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SERVICE
MANUAL

PM55

4822 725 50851



marantz®

model PM-55

Stereo Amplifier

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound.

Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

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Parts can be ordered either by mail or by telex. In both cases, correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

MARANTZ INTERNATIONAL
Vestdijk 9
5600 MD Eindhoven
The Netherlands
Phone: +31/40.758290
Telefax: +31/40.75.82.99
Telex: 35000 PHTC NL routing IND NLMTFAT

PARTS ORDERING

Parts may be ordered or advice can be given at the following addresses:

AUSTRIA
MARANTZ
Hietzinger Kai 137a
1130 Wien

BELGIUM
MARANTZ EUROPE B.V.
Div. Benelux
P.O. Box 218
Building HCM9
5600 MD Eindhoven
The Netherlands
Fax. 11 01 11

CHILE
MARANTZ
DIVISION OF PHILIPS S.A.
AV. Santa Maria, 0760
Casilla 2687
Santiago
Telex: 240.239

DENMARK
MARANTZ
Horsvinget 5
2630 Tastrup

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Postboks 7034
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4 Rue Bernard Palissy
92600 Asnières
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Telex: 611651

GERMANY
MARANTZ GERMANY GmbH
Alexanderstraße 1
2000 Hamburg
Germany

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MARANTZ EUROPE B.V.
Div. Benelux
P.O. Box 218
Building HCM9
5600 MD Eindhoven
The Netherlands
Fax. 040 - 75 52 66

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171 25 Solna

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GREAT BRITAIN
MARANTZ HiFi U.K. Ltd.
Kingsbridge House
Padbury oaks
575-583 Bath Road
Longford
Middlesex UB7 0EH
Faxnr.: 0753 680 428

GREECE
SHERTON ELECTRONICS S.A.
P.O.Box 21025
Hippocrates Street 188
Athens 11471
Greece
Telex: 216.795

JAPAN
MARANTZ JAPAN, Inc.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan

KUWAIT
AL ALAMIAHA ELECTRONICS
Ussama Building
Fahd al Saleem Street
P.O.Box 23781
Safat-Kuwait
Telex: 22694

ITALY
MARANTZ ITALIANA S.P.A.
Via Chiese, 74
20126 Milano
Italy

SAUDI ARABIA
AL ALAMIAH ELECTRONICS
P.O.Box 5954
University Street
Riyadh 11432
Saudi Arabia
Telex: 401530

SOUTH AFRICA
MARANTZ
DIVISION OF PHILIPS S.A.
Main Road Martindale
P.O.Box 58088
Newville 21114
South Africa

SPAIN
Euroservice S.A.
Bernardo obrégón, 26
28012 Madrid
Faxnr.: 3412 306 198

SWITZERLAND
MARANTZ
Technischer Service
Duenstraße 3
3186 Düringen
Switzerland

TURKEY
DOGRUOL Ltd.
I.M.C.
6 Blok N°6310
Unkapani
Istanbul
Turkey
Telex: 22085

MALTA
CACHIA & GALEA
Republic Street, 68D
Valetta
Telex: 1682

PORTUGAL
MARANTZ
Divisao Philips S.A. service
Ourela-carnaxide
2795 LinDA-A-VELHA
Telex: 43906

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

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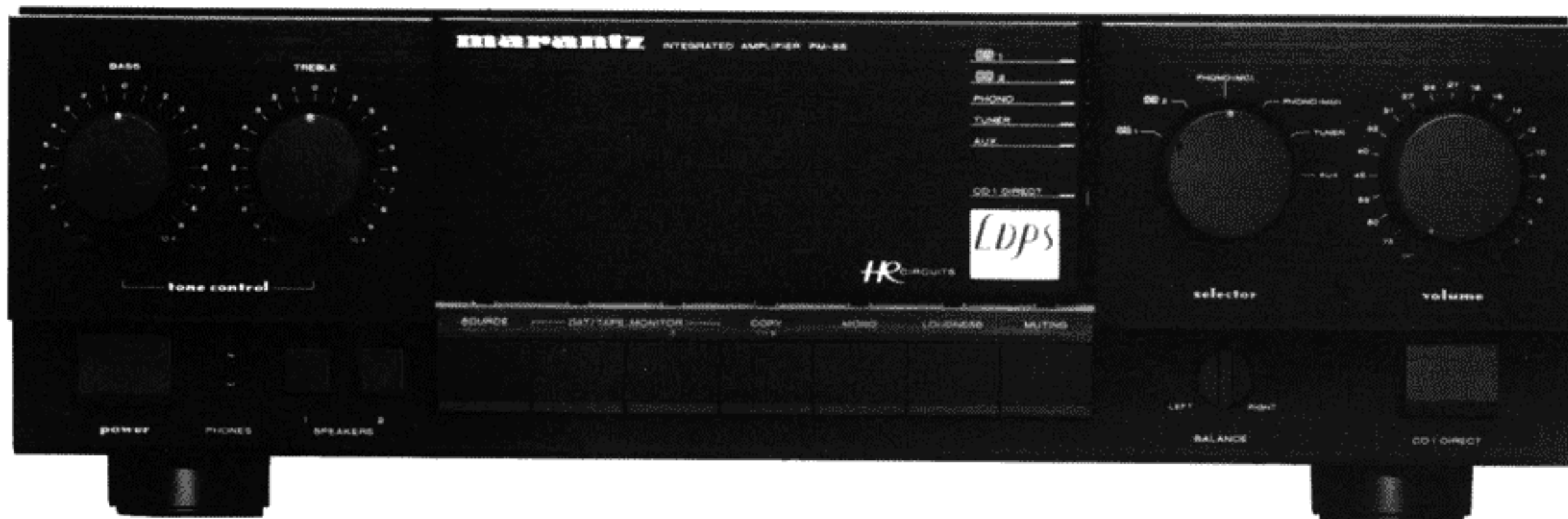
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How to use this service manual

- The "Common parts" which Marantz Japan, Inc. has established are eliminated from this service manual.
- These "Common parts" are applied to all models in the service manuals arranged and issued by MJI.
- To indicate clearly the common parts in the schematic diagram, a line is drawn above or under the Ref. Desig. No. of applicable parts.
- "Common parts" can be supplied from the Marantz service center as ever.
In case of ordering, please establish the parts number of 12 N/C'S following the procedure mentioned in this service manual "How to establish the parts number for common parts".

1) Please correctly write the parts number of 12 N/C'S following the rule.

MODEL PM-55 STEREO AMPLIFIER



1. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model PM-55 consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Tone Amp mounted on P.W. Board PE01
2. Master Volume mounted on P.W. Board PG01
3. Tape Monitor mounted on P.W. Board PJ01
4. Front Switch mounted on P.W. Board PS01
5. CD Direct Switch mounted on P.W. Board PS51
6. Input Selector,
Phono mounted on P.W. Board PV01
7. Headphone,
Speaker Switch mounted on P.W. Board PW01
8. Input Selector,
Indicator mounted on P.W. Board PY01
9. Function LED
Indicator mounted on P.W. Board PY51
10. Main Amp mounted on P.W. Board P701
11. Power Supply mounted on P.W. Board P801
12. Power Switch mounted on P.W. Board P901

2. ADJUSTMENT PROCEDURE

1. Test Points

Left channel: J705 (+), J707 (-)
Right channel: J706 (+), J708 (-)

2. Adjustment Points

Left channel: R719 2.2k ohm variable resistor
Right channel: R720 2.2k ohm variable resistor

3. Adjustment Procedure

- (1) Before turning on the set's power, turn variable resistors R719 and R720 in the direction in which the current does not flow (clockwise for R719, counterclockwise for R720).
- (2) Connect the DC digital voltmeter to the test points with the proper polarities. (Adjust both channels at once.)
- (3) Set the set's volume to minimum, the speaker terminals to no load, and the input to open.
- (4) Set the following after turning on the power:
After 30 seconds: 8 to 9 mV (22 to 25 mA)
After 1 minute: 9 to 10 mV (25 to 27 mA)
Be sure to set for 9 to 10 mV (25 to 27 mA) when the circuitry becomes stable.

4. Notes

When readjusting sets which have been heated up for repairs, etc., conduct a heat run at an idle for about 10 minutes, then set for 9 to 10 mV (25 to 27 mA).

3. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model PM-55 Stereo Amplifier.

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
ACVTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble shooting
DCVTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer	Adjust level of primary power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

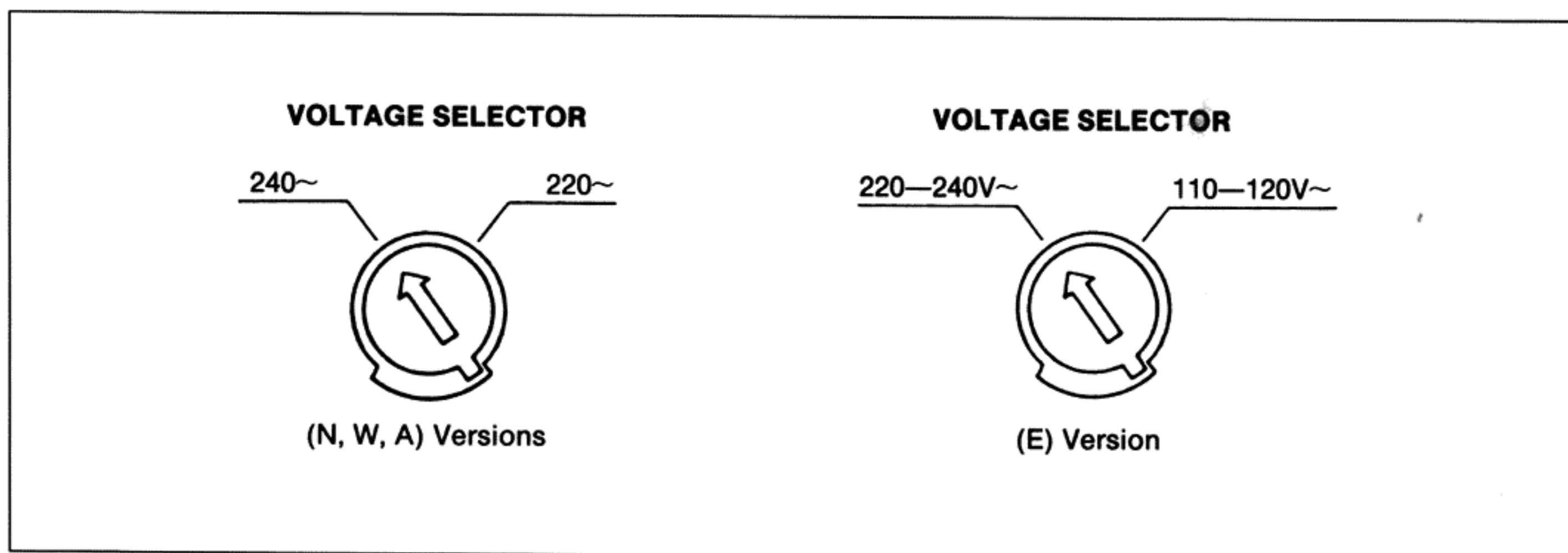
4. VOLTAGE CONVERSION

● EUROPEAN MODEL ONLY

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

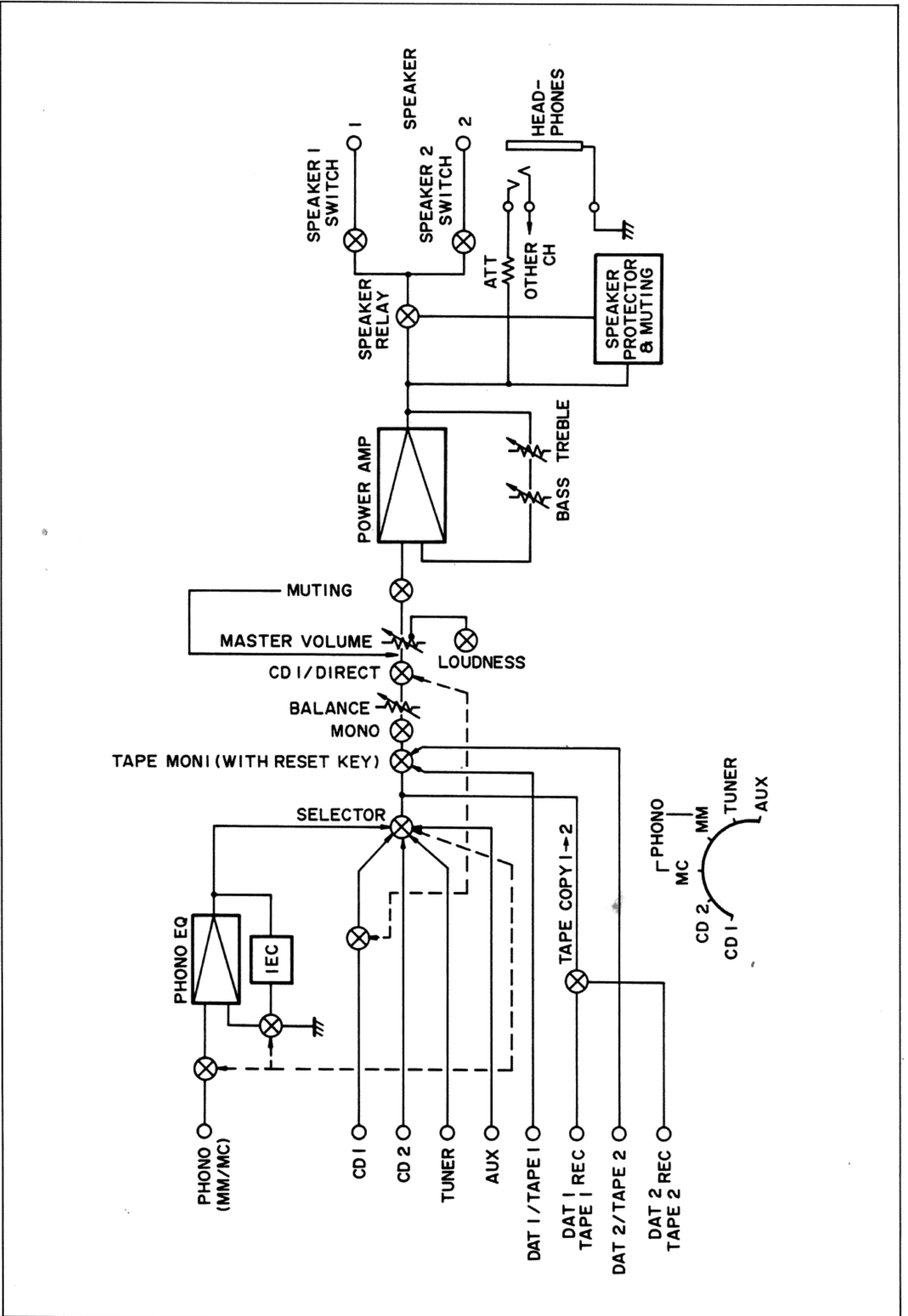
CAUTION
DISCONNECT POWER SUPPLY CORD FROM AC
OUTLET BEFORE CONVERTING VOLTAGE.

Voltage Conversion Chart



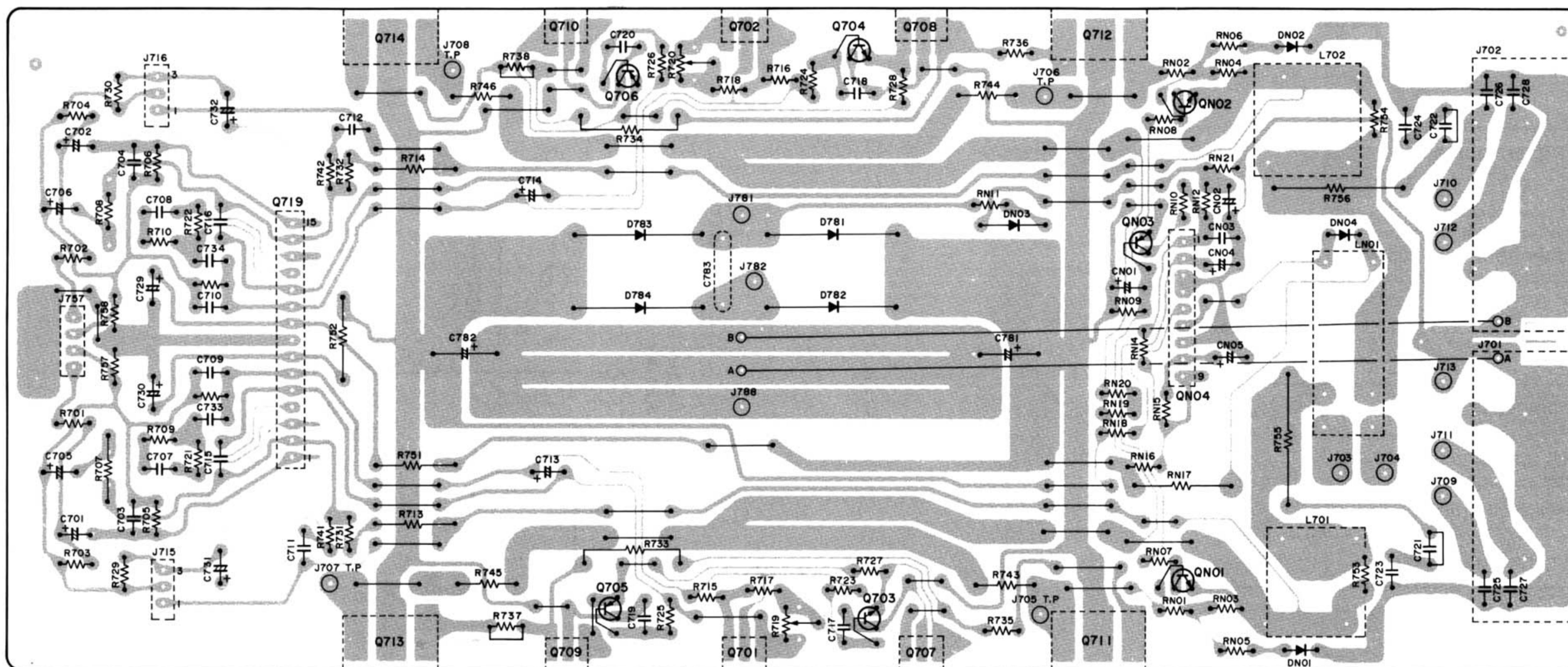
Note on Safety: Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

5. BLOCK DIAGRAM

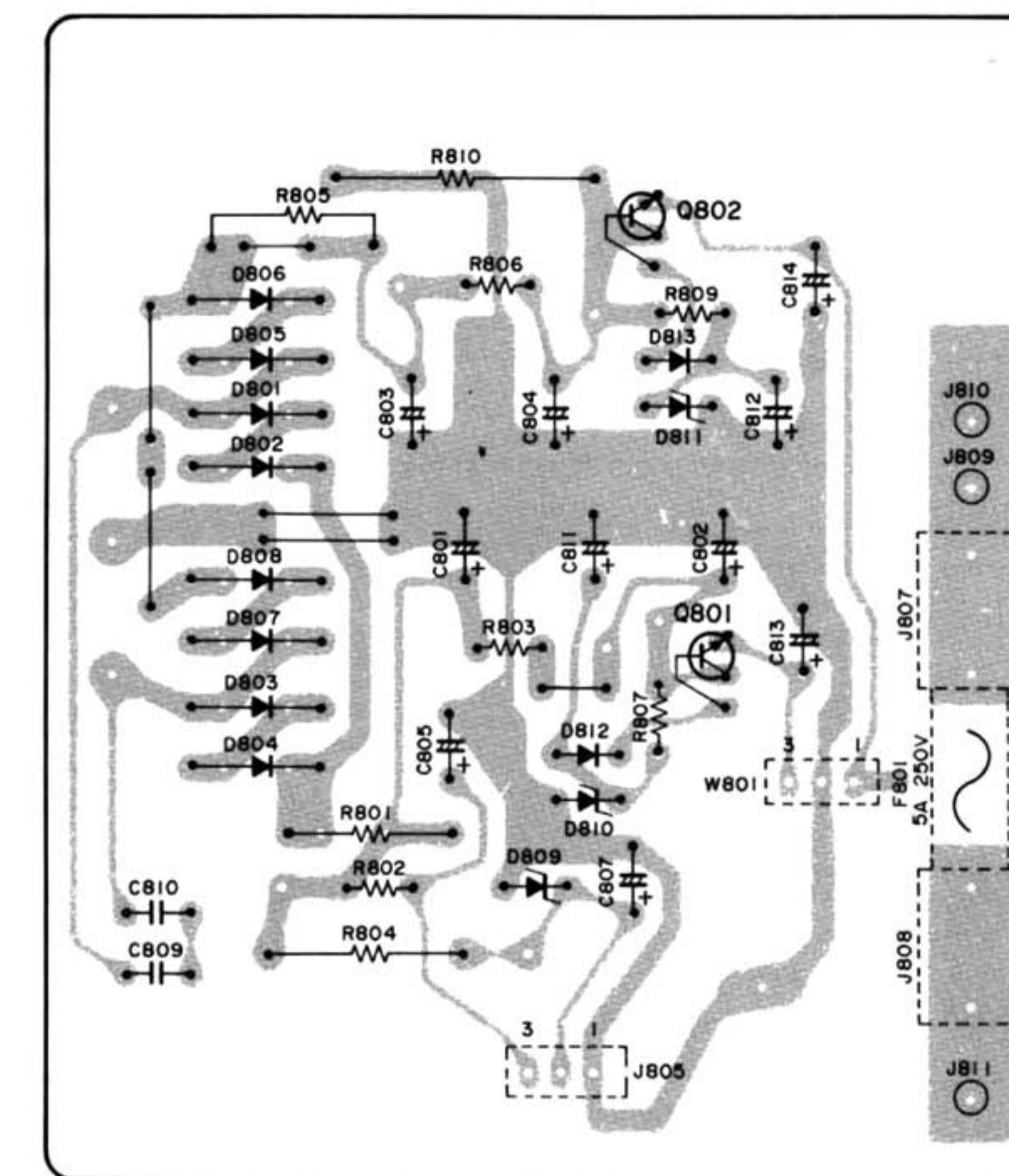


6. PARTS LOCATIONS (Pattern Side)

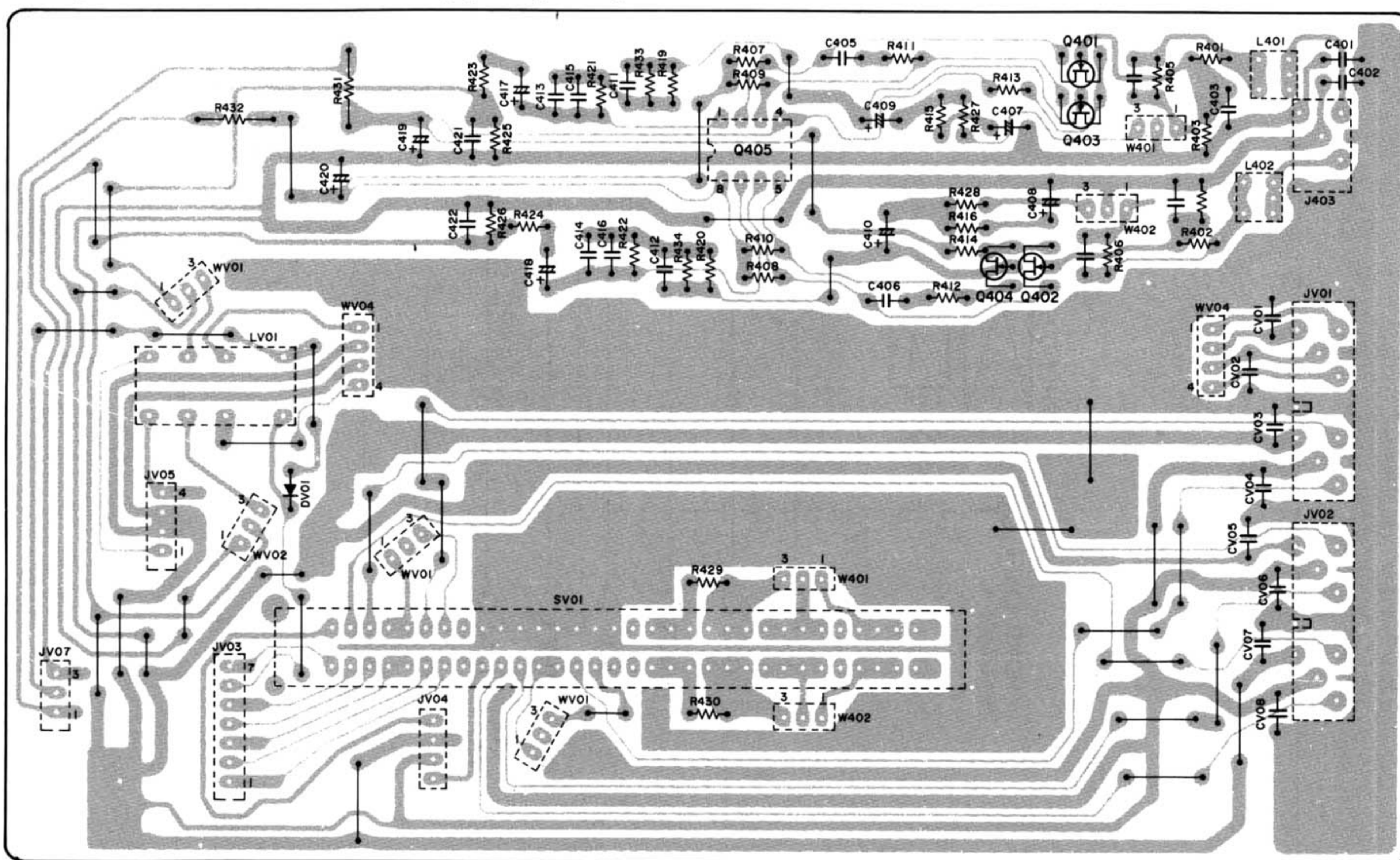
6.1 Main Amp Assembly (P701) Component Locations



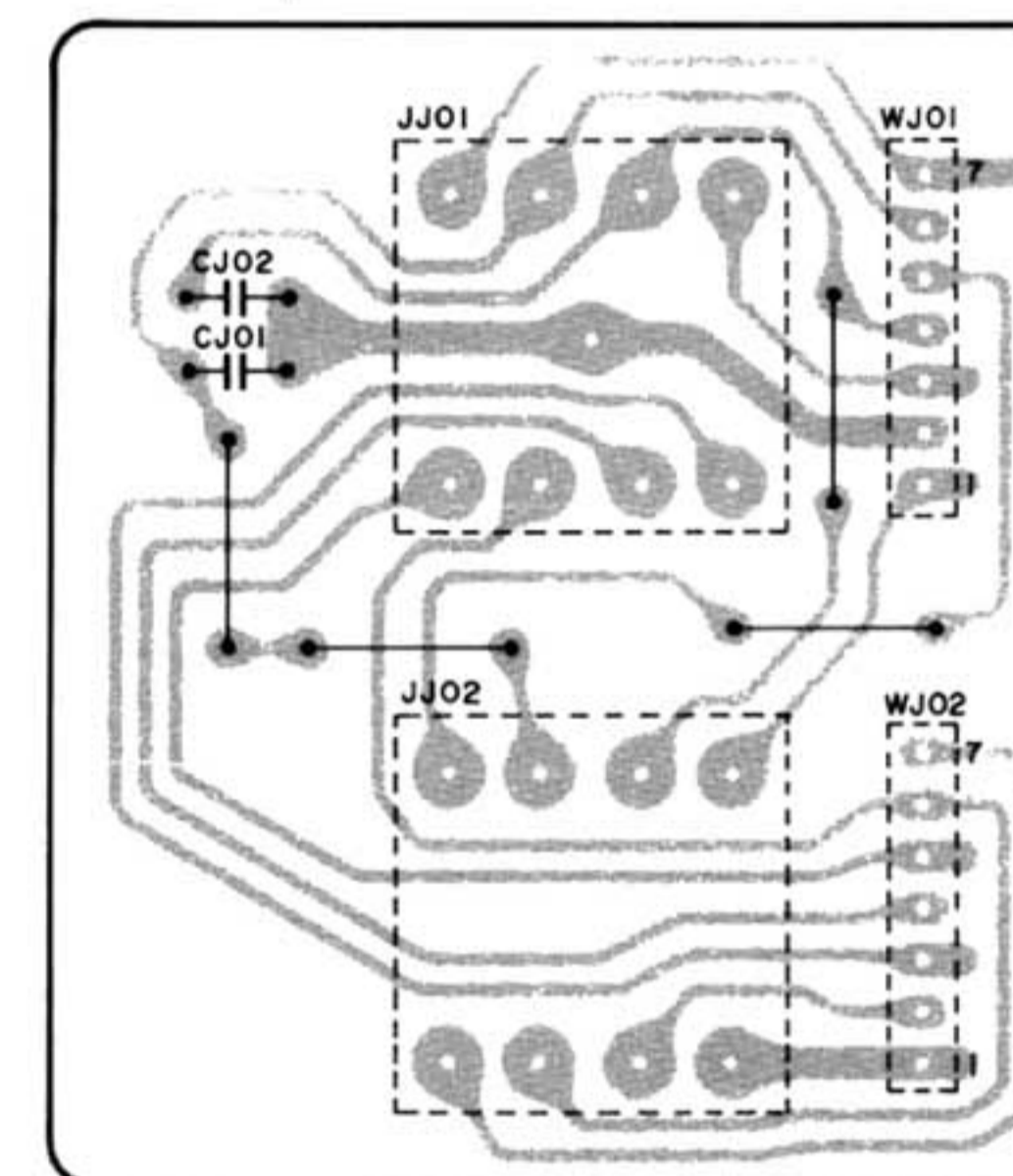
6.3 Power Supply Assembly (P801) Component Locations



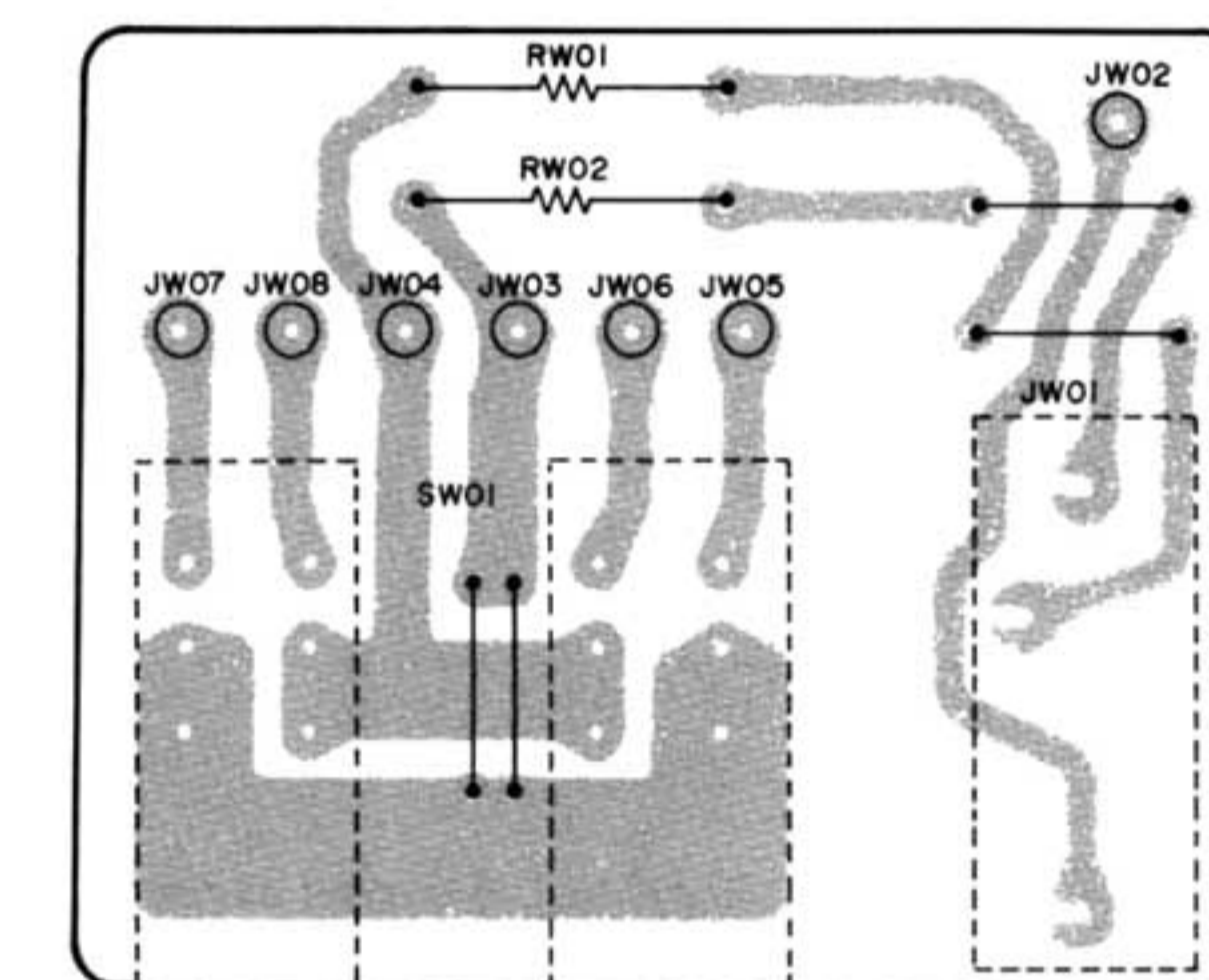
6.2 Input Selector, Phono Assembly (PV01) Component Locations



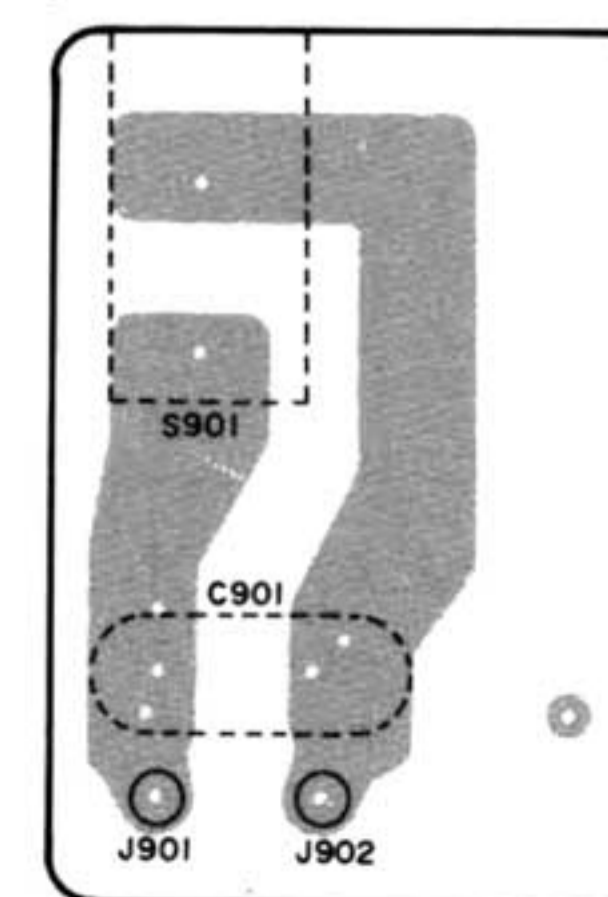
6.4 Tape Monitor Assembly (PJ01) Component Locations



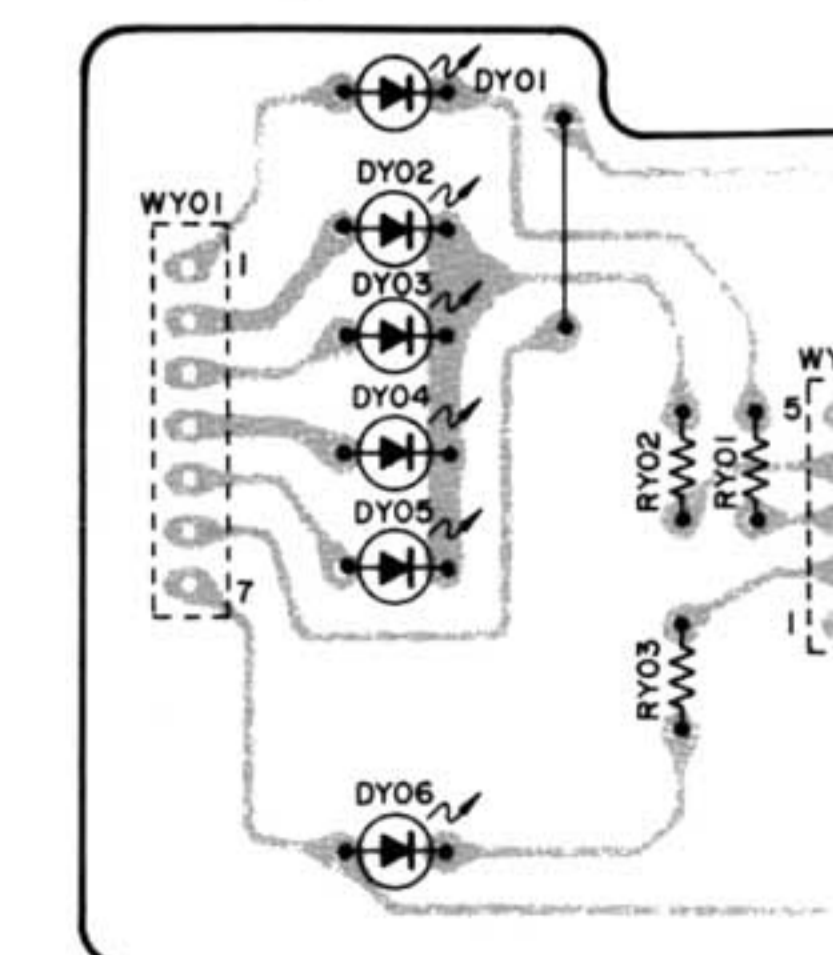
6.5 Headphone, Speaker Switch Assembly (PW01) Component Locations



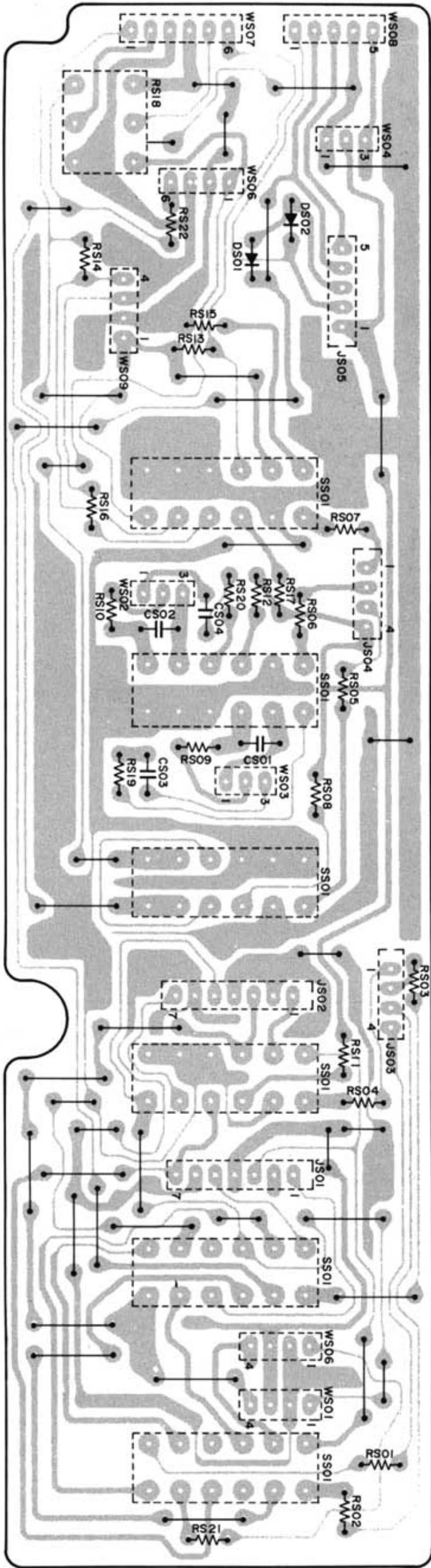
6.6 Power Switch Assembly (P901) Component Locations



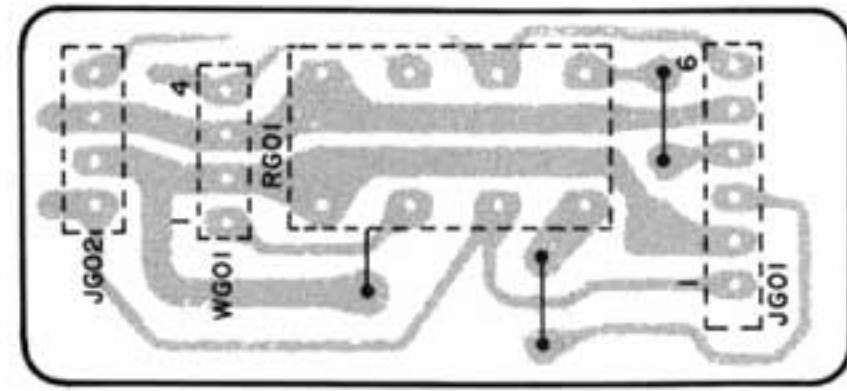
6.7 Input Selector, Indicator Assembly (PY01) Component Locations



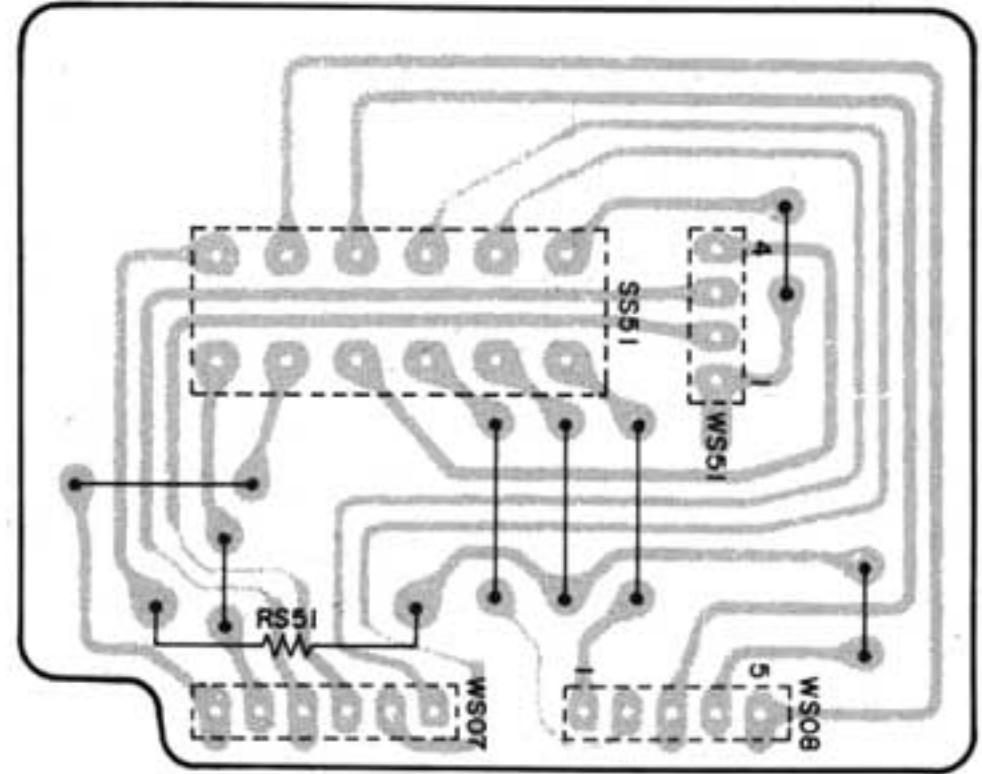
**6.8 Front Switch Assembly (PS01)
Component Locations**



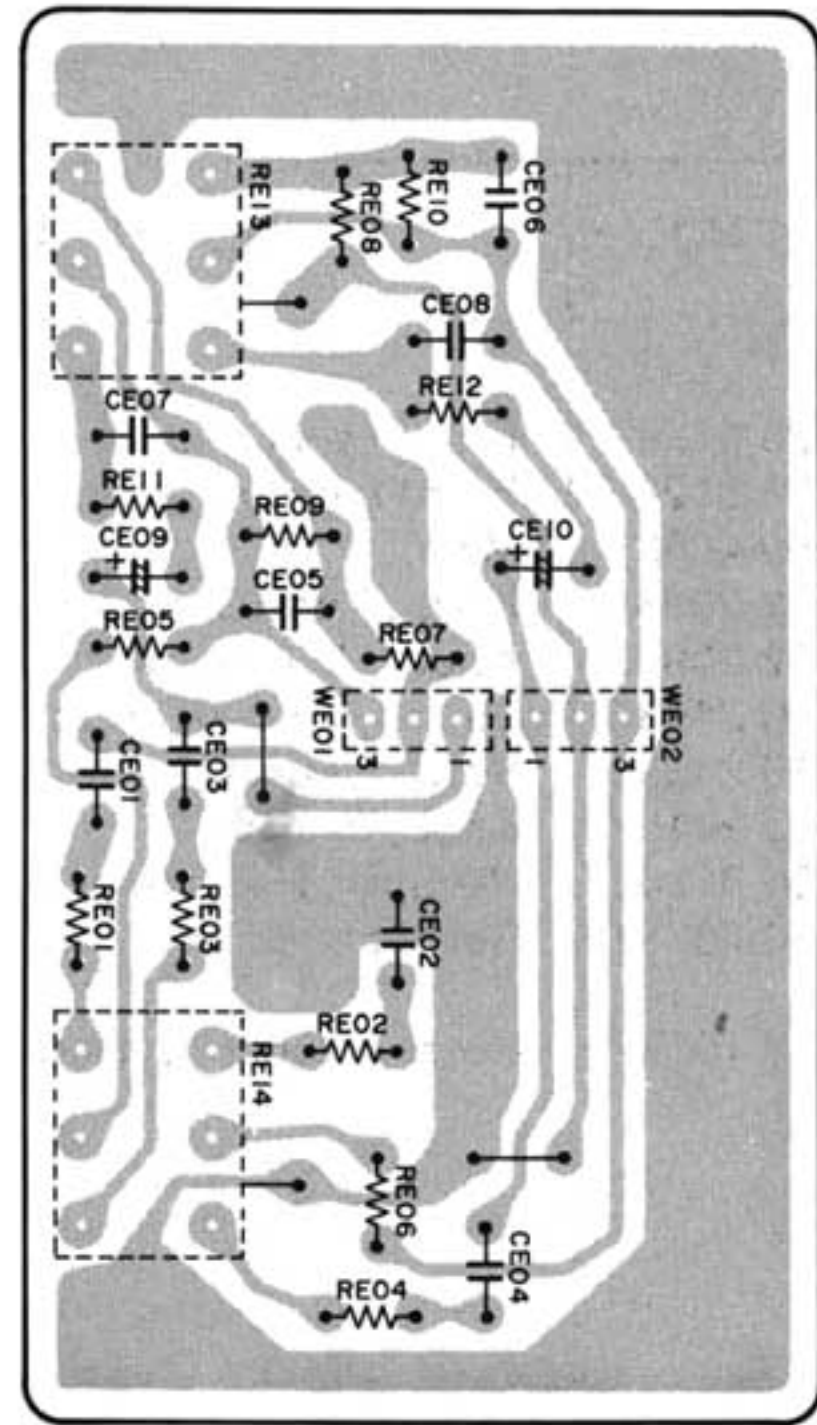
**6.9 Master Volume Supply Assembly (PG01)
Component Locations**



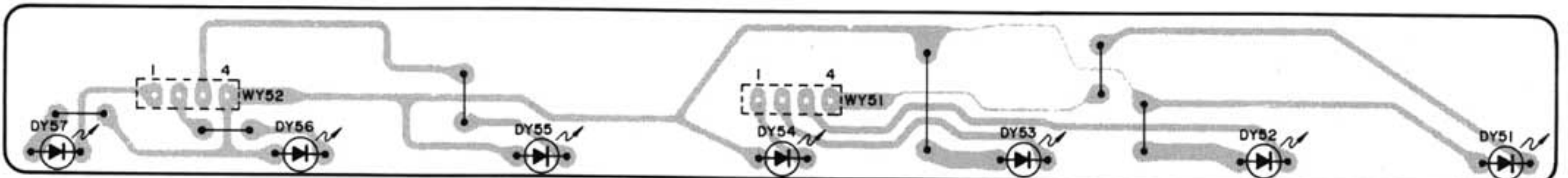
**6.10 CD Direct Switch Assembly (PS51)
Component Locations**



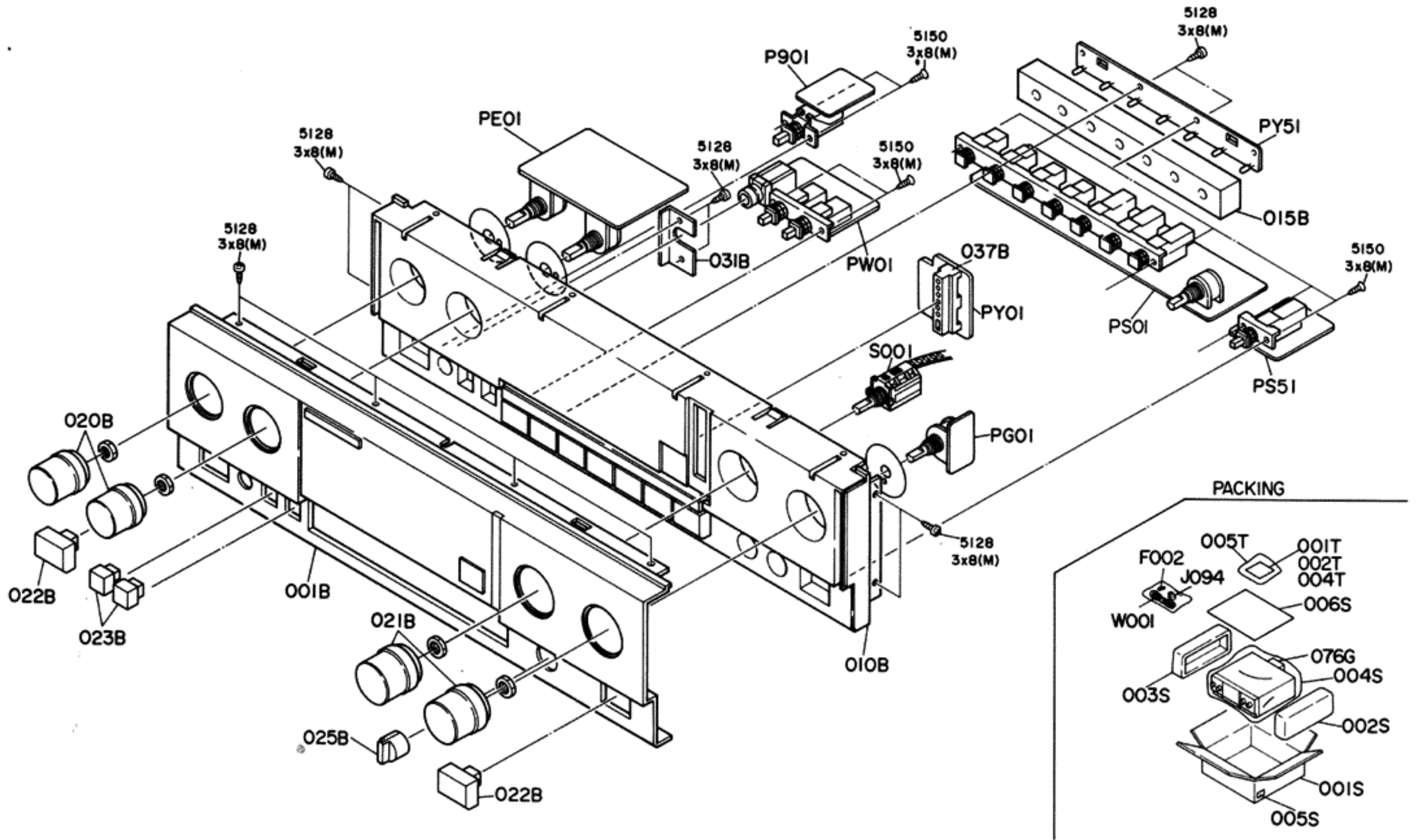
**6.11 Tone Amp Assembly (PE01)
Component Locations**



6.12 Function LED Indicator Assembly (PY51) Component Locations

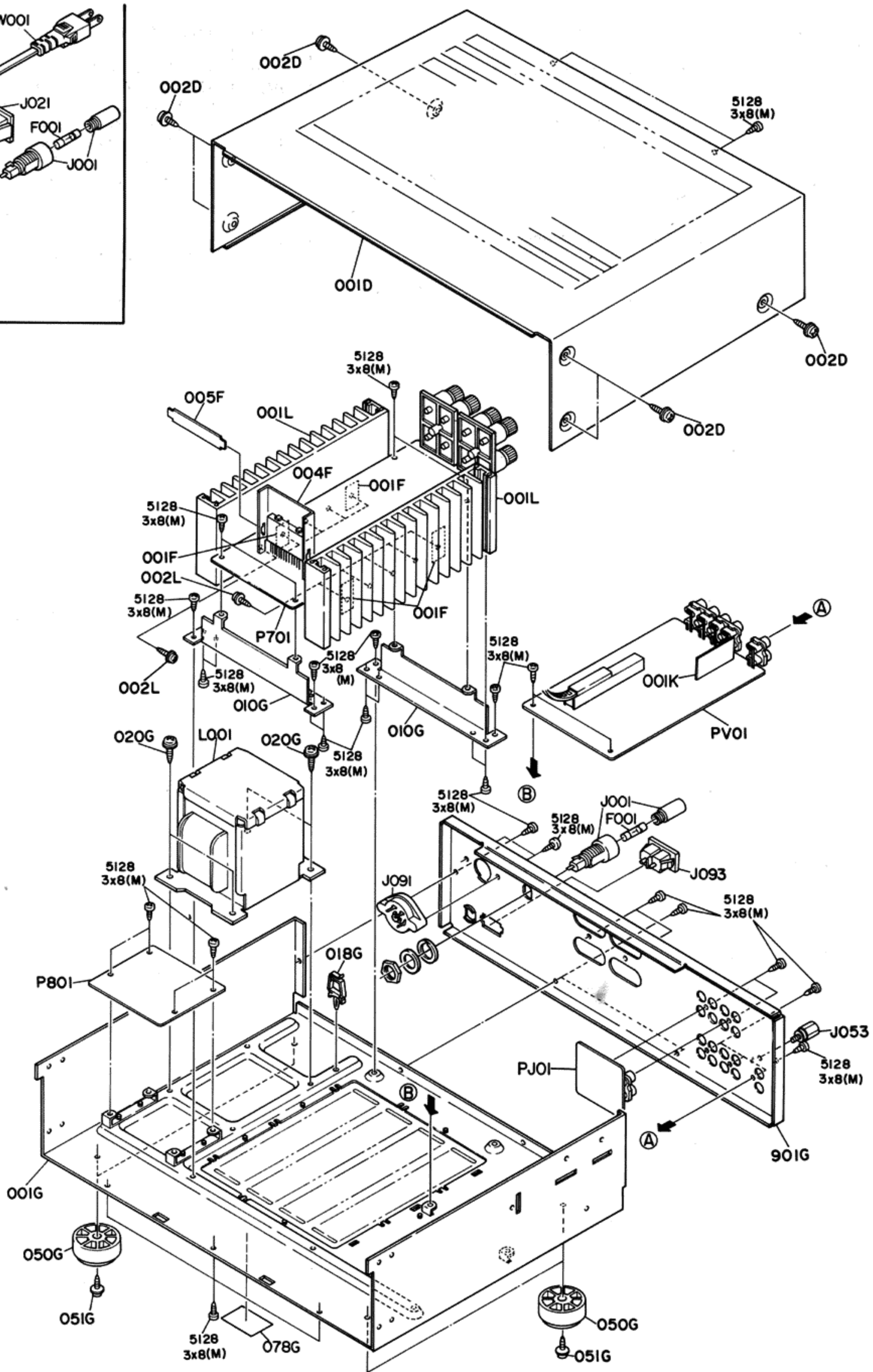
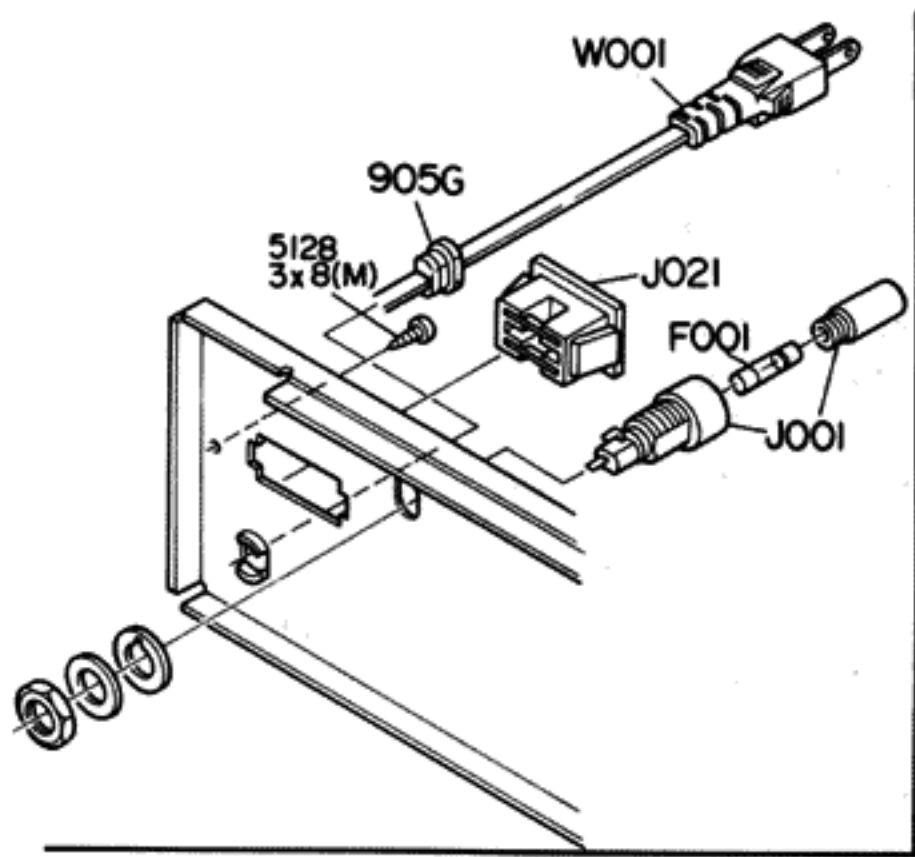


7. EXPLODED VIEW AND PARTS LIST



REF. DESIG.	PART NO.	DESCRIPTION
001B	4822 426 51284	Front Panel Assembly
010B	4822 426 51285	Front Panel Assembly, Chassis
015B	4822 459 40633	Mask
020B	4822 412 20984	Knob, Tone Control
021B	4822 412 20983	Knob, Volume/Selector
022B	4822 410 24635	Button, Power/Direct
023B	4822 410 24636	Button, Speaker
025B	4822 412 20157	Knob, Balance
031B	4822 256 91306	Retainer, Headphone
037B	4822 380 20311	Reflector, LED
S001	4822 273 10168	Rotary Switch, Selector

REF. DESIG.	PART NO.	DESCRIPTION
		PACKING
001T	4822 736 13907	User Manual
005T	4822 600 70363	Polyethylene Bag
076G	4822 530 20609	Sleeve, AC Cord [E]
△ F002	4822 253 30027	Fuse T3.15A 250V [E]
△ J094	4822 265 10092	Jack, AC Adapter [E]
△ W001	4822 321 21123	A.C. Power Cord [N, W]
	4822 321 10418	A.C. Power Cord [A]



REF. DESIG.	PART NO.	DESCRIPTION
001D	4822 426 60548	Lid, Top Cover
002D	4822 501 11008	B.T. Screw B4 x 8
001F	4822 466 92249	Insulator (Q711~Q714)
004F	4822 255 40867	Heatsink (Q719)
005F	4822 492 63973	Spring
018G	4822 401 11192	Clamper, Wire
020G	4822 501 11008	B.T. Screw B4 x 8
050G	4822 462 10312	Leg
051G	4822 501 11008	B.T. Screw B4 x 8
078G	4822 600 70229	Label, Caution
901G	4822 426 60551	Rear Panel [A, W]
	4822 426 60547	Rear Panel [E]
905G	4822 532 51704	Bushing, AC Power Cord [E]
001K	4822 454 12142	Shield
002L	4822 502 12512	B.T. Screw B3 x 12
△ F001	4822 253 30191	Fuse T1.6A 250V
△ J001	4822 256 30233	Jack, Fuse Holder
△ J021	4822 267 40663	Jack, AC Outlet [E]
J053	4822 290 40297	Terminal, GND
△ J091	4822 272 10236	Voltage Selector [N, A, W]
	4822 272 10227	Voltage Selector [E]
△ J093	4822 265 20222	Plug, AC Inlet [N, A, W]
△ L001	4822 130 61184	Power Transformer [E]
△ W001	4822 321 10427	A.C. Power Cord [E]

8. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR

R***: (1) GD05 --- 140, Carbon film fixed resistor, ±5%, 1/4W

R***: (2) GD05 --- 160, Carbon film fixed resistor, ±5%, 1/6W

① — Resistance value

Examples

① Resistance value

0.1Ω...001	10Ω...100	1kΩ...102	100kΩ...104
0.5Ω...005	18Ω...180	2.7kΩ...272	680kΩ...684
1Ω...010	100Ω...101	10kΩ...103	1MkΩ...105
6.8Ω...068	390Ω...391	22kΩ...223	4.7MkΩ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C***: CERAMIC CAP.

(1) DD1 --- 370, Ceramic condenser
Disc type
Temp. coeff. P350 ~ N1000, 50V

① ②

Capacity value
Tolerance

Examples

① Tolerance (Capacity deviation)

±0.25pF...0
±0.5pF...1
±5%...5

* Tolerance of COMMON PARTS handled here are as follows:

0.5pF ~ 5pF...±0.25pF
6pF ~ 10pF...±0.5pF
12pF ~ 560pF...±5%

② Capacity value

0.5pF...005	3pF...030	100pF...101
1pF...010	10pF...100	220pF...221
1.5pF...015	47pF...470	560pF...561

C***: CERAMIC CAP.

(1) DK16 --- 300, High dielectric constant ceramic condenser
Disc type
Temp. chara. 2B4, 50V

①

Capacity value

Example

② Capacity value

100pF...101	1000pF...102	10000pF...103
470pF...471	2200pF...222	

C***: ELECTROLY CAP. ($\text{—} \parallel \text{—}$), FILM CAP. ($\text{—} \parallel \text{—} \parallel \text{—}$)

(1) EA --- 10, Electrolytic condenser
One-way lead type, Tolerance ±20%

① ②

Dielectric strength
Capacity value

Examples

① Capacity value

0.1μF...104	4.7μF...475	100μF...107
0.33μF...334	10μF...106	330μF...337
1μF...105	22μF...226	1100μF...108
		2200μF...228

② Working voltage

6.3V...006	25V...025
10V...010	35V...035
16V...016	50V...050

(2) DF15 --- 350, Plastic film condenser
One-way type, Mylar ±5% 50V

①

Capacity value

Examples

① Capacity value

0.001μF (1000pF)...102	0.1μF...104
0.0018μF...182	0.56μF...564
0.01μF...103	1μF...105
0.015μF...153	

REF. DESIG.	PART NO.	DESCRIPTION
		PE01-TONE AMP CIRCUIT BOARD
		PE01-CAPACITORS
CE01	4822 121 43136	Film 0.068μF ±5%
CE02	4822 121 43136	Film 0.068μF ±5%
CE03	4822 121 42755	Film 0.012μF ±5%
CE04	4822 121 42755	Film 0.012μF ±5%
CE07	4822 121 43133	Film 0.039μF ±5%
CE08	4822 121 43133	Film 0.039μF ±5%
CE09	4822 124 90352	Elect 10μF 16V
CE10	4822 124 90352	Elect 10μF 16V
		PE01-RESISTORS
RE13	4822 100 20686	50KΩ(C), Variable
RE14	4822 100 20686	50KΩ(V), Variable
		PE01-MISCELLANEOUS
WE01	4822 323 10078	Jumper Lead, 3P
WE02	4822 323 10081	Jumper Lead, 3P
		PG01-MASTER VOLUME CIRCUIT BOARD
RG01	4822 100 20685	Variable Resistor 50KΩ
JG01	4822 265 10063	Jack, 6P
JG02	4822 265 30482	Plug, 4P
		PJ01-TAPE MONITOR CIRCUIT BOARD
CJ01	4822 122 32486	Ceramic Cap. 0.01μF +80% -20%
CJ02	4822 122 32486	Ceramic Cap. 0.01μF +80% -20%
JJ01	4822 265 30512	Terminal, 4P
JJ02	4822 265 30512	Terminal, 4P
		PS01-FRONT SWITCH CIRCUIT BOARD
		PS01-CAPACITORS
CS03	4822 121 42327	Film 470pF ±5%
CS04	4822 121 42327	Film 470pF ±5%
		PS01-SEMICONDUCTORS
DS01	4822 130 33305	Diode 1SS133, etc.
DS02	4822 130 33305	Diode 1SS133, etc.
		PS01-MISCELLANEOUS
JS01	4822 265 10064	Jack, 7P
JS02	4822 265 10064	Jack, 7P
JS03	4822 265 10105	Jack, 4P
JS04	4822 265 10105	Jack, 4P
JS05	4822 265 10061	Jack, 5P
SS01	4822 276 12424	Push Switch

REF. DESIG.	PART NO.	DESCRIPTION
WS04	4822 323 10083	Jumper Lead, 3P
WS07	4822 323 10169	Jumper Lead, 6P
WS08	4822 323 10159	Jumper Lead, 5P
		PS51-CD DIRECT SWITCH CIRCUIT BOARD
RS18	4822 100 20682	Variable Resistor 100K Ω (MN)
RS51	4822 116 60331	Resistor 1K Ω \pm 5% 1W
SS51	4822 276 12223	Push Switch, CD Direct
		PV01-INPUT SELECT/PHONO CIRCUIT BOARD
		PV01-CAPACITORS
C401	4822 122 32486	Ceramic 0.01 μ F +80% -20%
C402	4822 122 32486	Ceramic 0.01 μ F +80% -20%
C403	4822 121 51037	Film 150pF \pm 5%
C404	4822 121 51037	Film 150pF \pm 5%
C405	4822 121 41518	Film 470pF \pm 5%
C406	4822 121 41518	Film 470pF \pm 5%
C407	4822 124 22278	Elect 51 μ F 10V
C408	4822 124 22278	Elect 51 μ F 10V
C409	4822 124 22279	Elect 510 μ F 10V
C410	4822 124 22279	Elect 510 μ F 10V
C411	4822 121 42764	Film 0.047 μ F \pm 5%
C412	4822 121 42764	Film 0.047 μ F \pm 5%
C413	4822 121 42755	Film 0.012 μ F \pm 5%
C414	4822 121 42755	Film 0.012 μ F \pm 5%
C415	4822 121 42758	Film 1800pF \pm 5%
C416	4822 121 42758	Film 1800pF \pm 5%
C417	4822 124 90358	Elect 22 μ F 16V
C418	4822 124 90358	Elect 22 μ F 16V
C419	4822 124 90365	Elect 220 μ F 25V
C420	4822 124 90365	Elect 220 μ F 25V
C421	4822 121 42763	Film 3900pF \pm 5%
C422	4822 121 42763	Film 3900pF \pm 5%
CV01		
CV08	4822 122 32486	Ceramic 0.01 μ F +80% -20%
		PV01-RESISTORS
R407	4822 116 53691	4.64K Ω \pm 1% 1/6W
R408	4822 116 53691	4.64K Ω \pm 1% 1/6W
R409	4822 116 53691	4.64K Ω \pm 1% 1/6W
R410	4822 116 53691	4.64K Ω \pm 1% 1/6W
R413	4822 116 53691	4.64K Ω \pm 1% 1/6W
R414	4822 116 53691	4.64K Ω \pm 1% 1/6W
△ R431	4822 111 90731	47 Ω \pm 2% 1/4W, Fuse
△ R432	4822 111 90731	47 Ω \pm 2% 1/4W, Fuse
		PV01-SEMICONDUCTORS
Q401	4822 130 42839	F.E.T. 2SK369(BL)
Q402	4822 130 42839	F.E.T. 2SK369(BL)
Q403	4822 130 42839	F.E.T. 2SK369(BL)
Q404	4822 130 42839	F.E.T. 2SK369(BL)
Q405	4822 209 73064	IC NJM2068-DD
DV01	4822 130 33305	Diode 1SS133, etc.

REF. DESIG.	PART NO.	DESCRIPTION
J403	4822 266 30282	Terminal, 2P
JV01	4822 267 20348	Terminal, 4P
JV02	4822 266 30284	Terminal, 4P
JV03	4822 265 10064	Jack, 7P
JV04	4822 265 30482	Plug, 4P
JV05	4822 265 10105	Jack, 4P
JV06	4822 290 40296	Terminal, Earth
JV07	4822 265 10062	Jack, 3P
L401	4822 156 11019	Choke Coil 320 μ H (N)
L402	4822 156 11019	Choke Coil 320 μ H (N)
LV01	4822 280 20195	Relay
SV01	4822 277 21,147	Slide Switch
WV01	4822 323 10106	Jumper Lead, 3P
WV02	4822 323 10074	Jumper Lead, 3P
		PW01-HEADPHONE/SPEAKER SW. CIRCUIT BOARD
RW01	4822 116 60455	Metal Resistor 270 Ω \pm 5% 2W
RW02	4822 116 60455	Metal Resistor 270 Ω \pm 5% 2W
JW01	4822 267 30617	Jack, Headphone
SW01	4822 276 12423	Push Switch, Speaker
		PY01-INPUT SELECTOR IND. CIRCUIT BOARD
DY01		
?	4822 130 80326	L.E.D. LT3D8B
DY05		
DY06	4822 130 80327	L.E.D. LT3G8B
WY01	4822 323 10122	Jumper Lead, 7P
WY02	4822 323 10094	Jumper Lead, 5P
		PY51-FUNCTION LED IND. CIRCUIT BOARD
DY51		
?	4822 130 80326	L.E.D. LT3D8B
DY57		
WY51	4822 323 10111	Jumper Lead, 4P
WY52	4822 323 10111	Jumper Lead, 4P

REF. DESIG.	PART NO.	DESCRIPTION
		P701-MAIN AMP CIRCUIT BOARD
		P701-CAPACITORS
CN01	4822 124 22274	Elect 4.7 μ F 50V
CN02	4822 124 22273	Elect 0.47 μ F 50V
CN04	4822 124 22275	Elect 47 μ F 10V
CN05	4822 124 22275	Elect 47 μ F 10V
C701	4822 124 90386	Elect 10 μ F 25V [W]
	4822 124 22571	Elect 10 μ F 50V [N, E, A]
C702	4822 124 90386	Elect 10 μ F 25V [W]
	4822 124 22571	Elect 10 μ F 50V [N, E, A]
C703	4822 121 51008	Film 100pF \pm 5% [W]
	4822 121 51036	Film 100pF \pm 5% [N, E, A]
C704	4822 121 51008	Film 100pF \pm 5% [W]
	4822 121 51036	Film 100pF \pm 5% [N, E, A]
C705	4822 124 90354	Elect 100 μ F 16V
C706	4822 124 90354	Elect 100 μ F 16V
C707	4822 121 42756	Film 1500pF \pm 5%
C708	4822 121 42756	Film 1500pF \pm 5%
C711	4822 121 43129	Film 15pF \pm 10%
C712	4822 121 43129	Film 15pF \pm 10%
C713	4822 124 90354	Elect 100 μ F 16V
C714	4822 124 90354	Elect 100 μ F 16V
C715	4822 121 43127	Film 5pF \pm 10%
C716	4822 121 43127	Film 5pF \pm 10%
C717	4822 121 43126	Film 120pF \pm 5%
C718	4822 121 43126	Film 120pF \pm 5%
C719	4822 121 43126	Film 120pF \pm 5%
C720	4822 121 43126	Film 120pF \pm 5%
C725	4822 122 32486	Ceramic 0.01 μ F +80% -20% [N]
C726	4822 122 32486	Ceramic 0.01 μ F +80% -20% [N]
C727	4822 122 32486	Ceramic 0.01 μ F +80% -20% [N]
C728	4822 122 32486	Ceramic 0.01 μ F +80% -20% [N]
C729	4822 124 22572	Elect 100 μ F 63V
C730	4822 124 22572	Elect 100 μ F 63V
C731	4822 124 90362	Elect 22 μ F 50V
C732	4822 124 90362	Elect 22 μ F 50V
C781	4822 124 41533	Elect 8200 μ F 56V
C782	4822 124 41533	Elect 8200 μ F 56V
C783	4822 122 30043	Ceramic 0.01 μ F +80% -20%
		P701-RESISTORS
RN01	4822 111 91257	1K Ω \pm 5% 1/6W
RN02	4822 111 91257	1K Ω \pm 5% 1/6W
Δ RN11	4822 113 90119	22 Ω \pm 2% 1/4W, Fuse
RN17	4822 116 60331	1K Ω \pm 5% 1W
R713	4822 116 80647	33K Ω \pm 5% 1/2W
R714	4822 116 80647	33K Ω \pm 5% 1/2W
R719	4822 100 20681	2.2K Ω , Trimming
R720	4822 100 20681	2.2K Ω , Trimming
R723	4822 111 91285	100 Ω \pm 5% 1/6W
R724	4822 111 91285	100 Ω \pm 5% 1/6W
R725	4822 111 91285	100 Ω \pm 5% 1/6W
R726	4822 111 91285	100 Ω \pm 5% 1/6W
R727	4822 111 91257	1K Ω \pm 5% 1/6W
R728	4822 111 91257	1K Ω \pm 5% 1/6W
R733	4822 116 60342	180 Ω \pm 5% 1W
R734	4822 116 60342	180 Ω \pm 5% 1W
R735	4822 111 91424	2.2 Ω \pm 5% 1/6W
R736	4822 111 91424	2.2 Ω \pm 5% 1/6W
R743	4822 116 80153	0.18 Ω \pm 10% 5W
R744	4822 116 80153	0.18 Ω \pm 10% 5W
R745	4822 116 80153	0.18 Ω \pm 10% 5W
R746	4822 116 80153	0.18 Ω \pm 10% 5W
R751	4822 116 52332	10 Ω \pm 5% 1/2W
R752	4822 116 52332	10 Ω \pm 5% 1/2W

REF. DESIG.	PART NO.	DESCRIPTION
R753	4822 111 91405	220 Ω \pm 5% 1/6W
R754	4822 111 91405	220 Ω \pm 5% 1/6W
R755	4822 111 90726	10 Ω \pm 5% 2W
R756	4822 111 90726	10 Ω \pm 5% 2W
		P701-SEMICONDUCTORS
DN01	4822 130 80837	Diode HSS81
DN02	4822 130 80837	Diode HSS81
DN03	4822 130 32508	Diode DSF10C, etc.
DN04	4822 130 33305	Diode 1SS133, etc.
Δ D781	4822 130 33864	Diode 30D2FC
Δ D782	4822 130 33864	Diode 30D2FC
Δ D783	4822 130 33864	Diode 30D2FC
Δ D784	4822 130 33864	Diode 30D2FC
QN01	4822 130 43233	Transistor 2SC2240(GR, BL)
QN02	4822 130 43233	Transistor 2SC2240(GR, BL)
QN03	4822 130 42951	Transistor 2SA970(GR, BL)
QN04	4822 209 83312	IC TA7317P
Q701	4822 130 60526	Transistor 2SD1508
Q702	4822 130 60526	Transistor 2SD1508
Q703	4822 130 43233	Transistor 2SC2240(GR, BL)
Q704	4822 130 43233	Transistor 2SC2240(GR, BL)
Q705	4822 130 42951	Transistor 2SA970(GR, BL)
Q706	4822 130 42951	Transistor 2SA970(GR, BL)
Q707	4822 130 60525	Transistor 2SC3298(O, Y)
Q708	4822 130 60525	Transistor 2SC3298(O, Y)
Q709	4822 130 60524	Transistor 2SA1306(O, Y)
Q710	4822 130 60524	Transistor 2SA1306(O, Y)
Δ Q711	4822 130 60116	Transistor 2SC3280(R, O)
Δ Q712	4822 130 60116	Transistor 2SC3280(R, O)
Δ Q713	4822 130 60109	Transistor 2SA1301(R, O)
Δ Q714	4822 130 60109	Transistor 2SA1301(R, O)
Q719	4822 209 73065	IC STK3062
		P701-MISCELLANEOUS
J701	4822 266 30281	Terminal, Speaker
J702	4822 266 30279	Terminal, Speaker
J714	4822 265 30482	Plug, 4P
J715	4822 265 10062	Jack, 3P
J716	4822 265 10062	Jack, 3P
LN01	4822 280 20197	Relay
L701	4822 157 51739	Coil
L702	4822 157 51739	Coil
		P801-POWER SUPPLY CIRCUIT BOARD
		P801-CAPACITORS
C801	4822 124 41541	Elect 470 μ F 35V
C802	4822 124 41538	Elect 220 μ F 35V
C803	4822 124 41541	Elect 470 μ F 35V
C804	4822 124 41538	Elect 220 μ F 35V
C805	4822 124 41536	Elect 100 μ F 35V
C807	4822 124 41537	Elect 220 μ F 6.3V
C809	4822 122 32486	Ceramic 0.01 μ F +80% -20%
C810	4822 122 32486	Ceramic 0.01 μ F +80% -20%
C811	4822 124 41535	Elect 100 μ F 25V
C812	4822 124 41535	Elect 100 μ F 25V
C813	4822 124 41534	Elect 10 μ F 25V
C814	4822 124 41534	Elect 10 μ F 25V

REF. DESIG.	PART NO.	DESCRIPTION
P801-RESISTORS		
△ R801	4822 116 60307	1Ω ±5% ¼W, Fusible
△ R802	4822 115 90196	180Ω ±2% ¼W, Fuse
△ R803	4822 113 90119	22Ω ±2% ¼W, Fuse
△ R804	4822 116 80648	330Ω ±5% 3W, Metal
△ R805	4822 116 60307	1Ω ±5% ¼W, Fusible
△ R806	4822 113 90119	22Ω ±2% ¼W, Fuse
△ R807	4822 111 91423	1.2KΩ ±5% ¼W
△ R809	4822 111 91423	1.2KΩ ±5% ¼W
△ R810	4822 116 60332	22Ω ±2% ¼W, Fuse
P801-SEMICONDUCTORS		
△ D801 ?	4822 130 32508	Diode DSF10C, etc.
△ D808		
D809	4822 130 80317	Zener MTZJ5.1B
D810	4822 130 80838	Zener MTZJ18C
D811	4822 130 80838	Zener MTZJ18C
D812	4822 130 33305	Diode 1SS133, etc.
D813	4822 130 33305	Diode 1SS133, etc.
△ Q801	4822 130 60696	Transistor 2SC162(O, Y)
△ Q802	4822 130 60693	Transistor 2SA817(O, Y)
P801-MISCELLANEOUS		
J805	4822 265 10062	Jack, 3P
J806	4822 290 40296	Terminal, Earth
W801	4822 323 10281	Jumper Lead, 3P
P901-POWER SWITCH CIRCUIT BOARD		
△ C901	4822 122 33276	Ceramic Cap. 0.01μF ±20% 400V
△ S901	4822 276 11898	Push Switch, Power

(W01-99)	Assembly and Wiring
(T01-99)	Adjustment
(X01-00)	Correction

NOTE ON SAFETY:

Symbol △ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol △. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

9. TECHNICAL SPECIFICATIONS (DIN)

Audio Section

IHF Dynamic Power	
2 Ohms	170 W
4 Ohms	130 W
8 Ohms	90 W

Power Output Per Channel	
DIN 4 Ohms at 1 kHz	110 W
RMS 4 Ohms	83 W
DIN 8 Ohms at 1 kHz	80 W
RMS 8 Ohms	65 W

Total Harmonic Distortion at RMS 8 Ohms	0.02%
I.M. Distortion	0.02%
Damping Factor 8 Ohms (1 kHz)	100

MM Cartridge Input

Frequency Response (IEC RIAA)	±0.5 dB
Signal to Noise Ratio (A weighted)	86 dB
Input Impedance	47 k Ohms
Input Capacitance	200 pF
Input Sensitivity	2.5 mV

MC Cartridge Input

Input Sensitivity	250 μ V
Input Impedance	100 Ohms

CD-Tuner-Tape Input

Input Impedance	22 k Ohms
Input Sensitivity	150 mV
Frequency Response	15 Hz–70 kHz
Signal to Noise Ratio (A weighted)	96 dB

Output Voltage & Impedance

Tape Out [Phono (MM) 5.0 mV 1 kHz Input]	300 mV/220 Ohms
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Channel Separation [CD Input]	>80 dB
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General

Power Requirements	N and T versions	220/240 V AC, 50/60 Hz
	E version	110/120/220/240 V AC, 50/60 Hz

Power Consumption at Rated Output, both Channels Operating	200 W
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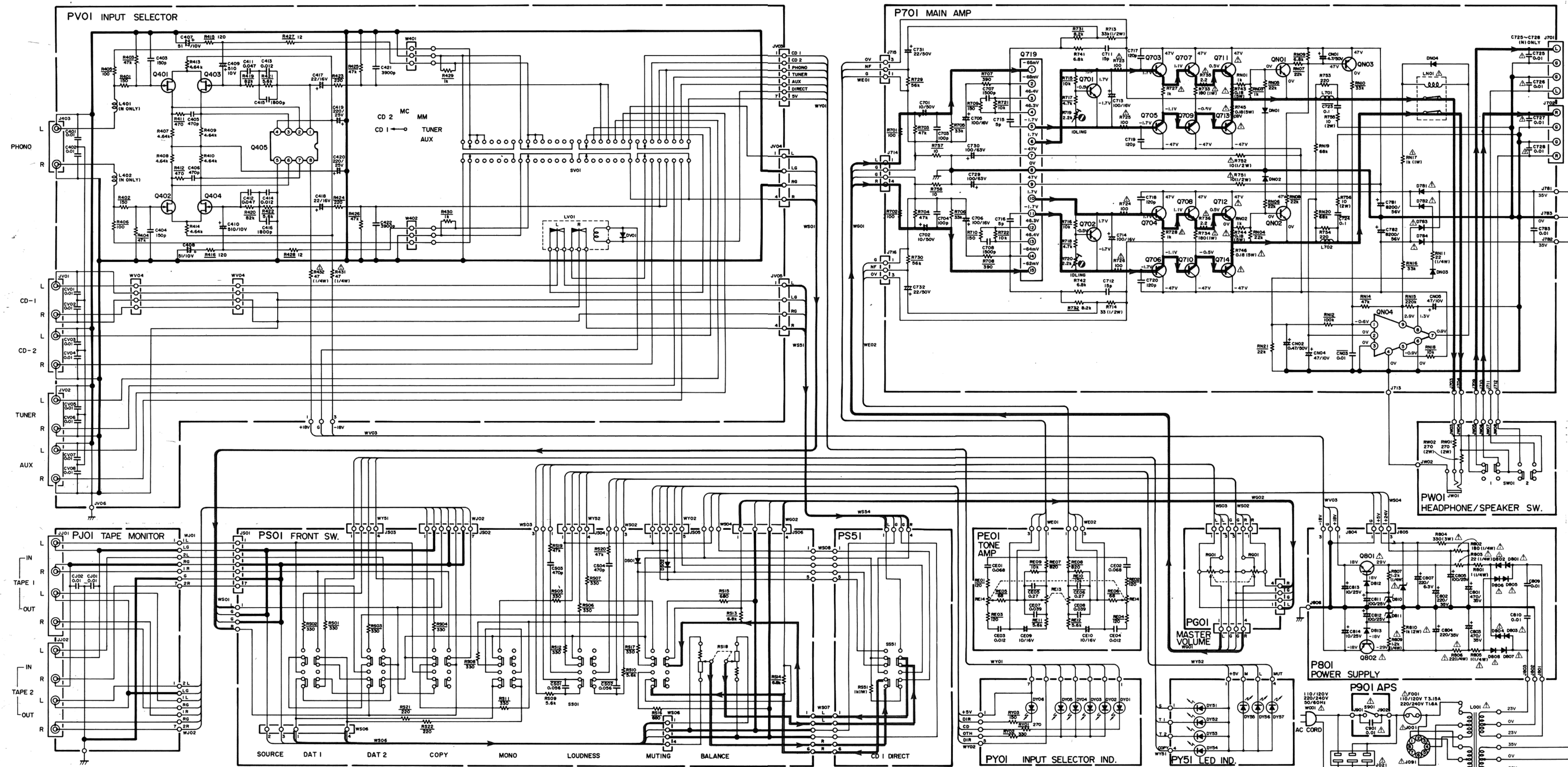
Dimensions

Panel Width	420 mm
Panel Height	136 mm
Depth	366 mm

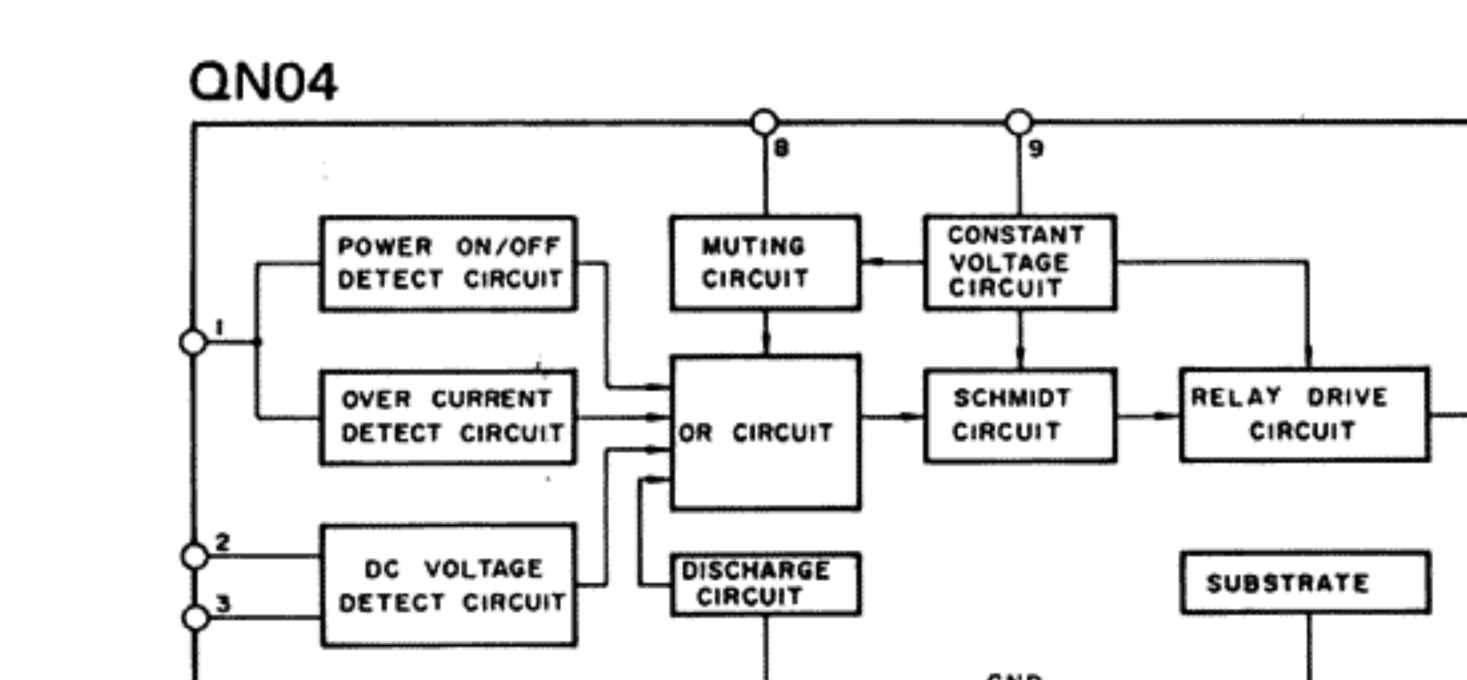
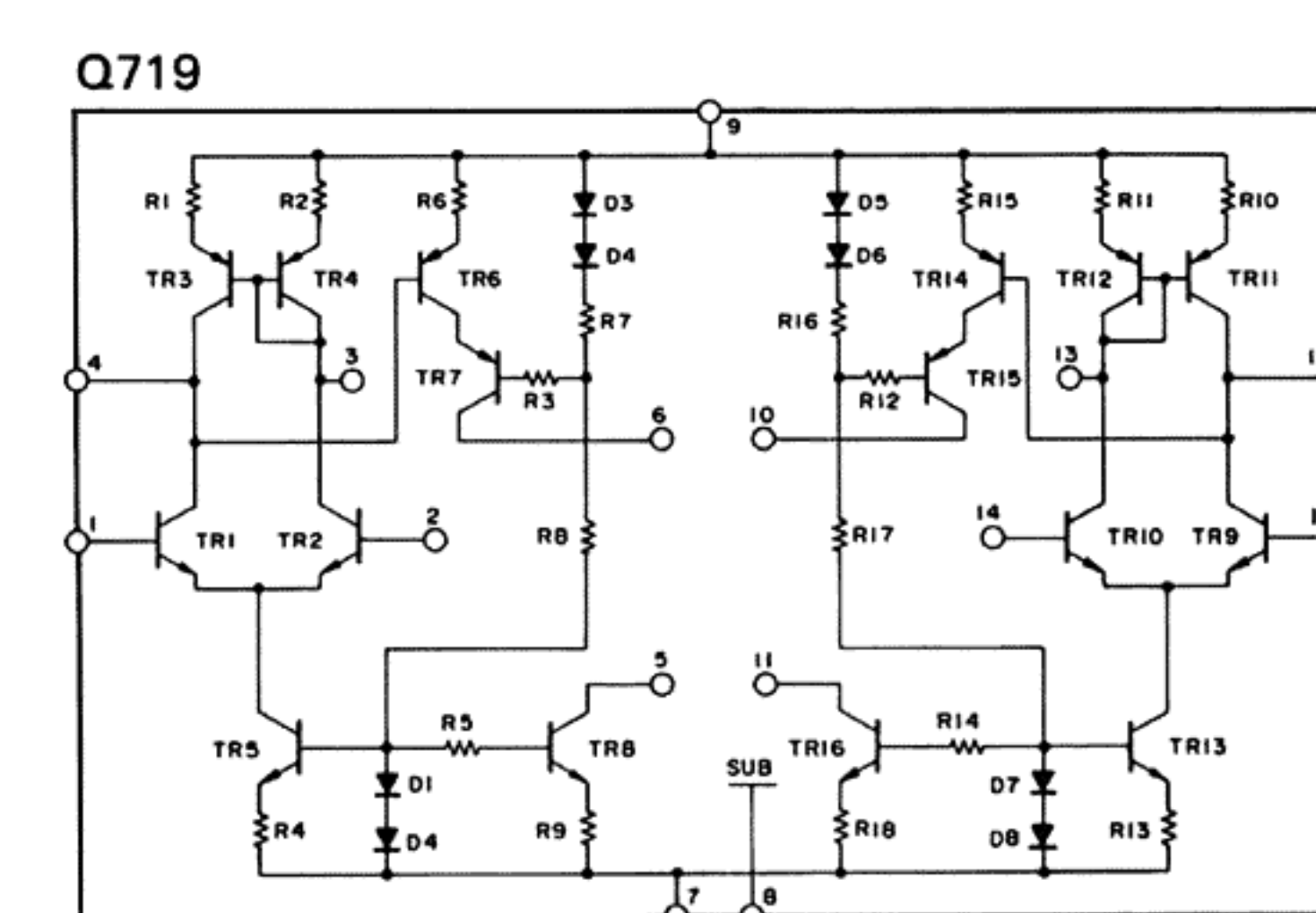
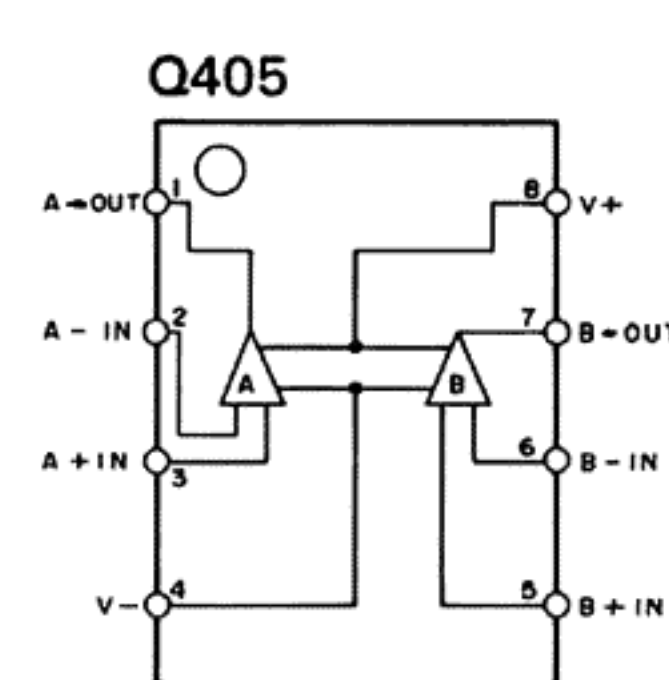
Weight

Unit Alone	9.2 kg
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Specifications and appearance are subject to change for modification without notice.



Q401~Q404	D781~D784	
2SK369 (BL)	30D2FC	
Q405	D801~D808, D812	
NJM2068D	D813	
Q701, Q702	S5688G	
2SD1508	D809	
Q707, Q708	MTZJ5.1B	
2SC3298 (O,Y)	D810, D811	
	MTZJ18C	
Q709, Q710	DS01, DS02, DN03	
2SA1306 (O,Y)	DN04	
	ISS133	
Q711, Q712	DY01~DY05	
2SC3280 (R,O)	DY1~DY57	
	LT308B	
Q713, Q714	2SA1301 (R,O)	
	DY06	
Q719	LT308B	
2SK369 (BL)	DN01, DN02	
	HSS81	
Q801		
2SC1627 (O,Y)		
Q802		
2SA817 (O,Y)		
ON01, ON02, Q703		
Q704		
2SC2240 (GR, BL)		
ON03, Q705, Q706		
2SA970 (GR, BL)		
ON04		
TA7317P		



NOTE ON SAFETY:
 Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

Components and wiring are subject to change for modification without notice.

"SERVICE INFORMATION IS FOR USE BY QUALIFIED PERSONNEL ONLY — ANY MISADJUSTMENT OR MISALIGNMENT MAY BE TREATED AS A NON-WARRANTY REPAIR BY ANY MARANTZ SERVICE CENTRE —"

- Kind of Common Parts**
- RESISTOR**
 R*** (1) GD05 140, Carbon film fixed resistor, $\pm 5\%$ 1/4W
 R*** (2) GD05 160, Carbon film fixed resistor, $\pm 5\%$ 1/6W
- CERAMIC CAP.**
 (1) DD1 370, Ceramic condenser, disc type (titan condenser) Temp. coeff. P350 to N1000 50V
- CERAMIC CAP.**
 (1) DK16 300, High dielectric constant ceramic condenser, disc type (titan variable) Temp. chara. 2B4 50V

- ELECTROLY. CAP. (E) / FILM CAP. (F)**
- (1) EA 10, Electrolytic condenser, one-way lead type, tolerance $\pm 20\%$
- (2) DF15 350, Plastic film condenser, one-way type, Mylar, $\pm 5\%$ 50V

* In case of ordering the common parts, please establish the correct parts number of 10 figures by the procedure "ASSIGNMENT OF COMMON PARTS CODES"



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