

TA-F800ES

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Item	Condition	Data
Continuous RMS power output (both channels driven simultaneously)	4 ohms 20 Hz - 20 kHz THD 0.008%	180 W + 180 W (DIN: 200 W + 200 W)
	6 ohms 20 Hz - 20 kHz THD 0.006%	150 W + 150 W (DIN: 170 W + 170 W)
	8 ohms 20 Hz - 20 kHz THD 0.004%	120 W + 120 W (DIN: 145 W + 145 W)
Power band - width (IHF)	4 ohms, THD 0.04%	10 Hz - 100 kHz at 90 W
	8 ohms, THD 0.04%	10 Hz - 100 kHz at 60 W
Dynamic headroom ('78 IHF)	4 ohms	2 dB
	8 ohms	1.2 dB
Total harmonic distortion	4 ohms, at 10 watt output	0.006%
	6 ohms, at 10 watt output	0.004%
	8 ohms, at 10 watt output	0.002%
Intermodulation (IM) distortion 60 Hz: 7 kHz = 4: 1	4 ohm, at rated output	0.008%
	6 ohms at rated output	0.006%
	8 ohms at rated output	0.004%

Damping factor	8 Ohms, 1 kHz			100
Slew rate	—			125 V/μsec 250 V/μsec (inside)
Residual noise	network A			less than 115 μV
Frequency response	PHONO MM			RIAA equalization curve ± 0.2 dB
	TUNER, CD, TAPE 1, 2, 3			2 Hz – 200 kHz +0 –3 dB
				2 Hz – 100 kHz +0 –3 dB
Input sensitivity	PHONO	MC	3 ohms	0.17 mV, 100 ohms
			40 ohms	0.17 mV, 1 kohm
		MM		2.5 mV, 50 kohms
		TUNER, CD, AUX, TAPE 1, 2, 3 ADAPTOR IN		

— Continued on page 2 —

Maximum input capability (1 kHz)	PHONO (1 KHz, THD 0.003%)	MC	9 mV
		MM	150 mV
S/N (network)	PHONO	MC	78 dB*, 70 dB (A)
		MM	80 dB*, 87 dB (A)
* 78 (IHF)	TUNER, CD, AUX, TAPE 1, 2, 3 ADAPTOR IN		84 dB*, 105 dB (A)
	REC OUT 1, 2, 3 ADAPTOR OUT		150 mV, 1 kohm
Output voltage impedance	HEADPHONES		25 milliwatts (at 8 ohms) Accepts low and high impedance headphones.
Tone controls	BASS, at 100 Hz	+4 -3.5 dB (turnover freq. 200 Hz)	
		+6 -5 dB (turnover freq. 400 Hz)	
	TREBLE, at 10 kHz	+7 -8 dB (freq. 3 kHz)	
		+4 -5 dB (freq. 5 kHz)	
SUBSONIC filter	—		6 dB/octave attenuation below 15 Hz

General

System Preamplifier section: Low-noise FET high gain NFB type equalizer amplifier, passive type direct tone control.

Power requirements Power amplifier section: purecomplementary SEPP power amplifier

220 V AC, 50/60 Hz

Power consumption 310 W

AC outlet 1 switched, 100 watts max.

Dimensions Approx. 470 × 166 × 436 mm (w/h/d)
(18 1/2 × 6 5/8 × 17 1/4 inches)
including projecting parts and controls

Weight Approx. 27.8 kg (61 lbs 5 oz) net

FEATURES

Newly developed technologies assure excellent performance and tone quality

Pure sound

A head chassis, named "Gibraltar" which provides high rigidity and periodic damping characteristics, is employed to reduce distortion caused by vibrations. This reduces air vibrations caused by floor and speakers and also reduces vibrations caused by the power transformer and power transistors.

Spontaneous twin drive power circuit

Condensers having large capacity are used for the voltage amplification drive stage of class A and power output stage of class B. Thus, a stable output and high quality sound are obtained, resulting in exclusion of power interferences. The class A stage realizes a stable operation free from interference of the power stage even when an instantaneous or strong output is received.

Simple and direct tone control

The tone controls consist of only passive elements to minimize the deterioration of tone quality at the tone control circuit.

Tone control elements can be passed by depressing the tone switch.

Source direct switch

A source direct switch is employed to reproduce high fidelity sound.

Any source can be reproduced without passing through the circuits of tone control, subsonic filter, mode switch and balance control.

Super legato linear system

The power amplifier drives low impedance speakers and assures powerful reproduction without low crossover distortion and switching distortion over the wide range. (Low impedance instantaneous service output 560 W + 560 W, 1 ohm loaded)

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Source direct switch	THD 0.008%	560 W
THD 0.004%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.00005%	560 W	
THD 0.00002%	560 W	
THD 0.00001%	560 W	
THD 0.000005%	560 W	
THD 0.000002%	560 W	
THD 0.000001%	560 W	
THD 0.0000005%	560 W	
THD 0.0000002%	560 W	
THD 0.0000001%	560 W	
THD 0.00000005%	560 W	
THD 0.00000002%	560 W	
THD 0.00000001%	560 W	
THD 0.000000005%	560 W	
THD 0.000000002%	560 W	
THD 0.000000001%	560 W	
THD 0.0000000005%	560 W	
THD 0.0000000002%	560 W	
THD 0.0000000001%	560 W	
THD 0.00000000005%	560 W	
THD 0.00000000002%	560 W	
THD 0.00000000001%	560 W	
THD 0.000000000005%	560 W	
THD 0.000000000002%	560 W	
THD 0.000000000001%	560 W	
THD 0.0000000000005%	560 W	
THD 0.0000000000002%	560 W	
THD 0.0000000000001%	560 W	
THD 0.00000000000005%	560 W	
THD 0.00000000000002%	560 W	
THD 0.00000000000001%	560 W	
THD 0.000000000000005%	560 W	
THD 0.000000000000002%	560 W	
THD 0.000000000000001%	560 W	
THD 0.0000000000000005%	560 W	
THD 0.0000000000000002%	560 W	
THD 0.0000000000000001%	560 W	
THD 0.00000000000000005%	560 W	
THD 0.00000000000000002%	560 W	
THD 0.00000000000000001%	560 W	
THD 0.000000000000000005%	560 W	
THD 0.000000000000000002%	560 W	
THD 0.000000000000000001%	560 W	
THD 0.0000000000000000005%	560 W	
THD 0.0000000000000000002%	560 W	
THD 0.0000000000000000001%	560 W	
THD 0.00000000000000000005%	560 W	
THD 0.00000000000000000002%	560 W	
THD 0.00000000000000000001%	560 W	
THD 0.000000000000000000005%	560 W	
THD 0.000000000000000000002%	560 W	
THD 0.000000000000000000001%	560 W	
THD 0.0000000000000000000005%	560 W	
THD 0.0000000000000000000002%	560 W	
THD 0.0000000000000000000001%	560 W	
THD 0.00000000000000000000005%	560 W	
THD 0.00000000000000000000002%	560 W	
THD 0.00000000000000000000001%	560 W	
THD 0.000000000000000000000005%	560 W	
THD 0.000000000000000000000002%	560 W	
THD 0.000000000000000000000001%	560 W	
THD 0.0000000000000000000000005%	560 W	
THD 0.0000000000000000000000002%	560 W	
THD 0.0000000000000000000000001%	560 W	
THD 0.00000000000000000000000005%	560 W	
THD 0.00000000000000000000000002%	560 W	
THD 0.00000000000000000000000001%	560 W	
THD 0.000000000000000000000000005%	560 W	
THD 0.000000000000000000000000002%	560 W	
THD 0.000000000000000000000000001%	560 W	
THD 0.0000000000000000000000000005%	560 W	
THD 0.0000000000000000000000000002%	560 W	
THD 0.0000000000000000000000000001%	560 W	
THD 0.00000000000000000000000000005%	560 W	
THD 0.00000000000000000000000000002%	560 W	
THD 0.00000000000000000000000000001%	560 W	
THD 0.000000000000000000000000000005%	560 W	
THD 0.000000000000000000000000000002%	560 W	
THD 0.000000000000000000000000000001%	560 W	
THD 0.0000000000000000000000000000005%	560 W	
THD 0.0000000000000000000000000000002%	560 W	
THD 0.0000000000000000000000000000001%	560 W	
THD 0.00000000000000000000000000000005%	560 W	
THD 0.00000000000000000000000000000002%	560 W	
THD 0.00000000000000000000000000000001%	560 W	
THD 0.000000000000000000000000000000005%	560 W	
THD 0.000000000000000000000000000000002%	560 W	
THD 0.000000000000000000000000000000001%	560 W	
THD 0.0000000000000000000000000000000005%	560 W	
THD 0.0000000000000000000000000000000002%	560 W	
THD 0.0000000000000000000000000000000001%	560 W	
THD 0.00000000000000000000000000000000005%	560 W	
THD 0.00000000000000000000000000000000002%	560 W	
THD 0.00000000000000000000000000000000001%	560 W	
THD 0.000000000000000000000000000000000005%	560 W	
THD 0.000000000000000000000000000000000002%	560 W	
THD 0.000000000000000000000000000000000001%	560 W	
THD 0.0000000000000000000000000000000000005%	560 W	
THD 0.0000000000000000000000000000000000002%	560 W	
THD 0.0000000000000000000000000000000000001%	560 W	
THD 0.00000000000000000000000000000000000005%	560 W	
THD 0.00000000000000000000000000000000000002%	560 W	
THD 0.00000000000000000000000000000000000001%	560 W	
THD 0.000000000000000000000000000000000000005%	560 W	
THD 0.000000000000000000000000000000000000002%	560 W	
THD 0.000000000000000000000000000000000000001%	560 W	
THD 0.0000000000000000000000000000000000000005%	560 W	
THD 0.0000000000000000000000000000000000000002%	560 W	
THD 0.0000000000000000000000000000000000000001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.001%	560 W	
THD 0.0005%	560 W	
THD 0.0002%	560 W	
THD 0.0001%	560 W	
THD 0.005%	560 W	
THD 0.002%	560 W	
THD 0.0000000000000		

SECTION 2 ADJUSTMENTS

1-1. FUNCTION OF CONTROLS

[illegible]

-
- Diagram of the rear panel of the device, showing various ports and components labeled 17 through 27:
- 17: Power input jack.
 - 18: Video input port.
 - 19: Video input port.
 - 20: Video input port.
 - 21: Video input port.
 - 22: Power switch.
 - 23: Grounding point.
 - 24: Video output port.
 - 25: Video output port.
 - 26: Video output port.
 - 27: Video output port.

17 PHONO input jacks

18 TUNER input jacks

19 CD (Compact Disc) input jacks

20 AUX (Auxiliary) input jacks

21 ADAPTOR IN/OUT (input and output) jacks and adaptor switch
The OUT jacks output the signals selected by the INPUT SELECTOR on the front panel and the IN jacks receive the signals.
When an additional equipment such as a graphic equalizer is connected, set the adaptor switch to ADAPTOR.
When the jacks are not used, set the switch to NORMAL.

22 AC OUTLET
The AC OUTLET is used to power other audio components whose total power consumption is 100 watts or less.

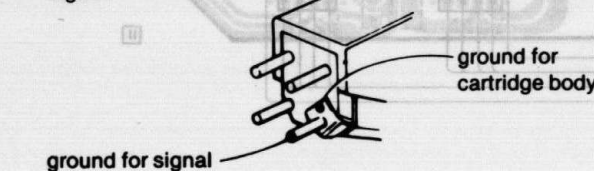
23 Ground terminal 
To prevent hum, be sure to connect the ground wire of the turntable system to this ground terminal. If hum still exists, it may be helpful to connect the ground terminal directly to earth via a ground rod.

24 25 26 TAPE RECORDER 1, 2, 3 input/output jacks
REC OUT (recording output) jacks: Accept the tape input jacks of the tape recorder.
To connect a hi-fi video cassette recorder, connect the audio line input jacks of the video cassette recorder to these jacks.

TAPE (tape input) jacks: Accept the REC output jacks of the tape recorder.
To connect a hi-fi video cassette recorder, video disc player or TV tuner, connect the audio line output jacks of each equipment to these jacks.

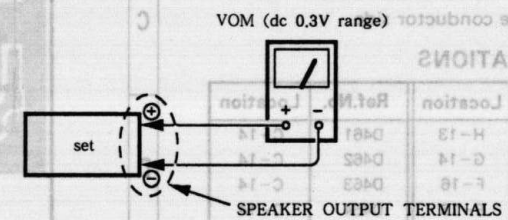
27 SPEAKER output terminals
Two pairs of speaker systems can be connected.
System A, system B or system A and B can be selected by means of the front panel SPEAKERS selector.

Note
In some particular MM cartridges, the ground for signal is connected to the ground for cartridge body.
If this type of cartridge should be installed to a metal cartridge shell, current will flow through the tonearm ground in a loop and will cause hum noise. In this case, disconnect the turntable ground wire from the ϕ terminal of the amplifier, or disconnect the ground for cartridge body from the ground for signal.



- Adjustments should be performed 10 minutes after the POWER switch is on (POWER ON).

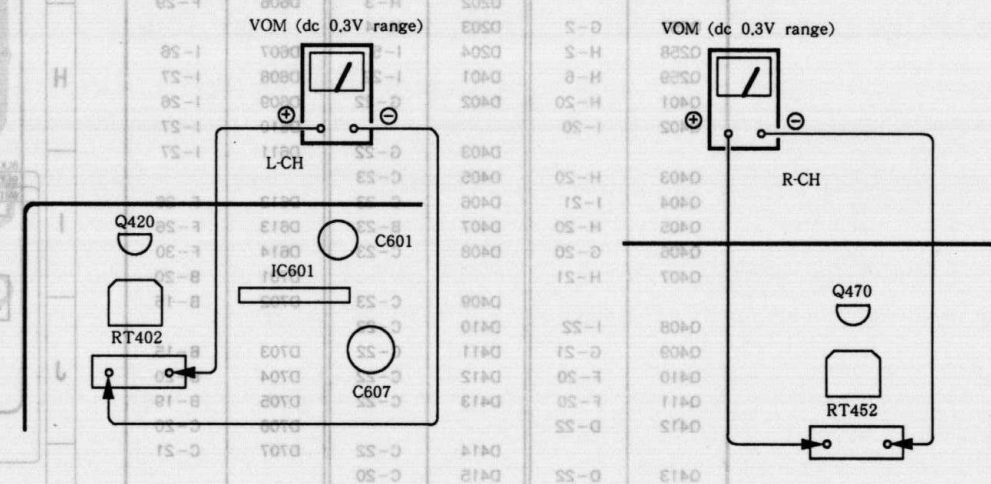
OFFSET Adjustment



1. Turn the ATTENUATOR knob fully counterclockwise under no-signal conditions.
2. Adjust RT401 and RT451 for 0V readings VOM.

DC BIAS Adjustment

1. Turn the ATTENUATOR knob fully counterclockwise under no-signal conditions.
2. Adjust RT402 and RT452 for 15mV readings on VOM.

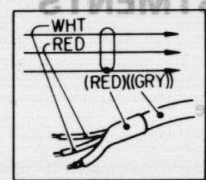


MAIN (B) BOARD

SECTION 3 DIAGRAMS

Note:

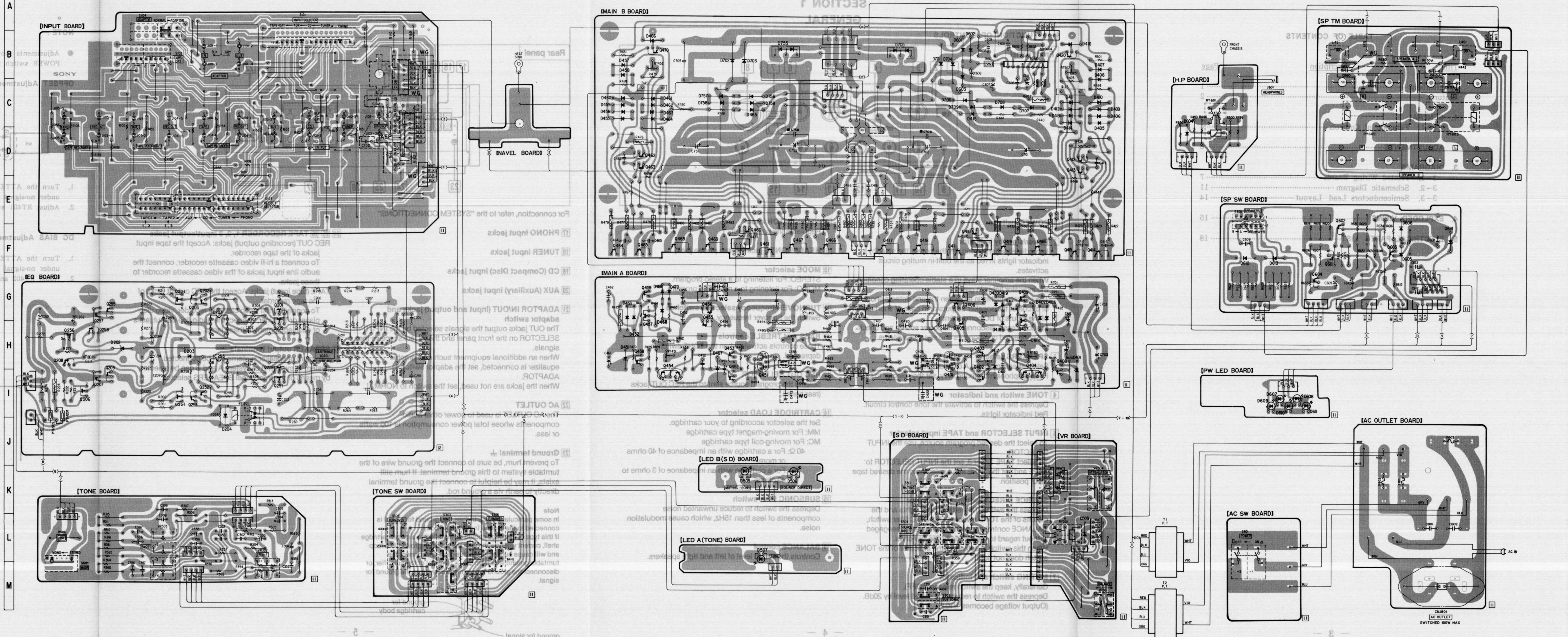
- Color code or sleeving over the end of the jacket.

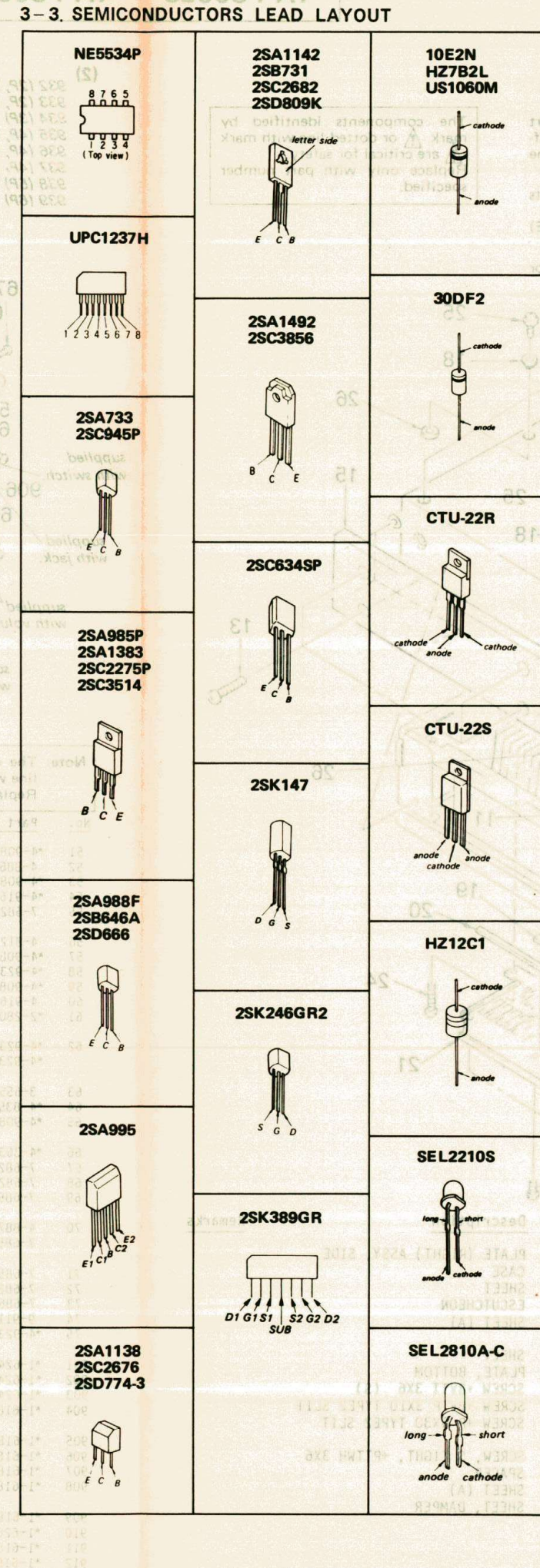
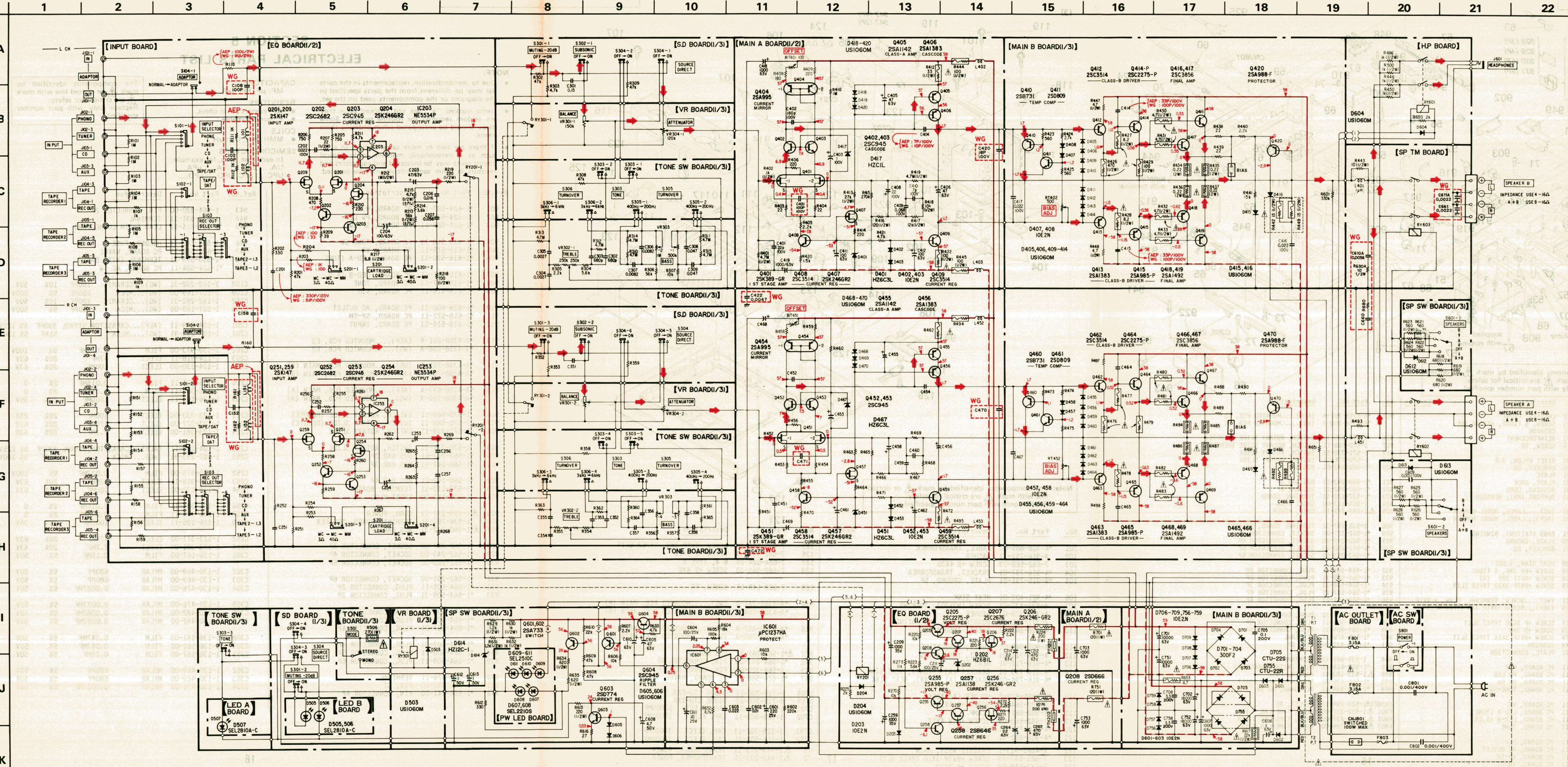


- Parts extracted from the component side.
- Parts extracted from the conductor side.
- Parts mounted on the conductor side.

SEMICONDUCTOR LOCATIONS

Ref.No.	Location	Ref.No.	Location	Ref.No.	Location
IC203	G-5	Q458	H-13	D461	C-14
IC253	H-5	Q459	G-14	D462	C-14
IC601	B-21	Q460	F-16	D463	C-14
		Q461	F-16	D464	C-14
		Q462	D-13	D465	C-16
Q201	G-6	Q463	D-13	D466	B-14
Q202	G-5	Q464	F-13	D467	H-15
Q203	G-5	Q465	F-13	D468	G-14
Q204	G-5	Q466	F-17	D469	G-14
Q205	I-2	Q467	F-17	D470	G-14
Q206	I-2	Q468	F-14	D503	L-23
Q207	I-2	Q469	F-15	D505	K-16
Q208	H-2	Q470	B-14	D506	K-15
Q209	H-6	Q601	F-28	D507	L-16
Q251	I-6	Q602	F-28	D601	B-20
Q252	I-4	Q603	F-29	D602	B-20
Q253	I-4	Q604	G-27	D603	C-20
Q254	I-4			D604	D-25
Q255	G-2			D605	F-29
Q256	H-2	D202	H-3	D606	F-29
Q257	G-2	D203	H-4		
Q258	H-2	D204	I-5	D607	I-26
Q259	H-6	D401	I-22	D608	I-27
Q401	H-20	D402	G-22	D609	I-26
Q402	I-20			D610	I-27
		D403	G-22	D611	I-27
Q403	H-20	D405	C-23		
Q404	I-21	D406	C-23	D612	F-26
Q405	H-20	D407	B-23	D613	F-30
Q406	G-20	D408	C-23	D614	B-20
Q407	H-21			D701	B-15
		D409	C-23	D702	B-15
Q408	I-22	D410	C-22	D703	B-15
Q409	G-21	D411	C-22	D704	B-20
Q410	F-20	D412	C-22	D705	B-19
Q411	F-20	D413	C-22	D706	C-20
Q412	D-22			D707	C-21
		D414	C-22		
Q413	D-22	D415	C-20		
Q414	F-23	D416	B-22	D708	C-21
Q415	F-22	D417	H-21	D709	C-20
Q416	F-19	D418	H-21	D755	B-16
Q417	F-18			D756	C-16
		D419	G-21	D757	C-15
Q418	F-22	D420	G-21		
Q419	F-21	D451	H-13	D758	C-15
Q420	B-22	D452	G-13	D759	C-16
Q451	H-16	D453	G-13		
Q452	I-15				
		D455	C-13		
Q453	H-15	D456	C-13		
Q454	I-14	D457	B-13		
Q455	H-15	D458	B-13		
Q456	G-15	D459	C-13		
Q457	G-14	D460	C-13		





● CIRCUIT BOARDS LOCATION

Note:

- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- % : indicates tolerance.
- Components for right channel have same values as for left channel.
- : nonflammable resistor.
- : fusible resistor.

Note: The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

● Switch

Ref. No.	Switch	Position
S101	INPUT SELECT	PHONO
S102	TAPE/DAT	1 PHONO
S103	REC OUT SELECT	OFF
S104	ADAPTOR	OFF
S201	CARTRIDGE LOAD	MM
S301	MUTING-20dB	OFF
S302	SUBSONIC	OFF
S303	STONE	OFF
S304	SOURCE DIRECT	OFF
S305	TURNOVER	400Hz
S306	TURNOVER	3kHz
S601	MODE	STEREO
S801	SPEAKERS	A
S801	POWER	OFF

IC BLOCK DIAGRAM

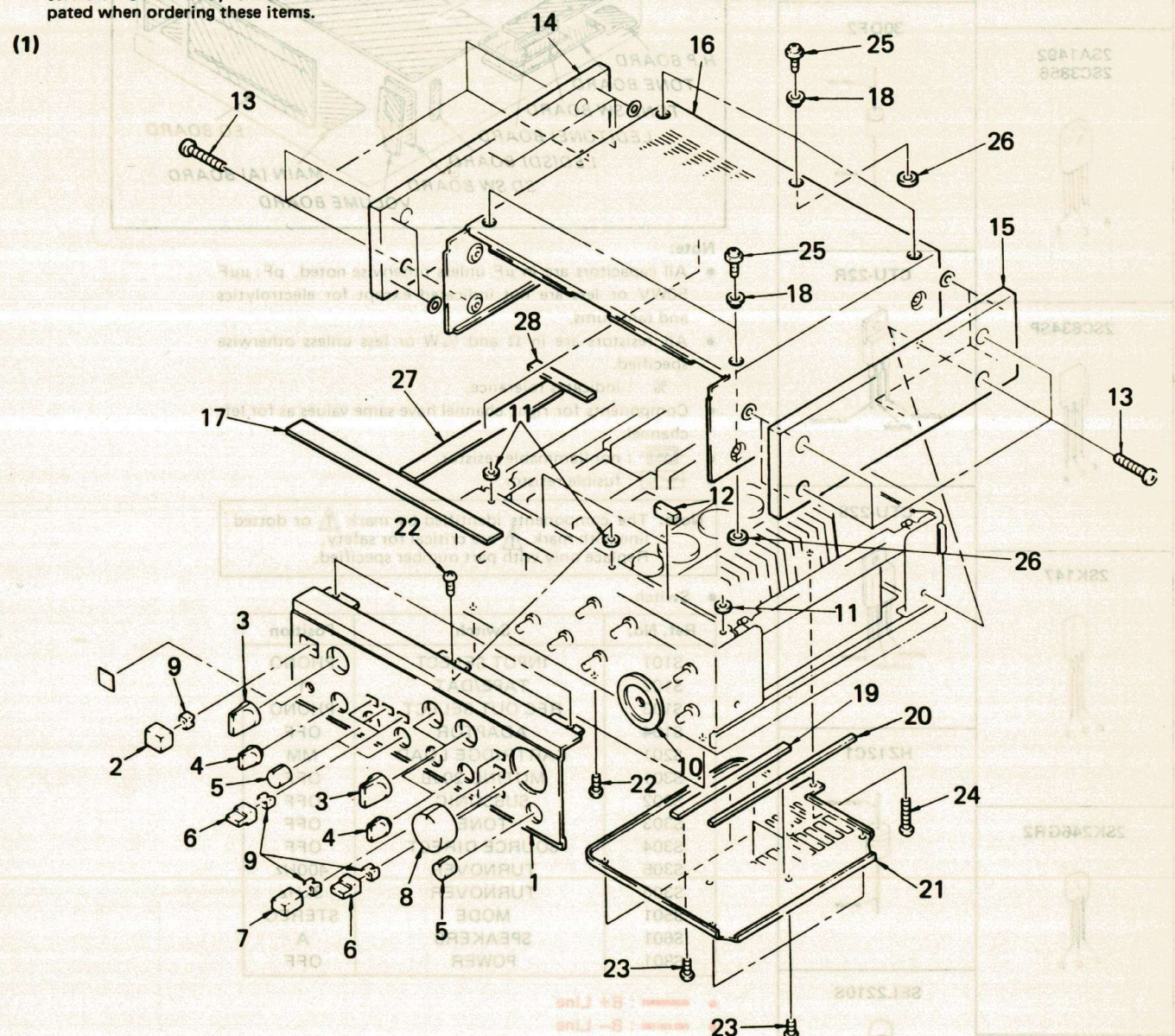
$\mu PC1237H$

SECTION 4 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

(1)



Ref.No.	Part No.	Description			
C355	1-130-476-00	MYLAR	0.0027MF	5%	50V
C356	1-130-482-00	MYLAR	0.0082MF	5%	50V
C357	1-130-482-00	MYLAR	0.0082MF	5%	50V
C358	1-136-161-00	FILM	0.047MF	5%	50V
C359	1-136-161-00	FILM	0.047MF	5%	50V
C401	1-107-210-00	MICA	22PF	5%	100V
C402	1-109-619-00	MICA	180PF	5%	100V
C403	1-123-380-00	ELECT	1MF	20%	100V
C404	1-107-048-00	(AEP)...MICA	7PF	0.5PF	100V
C404	1-107-202-00	(WG)...MICA	10PF	0.5PF	100V
C405	1-124-918-11	ELECT	47MF	20%	63V
C406	1-124-918-11	ELECT	47MF	20%	63V
C408	1-124-748-11	ELECT	22MF	20%	100V
C409	1-130-317-00	FILM	0.068MF	5%	100V
C410	1-107-048-00	MICA	7PF	0.5PF	100V
C411	1-124-130-00	ELECT	100MF	20%	63V
C412	1-124-130-00	ELECT	100MF	20%	63V
C414	1-107-159-00	(AEP)...MICA	33PF	5%	100V
C414	1-107-169-00	(WG)...MICA	100PF	5%	100V
C415	1-107-159-00	(AEP)...MICA	33PF	5%	100V
C415	1-107-169-00	(WG)...MICA	100PF	5%	100V
C416	1-130-973-00	FILM	0.022MF	5%	100V
C417	1-130-973-00	FILM	0.022MF	5%	100V
C418	1-123-378-00	ELECT	1000MF	20%	63V
C419	1-123-378-00	ELECT	1000MF	20%	63V
C420	1-107-208-00	(WG)...MICA	18PF	5%	100V
C421	1-107-169-00	(WG)...MICA	100PF	5%	100V
C422	1-130-479-00	(WG)...MYLAR	0.0047MF	5%	50V
C451	1-107-210-00	MICA	22PF	5%	100V
C452	1-109-619-00	MICA	180PF	5%	100V
C453	1-123-380-00	ELECT	1MF	20%	100V
C454	1-107-202-00	(WG)...MICA	10PF	0.5PF	100V
C454	1-107-278-00	(AEP)...MICA	7PF	0.5PF	100V
C455	1-124-918-11	ELECT	47MF	20%	63V
C456	1-124-918-11	ELECT	47MF	20%	63V
C458	1-124-748-11	ELECT	22MF	20%	100V
C459	1-130-317-00	FILM	0.068MF	5%	100V
C460	1-107-048-00	MICA	7PF	0.5PF	100V
C461	1-124-130-00	ELECT	100MF	20%	63V
C462	1-124-130-00	ELECT	100MF	20%	63V
C464	1-107-169-00	(WG)...MICA	100PF	5%	100V
C464	1-107-288-00	(AEP)...MICA	33PF	5%	100V
C465	1-107-169-00	(WG)...MICA	100PF	5%	100V
C465	1-107-288-00	(AEP)...MICA	33PF	5%	100V
C466	1-130-973-00	FILM	0.022MF	5%	100V
C467	1-130-973-00	FILM	0.022MF	5%	100V
C468	1-123-378-00	ELECT	1000MF	20%	63V
C469	1-123-378-00	ELECT	1000MF	20%	63V
C470	1-107-208-00	(WG)...MICA	18PF	5%	100V
C471	1-107-169-00	(WG)...MICA	100PF	5%	100V
C472	1-130-479-00	(WG)...MYLAR	0.0047MF	5%	50V
C601	1-123-334-00	ELECT	220MF	20%	25V
C602	1-136-153-00	FILM	0.01MF	5%	50V
C603	1-136-157-00	FILM	0.022MF	5%	50V
C604	1-123-333-00	ELECT	100MF	20%	25V
C605	1-124-918-11	ELECT	47MF	20%	63V
C606	1-123-380-00	ELECT	1MF	20%	63V

Ref.No.	Part No.	Description			
C607	1-123-378-00	ELECT	1000MF	20%	63V
C608	1-123-369-00	ELECT	4.7MF	20%	50V
C609	1-136-250-11	FILM	0.001MF	5%	100V
C610	1-123-380-00	ELECT	1MF	20%	63V
C610A	1-130-480-00	(WG)...MYLAR	0.0056MF	5%	50V
C611	1-123-356-00	ELECT	10MF	20%	25V
C611A	1-130-475-00	(WG)...CAP, POLYESTER FILM	0.0022MF		
C612	1-124-499-11	ELECT	1MF	20%	50V
C613	1-124-499-11	ELECT	1MF	20%	50V
C660	1-130-480-00	(WG)...MYLAR	0.0056MF	5%	50V
C661	1-130-475-00	(WG)...CAP, POLYESTER FILM	0.0022MF		
C701	1-125-382-11	CAP, ELECT	10000MF		63V
C702	1-125-503-11	CAP, ELECT	18000MF		63V
C703	1-123-378-00	ELECT	1000MF	20%	63V
C705	1-136-576-11	FILM	0.1MF	10%	200V
C708	1-136-586-11	CAP, METALIZED FILM	3.3MF		200V
C751	1-125-382-11	CAP, ELECT	10000MF		63V
C752	1-125-503-11	CAP, ELECT	18000MF		63V
C753	1-123-378-00	ELECT	1000MF	20%	63V
C758	1-136-586-11	CAP, METALIZED FILM	3.3MF		200V
C801	△ 1-161-741-00	CERAMIC	0.001MF	10%	400V
C802	△ 1-161-741-00	CERAMIC	0.001MF	10%	400V
CNJ801A	△ 1-526-794-11	OUTLET, AC			
D202	8-719-910-65	DIODE HZ682L			
D203	8-719-200-77	DIODE 10E2N			
D204	8-719-000-26	DIODE US1060M			
D401	8-719-910-68	DIODE HZ6C2L			
D402	8-719-200-77	DIODE 10E2N			
D403	8-719-200-77	DIODE 10E2N			
D405	8-719-000-26	DIODE US1060M			
D406	8-719-000-26	DIODE US1060M			
D407	8-719-200-77	DIODE 10E2N			
D408	8-719-200-77	DIODE 10E2N			
D409	8-719-000-26	DIODE US1060M			
D410	8-719-000-26	DIODE US1060M			
D411	8-719-000-26	DIODE US1060M			
D412	8-719-000-26	DIODE US1060M			
D413	8-719-000-26	DIODE US1060M			
D414	8-719-000-26	DIODE US1060M			
D415	8-719-000-26	DIODE US1060M			
D416	8-719-000-26	DIODE US1060M			
D417	8-719-910-75	DIODE HZ782L			
D418	8-719-000-26	DIODE US1060M			
D419	8-719-000-26	DIODE US1060M			
D420	8-719-000-26	DIODE US1060M			
D451	8-719-910-68	DIODE HZ6C2L			
D452	8-719-200-77	DIODE 10E2N			
D453	8-719-200-77	DIODE 10E2N			
D455	8-719-000-26	DIODE US1060M			
D456	8-719-000-26	DIODE US1060M			
D457	8-719-200-77	DIODE 10E2N			
D458	8-719-200-77	DIODE 10E2N			
D459	8-719-000-26	DIODE US1060M			
D460	8-719-000-26	DIODE US1060M			
D461	8-719-000-26	DIODE US1060M			
D462	8-719-000-26	DIODE US1060M			

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
D463	8-719-000-26	DIODE US1060M
D464	8-719-000-26	DIODE US1060M
D465	8-719-000-26	DIODE US1060M
D466	8-719-000-26	DIODE US1060M
D467	8-719-910-75	DIODE HZ7B2L
D468	8-719-000-26	DIODE US1060M
D469	8-719-000-26	DIODE US1060M
D470	8-719-000-26	DIODE US1060M
D503	8-719-000-26	DIODE US1060M
D505	8-719-301-52	DIODE SEL2810A-C
D506	8-719-301-52	DIODE SEL2810A-C
D507	8-719-301-52	DIODE SEL2810A-C
D601	8-719-200-77	DIODE 10E2N
D602	8-719-200-77	DIODE 10E2N
D603	8-719-200-77	DIODE 10E2N
D604	8-719-000-26	DIODE US1060M
D605	8-719-000-26	DIODE US1060M
D606	8-719-000-26	DIODE US1060M
D607	8-719-301-39	DIODE SEL2210S
D608	8-719-301-39	DIODE SEL2210S
D609	8-719-303-00	DIODE SEL2510C
D610	8-719-303-00	DIODE SEL2510C
D611	8-719-303-00	DIODE SEL2510C
D612	8-719-000-26	DIODE US1060M
D613	8-719-000-26	DIODE US1060M
D614	8-719-907-21	DIODE HZ12C1
D701	8-719-230-03	DIODE 30DF2
D702	8-719-230-03	DIODE 30DF2
D703	8-719-230-03	DIODE 30DF2
D704	8-719-230-03	DIODE 30DF2
D705	8-719-300-27	DIODE CTU-22S
D706	8-719-200-77	DIODE 10E2N
D707	8-719-200-77	DIODE 10E2N
D708	8-719-200-77	DIODE 10E2N
D709	8-719-200-77	DIODE 10E2N
D755	8-719-300-25	DIODE CTU-22R
D756	8-719-200-77	DIODE 10E2N
D757	8-719-200-77	DIODE 10E2N
D758	8-719-200-77	DIODE 10E2N
D759	8-719-200-77	DIODE 10E2N
F801	△1-532-237-00	FUSE, TIME-LAG 3.15A
F802	△1-532-237-00	FUSE, TIME-LAG 3.15A
F803	△1-532-286-00	FUSE, TIME-LAG 2.5A
IC203	8-759-905-42	IC NE5534P
IC253	8-759-905-42	IC NE5534P
IC601	8-759-111-68	IC UPC1237HA
J101	1-507-920-00	JACK, PIN 4P (ADAPTOR)
J102	1-507-920-00	JACK, PIN 4P (INPUT)
J103	1-507-920-00	JACK, PIN 4P (INPUT)
J104	1-507-831-00	JACK, PIN 6P (TAPE 1,2,3)
J105	1-507-831-00	JACK, PIN 6P (TAPE 1,2,3)
J601	1-507-863-41	JACK, LARGE TYPE (HEADPHONES)
L101	1-413-101-00	(WG)...COIL, INPUT
L102	1-413-101-00	(WG)...COIL, INPUT
L151	1-413-101-00	(WG)...COIL, INPUT
L152	1-413-101-00	(WG)...COIL, INPUT
L401	*1-422-009-13	COIL, AIR-CORE (1UH)
L402	1-422-261-11	COIL, AIR-CORE

Ref.No.	Part No.	Description
L403	1-422-261-11	COIL, AIR-CORE
L451	*1-422-009-13	COIL, AIR-CORE (1UH)
L452	1-422-261-11	COIL, AIR-CORE
L453	1-422-261-11	COIL, AIR-CORE
PTH201	1-806-886-11	THERMISTOR (POSITIVE)
PTH202	1-806-886-11	THERMISTOR (POSITIVE)
Q201	8-729-214-71	TRANSISTOR 2SK147
Q202	8-729-168-22	TRANSISTOR 2SC2682
Q203	8-729-600-27	TRANSISTOR 2SC634SP
Q204	8-729-201-56	TRANSISTOR 2SK246GR2
Q205	8-729-127-53	TRANSISTOR 2SC2275-P
Q206	8-729-201-56	TRANSISTOR 2SK246GR2
Q207	8-729-167-62	TRANSISTOR 2SC2676
Q208	8-729-300-62	TRANSISTOR 2SD666-A
Q209	8-729-214-71	TRANSISTOR 2SK147
Q251	8-729-214-71	TRANSISTOR 2SK147
Q252	8-729-168-22	TRANSISTOR 2SC2682
Q253	8-729-600-27	TRANSISTOR 2SC634SP
Q254	8-729-201-56	TRANSISTOR 2SK246GR2
Q255	8-729-118-53	TRANSISTOR 2SA985-P
Q256	8-729-201-56	TRANSISTOR 2SK246GR2
Q257	8-729-113-82	TRANSISTOR 2SA1138
Q258	8-729-304-62	TRANSISTOR 2SB646-A
Q259	8-729-214-71	TRANSISTOR 2SK147
Q401	8-729-203-21	TRANSISTOR 2SK389-GR
Q402	8-729-194-57	TRANSISTOR 2SC945-P
Q403	8-729-194-57	TRANSISTOR 2SC945-P
Q404	8-729-699-51	TRANSISTOR 2SA995
Q405	8-729-114-22	TRANSISTOR 2SA1142
Q406	8-729-104-91	TRANSISTOR 2SA1383
Q407	8-729-201-56	TRANSISTOR 2SK246-GR2
Q408	8-729-104-18	TRANSISTOR 2SC3514
Q409	8-729-104-18	TRANSISTOR 2SC3514
Q410	8-729-173-13	TRANSISTOR 2SB731-F
Q411	8-729-180-92	TRANSISTOR 2SD809-K
Q412	8-729-104-18	TRANSISTOR 2SC3514-Q
Q413	8-729-104-91	TRANSISTOR 2SA1383-Q
Q414	8-729-127-53	TRANSISTOR 2SC2275-P
Q415	8-729-118-53	TRANSISTOR 2SA985-P
Q416	8-729-303-88	TRANSISTOR 2SC3856
Q417	8-729-303-88	TRANSISTOR 2SC3856
Q418	8-729-303-85	TRANSISTOR 2SA1492
Q419	8-729-303-85	TRANSISTOR 2SA1492
Q420	8-729-108-14	TRANSISTOR 2SA988-F
Q451	8-729-203-21	TRANSISTOR 2SK389-GR
Q452	8-729-194-57	TRANSISTOR 2SC945-P
Q453	8-729-194-57	TRANSISTOR 2SC945-P
Q454	8-729-699-51	TRANSISTOR 2SA995
Q455	8-729-114-22	TRANSISTOR 2SA1142
Q456	8-729-104-91	TRANSISTOR 2SA1383
Q457	8-729-201-56	TRANSISTOR 2SK246-GR2
Q458	8-729-104-18	TRANSISTOR 2SC3514
Q459	8-729-104-18	TRANSISTOR 2SC3514
Q460	8-729-173-13	TRANSISTOR 2SB731
Q461	8-729-180-92	TRANSISTOR 2SD809-K
Q462	8-729-104-18	TRANSISTOR 2SC3514
Q463	8-729-104-91	TRANSISTOR 2SA1383

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
Q464	8-729-127-53	TRANSISTOR 2SC2275-P
Q465	8-729-118-53	TRANSISTOR 2SA985-P
Q466	8-729-303-88	TRANSISTOR 2SC3856
Q467	8-729-303-88	TRANSISTOR 2SC3856
Q468	8-729-303-85	TRANSISTOR 2SA1492
Q469	8-729-303-85	TRANSISTOR 2SA1492
Q470	8-729-108-14	TRANSISTOR 2SA988-F
Q601	8-729-173-37	TRANSISTOR 2SA733-P
Q602	8-729-173-37	TRANSISTOR 2SA733-P
Q603	8-729-177-42	TRANSISTOR 2SD774-3
Q604	8-729-194-57	TRANSISTOR 2SC945
R101	1-246-545-00	CARBON 1M 5% 1/4W
R102	1-246-545-00	CARBON 1M 5% 1/4W
R103	1-246-545-00	CARBON 1M 5% 1/4W
R104	1-246-545-00	CARBON 1M 5% 1/4W
R105	1-246-545-00	CARBON 1M 5% 1/4W
R106	1-246-545-00	CARBON 1M 5% 1/4W
R107	1-247-713-11	CARBON 1K 5% 1/4W
R108	1-247-713-11	CARBON 1K 5% 1/4W
R109	1-247-713-11	CARBON 1K 5% 1/4W
R110	1-247-739-11	(AEP)...CARBON 100 5% 1/2W
R110	1-249-673-11	(WG)...CARBON 1K 5% 1/2W
R111	1-247-713-11	(WG)...CARBON 1K 5% 1/4W
R112	1-247-713-11	(WG)...CARBON 1K 5% 1/4W
R151	1-246-545-00	CARBON 1M 5% 1/4W
R152	1-246-545-00	CARBON 1M 5% 1/4W
R153	1-246-545-00	CARBON 1M 5% 1/4W
R154	1-246-545-00	CARBON 1M 5% 1/4W
R155	1-246-545-00	CARBON 1M 5% 1/4W
R156	1-246-545-00	CARBON 1M 5% 1/4W
R157	1-247-713-11	CARBON 1K 5% 1/4W
R158	1-247-713-11	CARBON 1K 5% 1/4W
R159	1-247-713-11	CARBON 1K 5% 1/4W
R160	1-249-673-11	(WG)...CARBON 1K 5% 1/2W
R160	1-247-739-11	(AEP)...CARBON 100 5% 1/2W
R161	1-247-713-11	(WG)...CARBON 1K 5% 1/4W
R162	1-247-713-11	(WG)...CARBON 1K 5% 1/4W
R201	1-249-465-11	CARBON 47K 5% 1/4W
R202	1-247-706-11	CARBON 330 5% 1/4W
R203	1-247-700-11	(WG)...CARBON 100 5% 1/4W
R203	1-247-713-11	(AEP)...CARBON 1K 5% 1/4W
R204	1-247-701-01	(AEP)...CARBON 100 5% 1/4W
R204	1-249-516-11	(WG)...CARBON 33 5% 1/4W
R205	1-247-128-00	CARBON 750 5% 1/4W
R206	1-247-128-00	CARBON 750 5% 1/4W
R207	1-249-633-11	CARBON 22 5% 1/2W
R208	1-247-708-11	CARBON 470 5% 1/4W
R209	1-249-518-11	CARBON 39 5% 1/4W
R210	1-247-704-11	CARBON 220 5% 1/4W
R211	1-247-721-11	CARBON 4.7K 5% 1/4W
R212	1-214-937-00	CARBON 1M 5% 1/2W
R213	1-249-844-11	CARBON 56K 1% 1/2W
R214	1-249-565-11	CARBON 3.6K 5% 1/4W
R215	1-249-818-11	CARBON 4.7K 1% 1/2W
R217	1-259-501-11	CARBON 6.8 5% 1/2W
R218	1-247-739-11	CARBON 100 5% 1/2W
R219	1-249-657-11	CARBON 220 5% 1/2W
R220	1-247-725-11	CARBON 10K 5% 1/4W
R221	1-247-704-11	CARBON 220 5% 1/4W

Ref.No.	Part No.	Description
R222	1-247-717-11	CARBON 2.2K 5% 1/4W
R223	1-247-722-11	CARBON 5.6K 5% 1/4W
R224	△ 1-213-091-11	FUSIBLE 200 5% 1W F
R225	1-247-138-00	CARBON 2K 5% 1/4W
R251	1-249-465-11	CARBON 47K 5% 1/4W
R252	1-247-706-11	CARBON 330 5% 1/4W
R253	1-247-700-11	(WG)...CARBON 100 5% 1/4W
R253	1-247-713-11	(AEP)...CARBON 1K 5% 1/4W
R254	1-247-701-01	(AEP)...CARBON 100 5% 1/4W
R254	1-249-516-11	(WG)...CARBON 33 5% 1/4W
R255	1-247-128-00	CARBON 750 5% 1/4W
R256	1-247-128-00	CARBON 750 5% 1/4W
R257	1-249-633-11	CARBON 22 5% 1/2W
R258	1-247-708-11	CARBON 470 5% 1/4W
R259	1-249-518-11	CARBON 39 5% 1/4W
R260	1-247-704-11	CARBON 220 5% 1/4W
R261	1-247-721-11	CARBON 4.7K 5% 1/4W
R262	1-214-937-00	CARBON 1M 5% 1/2W
R263	1-249-844-11	CARBON 56K 1% 1/2W
R264	1-249-565-11	CARBON 3.6K 5% 1/4W
R265	1-249-818-11	CARBON 4.7K 1% 1/2W
R267	1-259-501-11	CARBON 6.8 5% 1/2W
R268	1-247-739-11	CARBON 100 5% 1/2W
R269	1-249-657-11	CARBON 220 5% 1/2W
R270	1-247-725-11	CARBON 10K 5% 1/4W
R271	1-247-704-11	CARBON 220 5% 1/4W
R272	1-247-717-11	CARBON 2.2K 5% 1/4W
R273	1-249-577-11	CARBON 11K 5% 1/4W
R274	△ 1-213-091-11	FUSIBLE 200 5% 1W F
R302	1-249-465-11	CARBON 47K 5% 1/4W
R303	1-247-721-11	CARBON 4.7K 5% 1/4W
R304	1-247-722-11	CARBON 5.6K 5% 1/4W
R305	1-247-717-11	CARBON 2.2K 5% 1/4W
R306	1-249-466-11	CARBON 56K 5% 1/4W
R307	1-247-725-11	CARBON 10K 5% 1/4W
R308	1-249-465-11	CARBON 47K 5% 1/4W
R309	1-249-465-11	CARBON 47K 5% 1/4W
R310	1-259-502-11	CARBON 4.7M 5% 1/4W
R311	1-259-502-11	CARBON 4.7M 5% 1/4W
R312	1-259-502-11	CARBON 4.7M 5% 1/4W
R313	1-259-502-11	CARBON 4.7M 5% 1/4W
R314	1-259-502-11	CARBON 4.7M 5% 1/4W
R315	1-259-502-11	CARBON 4.7M 5% 1/4W
R352	1-249-465-11	CARBON 47K 5% 1/4W
R353	1-247-721-11	CARBON 4.7K 5% 1/4W
R354	1-247-722-11	CARBON 5.6K 5% 1/4W
R355	1-247-717-11	CARBON 2.2K 5% 1/4W
R356	1-249-466-11	CARBON 56K 5% 1/4W
R357	1-247-725-11	CARBON 10K 5% 1/4W
R358	1-249-465-11	CARBON 47K 5% 1/4W
R359	1-249-465-11	CARBON 47K 5% 1/4W
R360	1-259-502-11	CARBON 4.7M 5% 1/4W
R361	1-259-502-11	CARBON 4.7M 5% 1/4W
R362	1-259-502-11	CARBON 4.7M 5% 1/4W
R363	1-259-502-11	CARBON 4.7M 5% 1/4W
R364	1-259-502-11	CARBON 4.7M 5% 1/4W
R365	1-259-502-11	CARBON 4.7M 5% 1/4W
R401	1-259-503-11	CARBON 4.7M 5% 1/2W

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description			
R402	1-249-673-11	CARBON	1K	5%	1/2W
R403	1-249-512-11	CARBON	22	5%	1/4W
R404	1-249-512-11	CARBON	22	5%	1/4W
R405	1-247-717-11	CARBON	2.2K	5%	1/4W
R406	1-247-704-11	CARBON	220	5%	1/4W
R408	1-247-703-11	CARBON	180	5%	1/4W
R409	1-247-704-11	CARBON	220	5%	1/4W
R410	1-246-545-00	CARBON	1M	5%	1/4W
R412	△ 1-212-970-00	FUSIBLE	33	5%	1/2W F
R413	1-249-490-11	CARBON	27K	5%	1/2W
R414	1-247-704-11	CARBON	220	5%	1/4W
R415	1-246-531-00	CARBON	270K	5%	1/4W
R416	1-247-740-11	CARBON	120	5%	1/2W
R417	1-249-486-11	CARBON	12K	5%	1/2W
R418	1-247-764-11	CARBON	10K	5%	1/2W
R419	1-259-503-11	CARBON	4.7M	5%	1/2W
R420	1-249-556-11	CARBON	1.5K	5%	1/4W
R421	1-247-721-11	CARBON	4.7K	5%	1/4W
R422	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R423	1-247-710-11	CARBON	560	5%	1/4W
R424	1-247-718-11	CARBON	2.7K	5%	1/4W
R425	1-247-710-11	CARBON	560	5%	1/4W
R426	△ 1-212-998-00	FUSIBLE	470	5%	1/2W F
R427	△ 1-212-956-00	FUSIBLE	8.2	5%	1/2W F
R428	△ 1-212-956-00	FUSIBLE	8.2	5%	1/2W F
R429	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R430	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R431	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R432	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R433	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R434	1-217-151-00	RES, METAL PLATE 0.22	2W		
R435	1-217-151-00	RES, METAL PLATE 0.22	2W		
R436	1-217-151-00	RES, METAL PLATE 0.22	2W		
R437	1-217-151-00	RES, METAL PLATE 0.22	2W		
R438	1-247-692-11	CARBON	22	5%	1/4W F
R439	1-247-692-11	CARBON	22	5%	1/4W F
R440	1-247-717-11	CARBON	2.2K	5%	1/4W F
R441	1-249-460-11	CARBON	15K	5%	1/4W
R442	△ 1-212-962-11	FUSIBLE	15	5%	1/2W F
R443	1-247-727-11	CARBON	10	5%	1/2W
R444	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R445	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R446	1-247-752-11	CARBON	1K	5%	1/2W
R447	1-249-482-11	CARBON	4.7	5%	1/2W
R448	1-249-482-11	CARBON	4.7	5%	1/2W
R449	△ 1-212-962-00	(AEP)...FUSIBLE	15	5%	1/2W F
R449	1-247-727-11	(WG)...CARBON	10	5%	1/2W
R450	1-247-752-11	CARBON	1K	5%	1/2W
R451	1-259-503-11	CARBON	4.7M	5%	1/2W
R452	1-249-673-11	CARBON	1K	5%	1/2W
R453	1-249-512-11	CARBON	22	5%	1/4W
R454	1-249-512-11	CARBON	22	5%	1/4W
R455	1-247-717-11	CARBON	2.2K	5%	1/4W
R456	1-247-704-11	CARBON	220	5%	1/4W
R458	1-247-703-11	CARBON	180	5%	1/4W
R459	1-247-704-11	CARBON	220	5%	1/4W

Ref.No.	Part No.	Description			
R460	1-246-545-00	CARBON	1M	5%	1/4W
R462	△ 1-212-970-00	FUSIBLE	33	5%	1/2W F
R463	1-249-490-11	CARBON	27K	5%	1/2W
R464	1-247-704-11	CARBON	220	5%	1/4W
R465	1-246-531-00	CARBON	270K	5%	1/4W
R466	1-247-740-11	CARBON	120	5%	1/2W
R467	1-249-486-11	CARBON	12K	5%	1/2W
R468	1-247-764-11	CARBON	10K	5%	1/2W
R469	1-259-503-11	CARBON	4.7M	5%	1/2W
R470	1-249-556-11	CARBON	1.5K	5%	1/4W
R471	1-247-721-11	CARBON	4.7K	5%	1/4W
R472	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R473	1-247-710-11	CARBON	560	5%	1/4W
R474	1-247-718-11	CARBON	2.7K	5%	1/4W
R475	1-247-710-11	CARBON	560	5%	1/4W
R476	△ 1-212-998-00	FUSIBLE	470	5%	1/2W F
R477	△ 1-212-956-00	FUSIBLE	8.2	5%	1/2W F
R478	△ 1-212-956-00	FUSIBLE	8.2	5%	1/2W F
R479	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R480	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R481	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R482	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R483	△ 1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R484	1-217-151-00	RES, METAL PLATE 0.22			
R485	1-217-151-00	RES, METAL PLATE 0.22			
R486	1-217-151-00	RES, METAL PLATE 0.22			
R487	1-217-151-00	RES, METAL PLATE 0.22			
R488	1-247-692-11	CARBON	22	5%	1/4W F
R489	1-247-692-11	CARBON	22	5%	1/4W F
R490	1-247-717-11	CARBON	2.2K	5%	1/4W F
R491	1-249-460-11	CARBON	15K	5%	1/4W
R492	△ 1-212-962-00	FUSIBLE	15	5%	1/2W F
R493	1-247-727-11	CARBON	10	5%	1/2W
R494	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R495	△ 1-212-982-00	FUSIBLE	100	5%	1/2W F
R496	1-247-752-11	CARBON	1K	5%	1/2W
R497	1-249-482-11	CARBON	4.7	5%	1/2W
R498	1-249-482-11	CARBON	4.7	5%	1/2W
R499	△ 1-212-962-00	(AEP)...FUSIBLE	15	5%	1/2W F
R499	1-247-727-11	(WG)...CARBON	10	5%	1/2W
R500	1-247-752-11	CARBON	1K	5%	1/2W
R506	1-216-429-00	METAL OXIDE	270	5%	1W F
R601	1-247-891-00	CARBON	330K	5%	1/4W
R602	1-247-887-00	CARBON	220K	5%	1/4W
R603	1-247-725-11	CARBON	10K	5%	1/4W
R604	1-249-461-11	CARBON	18K	5%	1/4W
R605	1-249-606-11	CARBON	180K	5%	1/4W
R606	1-247-725-11	CARBON	10K	5%	1/4W
R607	1-247-717-11	CARBON	2.2K	5%	1/4W
R608	1-249-465-11	CARBON	47K	5%	1/4W
R609	1-249-465-11	CARBON	47K	5%	1/4W
R610	1-249-462-11	CARBON	22K	5%	1/4W
R612	1-247-706-11	CARBON	330	5%	1/4W
R613	1-247-743-11	CARBON	220	5%	1/2W
R616	1-247-693-11	CARBON	27	5%	1/4W

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				
R617	1-249-489-11	CARBON	22K	5%	1/2W	F
R618	1-247-750-11	CARBON	680	5%	1/2W	
R619	1-247-750-11	CARBON	680	5%	1/2W	
R620	1-247-750-11	CARBON	680	5%	1/2W	
R621	1-247-749-11	CARBON	560	5%	1/2W	
R622	1-247-749-11	CARBON	560	5%	1/2W	
R623	1-247-749-11	CARBON	560	5%	1/2W	
R624	1-247-749-11	CARBON	560	5%	1/2W	
R625	1-247-749-11	CARBON	560	5%	1/2W	
R626	1-247-749-11	CARBON	560	5%	1/2W	
R627	1-247-749-11	CARBON	560	5%	1/2W	
R628	1-247-749-11	CARBON	560	5%	1/2W	
R629	1-247-753-11	CARBON	1.2K	5%	1/2W	
R630	1-247-752-11	CARBON	1K	5%	1/2W	
R630A	1-247-727-11	(WG)....CARBON	10	5%	1/2W	
R631	1-247-753-11	CARBON	1.2K	5%	1/2W	
R632	1-247-752-11	CARBON	1K	5%	1/2W	
R633	1-247-721-11	CARBON	4.7K	5%	1/4W	
R634	1-247-235-00	CARBON	620	5%	1/2W	
R635	1-247-235-00	CARBON	620	5%	1/2W	
R650	1-247-138-00	CARBON	2K	5%	1/4W	
R651	1-247-891-00	CARBON	330K	5%	1/4W	
R652	1-247-721-11	CARBON	4.7K	5%	1/4W	
R653	△1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R680	1-247-727-11	(WG)....CARBON	10	5%	1/2W	
R701	△1-213-086-00	FUSIBLE	120	5%	1W	F
R751	△1-213-086-00	FUSIBLE	120	5%	1W	F
RT401	1-237-873-11	RES, ADJ, CARBON 100 (OFFSET)				
RT402	1-237-455-11	RES, ADJ, CARBON 500 (BIAS)				
RT451	1-237-873-11	RES, ADJ, CARBON 100 (OFFSET)				
RT452	1-237-455-11	RES, ADJ, CARBON 500 (BIAS)				
RY201	1-515-614-11	RELAY				
RY301	1-515-683-11	RELAY				
RY601	1-515-614-11	RELAY				
RY602	1-515-356-00	RELAY				
RY603	1-515-356-00	RELAY				
S101	1-554-879-11	SWITCH, SLIDE (INPUT SELECTOR)				
S102	1-570-593-11	SWITCH, SLIDE (REMOTE TYPE)(TAPE/DAT)				
S103	1-570-076-11	SWITCH, SLIDE (REMOTE TYPE) (REC OUT SELECTOR)				

Ref.No.	Part No.	Description
S104	1-516-785-XX	SLIDE SWITCH (ADAPTOR)
S201	1-554-019-00	SWITCH, SLIDE (REMOTE TYPE) (CARTRIDGE LOAD)
S301	1-570-594-11	SWITCH, PUSH (2 KEY)(MUTING -20dB)
S302	1-570-595-11	SWITCH, PUSH (1 KEY)(SUB SONIC)
S303	1-570-596-11	SWITCH, PUSH (3 KEY)(TONE)
S304	1-570-594-11	SWITCH, PUSH (2 KEY)(SOURCE DIRECT)
S305	1-570-596-11	SWITCH, PUSH (3 KEY)(TURN OVER)
S306	1-570-596-11	SWITCH, PUSH (3 KEY)(TURN OVER)
S501	1-570-592-11	SWITCH, ROTARY (MODE)
S601	1-554-876-11	SWITCH, ROTARY (SPEAKERS)
S801	△1-554-880-11	SWITCH, PUSH (AC POWER)(1 KEY)
T1	△1-449-203-11	TRANSFORMER, POWER
T2	△1-449-203-21	TRANSFORMER, POWER
VR301	1-237-113-11	RES, VAR, CARBON 150K/150K (BALANCE)
VR302	1-237-174-11	RES, VAR, CARBON 250K/250K (TREBLE)
VR303	1-237-173-11	RES, VAR, CARBON 1MX500K/1M/500K (BASS)
VR304	1-237-175-11	RES, VAR, CARBON 120K/120K(ATTENUATOR)

ACCESSORY & PACKING MATERIAL

3-786-128-11	MANUAL, INSTRUCTION
4-847-802-00	SCREW
4-908-805-01	CUSHION (FRONT), LOWER
4-908-806-01	CUSHION (REAR), LOWER
4-908-807-01	CUSHION (FRONT), UPPER
4-908-808-01	CUSHION (REAR), UPPER
4-915-880-01	SHEET, PROTECTION
*4-923-815-01	INDIVIDUAL CARTON

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

