

# Service Manual

Stereo Integrated Amplifier

## SU-8077

(D), (DG), (EB), (XSW),  
(XGF), (XGH)

## SU-8077K

(D), (DG), (EB), (XSW),  
(XE), (X), (XA), (XAL)

SU-8077



SU-8077K

- The models SU-8077 (D, DG) and SU-8077K (D, DG) are available in Scandinavia and European only.
- The models SU-8077 (EB) and SU-8077K (EB) are available in Belgium only.
- The models SU-8077 (XSW) and SU-8077K (XSW) are available in Switzerland only.
- The model SU-8077 (XGF) is available in France only.
- The model SU-8077 (XGH) is available in Holland only.
- The model SU-8077K (XE) is available in United Kingdom only.
- The models SU-8077K (X, XA) are available in Asia, Latin America, Middle East and Africa only.
- The model SU-8077K (XAL) is available in Australia only.

**TECHNICAL SPECIFICATIONS** Specifications are subject to change without notice for further improvement.

[DIN 45 500]

**AMPLIFIER SECTION**

20Hz ~ 20kHz continuous power output	
both channels driven	2 x 65 W (4Ω), 2 x 60 W (8Ω)
40 Hz ~ 16 kHz continuous power output	
both channels driven	2 x 65 W (4Ω), 2 x 60 W (8Ω)
1 kHz continuous power output	
both channels driven	2 x 80 W (4Ω), 2 x 62 W (8Ω)
Power bandwidth both channels driven, -3 dB	THD 0.03% 5 Hz ~ 40 kHz (4Ω) THD 0.02% 5 Hz ~ 45 kHz (8Ω)

Total harmonic distortion	
rated power at 20Hz ~ 20 kHz	0.03% (4Ω), 0.02% (8Ω)
rated power at 40 Hz ~ 16 kHz	0.03% (4Ω), 0.02% (8Ω)
rated power at 1kHz	0.02% (4Ω), 8Ω)
half power at 20 Hz ~ 20 kHz	0.008% (8Ω)
half power at 1 kHz	0.003% (8Ω)
-26 dB power at 1 kHz	0.05% (4Ω)
50mW power at 1 kHz	0.08% (4Ω)

Intermodulation distortion	
rated power at 250 Hz: 8 kHz = 4:1, 4Ω	0.03%
rated power at 60 Hz: 7 kHz = 4:1, SMPTE, 8Ω	0.02%
Residual hum & noise (Straight DC)	0.3mV (0.3 mV, 1HF, A)
Damping factor	20 (4Ω), 40 (8Ω)

Input sensitivity and impedance	
PHONO MM	2.5 mV/47 kΩ
PHONO MC	170μV/47Ω
TUNER, AUX	200 mV/47 kΩ
TAPE 1, REC/PLAY	200 mV/47 kΩ
TAPE 2	200 mV/47 kΩ
PHONO maximum input voltage (1 kHz, RMS)	MM 150 mV MC 8 mV

S/N	rated power at 4Ω	
	PHONO	MM 75 dB (88 dB, IHF, A) MC 65 dB (70 dB, IHF, A)
	TUNER, AUX	92 dB (108 dB, IHF, A)

-26 dB Power at 4Ω		
PHONO	MM	67 dB
	MC	65 dB
TUNER, AUX		68 dB
50mW Power at 4Ω		
PHONO	MM	64 dB
	MC	62 dB
TUNER, AUX		65 dB
Frequency response	PHONO MM	RIAA standard curve
		30 Hz ~ 15 kHz, ±0.2 dB
	TUNER, AUX, TAPE	20 Hz ~ 20 kHz, +0 dB -0.1 dB
		0.5 Hz ~ 60 kHz, -1 dB
Tone controls:	BASS	50 Hz, +7.5 dB ~ -7.5 dB
	TREBLE	20 kHz, +7.5 dB ~ -7.5 dB
High filter		7 kHz, -6 dB/oct
Subsonic filter		30 Hz, -6dB/oct
Loudness control (volume at -30 dB)		50 Hz, +7.5 dB
Output voltage and impedance	REC OUT	200 mV
	REC/PLAY	25 mV/82 kΩ
Channel balance (250 Hz ~ 6300 Hz), AUX		±1.0 dB
Channel separation at 1 kHz, AUX		60 dB
Headphones output level and impedance		400 mV/330Ω
Load impedance	MAIN or REMOTE	4 ~ 16Ω
	MAIN + REMOTE	8 ~ 16Ω

**GENERAL**

Power consumption	600 W
Power supply (50 Hz/60 Hz)	110V/120V/220V/240V
Dimensions (W x H x D)	450 x 142 x 380 mm (17-23/32" x 5-19/32" x 14-3/16")
Weight	1.2 kg (26.5 lb.)

[DIN 45 500]

VERSTÄRKERTEIL

Dauertonleistung bei 20 Hz ~ 20 kHz beide Kanäle zusammen angesteuert	2 x 65 W (4Ω) 2 x 60 W (8Ω)
Dauertonleistung bei 40 Hz ~ 16 kHz beide Kanäle zusammen angesteuert	2 x 65 W (4Ω)
Dauertonleistung bei 1 kHz beide Kanäle zusammen angesteuert	2 x 60 W (8Ω) 2 x 80 W (4Ω), 2 x 62 W (8Ω)
Leistungsbandbreite beide Kanäle zusammen angesteuert, -3 dB	THD 0,03% 5 Hz ~ 40 kHz (4Ω) THD 0,02% 5 Hz ~ 45 kHz (8Ω)
Harmonische Verzerrungen Nennausgangsleistung bei 20 Hz ~ 20 kHz	0,03% (4Ω), 0,02% (8Ω)
Nennausgangsleistung bei 40 Hz ~ 16 kHz	0,03% (4Ω), 0,02% (8Ω)
Nennausgangsleistung bei 1 kHz	0,02% (4Ω), 8Ω
Halber Ausgangsleistung bei 20 Hz ~ 20 kHz	0,008% (8Ω)
Halber Ausgangsleistung bei 1 kHz	0,003% (8Ω)
-26 dB Ausgangsleistung bei 1 kHz	0,05% (4Ω)
50 mW Ausgangsleistung bei 1 kHz	0,08% (4Ω)
Intermodulationsverzerrung Nennausgangsleistung bei 250 Hz: 8 kHz = 4:1, 4Ω	0,03%
Nennausgangsleistung bei 60 Hz: 7 kHz = 4:1, SMPTE 8Ω	0,02%
Brummen & Rauschen	0,3 mV (0,3 mV, IHF A)
Dämpfungsfaktor	20 (4Ω), 40 (8Ω)
Eingangsempfindlichkeit & Impedanz	
PHONO MM	2,5 mV/47 kΩ
MC	170µV/47kΩ
TUNER, AUX	200 mV/47 kΩ
TAPE 1, REC/PLAY	200 mV/47 kΩ
TAPE 2	200 mV/47 kΩ
PHONO Maximale Eingangsspannungen	
MM	150 mV
MC	8 mV

Fremdspannungsabstand	
Nennausgangsleistung bei 4Ω	
PHONO MM	75 dB (88 dB, IHF, A)
MC	65 dB (70 dB, IHF, A)
TUNER, AUX	92 dB (IHF, A: 108 dB)
-26 dB Ausgangsleistung bei 4Ω	
PHONO MM	67 dB
MC	65 dB
TUNER, AUX	68 dB
50mW Ausgangsleistung bei 4Ω	
PHONO MM	64 dB
MC	62 dB
TUNER, AUX	65 dB
Frequenzgang	PHONO MM
	R1AA Standardkurve
	30 Hz ~ 15 kHz, ±0,2 dB
TUNER, AUX, TAPE	0,5 Hz ~ 80 kHz, -1 dB
	20 Hz ~ 20 kHz, +0
	-0,1 dB
Klangregler	BÄSSE
	HÖHEN
	50 Hz, +7,5 dB ~ -7,5 dB
Höhenfilter (HIGH)	20 kHz, +7,5 dB ~ -7,5 dB
Unterschallfilter	7 kHz, -6 dB/oct
Gehörgerechte Lautstärkekorrektur (Lautstärke bei -30 dB)	30 Hz, -6 dB/oct
	50 Hz, +7,5 dB
Ausgangsspannungen & Impedanz	REC OUT
	200 mV
	REC/PLAY
	25 mV/82 kΩ
Kanalabweichung (250 Hz ~ 6300 Hz), AUX	±1,0 dB
Kanaltrennung bei 1 kHz, AUX	60 dB
Kopfhörerpegel und Ausgangsimpedanz	400 mV/330Ω
Lautsprecher-Ausgangsimpedanz	
MAIN oder REMOTE	4 ~ 16Ω
MAIN und REMOTE	8 ~ 16Ω

ALLGEMEINE DATEN

Leistungsaufnahme	600 W
Netzspannung umschaltbar (50 Hz/60 Hz)	
	110V/120V/220V/240V
Abmessungen (B x H x T)	450 x 142 x 360 mm
Gewicht	12 kg

CARACTERISTIQUES TECHIQUES Sujet à changement sans préavis.

[DIN 45 500]

PARTIE AMPLIFICATEUR

Puissance (continue) à 20 Hz ~ 20 kHz pour l'ensemble des canaux excités	2 x 65 W (4Ω) 2 x 60 W (8Ω)
Puissance (continue) à 40 Hz ~ 16 kHz pour l'ensemble des canaux excités	2 x 65 W (4Ω) 2 x 60 W (8Ω)
Puissance (continue) à 1 kHz pour l'ensemble des canaux excités	2 x 80 W (4Ω), 2 x 60 W (8Ω)
Largeur de bande de puissance pour l'ensemble des canaux excités, -3 dB	THD 0,03% 5 Hz ~ 40 kHz (4Ω) THD 0,02% 5 Hz ~ 45 kHz (8Ω)
Distorsion harmonique totale pour la puissance mesurée à 20 Hz ~ 20 kHz	0,03% (4Ω), 0,02% (8Ω)
pour la puissance mesurée à 40 Hz ~ 16 kHz	0,03% (4Ω), 0,02% (8Ω)
pour la puissance mesurée à 1 kHz	0,02% (4Ω), 8Ω
pour la demi-puissance mesurée à 1 kHz	0,008% (8Ω)
pour une puissance mesurée de -26 dB, 1 kHz	0,003% (8Ω)
pour une puissance mesurée de 50 mW, 1 kHz	0,05% (4Ω) 0,08% (4Ω)
Distorsion d'intermodulation pour la puissance mesurée à 250 Hz: 8 kHz = 4:1, 4Ω	0,03%
pour la puissance mesurée à 60 Hz: 7 kHz = 4:1, 8Ω	0,02%
Tension résiduelle de bruit	0,3 mV (0,3 mV: IHF, A)
Facteur d'amortissement	20 (4Ω), 40 (8Ω)
Sensibilité & impédance d'entrée	
PHONO MM	2,5 mV/47 kΩ
MC	170µV/47kΩ
TUNER, AUX	200 mV/47 kΩ
TAPE 1, REC/PLAY	200 mV/47 kΩ
TAPE 2	200 mV/47 kΩ
Voltage d'entrée maximum (PHONO, 1 kHz, RMS)	
MM	150 mV
MC	8 mV

Rapport signal/bruit pour la puissance nominale, 4Ω	
PHONO MM	75 dB (88 dB, IHF, A)
MC	65 dB (70 dB, IHF, A)
TUNER, AUX	92 dB (IHF, A: 108 dB)
pour une sortie de -26 dB, 4Ω	
PHONO MM	67 dB
MC	65 dB
TUNER, AUX	68 dB
pour une sortie de 50mW, 4Ω	
PHONO MM	64 dB
MC	62 dB
TUNER, AUX	65 dB
Réponse de fréquence	
PHONO MM	Courbe standard R1AA
	30 Hz ~ 15 kHz, ±0,2 dB
	0,5 Hz ~ 80 kHz, -1 dB
	20 Hz ~ 20 kHz, +0
	-0,1 dB
Réglage de la tonalité	
BASS (graves)	50 Hz, +7,5 dB ~ -7,5 dB
TREBLE (aigus)	20 kHz, +7,5 dB ~ -7,5 dB
Filtre subsonique	30 Hz, -6 dB/oct.
Filtre Aigu (HIGH)	7 kHz, -6 dB/oct.
Correction physiologique (volume à -30 dB)	50 Hz, +7,5 dB
Tension de sortie & impédance	REC OUT
	200 mV
	REC/PLAY
	25 mV/82 kΩ
Equilibrage de canaux (250 Hz ~ 6300 Hz), AUX	±1,0 dB
Séparation des canaux, AUX 1 kHz	60 dB
Niveau de casque et impédance de sortie	400 mV/330Ω
Impédance de charge	PRINCIPALE ou ELOIGNEE 4 ~ 16Ω
	PRINCIPALE + ELOIGNEE 8 ~ 16Ω

GENERALITES

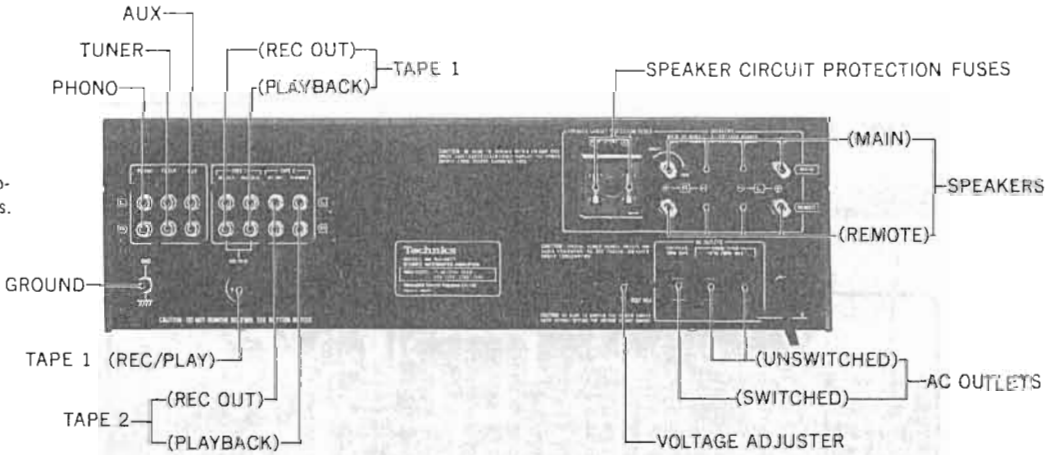
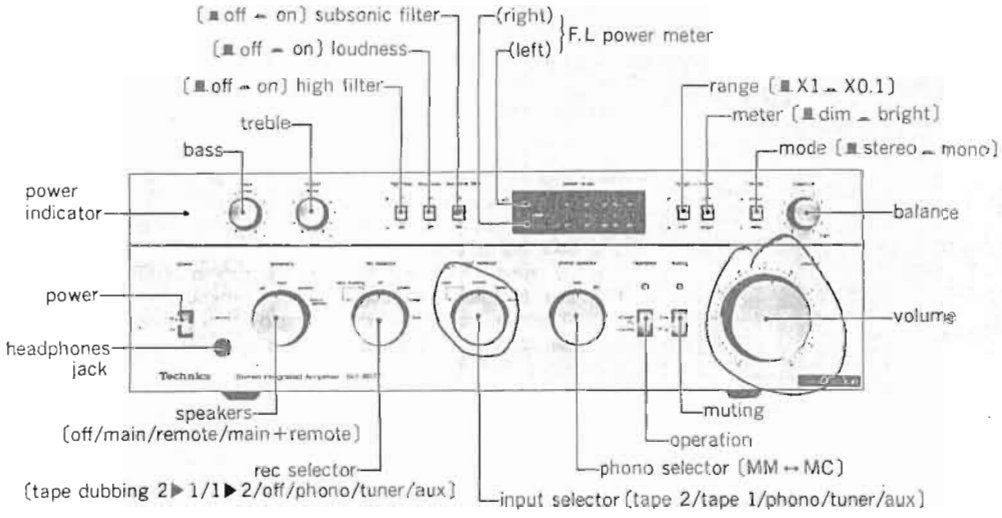
Consommation	600 W
Alimentation (50 Hz/60 Hz)	110V/120V/220V/240V
Dimensions (L x H x Pr)	450 x 142 x 360 mm
Poids	12 kg

■ CONTENTS

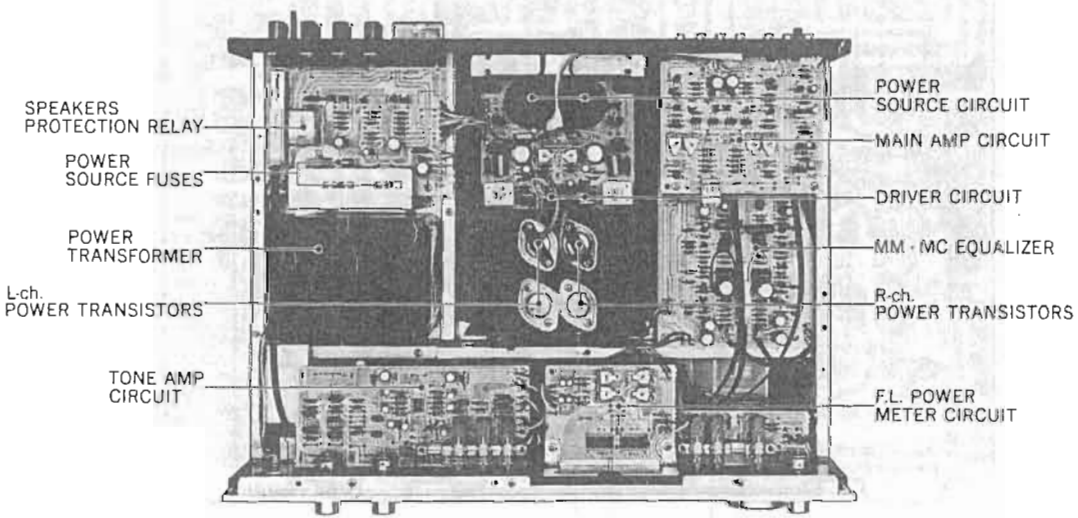
LOCATION OF CONTROLS ..... 3  
 FL POWER METER, CONTROL SWITCH AND TONE  
 AMPLIFIER PRINTED CIRCUIT BOARDS ..... 4  
 MAIN AMPLIFIER PRINTED CIRCUIT BOARD ..... 5  
 TERMINAL GUIDE OF TRANSISTOR AND IC ..... 5  
 POWER SUPPLY, POWER AMPLIFIER AND SPEAKER  
 PROTECTION CIRCUIT BOARDS ..... 6 ~ 7  
 MM/MC EQUALIZER PRINTED CIRCUIT BOARD ..... 8  
 BLOCK DIAGRAM OF INTEGRATED CIRCUITS ..... 8  
 SCHEMATIC DIAGRAM ..... 9 ~ 12  
 PRECAUTIONS FOR REPAIR ..... 13  
 ALIGNMENT INSTRUCTIONS (ENGLISH) ..... 14

ALIGNMENT POINTS ..... 15  
 ANWEISUNGEN FÜR ABGLEICHUNG (DEUTSCH) ..... 16  
 INSTRUCTIONS D'ALIGNMENT (FRANÇAIS) ..... 17  
 BLOCK DIAGRAM ..... 18  
 EXPLODED VIEWS ..... 19 ~ 20  
 REPLACEMENT PARTS LIST (Cabinet and Chassis Parts) ..... 21  
 REPLACEMENT PARTS LIST (Electric Parts) ..... 21 ~ 23  
 REPLACEMENT PARTS LIST (Accessories and Packings) ..... 23  
 CHANGE OF PARTS LIST ..... 23 ~ 24  
 PACKINGS ..... 24  
 ACCESSORIES ..... 24

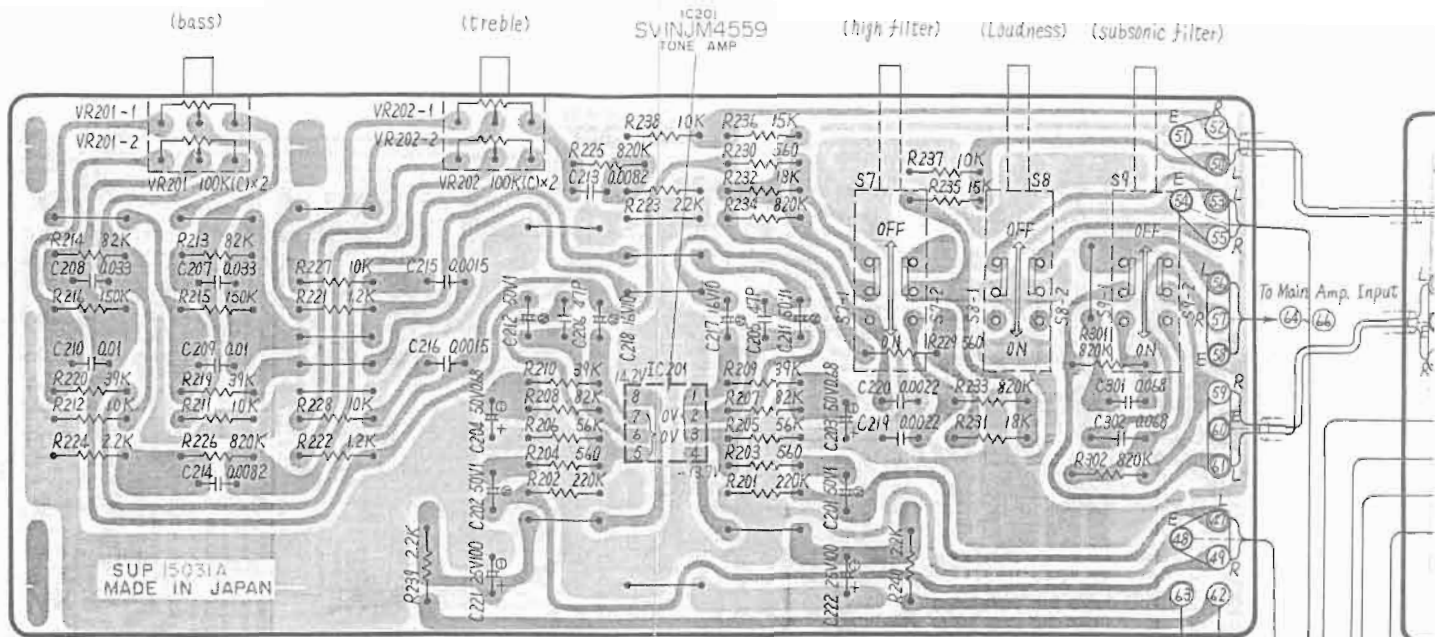
■ LOCATION OF CONTROLS



• The products for other destinations except (XA) and (X) are not equipped with AC outlets.



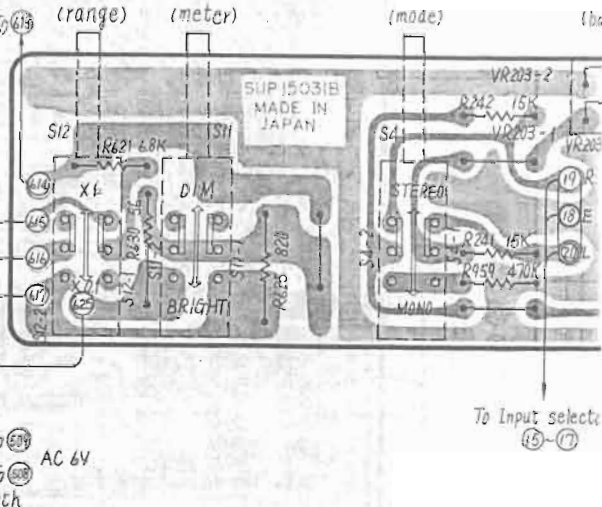
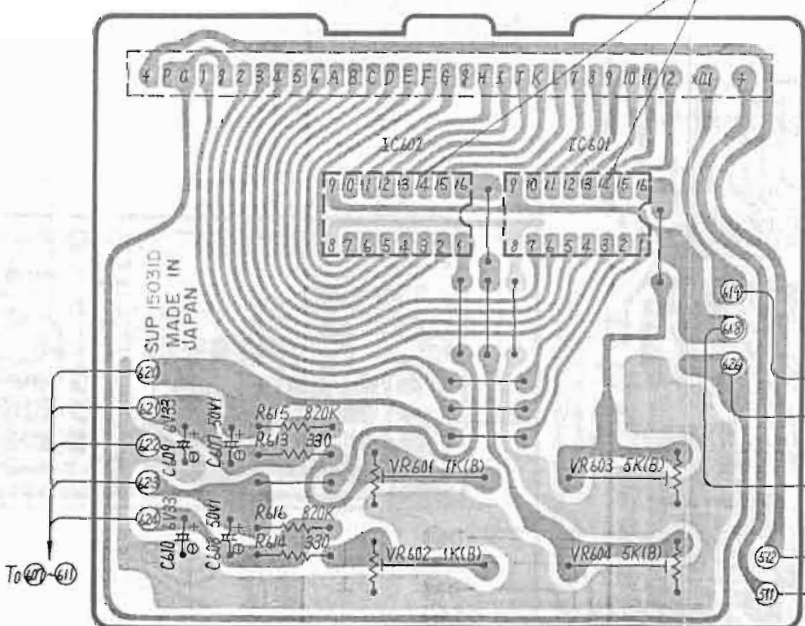
## FL POWER METER, CONTROL SWITCH AND TONE AMPLIFIER PRINTED CIRCUIT BOARD



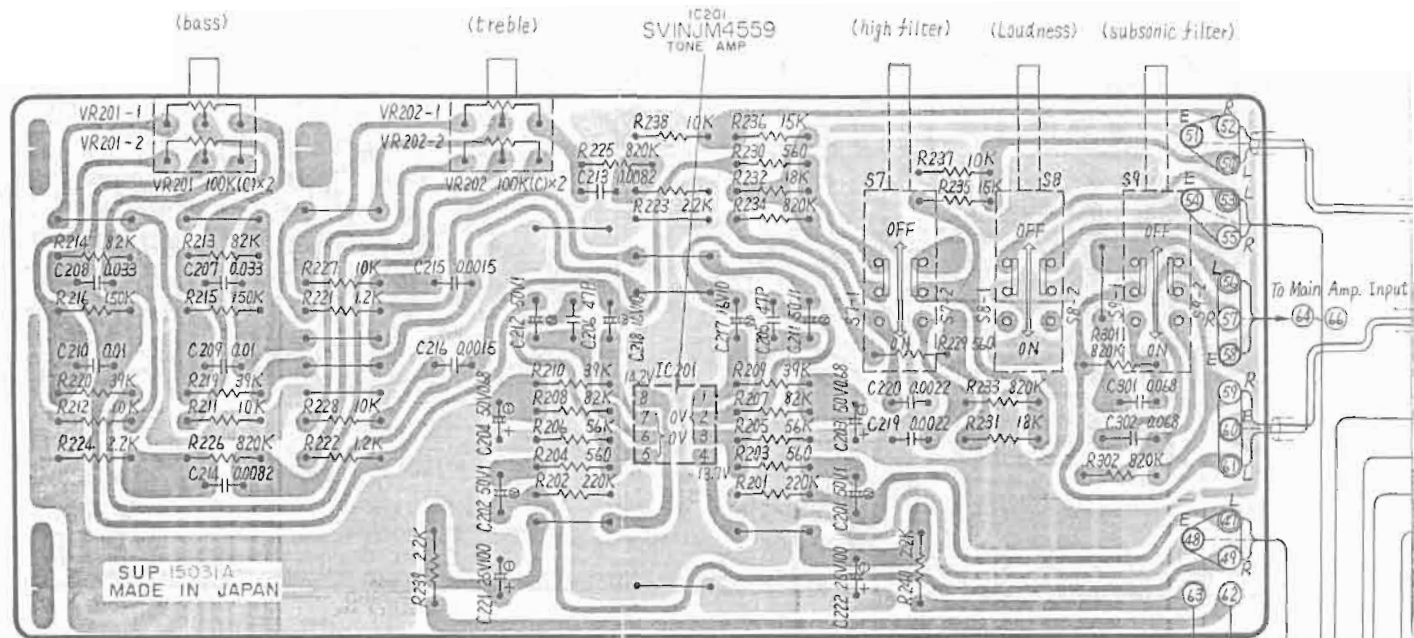
IC601				IC602			
1	1.5V	9	18.5V	1	1.5V	9	18.5V
2	0V	10	-0.12V	2	0V	10	-0.14V
3	-0.01V	11	-0.14V	3	0V	11	-0.15V
4	-0.1V	12	-0.15V	4	-0.1V	12	-0.15V
5	-0.13V	13	-0.16V	5	-0.13V	13	-0.16V
6	-0.12V	14	-0.13V	6	-0.13V	14	-0.15V
7	-0.13V	15	-0.14V	7	-0.13V	15	-0.14V
8	0V	16	4.3V	8	0V	16	4.3V

IC601,602 SV1BA658 COMPARATOR

FL POWER METER



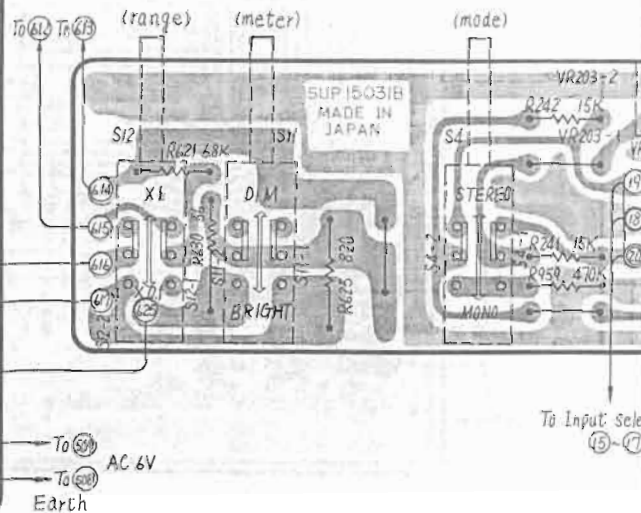
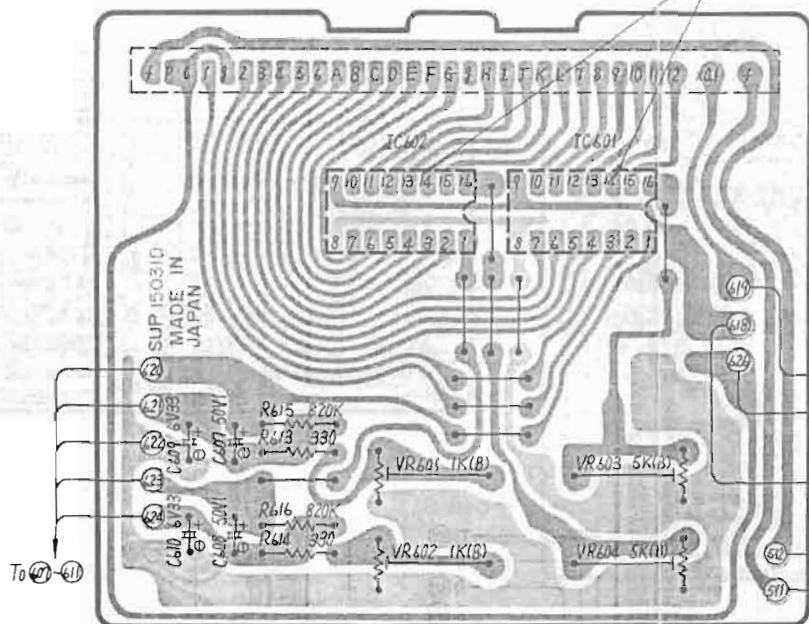
## FL POWER METER, CONTROL SWITCH AND TONE AMPLIFIER PRINTED CIRCUIT BOARD



IC601			IC602		
1	1.5V	9 18.5V	1	1.5V	9 18.5V
2	0V	10 -0.12V	2	0V	10 -0.14V
3	-0.01V	11 -0.14V	3	0V	11 -0.15V
4	-0.1V	12 -0.15V	4	-0.1V	12 -0.15V
5	-0.13V	13 -0.16V	5	-0.13V	13 -0.16V
6	-0.12V	14 -0.15V	6	-0.13V	14 -0.15V
7	-0.13V	15 -0.14V	7	-0.13V	15 -0.14V
8	0V	16 4.3V	8	0V	16 4.3V

### FL POWER METER

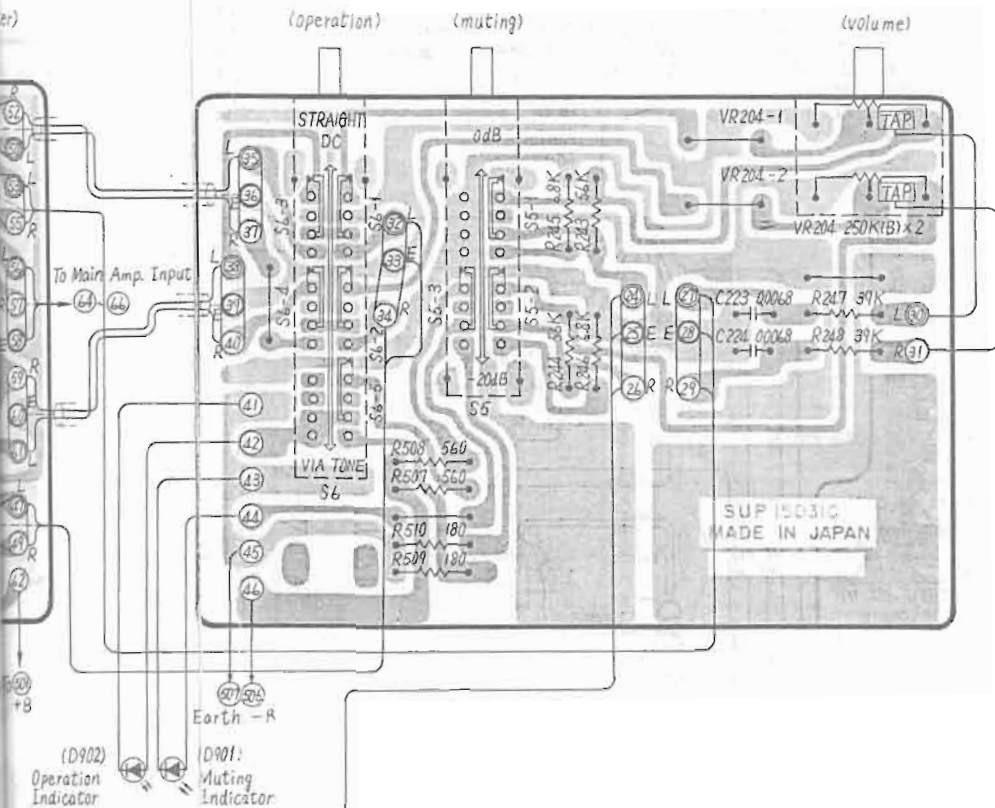
### IC601,602 SVIBA658 COMPARATOR



CIRCUIT BOARDS

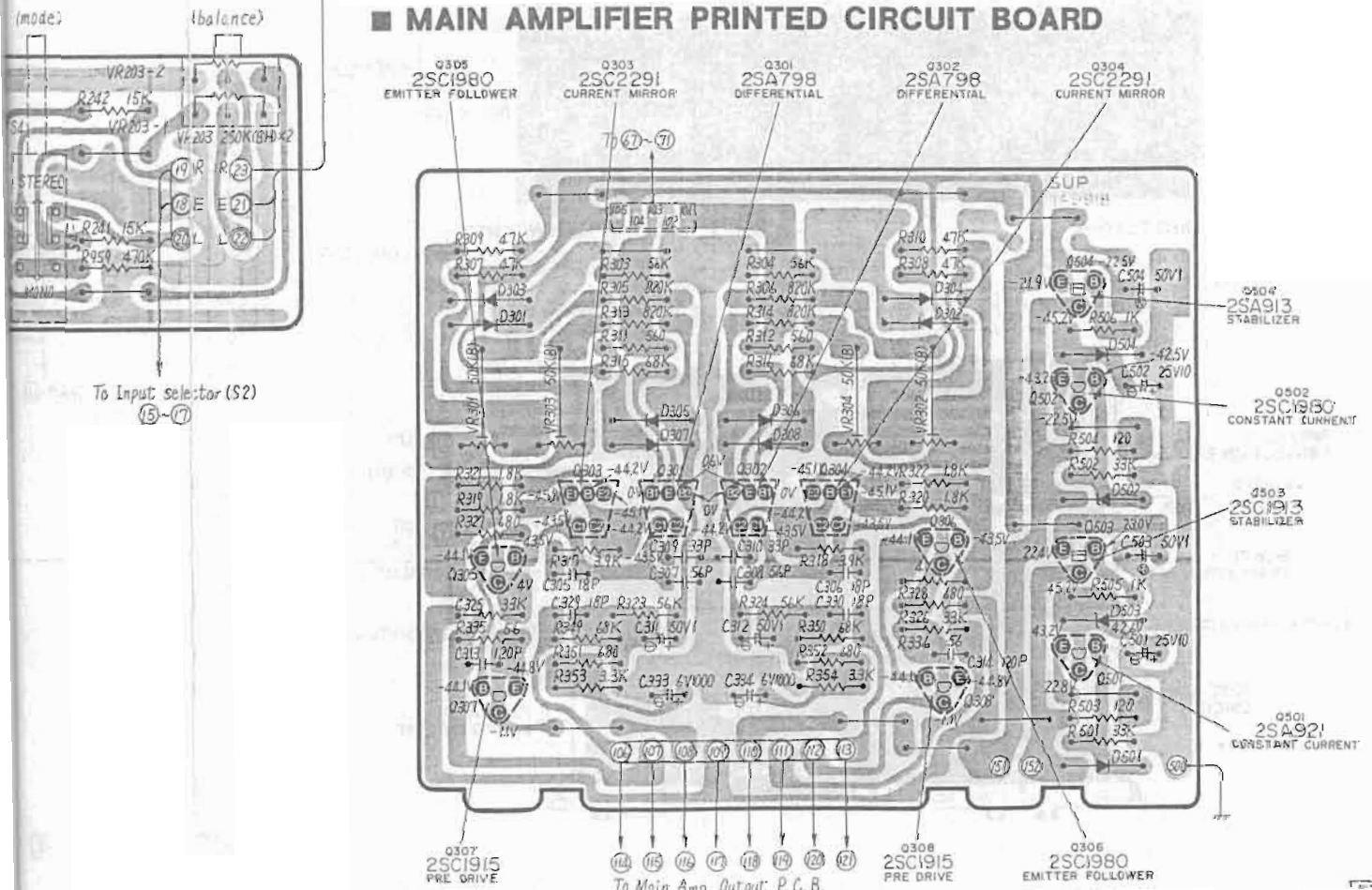
Earth (Ground) Lines

■ TERMINAL GUIDE OF TRANSISTOR AND IC

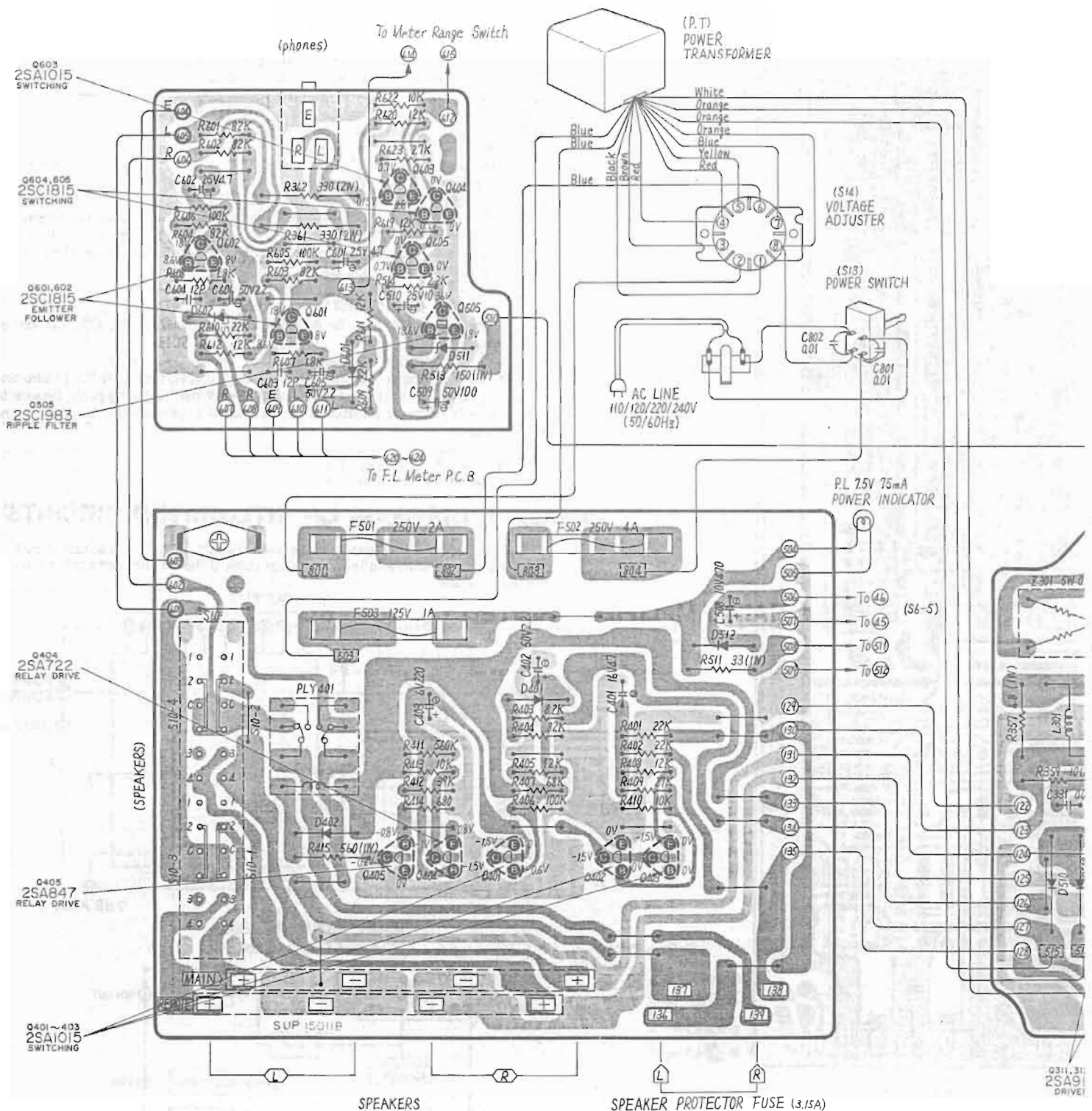


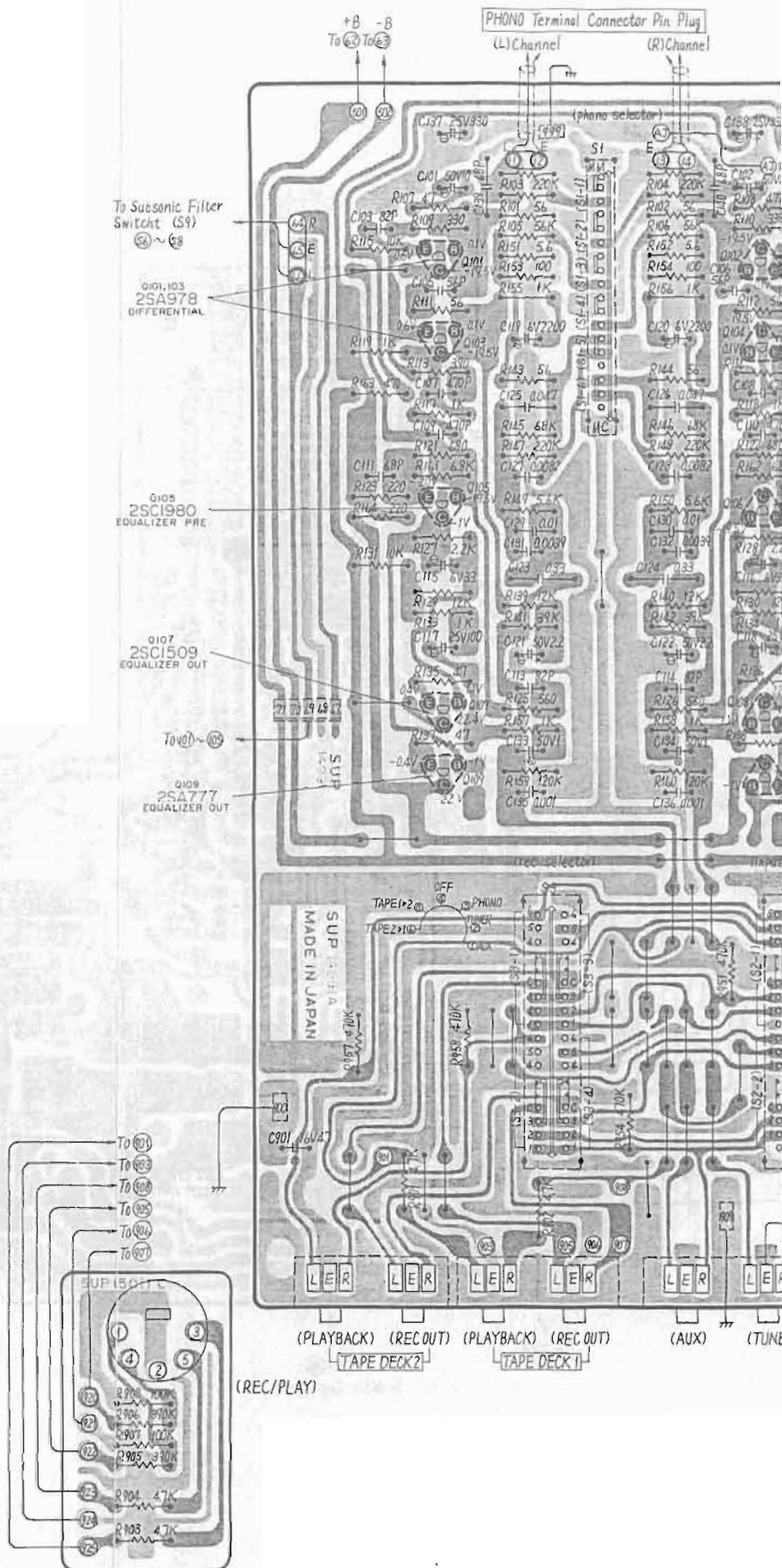
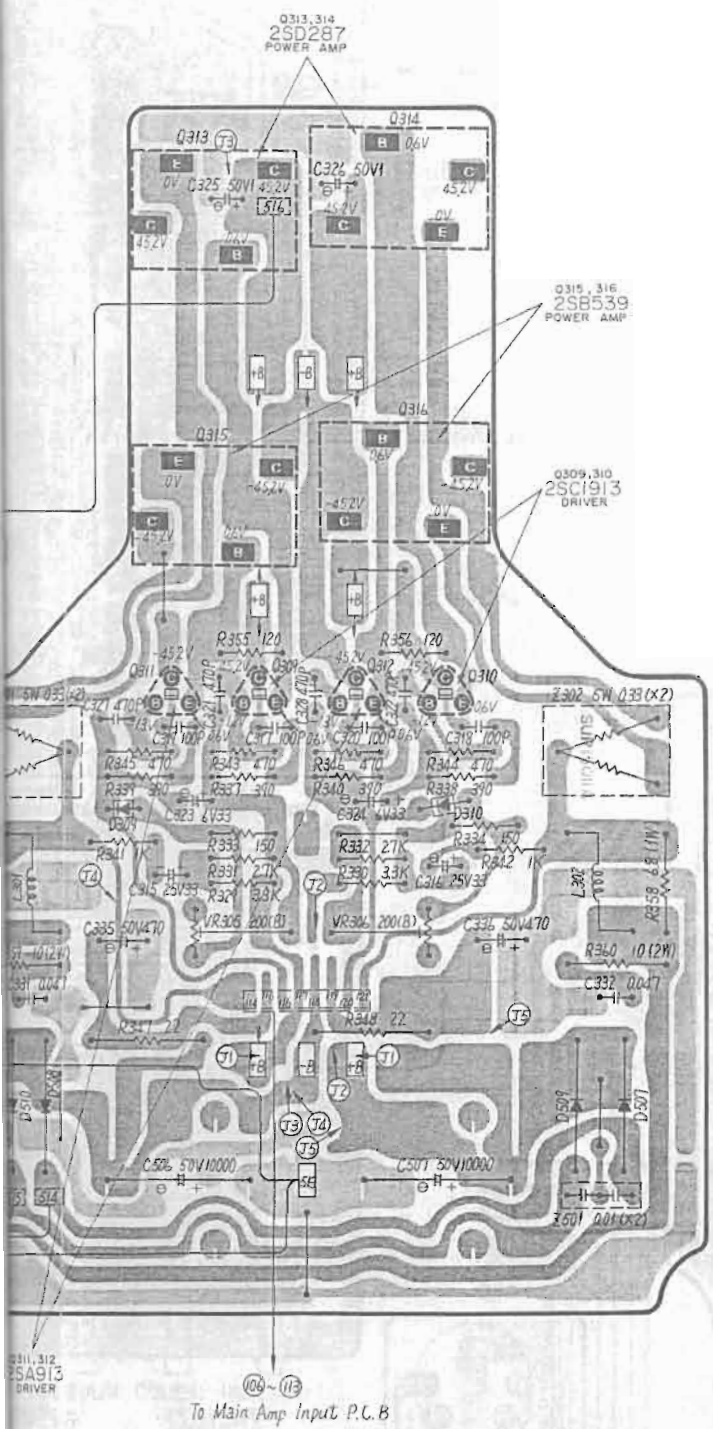
<p>2SA798</p>	<p>2SC2291</p>
<p>2SB645</p> <p>2SD665</p>	<p>2SA913, 2SC1913</p> <p>2SC1983</p>
<p>2SA722, 2SA777</p> <p>2SA1015, 2SA921</p> <p>2SC1509, 2SC1815</p> <p>2SC1980</p>	<p>2SA847, 2SA978</p> <p>2SC1915</p>
<p>SV1BA658</p>	<p>SV1N JM4559DS</p>

■ MAIN AMPLIFIER PRINTED CIRCUIT BOARD



## POWER SUPPLY, POWER AMPLIFIER AND SPEAKER PROTECTION CIRCUIT BOARDS





Q311, Q312  
2SA913  
DRIVER

To Main Amp Input P.C.B

To Subsonic Filter  
Switch (S9)

Q101, Q103  
2SA978  
DIFFERENTIAL

Q105  
2SC1980  
EQUALIZER PRE

Q107  
2SC1509  
EQUALIZER OUT

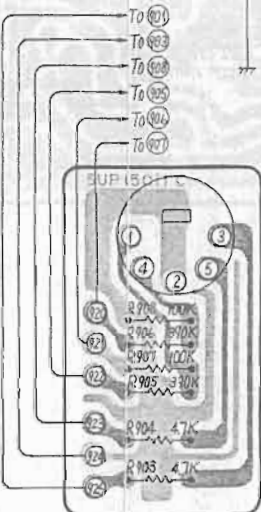
Q109  
2SA777  
EQUALIZER OUT

(PLAYBACK) (REC OUT) (PLAYBACK) (REC OUT) (AUX) (TUNE)

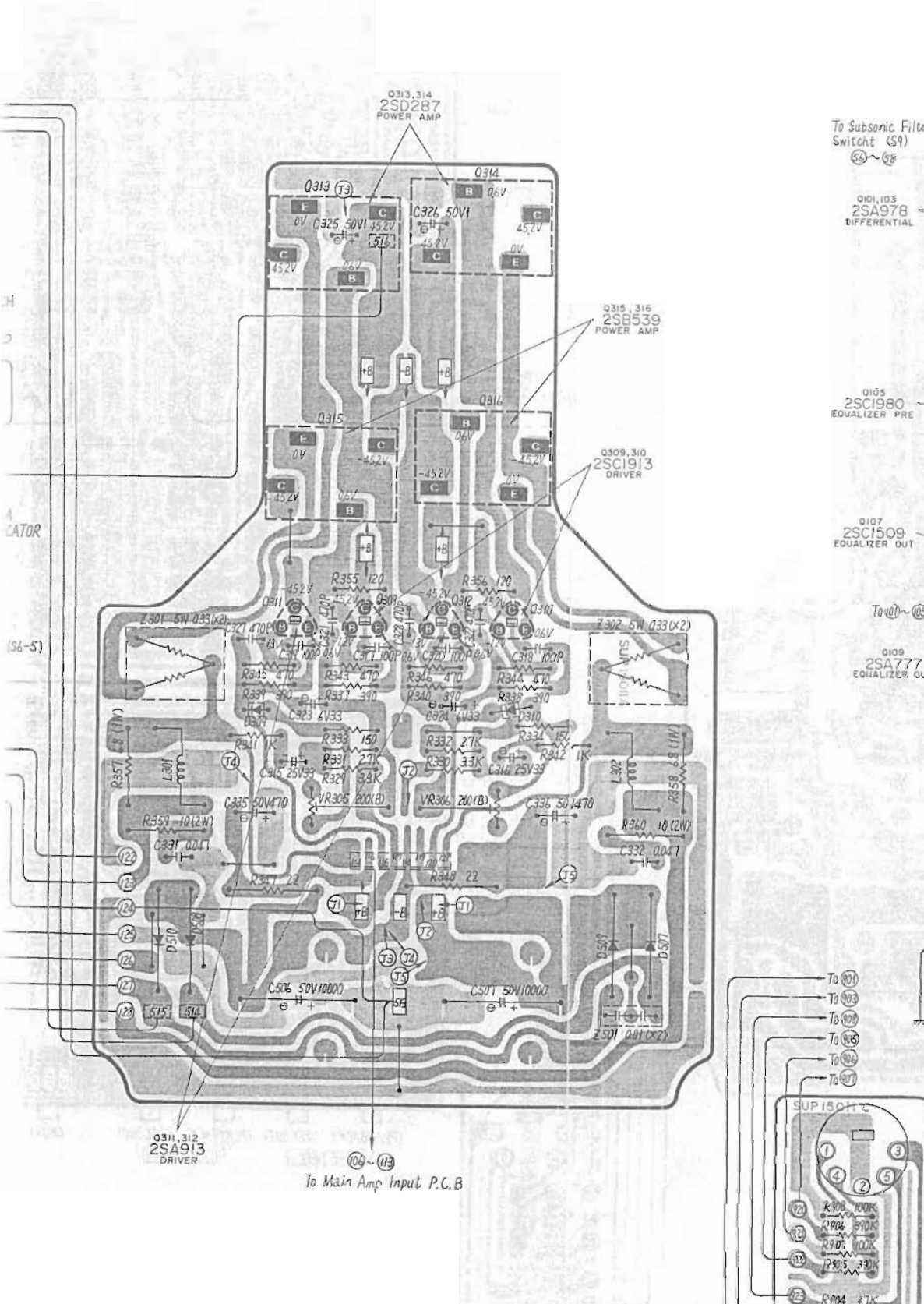
(REC/PLAY)

LER LER LER LER LER LER

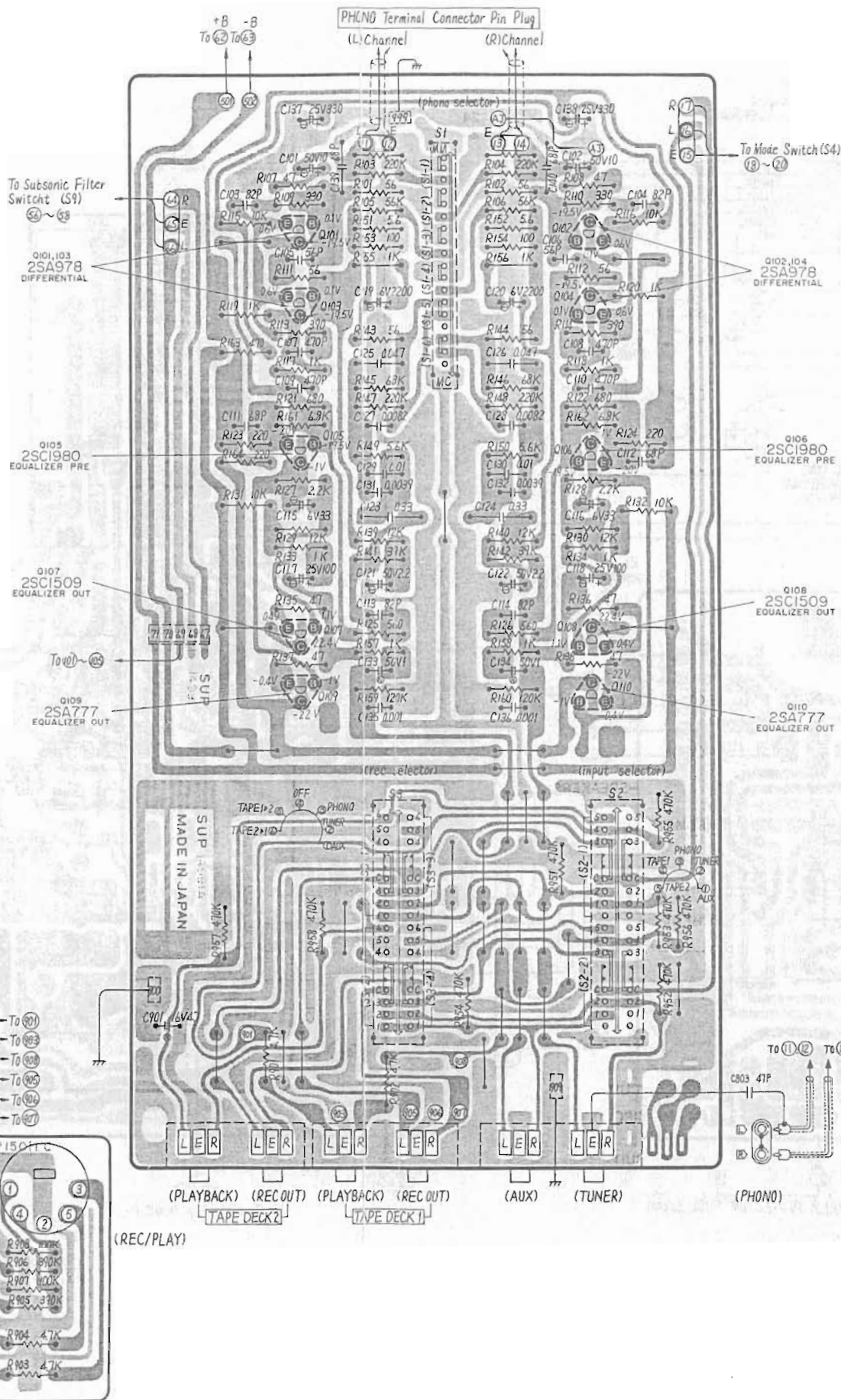
TAPE DECK? TAPE DECK?









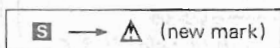


# MM/MC EQUALIZER PRINTED CIRCUIT BOARD



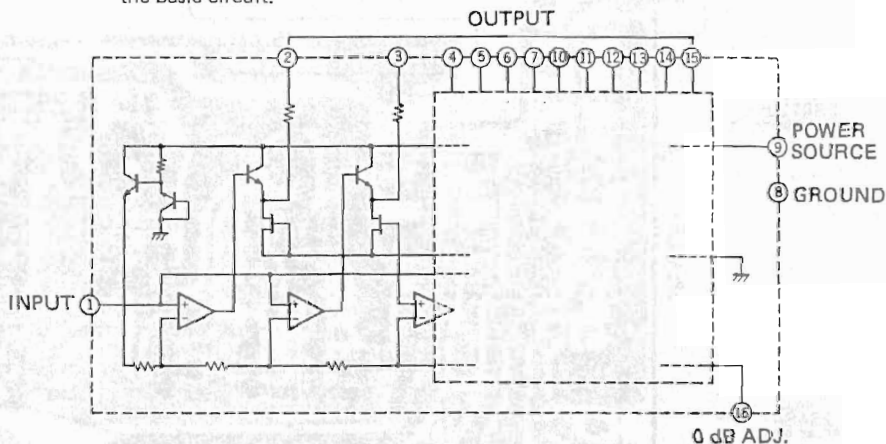
**NOTES**

1. S1-1 ~ S1-6 : Phono selector switch in "MM" position.
2. S2-1, S2-2 : Input selector switch in "phono" position.  
 ① aux ← ② tuner ← ③ phono ← ④ tape 1 ←  
 ⑤ tape 2
3. S3-1 ~ S3-4 : Rec selector switch in "phono" position.  
 ① aux ← ② tuner ← ③ phono ← ④ off  
 ⑤ tape dubbing | ▶ 2 ← ⑥ tape dubbing 2 ▶ |
4. S4-1, S4-2 : Mode selector switch in "stereo" position
5. S5-1 ~ S5-3 : Muting switch in "0 dB" position.
6. S6-1 ~ S6-5 : Operation switch in "straight DC" position.
7. S7-1, S7-2 : High filter switch in "off" position.
8. S8-1, S8-2 : Loudness switch in "off" position.
9. S9-1, S9-2 : Subsonic filter switch in "off" position.
10. S10-1 ~ S10-4 : Speakers switch in "main" position.
11. S11 : Meter switch in "dim" position.
12. S12 : Range switch in "X1" position.
13. S13 : Power switch in "on" position.
14. S14 : Voltage adjuster switch in "240V" position.
15. Indicated voltage values re the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
16.  Phono MM signal lines of left channel.  
 Via tone signal lines of left channel.
17. This schematic diagram may be modified at any time with the development of new technology.
18. To represent transistors, Q is used instead of TR (Ex TR1 → Q1)
19. The  mark has been used for the indication of specified parts for an assurance of safety, but it has been changed to  mark. When replacing parts, be sure to use parts with correct numbers with reference to the circuit drawing or the repair parts list.

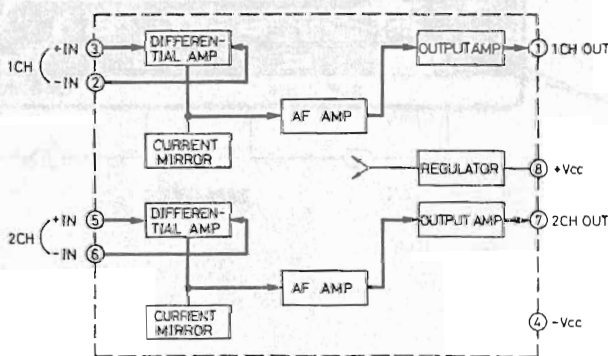


**■ BLOCK DIAGRAM OF INTEGRATED CIRCUITS**

- \* This is the basic block diagram of the inside circuit of IC. In an actual circuit, there may be sometimes idle terminals or some different functions other than the basic circuit.



**IC601, 602 (SVIBA658)  
Level Comparator**

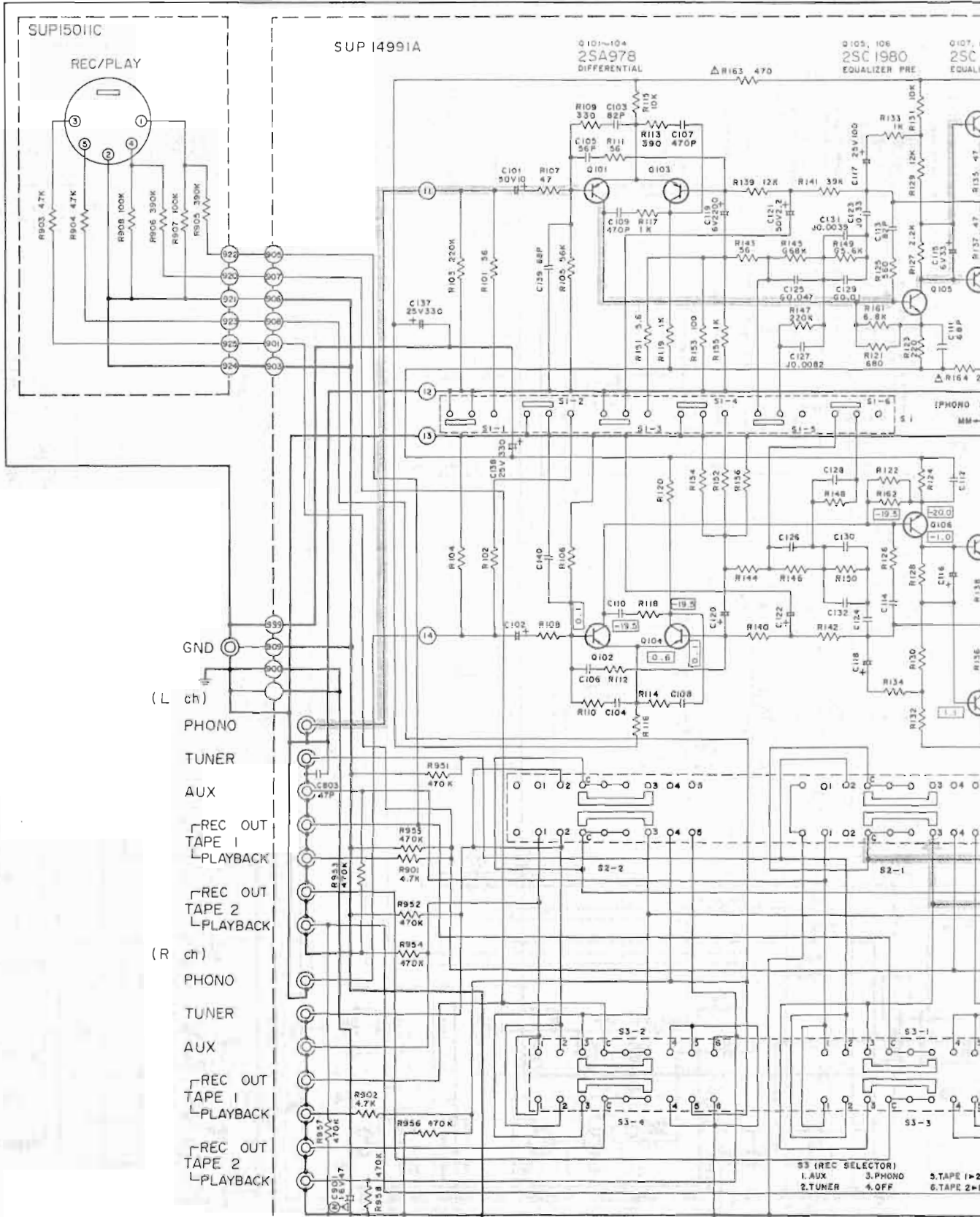


**IC201 (SVINJM4559DS)  
Tone Amplifier**

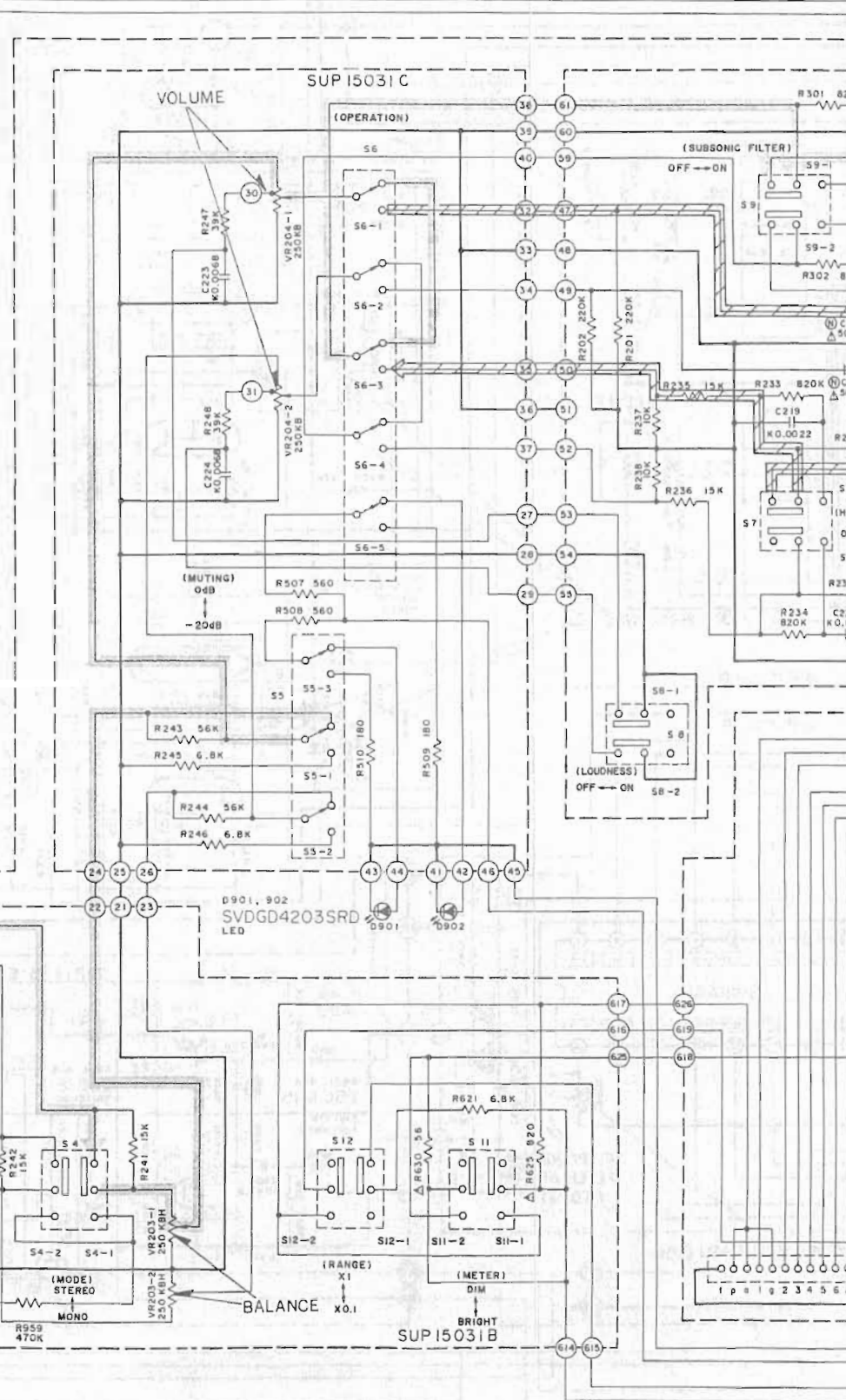
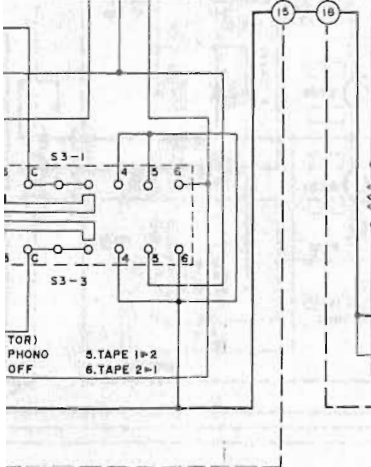
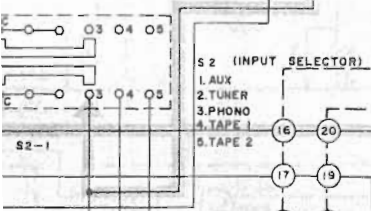
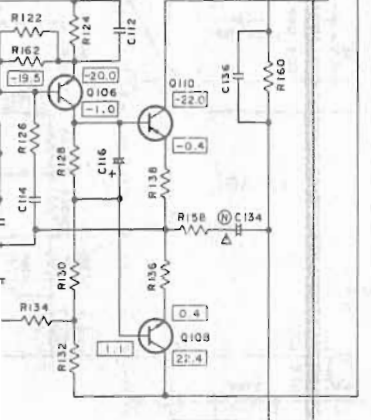
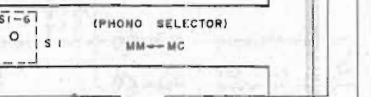
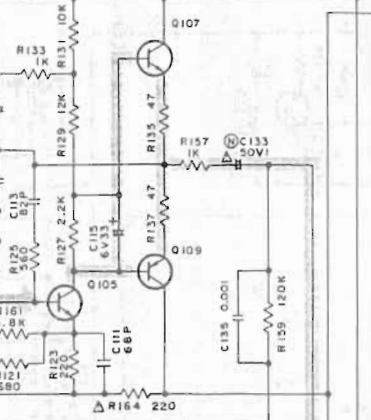
# SCHEMATIC DIAGRAM

1 2 3 4 5

A  
B  
C  
D  
E  
F



Q106, 108 2SC1980 EQUALIZER PRE  
 Q107, 109 2SC1509 EQUALIZER OUT  
 Q109, 110 2SA777 EQUALIZER OUT



VOLUME

SUP 15031 C

(OPERATION)

(SUBSONIC FILTER)  
OFF → ON

(MUTING)  
0dB  
-20dB

(LOUDNESS)  
OFF → ON

D901, 902  
SVDGD4203SRD  
LED

BALANCE

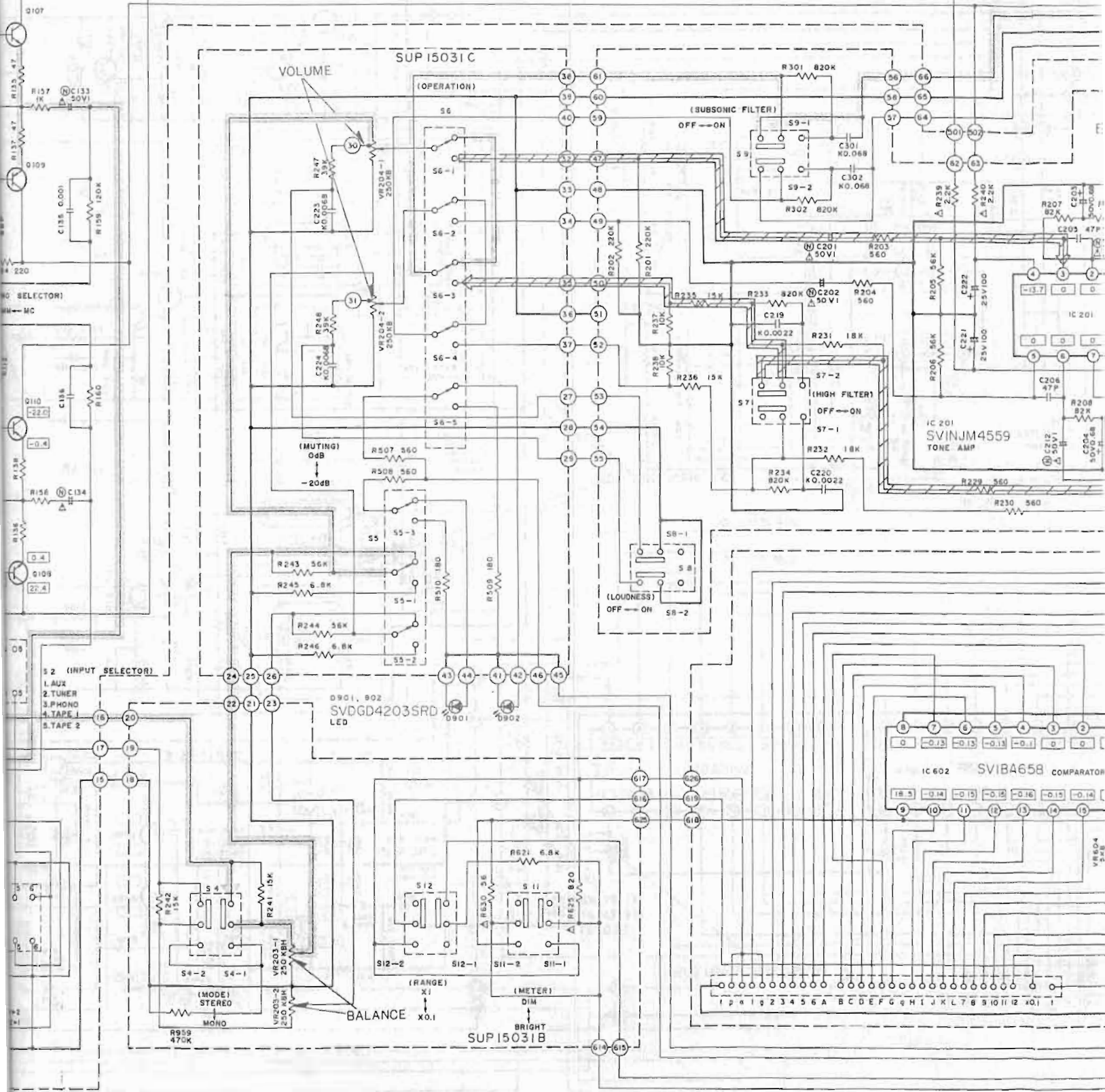
SUP 15031 B

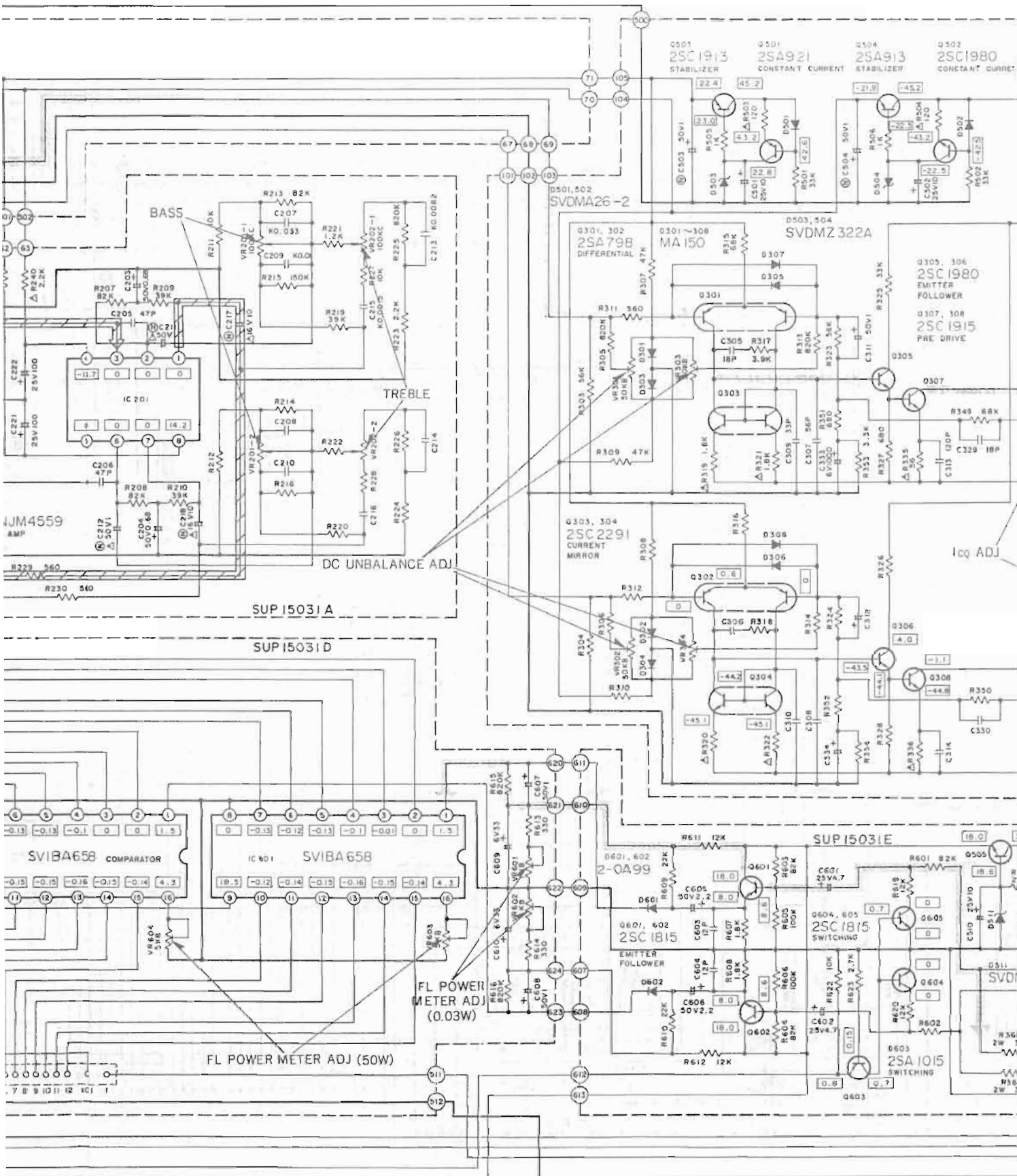
(RANGE)  
X1  
X0.1

(METER)  
DIM  
BRIGHT

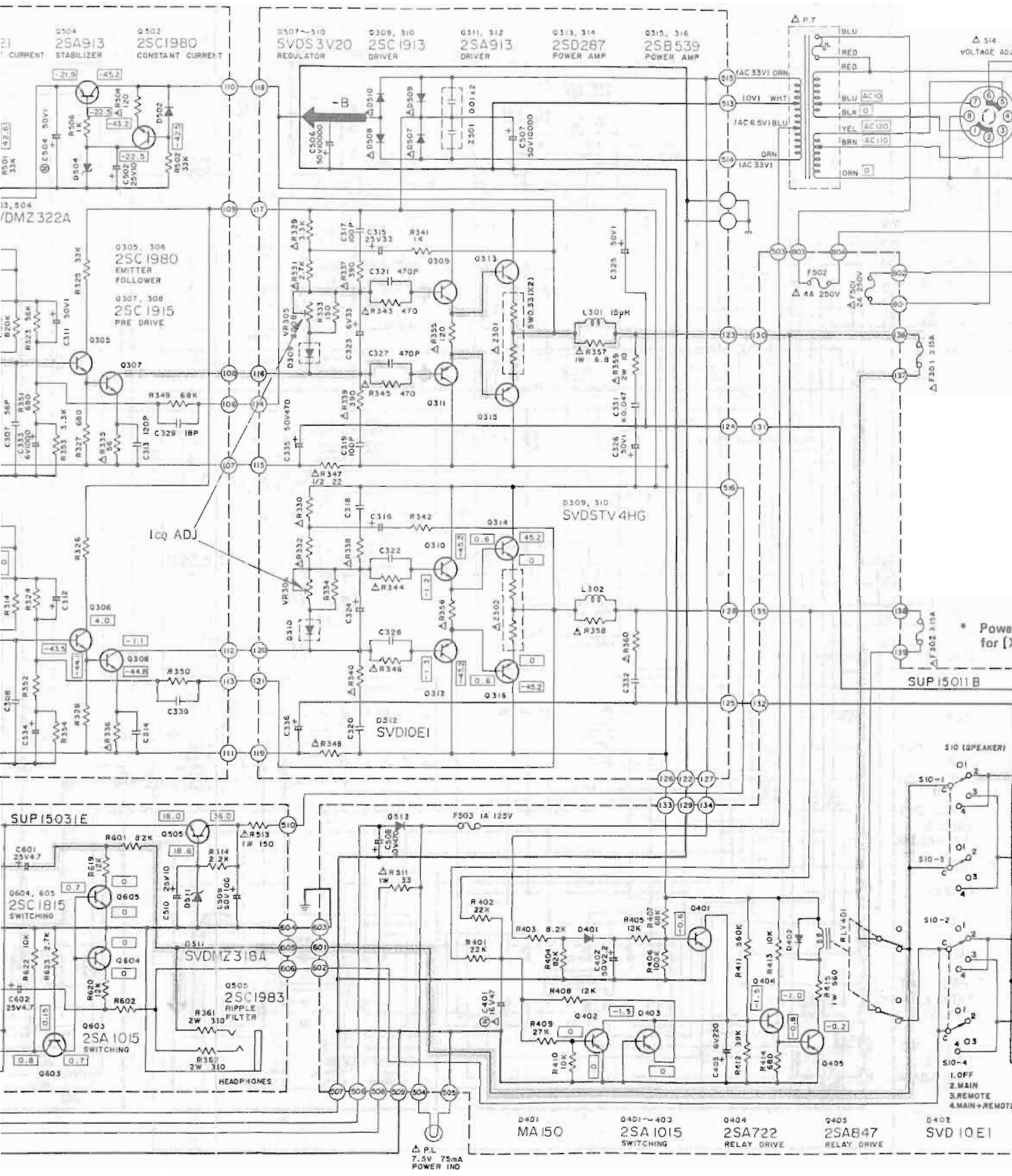
07, 108  
SC 1509  
BALIZER OUT

0109, 110  
2SA777  
EQUALIZER OUT



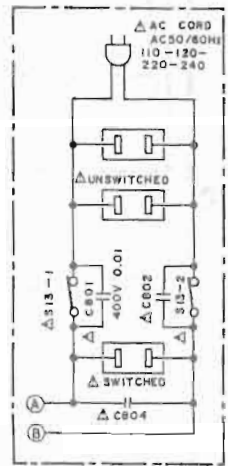
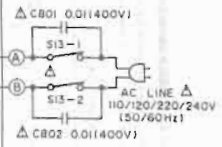
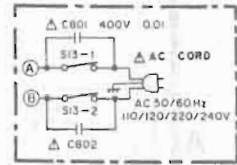


\* Power supply circuitry of products for [XAL] only

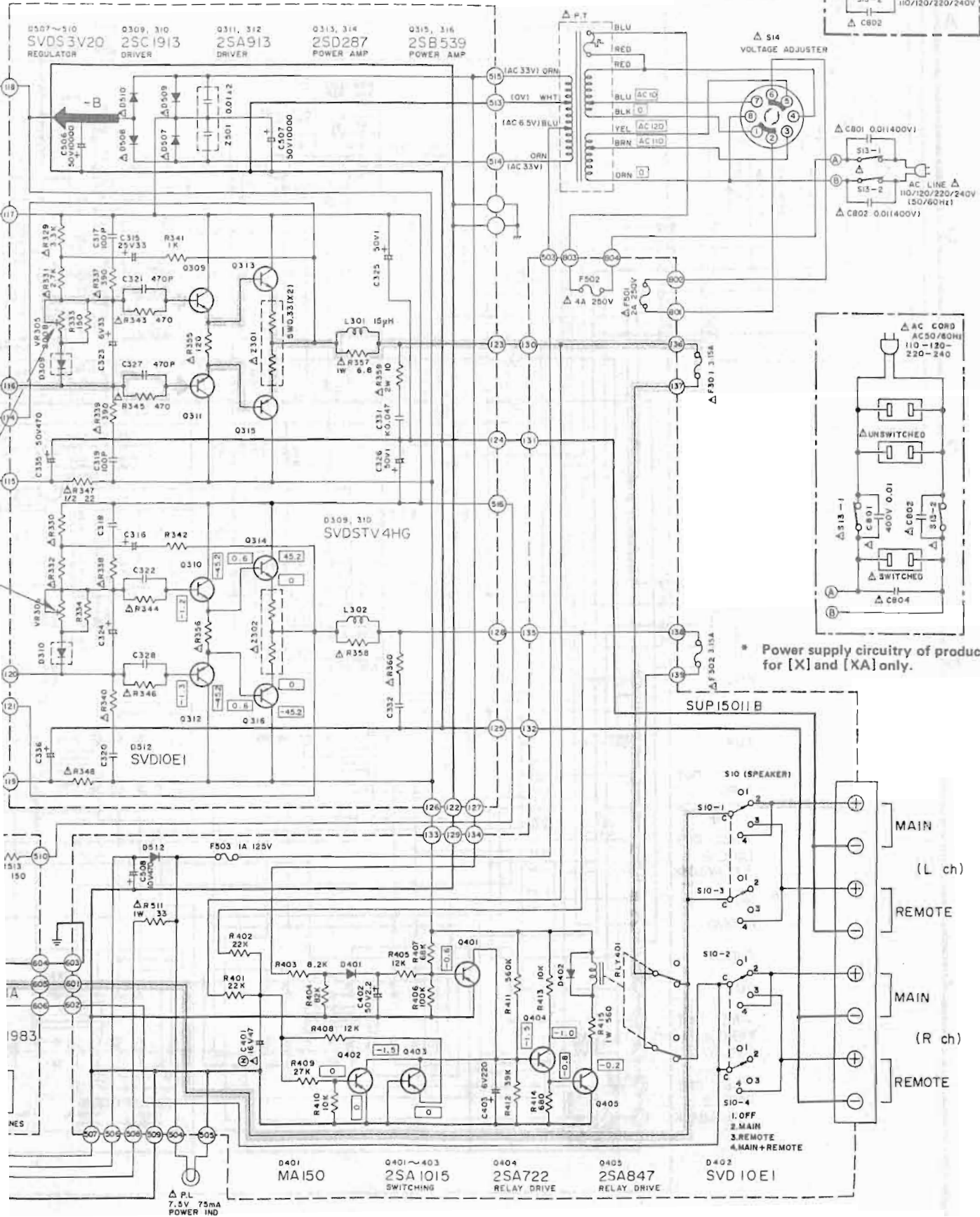




\* Power supply circuitry of products for [XAL] only.

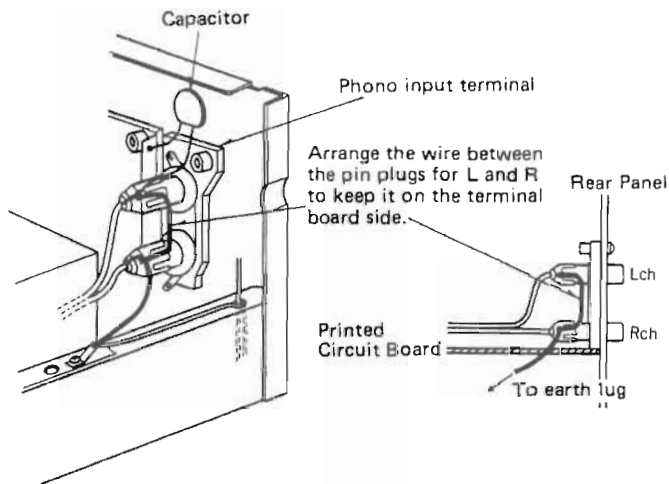


\* Power supply circuitry of products for [X] and [XA] only.

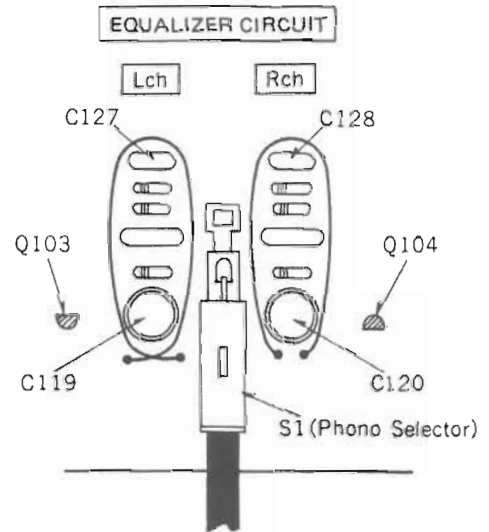


## ■ PRECAUTIONS FOR REPAIR

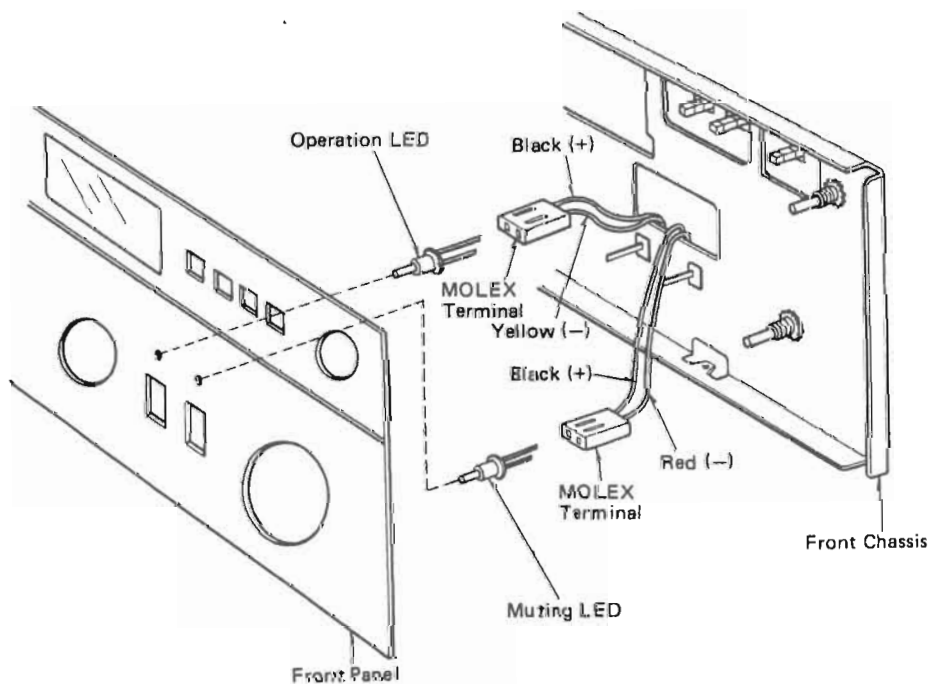
1. Turn off the power supply beforehand, and shortcircuit between the poles of electrolytic condenser  $10000\mu\text{F}$  with a resistance (about  $10\Omega$ ,  $3\text{W}$ ) in order to discharge the voltage. When replacing the power transistor, 2SD665 and 2SB645 used must be the same in hFE rank.
2. The S/N of the equalizer circuit has a delicate influence on the wiring position. After repair of this circuit, make the wiring as shown in Fig. 1 and Fig. 2. Hum level can be reduced by this way of wiring.
3. When inserting the lead wires (MOLEX terminal) for operation and for muting into LED's (D901, 902), pay attention to the polarity. (Fig. 3)



[Fig. 1]



[Fig. 2]



[Fig. 3]



D901, 902 (SVDGD4203SRD)

Operation ... ⊕ Black, ⊖ Yellow

Muting ..... ⊕ Black, ⊖ Red

1. Adjustment of unbalanced DC voltage and I<sub>ca</sub> (idling current of power TR)

• Conditions of the set, and equipment used

- 1. Operation switch . . . . . straight DC
- 2. Subsonic filter . . . . . off or on
- 3. Speaker switch . . . . . main
- 4. Sound volume . . . . . 0 (minimum)
- 5. DC voltmeter
- 6. 8-ohm load resistor (used only for unbalanced DC voltage adjustment)

Adjustments	DC voltmeter connections	Adjusting portions	Adjusting procedure
Unbalanced DC voltage	Connect the meter to the speaker terminals for L and R channels in parallel with the resistor.	VR303 (L ch) VR304 (R ch)	(1) Turn off the subsonic filter. (2) Set the meter to "0" with measuring range as small as possible.
Unbalanced DC voltage	Connect the meter to the speaker terminals for L and R channels in parallel with the resistor.	VR301 (L ch) VR302 (R ch)	(1) Turn on the subsonic filter. (2) Set the meter to "0" with measuring range as small as possible.
I <sub>ca</sub> (idling current of power TR)	{ (+) side . . . TP3 } L ch { (-) side . . . TP1 } { (+) side . . . TP4 } R ch { (-) side . . . TP2 }	VR305 (L ch) VR306 (R ch)	Adjust it to about 15mV a few minutes after turning on the power supply.

2. Adjustment of FL power meter

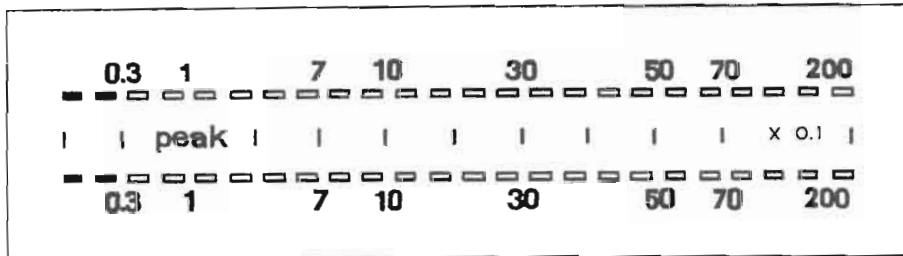
• Conditions of the set, and equipment used

- 1. Input selector . . . . . tuner
- 2. Speaker switch . . . . . main
- 3. Meter range switch . . . . . X0.1 or X1
- 4. Meter brightness switch . . . . . dim or bright
- 5. Sound volume . . . . . 10 (max.)
- 6. Low frequency oscillator
- 7. AC electronic voltmeter
- 8. 8-ohm load resistor

2-1. Adjustment of 0.03W

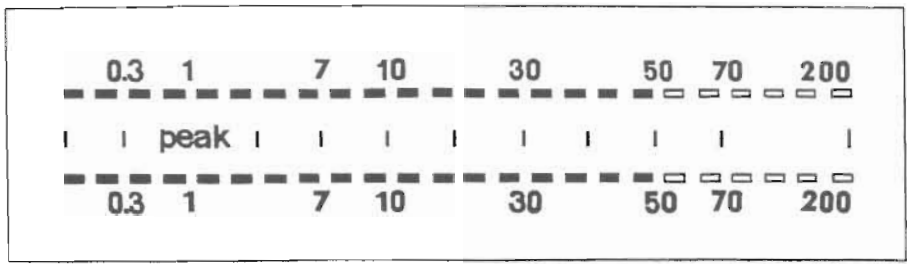
- 1) Connect the low frequency oscillator to the tuner terminals for both channels, and the AC electronic voltmeter to the speaker terminals in parallel with the load resistor.
- 2) Set the meter range switch to "X0.1", and the meter brightness switch to "dim".
- 3) Add 1 kHz signal from the low frequency oscillator, and regulate the input level so that the AC electronic voltmeter indicates 0.75V.
- 4) Adjust VR601 (L ch) while observing the FL power meter until the first segment is about to turn on. (0.3 x 0.1W).
- 5) Similarly, make the adjustment of VR602 (R ch). At that time, if the indication of L ch varies, correct VR601.

**Note:** When the adjustment has been made so that the second segment is about to turn on, the first segment turns on without input.

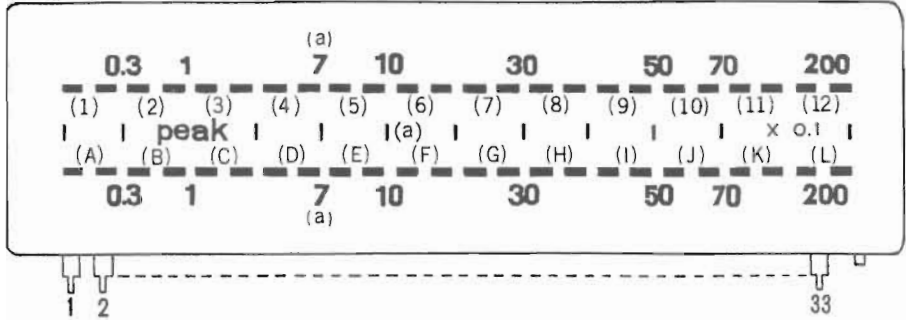


2-2. Adjustment of 50W

- 1) Set the meter range switch to "X1", and the meter brightness switch to "bright".
- 2) Regulate the input level so that the AC electronic voltmeter indicates 19V.
- 3) Make the adjustment in the same way as mentioned in 2-1 by regulating VR603 (L ch) and VR604 (R ch) so that the 9th segment (at 50W position) is about to turn on.
- 4) Next, make the adjustment in 2-1 (0.03W) by regulating the input level.
- 5) Again regulate the input level to make the output 19V, and make sure that the segment at 50W position is on.



• Segment indication pattern

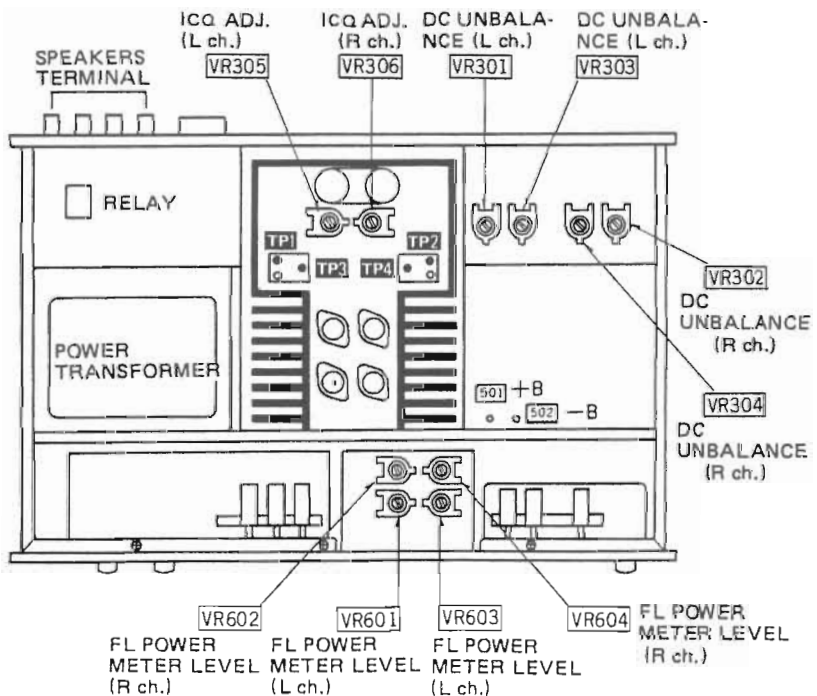


Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Electrode	f	peak	a	1	g	2	3	4	5	6	A	B	C	D	E	F	G

Terminal No.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Electrode	g	H	I	J	K	L	7	8	9	10	11	12		×0.1		f

- Note:** 1. (a) represents the segments for the top and bottom number scales and for central bar scales.  
 2. Each segment consists of two bars.  
 (■ ■ ..... 1 segment)

■ ALIGNMENT POINTS



## 1. Réglage de la tension CC déséquilibrée (Temps mort du transformateur d'alimentation.

### o Conditions de l'appareil et équipement utilisé

1. Commutateur de fonctionnement ..... Straight DC
2. Filtre subsonique ..... Marche ou arrêt
3. Commutateur du haut-parleur ..... Principal
4. Volume du son ..... 0 (minimum)
5. Voltmètre CC
6. Résistance de 8 ohms de charge (utilisée seulement pour le réglage de la tension CC déséquilibrée)

Réglages	Branchements du voltmètre CC	Sections à régler	Procédé de réglage
Tension CC déséquilibrée	Brancher le compteur aux bornes des canaux D et G du haut-parleur en parallèle avec la résistance.	VR303 (Canal G) VR304 (Canal D)	(1) Couper le filtre subsonique (2) Régler le compteur sur "0" avec une gamme de mesure aussi petite que possible.
Tension CC déséquilibrée	Brancher le compteur aux bornes des canaux G et D du haut-parleur, en parallèle avec la résistance.	VR301 (Canal G) VR302 (Canal D)	(1) Couper le filtre subsonique (2) Régler le compteur sur "0" avec une gamme de mesure aussi petite que possible.
I <sub>CC</sub> (Courant de temps mort du transformateur d'alimentation)	Côté (+) ..... TP3 } Canal G Côté (-) ..... TP1 } Côté (+) ..... TP4 } Canal D Côté (-) ..... TP2 }	VR305 (Canal G) VR306 (Canal D)	Le régler à environ 15mV quelques minutes après avoir branché l'alimentation.

## 2. Réglage du compteur d'alimentation FL

### o Conditions de l'appareil et équipement utilisé

1. Sélecteur d'entrée ..... Commande d'accord
2. Commutateur de l'enceinte ..... Principal
3. Commutateur de la gamme du compteur ..... x0,1 ou x 1
4. Commutateur de luminosité du compteur ..... faible ou clair
5. Volume du son ..... 10 maxi.
6. Oscillateur de basse fréquence
7. Voltmètre électronique CA
8. Résistance de 8 ohms de charge

### 2.1 Réglage de 0,03W

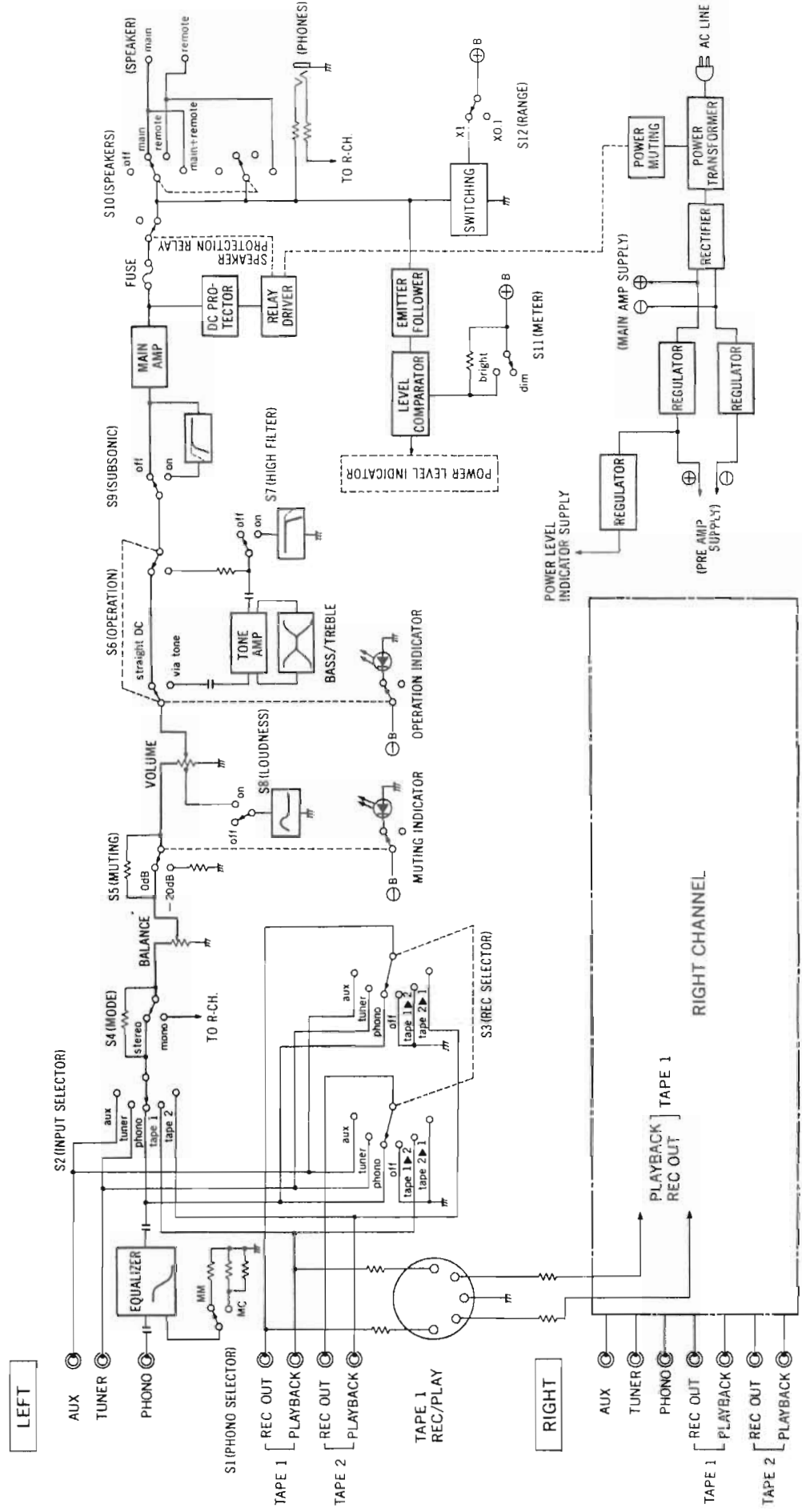
- 1) Brancher l'oscillateur de basse fréquence aux bornes de la commande d'accord des deux canaux; et le voltmètre électronique aux bornes de l'enceinte en parallèle avec la résistance de charge.
- 2) Placer le commutateur de gamme du compteur sur "X0,1" et le commutateur de luminosité sur "dim"
- 3) Alimenter un signal de 1 kHz par l'oscillateur de basse fréquence et régler le niveau d'entrée de telle sorte que le voltmètre électronique indique 0,75V.
- 4) Régler le VR601 (Canal gauche) tout en observant le compteur d'alimentation FL jusqu'à ce que le premier segment soit sur le point d'être branché. (0,3 x 0,1 W).
- 5) De la même façon, faire le réglage de VR602 (Canal droit). A cette étape, si l'indication du canal gauche varie, corriger VR601.

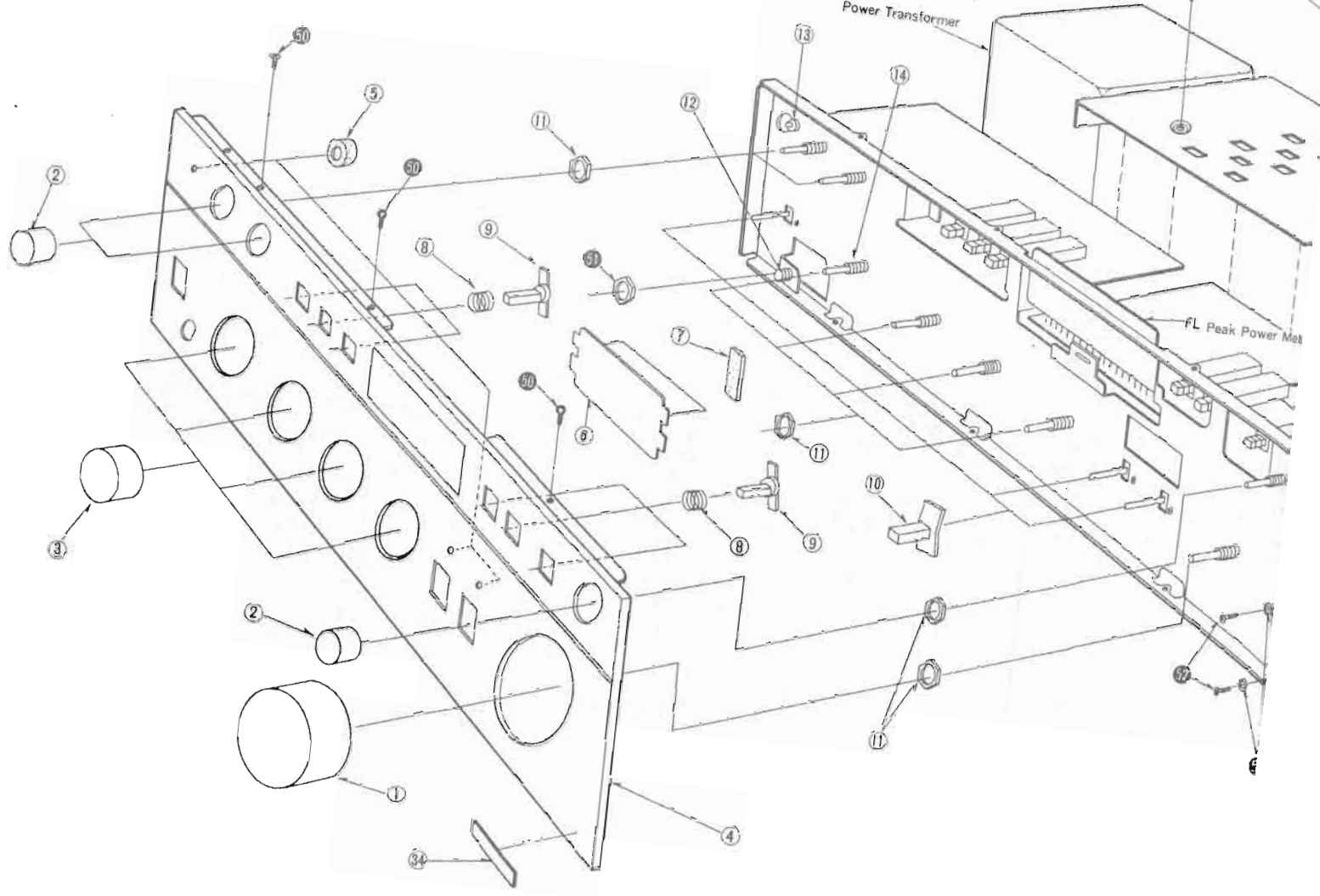
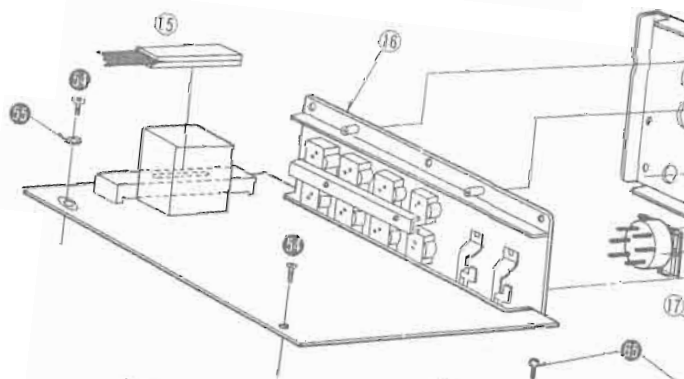
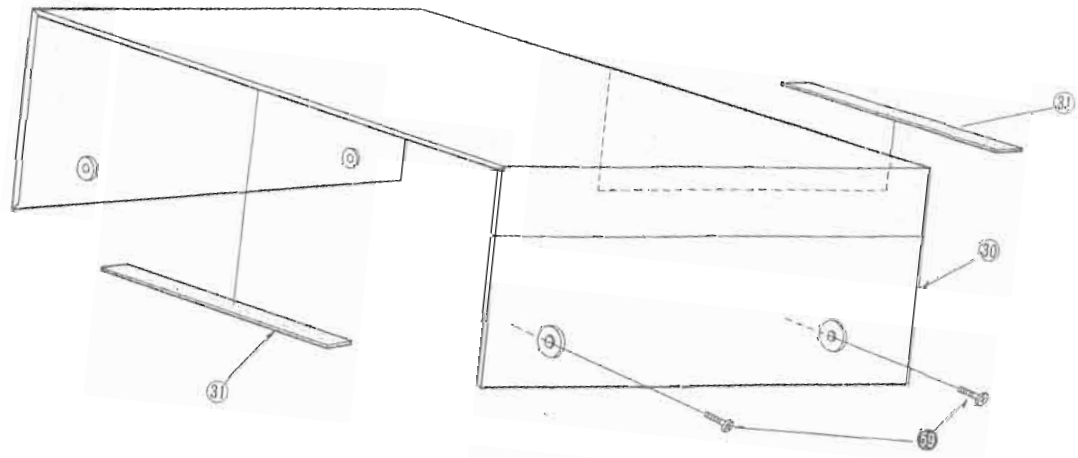
**Note:** Quand le réglage a été fait de telle sorte que le second segment est sur le point d'être branché, le premier segment s'allume sans entrée.

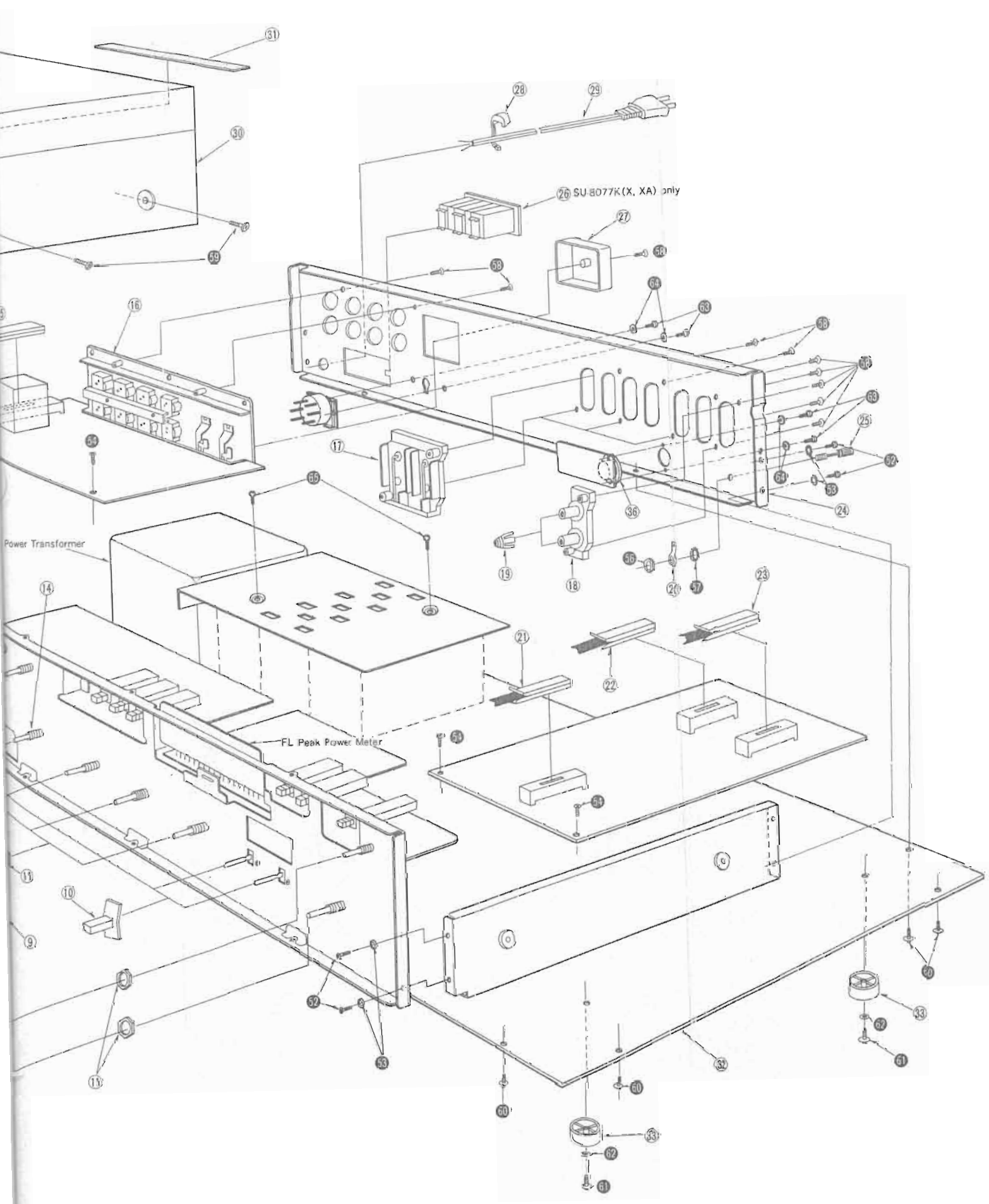
### 2.2 Réglage de 50W

- 1) Régler le commutateur de gamme du compteur sur "X1" et le commutateur de luminosité sur "bright".
- 2) Régler le niveau d'entrée de telle sorte que le compteur électronique indique 19V.
- 3) Faire le réglage de la même façon que le réglage mentionné dans le paragraphe 2-1 en réglant VR603 (Canal gauche) et VR604 (Canal droit) de telle sorte que le neuvième segment (dans la position de ROW) soit sur le point d'être branché.
- 4) Effectuer le réglage comme dans le paragraphe 2-1 (0,03W) en réglant le niveau d'entrée.
- 5) De nouveau régler le niveau d'entrée pour donner une sortie de 19V et s'assurer que le segment à la position 50W, est branché.

# ■ BLOCK DIAGRAM









**REPLACEMENT PARTS LIST ..... Cabinet and Chassis Parts**

- Notes:** 1. Part numbers are indicated on most mechanical parts.  
Please use this part number for parts order.  
2.  $\Delta$  indicates that only parts specified by the manufacturer be used for safety.

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
<b>CABINET and CHASSIS PARTS</b>			<b>SCREWS AND WASHERS</b>		
1	SBN821	Knob, Volume Control	29 [D, XGF, XGH, EB, DG]	$\Delta$ SJA97	AC Cord, with Plug
2	SBN825	Knob, Balance, Bass & Treble Control	29 [XSW]	$\Delta$ SJA111	AC Cord, with Plug
3	SBN823	Knob, Speakers, Rec Selector, Input Selector & Phono Selector	30	SKA10134	Cabinet (Silver)
4	SGWU8077M	Panel, Front Ass'y (Silver)	31	SHS1009	Fiber, Cabiner
5	SHG1481	Rubber Cushion, Indicator	32	SKU7210	Bottom Board
6	SDU15	Filter, Tinted Plate	33	SKLA7-1	Foot, Set
7	SHG1479	Rubber Cushion, Tinted Plate Filter	34	SGK1263	Label, Straight DC & 3DA
8	SUS123-1	Spring, Push Switch Buttons	36	SJS5609	Socket, DIN (REC/PALY)
9	SBC197	Button, Push Switch			
10	SBD19	Knob, Power, Operation & Muting Switch			
11	SNE4021	Nut, Volume, Balance, Bass, Treble, Speaker Selector & Input Selector			
12	XCJ6P21B-A	Headphones Jack	①	XTB3+8BFN	Screw, Front Panel M'tg
13	SHGA204	Rubber Cushion, Lamp Holder	②	XNNS12	Nut, Headphones Jack M'tg
14	ESA23421	Remote Switch, Speakers Selector	③	XTB3+8BFZ	Screw, Side Panel M'tg
15	ESA2071	Wire, Speakers Selector	④	XWC3B	Washer, Side Panel Screw
16	SJF8013-1	Terminal, Speakers	⑤	XTB3+8BFN	Screw, Printed Circuit Board M'tg
17	SJF3421	Terminal, Input	⑥	XWC3B	Washer, Printed Circuit Board Screw
18	SJF3215-1	Terminal, Phono Input	⑦	XNG6E	Nut, Ground Terminal M'tg
19	SJP1103	Pin Plug, Phono Input Terminal	⑧	XWC6B	Washer, Ground Terminal
20	SJT201	Terminal, Earth	⑨	XTB3+8BFZ	Screw, Rear Panel, Input Terminal & Speaker Terminal M'tg
21	ESA337	Remote Switch, Phono Selector	⑩	XTB4+8FFN	Screw, Cabinet M'tg
22	ESA331	Remote Switch, Rec Selector	⑪	XTB3+8BFZ	Screw, Bottom Board M'tg
23	ESA334	Remote Switch, Input Selector	⑫	XTN3+10B	Screw, Set Foot M'tg
24 [D, XSW]	SGPU8077D	Rear Panel, SGP1330-1B with Plate (SGP9017)	⑬	XWG3	Washer, Set Foot Screw
24 [XGF, XGH, EB, DG]	SGPU8077E	Rear Panel, SGP1330-1B with Name Plate (SGT19150) and Plate (SGP9017)	⑭	XSN3+6BVS	Screw, DIN Socket & Voltage Adjuster Switch M'tg
25	SJF4101	Terminal, Ground	⑮	XWA3BFZ	Washer, DIN Socket & Voltage Adjuster Switch Screw
27	SUV337	Cover, Speaker Terminal	⑯	XTB3+8BFZ	Screw, Heat Sink Cover M'tg
28	SHR127	Bushing, AC Cord			

**REPLACEMENT PARTS LIST ..... Electric Parts**

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
<b>INTEGRATED CIRCUITS</b>			<b>COILS and TRANSFORMER</b>		
IC201	SVINJM4559DS	IC, Tone Amplifier	D309, 310	SVDSTV4HG	Diode, Bias
IC601, 602	SV1BA658	IC, FL Comparator	D402, 512	SM112	Diode, Relay Coil & Indicator Rectifier
<b>TRANSISTORS</b>			D501, 502	SVDMA26-2	Diode, Regulator
Q101, 102, 103, 104	2SA978-G	Transistor, Differential Amplifier } Use pair ranks (Use in ranks F or G)	D503, 504	SVDMZ322A	Diode, Zener 22V
Q105, 106, 305, 306, 502	2SC1980-T	Transistor, Equalizer Amp. & Emitter Follower (Use in ranks R, S or T)	D507, 508, 509, 510	$\Delta$ SVD53V20	Rectifier
Q107, 108	2SC1509F-R	Transistor, Equalizer Output Amplifier (Use in ranks Q or R)	D511	SVDMZ318A	Diode, Zener 18V
Q109, 110	<b>2SA777-Q</b>	Transistor, Equalizer Output Amplifier	D601, 602	2-0A99	Diode, FL Meter Driver
Q301, 302	<b>2SA798A-G2</b>	Transistor, Differential Amplifier	D901, 902	SVDGD4203SRD	Diode, Muting & Operation Indicator
Q303, 304	2SC2291-G	Transistor, Current Mirror (Use in ranks F or G)	<b>COMPONENT COMBINATIONS</b>		
Q307, 308	2SC1915-G	Transistor, Drive Amplifier (Use in ranks F or G)	L301, 302	$\Delta$ SLQY15G-3P	Coil, Choke
Q309, 310	2SC1913-R	Transistor, Drive Amplifier (Use in ranks Q or R)	P.T.	SLT5Q97	Transformer, Power
Q311, 312	2SA913-R	Transistor, Drive Amplifier (Use in ranks Q or R)	<b>RELAY</b>		
Q313, 314	2SD665-R	Transistor, Power Amplifier (Use in ranks O or R)	RLY401	SSY19-1	Relay, Speaker Switch
Q315, 316	2SB645-R	Transistor, Power Amplifier (Use in ranks O or R)	<b>FUSES</b>		
Q401, 402, 403, 603	2SA1015-0	Transistor, Switching & FL Meter (Use in ranks Y or O)	F301, 302	$\Delta$ XBA2C31SSO	Fuse, 3.15A (250V), Speaker Circuit
Q404	<b>2SA902S-F</b>	Transistor, Relay Driver	F501	$\Delta$ XBA2C20TRO	Fuse, 2A (250V), P.T. Primary
Q405	2SA847-G	Transistor, Relay Driver (Use in ranks F or G)	F502	$\Delta$ XBAS2C40T1A	Fuse, 4A (250V), P.T. Primary
Q501	2SA921-T	Transistor, Regulator (Use in ranks R, S or T)	F503	$\Delta$ XBA2C05TRO	Fuse, 0.5A (250V), P.T. Secondary
Q503	2SC1913-R	Transistor, Regulator (Use in ranks Q or R)	<b>LAMP</b>		
Q504	2SA913-R	Transistor, Regulator (Use in ranks Q or R)	PL	$\Delta$ XAMR28K500	Lamp, Power Indicator (7.5V, 75mA)
Q505	2SC1983	Transistor, Ripple Filter	<b>SWITCHES</b>		
Q601, 602, 604, 605	2SC1815-0	Transistor, FL Meter Driver (Use in ranks Y or O)	S1	ESD80540	Switch, Phono Selector
<b>DIODES</b>			S2, 3	ESA2682	Switch, Input & Recording Selector
D301, 302, 303, 304, 305, 306, 307, 308, 401	MA150	Diode, Bias & Rectifier	S4, 11, 12	SSH355	Switch, Mode, Range & Meter
			S5	SSL129	Switch, Muting
			S6	SSL131	Switch, Operation

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
S7, 8, 9	SSH353	Switch, Loudness, Subsonic Filter & High Filter	R313, 314	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%
S10	ESA273	Switch, Speakers Selector	R315, 316	ERD25TJ683	Carbon, 68kΩ, 1/4W, ± 5%
S13	ESL21182	Switch, Power Source	R317, 318	ERD25TJ392	Carbon, 39kΩ, 1/4W, ± 5%
S14	ESE37200	Switch, Voltage Adjuster	R319, 320	ERD25FJ182	Carbon, 1.8kΩ, 1/4W, ± 5%
<b>VARIABLE RESISTORS</b>			R321, 322	ERD25FJ182	Carbon, 1.8kΩ, 1/4W, ± 5%
VR201	EWKHQY090C15	Bass Control, 100kΩ (C)	R323, 324	ERD25TJ563	Carbon, 56kΩ, 1/4W, ± 5%
VR202	EWKHQ0090C15	Treble Control, 100kΩ (C)	R325, 326	ERD25TJ333	Carbon, 33kΩ, 1/4W, ± 5%
VR203	EWK4A090252	Balance Control, 250kΩ (BH)	R327, 328	ERD25TJ681	Carbon, 680Ω, 1/4W, ± 5%
VR204	EWFB1AF258F5	Volume Control, 250kΩ (B)	R329, 330	ERD25FJ332	Carbon, 3.3kΩ, 1/4W, ± 5%
VR301, 302, 303, 304	EVLS3AA00854	DC Unbalance Adjustment, 50kΩ (B)	R331, 332	ERD25FJ272	Carbon, 2.7kΩ, 1/4W, ± 5%
VR305, 306	EVLS3AA00822	ICQ Adjustment, 200Ω (B)	R333, 334	ERD25TJ151	Carbon, 150Ω, 1/4W, ± 5%
VR601, 602	EVLS3AA00813	FL Meter Adjustment, 1kΩ (B)	R335, 336	ERD25FJ560	Carbon, 56Ω, 1/4W, ± 5%
VR603, 604	EVLS3AA00853	FL Meter Adjustment, 5kΩ (B)	R337, 338	ERD25FJ391	Carbon, 390Ω, 1/4W, ± 5%
<b>METER</b>			R339, 340	ERD25FJ391	Carbon, 390Ω, 1/4W, ± 5%
FL	SAD24A15YS	Meter, FL Peak-Power	R341, 342	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%
<b>RESISTORS</b>			R343, 344	ERD25FJ471	Carbon, 470Ω, 1/4W, ± 5%
R101, 102	ERD25TJ560	Carbon, 56Ω, 1/4W, ± 5%	R345, 346	ERD25FJ471	Carbon, 470Ω, 1/4W, ± 5%
R103, 104	ERD25TJ224	Carbon, 220kΩ, 1/4W, ± 5%	R347, 348	ERQ12HJ470	Fuse type metallic, 47Ω, 1/2W, ± 5%
R105, 106	ERD25TJ563	Carbon, 56kΩ, 1/4W, ± 5%	R349, 350	ERD25TJ683	Carbon, 68kΩ, 1/4W, ± 5%
R107, 108	ERD25TJ470	Carbon, 47Ω, 1/4W, ± 5%	R351, 352	ERD25TJ681	Carbon, 680Ω, 1/4W, ± 5%
R109, 110	ERD25TJ331	Carbon, 330Ω, 1/4W, ± 5%	R353, 354	ERD25TJ332	Carbon, 3.3kΩ, 1/4W, ± 5%
R111, 112	ERD25TJ560	Carbon, 56Ω, 1/4W, ± 5%	R355, 356	ERD25FJ121	Carbon, 120Ω, 1/4W, ± 5%
R113, 114	ERD25TJ391	Carbon, 390Ω, 1/4W, ± 5%	R357, 358	ERX1ANJ6R8	Metal Film, 6.8Ω, 1W, ± 5%
R115, 116	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%	R359, 360	ERG2ANJ100	Metal oxide, 10Ω, 2W, ± 5%
R117, 118	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%	R361, 362	ERG2ANJ331	Metal oxide, 330Ω, 2W, ± 5%
R119, 120	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%	R401, 402	ERD25TJ223	Carbon, 22kΩ, 1/4W, ± 5%
R121, 122	ERD25TJ681	Carbon, 680Ω, 1/4W, ± 5%	R403	ERD25TJ822	Carbon, 8.2kΩ, 1/4W, ± 5%
R123, 124	ERD25TJ221	Carbon, 220Ω, 1/4W, ± 5%	R404	ERD25TJ823	Carbon, 82kΩ, 1/4W, ± 5%
R125, 126	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	R405	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%
R127, 128	ERD25TJ222	Carbon, 2.2kΩ, 1/4W, ± 5%	R406	ERD25TJ104	Carbon, 100kΩ, 1/4W, ± 5%
R129, 130	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%	R407	ERD25TJ683	Carbon, 68kΩ, 1/4W, ± 5%
R131, 132	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%	R408	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%
R133, 134	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%	R409	ERD25TJ273	Carbon, 27kΩ, 1/4W, ± 5%
R135, 136	ERD25TJ470	Carbon, 47Ω, 1/4W, ± 5%	R410	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%
R137, 138	ERD25TJ470	Carbon, 47Ω, 1/4W, ± 5%	R411	ERD25TJ564	Carbon, 560kΩ, 1/4W, ± 5%
R139, 140	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%	R412	ERD25TJ393	Carbon, 39kΩ, 1/4W, ± 5%
R141, 142	ERD25TJ393	Carbon, 39kΩ, 1/4W, ± 5%	R413	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%
R143, 144	ERD25TJ560	Carbon, 56Ω, 1/4W, ± 5%	R414	ERD25TJ681	Carbon, 680Ω, 1/4W, ± 5%
R145, 146	ERD25CKG6802	Metal Film, 68kΩ, 1/4W, ± 2%	R415	ERG1ANJ561	Metal oxide, 560Ω, 1W, ± 5%
R147, 148	ERD25TJ224	Carbon, 220kΩ, 1/4W, ± 5%	R501, 502	ERD25TJ333	Carbon, 33kΩ, 1/4W, ± 5%
R149, 150	ERD25CKG5601	Metal Film, 5.6kΩ, 1/4W, ± 2%	R503, 504	ERD25FJ121	Carbon, 120Ω, 1/4W, ± 5%
R151, 152	ERD25TJ566	Carbon, 5.6Ω, 1/4W, ± 5%	R505, 506	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%
R153, 154	ERD25TJ101	Carbon, 100Ω, 1/4W, ± 5%	R507, 508	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%
R155, 156	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%	R509, 510	ERD25TJ181	Carbon, 180Ω, 1/4W, ± 5%
R157, 158	ERD25TJ102	Carbon, 1kΩ, 1/4W, ± 5%	R511	ERG1ANJ330	Metal oxide, 33Ω, 1W, ± 5%
R159, 160	ERD25TJ124	Carbon, 120kΩ, 1/4W, ± 5%	R513	ERQ1CJ151	Fuse type metallic, 150Ω, 1W, ± 5%
R161, 162	ERD25TJ682	Carbon, 6.8kΩ, 1/4W, ± 5%	R514	ERD25TJ222	Carbon, 2.2kΩ, 1/4W, ± 5%
R163	ERD25FJ471	Carbon, 470Ω, 1/4W, ± 5%	R601, 602	ERD25TJ823	Carbon, 82kΩ, 1/4W, ± 5%
R164	ERD25FJ221	Carbon, 220Ω, 1/4W, ± 5%	R603, 604	ERD25TJ823	Carbon, 82kΩ, 1/4W, ± 5%
R201, 202	ERD25TJ224	Carbon, 220kΩ, 1/4W, ± 5%	R605, 606	ERD25TJ104	Carbon, 100kΩ, 1/4W, ± 5%
R203, 204	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	R607, 608	ERD25TJ182	Carbon, 1.8kΩ, 1/4W, ± 5%
R205, 206	ERD25TJ563	Carbon, 56kΩ, 1/4W, ± 5%	R609, 610	ERD25TJ223	Carbon, 22kΩ, 1/4W, ± 5%
R207, 208	ERD25TJ823	Carbon, 82kΩ, 1/4W, ± 5%	R611, 612	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%
R209, 210	ERD25TJ393	Carbon, 39kΩ, 1/4W, ± 5%	R613, 614	ERD25TJ331	Carbon, 330Ω, 1/4W, ± 5%
R211, 212	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%	R615, 616	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%
R213, 214	ERD25TJ823	Carbon, 82kΩ, 1/4W, ± 5%	R619, 620	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%
R215, 216	ERD25TJ154	Carbon, 150kΩ, 1/4W, ± 5%	R621	ERD25TJ682	Carbon, 6.8kΩ, 1/4W, ± 5%
R219, 220	ERD25TJ393	Carbon, 39kΩ, 1/4W, ± 5%	R622	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%
R221, 222	ERD25TJ122	Carbon, 1.2kΩ, 1/4W, ± 5%	R623	ERD25TJ272	Carbon, 2.7kΩ, 1/4W, ± 5%
R223, 224	ERD25TJ222	Carbon, 2.2kΩ, 1/4W, ± 5%	R625	ERD25FJ821	Carbon, 820Ω, 1/4W, ± 5%
R225, 226	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	R630	ERD25FJ560	Carbon, 56Ω, 1/4W, ± 5%
R227, 228	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%	R951, 952	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%
R229, 230	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	R953, 954	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%
R231, 232	ERD25TJ183	Carbon, 18kΩ, 1/4W, ± 5%	R955, 956	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%
R233, 234	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	R957, 958	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%
R235, 236	ERD25TJ153	Carbon, 15kΩ, 1/4W, ± 5%	R959	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%
R237, 238	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%	R901, 902	ERD25TJ472	Carbon, 4.7kΩ, 1/4W, ± 5%
R239, 240	ERD25FJ222	Carbon, 2.2kΩ, 1/4W, ± 5%	R903, 904	ERD25TJ472	Carbon, 4.7kΩ, 1/4W, ± 5%
R241, 242	ERD25TJ153	Carbon, 15kΩ, 1/4W, ± 5%	R905, 906	ERD25TJ394	Carbon, 390kΩ, 1/4W, ± 5%
R243, 244	ERD25TJ563	Carbon, 56kΩ, 1/4W, ± 5%	R907, 908	ERD25TJ104	Carbon, 100kΩ, 1/4W, ± 5%
R245, 246	ERD25TJ682	Carbon, 6.8kΩ, 1/4W, ± 5%	<b>CAPACITORS</b>		
R247, 248	ERD25TJ393	Carbon, 39kΩ, 1/4W, ± 5%	C101, 102	ECEA50M10R	Electrolytic, 10μF, 50V
R301, 302	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	C103, 104	ECCD1H820K	Ceramic, 82pF, 50V, ±10%
R303, 304	ERD25TJ563	Carbon, 56kΩ, 1/4W, ± 5%	C105, 106	ECCD1H560K	Ceramic, 56pF, 50V, ±10%
R305, 306	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	C107, 108	ECKD1H471KB	Ceramic, 470pF, 50V, ±10%
R307, 308	ERD25TJ473	Carbon, 47kΩ, 1/4W, ± 5%	C109, 110	ECKD1H471KB	Ceramic, 470pF, 50V, ±10%
R309, 310	ERD25TJ473	Carbon, 47kΩ, 1/4W, ± 5%	C111, 112	ECCD1H680K	Ceramic, 68pF, 50V, ±10%
R311, 312	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	C113, 114	ECCD1H820K	Ceramic, 82pF, 50V, ±10%
			C115, 116	ECFA1CS330	Electrolytic, 33μF, 50V
			C117, 118	ECEA1ES101	Electrolytic, 100μF, 25V
			C119, 120	ECFAQS222	Electrolytic, 2200μF, 6V
			C121, 122	ECEA50Z2R2	Electrolytic, 2.2μF, 50V
			C123, 124	ECQM1H334JZ	Polyester, 0.33μF, 50V, ± 5%

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
C125, 126	ECQP1473GZ	Polypropylene, 0.047 $\mu$ F, 125V, $\pm$ 2%	C315, 316	ECEA1VS330	Electrolytic, 33 $\mu$ F, 35V
C127, 128	ECQM1H822JZ	Polyester, 0.0082 $\mu$ F, 50V, $\pm$ 5%	C317, 318	ECCD2H101K	Ceramic, 100pF, 500V, $\pm$ 10%
C129, 130	ECQP1103GZ	Polypropylene, 0.01 $\mu$ F, 125V, $\pm$ 2%	C319, 320	ECCD2H101K	Ceramic, 100pF, 500V, $\pm$ 10%
C131, 132	ECQM1H392JZ	Polyester, 0.0039 $\mu$ F, 50V, $\pm$ 5%	C321, 322	ECKD1H471K8	Ceramic, 470pF, 50V, $\pm$ 10%
C133, 134	$\Delta$ ECEA50N1	Non-polar electrolytic, 1 $\mu$ F, 50V	C323, 324	ECEA1CS330	Electrolytic, 33 $\mu$ F, 16V
C135, 136	ECQM1H102JZ	Polyester, 0.001 $\mu$ F, 50V, $\pm$ 5%	C325, 326	ECEA50Z1	Electrolytic, 1 $\mu$ F, 50V
C137, 138	ECEA1ES331	Electrolytic, 330 $\mu$ F, 25V	C327, 328	ECKD1H471K8	Ceramic, 470pF, 50V, $\pm$ 10%
C139, 140	ECCD1H680K	Ceramic, 68pF, 50V, $\pm$ 10%	C329, 330	ECCD1H180K	Ceramic, 18pF, 50V, $\pm$ 10%
C201, 202	$\Delta$ ECEA50N1	Non-polar electrolytic, 1 $\mu$ F, 50V	C331, 332	ECQM1H473KZ	Polyester, 0.047 $\mu$ F, 50V, $\pm$ 10%
C203, 204	ECEA50ZR68	Electrolytic, 0.68 $\mu$ F, 50V	C333, 334	ECEA0JS102	Electrolytic, 1000 $\mu$ F, 6V
C205, 206	ECCD1H470K	Ceramic, 47pF, 50V, $\pm$ 10%	C335, 336	ECEA1JS471	Electrolytic, 470 $\mu$ F, 63V
C207, 208	ECQM1H333KZ	Polyester, 0.033 $\mu$ F, 50V, $\pm$ 10%	C401	$\Delta$ ECEA16N47	Non-polar electrolytic, 47 $\mu$ F, 16V
C209, 210	ECQM1H103KZ	Polyester, 0.01 $\mu$ F, 50V, $\pm$ 10%	C402	ECEA50Z2R2	Electrolytic, 2.2 $\mu$ F, 50V
C211, 212	$\Delta$ ECEA50N1	Non-polar electrolytic, 1 $\mu$ F, 50V	C403	ECEA1AS221	Electrolytic, 220 $\mu$ F, 10V
C213, 214	ECQM1H822KZ	Polyester, 0.0082 $\mu$ F, 50V, $\pm$ 10%	C501, 502	ECEA1HS100	Electrolytic, 10 $\mu$ F, 50V
C215, 216	ECQM1H152KZ	Polyester, 0.0015 $\mu$ F, 50V, $\pm$ 10%	C503, 504	$\Delta$ ECEA50N1	Non-polar electrolytic, 1 $\mu$ F, 50V
C217, 218	$\Delta$ ECEA16N10	Non-polar electrolytic, 10 $\mu$ F, 16V	C506, 507	ECET50R103Z	Electrolytic, 10000 $\mu$ F, 50V
C219, 220	ECQM1H222KZ	Polyester, 0.0022 $\mu$ F, 50V, $\pm$ 10%	C508	ECEA1AS471	Electrolytic, 470 $\mu$ F, 10V
C221, 222	ECEA1ES101	Electrolytic, 100 $\mu$ F, 25V	C509	ECEA1HS101	Electrolytic, 100 $\mu$ F, 50V
C223, 224	ECQM1H682KZ	Polyester, 0.0068 $\mu$ F, 50V, $\pm$ 10%	C510	ECEA1HS100	Electrolytic, 10 $\mu$ F, 50V
C301, 302	ECQM1H683KZ	Polyester, 0.068 $\mu$ F, 50V, $\pm$ 10%	C601, 602	ECEA25Z4R7	Electrolytic, 4.7 $\mu$ F, 25V
C305, 306	ECCD1H180K	Ceramic, 18pF, 50V, $\pm$ 10%	C603, 604	ECCD1H120K	Ceramic, 12pF, 50V, $\pm$ 10%
C307, 308	ECCD1H560K	Ceramic, 56pF, 50V, $\pm$ 10%	C605, 606	ECEA50Z2R2	Electrolytic, 2.2 $\mu$ F, 50V
C309, 310	ECCD1H330K	Ceramic, 33pF, 50V, $\pm$ 10%	C607, 608	ECEA50Z1	Electrolytic, 1 $\mu$ F, 50V
C311, 312	ECEA50M1R	Electrolytic, 1 $\mu$ F, 50V, $\pm$ 10%	C609, 610	ECEA1CS330	Electrolytic, 33 $\mu$ F, 16V
C313, 314	ECCD2H121K	Ceramic, 120pF, 500V, $\pm$ 10%	C801, 802	$\Delta$ ECKDHS103SE2	Ceramic, 0.01 $\mu$ F, 400VAC, $\pm$ 50%
			C803	ECCD1H470K	Ceramic, 47pF, 50V, $\pm$ 10%
			C901	$\Delta$ ECEA16N4R7	Non-polar electrolytic, 4.7 $\mu$ F, 16V

## REPLACEMENT PARTS LIST ..... Accessories and Packings

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
<b>ACCESSORY</b>					
A1	XBA2C31SSO	Fuse, 3.15A (250V) Speaker Circuit	P3	SPS1719-1	Pad, Right Side
<b>PACKING PARTS</b>					
P1	SPP595	Polyethylene Bag	P3 [XSW] only	SPS1719	Pad, Right Side
P2	SPS1717-1	Pad, Left Side	P4	SPG1871	Carton Box
P2 [XSW] only	SPS1717	Pad, Left Side	P4 [XSW] only	SPG1875	Carton Box
			P4 [XGF] only	SPG1873	Carton Box
			P6	SQF10167	Instructions Book, Printed Matter

Notes: (D) and (DG) are available in Scandinavia and European only.

(EB) is available in Belgium only.

(XSW) is available in Switzerland only.

(XGF) is available in France only.

(XGH) is available in Holland only.

(XE) is available in United Kingdom only.

(X) and (XA) are available in Asia, Latin America, Middle East and Africa only.

(XAL) is available in Australia only.

## CHANGE OF PARTS LIST

# SU-8077K

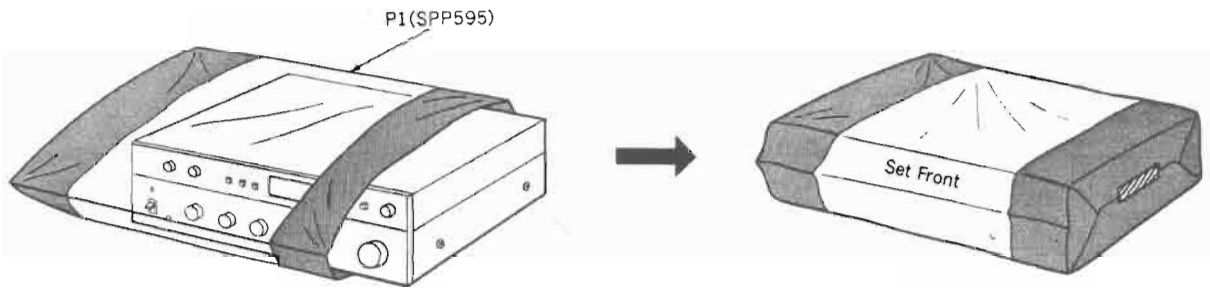
(D), (DG), (EB), (XSW), (X), (XA), (XAL), (XE)

Note: This parts list included only the changes of the model SU-8077 parts list.

Ref. No.	Change of Part No.		Part Name & Description
	SU-8077	SU-8077K	
<b>CABINET and CHASSIS PARTS</b>			
1	SBN821	SBN827	Knob, Volume Control
2	SBN825	SBN831	Knob, Balance, Bass & Treble Control
3	SBN823	SBN829	Knob, Speakers, Rec Selector, Input Selector & Phono Selector
4	SGWU8077M	SGWU8077KD	Panel, Front Ass'y (Black)
9	SBC197	SBC197-1	Button, Push Switch
10	SBD19	SBD19-1	Knob, Power Operation & Muting
24	SGPU8077D	SGPU8077KE	Rear Panel, SGP1330-1B with Name Plate (SGT19151) and Plate (SGP9017)
		[XE, XGH, EB, DG]	
	SGPU8077E	SGPU8077KX	Rear Panel, SGP1330-1A with Name Plate (SGT19130)
		[X, XA]	
SGPU8077E	SGPU8077KD	Rear Panel, SGP1330-1B with Name Plate (SGT19170) and Plate (SGP9017)	
	[D, XSW]		
		SGPU8077KL	Rear Panel, SGP1330-2B with Name Plate (SGT19130) and Plate (SGP9017)
		[XAL]	

Ref. No.	Change of Part No.		Part Name & Description
	SU-8077	SU-8077K	
26	—	SJS601 [X, XA] only	Socket, AC Outlet
28	SHR127	SHR127	Bushing, AC Cord
		SHR131 [XAL] only	Bushing, AC Cord
29	SJA97 [D, XGF, XGH, EB, DG]	SJA97 [D, XGH, EB, DG, X, XA]	AC Cord, with Plug
		SJA111 [XSW]	AC Cord, with Plug
	SJA111 [XSW]	RJA45ZC [XE]	AC Cord
		QFC1207M [XAL]	AC Cord, with Plug
30	SKA10134	SKA10135	Cabinet (Black)
<b>SCREWS and WASHERS</b>			
●	XTB3+8BFN	XTB3+8BFZ	Screw, Front Panel M'tg
●	XTB4+8FFN	XTB4+8FFZ	Screw, Cabinet M'tg
<b>ACCESSORIES</b>			
A2	—	SJP5213-1 [X, XA] only	Plug Adapter, AC power
A3	—	SJP5215 [X, XA] only	Plug Adapter, AC Power
<b>PACKING PARTS</b>			
P2	SPS1717-1	SPS1717-1	Pad, Left Side
	SPS1717 [XSW] only	SPS1717 [XE, XSW] only	Pad, Left Side
P3	SPS1719-1	SPS1719-1	Pad, Right Side
	SPS1719 [XSW] only	SPS1719 [XE, XSW] only	Pad, Right Side
P4	SPG1871 [D, XGH, EB, DG]	SPG2005	Carton Box
	SPG1875 [XSW]	SPG2007 [XE, XSW] only	Carton Box
	SPG1873 [XGF]		

## ■ PACKINGS



## ■ ACCESSORIES

