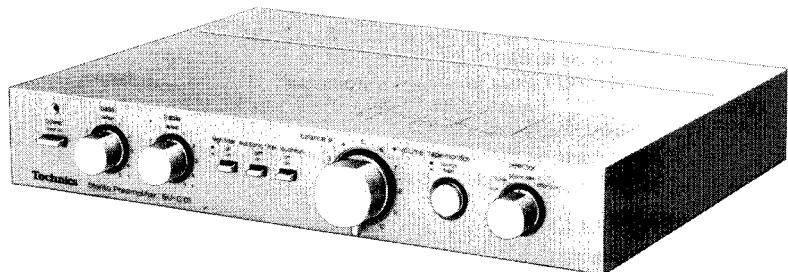


Service Manual

SU-C01

Stereo Preamplifier

SU-C01

(E), (EG), (X), (XA), (XAL),
(XGH), (XGF), (XE), (EB)

- * The models SU-C01 (E, EG) are available in Scandinavia and European only.
- * The models SU-C01 (X, XA) are available in Asia, Latin America, Middle East and Africa only.
- * The model SU-C01 (XAL) is available in Australia only.
- * The model SU-C01 (XGH) is available in Holland only.
- * The model SU-C01 (XGF) is available in France only.
- * The model SU-C01 (XE) is available in United Kingdom only.
- * The model SU-C01 (EB) is available in Belgium only.

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

(DIN 45 500)

AMPLIFIER SECTION

Input sensitivity & impedance

PHONO MM	2.5 mV/47 kΩ
MC	100μV/47 kΩ
TUNER, AUX	150 mV/47 kΩ
TAPE	150 mV/47 kΩ

PHONO maximum input voltage (1 kHz, RMS)

PHONO MM	200 mV
MC	8 mV

Total harmonic distortion

TUNER, AUX, TAPE	0.003%
	(at 3V output and max. volume)

PHONO MM, MC

	0.005%
	(at 3V output and -20 dB volume)

S/N

rated output	PHONO MM	75 dB (IHF, A: 88 dB)
	MC	66 dB (IHF, A: 78 dB)
	TUNER, AUX	87 dB (IHF, A: 100 dB)
-26 dB output	PHONO MM	63 dB
	MC	63 dB
	TUNER, AUX	65 dB

Frequency response

PHONO	RIAA standard curve ±0.2 dB (30 Hz ~ 15 kHz)
TUNER, AUX, TAPE	3 Hz ~ 100 kHz, -1 dB +0, -0.05 dB, 20 Hz ~ 20 kHz
Tone controls	Bass 50 Hz, +10 dB ~ -10 dB Treble 20 kHz, +10 dB ~ -10 dB
Subsonic filter	30 Hz, -12 dB/oct.
High filter	7 kHz, -6 dB/oct.
Loudness control (volume at -30 dB)	50 Hz, +9 dB
Output voltage	
OUTPUT	rated 1 V maximum 7 V
REC OUT	150 mV
Channel balance, AUX	250 Hz ~ 6,300 Hz ±1 dB
Channel separation, AUX	1 kHz 55 dB

GENERAL

Power consumption	9 W
Power supply	AC 50/60 Hz, 110, 120, 220, 240V
Dimensions (W x H x D)	297 x 49 x 241 mm (11-11/16" x 1-15/16" x 9-1/4")
Weight	3 kg (6.6 lb)

TECHNISCHE DATEN (Spezifikationen können infolge von Verbesserungen ohne Ankündigung geändert werden)

(DIN 45 500)

VERSTÄRKERTEIL

Eingangsempfindlichkeit & impedanz

PHONO MM	2.5 mV/47 kΩ
MC	100μV/47 kΩ
TUNER, AUX	150 mV/47 kΩ
TAPE	150 mV/47 kΩ

PHONO maximale Eingangsspannungen (1 kHz, RMS)

PHONO MM	200 mV
MC	8 mV

Gesamtklirrfaktor

TUNER, AUX, TAPE	0.003%
	(bei 3 V Ausgang und größter Lautstärke)

PHONO MM, MC

	0.005%
	(bei 3 V Ausgang und -20 dB Lautstärke)

Rauschabstand

Nennleistung	PHONO MM	75 dB (IHF, A: 88 dB)
	MC	66 dB (IHF, A: 78 dB)
	TUNER, AUX	87 dB (IHF, A: 100 dB)
-26 dB Leistung	PHONO MM	63 dB
	MC	63 dB
	TUNER, AUX	65 dB

Frequenzgang

PHONO	RIAA standardkurve ±0.2 dB (30 Hz ~ 15 kHz)
TUNER, AUX, TAPE	3 Hz ~ 100 kHz, -1 dB +0, -0.05 dB, 20 Hz ~ 20 kHz
Klangregler	Bass 50 Hz, +10 dB ~ -10 dB Treble 20 kHz, +10 dB ~ -10 dB
Unterschallfilter	30 Hz, -12 dB/oct.
Höhenfilter	7 kHz, -6 dB/oct.
Gehörichtige Lautstärke (Lautstärke bei -30 dB)	50 Hz, +9 dB
Ausgangsspannungen	
OUTPUT	Nennleistung 1 V max. 7 V
REC OUT	150 mV
Kanalabweichung, AUX	250 Hz ~ 6300 Hz ±1 dB
Kanaltrennung, AUX	1 kHz 55 dB

ALLGEMEINE DATEN

Leistungsaufnahme	9 W
Netzspannung (50/60 Hz)	110, 120, 220, 240V
Abmessungen (B x H x T)	297 x 49 x 241 mm
Gewicht	3 kg

CARACTERISTIQUES TECHNIQUES (Sujet à changement sans préavis.)

(DIN 45 500)

PARTIE AMPLIFICATEUR

Sensibilité et impédance d'entrée

PHONO MM	2,5 mV/47 kΩ
MC	100µV/47 kΩ
TUNER, AUX	150 mV/47 kΩ
TAPE	150 mV/47 kΩ

Tension maximum d'entrée PHONO (1 kHz, eff.)

PHONO MM	200 mV
MC	8 mV

Distorsion harmonique totale

TUNER, AUX, TAPE	0,003%
PHONO MM, MC	(Sortie 3 V, Volume max.) 0,005%

PHONO MM, MC	(Sortie 3 V, Volume -20 dB)
--------------	-----------------------------

Rapport signal/bruit

pour la puissance nominale

PHONO MM	75 dB (IHF, A: 88 dB)
MC	66 dB (IHF, A: 78 dB)
TUNER, AUX	87 dB (IHF, A: 100 dB)
puissance de -20dB	
PHONO MM	63 dB
MC	63 dB
TUNER, AUX	65 dB

Réponse de fréquence

PHONO	Courbe nominale RIAA ±0,2 dB (30 Hz ~ 15 kHz)
TUNER, AUX, TAPE	3 Hz ~ 100 kHz, -1 dB +0, -0,05 dB, 20 Hz ~ 20 kHz

Réglage de la tonalité

Bass (graves)	50 Hz, +10 dB ~ -10 dB
Treble (aigus)	20 kHz, +10 dB ~ -10 dB

Filtrage infra-acoustique

Filtre d'aigu	30 Hz, -12 dB/oct.
	7 kHz, -6 dB/oct.

Correction physiologique (volume à -30 dB)

Tension de sortie	50 Hz +9 dB
-------------------	-------------

OUTPUT Pour la puissance nominale max.	1 V 7 V
REC OUT	150 mV

Equilibrage de canaux, AUX 250 Hz ~ 6300 Hz

Séparation des canaux AUX 1 kHz	±1 dB
	55 dB

GENERALITES

Consommation

Allimentation (50/60 Hz)	9 W
Dimensions (L x H x Pr)	110, 120, 220, 240V

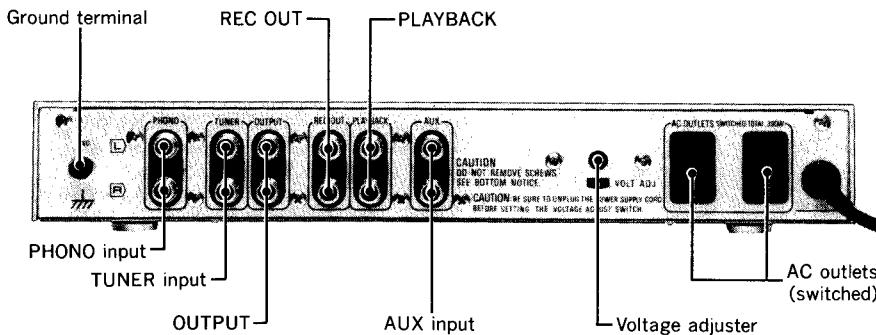
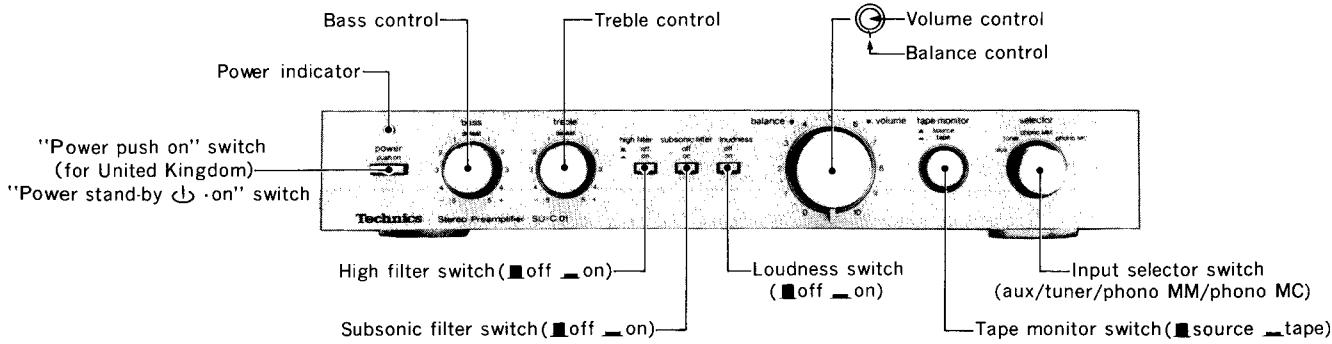
Dimensions (L x H x Pr)

Poids	3 kg

■ CONTENTS

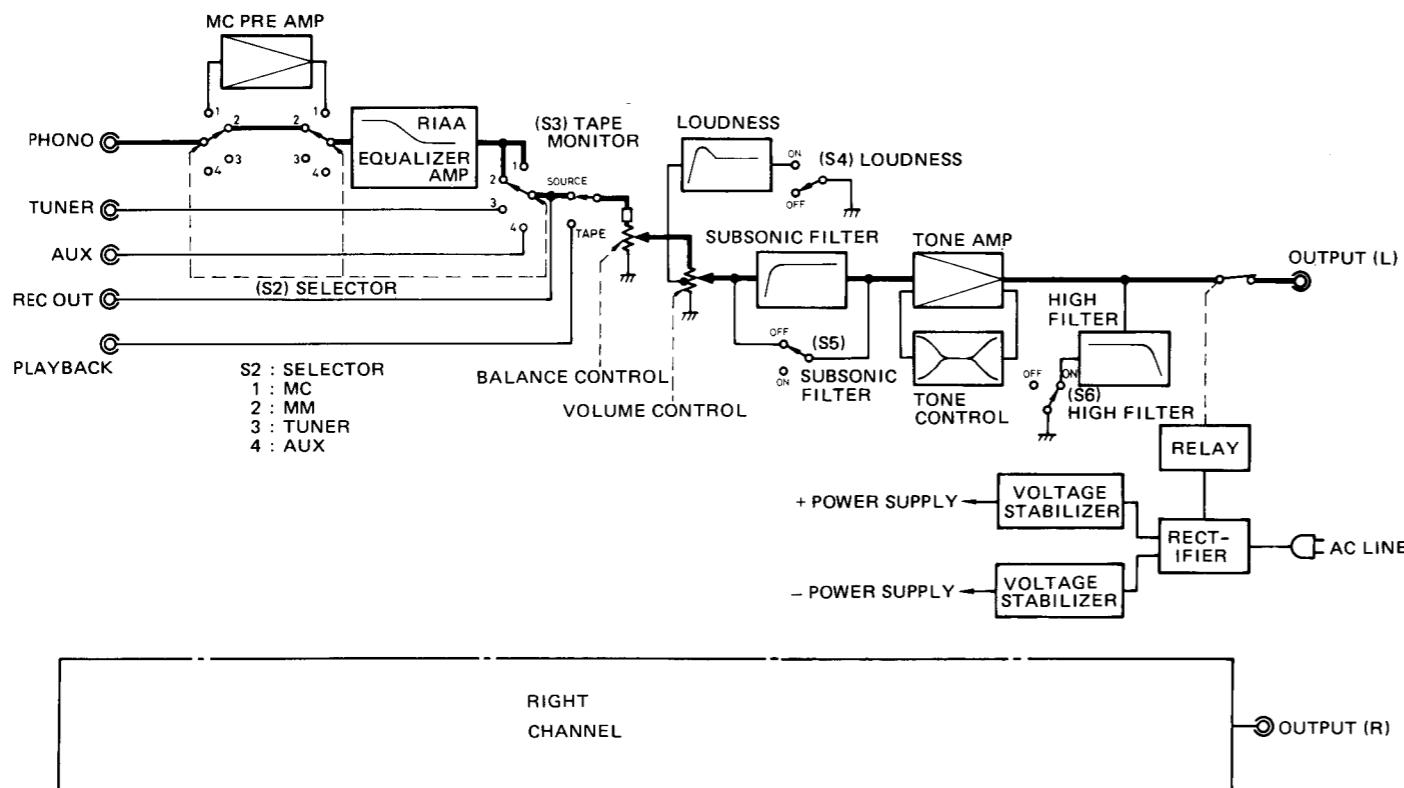
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BLOCK DIAGRAM	3	EXPLODED VIEWS.....	9 ~ 10
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REPLACEMENT PARTS LIST (Electric Parts)	4	REPLACEMENT PARTS LIST (Packing Parts)	12
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■ LOCATION OF CONTROLS

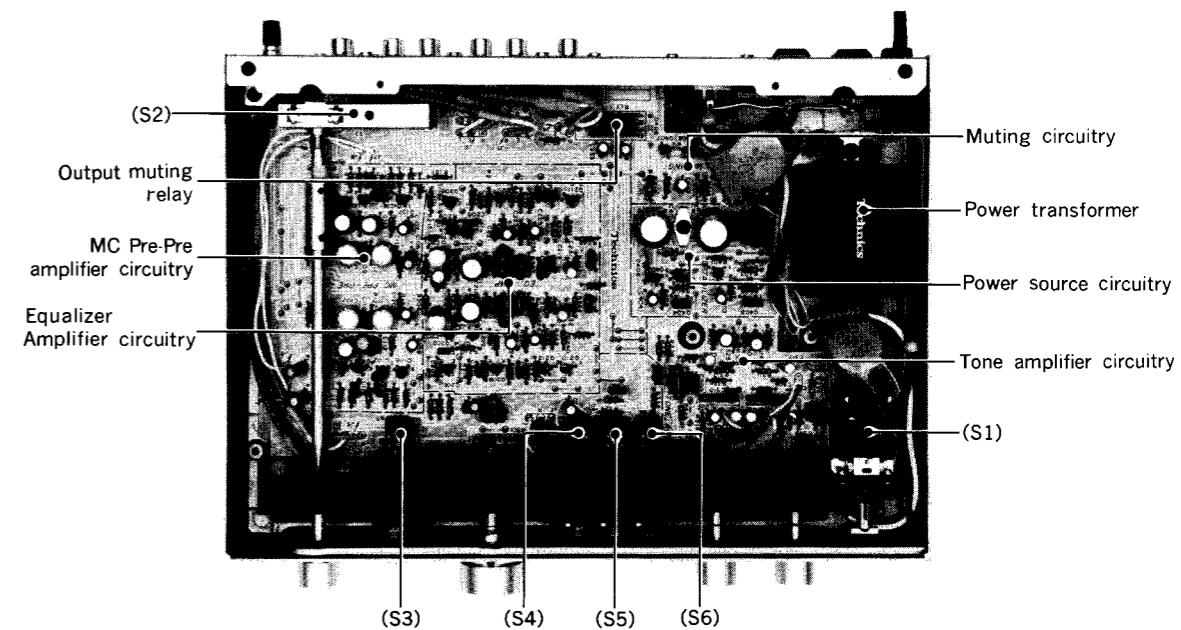


* The products for other destinations except (XA) and (X) are not equipped with AC outlets.

■ BLOCK DIAGRAM

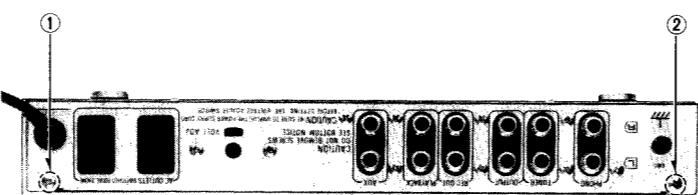


■ PRINTED CIRCUIT BOARD VIEW

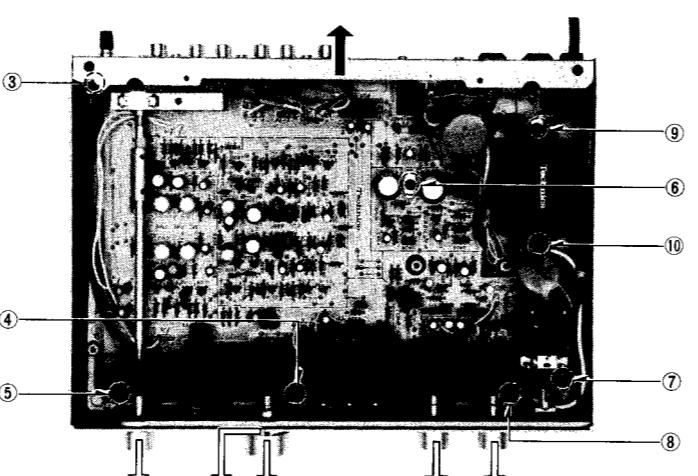


■ HOW TO REMOVE THE PRINTED CIRCUIT BOARD

1. Remove the bottom board from the set.
2. Pull out the knobs from the front panel. (Arrow → in Photo 2)
3. Remove the 6 setscrews (③ ~ ⑧ in Photo 2) used to secure the printed circuit board on the cabinet.
4. Remove the 2 setscrews (⑨, ⑩ in Photo 2) used to secure the power transformer on the cabinet.
5. Remove the 2 setscrews (①, ② in Photo 1) used to fasten the rear panel.
6. Pull the printed circuit board backwards along with the rear panel. Then the printed circuit board can be removed from the cabinet. (Refer to photo 2)
7. When installing the printed circuit board, reverse the procedure 1 ~ 6.



[PHOTO 1]



[PHOTO 2]

■ REPLACEMENT PARTS LIST Electric Parts

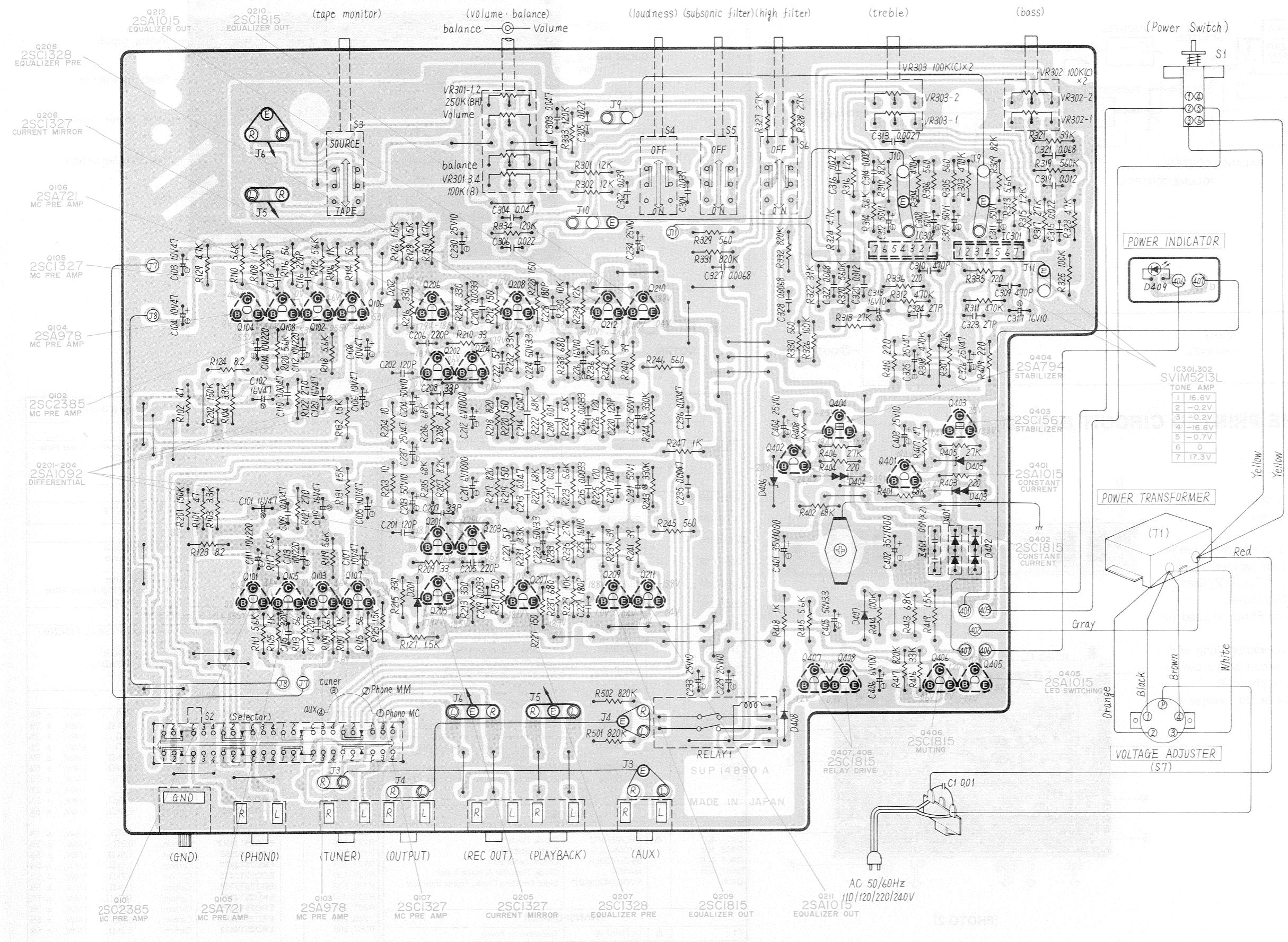
- NOTES:**
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
 2. △ indicates that only parts specified by the manufacturer be used for safety.

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description			
INTEGRATED CIRCUITS								
IC301, 302	SVIM5213CO	IC, Tone Amplifier	Z401	EXRFS203ZS	Component Combination, Power Noise Killer, 0.01μF (X2)			
TRANSISTORS								
Q101, 102	2SC2385-G	Transistor, MC Pre Amplifier (Use in ranks F or G)	RELAY 1	SSY9	Relay, Output Muting			
Q103, 104	2SA978-G	Transistor, MC Pre Amplifier (Use in ranks F or G)	S1 [X, XA] only	SSH113	Switch, Power Source			
Q105, 106	2SA902S-F	Transistor, MC Pre Amplifier (Use in ranks F or G)	S2	SSH119	Switch, Power Source			
Q107, 108	2SC1328-T	Transistor, MC Pre Amplifier (Use in ranks S, T or U)	S3	SSR133	Switch, Selector			
Q201, 203	2SA1092-T	Transistor, Differential Amplifier (Use in ranks T or U)	S4, 5, 6	SSH83	Switch, Tape Monitor			
Q202, 204	2SA1092-T	Transistor, Differential Amplifier (Use in ranks T or U)	S7	SSH361	Switch, Loudness, High & Low Filter			
Q205, 206	2SC1328-T	Transistor, Current Mirror (Use in ranks S, T or U)		ESE372	Switch, Voltage Adjuster			
Q207, 208	2SC1328-T	Transistor, Equalizer Amplifier (Use in ranks S or T)	SWITCHES					
Q209, 210	2SC1815-G	Transistor, Equalizer Output Amplifier (Use in ranks G or B)	S1	SSH113	Switch, Power Source			
Q211, 212	2SA1015-0	Transistor, Equalizer Output Amplifier (Use in ranks Y or O)	S2	SSH119	Switch, Power Source			
Q401, 405	2SA1015-0	Transistor, Constant Current & LED Switching (Use in ranks Y or O)	S3	SSR133	Switch, Selector			
Q402, 406, 407, 408	2SC1815-G	Transistor, Constant Current & Relay Drive (Use in ranks Y or O)	S4, 5, 6	SSH83	Switch, Tape Monitor			
Q403	2SC1567-Q	Transistor, Stabilizer (Use in ranks Q or R)	S7	SSH361	Switch, Loudness, High & Low Filter			
Q404	2SA794-Q	Transistor, Stabilizer (Use in ranks Q or R)	RELAY					
VARIABLE RESISTORS								
VR301	EWKP8AS01386	Volume & Balance Control, 100kΩ(B)/250kΩ(BH)	RELAY 1	SSY9	Relay, Output Muting			
VR302	EWKGYY035C15	Bass Control, 100kΩ(C)	S1 [X, XA] only	SSH113	Switch, Power Source			
VR303	EWKGYY035C15	Treble Control, 100kΩ(C)	S2	SSH119	Switch, Power Source			
RESISTORS								
R101, 102	ERD25TJ470	Carbon, 47Ω, 1/4W, ± 5%	R121, 122	ERO25CKF2700	Metal Film, 270Ω, 1/4W, ± 1%			
R103, 104	ERD25TJ332	Carbon, 3.3kΩ, 1/4W, ± 5%	R123, 124	ERD25TJ8R2	Carbon, 8.2Ω, 1/4W, ± 5%			
R105, 106	ERO25CKG1001	Metal Film, 1kΩ, 1/4W, ± 2%	R125, 126	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%			
R107, 108	ERO25CKG1001	Metal Film, 1kΩ, 1/4W, ± 2%	R127, 128	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%			
R109, 110	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%	R129, 130	ERD25TJ472	Carbon, 4.7kΩ, 1/4W, ± 5%			
R111, 112	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%	R131, 132	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%			
R113, 114	ERO25CKG56RO	Metal Film, 56Ω, 1/4W, ± 2%	R201, 202	ERD25TJ154	Carbon, 150kΩ, 1/4W, ± 5%			
R115, 116	ERO25CKG56RO	Metal Film, 56Ω, 1/4W, ± 2%	R203, 204	ERD25TJ100	Carbon, 10Ω, 1/4W, ± 5%			
R117, 118	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%	R205, 206	ERD25TJ683	Carbon, 68kΩ, 1/4W, ± 5%			
R119, 120	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%	R207, 208	ERD25TJ822	Carbon, 8.2kΩ, 1/4W, ± 5%			
DIODES								
D201, 202	MA150	Diode, Current Mirror	D121, 122	ERO25CKF2700	Metal Film, 270Ω, 1/4W, ± 1%			
D401, 402	SVDMI151U	Diode, Rectifier	D123, 124	ERD25TJ8R2	Carbon, 8.2Ω, 1/4W, ± 5%			
D403, 404	SVDMA26-2	Diode, Stabilizer	R125, 126	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%			
D405, 406	SVDHZ20L-1	Diode, Zener 20V	R127, 128	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%			
D407, 408	MA150	Diode, Rectifier & Noise Killer	R129, 130	ERD25TJ472	Carbon, 4.7kΩ, 1/4W, ± 5%			
D409	SVDGD4203SRD	Light Emitting Diode, Power Indicator	R131, 132	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%			
TRANSFORMER								
T1	△ SLT5J67-W	Transformer, Power	T1	△ SLT5J67-W	Transformer, Power			

(Continued to Page 11)

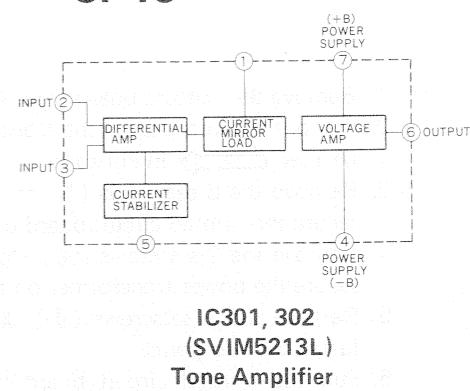
PRINTED CIRCUIT BOARD WIRING VIEW

Earth (Ground) Lines



- Notes:**
1. S1: Power switch in "on" position.
 2. S2: Input selector switch in "phono MC" position.
 3. S3: Tape monitor switch in "source" position.
 4. S4: Loudness switch in "off" position
 5. S5: Subsonic filter switch in "off" position.
 6. S6: High filter switch in "off" position.
 7. S7: Voltage adjuster switch in "240V" position.
- ① 110V → 120V → 220V → 240V
 ② Indicated voltage values are 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.
 ③ Standards values ()
 ④ The **s** mark has been used for the indication of specified parts for an assurance of safety, but it has been changed to **Δ** mark. When replacing parts, be sure to use parts with correct numbers with reference to the circuit drawing or the repair parts list.
s → **Δ** (new mark)
 ⑤ To represent transistors, Q is used instead of TR (Ex. TR1 → Q1)
 ⑥ Phono signal lines of left channel.
 ⑦ This schematic diagram may be modified at any time with the development of new technology.

BLOCK DIAGRAM OF IC



TERMINAL GUIDE OF TRANSISTOR & IC

2SA721, 2SC1327 2SA1015, 2SC1815 2SA1092 2SC1328	2SA794, 2SC1567

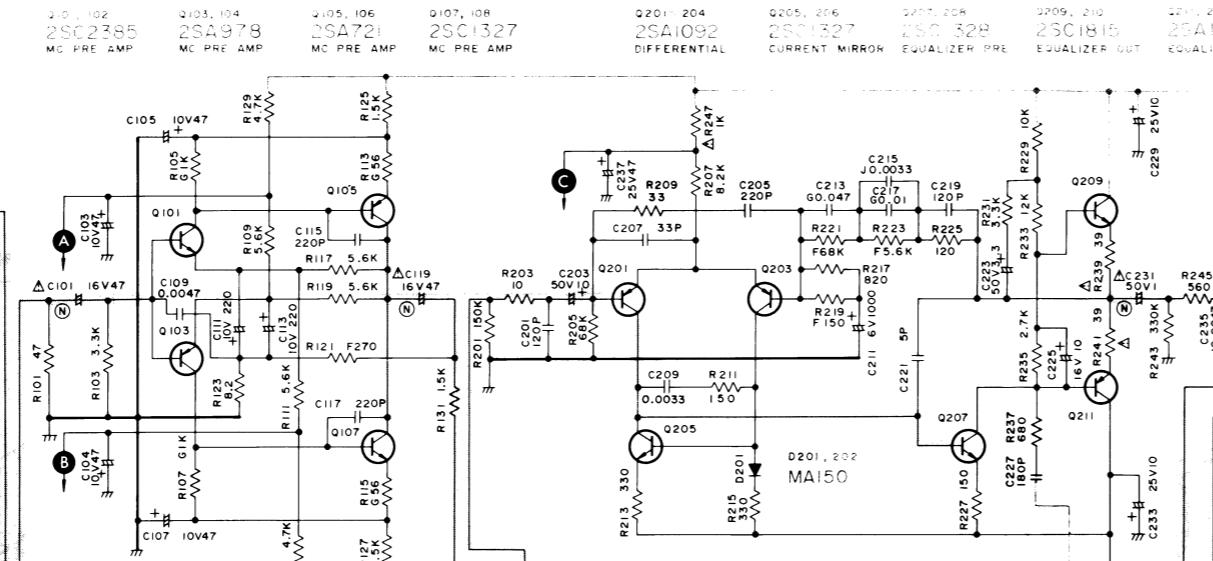
2SA978, 2SC2385	SVIM5213L

■ SCHEMATIC DIAGRAM

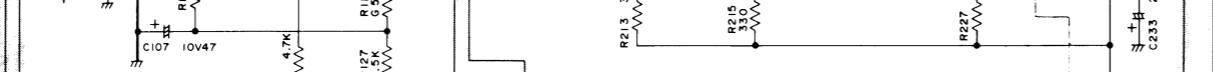
1 2 3 4 5 6 7 8 9

A

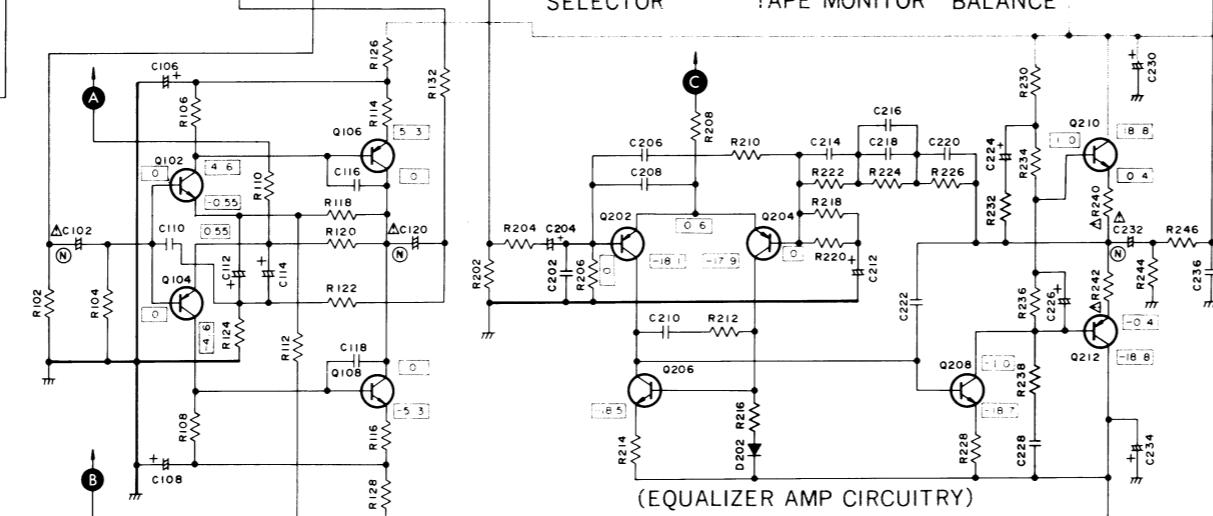
GND
(L ch)
PHONO
TUNER
AUX
REC OUT
PLAYBACK

**B**

TAPE
PLAYBACK

**C**

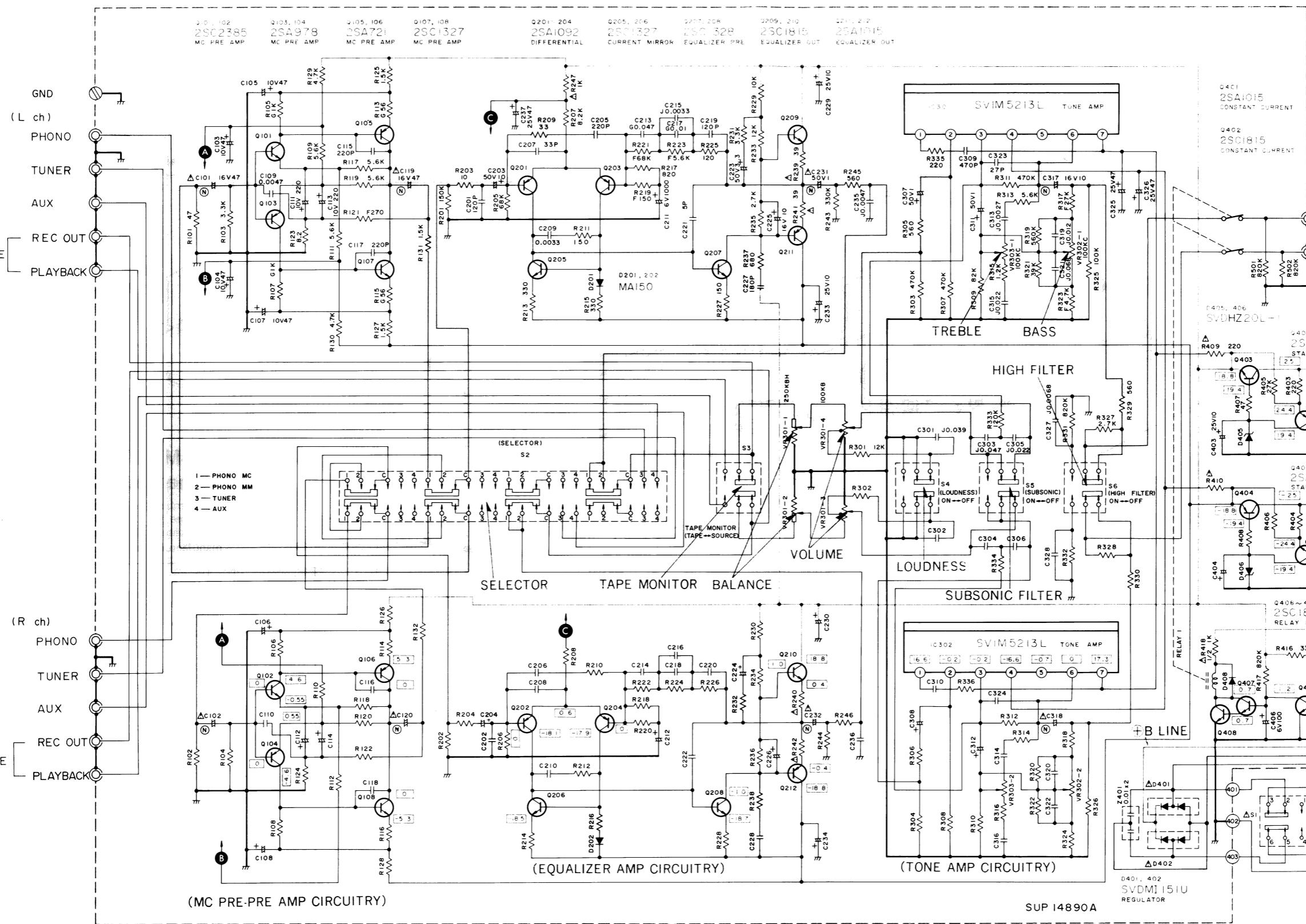
(R ch)
PHONO
TUNER
AUX
REC OUT
PLAYBACK



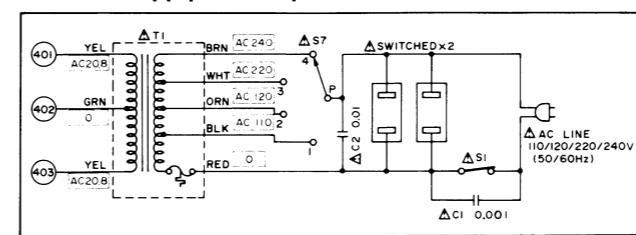
(MC PRE-PRE AMP CIRCUITY)

F

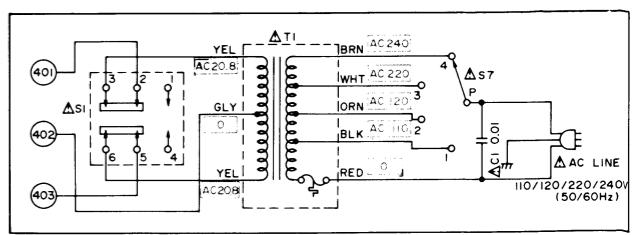
Ref. No.	Production Part	Standard Part
Q105, 106	2SA721	2SA902S-F
Q107, 108, 205, 206	2SC1327	2SC1328



• Power Supply Circuitry of Product for (X) and (XA) only.

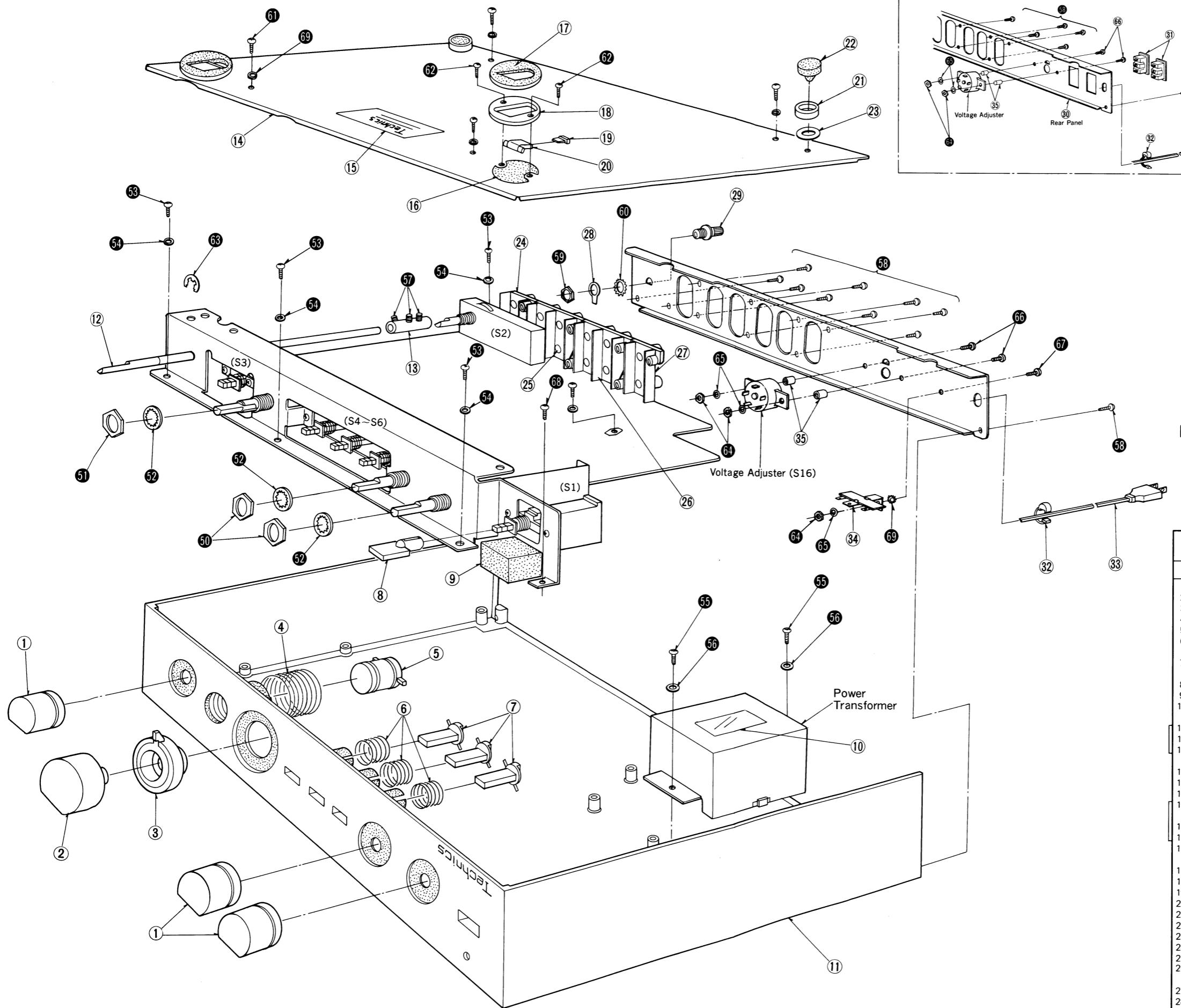


• Power Supply Circuitry of Product for (XAL) only.



SU-C01 SU-C01

■ EXPLODED VIEWS



• Available in [X] and [XA] only

• Available in [X] and [XA] only

■ REPLACEMENT PARTS LIST (Cabinet and Chassis Parts)

NOTES : 1. Part numbers are indicated on most mechanical parts.
Please use this part number for parts orders.
2. Δ indicates that only parts specified by the manufacturer be used for safety.

Ref. No.	Part No.	Part Name & Description
CABINET and CHASSIS PARTS		
1	SBN785	Knob, Bass, Treble, Selector
2	SBN781	Knob, Volume
3	SBN783-1	Knob, Balance
4	SUS145	Spring, Tape Monitor Switch
5	SBC203	Button, Tape Monitor Switch
6	SUS123-2	Spring, High Filter, Subsonic Filter
7	SBC205-1	Loudness Switch
8	SBC207-1	Button, High Filter, Subsonic Filter
9	SHG1491	Loudness Switch
10	SGB497-1	Button, Power Switch
11	SGWUC01D	Rubber Cushion, Power Switch
11 [XE] only	SGWUC01E	Panel, with Cabinet
11 [X, XA, XAL] only	SGWUC01M	Panel, with Cabinet
12	SUB23	Panel, with Cabinet
13	SUBA21-1S	Shaft, Selector Switch
14	SKU7291	Coupler, Selector Switch Shaft
15 [E, XGF, XGH, EB, EG]	SGT19490	Bottom Board
15 [XE]	SGT19450	Name Plate
15 [X, XA, XAL]	SGT19510	Name Plate
16	SHS2411	Fiber, Front Side Feet
17	SHG1485	Rubber, Cushion, Front Feet
18	SKL217	Foot, Front Side
19	SHG1493	Rubber Cushion, Stand Feet
20	SKX259	Stand Foot, Front Side
21	SGX803	Ring, Rear Side Feet
22	SHG1487	Foot, Rear Side
23	SHR5013	Washer, Rear Side Feet
24	SJF3225SA	Terminal, Phono
25	SJF3431-2SA	Terminal, Tuner & Output
26	SJF3431-1SA	Terminal, Rec Out & Playback
27	SJF3225SA	Terminal, Aux
28	SJT215	Lug, Ground
29	SJF4101-1	Terminal, Ground

(Continued from Page 4)

■ REPLACEMENT PARTS LIST Electrical Parts

NOTES : 1. Part numbers are indicated on most mechanical parts.

Please use this part number for parts orders.

2. Δ 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			
CAPACITORS												
R209, 210		ERD25TJ330	Carbon,	33Ω,	1/4W,	± 5%	C1	Δ	ECKDHS103SE2	Ceramic,	0.01μF,	400VAC, ±20%
R211, 212		ERD25TJ151	Carbon,	150Ω,	1/4W,	± 5%	C1 [X, XA] only	Δ	ECKDDS102MD	Ceramic,	0.001μF,	250VAC, ±20%
R213, 214		ERD25TJ331	Carbon,	330Ω,	1/4W,	± 5%	C2[X, XA] only	Δ	ECKDHS103SE2	Ceramic,	0.01μF,	400VAC, ±20%
R215, 216		ERD25TJ331	Carbon,	330Ω,	1/4W,	± 5%	C101, 102	Δ	ECEA16NA47	Non-Polar Electrolytic,	47μF,	16V
R217, 218		ERD25TJ821	Carbon,	820Ω,	1/4W,	± 1%	C103, 104		ECEA10Z47	Electrolytic,	47μF,	10V
R219, 220		ERO25CKF1500	Metal Film,	150Ω,	1/4W,	± 1%	C105, 106		ECEA1AS470	Electrolytic,	47μF,	10V
R221, 222		ERO25CKF6802	Metal Film,	68kΩ,	1/4W,	± 1%	C107, 108		ECEA1AS470	Electrolytic,	47μF,	10V
R223, 224		ERO25CKF5601	Metal Film,	5.6kΩ,	1/4W,	± 1%	C109, 110		ECKD1H472MD	Ceramic,	0.0047μF,	50V, ±20%
R225, 226		ERD25TJ121	Carbon,	120Ω,	1/4W,	± 5%	C111, 112		ECEA1AS221	Electrolytic,	220μF,	10V
R227, 228		ERD25TJ151	Carbon,	150Ω,	1/4W,	± 5%	C113, 114		ECEA1AS221	Electrolytic,	220μF,	10V
R229, 230		ERD25TJ103	Carbon,	10kΩ,	1/4W,	± 5%	C115, 116		ECCD1H221K	Ceramic,	220pF,	50V, ±10%
R231, 232		ERD25TJ332	Carbon,	3.3kΩ,	1/4W,	± 5%	C117, 118		ECCD1H221K	Ceramic,	220pF,	50V, ±10%
R233, 234		ERD25TJ123	Carbon,	12kΩ,	1/4W,	± 5%	C119, 120		ECEA16NA47	Non-Polar Electrolytic,	47μF,	16V
R235, 236		ERD25TJ272	Carbon,	2.7kΩ,	1/4W,	± 5%	C201, 202		ECCD1H121K	Ceramic,	120pF,	50V, ±10%
R237, 238	Δ	ERD25TJ681	Carbon,	680Ω,	1/4W,	± 5%	C203, 204		ECEA50M10R	Electrolytic,	10μF,	50V
R239, 240	Δ	ERD25FJ390	Carbon,	39Ω,	1/4W,	± 5%	C205, 206		ECCD1H221K	Ceramic,	220pF,	50V, ±10%
R241, 242	Δ	ERD25FJ390	Carbon,	39Ω,	1/4W,	± 5%	C207, 208		ECCD1H330K	Ceramic,	33pF,	50V, ±10%
R243, 244		ERD25TJ334	Carbon,	330kΩ,	1/4W,	± 5%	C209, 210		ECKD1H332MD	Ceramic,	0.0033μF,	50V, ±20%
R245, 246		ERD25TJ561	Carbon,	560Ω,	1/4W,	± 5%	C211, 212		ECEA0JS102	Electrolytic,	1000μF,	6.3V
R247	Δ	ERD25FJ102	Carbon,	1kΩ,	1/4W,	± 5%	C213, 214		ECQP1473GZ	Polypropylene	0.047μF,	125V, ± 2%
R301, 302		ERD25TJ123	Carbon,	12kΩ,	1/4W,	± 5%	C215, 216		ECQM1H332JZ	Polyester,	0.0033μF,	50V, ± 5%
R303, 304		ERD25TJ474	Carbon,	470kΩ,	1/4W,	± 5%	C217, 218		ECQP1103GZ	Polypropylene	0.01μF,	125V, ± 2%
R305, 306		ERD25TJ561	Carbon,	560Ω,	1/4W,	± 5%	C219, 220		ECCD1H121K	Ceramic,	120pF,	50V, ±10%
R307, 308		ERD25TJ474	Carbon,	470kΩ,	1/4W,	± 5%	C221, 222		ECCD1H050K	Ceramic,	5pF,	50V, ±10%
R309, 310		ERD25TJ823	Carbon,	82kΩ,	1/4W,	± 5%	C223, 224		ECEA50Z3R3	Electrolytic,	3.3μF,	50V
R311, 312		ERD25TJ474	Carbon,	470kΩ,	1/4W,	± 5%	C225, 226		ECEA1HS100	Electrolytic,	10μF,	50V
R313, 314		ERD25TJ562	Carbon,	5.6kΩ,	1/4W,	± 5%	C227, 228		ECCD1H181K	Ceramic,	180pF,	50V, ±10%
R315, 316		ERD25TJ122	Carbon,	1.2kΩ,	17W,	± 5%	C229, 230		ECEA1HS100	Electrolytic,	10μF,	50V
R317, 318		ERO25CKF2702	Metal Film,	27kΩ,	1/4W,	± 1%	C231, 232		ECEA50N1	Non-Polar Electrolytic,	1μF,	50V
R319, 320		ERD25TJ564	Carbon,	560kΩ,	1/4W,	± 5%	C233, 234		ECEA1HS100	Electrolytic,	10μF,	50V
R321, 322		ERD25TJ393	Carbon,	39kΩ,	1/4W,	± 5%	C235, 236		ECQM1H472JZ	Polyester,	0.0047μF,	50V, ± 5%
R323, 324		ERO25CKF4701	Metal Film,	4.7kΩ,	1/4W,	± 1%	C237		ECEA1ES470	Electrolytic,	47μF,	25V
R325, 326		ERD25TJ104	Carbon,	100kΩ,	1/4W,	± 5%	C301, 302		ECQM1H393JZ	Polyester,	0.039μF,	50V, ± 5%
R327, 328		ERD25TJ272	Carbon,	2.7kΩ,	1/4W,	± 5%	C303, 304		ECQM1H473JZ	Polyester,	0.047μF,	50V, ± 5%
R329, 330		ERD25TJ561	Carbon,	560Ω,	1/4W,	± 5%	C305, 306		ECQM1H223JZ	Polyester,	0.022μF,	50V, ± 5%
R331, 332		ERD25TJ824	Carbon,	820kΩ,	1/4W,	± 5%	C307, 308		ECEA50M1R	Electrolytic,	1μF,	50V
R333, 334		ERD25TJ124	Carbon,	120kΩ,	1/4W,	± 5%	C309, 310		ECKD1H471KB	Ceramic,	470pF,	50V, ±10%
R335, 336		ERD25TJ221	Carbon,	220Ω,	1/4W,	± 5%	C311, 312		ECEA50Z1	Electrolytic,	1μF,	50V
R401, 402		ERD25TJ683	Carbon,	68kΩ,	1/4W,	± 5%	C313, 314		ECQM1H272JZ	Polyester,	0.0027μF,	50V, ± 5%
R403, 404		ERD25TJ221	Carbon,	220Ω,	1/4W,	± 5%	C315, 316		ECQM1H223JZ	Polyester,	0.022μF,	50V, ± 5%
R405, 406		ERD25TJ273	Carbon,	27kΩ,	1/4W,	± 5%	C317, 318		ECEA16N10	Non-Polar Electrolytic,	10μF,	16V
R407, 408		ERD25TJ470	Carbon,	47Ω,	1/4W,	± 5%	C319, 320		ECQM1H123JZ	Polyester,	0.012μF,	50V, ± 5%
R409, 410	Δ	ERD25FJ221	Carbon,	220Ω,	1/4W,	± 5%	C321, 322		ECQM1H683JZ	Polyester,	0.068μF,	50V, ± 5%
R413		ERD25TJ682	Carbon,	6.8kΩ,	1/4W,	± 5%	C323, 324		ECCD1H270K	Ceramic,	27pF,	50V, ±10%
R414		ERD25TJ104	Carbon,	100kΩ,	1/4W,	± 5%	C325, 326		ECEA1ES470	Electrolytic,	47μF,	25V
R415		ERD25TJ562	Carbon,	5.6kΩ,	1/4W,	± 5%	C327, 328		ECQM1H682JZ	Polyester,	0.0068μF,	50V, ± 5%
R416		ERD25TJ333	Carbon,	33kΩ,	1/4W,	± 5%	C401, 402		ECEA1VS102	Electrolytic,	1000μF,	35V
R417		ERD25TJ824	Carbon,	820kΩ,	1/4W,	± 5%	C403, 404		ECEA1HS100	Electrolytic,	10μF,	50V
R418	Δ	ERD50FJ102	Carbon,	1kΩ,	1/2W,	± 5%	C405		ECEA50Z3R3	Electrolytic,	3.3μF,	50V
R419	Δ	ERD50FJ152	Carbon,	1.5kΩ,	1/2W,	± 5%	C406		ECEA1AS101	Electrolytic,	100μF,	10V
R501, 502		ERD25TJ824	Carbon,	820kΩ,	1/4W,	± 5%						

■ REPLACEMENT PARTS LIST(Cabinet and Chassis Parts)

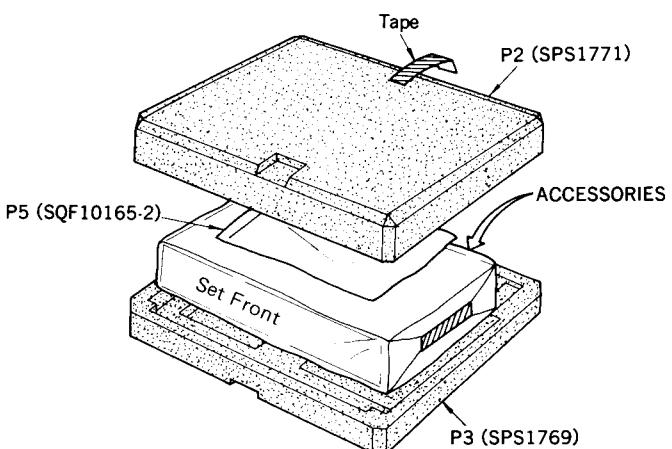
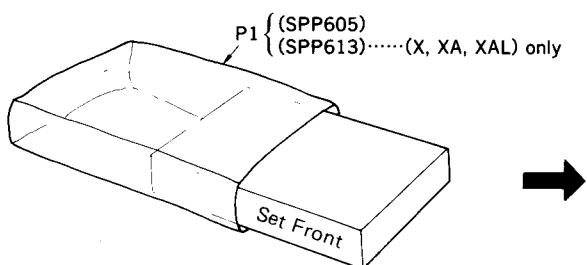
Ref. No.		Part No.	Part Name & Description			Ref. No.		Part No.	Part Name & Description		
30 [E, XE, XGF, XGH, EB, EG]		SGP1434A	Rear Panel					XWC3B	Washer, Printed Circuit Board Screw M'tg		
30 [X, XA]		SGP1434-1A	Rear Panel					XTN3+8BFZ	Screw, Power Transformer M'tg		
30 [XAL]		SGP1434-2A	Rear Panel					XWG3FZ	Washer, Power Transformer Screw		
31 [X, XA] only	Δ	SJS466-1	Socket, AC Outlet					XXE3D4FZ	Screw, Selector Switch Shaft Coupler M'tg		
32 [E,X,XA,XGF, XGH, EB, EG]		SHR127	Bushing, AC Cord					XTB3+8BFN	Screw, Rear Panel & Terminals M'tg		
32 [XE]		SHR129	Bushing, AC Cord					XNS6	Nut, Ground Terminal M'tg		
32 [XAL]		SHR131	Bushing, AC Cord								
33 [E,XGF,XGH, EB, EG]	Δ	RJA23ZC	AC Cord					XWC6B	Washer (Spring), Ground Terminal Nut		
33 [X, XA]	Δ	SJA97	AC Cord					XTB3+8BFN	Screw, Bottom Board M'tg		
33 [XE]	Δ	RJA45ZC	AC Cord					XSS3+6S	Screw, Front Foot M'tg		
33 [XAL]	Δ	QFC1207M	AC Cord					XUC5FT	Circlip, Selector Switch Shaft M'tg		
34		SJR205	Terminal Strip, 2 Pin					XNG3 S	Nut, Voltage Adjuster Switch & 2 pin		
34 [X, XA] only		RJR4B	Terminal Strip, 2 Pin						Terminal Strip M'tg		
35		SUDA41	Spacer, Voltage Adjuster Switch					XWA3B	Washer, Voltage Adjuster Switch & 2 pin		
SCREWS and WASHERS											
		XNS8	Nut, Bass and Treble Control M'tg					XSB3+14BNS	Screw, Voltage Adjuster Switch M'tg		
		XNS9	Nut, Volume and Balance Control M'tg					XSB3+8BNS	Screw, 2 pin Terminal Strip M'tg		
		XWC9B	Washer, Bass, Treble and Volume Control					XTB3+6BFZ	Screw, Printed Circuit Board Ass'y M'tg		
		XTB3+8BFZ	Screw, Printed Circuit Board Ass'y M'tg					XWC3B	Washer, Bottom Board & 2 pin Terminal Strip Screw		

■ REPLACEMENT PARTS LIST Accessories and Packing Parts

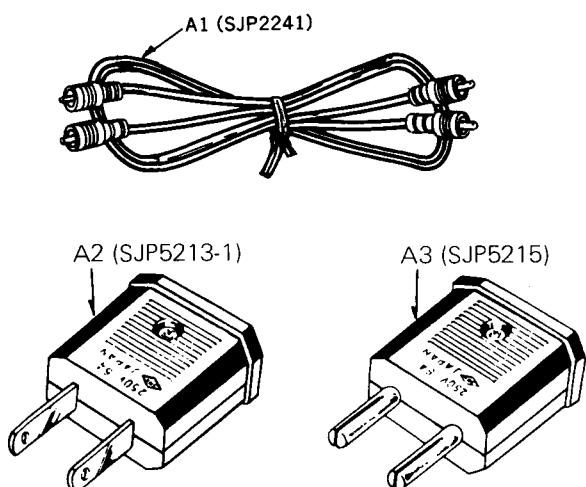
Ref. No.		Part No.	Part Name & Description
ACCESSORIES			
A1		SJP2241	Cord, Connection
A2 [X, XA] only	▲	SJP5213-1	Plug Adapter, AC power
A3 [X, XA] only	▲	SJP5215	Plug Adapter, AC Power
PACKING PARTS			
P1 P1 [X, XA, XAL] only		SPP605 SPP613	Polyethylene Bag Polyethylene Bag
P2		SPS1771	Pad, Set Top Side
P3		SPS1769	Pad, Set Bottom Side
P4 [E]		SPG1913	Carton Box
P4 [XE, X, XA, XAL, XGH, EB, EG]		SPG1915	Carton Box
P4 [XGF]		SPG1883	Carton Box
P5		SQF10165-2	Instructions Book, Printed Matter

(E) and (EG) are available in Scandinavia and European only.
 (XE) is available in United Kingdom only.
 (EB) is available in Belgium only.
 (XGF) is available in France only.
 (XGH) is available in Holland only.
 (X) and (XA) are available in Asia, Latin America, Middle East and Africa only.
 (XAL) is available in Australia only.

■ PACKINS



■ ACCESSORIES



How to assemble the carrying handle.

