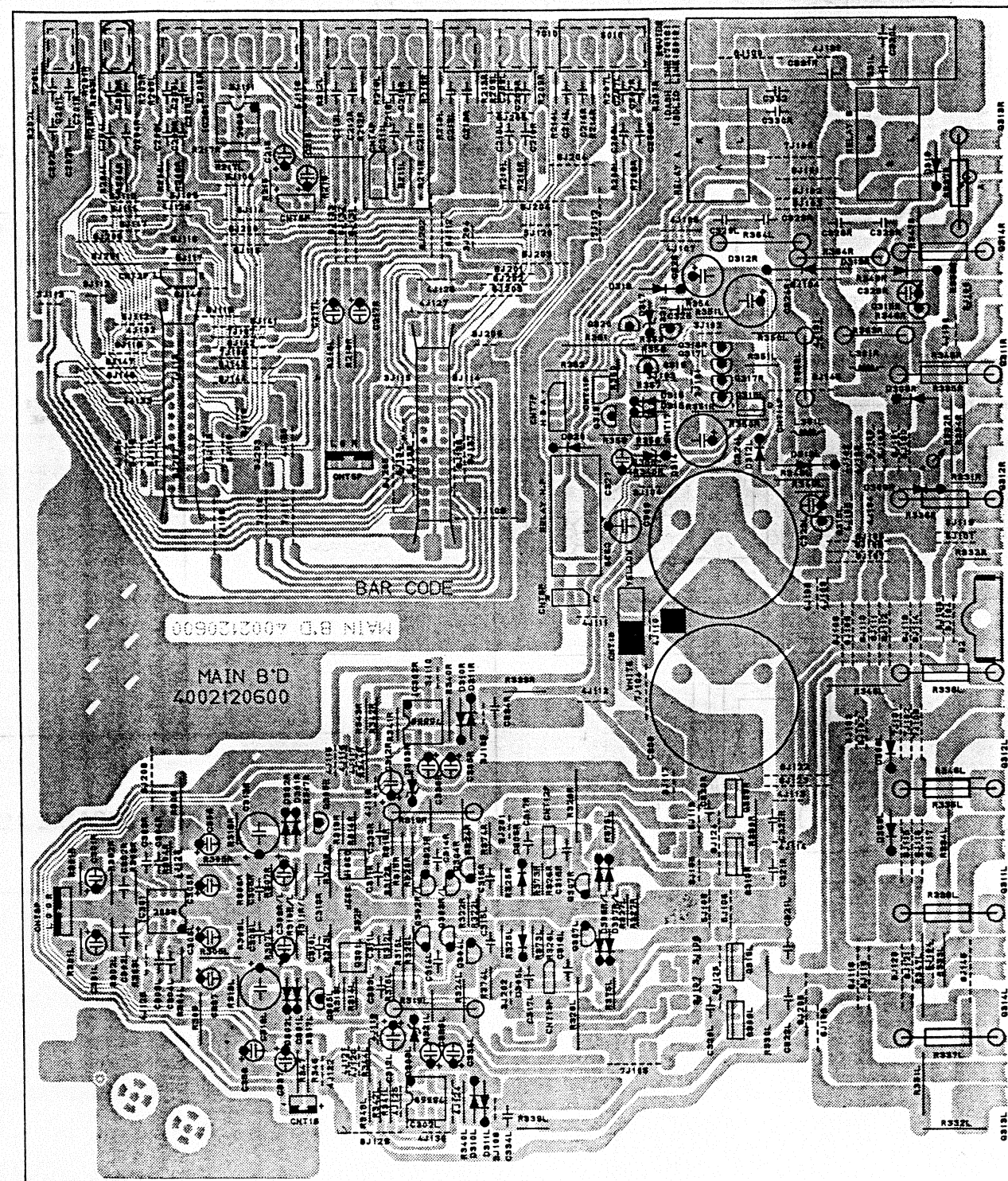
P.C. Boards (Top & Bottom Views)

MAIN P.C. BOARD 4002120600

(TOP VIEW)

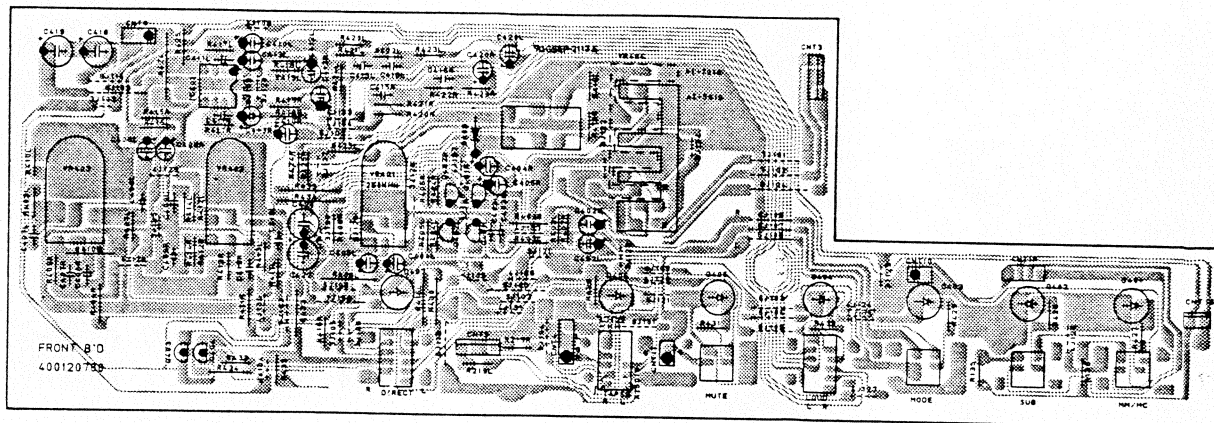


(BOTTOM VIEW)

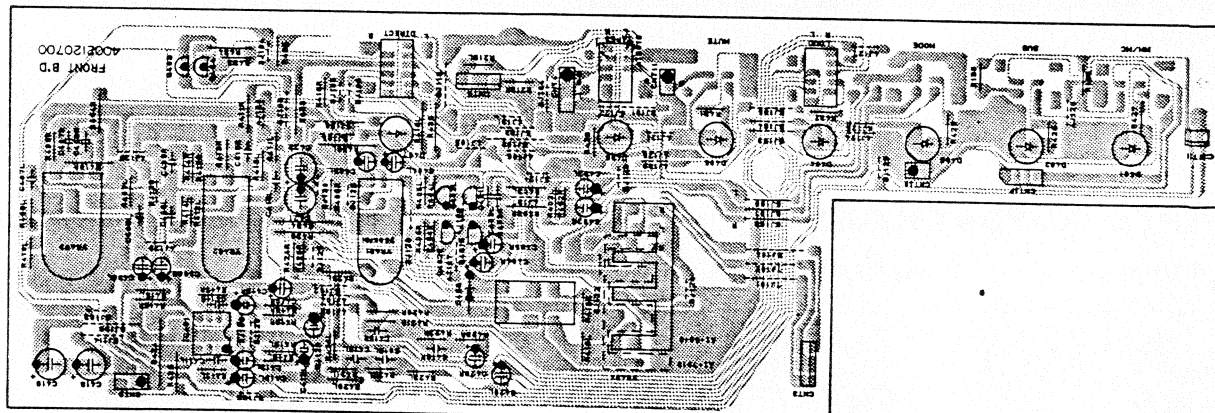


FRONT P.C. BOARD 4002120700

(TOP VIEW)

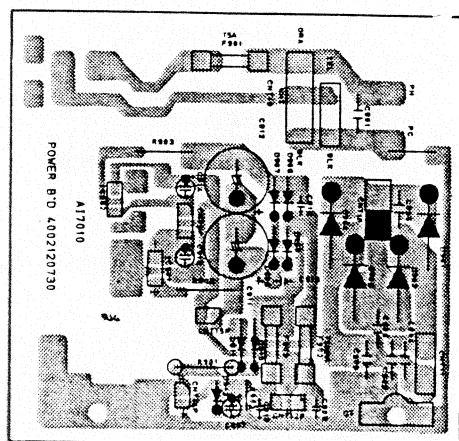


(BOTTOM VIEW)

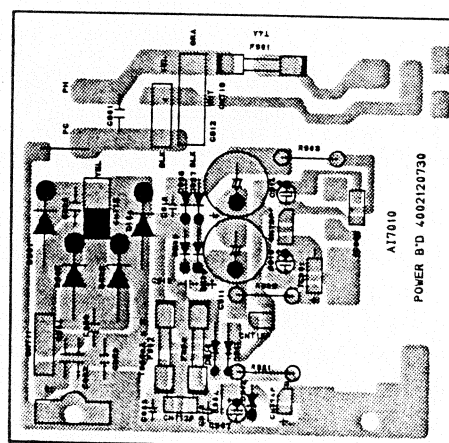


POWER P.C. BOARD 4002120730

(TOP VIEW)

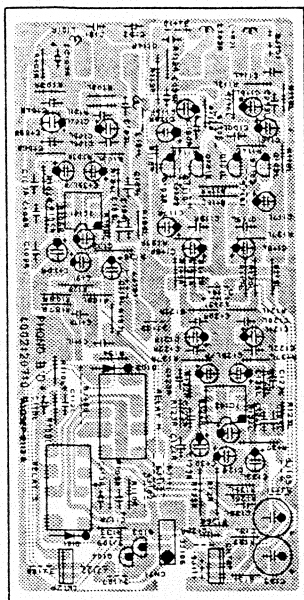


(BOTTOM VIEW)

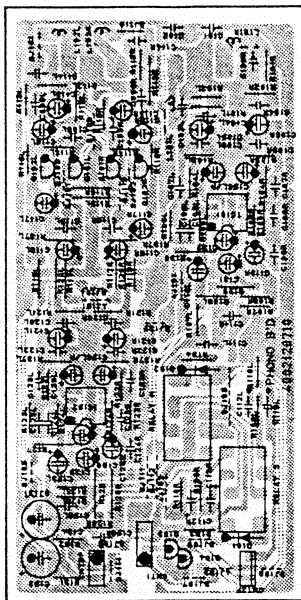


PHONO P.C. BOARD 4002120710

(TOP VIEW)

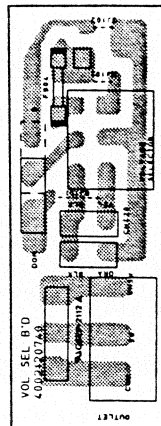


(BOTTOM VIEW)

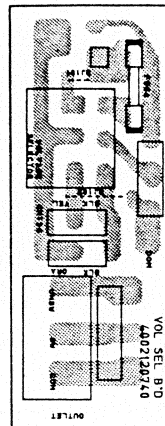


VOL SEL P.C. BOARD 400212074

(TOP VIEW)

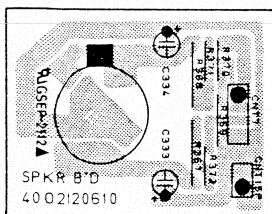


(BOTTOM VIEW)

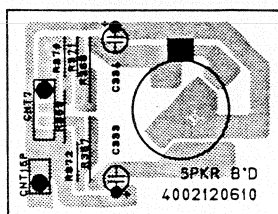


SPKR P.C. BOARD 4002120610

(TOP VIEW)

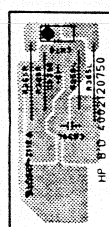


(BOTTOM VIEW)

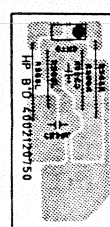


HP P.C. BOARD 4002120750

(TOP VIEW)

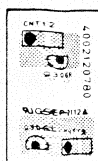


(BOTTOM VIEW)



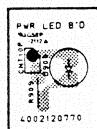
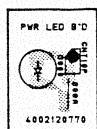
BIAS P.C. BOARD 4002120780

(TOP VIEW) (BOTTOM VIEW)



PWR LED P.C. BOARD 4002120770

(TOP VIEW) (BOTTOM VIEW)

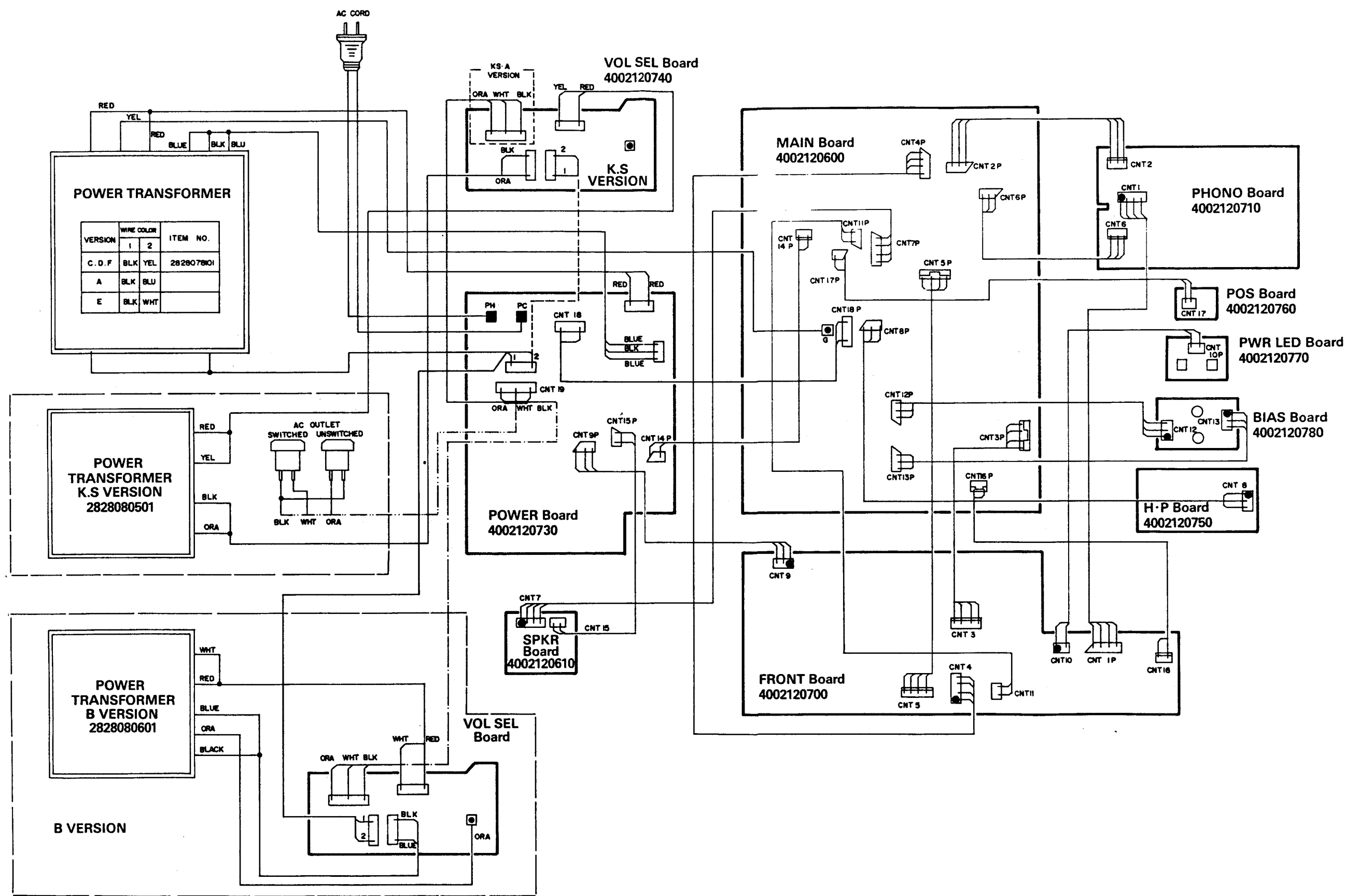


POS P.C. BOARD 4002120760

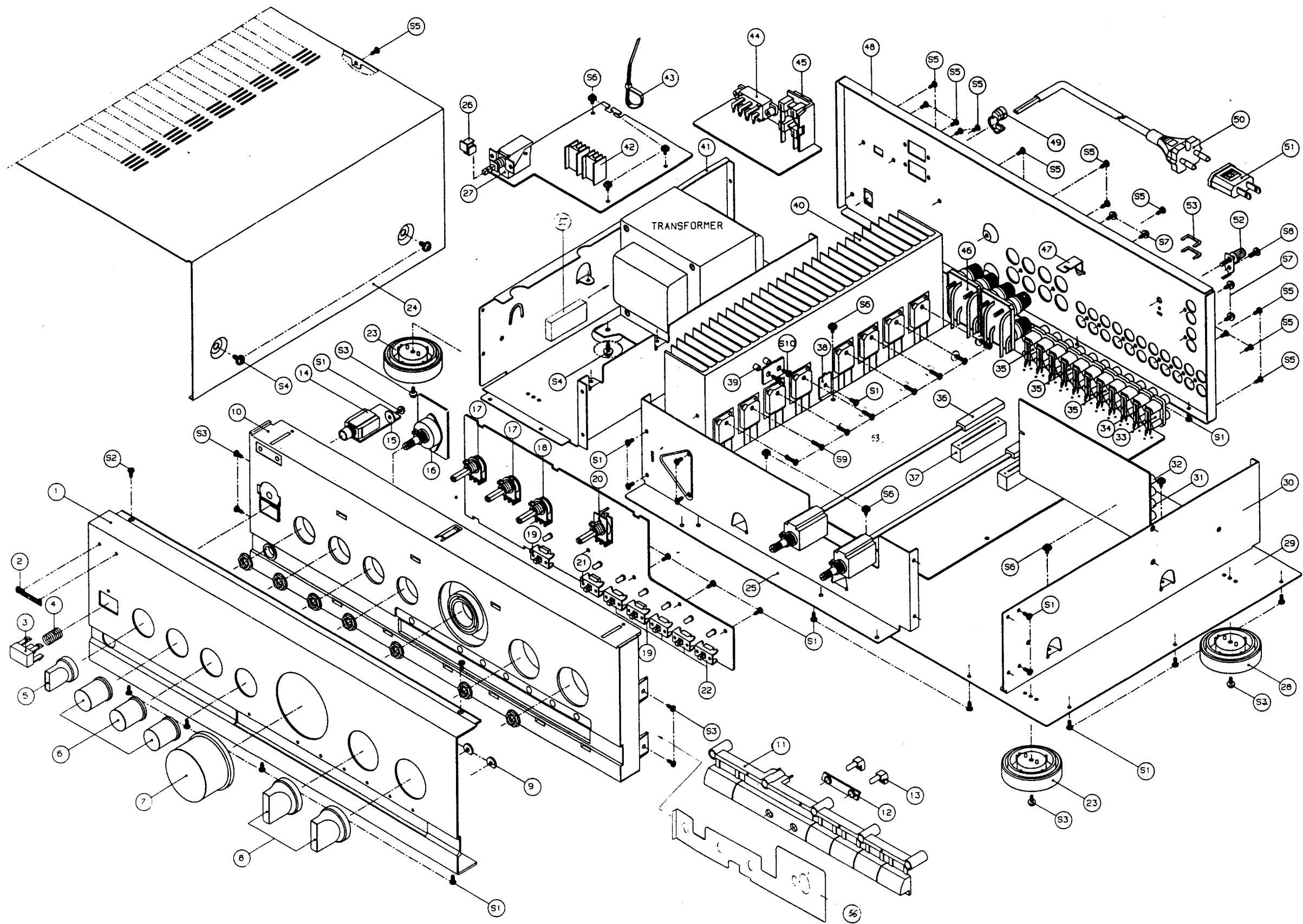
(TOP VIEW) (BOTTOM VIEW)



Wiring Diagram



Exploded View (Cabinet & Chassis)



Electrical Parts List

PRODUCT SAFETY NOTICE: Products marked with Δ have special characteristics important to safety. If you replace any of these components, carefully read the product safety notice of this manual. Don't degraded the safety of the product through improper servicing. Remark meaning for version, so refer to power requirement of Specifications in this manual. Resistors & Capacitors tolerance; D: ($\pm 5\%$), J: ($\pm 0.5\%$), K: ($\pm 10\%$), M: ($\pm 20\%$), Z: (+80%, -20%).

Ref. No.	Part No.	Description	Remark
Main P.C. Board 4002120600			
Capacitors			
C201L/R	3579101130	Ceramic 100pF 100V D	D
C210L/R			
C211L/R	3579101130	Ceramic 100pF 100V D	D
C214L/R			
C215/C216	3479247041	Electric SA 47 μ F 25V M	
C217L/R	3479222041	Electric SA 22 μ F 25V M	
C218L/R	3579101130	Ceramic 100pF 100V D	D
C301L/R	3479247971	Electric SA 4.7 μ F 50V M	
C302L/R	3579470130	Ceramic 47pF 50V D	
C303L/R	3579331130	Ceramic 330pF 50V D	
C304L/R	3579561130	Ceramic 560pF 50V D	
C305L/R	3479210061	Electric SA 10 μ F 35V M	
C306L/R	3579102120	Mylar 0.001 μ F 100V J	
C307/C308	3479247041	Electric SA 47 μ F 25V M	
C309L/R	3479222971	Electric SA 2.2 μ F 50V M	
C310L/R	3579471130	Ceramic 470pF 50V D	
C311L/R	3579102530	Ceramic 1000pF 50V D	
C312L/R	3479247071	Electric SA 47 μ F 50V M	
C313L/R	3409247121	Ceramic 470 μ F 10V M	
C314L/R	3579270130	Ceramic 27pF 50V D	
C315L/R	3579150130	Ceramic 15pF 50V D	
C316L/R		Not used !	
C317L/R	3579471130	Ceramic 470pF 50V D	
C318L/R	3579473120	Mylar 0.047 μ F 100V J	
C319L/R		Not used !	
C320L/R	3579101130	Ceramic 100pF 50V D	
C321L/R	3579101130	Ceramic 100pF 50V D	
C322L/R	3579472120	Mylar 0.47 μ F 100V J	
C323L/R	3479210971	Electric SA 1 μ F 50V M	
C324L/R	3409247131	Electric SA 470 μ F 16V M	
C325	3579102120	Mylar 0.01 μ F 100V J	
C325L/R	3479222041	Electric SA 22 μ F 25V M	
C326	3479210131	Electric SA 100 μ F 16V M	
C326L/R	3479222041	Electric SA 22 μ F 25V M	
C327	3479247871	Electric SA 0.47 μ F 100V M	
C328L/R	3609104120	Mylar 0.1 μ F 100V J	
C329L/R	3609104120	Mylar 0.1 μ F 100V J	
C330L/R	3579472530	Ceramic 4700pF 100V D	D
C332L/R			
C333L/R	3579809030	Ceramic 8pF 50V D	
C335	3409222169	Electric SA 220 μ F 35V M	
C336		Not used !	
C337 C338	3479247041	Electric SA 47 μ F 25V M	
C340L/R	3509103450	Ceramic 0.01 μ F 150V M	
Coil			
L301L/R	2648601470	Inductor 0.5mH	
Diodes			
D301L/R	2058306101	1N4148	

Ref. No.	Part No.	Description	Remark
D302L/R	2058306101	1N4148	
D303L/R	2258522127	Zener DZ27	
D304L/R		Not used !	
D305L/R	2058306101	1N4148	
D307L/R			
D308L/R	2258106100	1N4002	
D309L/R	2258106100	1N4002	
D310L/R	2058306101	1N4148	
D313L/R			
D314	2258522119	Zener DZ12	
D315	2258522111	Zener DZ5.6	
D316	2058306101	1N4148	
D317	2258522119	1N4002	
D318-D320	2258106100	1N4002	
Resistors: All resistors are 1/5W carbon film $\pm 5\%$ tolerance, unless otherwise specified. M. is metal film, M.O. is metal oxide and C. is cement type.			
R201L/R	3069102970	1k Ω	
R202L/R	3069224970	220k Ω	
R203L/R	3069102970	1k Ω	
R204L/R	3069224970	220k Ω	
R205L/R	3069102970	1k Ω	
R206L/R	3069224970	220k Ω	
R207L/R	3069102970	1k Ω	
R208L/R	3069224970	220k Ω	
R209	3069102970	1k Ω	
R210L/R	3069224970	220k Ω	
R211L/R	3069224970	220k Ω	
R212L/R	3069272970	2.7k Ω	
R213L/R	3069272970	2.7k Ω	
R214L/R	3069272970	2.7k Ω	
R215/R216	3069470970	47 Ω	
R217L/R	3069563970	56k Ω	
R218L/R	3069472970	4.7k Ω	
R219L/R	3069181970	180 Ω	
R301L/R	3069102970	1k Ω	
R302L/R	3069473970	47k Ω	
R303L/R	3069271970	270 Ω	
R304L/R	3069152970	1.5k Ω	
R305L/R	3069471970	470 Ω	
R306L/R	3069104970	100k Ω	
R307L/R	3069474970	470k Ω	
R308	3069470970	47 Ω	
R309	3069470970	47 Ω	
R310L/R	3069102970	1k Ω	
R311L/R	3069563970	56k Ω	
R312L/R	3069331970	330 Ω	
R313L/R	3069470970	47 Ω	
R314L/R	3069470970	47 Ω	
R315L/R	3069332970	3.3k Ω	
R316	3069339970	3.3 Ω	
R317L/R	3069102970	1k Ω	
R318L/R	3069273970	27k Ω	
R319L/R	3039222576	M.O. 2.2k Ω 2W	
R320L/R	3069122970	1.2k Ω	
R321L/R	3069103970	10k Ω	
R323L/R	3069102970	1k Ω	

Ref. No.	Part No.	Description	Remark
R324L R	3069121127	M., 1200 1/4W	
R325L R	3069272970	2.7kΩ	
R326L R	3069202970	2kΩ	
R327L R	3069183970	18kΩ	
R328L R	3069121127	M., 1200 1/4W	
R329		Not used!	
R330L R	3069391127	M.O., 390Ω 1/2W	
R331L R	3069339970	3.3Ω	
R334L R			
R335L R	3069398782	C., 0.390 5W	
R338L R			
R339L R	3069183970	18kΩ	
R340L R	3069183970	18kΩ	
R341L R	3069472970	4.7kΩ	
R342L R	3069242970	2.4kΩ	
R343L R	3069472970	4.7kΩ	
R344L R	3069273970	27kΩ	
R345L R	3069273970	27kΩ	
R346L R	3069222970	2.2kΩ	
R347L R	3069222970	2.2kΩ	
R348L R	3069153970	15kΩ	
R349L R	3069222970	2.2kΩ	
R350L R	3069222970	2.2kΩ	
R351L R	3069222970	2.2kΩ	
R352	3069271970	270Ω	
R353	3069103970	10kΩ	
R354	3069101970	100Ω	
R355	3069222970	2.2kΩ	
R356	3069432970	4.3kΩ	
R357	3069123970	12kΩ	
R358	3069102970	10kΩ	
R359	3069222970	2.2kΩ	
R360	3069222970	2.2kΩ	
R361	3069473970	47kΩ	
R362	3069153970	15kΩ	
R363L R	3039101476	M.O., 100Ω 1W	
R364L R	3039100576	M.O., 100 2W	
R371L R	3069102970	1kΩ	
R373	3069123970	12kΩ	
R374L R	3069339970	3.3Ω	
R375L R	3069339970	3.3Ω	
Relay A	5528001500	Relay DH24D 2-0T 7A	
Relay B	5528001500	Relay DH24D 2-0T 7A	
Relay H	5528001480	Relay DH24D 2-0T 3A	
Transistors			
Q301L R	2018217700	Differential Amplifier 2SK332F FET	
Q302L R	2208606108	Differential Amplifier KTC2240	
Q303L R	2208606108	Differential Amplifier KTC2240	
Q304L R	2008206102	Pre-driver KTA949	
Q305L R	2208606114	Current Mirror A06	
Q307L R	2008606107	Pre-driver KTC2229	
Q308L R		Not used!	
Q309L R	2029407118	Driver 2SC2168	
Q310L R	2028107115	Driver 2SA958	
Q311L R	2029416106	Power 2SC3855	
Q312L R	2029116103	Power 2SA1491	
Q313L R	2029416106	Power 2SC3855	
Q314L R	2029116103	Power 2SA1491	
Q315L R	2208606114	Switching A06	

Ref. No.	Part No.	Description	Remark
Q316L R	2208606114	Switching A06	
Q317		Not used!	
Q318	2208606114	Switching A06	
Q319	2008606104	Switching C815Y	
Q320	2208606114	Switching A06	
Q321	2208206113	Switching A55	

Phono P.C. Board 4002120710

Capacitors					
C099L R	3579331130	Ceramic	330pF	50V	D
C100L R	3579881130	Ceramic	680pF	50V	D
C101/C102	3579473530	Ceramic	0.047μF	50V	Z
C103L R	3579220210	Ceramic	22pF	50V	D
C104L R	3579880130	Ceramic	68pF	50V	D
C105L R	3479247971	Electric SA	4.7μF	50V	M
C106L R	3579100030	Ceramic	10pF	50V	D
C107L R	3579222530	Ceramic	2200pF	50V	Z
C108L R	3679182120	Mylar	0.0018μF	100V	J
C109L R	3679562120	Mylar	0.0056μF	100V	J
C110L R	3479288871	Electric SA	0.68μF	100V	M
C111L R	3679562120	Mylar	0.0056μF	100V	J
C112L R	3658224201	Tantal	0.22μF	16V	K
C113L R	3658224201	Tantal	0.22μF	16V	K
C114L R	3579472530	Ceramic	4700pF	50V	Z
C115L R	3479210121	Electric SA	100μF	10V	M
C116L R	3479210121	Electric SA	100μF	10V	M
C117L R	3479222031	Electric SA	22μF	16V	M
C118L R	3479222031	Electric SA	22μF	16V	M
C119L R	3679472120	Mylar	0.0047μF	100V	J
C120L R	3679102120	Mylar	0.001μF	100V	J
C121L R	3479247971	Electric SA	4.7μF	50V	M
C122L R	3579100030	Ceramic	10pF	50V	D
C123L R	3579222530	Ceramic	2200pF	50V	Z
C124L R	3679562120	Mylar	0.0056μF	100V	J
C125L R	3679182120	Mylar	0.0018μF	100V	J
C126L R	3479210121	Electric SA	100μF	10V	M
C127L R	3479288871	Electric SA	0.68μF	100V	M
C128L R	3679562120	Mylar	0.0056μF	100V	J
C129-C132	3479247041	Electric SA	47μF	25V	M
C133/C134	3408222131	Electric SA	220μF	16V	M
C135L R	3479210121	Electric SA	100μF	10V	M

Coils					
L101L R	2648001010	Inductor	50μH		D
L102L R	2648001010	Inductor	50μH		D

Diode					
D101/D102	2258106100	1N4002			

Resistors					
R101L R	3069102970	1kΩ			
R102L R	3069913970	91kΩ			
R103L R	3069913970	91kΩ			
R104L R	3069911970	910Ω			
R105L R	3069433970	43kΩ			
R106L R	3069564970	56kΩ			
R107L R	3069471970	470Ω			

Ref. No.	Part No.	Description	Remark
R108L R	3069104970	100kΩ	
R109L R	3069105970	10kΩ	
R110L R	3069753970	75kΩ	
R111L R	3069122970	1.2kΩ	
R112L R	3069680970	68Ω	
R113L R	3069103970	10kΩ	
R114L R	3069103970	10Ω	
R115L R	3069473970	47kΩ	
R116L R	3069562970	5.6kΩ	
R117L R	3069473970	47kΩ	
R118L R	3069562970	5.6kΩ	
R119L R	3069470970	47Ω	
R120L R	3069104970	100kΩ	
R121L R	3069911970	910Ω	
R122L R	3069433970	43kΩ	
R123L R	3069564970	56kΩ	
R124L R	3069471970	470Ω	
R125L R	3069104970	100kΩ	
R126L R	3069471970	470Ω	
R127/R128	3069471970	470Ω	
R129/R130	3069471970	470Ω	
R131/R132	3069152970	1.5kΩ	
R133/R134	3069331970	330Ω	
R135/R136		Not used!	
R137L R	3069911970	910Ω	
Relay M	5528001020	Relay RZ12	
Relay S	5528001020	Relay RZ12	

Transistors			
Q101L R	2008607114	MC Amplifier 2SC3329	
Q102L R	2008207107	MC Amplifier 2SA1316	
Q103/Q104	2208606114	MPS A06 Switching NPN	

Front P.C. Board 4002120700

Capacitors					
C401L R		Not used!			
C402L R	3479222971	Electric SA	2.2μF	50V	M
C403L R	3579470130	Ceramic	47pF	50V	D
C404L R	3479222971	Electric SA	2.2μF	50V	M
C405L R	3479222971	Electric SA	2.2μF	50V	M
C406L R	3679153120	Mylar	0.015μF	100V	J
C407L R	3679823120	Mylar	0.082μF	100V	J
C408L R	3479222971	Electric SA	2.2μF	50V	M
C409L R	3679183120	Mylar	0.018μF	100V	J
C410L R	3479210041	Electric SA	10μF	25V	M
C411L R	3579391130	Ceramic	390pF	50V	D
C412L R	3479247021	Electric SA	47μF	10V	M
C413L R	3479222971	Electric SA	2.2μF	50V	M
C414L R		Not used!			
C415L R	3609104120	Mylar	0.1μF	100V	J
C416L R	3679823120	Mylar	0.082μF	100V	J
C417/C418	3408210141	Electric SA	100μF	25V	M
C419L R	3679392120	Mylar	3300pF	100V	J
C420L R	3479210971	Electric SA	1μF	50V	M
C421/C422	3408210141	Electric SA	100μF	25V	M

Diodes			
D401-D403	2371124502	LED SLR 54URC	

Ref. No.	Part No.	Description	Remark
D404	2371124502	LED SLR 54YCD	
D406	2371124702	LED SLR 54URC	
D405-D407	2371124702	LED SLR 54URC	
D408	2258106100	1N4148	

Resistors					
R400L R	3069331970	330Ω			
R401L R	3069102970	1kΩ			
R402L R	3069104970	100kΩ			
R403L R	3069321970	220Ω			
R404L R	3069100970	10Ω			
R405L R	3069100970	10Ω			
R406L R	3069104970	100kΩ			
R407L R	3069222970	2.2kΩ			
R408L R		Not used!			
R409L R	3069682970	68kΩ			
R410L R	3069392970	3.9kΩ			
R411L R	3069222970	2.2kΩ			
R412L R	3069222970	82kΩ			
R413L R	3069105970	10kΩ			
R414L R	30696821970	820Ω			
R415L R	3069474970	470kΩ			
R416L R	3069101970	100Ω			
R417L R	3069272970	2.7kΩ			
R418L R	3069322970	3.3kΩ			
R419L R	3069182970	1.8kΩ			
R420L R	3069392970	3.9kΩ			
R421L R	3069222970	2.2kΩ			
R422L R	3069152970	1.5kΩ			
R423L R	3069122970	1.2kΩ			
R424L R	3069392970	3.9kΩ			
R425	3069470970	47Ω			
R425L R	3069471970	470Ω			
R426	3069472970	4.7kΩ			
R427	3069472970	4.7kΩ			
R428-R433	3069102970	1kΩ			
R433	3069331970	330Ω			
R434	3069470970	47Ω			
R434	3069472970	4.7kΩ			
Relay D	5528001020	Relay RZ12			

Transistors			
Q401L R	2008206104	Tone Buffer A970BL	
Q402L R	2208606108	Tone Buffer C2240BL	
Q403	2208606114	Switching A06	

Power P.C. Board 4002120730

Capacitors					
C901	3549472410	Ceramic	0.0047μF	400V	J
C902-C906	3609153267	Mylar	0.015μF	400V	M
C907	3479233971	Electric SA	3.3μF	50V	M
C908/C909	3419568280	Electric SA	8200μF	80V	M
C910	3679473120	Mylar	0.047μF	100V	J
C911/C912	3408210269	Electric SA	1000μF	35V	M
C913/C914	3471210061	Electric SA	10μF	35V	M
C915	3679472120	Mylar	0.047μF	100V	J

Ref. No.	Part No.	Description	Remark
C916/C917 C918/C919	3679472120	Not used! Mylar 0.047 μ F 100V J	
Diodes			
D901-D904 D905-D908 D909 D910/D911 D912	2058100138 2058306101 2058306101 2258106100	6A2 Rectifier 1N4002 Not used! 1N4002 1N4148	
Fuses			
F901 F902/F903	5508303035 5508302635	T 5A 250V 500mA 250V	
Resistor			
R901 R902/R903 R904 R905-R908	3039102476 3039339476 3069332970	M.O., 1k Ω 1W M.O., 3.3k Ω 1W M.O., 3.3k Ω 1/4W Not used!	

Power LED P.C. Board 4002120770			
Diode			
D900	2371124702	LED SLR 54URC	
Resistor			
R909	3069102970	1k Ω	

SPKR P.C. Board 4002120610			
Capacitors			
C333 C334	3479222071 3479222071	Electric SA 22 μ F 50V M Electric SA 22 μ F 50V M	
Resistors			
R367/R368 R369 R370 R371/R372	3069221970 3069620970 306960970	Not used! 220 Ω 82 Ω 56 Ω	

Headphone P.C. Board 4002120750			
Capacitor			
C339L/R	3579102530	Ceramic 1000pF 50V D	D
Resistors			
R366L/R	303991476	M.O., 680 Ω 1W	

Ref. No.	Part No.	Description	Remark
Bias P.C. Board 4002120780			
Transistor			
Q306L/R	2008609107	Biasing MPS9633	

Posistor P.C. Board 4002120760			
Resistor			
R376	2438012100	Posistor PTH487A01BE22	
Connector Lead Ass'ies			

CNT1	4119104453	Slat Wire Ass'y From Phono to Front 450mm 4P	
CNT2	4358103309	Ass'y from Front Phono to Main Board 200mm 3P	
CNT3	4358504301	Ass'y Front to Main 300mm 4P	
CNT4	4358104409	Ass'y Front to Main 400mm 3P	
CNT5	4358504301	Ass'y Front to Main 300mm 4P	
CNT6	4358103302	Ass'y Phono to Main 200mm 3P	
CNT7	4119104453	Slat Wire Ass'y SPKR to Main 450mm 4P	
CNT8	4119103453	Slat Wire Ass'y H.P. to Main 450mm 3P	
CNT9	4119103243	Slat Wire Ass'y Front to Power 240mm 3P	
CNT10	4119102353	Slat Wire Ass'y Front to Power LED 350mm 2P	
CNT11	4119102403	Slat Wire Ass'y Front to Main 400mm 2P	
CNT12	4358103166	Ass'y Basing to Main 160mm 3P	
CNT13	4358103166	Ass'y Basing to Main 160mm 3P	
CNT14	4358102452	Ass'y Main to Power 450mm 2P	
CNT15	4119102143	Slat Wire Ass'y SPKR to Power 140mm 2P	
CNT16	4358502140	Ass's Front to Main 140mm 2P	
CNT17	4119102703	Slat Wire Ass'y Posistor to Main 700mm 2P	
CNT18	4358202502	Ass'y KST Q250DL Main to Power 500mm 2P	
CNT1P	4428513440	Plug 4P	
CNT2P	4428505710	Plug 3P	
CNT3P	4428517710	Plug 4P	
CNT4P	4428505710	Plug 3P	
CNT5P	4428517710	Plug 4P	
CNT6P	4428505710	Plug 3P	
CNT7P	4428505610	Plug 4P	
CNT8P	4428505710	Plug 3P	
CNT9P	4428505710	Plug 3P	
CNT10P	4428513420	Plug 2P Angle	
CNT11P	4428508210	Plug 2P	
CNT12P	4428505710	Plug 3P	
CNT13P	4428505710	Plug 3P	
CNT14P	4428508210	Plug 2P	
CNT15P	4428508210	Plug 2P	
CNT16P	4428517510	Plug 2P	
CNT17P	4428508210	Plug 2P	
CNT18P	4428525780	Plug 2P AC	
G1	4235006810	Ground Plat	
G2	4235006810	Ground Plat	
Fuse Clip	4255001010	6EA	

Mechanical Parts List (Cabinet & Chassis)

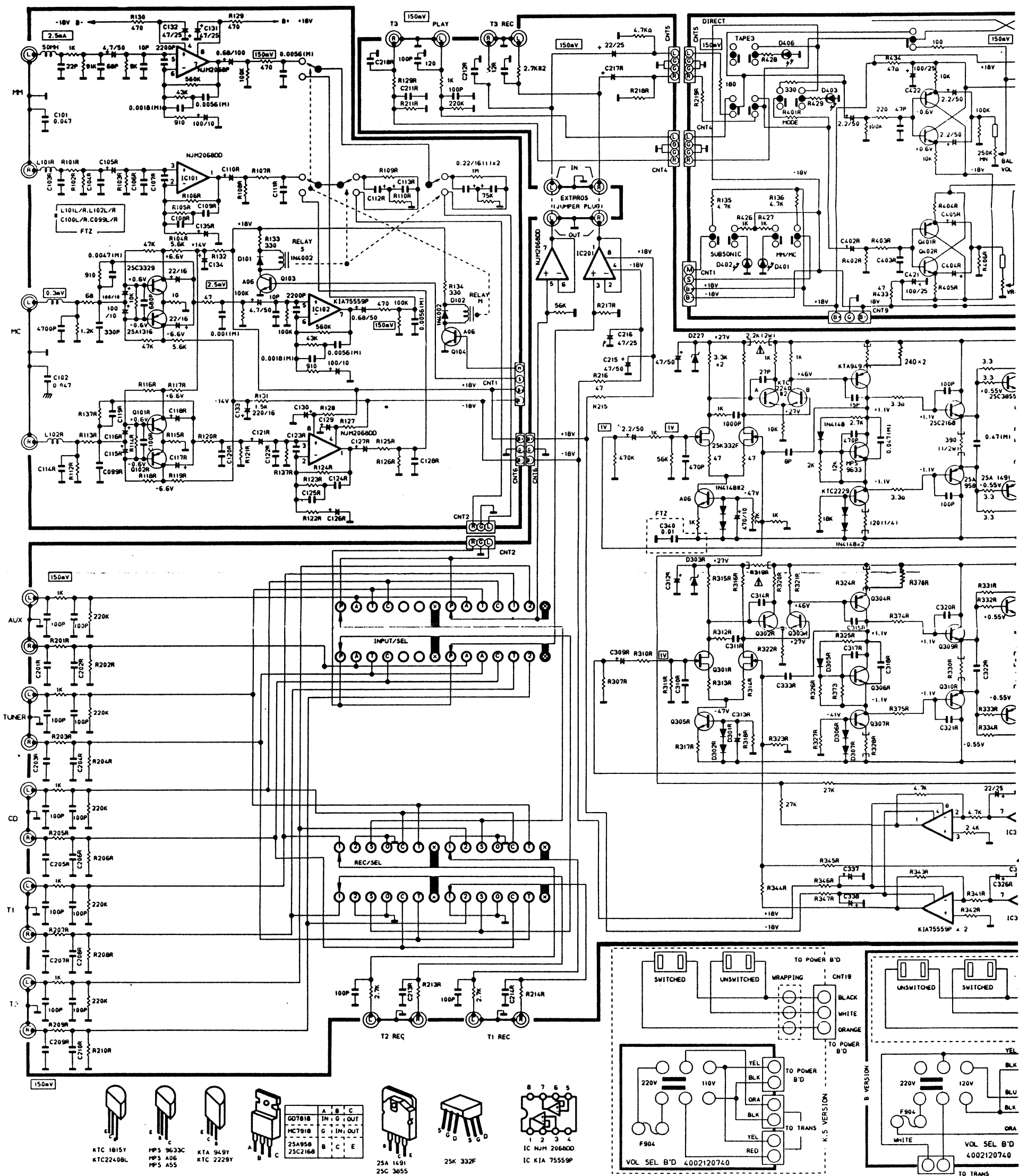
No.	Description	Parts No.	Q'ty	Remark
1	Panel Front, Black	048601000311	1	Domestic
2	Badge	048535031911	1	
(2)	Badge, Sherwood	048535032511	1	
3	Button Power	8545074310	1	
4	Spring Power	6555004380	1	
5	Knob Speaker	048643004911	1	
6	Knob Rotary	048643004811	3	
7	Knob Main	048643004611	1	
8	Knob Function	048643004711	2	
9	Guide LED	8555031410	8	
10	Body Front	048521007011	1	Domestic, A
11	Button Push 6Key	048542001911	1	
(11)	Button Push 8Key	048542000911	1	
12	Bezel	048525007511	1	
13	Button Push	8545077410	2	
14	Jack Phone	4438006020	1	
15	Washer	8305003810	1	
16	VR Speaker	4608002410	1	
17	VR 100KA x 2, Bass/Treble	3208059910	2	
18	VR 250KMN, Balance	3208060010	1	
19	Switch Push (4/2, S), Direct, Loudness	4628056910	2	Domestic
20	VR 50KA x 2, Volume	3208058210	1	
21	Switch Push (4/2, NS), Tape3	4628056510	1	
22	Switch Push (2/2, S)	4628056416	4	
23	Foot, Gold Front	046033101611	2	
(23)	Foot Gold Front	046033101711	2	
24	Cover Top, Black	046122021111	1	
25	Chassis Front	6122212710	1	
26	Shaft Power	6305004810	1	
27	Switch Power	4628056110	1	
28	Foot Base	6033101610	2	A, B, C, D, E, F, Domestic
(28)	Foot, Gold	046033101611	1	
(28)	Foot, Gold	046033101711	2	
29	Cover Bottom	6122415710	1	
30	Frame Right	6122901610	1	
31	Jack RCA 2P Ground, MM	4438107510	1	
32	Jack RCA 2P MC	4438105810	1	
33	Jack RCA 2P	4438103010	1	
34	Jack RCA 2P, Gold	4438105710	1	
35	Jack RCA 6P	4438103210	3	
36	SW Rotary, REC, input selector	4608002510	2	Domestic, B, A, B, Domestic
37	Switch Slide	4618007510	2	
38	Bracket Heatsink	6505103910	1	
39	Bushing	7015003110	2	
40	Heatsink Power	7502004320	1	
41	Frame Left	6121605610	1	
42	Heatsink Regulator TR	7505206220	2	
43	Cable Tie	6528000410	1	
44	Selector Voltage	4618006510	1	
45	Outlet, Black	4448103010	1	Domestic
(45)	Outlet, Black	4448100410	2	
46	Terminal Speaker	4408105810	1	
47	Bracket P.C. Board	6505108110	1	
48	Chassis Back, Black	046102028911	1	
(48)	Chassis Back, Black	046102028211	1	
(48)	Chassis Back, Black	046102032631	1	
(48)	Chassis Back, Black	046102028641	1	
(48)	Chassis Back, Black	046102028511	1	
(48)	Chassis Back, Black	046102028671	1	
49	Cord Stopper, Black	6518000310	1	Domestic
(49)	Cord Stopper, Black	6518000710	1	

No.	Description	Parts No.	Q'ty	Remark
(48)	Cord Stopper, Black	6518000111	1	C, D, F
(48)	Cord Stopper, Black	6518000211	1	
50	Cord AC Power, Black	4308000520	1	Domestic
(50)	Cord AC Power, Black	4308001410	1	
(50)	Cord AC Power, Black	4308002310	1	C, D, F
(50)	Cord AC Power, Black	4308000610	1	
51	Adapter	4428300310	1	Domestic
52	System Ground	4408104910	1	
53	Plug Jumper	4328204210	2	
54	Washer Spring	8319130011	8	
55	Sponge	6705013830	1	
56	Shield Fence	6163109210	1	

Screws				
S1	#2BTC 3x8 ZNB	8109230083	28	
S2	#2FTC 3x8 ZNB	8129230083	2	
S3	#2WPTC 3x6 ZNB	8159230083	8	
S4	#2WSAM 4x8 ZNB	8119440083	8	
S5	#2PTC 3x8 ZNB	8119230083	22	
S6	#2WPTC 3x8 ZNY	8159230081	8	
S7	Ground	8155000710	4	
S8	#2PTC 4x6 ZNY	8119230061	1	
S9	#2HEX 3x12 ZNY	8099130121	8	
S10	#2WPTC 3x10 ZNY	8159230101	2	

D

5



D **E** **F** **G**



NOTES 1. Resistance values are indicated in ohms unless otherwise specified (K=1,000 M=1,000,000)

2. Capacitance values are shown in microfarads unless otherwise noted (P=micro-micro farads.)

3. : Signal Voltage

CAUTION : Safety precautions to be followed during servicing

- 1) Since those parts marked with  are critical parts for safety use the one described parts list.
- 2) Before returning the receiver to the customer make appropriate leakage current or resistance measurements to determine that exposed parts are properly insulated from the supply circuit.