SERVICE MANUAL

PM-64/PM-54

4822 725 50317

marantz®

model PM-64/PM-54

Stereo Pre Main Amplifier

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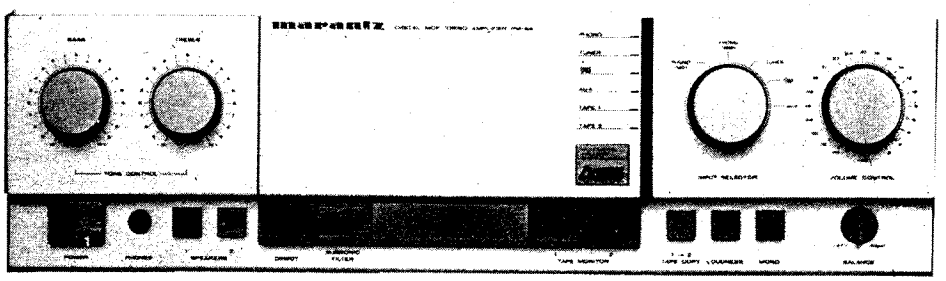
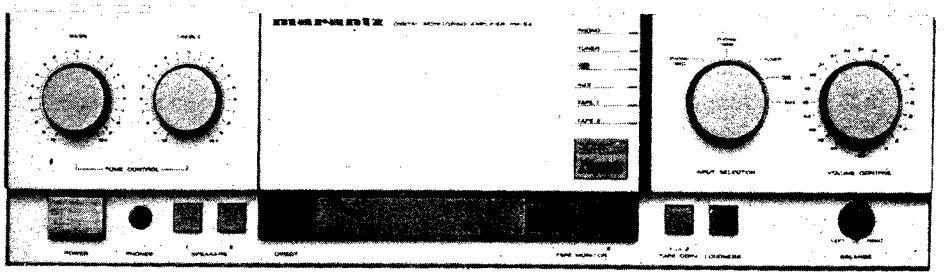
Mq627.

MODEL PM-64/PM-54 STEREO PRE MAIN AMPLIFIER



PM-64



PM-54

INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for the Marantz Model PM-64/PM-54 Stereo Pre Main Amplifier.

Servicing information and voltage data included in this manual are intended for use by knowledgeable and experienced personnel only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of circuitry operation.

The parts list furnishes complete ordering information. Most replacement parts should be ordered from the Marantz Company. However, a simple description is included for parts which can be obtained locally.

1. SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or front Panel of product and controls and chassis buttom.

Any resistance measurement less than 1 Megohms should cause unit to be reparied or corrected before AC power is applied, and verified before return to user/customer.

Ref. UL Standard NO. 1270. Para 66. 3. D (Mandatory Test after servicing Electrical Appliances, effective 7-1-83).

2. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model PM-64/PM-54 consists of the following units. Each unit mounted on a printed circuit board is discribed within the square enclosed by a bold dotted line on the circuit diagram.

1. **Phono Amp/Input Jack ..... mounted on P.W. Board P401**
2. **Main Amp/Power Supply ..... mounted on P.W. Board P701**
3. **Power Switch ... mounted on P.W. Board P851**
4. **Tone Amp ..... mounted on P.W. Board PE01**
5. **Volume, Balance . mounted on P.W. Board PT01**
6. **Compo-Multi .... mounted on P.W. Board PU51**
7. **Tape 2 In/Out Jack ..... mounted on P.W. Board PV01**
8. **Phones ..... mounted on P.W. Board PW51**
9. **Indicator ..... mounted on P.W. Board PY01**

3. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model PM-64/PM-54 Stereo Pre Main Amplifier.

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
AC VTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble shooting
DC VTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer (0 ~ 140V AC, 10A)	Adjust level of primery power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

4. ALIGNMENT PROCEDURES

- **Idling Adjustment**

1. Set the load at the speaker terminals to the open condition.
2. Connect a DC voltmeter between TP-1 and TP-2.
3. Adjust R731 (semi-fixed resistor) so that the DC voltmeter displays 8.8mV.
4. Adjust R732 in the same manner over TP-3 and TP-4 for the right channel.

5. VOLTAGE CONVERSION

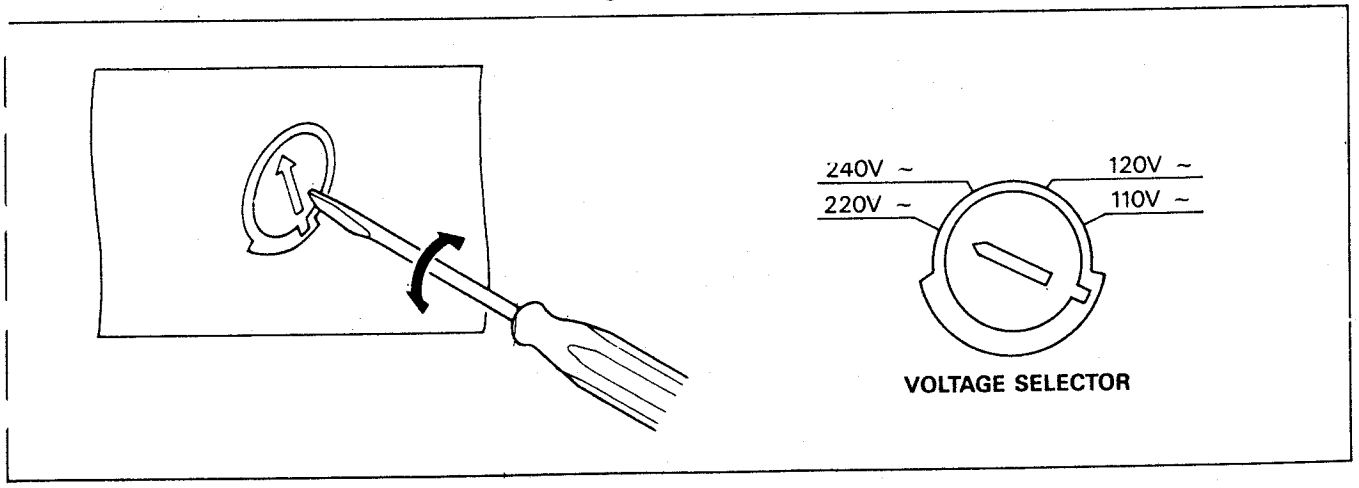
- **European Model Only**

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 ⚠ Fire or electrical shock hazard. Only orignal 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.

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6. CIRCUIT DESCRIPTION

• **Audio Power Drive Amplifier**

1. Maximum ratings Ta = 25°C

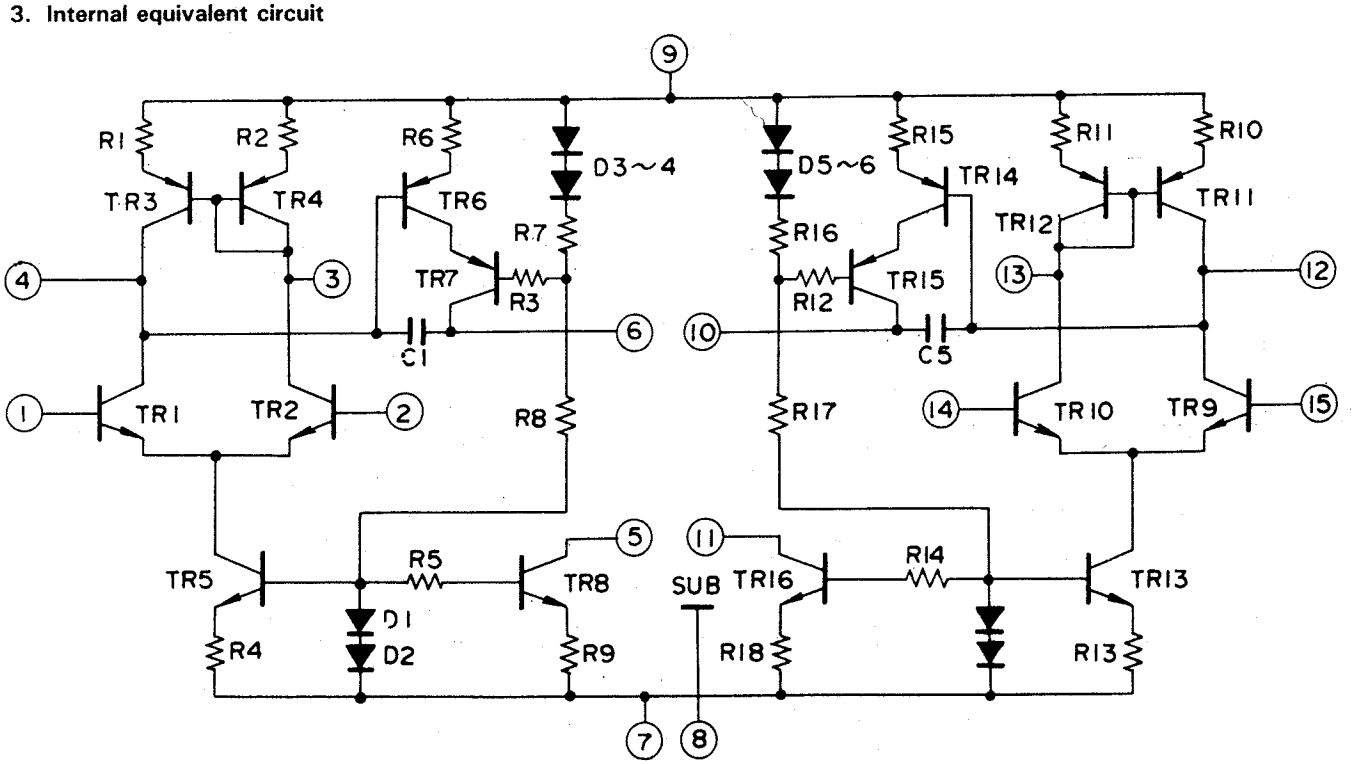
Item	Symbol	Conditions	Maximum ratings	Units
Operating supply current	Vcc		±75	V
IC board operating temperature	Tc		115	°C
Storage temperature	Tstg		−30 ~ −115	°C
Package power dissipation	Pd			W

2. Operating characteristics

Ta = 25°C, RL = 33kΩ, (1) VH = 40 dB (2) VG = 26.5 dB, measurements at the specified circuits

Item	Symbol	Test conditions					Standard values			Units
		Vcc (V)	f (Hz)	Vo (V)		Test circuit	Min.	Typ.	Max.	
Quiescent current	Icc	±60				(1)		26	40	nA
Medium voltage (1)	V_N (1)	±60				(1)	− 50		+50	nV
Output noise voltage	V_{NO} *1	±60			Rg = 0Ω	(1)			1.0	nV
Input inpedance	ri	±60	1k	2/83		(1)		0.005	0.01	
Total harmonic distortion	THD (1)	±50	20K	28.3		(1)		0.005	0.1	%
	THD (2)									
	THD (3)									
Medium voltage (2)	V_N (2)	±60				(2)	−70		+70	nV

3. Internal equivalent circuit



Mg630

• Silicon PNP Expitaxial Planer Type, Low Frequency Power Amplification Transistor 2SD1266 (Q801)

1. Absolute maximum ratings

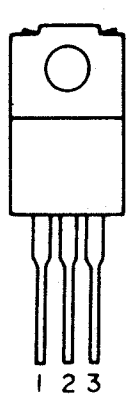
Ta = 25°C

Item		Symbol	Conditions	Maximum ratings	Units
Collector-base voltage		V_{CBO}		60	V
Collector-emitter voltage		V_{CEO}		60	V
Emitter-base voltage		V_{EBO}		6	V
Front collector current		I_{cp}		5	A
Collector current		I_C		3	A
Collector loss	Tc = 25°C	P_c		35	W
	Ta = 25°C			2	
Junction temperature		Tj		150	°C
Storage temperature		Tstg		−55 ~ +150	°C

2. Electrical characteristics

Ta = 25°C

Item	Symbol	Test Conditions				Standard values			Units
		V_{CE} (V)	V_{BE} (V)	I_C (A)	I_B (A)	Min.	Typ.	Max.	
Collector breaking current	I_{CES}	60	0					2 00	μA
	I_{CEO}	60			0			300	μA
Emitter breaking current	I_{EBO}		5	0				1	mA
Collector-emitter voltage	V_{CEO}			30m	0	60			V
DC amplification rate	h_{FE1}	4		1		40		250	
	h_{FE2}	4		3		10			
Base-emitter voltage	V_{BE}	4		3				1.8	V
Collector-emitter saturation voltage	$V_{CE(sat)}$			3	0.375			1.2	V
Turn-on time	Ton			1	0.1		0.5		μs
Storage time	Tstg			1	0.1		2.5		μs
Fall time	tf			1	0.1		0.4		μs



1. Base
2. Collector
3. Emitter

M9631

• Silicon PNP Expitaxial Planer Type, Low Frequency Power Amplification Transistor 2SB941 (Q802)

1. Absolute maximum ratings

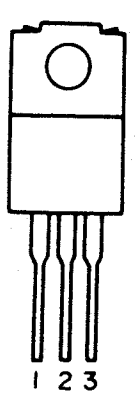
Ta = 25°C

Item		Symbol	Conditions	Maximum ratings	Units
Collector-base voltage		$-V_{CBO}$		60	V
Collector-emitter voltage		$-V_{CEO}$		60	V
Emitter-base voltage		$-V_{EBO}$		5	V
Front collector current		$-I_{cp}$		5	A
Collector current		$-I_C$		3	A
Collector loss	Tc = 25°C	P_c		35	W
	Ta = 25°C			2	
Junction temperature		Tj		150	°C
Storage temperature		Tstg		−55 ~ +150	°C

2. Electrical characteristics

Ta = 25°C

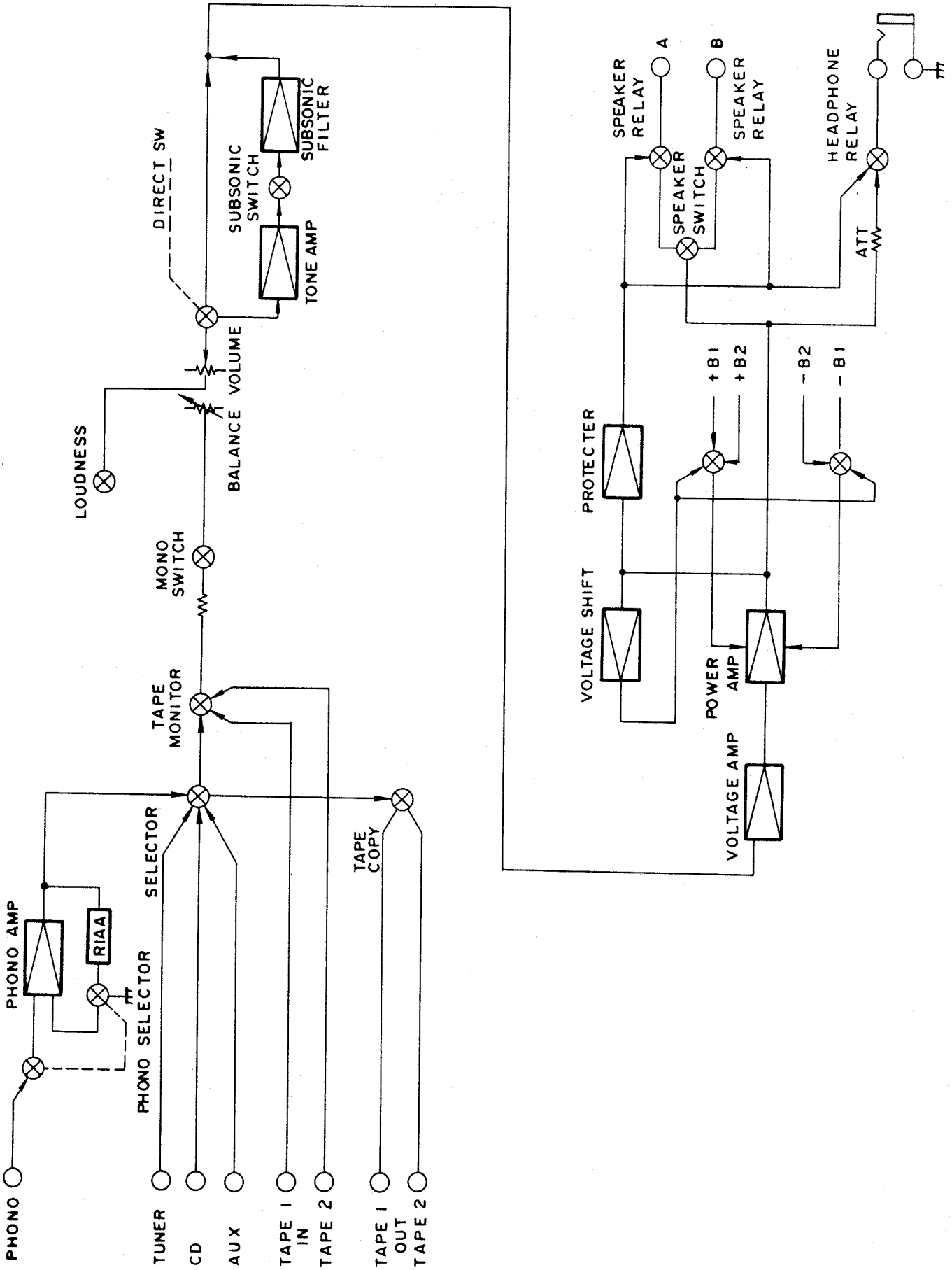
Item	Symbol	Test Conditions				Standard value			Units
		V_{CE} (V)	V_{BE} (V)	I_C (A)	I_B (A)	Min.	Typ.	Max.	
Collector breaking current	$-I_{CES}$	−60	0					2 00	μA
Emitter breaking current	$-I_{CEO}$	−60			0			300	μA
	$-I_{EBO}$		−5	0				1	mA
Collector-emitter voltage	$-V_{CEO}$			−30m	0	60			V
DC amplification rate	h_{FE1}	− 4		−1		40		250	
	h_{FE2}	−4		−3		10			
Base-emitter voltage	$-V_{BE}$	− 4		−3				1.8	V
Collectoremitter saturation voltage	$-V_{CE(sat)}$			− 3	−0.375			1.2	V
Turnon time	Ton			−1	−0.1		0.5		μs
Storage time	Tstg			−1	−0.1		1.2		μs
Fall time	tf			−1	−0.1		0.3		μs



1. Base
2. Collector
3. Emitter

Mq632

7. BLOCK DIAGRAM PM-64



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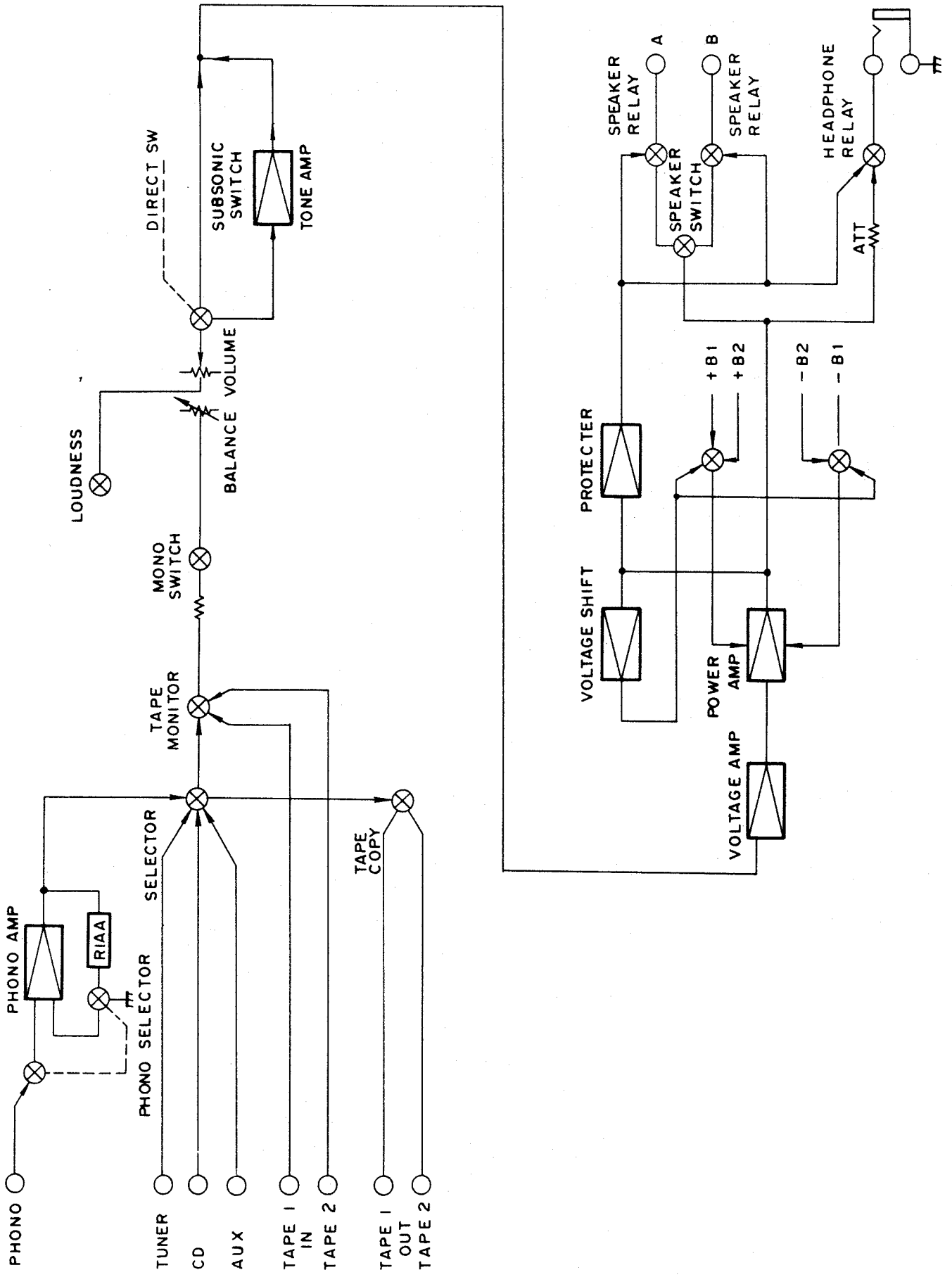
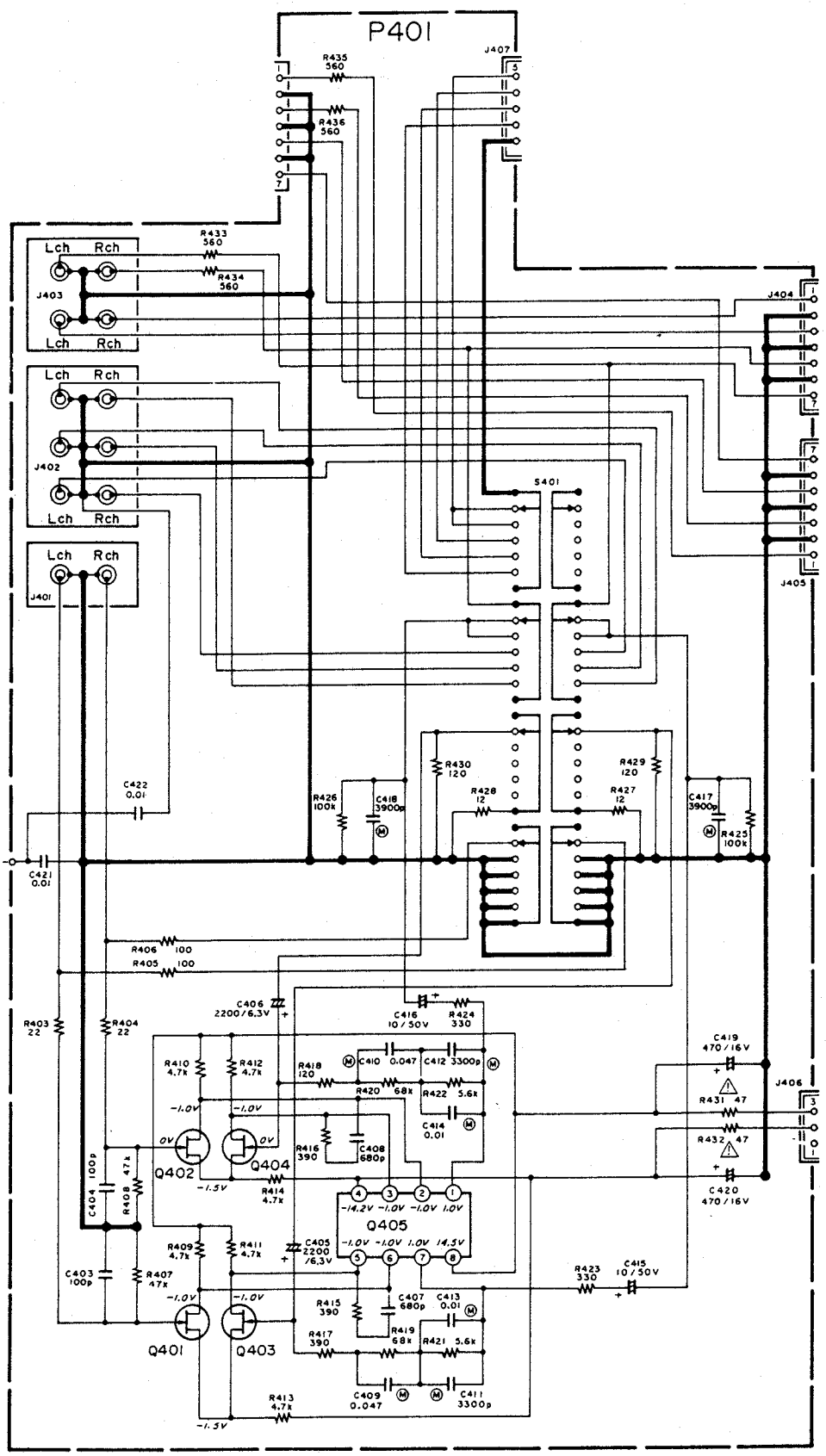

PHONO
TUNER
CD
AUX
TAPE 1 IN
TAPE 2
TAPE 1 OUT
TAPE 2
PHONO AMP
RIAA
PHONO SELECTOR
SELECTOR
TAPE COPY
TAPE MONITOR
MONO SWITCH
LOUDNESS
BALANCE VOLUME
DIRECT SW
SUBSONIC SWITCH
TONE AMP
PROTECTER
VOLTAGE SHIFT
VOLTAGE AMP
POWER AMP
+B1
+B2
-B2
-B1
SPEAKER RELAY
SPEAKER SWITCH
A
B
HEADPHONE RELAY
ATT

Mq634

8. SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS

8.2 Phono Amp/Input Jack (P401) Schematic Diagram and Component Locations



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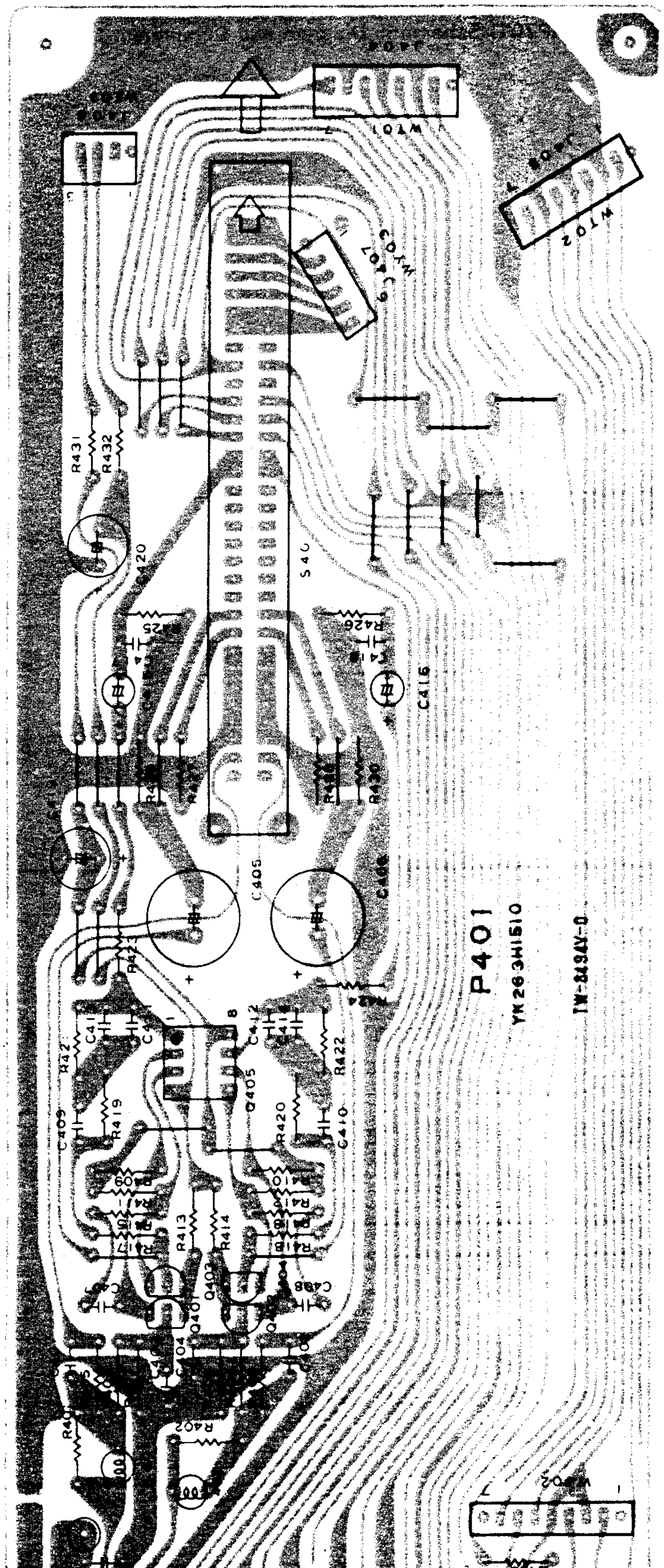
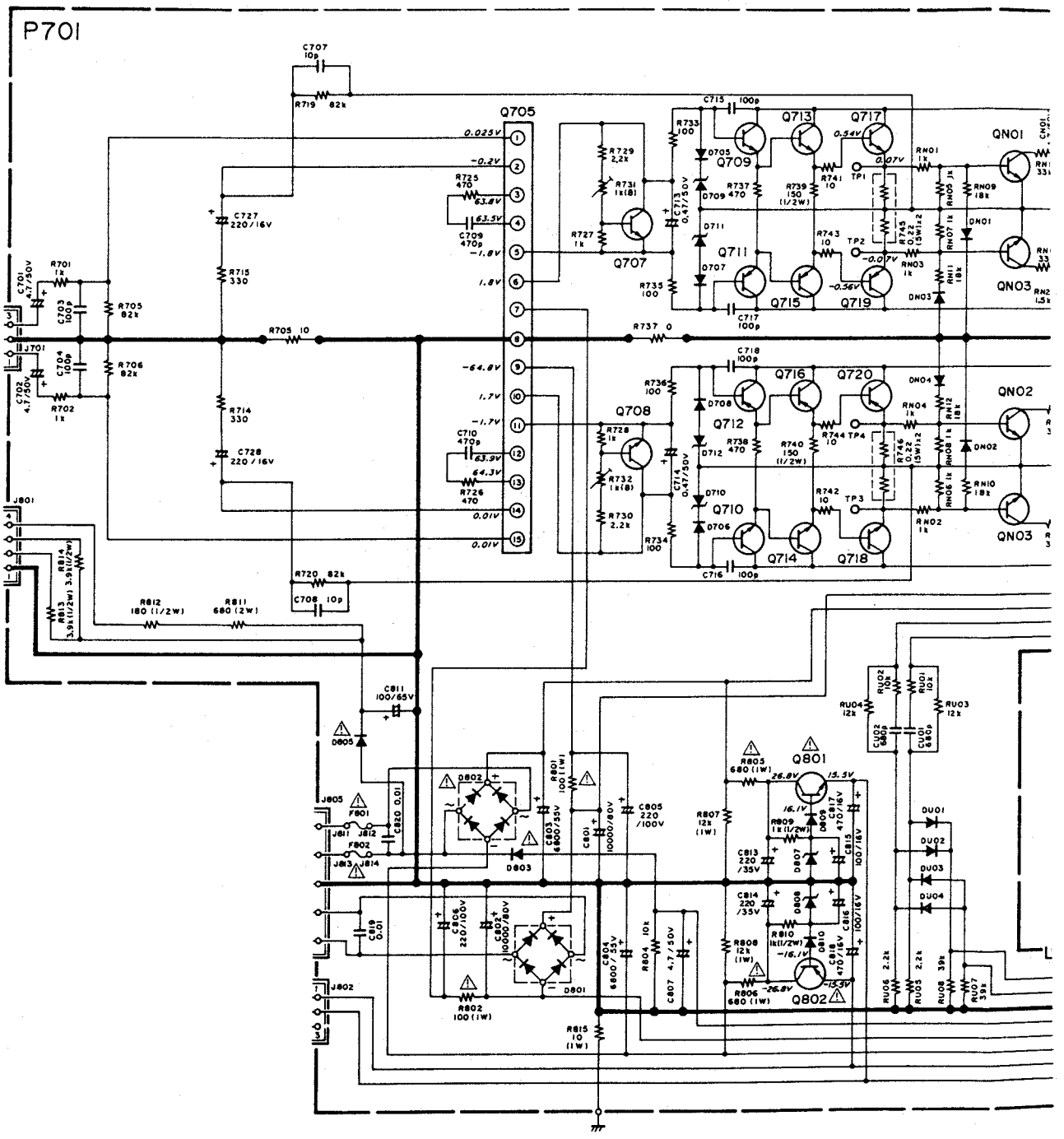
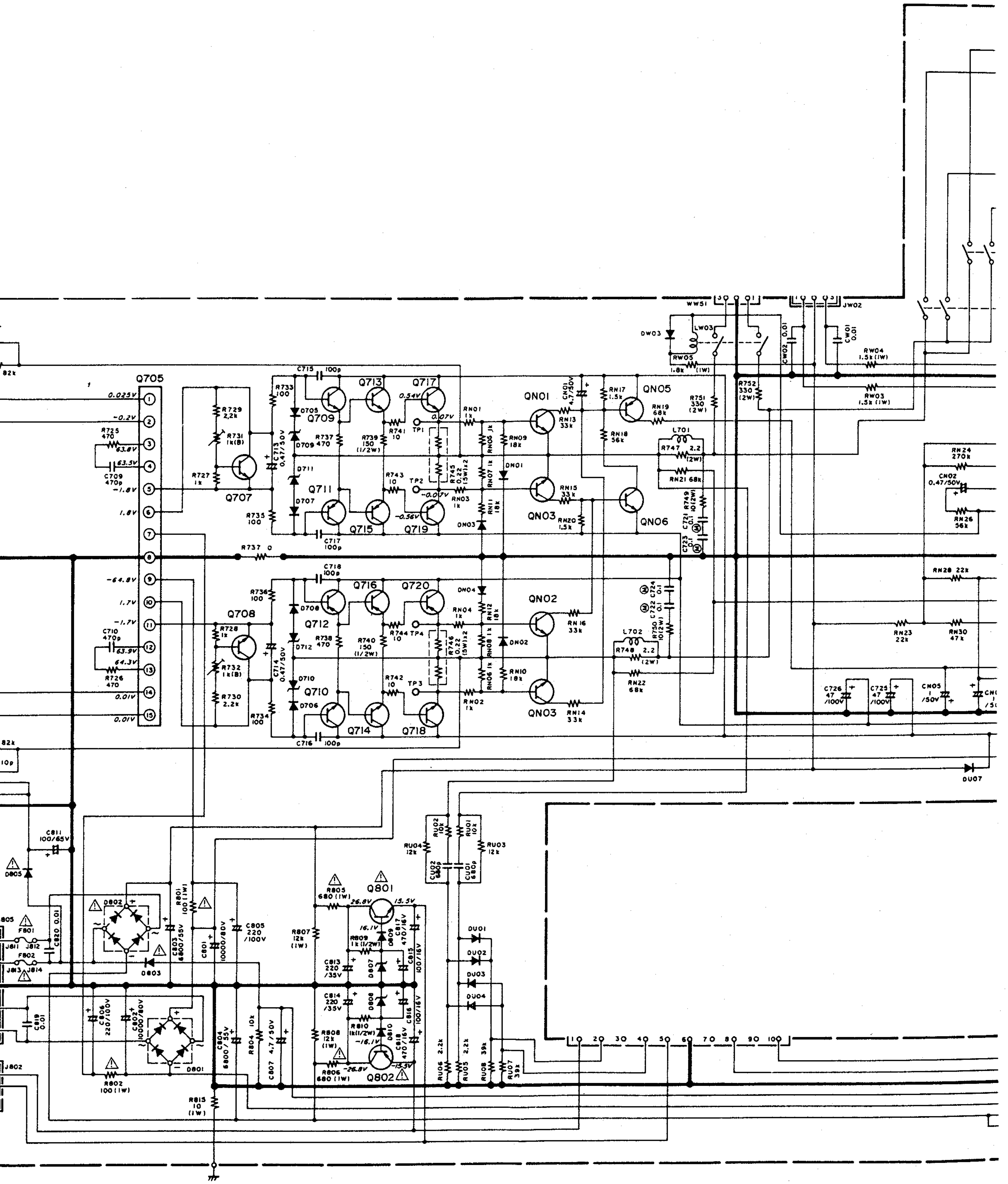

P401

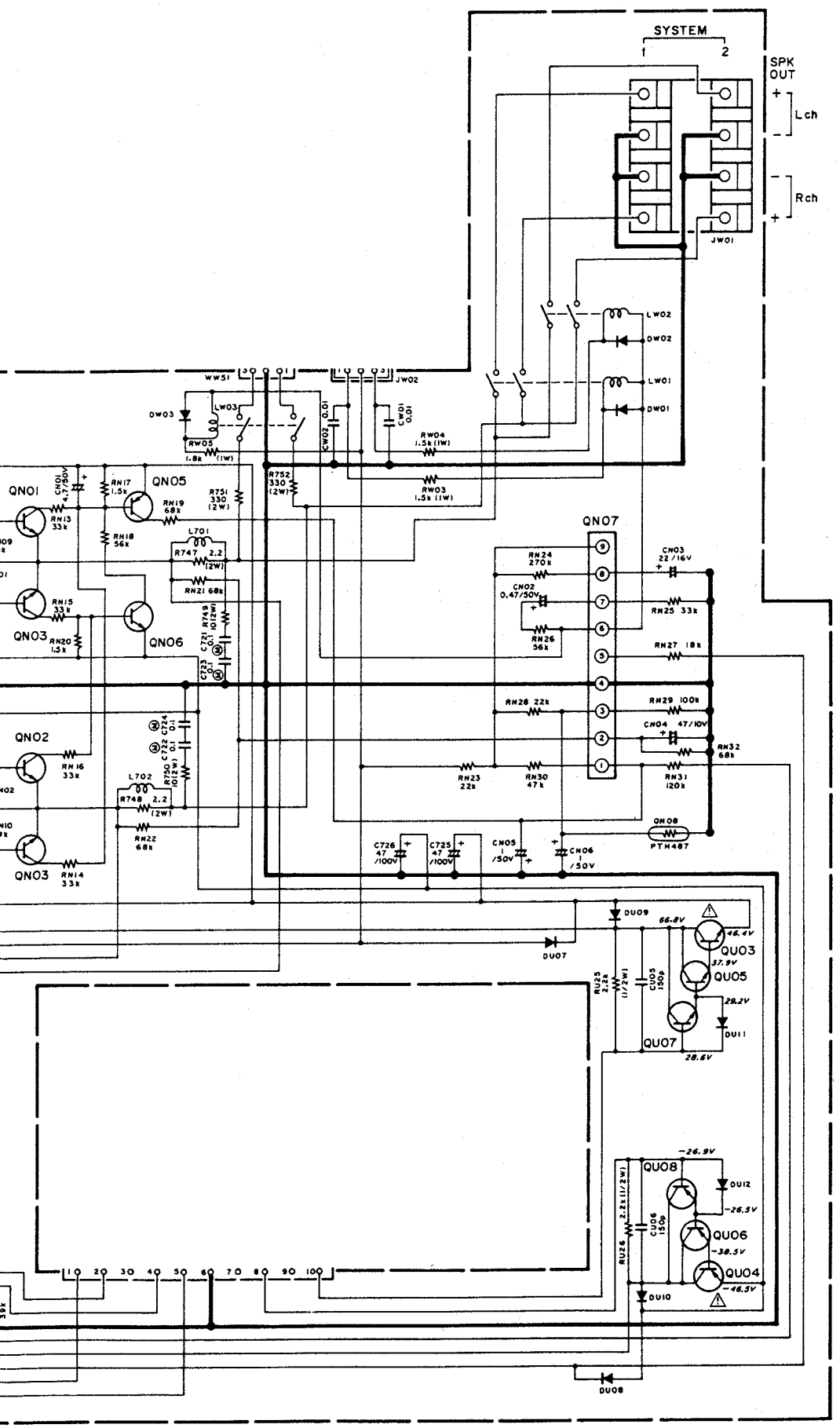
8.2 Main Amp/Power Supply (P701) Schematic Diagram and Component Locations

PM-64

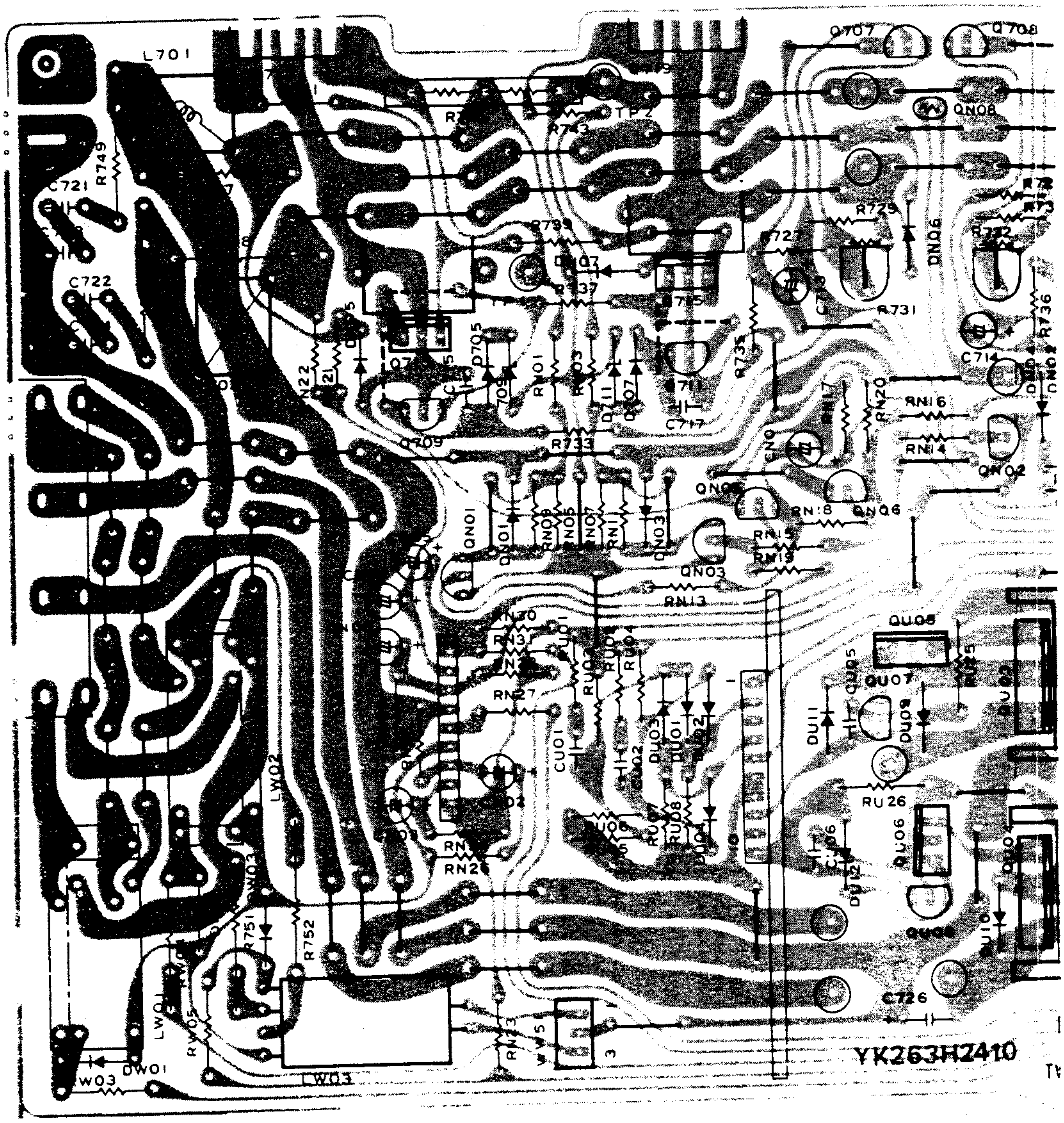


agram and Component Locations




SYSTEM
1
2
SPK OUT
Lch
Rch
JW01
JW02
LW02
DW02
LW01
DW01
WW51
DW03
LW03
CW02 0.01
CW01 0.01
RW04 1.5k (1W)
RW05 1.8k (1W)
RW03 1.5k (1W)
R752 330 (2W)
QN01
CN01 4.7/50V
RN17 1.5k
QN05
RN19 68k
R751 330 (2W)
RN13 33k
RN18 56k
L701
R747 2.2 (2W)
RN21 68k
QN03
RN15 33k
RN20 1.5k
QN06
C721 0.1
R749 10 (2W)
C723 0.1
QN07
RN24 270k
CN02 0.47/50V
RN26 56k
CN03 22/16V
RN25 33k
RN27 18k
RN28 22k
RN29 100k
CN04 47/10V
RN32 68k
RN23 22k
RN30 47k
RN31 120k
QN02
RN16 33k
C724 0.1
C722 0.1
R750 10 (2W)
L702
R748 2.2 (2W)
RN22 68k
QN03
RN14 33k
QN08 PTH487
C726 47 /100V
C725 47 /100V
CN05 1 /50V
CN06 1 /50V
DU09
DU07
66.8V
46.4V
QU03
37.9V
QU05
29.2V
DU11
QU07
28.6V
RU25 2.2k 1/4W (1/2W)
CU05 150p
-26.9V
QU08
DU12
-26.5V
QU06
-38.5V
QU04
-46.5V
DU10
RU26 2.2k (1/2W)
CU06 150p
DU08
10 20 30 40 50 60 70 80 90 100

Mqb 36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C722
R729
R731
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R736
C714
C717
C726
R751
R752
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Q709
QN01
QN02
QN03
QN06
QN08
RN13
RN14
RN15
RN16
RN18
RN19
RN20
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RN30
RN31
QU05
QU06
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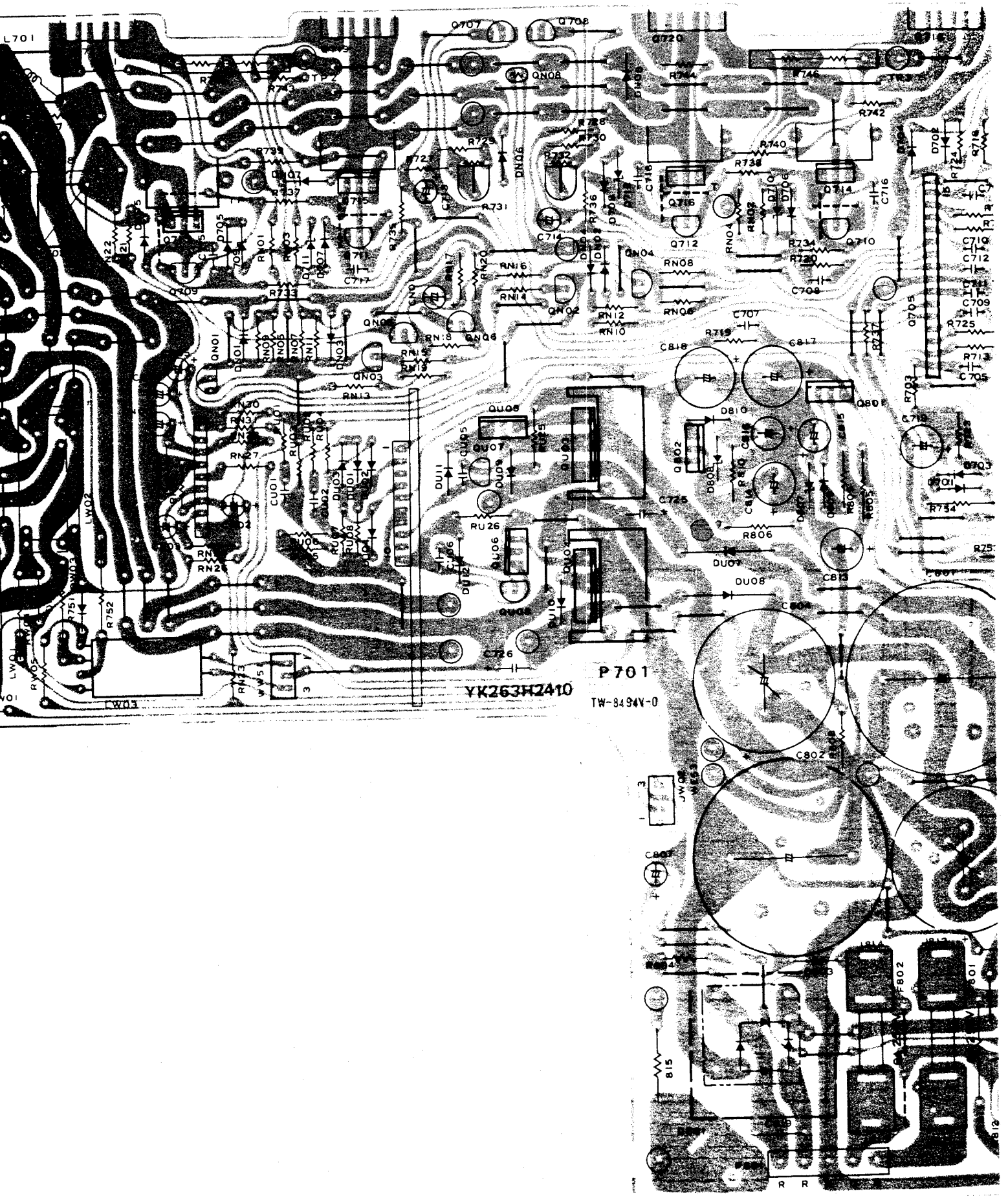
DW01
RW05
WW5
YK263H2410

Mq637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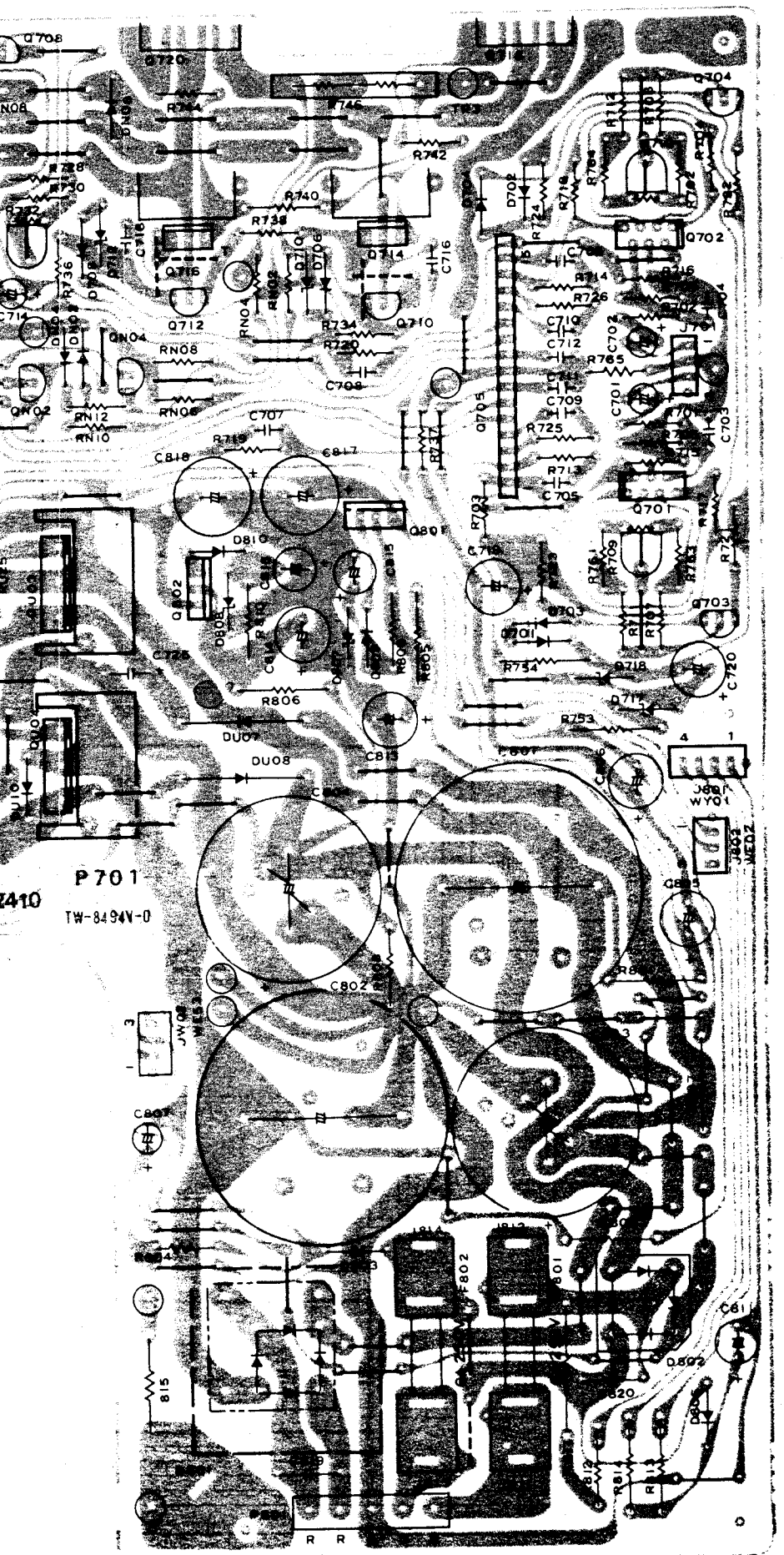
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TW-8494V-0
Q708
Q720
R744
R745
R742
R740
R738
R736
R730
R728
Q716
Q712
Q714
Q710
Q704
Q702
Q701
Q703
RN04
RN08
RN12
RN10
RN06
C707
C708
C709
C710
C712
C714
C716
C705
C703
C702
C701
R715
R734
R720
R725
R713
R726
R714
R785
R703
R709
R761
R763
R754
R718
R753
C720
C818
C817
D810
Q802
Q801
D802
D808
C806
C805
C804
C803
R806
R805
R804
R803
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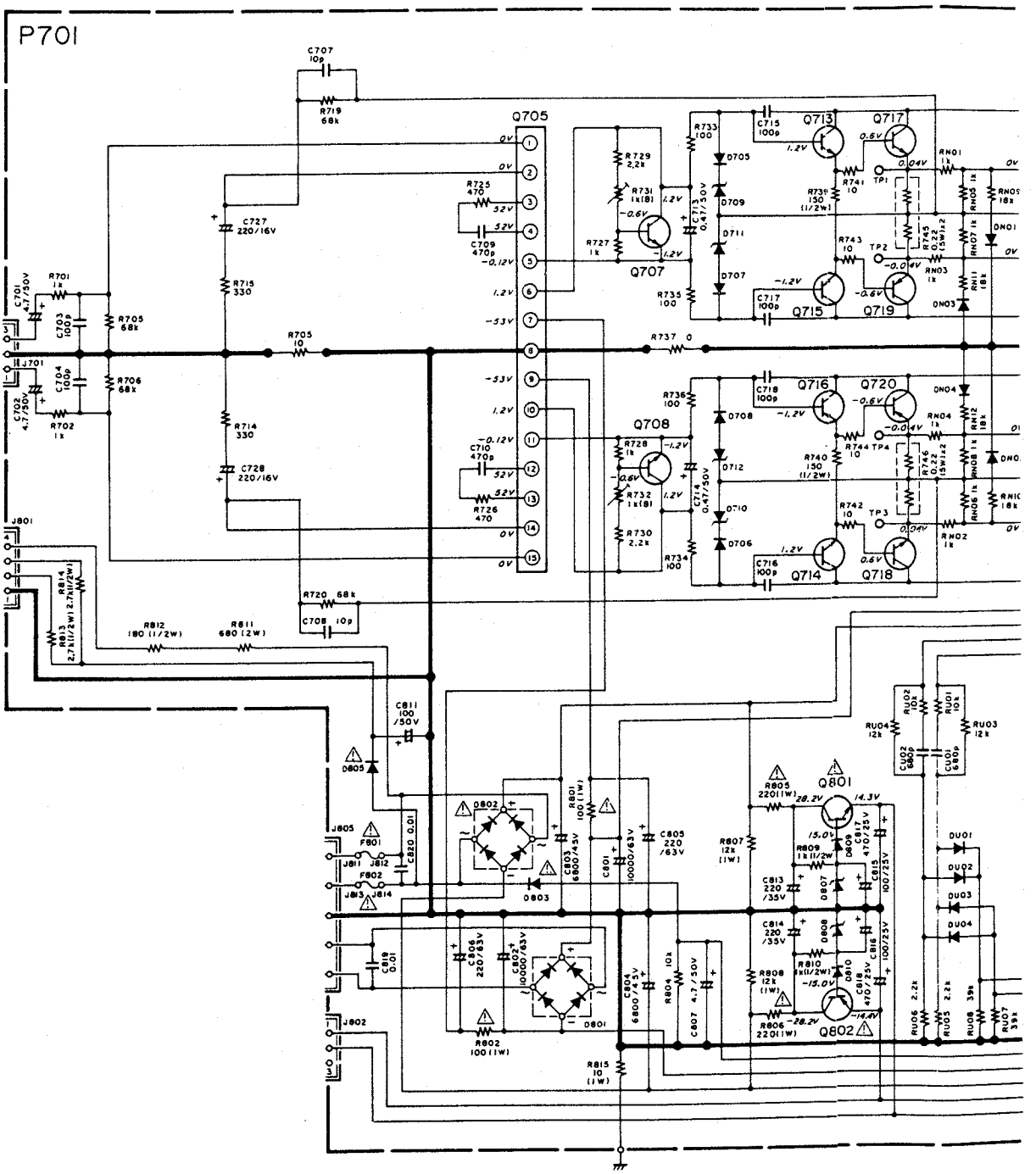
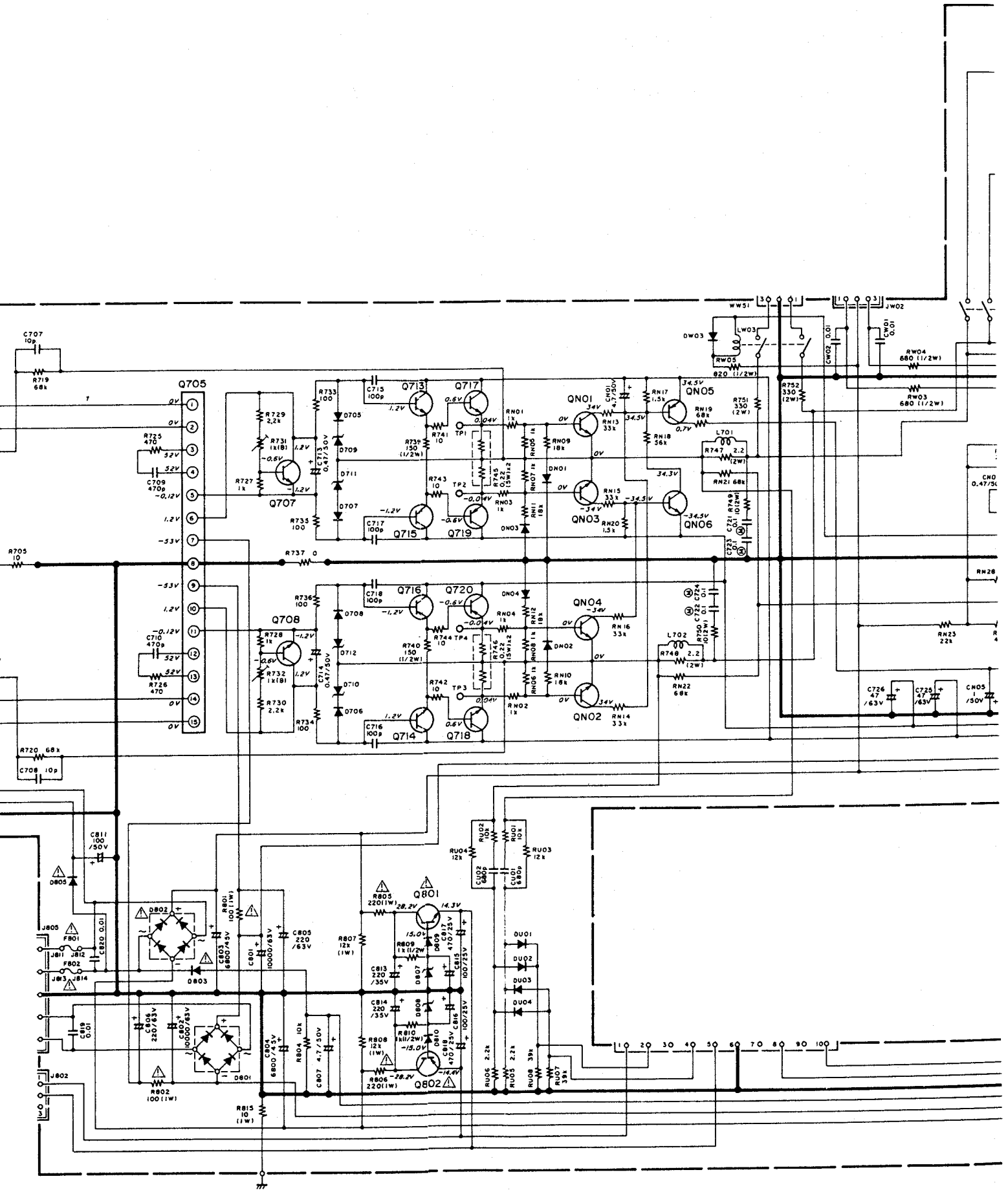
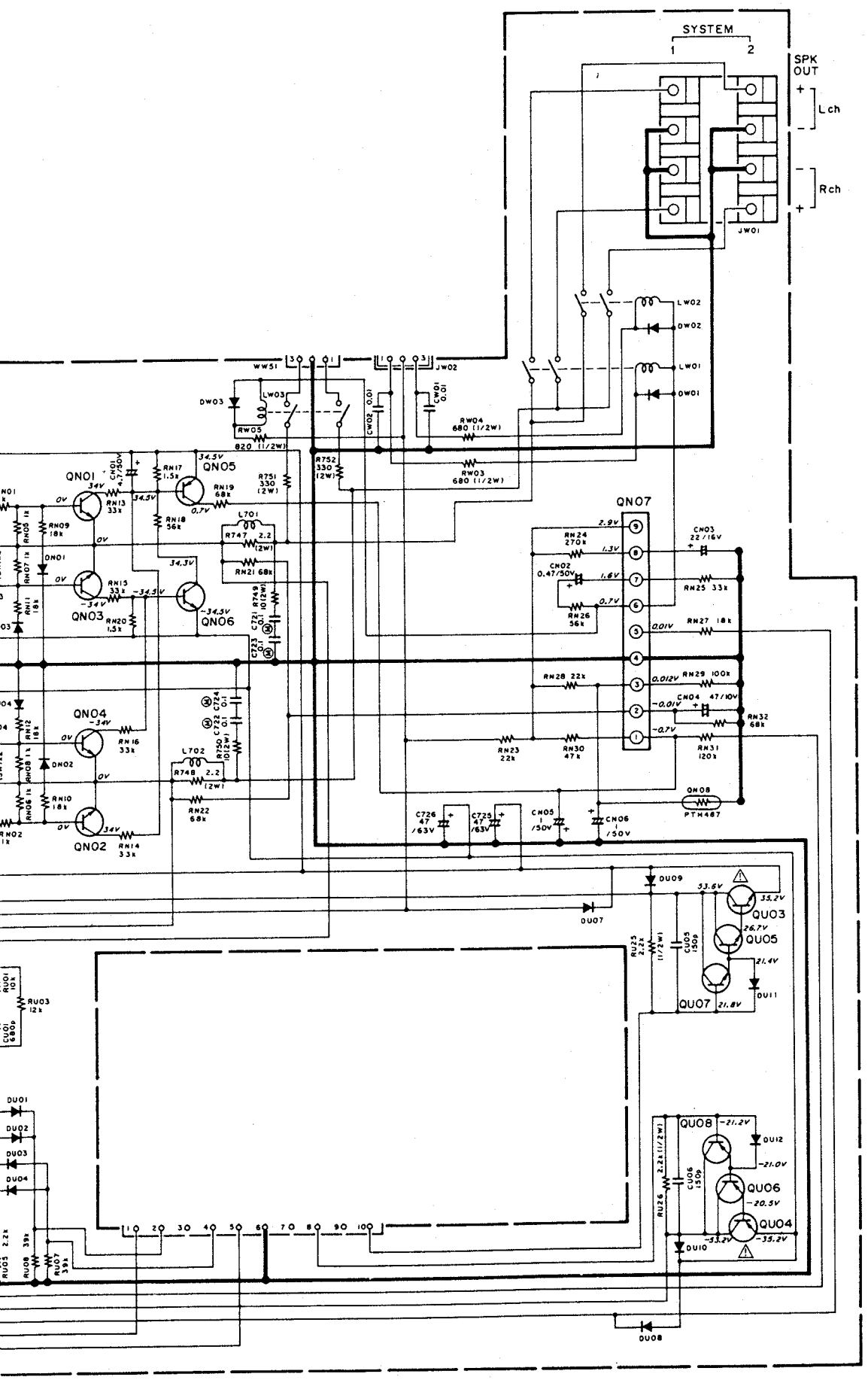
DU08
C815
C801
J801
WY01
J803
WE02
C802
C807
C813
C814
C811
C812
C810
C809
C808
R801
R802
R812
R813
R814
R815
R820
D801
D803
C61
R
3
4
1

8.2 Main Amp/Power Supply (P701) Schematic Diagram and Component Locations

PM-54



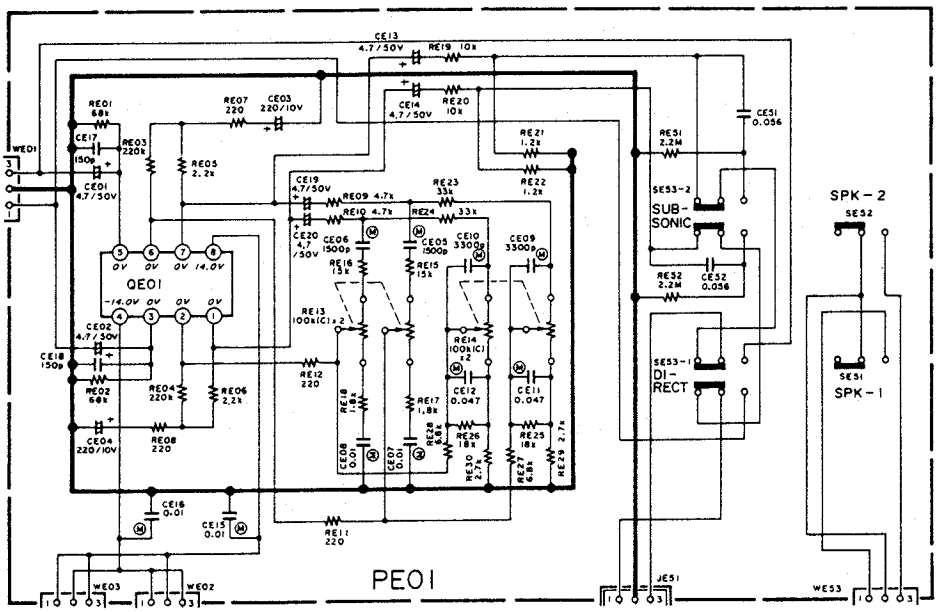

Q705
Q707
Q708
Q713
Q715
Q716
Q714
Q717
Q719
Q720
Q718
QN01
QN03
QN04
QN02
QN05
QN06
Q801
Q802
C707 10p
R719 68k
R705 10
R737 0
R720 68k
C708 10p
C811 100 /50V
D805
D802
D803
D801
J805
J802
FB01
FB02
J811
J812
J813
J814
C820 0.01
C809 0.01
C806 220/63V
C807 10000/63V
C803 6800/45V
C801 10000/63V
C805 220 /63V
C804 6800/45V
C807 4.7/50V
R801 100 (1W)
R802 100 (1W)
R804 10k
R815 10 (1W)
R807 12k (1W)
R805 220 (1W)
R806 220 (1W)
R808 12k (1W)
R809 1k (1/2W)
R810 3k (1/2W)
C813 220 /35V
C814 220 /35V
C815 100/25V
C816 100/25V
C817 470/25V
C818 470/25V
D807
D808
D809
D810
RU01 10k
RU02 10k
RU03 12k
RU04 12k
CU01 680p
CU02 680p
DU01
DU02
DU03
DU04
RU05 2.2k
RU06 2.2k
RU07 39k
RU08 39k
DW03
LW03
RW05 820 (1/2W)
RW04 680 (1/2W)
RW03 680 (1/2W)
WW51
JW02
CW01 0.01
CW02 0.01
R752 330 (2W)
R751 330 (2W)
L701
L702
R747 2.2 (2W)
R748 2.2 (2W)
RN21 68k
RN22 68k
RN23 22k
C726 47 /63V
C725 47 /63V
CN05 1 /50V
C721 0.1
C722 0.1
C723 0.1
C724 0.1
R749 (1/2W)
R750 (1/2W)
R729 2.2k
R731 1k(B)
R727 1k
R733 100
R735 100
C715 100p
C717 100p
C713 0.47/50V
D705
D709
D711
D707
R741 10
R743 10
R739 150 (1/2W)
TP1
TP2
R745 0.22 (5W)x2
RN01 1k
RN03 1k
RN05 1k
RN07 1k
RN09 18k
RN11 18k
CN01 4.7/50V
RN13 33k
RN15 33k
RN17 1.5k
RN18 56k
RN19 68k
RN20 1.5k
R736 100
R734 100
C718 100p
C716 100p
C714 0.47/50V
D708
D712
D710
D706
R740 150 (1/2W)
R742 10
R744 10
TP4
TP3
R746 0.22 (5W)x2
RN02 1k
RN04 1k
RN06 1k
RN08 1k
RN10 18k
RN12 18k
RN14 33k
RN16 33k
C710 470p
C709 470p
R725 470
R726 470
R728 1k
R732 1k(B)
R730 2.2k
R731 1k(B)
R727 1k
C712 0.47/50V
R735 100
C717 100p
R733 100
C715 100p
R741 10
R743 10
R739 150 (1/2W)
R745 0.22 (5W)x2
RN01 1k
RN03 1k
RN05 1k
RN07 1k
RN09 18k
RN11 18k
CN01 4.7/50V
RN13 33k
RN15 33k
RN17 1.5k
RN18 56k
RN19 68k
RN20 1.5k
R751 330 (2W)
R752 330 (2W)
L701
R747 2.2 (2W)
RN21 68k
C721 0.1
R749 (1/2W)
C722 0.1
C723 0.1
C724 0.1
R750 (1/2W)
L702
R748 2.2 (2W)
RN22 68k
RN23 22k
C726 47 /63V
C725 47 /63V
CN05 1 /50V
RW05 820 (1/2W)
RW04 680 (1/2W)
RW03 680 (1/2W)
DW03
LW03
WW51
JW02
CW01 0.01
CW02 0.01


SYSTEM
1
2
SPK OUT
+
Lch
−
Rch
JW01
LW02
DW02
LW01
DW01
WW51
JW02
DW03
LW03
RW05
820 (1/2W)
CW02 0.01
CW01 0.01
RW04 680 (1/2W)
RW03 680 (1/2W)
R752 330 (2W)
R751 330 (2W)
QN01
QN02
QN03
QN04
QN05
QN06
QN07
QN08
PTH487
L701
R747 2.2 (2W)
RN21 68k
L702
R748 2.2 (2W)
RN22 68k
C721 R749 (1/2W)
C723 0.1
C724 0.1
C722 R750 (1/2W)
RN24 270k
CN02 0.47/50V
RN26 56k
RN25 33k
CN03 22/16V
RN27 18k
RN28 22k
RN29 100k
CN04 47/10V
RN32 68k
RN23 22k
RN30 47k
RN31 120k
C726 47/63V
C725 47/63V
CN05 1/50V
CN06 1/50V
DU07
DU08
DU09
QU03
QU05
QU07
DU11
QU08
DU12
QU06
QU04
DU10
RU01 10k
RU03 12k
DU01
DU02
DU03
DU04
RU05 2.2k
RU08 39k
RU07 39k
RU25 2.2k (1/2W)
CU05 150p
RU26 2.2k (1/2W)
CU06 150p
1 2 3 4 5 6 7 8 9 10

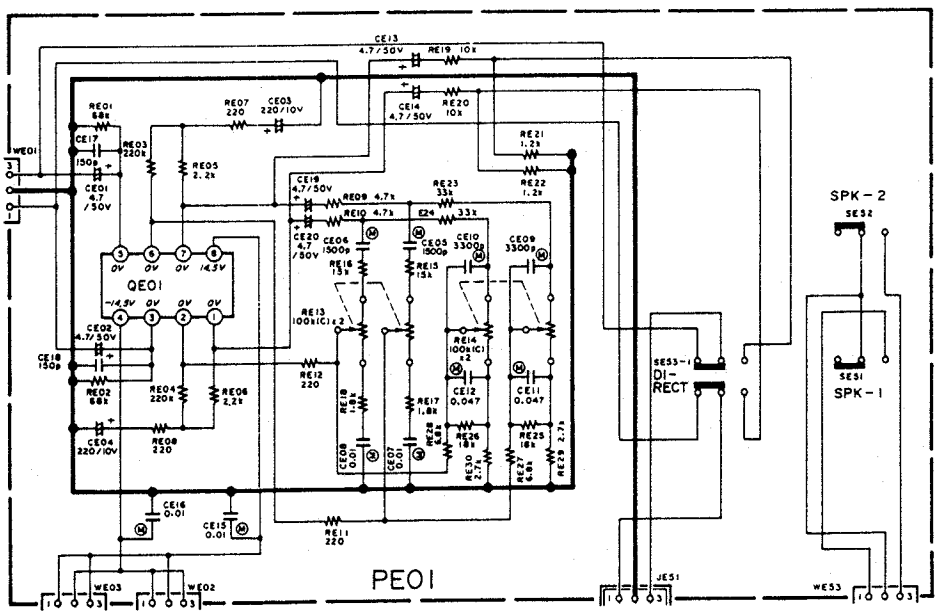
Mq638

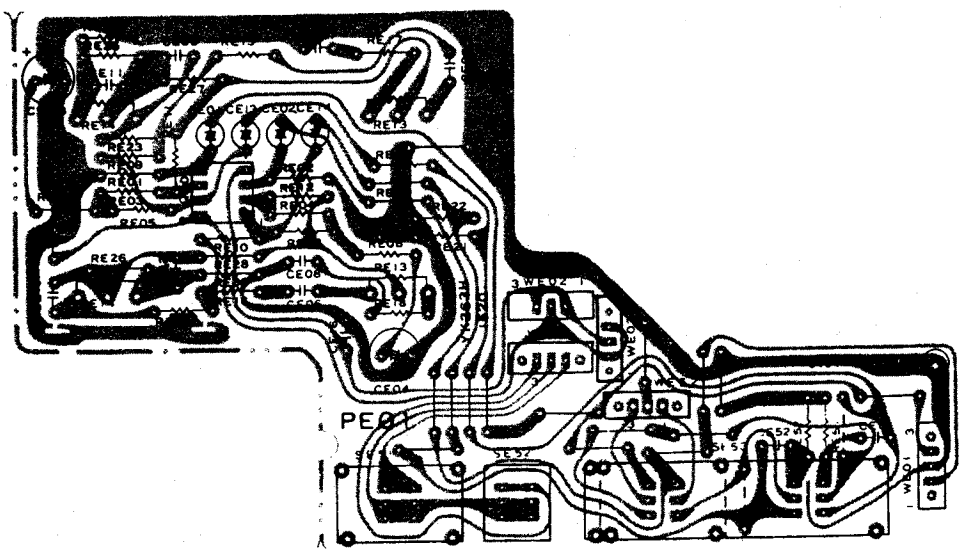
8.3 Tone Amp (PE01) Schematic Diagram and Component Locations

PM-64



PM-54

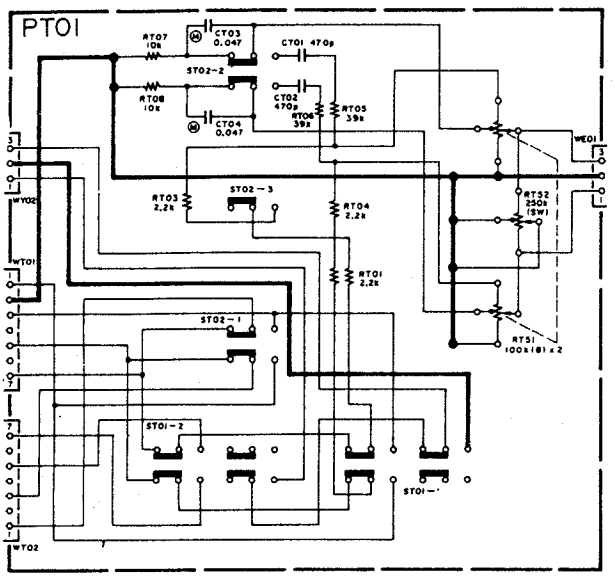




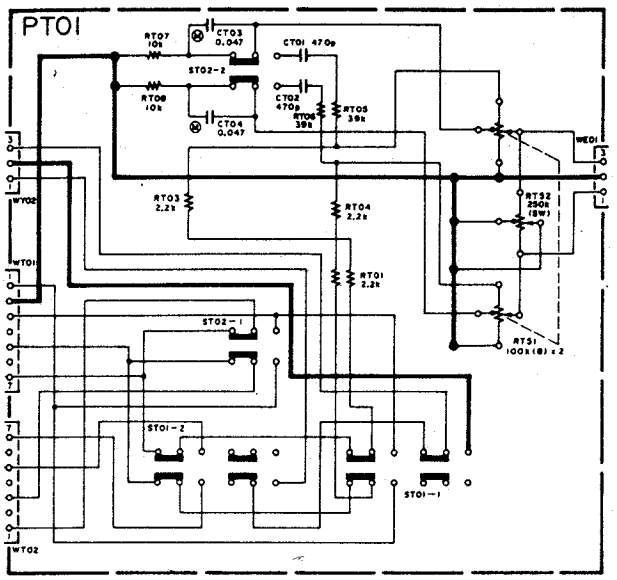
Mq639

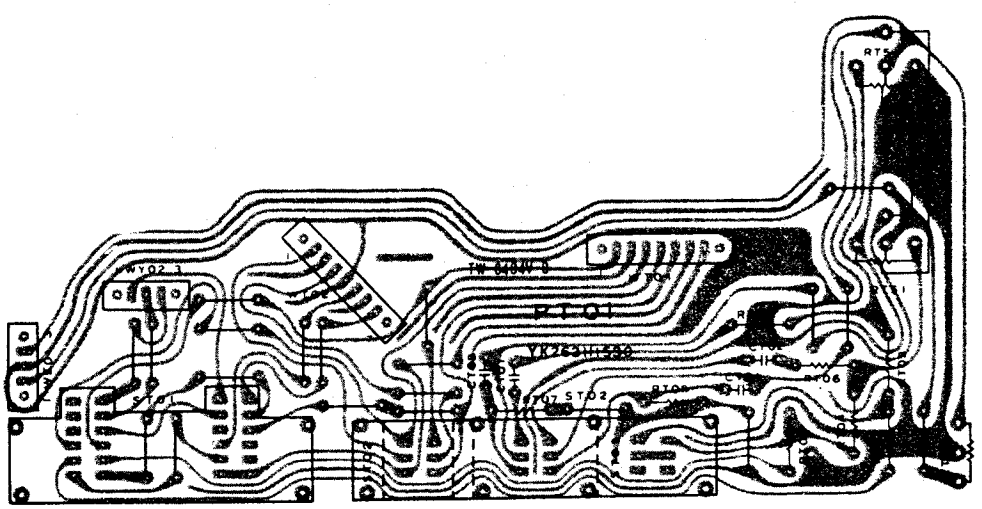
8.4 Volume, Balance (PT01) Schematic Diagram and Component Locations

PM-64

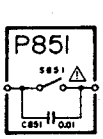


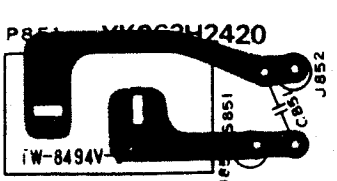
PM-54





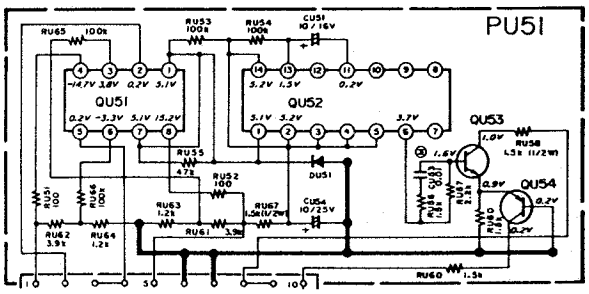
8.5 Power Switch (P851) Schematic Diagram and Component Locations

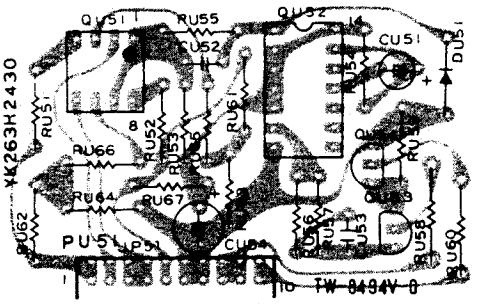




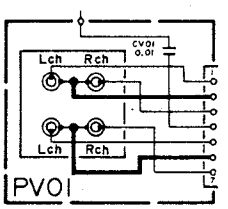
Mg640

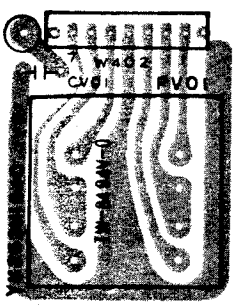
8.6 Compo-Multi (PU51) Schematic Diagram and Component Locations



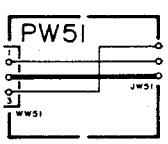


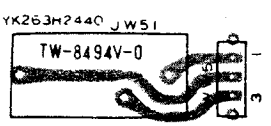
8.7 Tape 2 In/Out Jack (PV01) Schematic Diagram and Component Locations



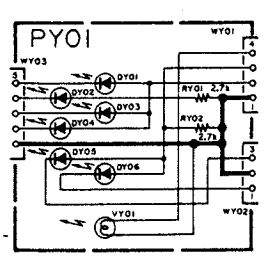


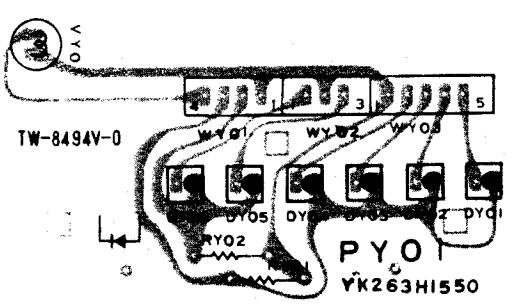
8.8 Phones (PW51) Schematic Diagram and Component Locations





8.9 Indicator (PY01) Schematic Diagram and Component Locations

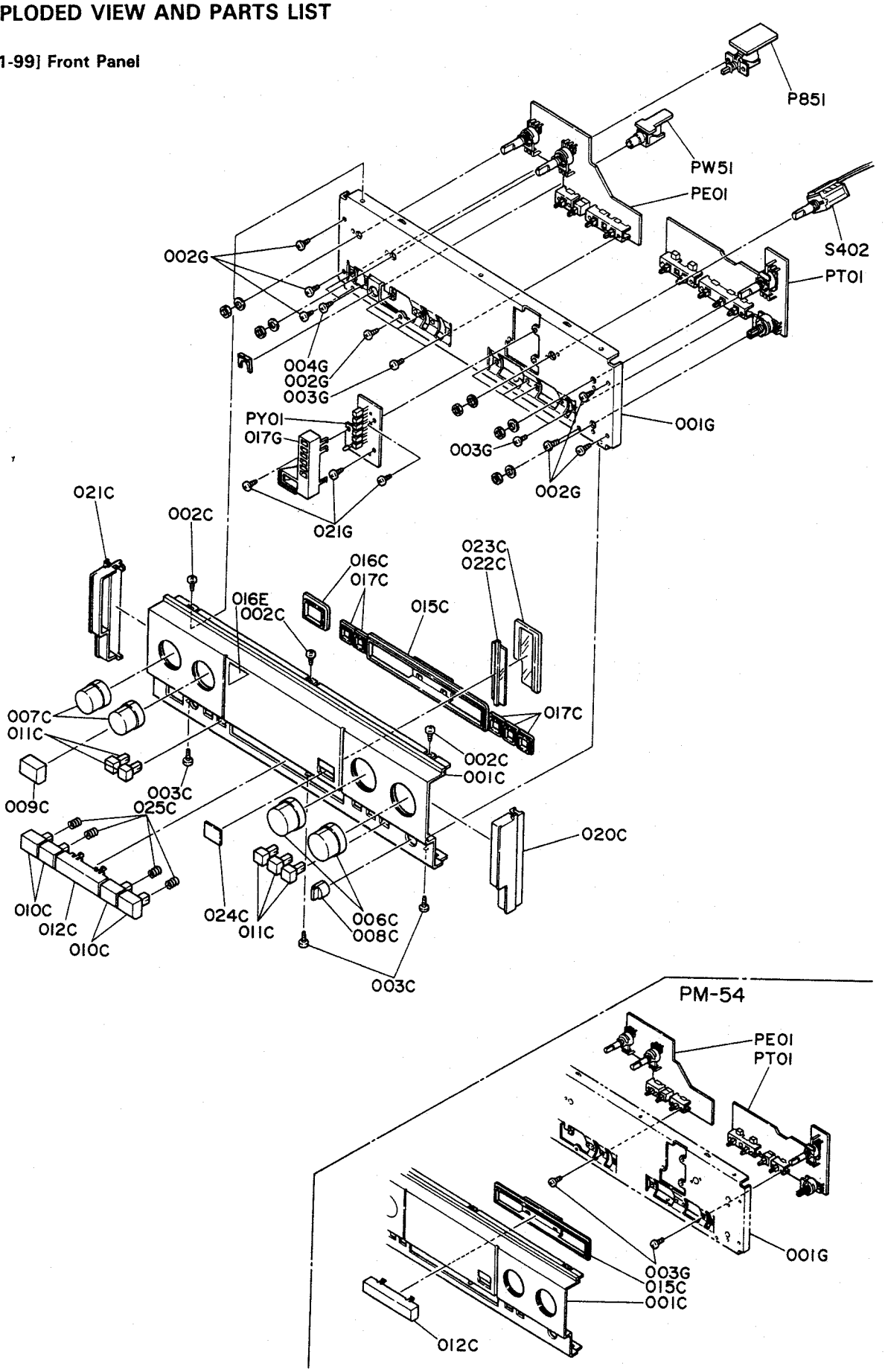




Mq641

9. EXPLODED VIEW AND PARTS LIST

[P01-99] Front Panel



Mq642

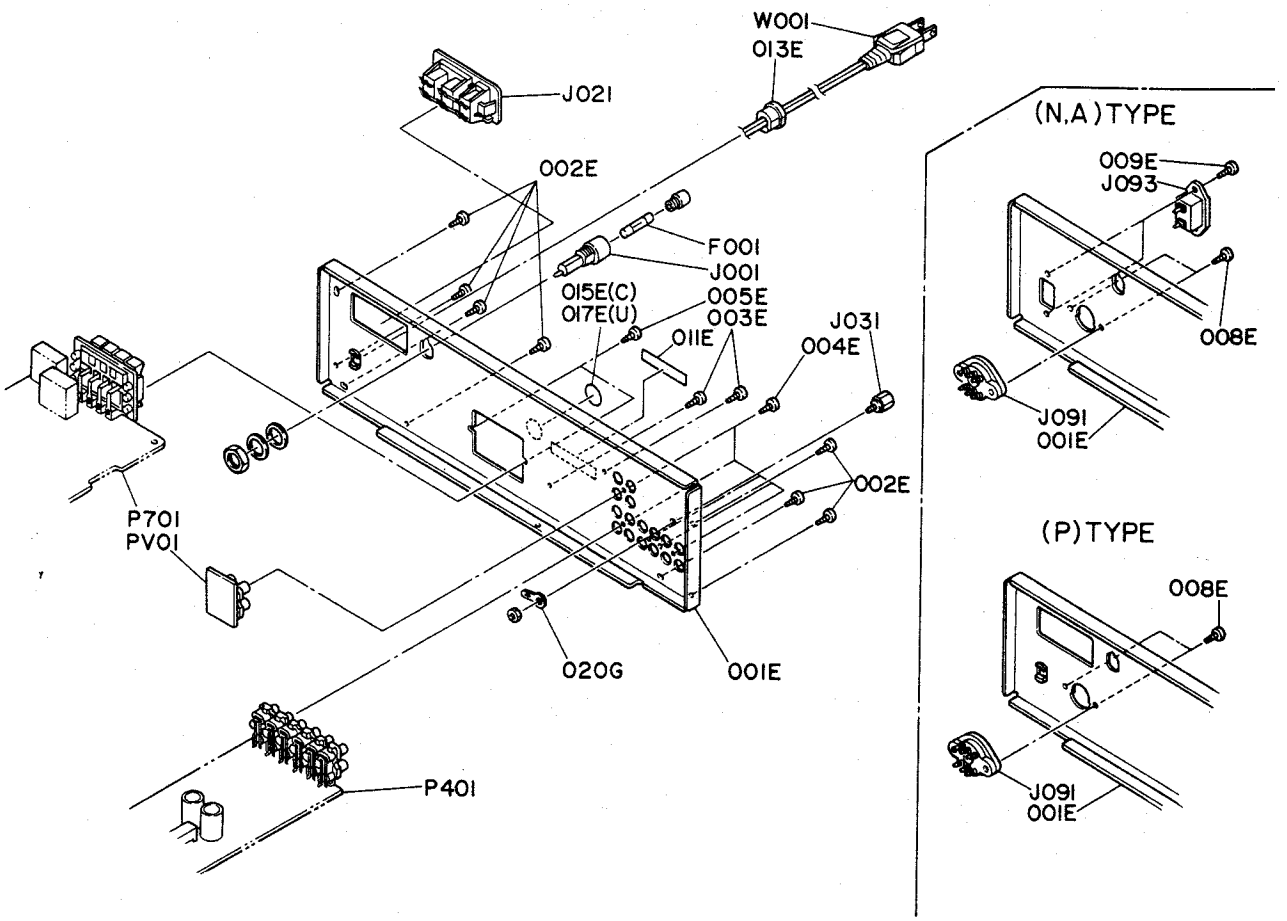
• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japan
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							PM-64 FRONT PANEL
A	1	1	1	1		263H248400	Front Panel Assembly (Gold)
001C	1	1	1	1		263H248010	Front Panel
012C	1	1	1	1		263H113010	Stud
015C	1	1	1	1		263H259010	Bushing
016C	1	1	1	1		242H259020	Bushing Power Switch
017C	5	5	5	5		242H259030	Bushing
020C	1	1	1	1		263H067010	Cap Right
021C	1	1	1	1		263H067020	Cap Left
022C	1	1	1	1		263H151010	Introducer
023C	1	1	1	1		263H158010	Window
024C	1	1	1	1		242H151020	Introducer AVSS
A1					1	263H248410	Front Panel Assembly (Black)
001C					1	263H248020	Front Panel
012C					1	263H113110	Stud
015C					1	263H259110	Bushing
016C					1	242H259120	Bushing Power Switch
017C					5	242H259130	Bushing
020C					1	263H067110	Cap Right
021C					1	263H067120	Cap Left
022C					1	263H151010	Introducer
023C					1	263H158010	Window
024C					1	242H151120	Introducer
							PM-54 FRONT PANEL
A	1	1	1			264H248400	Front Panel Assembly (Gold)
001C	1	1	1			264H248010	Front Panel
012C	1	1	1			242H113010	Stud
015C	1	1	1			242H259010	Bushing
016C	1	1	1			242H259020	Bushing
017C	4	4	4			242H259030	Bushing
020C	1	1	1			263H067010	Cap Right
021C	1	1	1			263H067020	Cap Left
022C	1	1	1			263H151010	Introducer
023C	1	1	1			263H158010	Window
024C	1	1	1			244H151020	Introducer
A1					1	264H248410	Front Panel Assembly (Black)
001C					1	264H248020	Front Panel
012C					1	242H113110	Stud
015C					1	242H259110	Bushing
016C					1	242H259120	Bushing
017C					4	242H259130	Bushing
020C					1	263H067110	Cap Right
021C					1	263H067120	Cap Left
022C					1	263H151010	Introducer
023C					1	263H158010	Window
024C					1	242H151120	Introducer

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
002C	2	2	2	2	2	5128030820	B.H. Tapped Screw B3×8
003C	2	2	2	2	2	5128030820	B.H. Tapped Screw B3×8
006C	2	2	2	2		263H154010	Knob (Gold) Vol./Input Selec.
006C					2	263H154110	Knob (Black) Vol./Input Selec.
007C	2	2	2	2		263H154020	Knob (Gold) Tone Control
007C					2	263H154120	Knob (Black) Tone Control
008C	1	1	1	1		263H154030	Knob (Gold) Balance
008C					1	263H154130	Knob (Black) Balance
009C	1	1	1	1		242H270010	Button (Gold) Power
009C					1	242H270110	Button (Black) Power
025C	4	4	4		4	263H115010	Spring Button
							(PM-64 ONLY)
010C	4	4	4	4		263H270010	Button (Gold) Direct/Subsonic/Tape Monitor 1, 2
010C					4	263H270110	Button (Black) Direct/Subsonic/Tape Monitor 1, 2
011C	5	5	5	5		263H270020	Button (Gold) Speaker 1, 2/ Loudness, etc.
011C					5	263H270120	Button (Black) Speaker 1, 2/ Loudness, etc.
							(PM-54 ONLY)
010C	3	3	3			263H270010	Button (Gold) Direct/Tape Monitor
010C					3	263H270110	Button (Black) Direct/Tape Monitor
011C	4	4	4			263H270020	Button (Gold) Speaker/Loudness, etc.
011C					4	263H270120	Button (Black) Speaker/ Loudness, etc.
001G	1	1	1		1	263H105010	Chassis Front
002G	7	7	7		7	5128030880	B.H. Tapped Screw B3×8
003G	8	8	8		8	51100306A9	B.H.M. Screw B3×6
004G	2	2	2		2	51100306Z9	B.H.H. Screw B3×6
017G	1	1	1		1	263H051010	Guide L.E.D.
021G	3	3	3			5128030880	B.H. Tapped Screw B3×8
021G					3	5128030820	B.H. Tapped Screw B3×8
016E	1					105H861010	Label 3 Year ESC

Mg643

[P02-99] Rear Panel



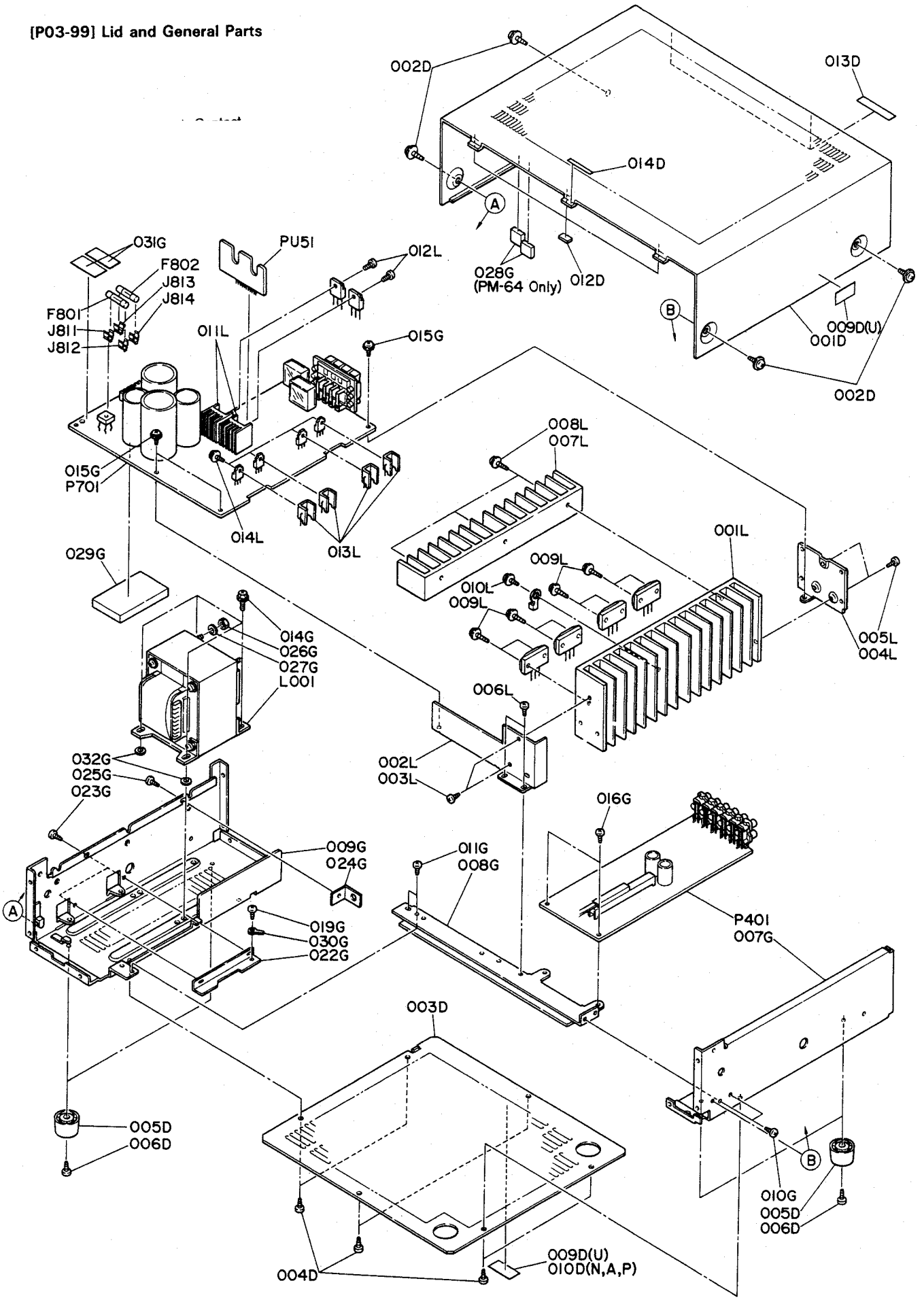
- (U) for U.S.A.
- (N) for Europe
- (A) for Australia
- (P) for PX
- (F) for Japan

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
001E		1	1			263H250020	Rear Panel (PM-64)
001E					1	263H250010	Rear Panel (PM-64)
001E				1		263H250030	Rear Panel (PM-64)
001E	1					263H250040	Rear Panel (PM-64)
001E					1	264H250010	Rear Panel (PM-54)
001E		1	1			264H250020	Rear Panel (PM-54)
001E	1					264H250040	Rear Panel (PM-54)
002E	7	7	7	7		5128030880	B.H. Tapped Screw B3×8
002E					7	51280308Z0	B.H. Tapped Screw B3×8
003E	2	2	2	2		5128030880	B.H. Tapped Screw B3×8
003E					2	51280308Z0	B.H. Tapped Screw B3×8
004E	5	5	5	5		5128030880	B.H. Tapped Screw B3×8
004E					5	51280308Z0	B.H. Tapped Screw B3×8
005E	2	2	2	2		5128030880	B.H. Tapped Screw B3×8
005E					2	51280308Z0	B.H. Tapped Screw B3×8
008E		2	2	2		5128030880	B.H. Tapped Screw B3×8
009E		2	2			5128030880	B.H. Tapped Screw B3×8
011E		1	1	1	1	2112265110	Indicator Serial Label
011E	1					2112265010	Indicator Serial Label
013E	1			1	1	1455259090	Bushing
015E	1					2457861040	Label CSA
017E	1					9511101070	Label UL
020G	1	1	1	1	1	62040029WD	Lug GND

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
⚠ F001		1	1			FS10258000	Fuse 2.5A (PM-64)
⚠ F001				1	1	FS10800600	Fuse 8A (PM-64)
⚠ F001	1					FS10500500	Fuse 5A (PM-64)
⚠ F001		1	1			FS10200800	Fuse 2A (PM-54)
⚠ F001					1	FS10500600	Fuse 5A (PM-54)
⚠ F001	1					FS10500500	Fuse 5A (PM-54)
⚠ J001		1	1	1		YJ08000290	Jack, Fuse Holder
⚠ J001	1				1	YJ08000300	Jack, Fuse Holder
⚠ J021	1			1	1	YJ04001100	Jack, AC Outlet
⚠ J031	1	1	1	1	1	YT01010050	Terminal, Ground
⚠ J091		1	1	1		BY05080050	Voltage Selector
⚠ J093		1	1			YP04000610	AC Inlet
⚠ W001					1	YC01800200	AC Power Cord
⚠ W001	1			1		YC01800260	AC Power Cord

M9644

[P03-99] Lid and General Parts



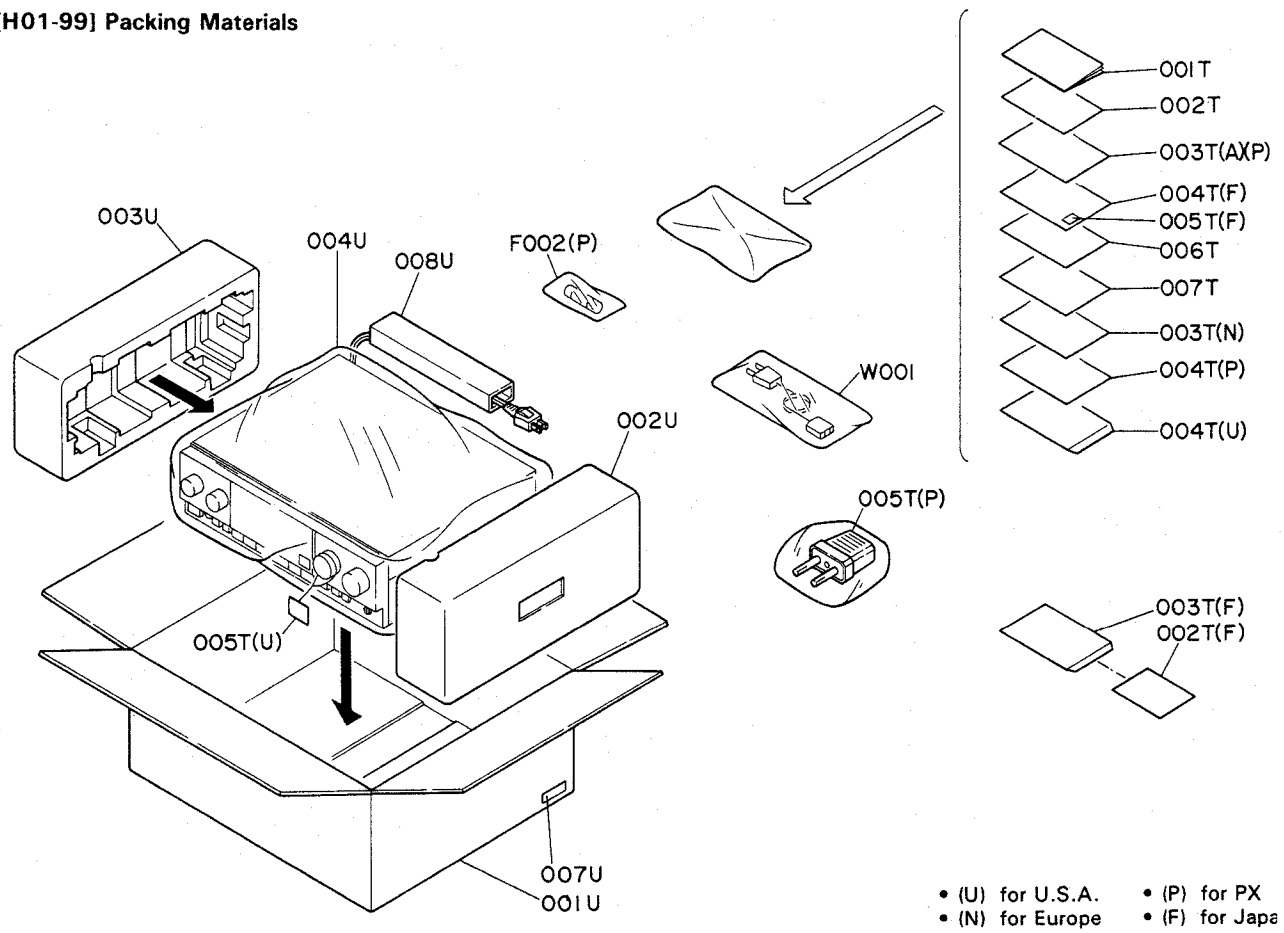
Mq645

• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japan
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
001D	1	1	1	1		263H257030	Top Cover (Gold)
001D					1	263H257040	Top Cover (Black)
002D	4	4	4	4	4	51260408Z0	B.T. Screw B4×8
003D	1	1	1	1	1	263H257020	Bottom Cover
004D	6	6	6	6		5128030880	B.H. Tapped Screw B3×8
004D					6	5128030820	B.H. Tapped Screw B3×8
005D	4	4	4	4	4	2759057010	Leg
006D	4	4	4	4	4	5128041080	B.H. Tapped Screw B4×10
009D		1	1	1		2911861140	Label
009D	2					117H861010	Label
010D		1	1	1		2911861110	Label
012D					3	242H118010	Spacer
013D					2	296S118010	Spacer
014D					1	2964056010	Buffer
007G	1	1	1	1	1	263H105020	Chassis, Right
008G	1	1	1	1	1	263H160010	Bracket
009G	1	1	1	1	1	263H105030	Chassis, Left
010G	2	2	2	2	2	5128030880	B.H. Tapped Screw B3×8
011G	2	2	2	2	2	5128030880	B.H. Tapped Screw B3×8
014G	4	4	4	4	4	52040408A0	H. Head Bolt
015G	3	3	3	3	3	5126030880	B.T. Screw B3×8
016G	2	2	2	2	2	5126030880	B.T. Screw B3×8
019G	1	1	1	1		5128030880	B.H. Tapped Screw B3×8
019G					1	5128030820	B.H. Tapped Screw B3×8
022G	1	1	1	1	1	263H104010	Retainer
023G	2	2	2	2		5128030880	B.H. Tapped Screw B3×8
023G					2	5128030820	B.H. Tapped Screw B3×8
024G	1	1	1	1	1	263H104020	Retainer
025G	1	1	1	1		5128030880	B.H. Tapped Screw B3×8
025G					1	5128030820	B.H. Tapped Screw B3×8
026G	1	1	1	1	1	53110503A9	Hexagon Nut
027G	1	1	1	1	1	54020501A0	Flat Washer, P.
028G	2	2	2	2	2	263H056010	Buffer Top Cover (PM-64)
029G	1	1	1	1	1	263H056020	Buffer
030G	1	1	1	1	1	62030049W0	Lug
031G	2				2	9510611050	Label.Fuse

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
001L	1	1	1	1	1	263H267010	Heat Sink
002L	1	1	1	1	1	263H160030	Bracket
003L	2	2	2	2	2	5128030880	B.H. Tapped Screw B3×8
004L	1	1	1	1	1	263H160020	Bracket
005L	2	2	2	2	2	5128030880	B.H. Tapped Screw B3×8
006L	2	2	2	2	2	5128030880	B.H. Tapped Screw B3×8
007L	1	1	1	1	1	263H267030	Heat Sink (PM-64 Only)
008L	3	3	3	3	3	5178031580	Fin Neck B.T. Screw B3×15
009L	8	8	8	8	8	5178031580	Fin Neck B.T. Screw B3×15
010L	1	1	1	1	1	5178031580	Fin Neck B.T. Screw B3×15
011L	2	2	2	2	2	263H267040	Heat Sink
012L	2	2	2	2	2	51100308A9	B.H.M. Screw B3×8
013L	4	4	4	4	4	250H267020	Heat Sink (PM-64 Only)
014L	4	4	4	4	4	5126030880	B.T. Screw B3×8 (PM-64 Only)
⚠ L001		1	1	1		TS19620060	Power Transformer (PM-64)
⚠ L001					1	TS19620040	Power Transformer (PM-64)
⚠ L001	1					TS19620050	Power Transformer (PM-64)
⚠ L001		1	1			TS19616050	Power Transformer (PM-54)
⚠ L001					1	TS19616030	Power Transformer (PM-54)
⚠ L001	1					TS19616040	Power Transformer (PM-54)

[H01-99] Packing Materials



- (U) for U.S.A.
- (N) for Europe
- (A) for Australia
- (P) for PX
- (F) for Japa

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
001T		1	1	1		263H851310	User Manual
001T					1	263H851110	User Manual
001T	1					263H851210	User Manual
002T		1	1	1		263H851320	User Manual, Spec (PM-64)
002T					1	9631000130	Warranty Card
002T	1					263H851220	User Manual, Spec (PM-64 Only)
002T		1	1			264H851320	User Manual, Spec (PM-54)
002T	1					264H851220	User Manual, Spec (PM-54)
003T			1			9631000090	Warranty Card
003T					1	128T854010	Warranty Card
003T		1				263H856010	Circuit Diagram (PM-64)
003T				1		416H854010	Warranty Card
003T	1					103H854010	Warranty Card
003T		1				264H856010	Circuit Diagram (PM-54)
004T					1	9611000050	User's Card
004T				1		3435851210	User Manual Flysheet
004T	1					2225813010	Envelope
005T					1	9540000010	License
005T				1		YJ04000240	Jack Plug
005T	1					9560000100	Hang Tag
006T	1					9650000050	Service Station Card Canada
007T	1					101K854210	Warranty Card Canada

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
001U		1	1		1	263H801010	Packing Case (PM-64)
001U				1		263H801020	Packing Case (PM-64)
001U	1					263H801030	Packing Case (PM-64)
001U		1	1		1	264H801010	Packing Case (PM-54)
001U	1					264H801020	Packing Case (PM-54)
002U	1	1	1	1	1	263H809010	Cushion (R)
003U	1	1	1	1	1	263H809020	Cushion (L)
004U	1	1	1	1	1	9091111030	Polyethy Sheet
007U			4			9526019030	Serial No. Card
007U					4	9526019040	Serial No. Card
007U		4				9526019060	Serial No. Card
007U				4		9562019050	Serial No. Card
007U	4					9562019010	Serial No. Card
008U	1			1	1	2864804010	Sleeve
⚠ W001			1			ZC02006030	AC Power Cord
⚠ W001		1				ZC01805030	AC Power Cord
F002				1		FS10400600	Fuse 4A

10.ELECTRICAL PARTS LIST

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia
- (P) for PX
- (F) for Japan

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							P401-PHONO AMP/INPUT JACK CIRCUIT BOARD
P401	1	1	1	1	1	YK263H1510	P.W. Board, Phono Amp/ Input Jack
	1	1	1	1		ZZ263H1510	P.W. Board Assembly
							P401-CAPACITORS
C403	1	1	1	1	1	DF35100520	Mica 1000pF ±5%
C404	1	1	1	1	1	DF35100520	Mica 1000pF ±5%
C405	1	1	1	1	1	0A22800160	Elect 2200μF 6.3V
C406	1	1	1	1	1	0A22800160	Elect 2200μF 6.3V
C407	1	1	1	1	1	DF55681090	Film 680pF ±5%
C408	1	1	1	1	1	DF55681090	Film 680pF ±5%
C409	1	1	1	1	1	DF75473530	Film 0.047μF ±5%
C410	1	1	1	1	1	DF75473530	Film 0.047μF ±5%
C411	1	1	1	1	1	DF55332090	Film 3300pF ±5%
C412	1	1	1	1	1	DF55332090	Film 3300pF ±5%
C413	1	1	1	1	1	DF75103530	Film 0.01μF ±5%
C414	1	1	1	1	1	DF75103530	Film 0.01μF ±5%
C415	1	1	1	1	1	EA10602560	Elect 10μF 25V
C416	1	1	1	1	1	EA10602560	Elect 10μF 25V
C417	1	1	1	1	1	DF15392310	Film 3900pF ±5%
C418	1	1	1	1	1	DF15392310	Film 3900pF ±5%
C419	1	1	1	1	1	0A47701630	Elect 470μF 16V
C420	1	1	1	1	1	0A47701630	Elect 470μF 16V
C421	1	1	1	1	1	DK18103310	Ceramic 0.01μF +80% −20%
C422	1	1	1	1	1	DK18103310	Ceramic 0.01μF +80% −20%
							P401-RESISTORS (All Resistor are ±5% & 1/4W)
R403	1	1	1	1	1	GD05220140	22Ω
R404	1	1	1	1	1	GD05220140	22Ω
R405	1	1	1	1	1	GD05101140	100Ω
R406	1	1	1	1	1	GD05101140	100Ω
R407 ~ R412	6	6	6	6	6	GD05473140	47kΩ
R413	1	1	1	1	1	GD05472140	4.7kΩ
R414	1	1	1	1	1	GD05472140	4.7kΩ
R415	1	1	1	1	1	GD05391140	390Ω
R416	1	1	1	1	1	GD05391140	390Ω
R417	1	1	1	1	1	GD05121140	120Ω
R418	1	1	1	1	1	GD05121140	120Ω
R419	1	1	1	1	1	GD05683140	68kΩ
R420	1	1	1	1	1	GD05683140	68kΩ
R421	1	1	1	1	1	GD05562140	5.6kΩ
R422	1	1	1	1	1	GD05562140	5.6kΩ
R423	1	1	1	1	1	GD05331140	330Ω
R424	1	1	1	1	1	GD05331140	330Ω
R425	1	1	1	1	1	GD05104140	100kΩ
R426	1	1	1	1	1	GD05104140	100kΩ
R427	1	1	1	1	1	GD05120140	12Ω
R428	1	1	1	1	1	GD05120140	12Ω
R429	1	1	1	1	1	GD05121140	120Ω
R430	1	1	1	1	1	GD05121140	120Ω
⚠ R431	1	1	1	1	1	GG05470140	47Ω
⚠ R432	1	1	1	1	1	GG05470140	47Ω
R433 ~ R436	4	4	4	4	4	GD05561140	560Ω
							P401-SEMICONDUCTORS
Q401 ~ Q404	4	4	4	4	4	HF203691B0	F.E.T. 2SK369(BL)
Q405	1	1	1	1	1	HC10017090	IC NJM 2043 DD
							P401-MISCELLANEOUS
J401	1	1	1	1	1	YT02020290	Terminal Phono
J402	1	1	1	1	1	YT02060180	Terminal Tuner, CD & AUX
J403	1	1	1	1	1	YT02040470	Terminal Tape 1 In/Out
J404	1	1	1	1	1	YJ06002460	Jack (7P)
J405	1	1	1	1	1	YJ06002460	Jack (7P)
J406	1	1	1	1	1	YJ06002430	Jack (3P)
J407	1	1	1	1	1	YJ06002390	Jack (5P)
L401	1	1	1	1	1	LC16820020	Choke Coil 6.8μH
L402	1	1	1	1	1	LC16820020	Choke Coil 6.8μH
S401	1	1	1	1	1	SS08060040	Slide Switch, Selector
S402	1	1	1	1	1	SR00050190	Rotary Switch, Selector Cont
W402	1	1	1	1	1	YU07100260	Jumper Lead
							P701-MAIN AMP/POWER SUPPLY CIRCUIT BOARD (PM-64 ONLY)
P701	1	1	1	1	1	YK263H2410	P.W. Board, Main Amp/ Power Supply
	1					ZZ263H2410	P.W. Board Assembly
		1	1			ZZ263H8410	P.W. Board Assembly
				1		ZZ263H7410	P.W. Board Assembly
							(PM-54 ONLY)
P701	1	1	1		1	YK263H2410	P.W. Board Main Amp/ Power Supply
	1					ZZ264H2410	P.W. Board Assembly
		1	1			ZZ264H8410	P.W. Board Assembly

• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japan
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							P701-CAPACITORS
C701	1	1	1	1	1	OA10605010	Elect 10μF 50V
C702	1	1	1	1	1	OA10605010	Elect 10μF 50V
C703	1	1	1	1	1	DF55221520	Film 220pF ±5%
C704	1	1	1	1	1	DF55221520	Film 220pF ±5%
C707	1	1	1	1	1	DF31100520	Mica 10pF ±0.5pF
C708	1	1	1	1	1	DF31100520	Mica 10pF ±0.5pF
C709	1	1	1	1	1	DF54471090	Film 470pF ±5%
C710	1	1	1	1	1	DF54471090	Film 470pF ±5%
C713	1	1	1	1	1	OA10701610	Elect 100μF 16V
C714	1	1	1	1	1	OA10701610	Elect 100μF 16V
C715 ~ C718	4	4	4	4	4	DF15101550	Film 100pF 100V
C721	1	1	1	1	1	DF15104350	Film 0.1μF ±5%
C722	1	1	1	1	1	DF15104350	Film 0.1μF ±5%
C723	1	1	1	1	1	DF15104350	Film 0.1μF ±5%
C724	1	1	1	1	1	DF15104350	Film 0.1μF ±5%
C725	1	1	1	1	1	EA47610030	Elect 47μF 100V
C726	1	1	1	1	1	EA47610030	Elect 47μF 100V
C727	1	1	1	1	1	OA22701610	Elect 220μF 16V
C728	1	1	1	1	1	OA22701610	Elect 220μF 16V
C801	1	1	1	1	1	EB10908010	Elect 10000μF 80V (PM-64)
C801	1	1	1		1	EB10906330	Elect 10000μF 63V (PM-54)
C802	1	1	1	1	1	EB10908010	Elect 10000μF 80V (PM-64)
C802	1	1	1		1	EB10906330	Elect 10000μF 63V (PM-54)
C803	1	1	1	1	1	EB68805520	Elect 6800μF 55V (PM-64)
C803	1	1	1		1	EB68804540	Elect 6800μF 45V (PM-54)
C804	1	1	1	1	1	EB68805520	Elect 6800μF 55V (PM-64)
C804	1	1	1		1	EB68804540	Elect 6800μF 45V (PM-54)
C805	1	1	1	1	1	EA10708050	Elect 100μF 80V
C806	1	1	1	1	1	EA10708050	Elect 100μF 80V
C807	1	1	1	1	1	EA10505030	Elect 1μF 50V
C811	1	1	1	1	1	EA10706330	Elect 100μF 63V
C813	1	1	1	1	1	OA22703510	Elect 220μF 35V
C814	1	1	1	1	1	OA22703510	Elect 220μF 35V
C815	1	1	1	1	1	OA10701610	Elect 100μF 16V
C816	1	1	1	1	1	OA10701610	Elect 100μF 16V
C817	1	1	1	1	1	OA47701630	Elect 470μF 16V
C818	1	1	1	1	1	OA47701630	Elect 470μF 16V
C819	1	1	1	1	1	DK18103560	Ceramic 0.01μF +80% −20%
C820	1	1	1	1	1	DK18103560	Ceramic 0.01μF +80% −20%

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
CN01	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CN02	1	1	1	1	1	EA47405030	Elect 0.47μF 50V
CN03	1	1	1	1	1	EA22601630	Elect 22μF 16V
CN04	1	1	1	1	1	EA47601010	Elect 47μF 10
CN05	1	1	1	1	1	EA10505030	Elect 1μF 50V
CN06	1	1	1	1	1	EA10505030	Elect 1μF 50V
CU01	1	1	1	1	1	DF15681550	Film 680pF ±5%
CU02	1	1	1	1	1	DF15681550	Film 680pF ±5%
CU05	1	1	1	1	1	DF15151550	Film 150pF ±5%
CU06	1	1	1	1	1	DF15151550	Film 150pF ±5%
CW01	1	1	1	1	1	DF16103350	Film 0.01μF ±10%
CW02	1	1	1	1	1	DF16103350	Film 0.01μF ±10%
							P701-RESISTORS (All Resistor are ±5% & 1/4W)
R701	1	1	1	1	1	GD05102140	1kΩ
R702	1	1	1	1	1	GD05102140	1kΩ
R705	1	1	1	1	1	GD05823140	82kΩ
R706	1	1	1	1	1	GD05823140	82kΩ
R715	1	1	1	1	1	GD05331140	330Ω
R716	1	1	1	1	1	GD05331140	330Ω
R719	1	1	1	1	1	GD05823140	82kΩ
R720	1	1	1	1	1	GD05823140	82kΩ
R725	1	1	1	1	1	GD05471140	470Ω
R726	1	1	1	1	1	GD05471140	470Ω
R727	1	1	1	1	1	GD05681140	680Ω
R728	1	1	1	1	1	GD05681140	680Ω
R729	1	1	1	1	1	GD05222140	2.2kΩ
R730	1	1	1	1	1	GD05222140	2.2kΩ
R731	1	1	1	1	1	RA01020600	Trimming 1kΩ
R732	1	1	1	1	1	RA01020600	Trimming 1kΩ
R733 ~ R736	4	4	4	4	4	GD05101140	100Ω
R737	1	1	1	1	1	GG05471140	470Ω
R738	1	1	1	1	1	GG05471140	470Ω
R739	1	1	1	1	1	GG05151120	150Ω 1/2W
R740	1	1	1	1	1	GG05151120	150Ω 1/2W
R741	1	1	1	1	1	GG05100140	10Ω
R742	1	1	1	1	1	GG05100140	10Ω
R743	1	1	1	1	1	GG05100140	10Ω
R744	1	1	1	1	1	GG05100140	10Ω
R745	1	1	1	1	1	BW10000060	Compo. 0.22Ω×2 5W
R746	1	1	1	1	1	BW10000060	Compo. 0.22Ω×2 5W
R747	1	1	1	1	1	NK05022020	2.2Ω 2W
R748	1	1	1	1	1	NK05022020	2.2Ω 2W
R749	1	1	1	1	1	NK05100020	10Ω 2W
R750	1	1	1	1	1	NK05100020	10Ω 2W
R751	1	1	1	1	1	GA05331010	330Ω 1W
R752	1	1	1	1	1	GA05331010	330Ω 1W

Ma647

• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japa
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
⚠ R801	1	1	1	1	1	NK05101010	100Ω 1W
⚠ R802	1	1	1	1	1	NK05101010	100Ω 1W
R804	1	1	1	1	1	GD05103140	10kΩ
⚠ R805	1	1	1	1	1	NK05681010	680Ω 1W
⚠ R806	1	1	1	1	1	NK05681010	680Ω 1W
R807	1	1	1	1	1	NK05123010	12kΩ 1W
R808	1	1	1	1	1	NK05123010	12kΩ 1W
R809	1	1	1	1	1	GG05102120	1kΩ 1/2W
R810	1	1	1	1	1	GG05102120	1kΩ 1/2W
R811	1	1	1	1	1	GA05681020	680Ω 2W
R812	1	1	1	1	1	GG05181120	180Ω 1/2W
R813	1	1	1	1	1	GG05392120	3.9kΩ 1/2W
R814	1	1	1	1	1	GG05392120	3.9kΩ 1/2W
RN01 ~ RN08	8	8	8	8	8	GD05102140	1kΩ
RN09 ~ RN12	4	4	4	4	4	GD05183140	18kΩ
RN13 ~ RN16	4	4	4	4	4	GD05333140	33kΩ
RN17	1	1	1	1	1	GD05152140	1.5kΩ
RN18	1	1	1	1	1	GD05563140	56kΩ
RN19	1	1	1	1	1	GD05683140	68kΩ
RN20	1	1	1	1	1	GD05152140	1.5kΩ
RN21	1	1	1	1	1	GD05683140	68kΩ
RN22	1	1	1	1	1	GD05683140	68kΩ
RN23	1	1	1	1	1	GD05333140	33kΩ
RN24	1	1	1	1	1	GD05274040	270kΩ
RN25	1	1	1	1	1	GD05333140	33kΩ
RN26	1	1	1	1	1	GD05563140	56kΩ
RN27	1	1	1	1	1	GD05333140	33kΩ
RN28	1	1	1	1	1	GD05223140	22kΩ
RN29	1	1	1	1	1	GD05104040	100kΩ
RN30	1	1	1	1	1	GD05473140	47kΩ
RN31	1	1	1	1	1	GD05124040	120kΩ
RU01 ~ RU04	4	4	4	4	4	GD05103140	10kΩ
RU05	1	1	1	1	1	GD05222140	2.2kΩ (PM-64)
RU05	1	1	1		1	GD05332140	3.3kΩ (PM-54)
RU06	1	1	1	1	1	GD05222140	2.2kΩ (PM-64)
RU06	1	1	1		1	GD05332140	3.3kΩ (PM-54)
RU07	1	1	1	1	1	GD05393140	39kΩ
RU08	1	1	1	1	1	GD05393140	39kΩ
RU25	1	1	1	1	1	GG05222120	2.2kΩ 1/2W
RU26	1	1	1	1	1	GG05222120	2.2kΩ 1/2W
RW03	1	1	1	1	1	GA05152010	1.5kΩ 1W (PM-64)
RW03	1	1	1		1	GG05331120	330Ω 1/2W (PM-54)
RW04	1	1	1	1	1	GA05152010	1.5kΩ 1W (PM-64)
RW04	1	1	1		1	GG05331120	330Ω 1/2W (PM-54)
RW05	1	1	1	1	1	NK05182010	1.8kΩ 1W (PM-64)
RW05	1	1	1		1	GG05681120	680Ω 1/2W (PM-54)

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							P701-SEMICONDUCTORS
D705 ~ D708	4	4	4	4	4	HD20003210	Diode 1S2471
D709 ~ D712	4	4	4	4	4	HD30064060	Zener RD6.2E
⚠ D801	1	1	1	1	1	HE20013290	Diode D5FB20 (PM-64)
⚠ D801	1	1	1		1	HE20009290	Diode S5VB20 (PM-54)
⚠ D802	1	1	1	1	1	HD20008290	Diode S4VB20
⚠ D803	1	1	1	1	1	HD20003210	Diode 1S2471
⚠ D805	1	1	1	1	1	HD20022030	Diode DSF10C
D807	1	1	1	1	1	HD30051060	Zener RD16E
D808	1	1	1	1	1	HD30051060	Zener RD16E
D809	1	1	1	1	1	HD20001000	Diode 1S1555
D810	1	1	1	1	1	HD20001000	Diode 1S1555
DN01 ~ DN04	4	4	4	4	4	HD20003210	Diode 1S2471
DU01 ~ DU04	4	4	4	4	4	HD20003210	Diode 1S2471
DU07	1	1	1	1	1	HD20011290	Diode S3V20
DU08	1	1	1	1	1	HD20011290	Diode S3V20
DU09	1	1	1	1	1	HD20022030	Diode DSF10C
DU10	1	1	1	1	1	HD20022030	Diode DSF10C
DU11	1	1	1	1	1	HD20003210	Diode 1S2471
DU12	1	1	1	1	1	HD20003210	Diode 1S2471
DW01	1	1	1	1	1	HD20003210	Diode 1S2471
DW02	1	1	1	1	1	HD20003210	Diode 1S2471
DW03	1	1	1	1	1	HD20003210	Diode 1S2471
Q705	1	1	1	1	1	HC10145030	IC STK3102-2A
Q707	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
Q708	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
Q709	1	1	1	1	1	HT326821P0	Transistor 2SC2682(P) (PM-64)
Q710	1	1	1	1	1	HT326821P0	Transistor 2SC2682(P) (PM-64)
Q711	1	1	1	1	1	HT111421P0	Transistor 2SA1142(P) (PM-64)
Q712	1	1	1	1	1	HT111421P0	Transistor 2SA1142(P) (PM-64)
Q713	1	1	1	1	1	HT332982D0	Transistor 2SC3298 (O, Y)

Mq648

• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japan
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
Q714	1	1	1	1	1	HT332982D0	Transistor 2SC3298 (O, Y)
Q715	1	1	1	1	1	HT113062D0	Transistor 2SA1306 (O, Y)
Q716	1	1	1	1	1	HT113062D0	Transistor 2SA1306 (O, Y)
Q717	1	1	1	1	1	HT327742B0	Transistor 2SC2774 (O, Y) (PM-64)
Q717	1	1	1		1	HT327732B0	Transistor 2SC2773 (O, Y) (PM-54)
Q718	1	1	1	1	1	HT327742B0	Transistor 2SC2774 (O, Y) (PM-64)
Q718	1	1	1		1	HT327732B0	Transistor 2SC2773 (O, Y) (PM-54)
Q719	1	1	1	1	1	HT111702B0	Transistor 2SA1170 (O, Y) (PM-64)
Q719	1	1	1		1	HT111692B0	Transistor 2SA1169 (O, Y) (PM-54)
Q720	1	1	1	1	1	HT111702B0	Transistor 2SA1170 (O, Y) (PM-64)
Q720	1	1	1		1	HT111692B0	Transistor 2SA1169 (O, Y) (PM-54)
⚠ Q801	1	1	1	1	1	HT412662B0	Transistor 2SD1266 (Q, P)
⚠ Q802	1	1	1	1	1	HT209412B0	Transistor 2SB941 (Q, P)
QN01	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
QN02	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
QN03	1	1	1	1	1	HT109922B0	Transistor 2SA992 (F, E)
QN04	1	1	1	1	1	HT109922B0	Transistor 2SA992 (F, E)
QN05	1	1	1	1	1	HT109922B0	Transistor 2SA992 (F, E)
QN06	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
QN07	1	1	1	1	1	HC10042050	IC TA7317P
QN08	1	1	1	1	1	HP00009230	Varistor PTH487
⚠ QU03	1	1	1	1	1	HT335193A0	Transistor 2SC3519 (O, P, Y) (PM-64)
⚠ QU03	1	1	1		1	HT412382B0	Transistor 2SD1238 (R, S) (PM-54)
⚠ QU04	1	1	1	1	1	HT113863A0	Transistor 2SA1386 (O, P, Y) (PM-64)
⚠ QU04	1	1	1		1	HT209222B0	Transistor 2SB922 (R, S) (PM-54)
QU05	1	1	1	1	1	HT323441D0	Transistor 2SC2344(D)
QU06	1	1	1	1	1	HT110111D0	Transistor 2SA1011(D)
QU07	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
QU08	1	1	1	1	1	HT109922B0	Transistor 2SA992 (F, E)
							P701-MISCELLANEOUS (PM-64 ONLY)
⚠ F801	1					FS10500500	Fuse 5A
⚠ F801		1	1			FS10500800	Fuse 5A
⚠ F801				1	1	FS10600600	Fuse 6A
⚠ F802	1					FS10500500	Fuse 5A
⚠ F802		1	1			FS10500800	Fuse 5A
⚠ F802				1	1	FS10600600	Fuse 6A
							(PM-54 ONLY)
⚠ F801	1					FS10500500	Fuse 5A
⚠ F801		1	1			FS10400800	Fuse 4A
⚠ F801					1	FS10500600	Fuse 5A
⚠ F802	1					FS10500500	Fuse 5A
⚠ F802		1	1			FS10400800	Fuse 4A
⚠ F802					1	FS10500600	Fuse 5A

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
J701	1	1	1	1	1	YJ06002430	Jack (3P)
J801	1	1	1	1	1	YJ06002430	Jack (3P)
J802	1	1	1	1	1	YJ06002430	Jack (3P)
J805	1	1	1	1	1	YJ06001050	Jack (5P)
J811		1	1			YJ08000270	Jack
J811	1			1	1	YJ08000170	Jack
J812		1	1			YJ08000270	Jack
J812	1			1	1	YJ08000170	Jack
J813		1	1			YJ08000270	Jack
J813	1			1	1	YJ08000170	Jack
J814		1	1			YJ08000270	Jack
J814	1			1	1	YJ08000170	Jack
JW01	1	1	1	1	1	YT03080010	Terminal Speaker 1/2
JW02	1	1	1	1	1	YJ06002430	Jack (3P)
L701	1	1	1	1	1	LL23905120	Coil
L702	1	1	1	1	1	LL23905120	Coil
LW01	1	1	1	1	1	LY20240190	Relay (PM-64)
LW01	1	1	1		1	LY20240260	Relay (PM-54)
LW02	1	1	1	1	1	LY20240190	Relay (PM-64)
LW02	1	1	1		1	LY20240260	Relay (PM-54)
LW03	1	1	1	1	1	LY20240240	Relay
							P851-POWER SWITCH CIRCUIT BOARD
P851	1	1	1	1	1	YK263H2420	P.W. Board, Power Switch
	1	1	1	1		ZZ263H2420	P.W. Board Assembly
							P851-CAPACITOR
⚠ C851	1	1	1	1		DK18103840	Ceramic 0.01μF +80% −20%
⚠ C851					1	DK18103850	Ceramic 0.01μF +80% −20%
							P851-MISCELLANEOUS
⚠ S851	1	1	1	1	1	SP01010820	Push Switch Power
							PE01-TONE AMP CIRCUIT BOARD
PE01	1	1	1	1	1	YK263H1520	P.W. Board, Tone Amp
	1	1	1	1		ZZ263H1520	P.W. Board Assembly (PM-64)
	1	1	1			ZZ264H1520	P.W. Board Assembly (PM-54)
							PE01-CAPACITORS
CE01	1	1	1	1	1	OA47505010	Elect 4.7μF 50V
CE02	1	1	1	1	1	OA47505010	Elect 4.7μF 50V
CE03	1	1	1	1	1	EA22701030	Elect 220μF 10V
CE04	1	1	1	1	1	EA22701030	Elect 220μF 10V
CE05	1	1	1	1	1	DF15152310	Film 1500pF ±5%
CE06	1	1	1	1	1	DF15152310	Film 1500pF ±5%
CE07	1	1	1	1	1	DF15103310	Film 0.01μF ±5%
CE08	1	1	1	1	1	DF15103310	Film 0.01μF ±5%
CE09	1	1	1	1	1	DF15332310	Film 3300pF ±5%
CE10	1	1	1	1	1	DF15332310	Film 3300pF ±5%

M9649

• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japan
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
CE11	1	1	1	1	1	DF15473310	Film 0.047μF ±5%
CE12	1	1	1	1	1	DF15473310	Film 0.047μF ±5%
CE13	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CE14	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CE15	1	1	1	1	1	DF15103310	Film 0,01μF ±5%
CE16	1	1	1	1	1	DF15103310	Film 0.01μF ±5%
CE17	1	1	1	1	1	DF55151520	Film 150pF ±5%
CE18	1	1	1	1	1	DF55151520	Film 150pF ±5%
CE19	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CE20	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CE51	1	1	1	1	1	DF15153310	Film 0.015μF ±5% (PM-64)
CE52	1	1	1	1	1	DF15153310	Film 0.015μF ±5% (PM-64)
							PE01-RESISTORS (All Resistor are ±5% & 1/4W)
RE01	1	1	1	1	1	GD05683140	68kΩ
RE02	1	1	1	1	1	GD05683140	68kΩ
RE03	1	1	1	1	1	GD05224140	220kΩ
RE04	1	1	1	1	1	GD05224140	220kΩ
RE05	1	1	1	1	1	GD05222140	2.2kΩ
RE06	1	1	1	1	1	GD05222140	2.2kΩ
RE07	1	1	1	1	1	GD05221140	220Ω
RE08	1	1	1	1	1	GD05221140	220Ω
RE09	1	1	1	1	1	GD05472140	4.7kΩ
RE10	1	1	1	1	1	GD05472140	4.7kΩ
RE11	1	1	1	1	1	GD05221140	220Ω
RE12	1	1	1	1	1	GD05221140	220Ω
RE13	1	1	1	1	1	RM01040810	Variable 100kΩ × 2
RE14	1	1	1	1	1	RM01040810	Variable 100kΩ × 2
RE15	1	1	1	1	1	GD05153140	15kΩ
RE16	1	1	1	1	1	GD05153140	15kΩ
RE17	1	1	1	1	1	GD05182140	1.8kΩ
RE18	1	1	1	1	1	GD05182140	1.8kΩ
RE19	1	1	1	1	1	GD05103140	10kΩ
RE20	1	1	1	1	1	GD05103140	10kΩ
RE21	1	1	1	1	1	GD05821140	820Ω
RE22	1	1	1	1	1	GD05821140	820Ω
RE23	1	1	1	1	1	GD05333140	33kΩ
RE24	1	1	1	1	1	GD05333140	33kΩ
RE25	1	1	1	1	1	GD05183140	18kΩ
RE26	1	1	1	1	1	GD05183140	18kΩ
RE27	1	1	1	1	1	GD05682140	6.8kΩ
RE28	1	1	1	1	1	GD05682140	6.8kΩ
RE29	1	1	1	1	1	GD05272140	2.7kΩ
RE30	1	1	1	1	1	GD05272140	2.7kΩ
RE51	1	1	1	1	1	GD05225140	2.2MΩ (PM-64)
RE52	1	1	1	1	1	GD05225140	2.2MΩ (PM-64)
							PE01-SEMICONDUCTOR
QE01	1	1	1	1	1	HC10026090	IC NJM2041D

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							PE01-MISCELLANEOUS
JE51	1	1	1	1	1	YJ06002430	Jack (3P)
SE51	1	1	1	1	1	SP02011180	Push Switch Speaker System 1
SE52	1	1	1	1	1	SP02011210	Push Switch Speaker System 2
SE53	1	1	1	1	1	SP02020770	Push Switch Direct & Subsonic (PM-64)
SE53	1	1	1		1	SP02011180	Push Switch Direct (PM-54)
WE01	1	1	1	1	1	YU03140260	Jumpr Lead
WE02	1	1	1	1	1	YU03100260	Jumpr Lead
WE03	1	1	1	1	1	YU03340260	Jumpr Lead
WE51	1	1	1	1	1	YU03120260	Jumpr Lead (PM-64)
WE53	1	1	1	1	1	YU03200260	Jumpr Lead (PM-64)
							PT01-VOL/BALANCE CIRCUIT BOARD
PT01	1	1	1	1	1	YK263H1530	P.W. Board, Vol/Balance
	1	1	1	1		ZZ263H1530	P.W. Board Assembly (PM-64)
	1	1	1			ZZ264H1530	P.W. Board Assembly (PM-54)
							PT01-CAPACITORS
CT01	1	1	1	1	1	DF55471090	Film 470pF ±5%
CT02	1	1	1	1	1	DF55471090	Film 470pF ±5%
CT03	1	1	1	1	1	DF15473310	Film 0.047μF ±5%
CT04	1	1	1	1	1	DF15473310	Film 0.047μF ±5%
							PT01-RESISTORS (All Resistor are ±5% & 1/4W)
RT01 ~ RT04	4	4	4	4	4	GD05222140	2.2kΩ
RT05	1	1	1	1	1	GD05393140	39kΩ
RT06	1	1	1	1	1	GD05393140	39kΩ
RT07	1	1	1	1	1	GD05103140	10kΩ
RT08	1	1	1	1	1	GD05103140	10kΩ
RT51	1	1	1	1	1	RM01040820	Variable 100kΩB × 2 Vol.
RT52	1	1	1	1	1	RK02540050	Variable 250kΩ Balance
							PT01-MISCELLANEOUS
ST01	1	1	1	1	1	SP04020430	Push Switch Tape 1/2 Mon
ST02	1	1	1	1	1	SP02030320	Push Switch Copy/Loudness/Mono (PM-64)
ST02	1	1	1		1	SP02011210	Push Switch Copy 1-2 (PM-54)
ST03	1	1	1		1	SP02011180	Push Switch Loudness (PM-54)
WT01	1	1	1	1	1	YU04140260	Jumper Lead (4P)
WT02	1	1	1	1	1	YU04140260	Jumper Lead (4P)

• (U) for U.S.A. • (P) for PX
• (N) for Europe • (F) for Japan
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							PU51-COMP-MULTI CIRCUIT BOARD
PU51	1	1	1	1	1	YK263H2430	P.W. Board, Comp-Multi
	1	1	1	1		ZZ263H2430	P.W. Board Assembly
							PU51-CAPACITORS
CU51	1	1	1	1	1	EA10601630	Elect 10μF 16V
CU52	1	1	1	1	1	DD15220370	Ceramic 22pF ±5%
CU53	1	1	1	1	1	DF15103310	Film 0.01μF ±5%
CU54	1	1	1	1	1	EA10602530	Elect 10μF 25V
							PU51-RESISTORS (All Resistor are ±5% & 1/4W)
RU51	1	1	1	1	1	GG05101140	100Ω
RU52	1	1	1	1	1	GG05101140	100Ω
RU53	1	1	1	1	1	GD05104140	100kΩ
RU54	1	1	1	1	1	GD05104140	100kΩ
RU55	1	1	1	1	1	GD05473140	47kΩ
RU56	1	1	1	1	1	GD05152140	1.5kΩ
RU57	1	1	1	1	1	GD05222140	2.2kΩ
RU58	1	1	1	1	1	GG05152140	1.5kΩ
RU59	1	1	1	1	1	GG05102140	1kΩ
RU60	1	1	1	1	1	GG05152140	1.5kΩ
RU61	1	1	1	1	1	GD05392140	3.9kΩ
RU62	1	1	1	1	1	GD05392140	3.9kΩ
RU63	1	1	1	1	1	GD05122140	1.2kΩ
RU64	1	1	1	1	1	GD05122140	1.2kΩ
RU65	1	1	1	1	1	GD05104140	100kΩ
RU66	1	1	1	1	1	GD05104140	100kΩ
RU67	1	1	1	1	1	GG05152120	1.5kΩ 1/2W
							PU51-SEMICONDUCTORS
DU51	1	1	1	1	1	HD20002210	Diode 1S2472
QU51	1	1	1	1	1	HC10022090	IC NJM2903D
QU52	1	1	1	1	1	HC712200A0	IC HD74LS122P
QU53	1	1	1	1	1	HT318452B0	Transistor 2SC1845 (F, E)
QU54	1	1	1	1	1	HT109922B0	Transistor 2SA992 (F, E)
							PU51-MISCELLANEOUS
JP51	1	1	1	1	1	YP06003240	Plug (12P)
							PV01-TAPE 2 IN/OUT JACK CIRCUIT BOARD
PV01	1	1	1	1	1	YK263H1540	P.W. Board, Tape 2 In/Out Jack
	1	1	1	1		ZZ263H1540	P.W. Board Assembly
							PV01-MISCELLANEOUS
JV01	1	1	1	1	1	YT02040490	Terminal Tape 2 In/Out

REF. DESIG.	Q'TY U	N	A	P	F	PART NO.	DESCRIPTION
							PW51-PHONES CIRCUIT BOARD
PW51	1	1	1	1	1	YK263H2440	P.W. Board, Phones
	1	1	1	1		ZZ263H2440	P.W. Board Assembly
							PW51-MISCELLANEOUS
JW51	1	1	1	1		YJ01001790	Jack, Phones
JW51					1	YJ01002080	Jack, Phones
WW51	1	1	1	1	1	YU03260260	Jumper Lead
							PY01-INDICATOR CIRCUIT BOARD
PY01	1	1	1	1	1	YK263H1550	P.W. Board, Indicator
	1	1	1	1		ZZ263H1550	P.W. Board Assembly
							PY01-RESISTORS (All Resistor are ±5%)
RY01	1	1	1	1	1	GG05272120	2.7kΩ 1/2W
RY02	1	1	1	1	1	GG05272120	2.7kΩ 1/2W
							PY01-SEMICONDUCTORS
DY01 ~ DY06	6	6	6	6	6	HI10028320	L.E.D. GL-9HD4
							PY01-MISCELLANEOUS
VY01	1	1	1	1	1	IN10080610	Lamp
WY01	1	1	1	1	1	YU04220260	Jumper Lead
WY02	1	1	1	1	1	YU03140260	Jumper Lead
WY03	1	1	1	1	1	YU05180260	Jumper Lead

(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.

Ma651

11. TECHNICAL SPECIFICATIONS

PM-64

AUDIO SECTION

POWER OUTPUT PER CHANNEL

DIN 4 OHMS	110 W
RMS 4 OHMS (20 ~ 20 kHz, 0.06%)	100 W
DIN 8 OHMS (1 kHz, 1%)	110 W
RMS 8 OHMS (20 ~ 20 kHz, 0.03%)	100 W
TOTAL HARMONIC DISTORTION AT RMS 8 OHMS (20 ~ 20 kHz)	0.03%
I.M. DISTORTION	0.03%
DAMPING FACTOR 8 OHMS (1 kHz)	100

MM CARTRIDGE INPUT

Frequency Response (RIAA)(20 ~ 20 kHz)	±0.5 dB
Signal-to-Noise Ratio "IHF A"	80 dB
Input Impedance	47k ohms
Input Capacitance	120 pF
Input Sensitivity	2.5 mV
Equivalent Input Noise	1.0 μV
Dynamic Range	35.5 dB

MC CARTRIDGE INPUT

Input Sensitivity	250 μV
Input Impedance	100 ohms

AUX. INPUT

Input Impedance	27 k ohms
Input Sensitivity	150 mV
Frequency Response	10 Hz ~ 30 kHz
Signal-to-Noise Ratio (IHF A)	90 dB

OUTPUT VOLTAGE

Tape Out [PHONO 1 kHz 7.75 mV Input]	435 mV

OUTPUT IMPEDANCE

Tape Out	(Other) 560/800 ohms (PHONO)

GENERAL

Power Requirements	110/120/220/240 V AC, 50/60 Hz
Power Consumption at Rated Output, both Channels Operating	460 W
Dimensions (W × H × D)	416 × 117 × 334 mm
Weight	10 kg

Specifications and appearance are subject to change for modification without notice.

Mq652

PM-54

AUDIO SECTION

POWER OUTPUT PER CHANNEL

DIN 4 OHMS	70 W
RMS 4 OHMS (20 ~ 20 kHz, 0.06%)	60 W
DIN 8 OHMS (1 kHz, 1%)	70 W
RMS 8 OHMS (20 ~ 20 kHz, 0.03%)	60 W
TOTAL HARMONIC DISTORTION AT RMS 8 OHMS (20 ~ 20 kHz)	0.03%
I.M. DISTORTION	0.03%
DAMPING FACTOR 8 OHMS (1 kHz)	100

MM CARTRIDGE INPUT

Frequency Response (RIAA)(20 ~ 20 kHz)	±0.5 dB
Signal-to-Noise Ratio "IHF A"	80 dB
Input Impedance	47k ohms
Input Capacitance	120 pF
Input Sensitivity	2.5 mV
Equivalent Input Noise	1.0 μV
Dynamic Range	35.5 dB

MC CARTRIDGE INPUT

Input Sensitivity	250 μV
Input Impedance	100 ohms

AUX. INPUT

Input Impedance	27 k ohms
Input Sensitivity	150 mV
Frequency Response	10 Hz ~ 30 kHz
Signal-to-Noise Ratio (IHF A)	90 dB

OUTPUT VOLTAGE

Tape Out [PHONO 1 kHz 7.75 mV Input]	435 mV

OUTPUT IMPEDANCE

Tape Out	(Other) 560/800 ohms (PHONO)

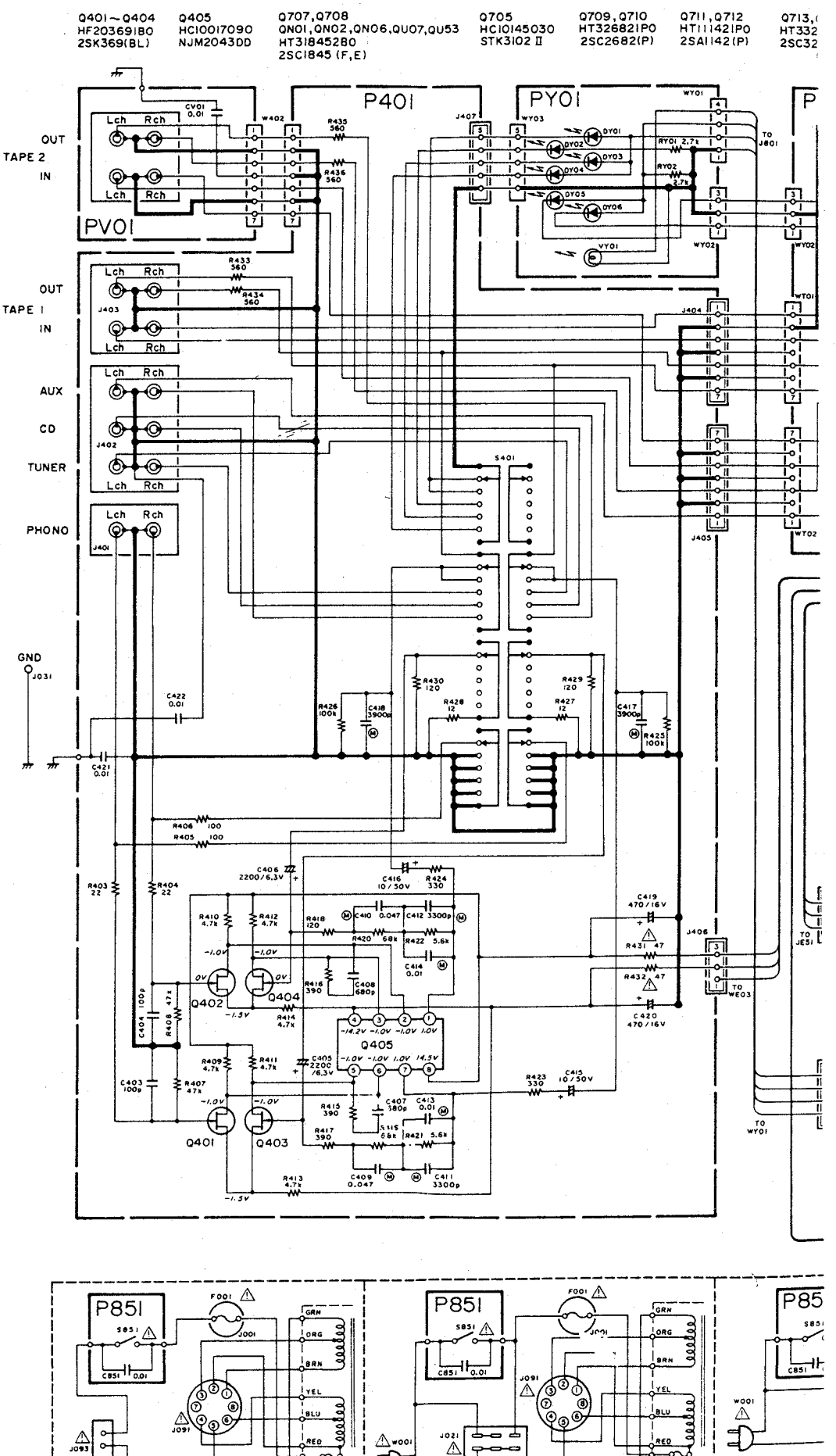
GENERAL

Power Requirements	110/120/220/240 V AC, 50/60 Hz
Power Consumption at Rated Output, both Channels Operating	280 W
Dimensions (W × H × D)	416 × 117 × 334 mm
Weight	8.8 kg

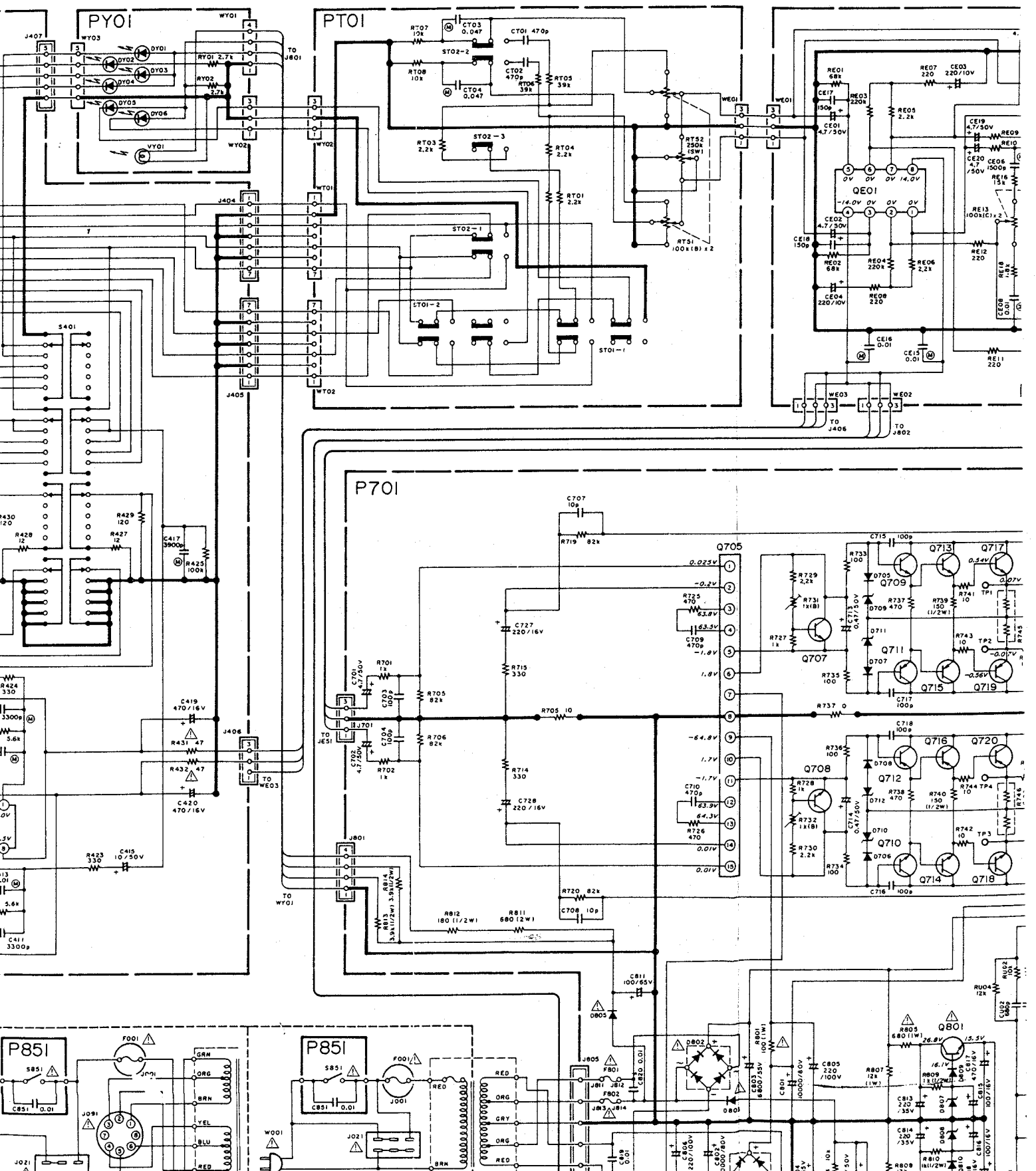
Specifications and appearance are subject to change for modification without notice.

Ma653

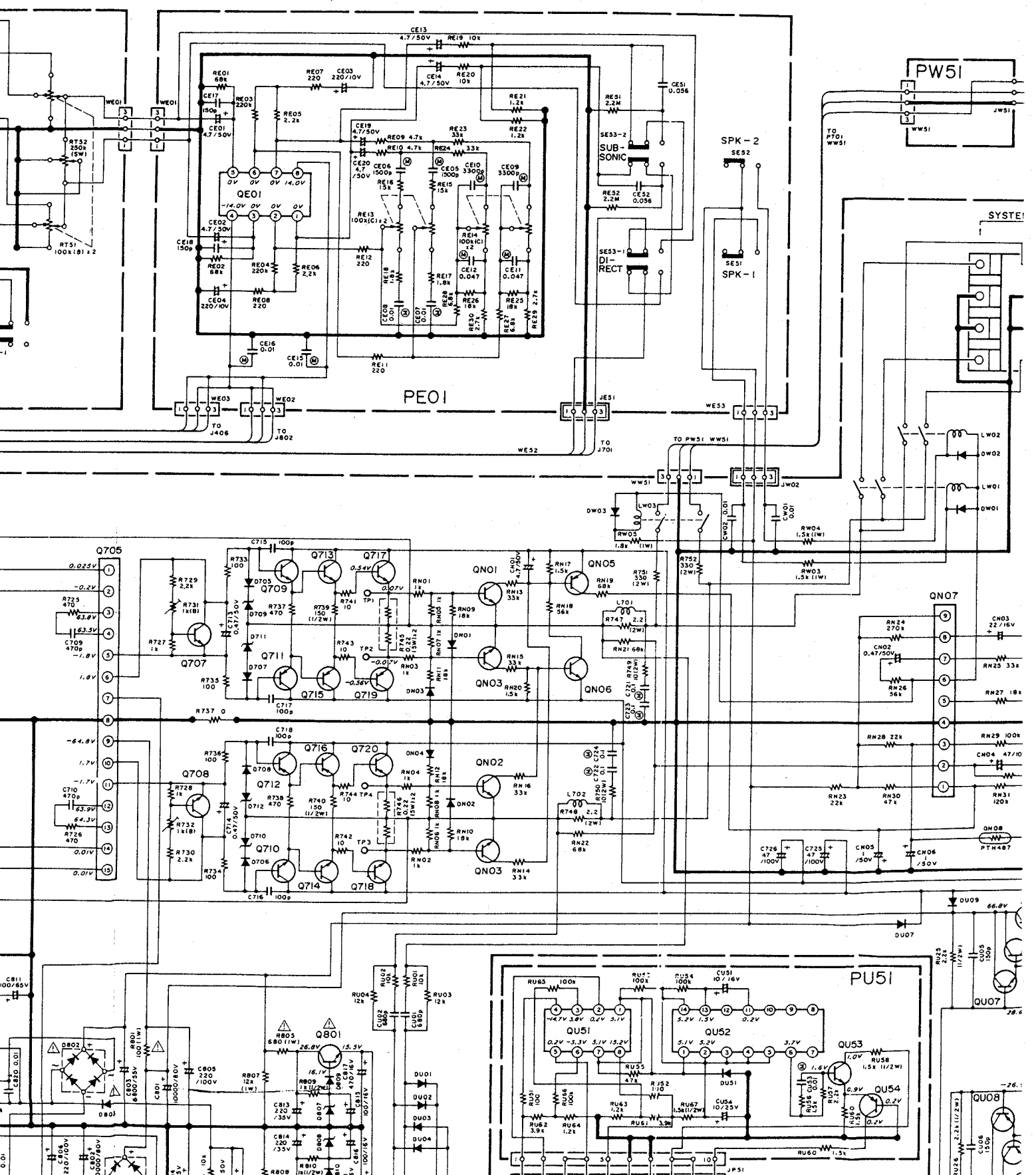
12.SCHEMATIC DIAGRAM



QU53	Q705	Q709,Q710	Q711,Q712	Q713,Q714	Q715,Q716	Q717,Q718	Q719,Q720	Q801	Q802	QE01	QN03~QN05	QN07
	HC10145030	HT326821P0	HT111421P0	HT332982D0	HT113062D0	HT32774280	HT111702B0	HT412662B0	HT209412B0	HC10026090	QU08,QU54	HC100
	STK3102 II	2SC2682(P)	2SA1142(P)	2SC3298 (O,Y)	2SA1306 (O,Y)	2SC2774 (O,Y)	2SA1170 (O,Y)	2SD1266 (Q,P)	2SB941 (Q,P)	NJM2041D	HT109922B0 2SA992 (F,E)	TA731



Q801	Q802	QE01	QN03~QN05	QN07	QU03	QU04	QU05	QU06	QU51	QU52	DU51
HT412662B0	HT209412B0	HC10026090	QU08,QU54	HC10042050	HT412382B0	HT209222B0	HT323441D0	HT1101111D0	HC10022090	HC712200A0	HD200002
2SD1266 (Q,P)	2SB941 (Q,P)	NJM2041D	HT109922B0 2SA992 (F,E)	TA7317P	2SD1238 (R,S)	2SB922 (R,S)	2SC2344(D)	2SA1011(D)	NJM2903D	HA74LS122P	IS2472



04 7209222B0 B922 (R,S)	QU05 HT32344(D0 2SC2344(D)	QU06 HTI101II(D0 2SAI011(D)	QU51 HC10022090 NJM2903D	QU52 HC7I2200A0 HA74LS122P	DU51 HD20002210 IS2472	D705~D708 D803,DN01~ DN04 DU01~DU04,DU11 DU12,DW01~DW03 HD20003210 IS2471	D709~D712 HD30064060 RD6.2E

D805
DU09,DU10
HD20022030
DSF10C

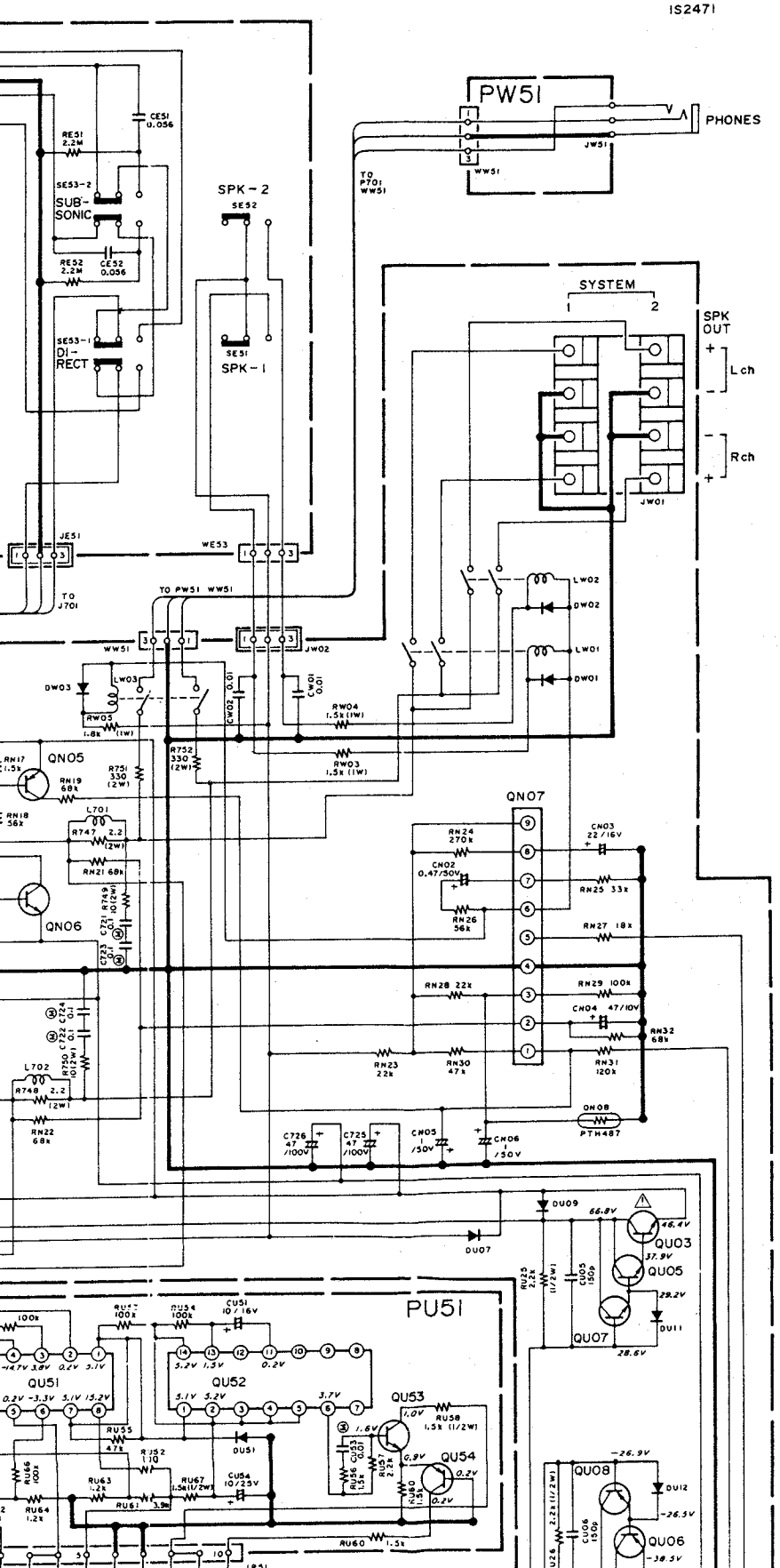
D801
HE20013290
D5FB20

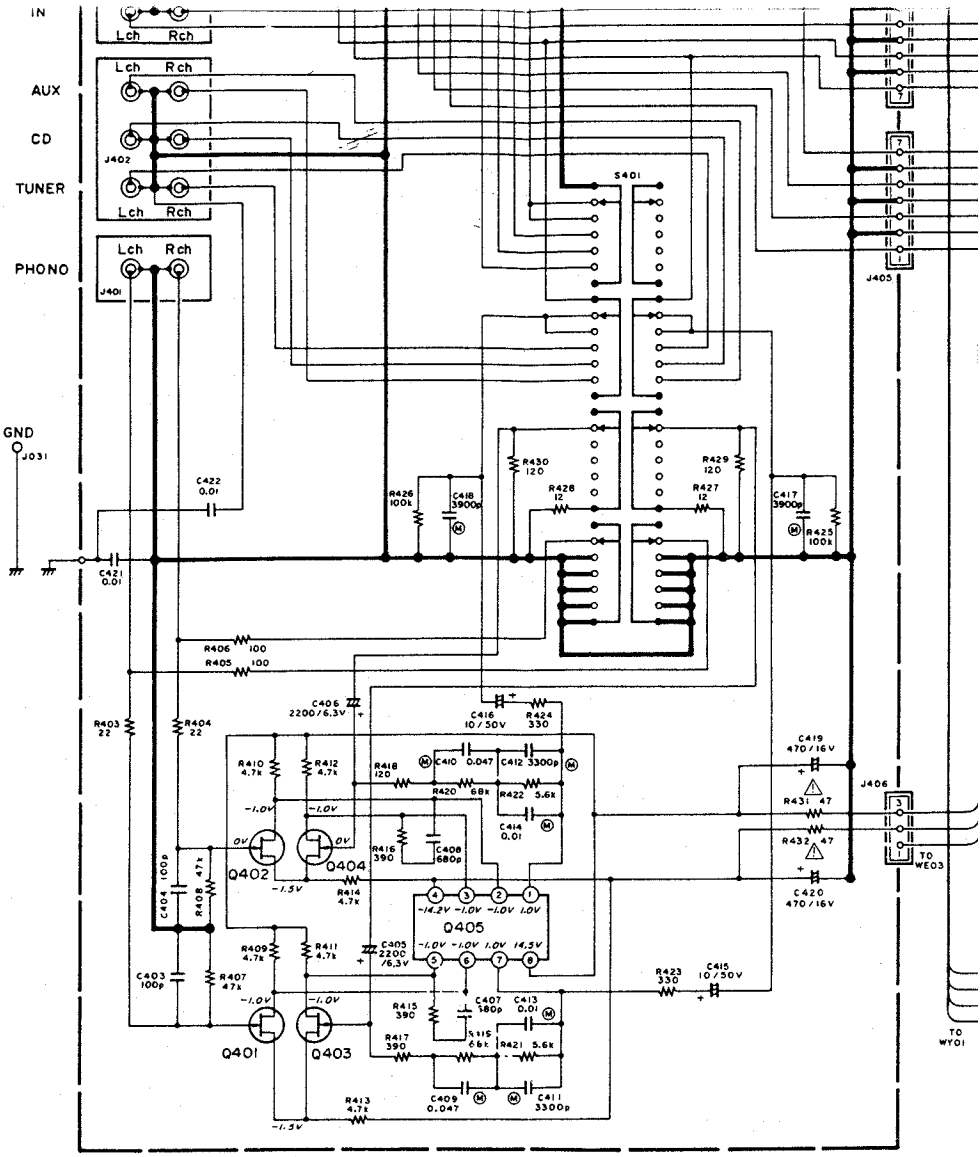
D802
HD20008290
S4VB20

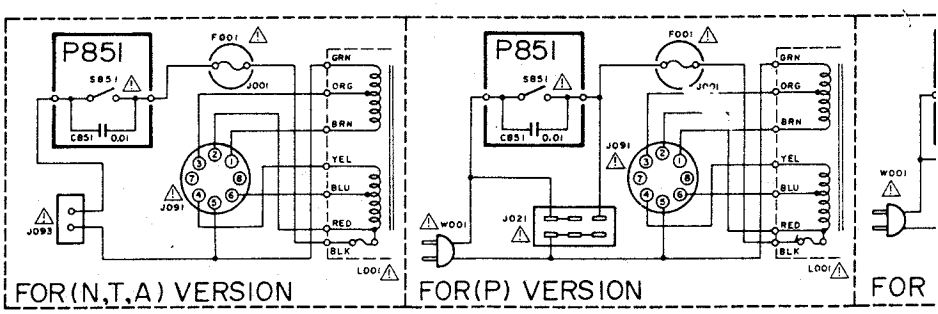
D807,D808
HD30051060
RD16E

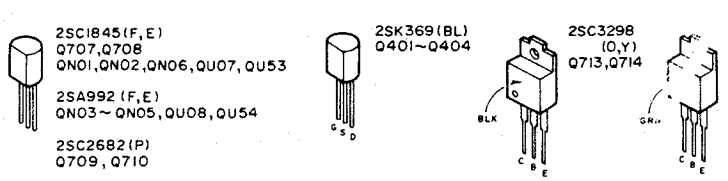
DU07,DU08
HD20011290
S3VB20

DY01~DY06
HI10028320
GL-9HD4



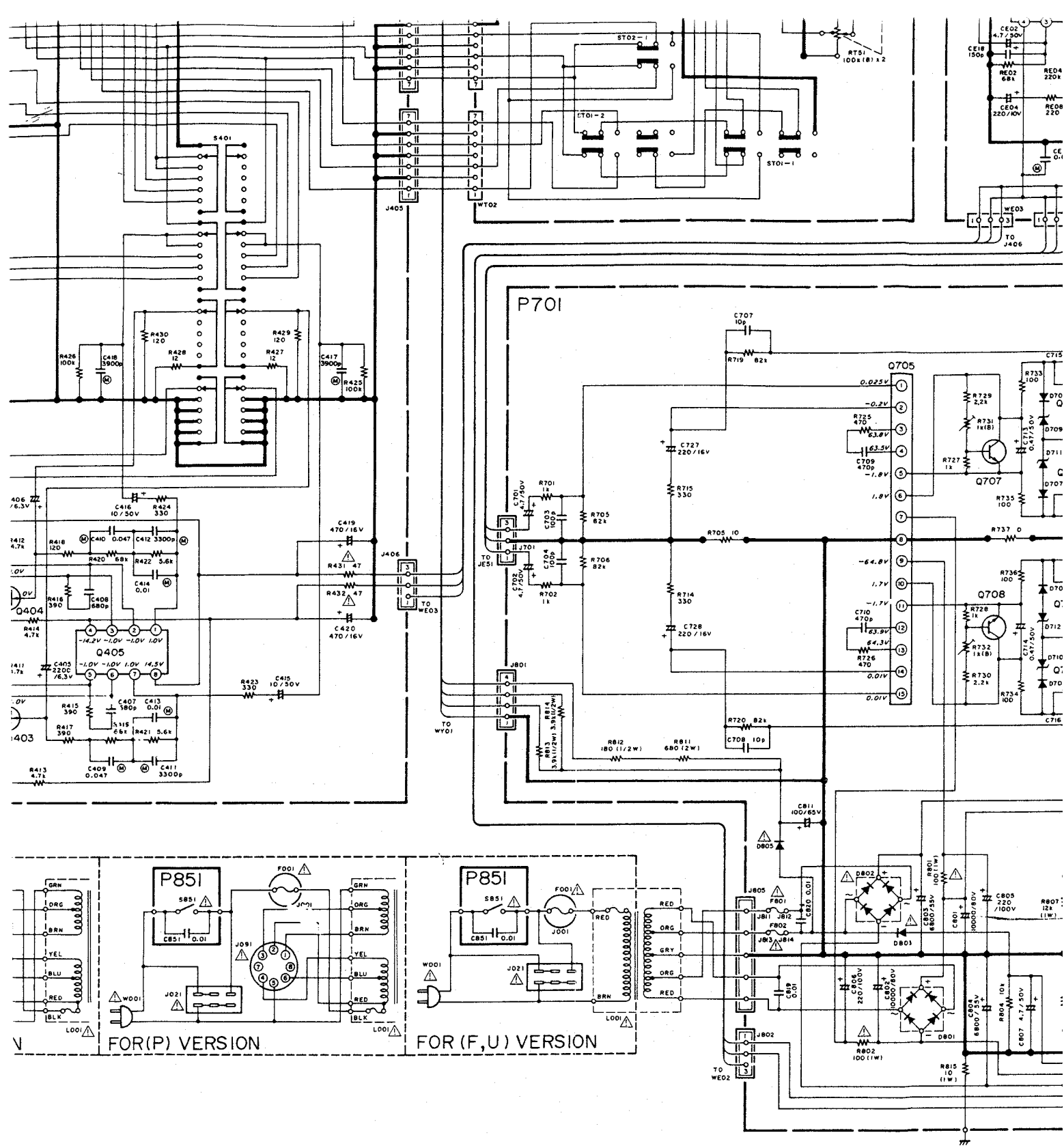






NOTE ON SAFETY:

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.



2SK369(BL) Q401~Q404

2SC3298 (O,Y) Q713,Q714

2SA1306 (O,Y) Q715,Q716

2SD1238 (R,S) QU03

2SB922 (R,S) QU04

2SC2344 (D) QU05

2SA1011 (D) QU06

15(F,E)
)708
)NO2,QN06,QU07,QU53

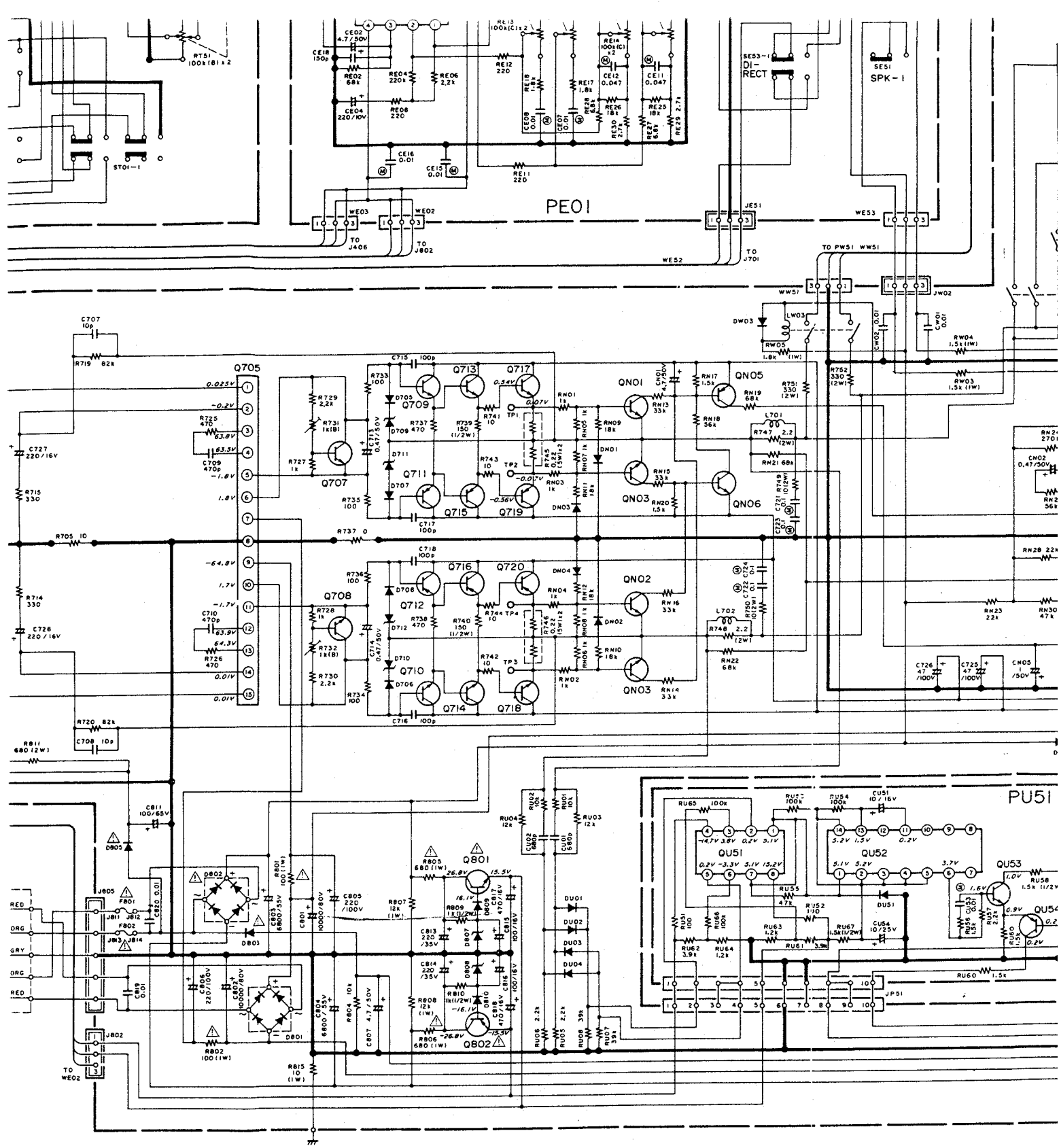
2 (F,E)
- QN05,QU08,QU54

82(P)
Q710

:2(P)
)712

: ON SAFETY:

ol ⚠ Fire or electrical shock hazard. Only original parts
l be used to replace any part marked with symbol ⚠ .
other component substitution (other than original
may increase risk of fire or electrical shock hazard.



2SB922 (R,S) QU04

2SC2344 (D) QU05

2SA1011 (D) QU06

2SD1266 (Q,P) Q801

2SB941 (Q,P) Q802

TOP VIEW
NJM2043DD Q405

NJM2041D QE01

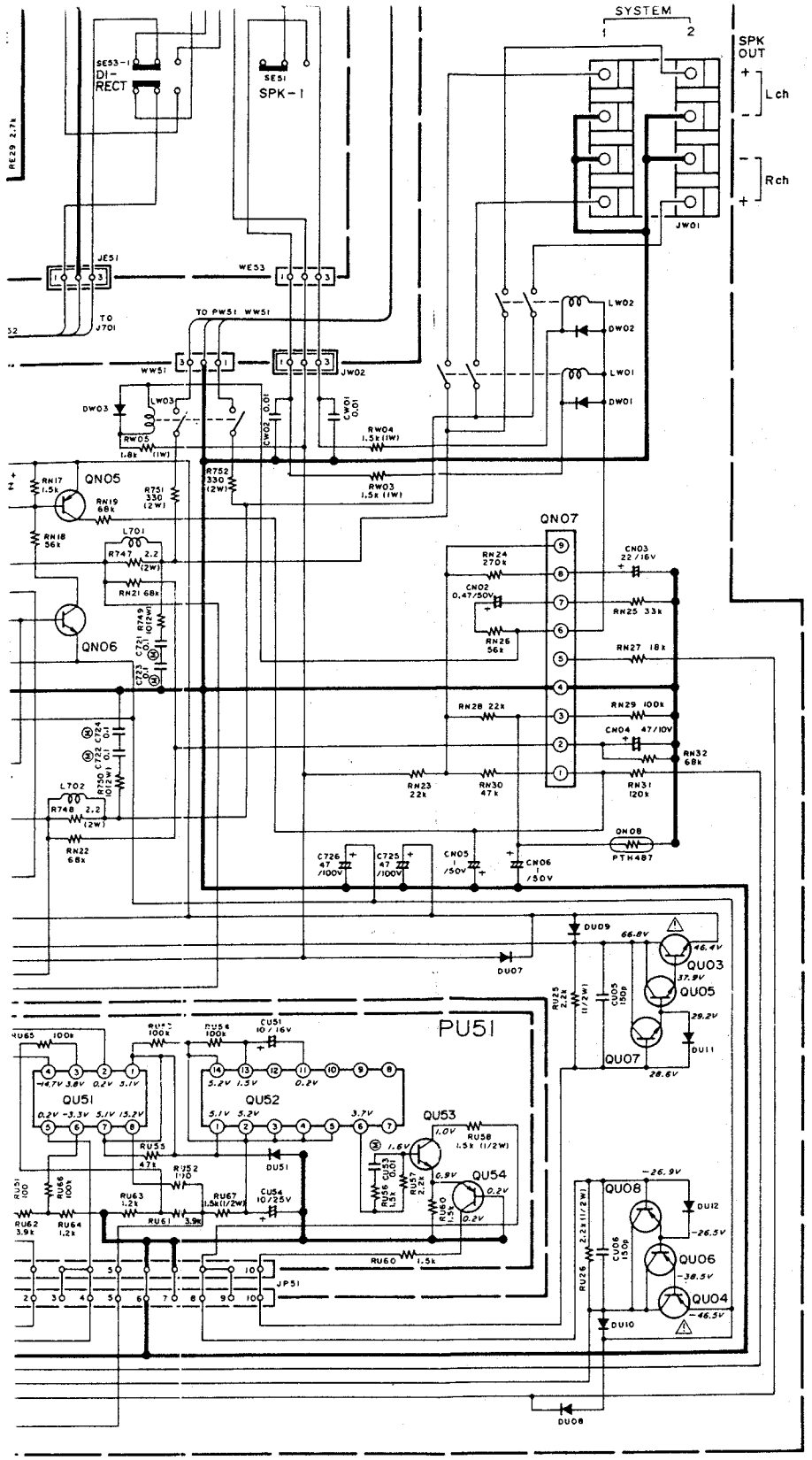
NJM2903D QU51

FRONT VIEW
TA7317P QN07

TOP VIEW
HA74LS122P QU32

FRONT VIEW
STK3102 Q705

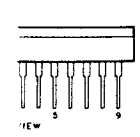
Components and wiring are subject to change for

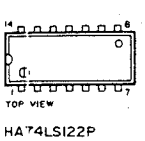


D807, D808
HD30051060
RD16E

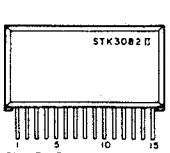
DU01, DU08
HD20011290
S3VB20

DY01~DY06
HI10028320
GL-9HD4

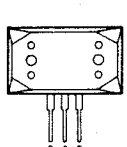




HA74LS122P
QU32



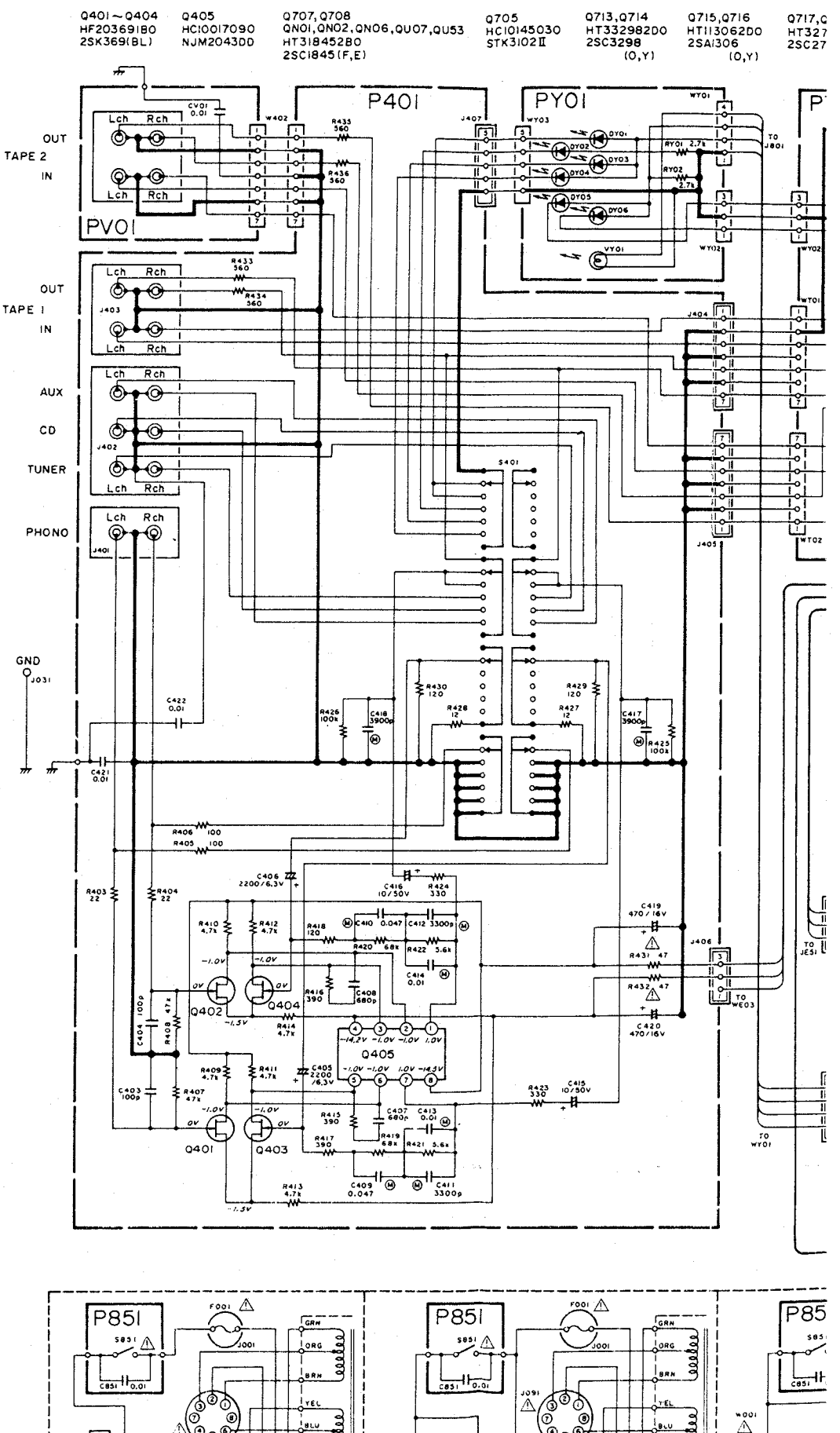
STK3102
Q705



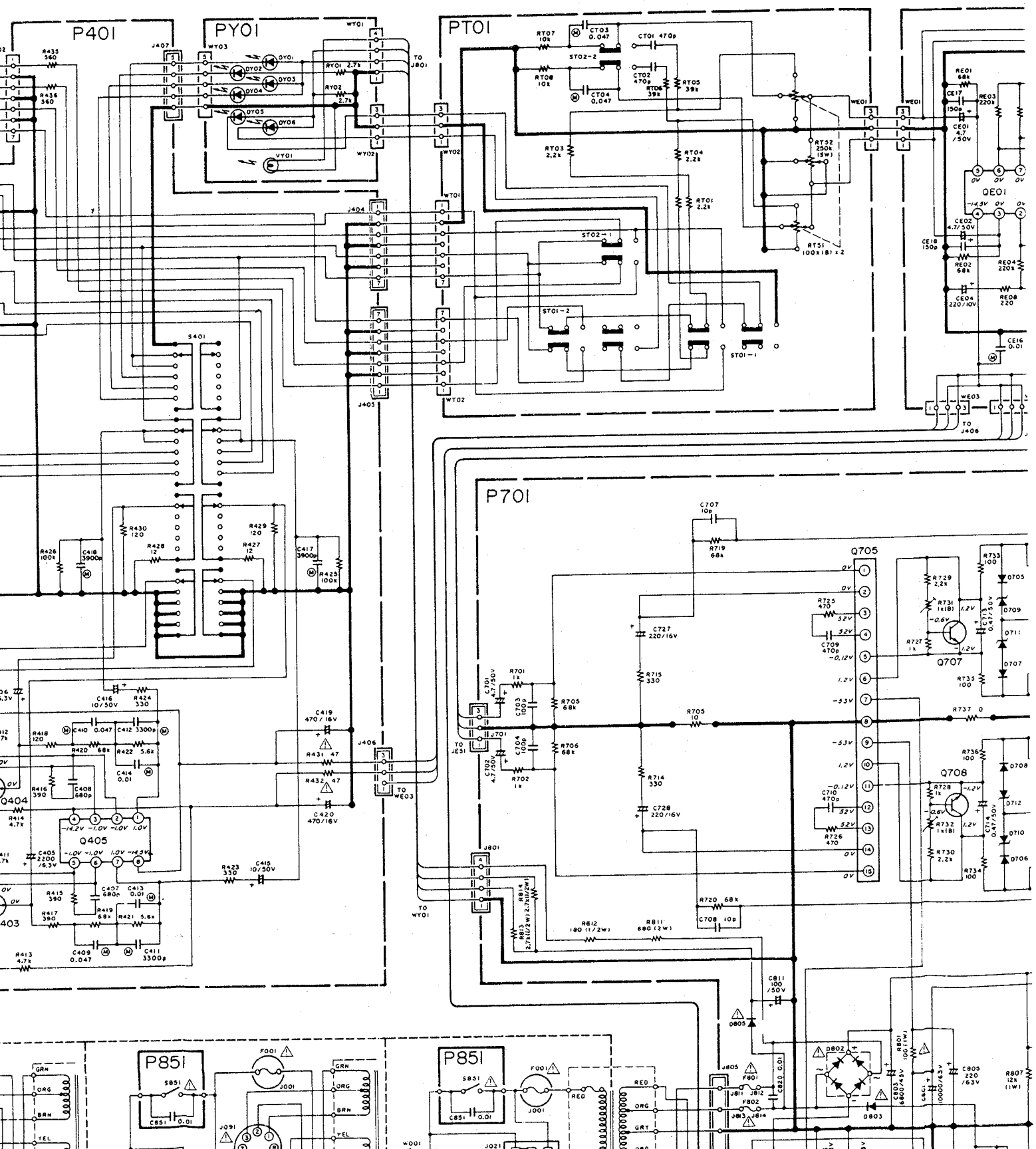
2SC2774 (O,Y)
Q717, Q718

2SA1170 (O,Y)
Q719, Q720

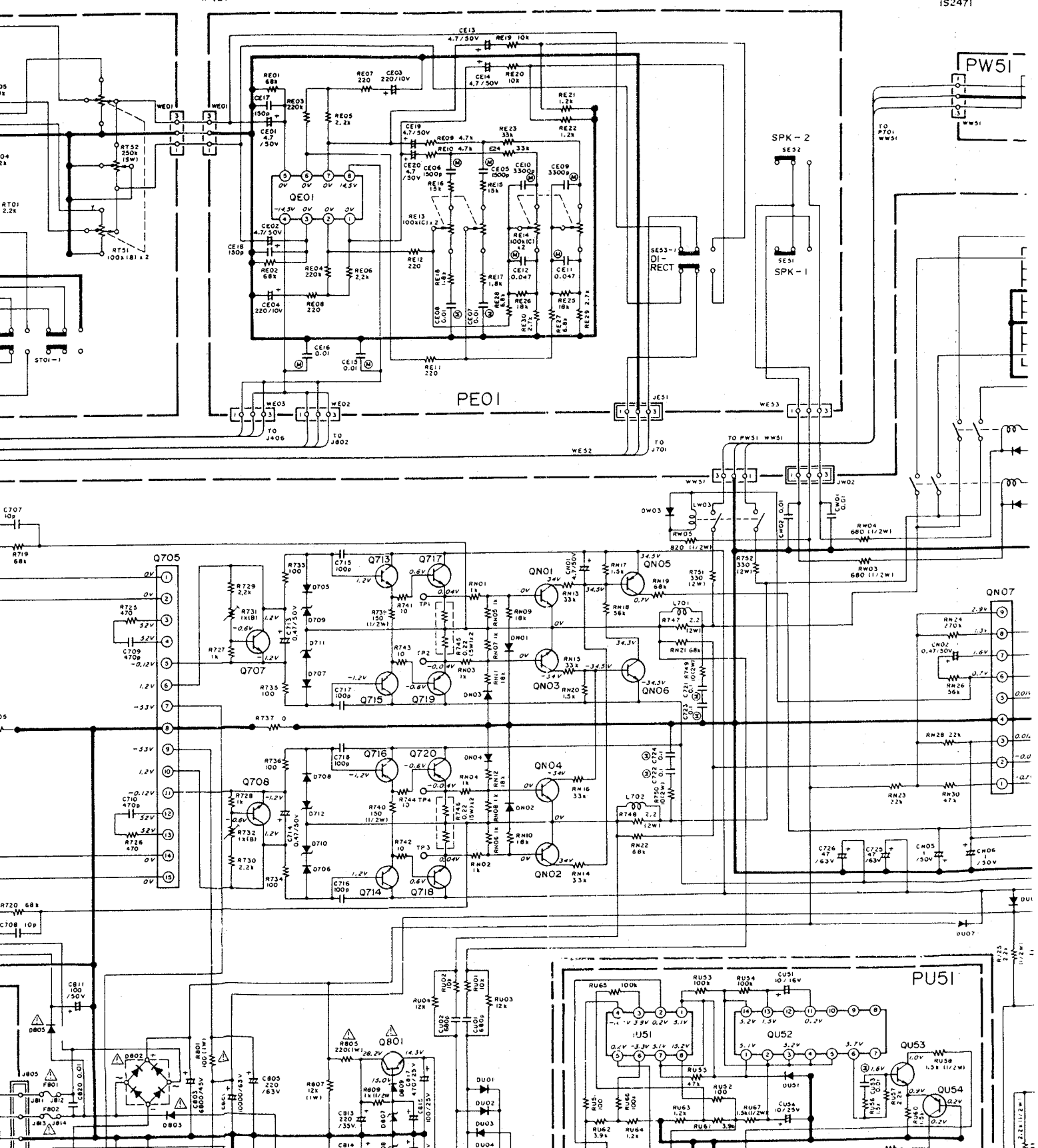
Components and wiring are subject to change for modification without notice.


Q401~Q404
HF203691B0
2SK369(BL)
Q405
HC10017090
NJM2043DD
Q707,Q708
QN01,QN02,QN06,QU07,QU53
HT31845280
2SC1845(F,E)
Q705
HC10145030
STK3102II
Q713,Q714
HT33298200
2SC3298
(O,Y)
Q715,Q716
HT11306200
2SA1306
(O,Y)
P401
PY01
PV01
OUT
TAPE 2
IN
OUT
TAPE 1
IN
AUX
CD
TUNER
PHONO
GND
Lch Rch
J401
J402
J403
J404
J405
J406
J031
S401
Q401
Q402
Q403
Q404
Q405
P851
S851
F001
J001
GRN
ORG
BRN
YEL
BLU

Q707,Q708 QN01,QN02,QN06,QU07,QU53 HT318452B0 2SC1845(F,E)	Q705 HC10145030 STK3102Ⅱ	Q713,Q714 HT33298200 2SC3298 (O,Y)	Q715,Q716 HT113062D0 2SA1306 (O,Y)	Q717,Q718 HT32773280 2SC2773 (O,Y)	Q719,Q720 HT111692B0 2SA1169 (O,Y)	Q801 HT412662B0 2SD1266 (Q,P)	Q802 HT20941280 2SB941 (Q,P)	QE01 HC10026090 NJM2041D	QN03～QN05 QU08,QU54 HT10992280 2SA992 (F,E)	QN07 HC10042050 TA7317P



0802 HT20941280 SB941 (Q,P)	QE01 HC10026090 NJM2041D	QN03 ~ QN05 QU08,QU54 HTI09922B0 2SA992 (F,E)	QN07 HC10042050 TA7317P	QU03 HT41238280 2SDI238 (R,S)	QU04 HT20992280 2SB992 (R,S)	QU05 HT32344100 2SC2344(D)	QU06 HT11011100 2SAI011(D)	QU51 HC10022090 NJM2903D	QU52 HC712200A0 HA74LSI22P	DU51 HD20002210 IS2472	D705 ~ D708 D803,DN01~ DN0 DU01~DU04,DU11 DU12,DW01~ DW0 HD20003210 IS2471



MODEL PM-54

QU51
HC10022090
NJM2903D

QU52
HC712200A0
HA74LSI22P

DU51
HD20002210
IS2472

D705 ~ D708
D803,DN01 ~ DN04
DU01 ~ DU04,DU11
DU12,DW01 ~ DW03
HD20003210
IS2471

D709 ~ D712
HD30064060
RD6.2E

D805
DU09,DU10
HD20022030
DSF10C

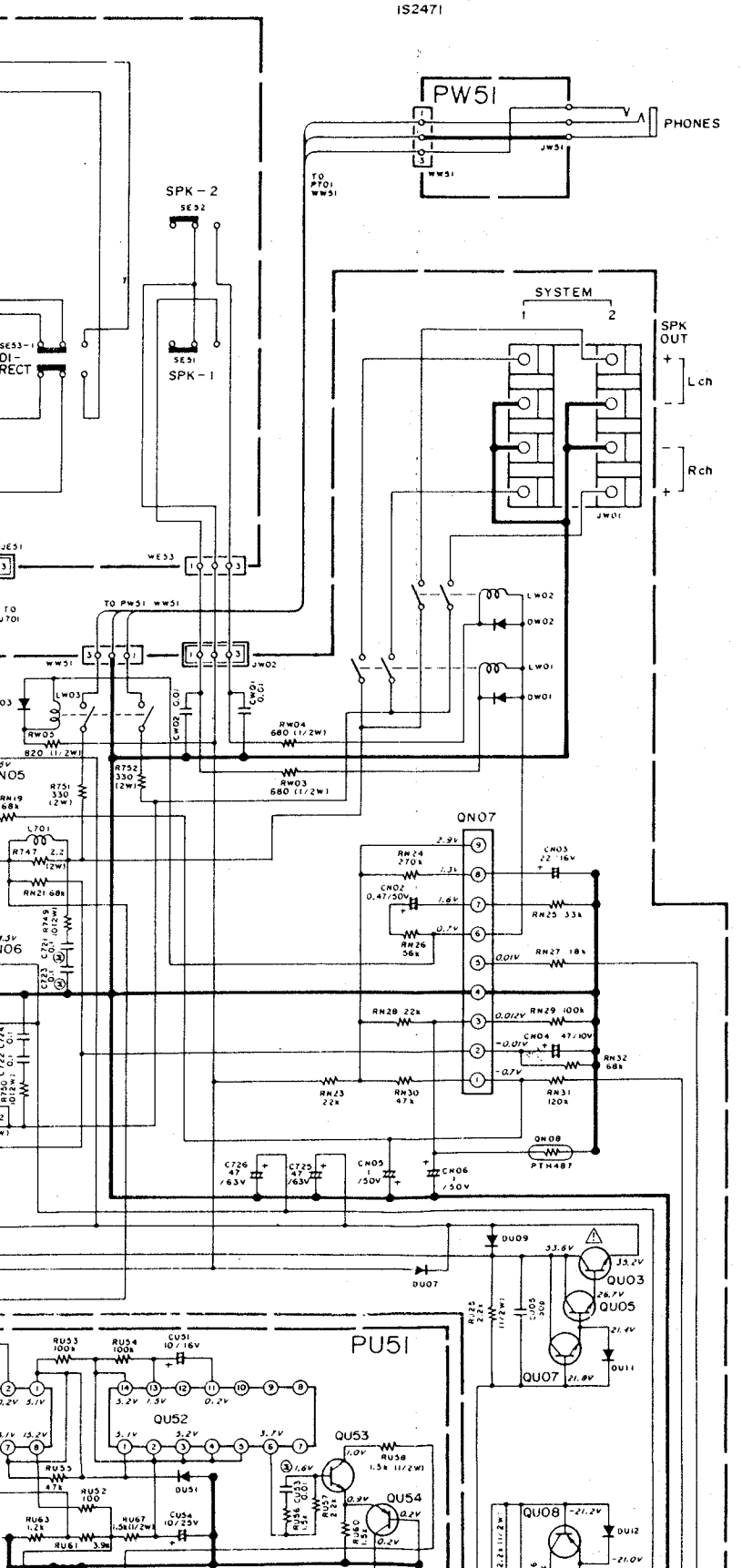
D801
HE2009290
S5VB20

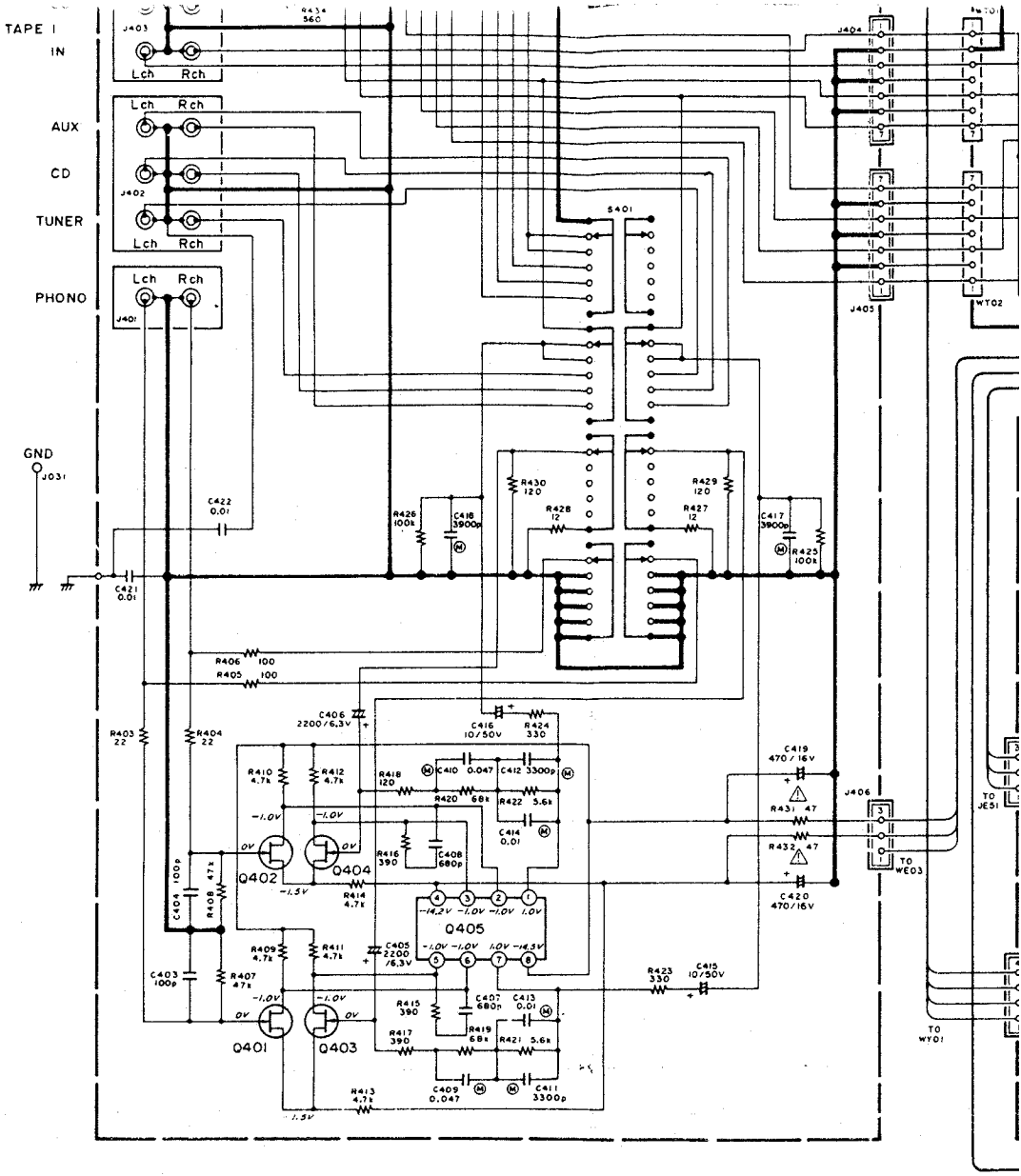
D802
HD20008290
S4VB20

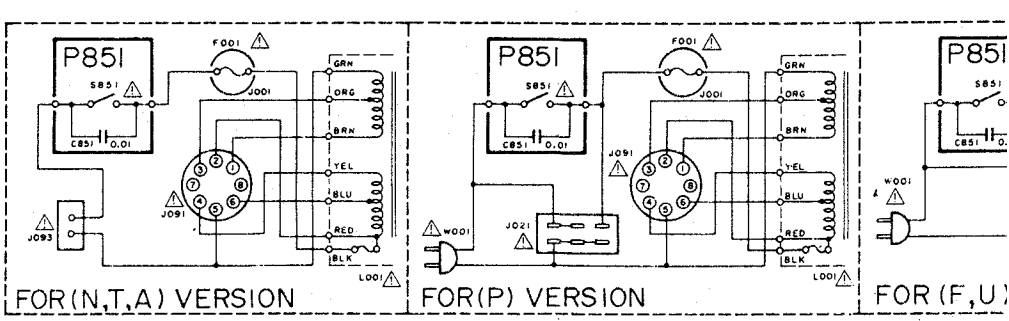
D807,D808
HD30051060
RD16E

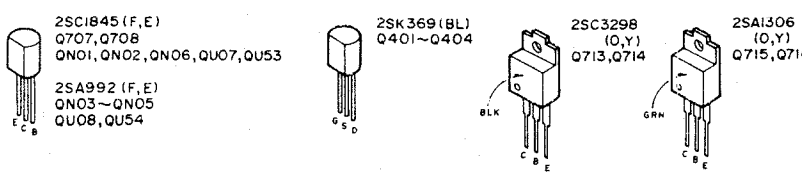
DU07,DU08
HD20011290
S3VB20

DY01 ~ DY06
H110028320
GL-9H04



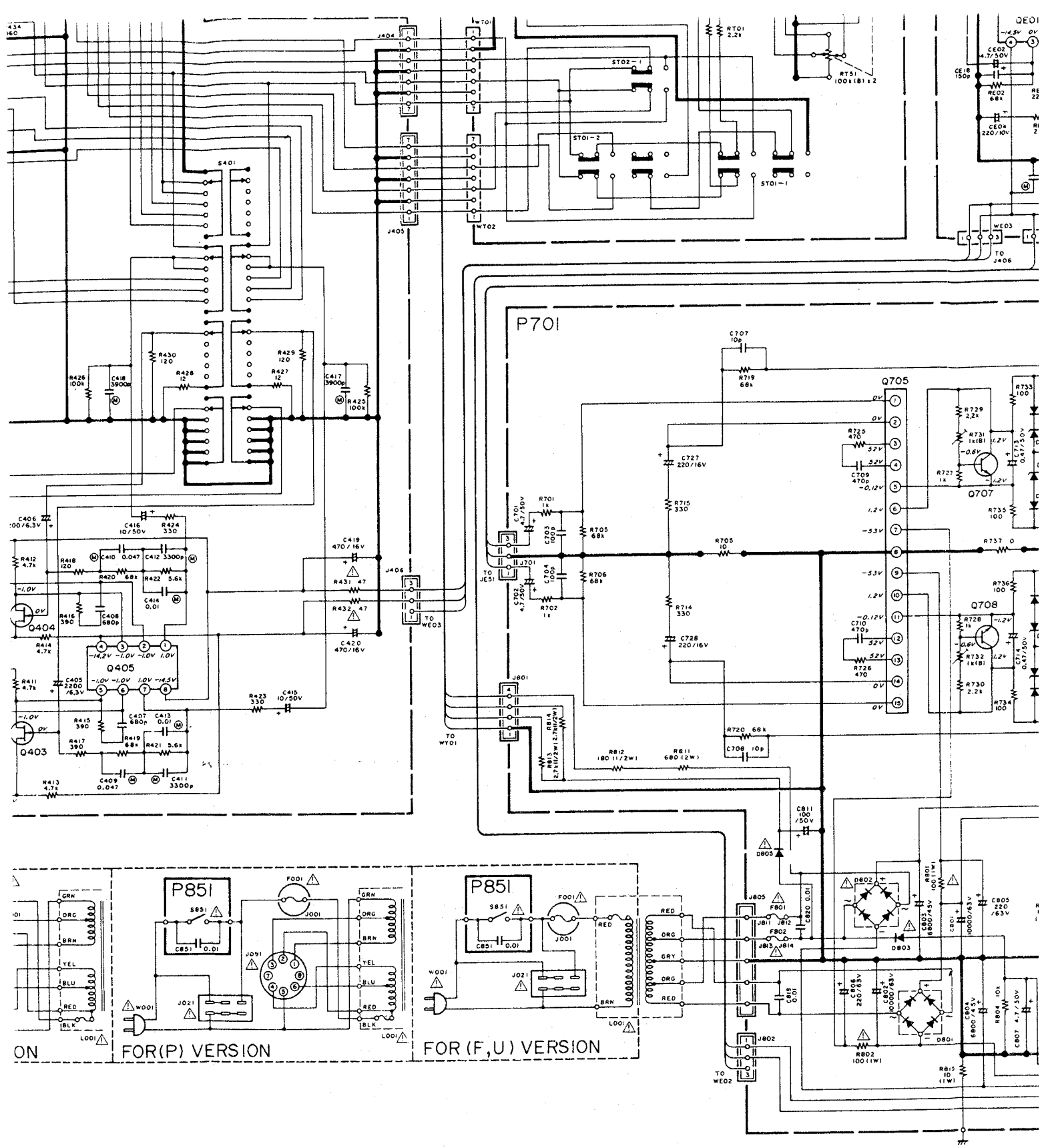






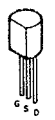
NOTE ON SAFETY:

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.

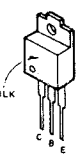


1845(F,E)
7,Q708
11,QN02,QN06,QU07,QU53

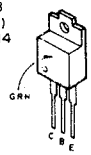
992(F,E)
03~QN05
08,QU54



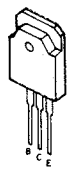
2SK369(BL)
Q401~Q404



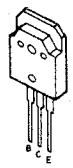
2SC3298
(O,Y)
Q713,Q714



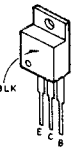
2SAI306
(O,Y)
Q715,Q716



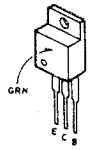
2SD1238
(R,S)
QU03



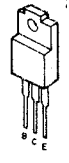
2SB922
(R,S)
QU04



2SC2344
(D)
QU05

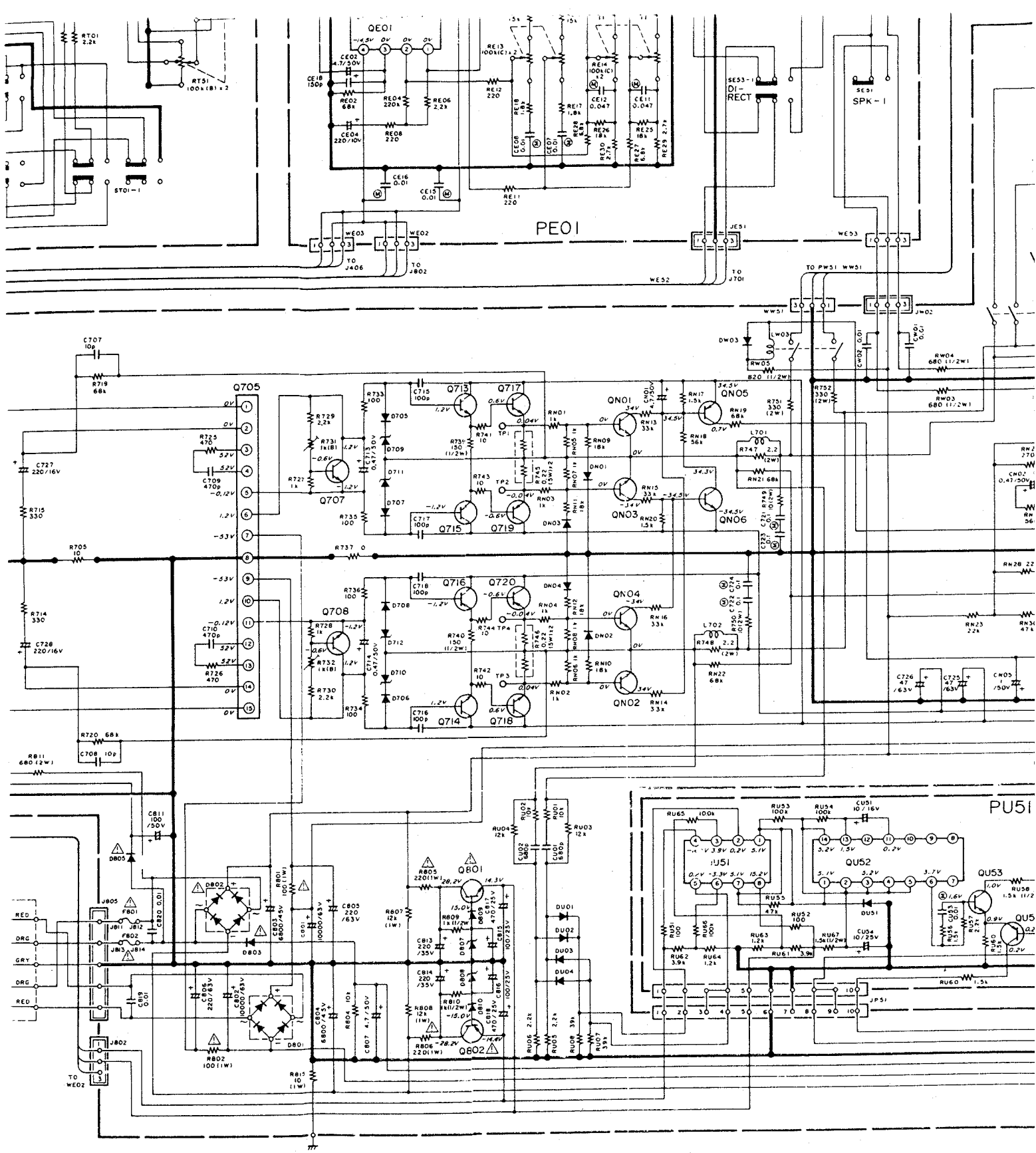


2SAI011
(D)
QU06



ON SAFETY:

1 ⚠ Fire or electrical shock hazard. Only original parts be used to replace any part marked with symbol ⚠ . ther component substitution (other than original may increase risk of fire or electrical shock hazard.



2SB922 (R,S) QU04

2SC2344 (D) QU05

2SA1011 (D) QU06

2SD1266 (Q,P) Q801

2SB941 (Q,P) Q802

TOP VIEW
NJM2043DD Q405

NJM2041D QE01

NJM2903D QU51

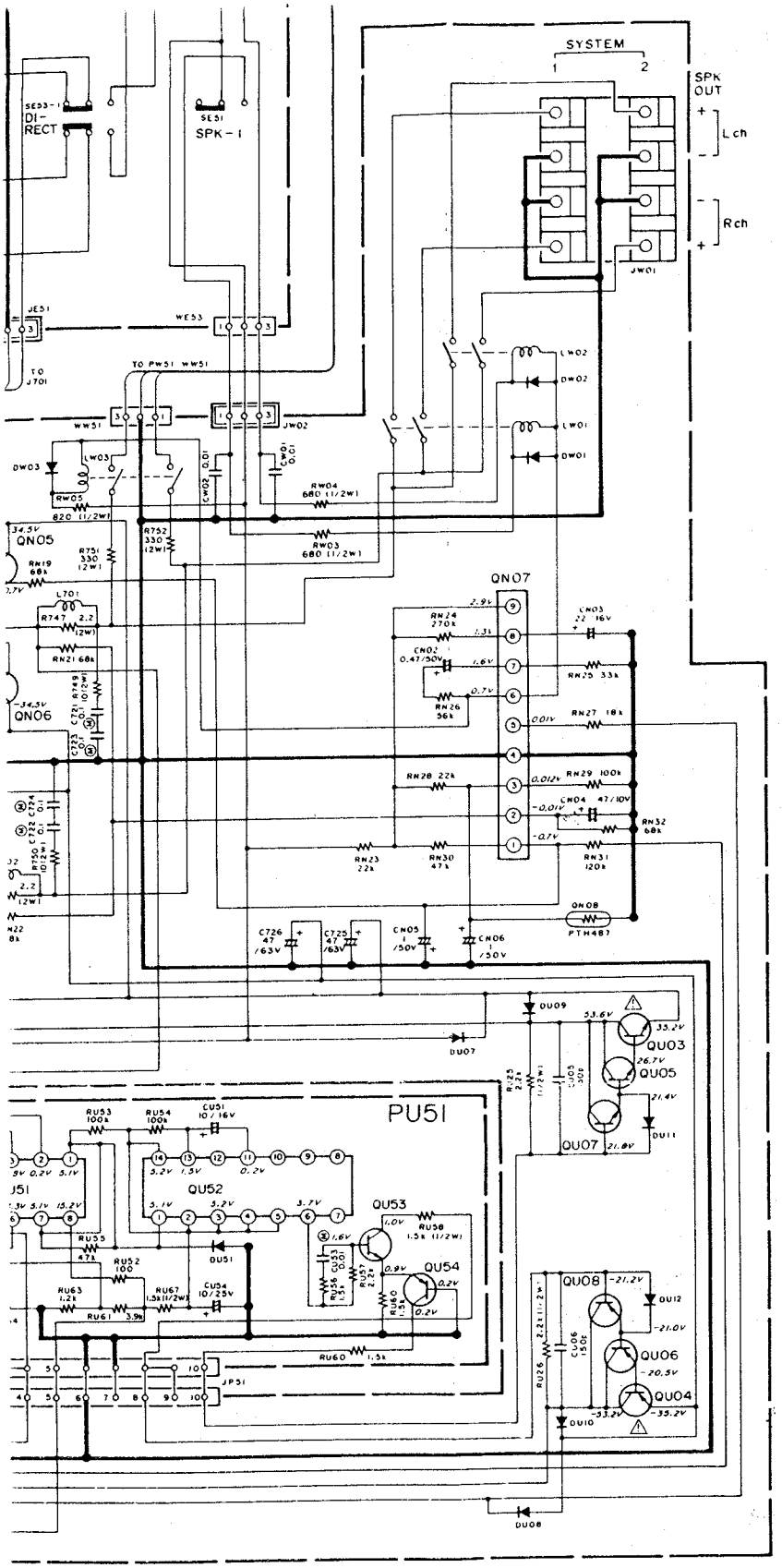
FRONT VIEW
TA7317P QN07

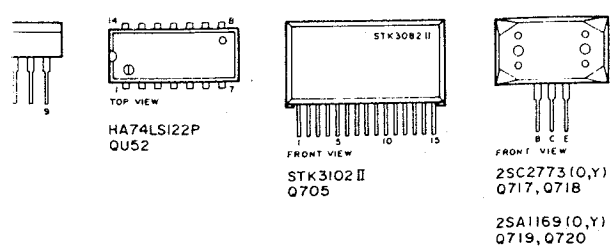
TOP VIEW
HA74LS122P QU52

FRONT VIEW
STK3102 II Q705

Components and wiring are subject to change for mod

DY01 ~ DY06
H110028320
GL-9HD4





HA74LSI22P
QU52

STK3102 II
Q705

2SC2773 (O,Y)
Q717, Q718

2SA1169 (O,Y)
Q719, Q720

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