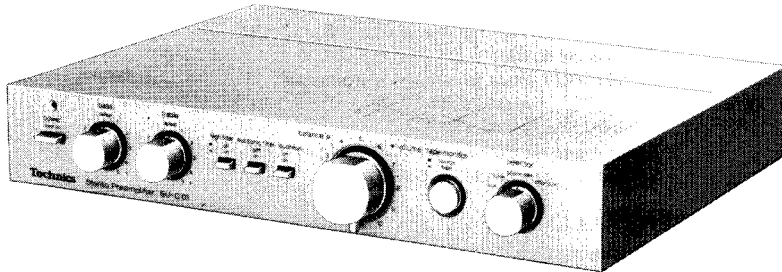


Service Manual

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 k Ω
MC	100 μ V/47 Ω
TUNER, AUX	150 mV/47 k Ω
TAPE	150 mV/47 k Ω

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 k Ω
MC	100 μ V/47 Ω
TUNER, AUX	150 mV/47 k Ω
TAPE	150 mV/47 k Ω

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 (BÄSSE) 50 Hz, +10 dB ~ -10 dB

Treble (HÖHEN) 20 kHz, +10 dB ~ -10 dB

Unterschallfilter 30 Hz, -12 dB/oct.

Höhenfilter 7 kHz, -6 dB/oct.

Gehörichige 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

Technics

Matsushita Electric Trading Co., Ltd.

P.O. Box 288, Central Osaka Japan

CARACTERISTIQUES TECHIQUES (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 Ω
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%
	(Sortie 3 V, Volume max.)
PHONO MM, MC	0,005%
	(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

30 Hz, -12 dB/oct.

Filtre d'aigu

7 kHz, -6 dB/oct.

Correction physiologique (volume à -30 dB)

50 Hz +9 dB

Tension de sortie

OUTPUT Pour la puissance nominale	1 V
max.	7 V

REC OUT

150 mV

Equilibrage de canaux, AUX 250 Hz ~ 6300 Hz

±1 dB

Séparation des canaux AUX 1 kHz

55 dB

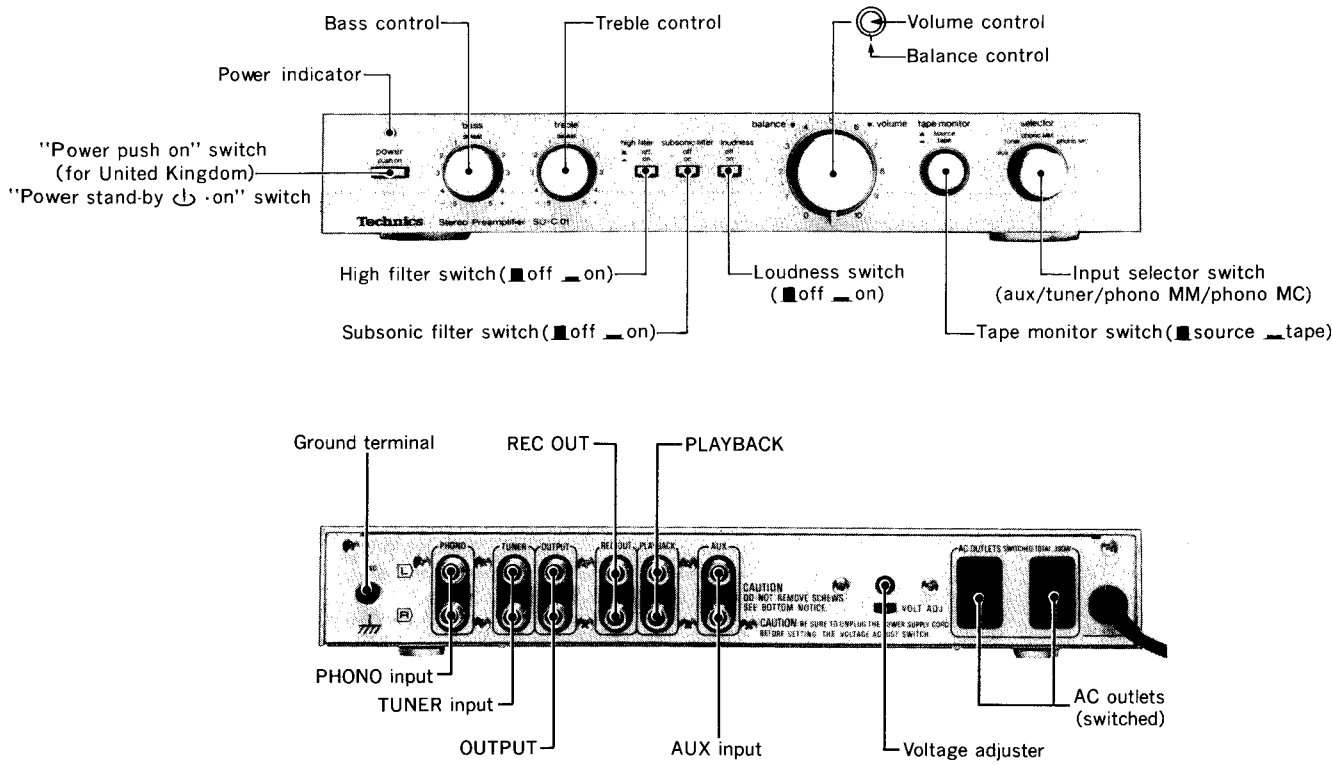
GENERALITES

Consommation	9 W
Allimentation (50/60 Hz)	110, 120, 220, 240V
Dimensions (L x H x Pr)	297 x 49 x 241 mm
Poids	3 kg

CONTENTS

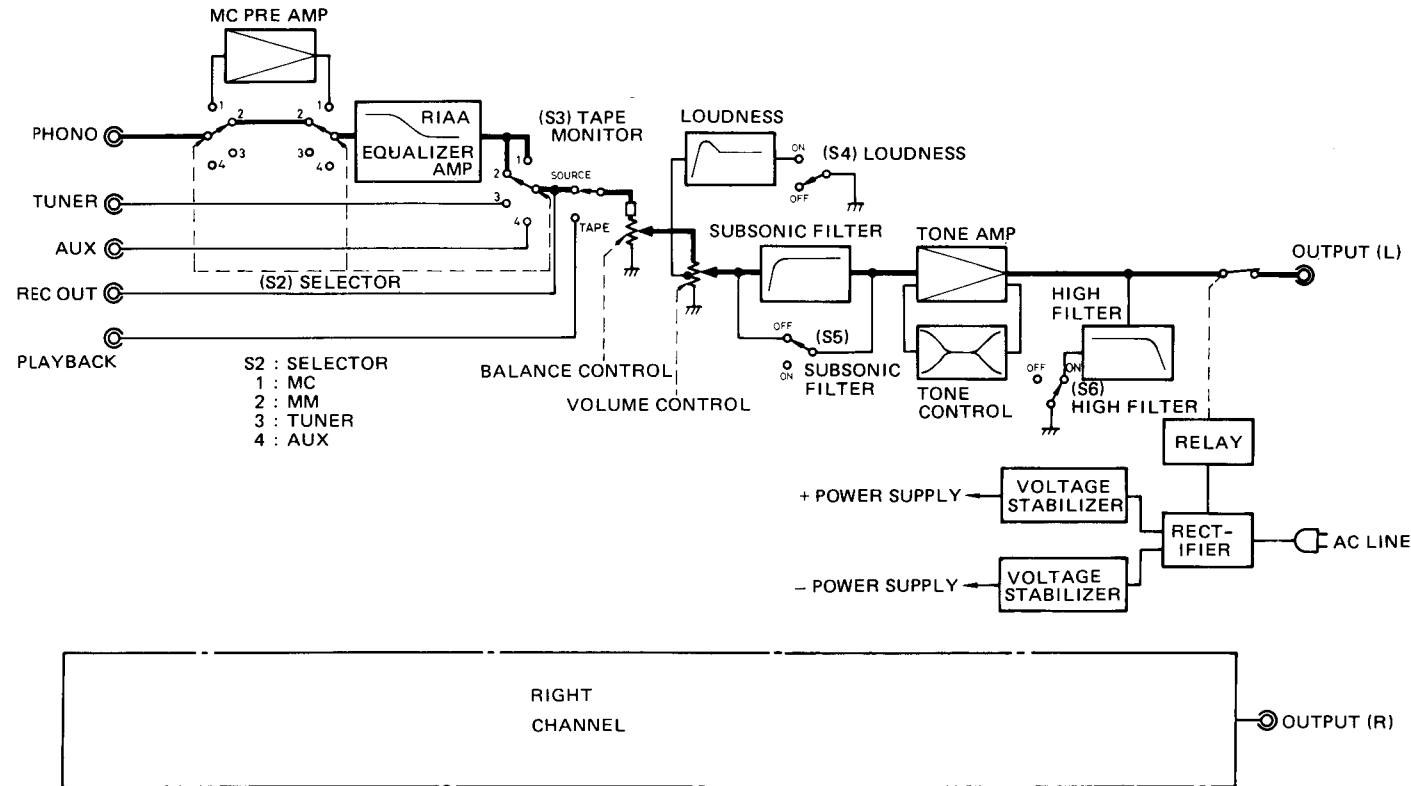
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LOCATION OF CONTROLS



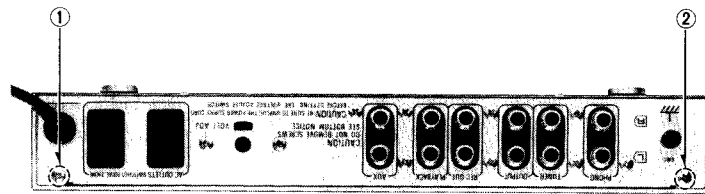
* The products for other destinations except (XA) and (X) are not equipped with AC outlets.

■ BLOCK DIAGRAM

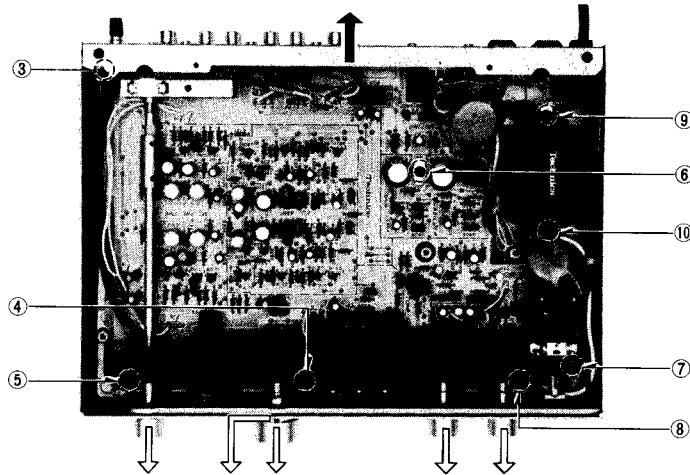


■ HOW TO REMOVE THE PRINTED CIRCUIT BOARD

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.

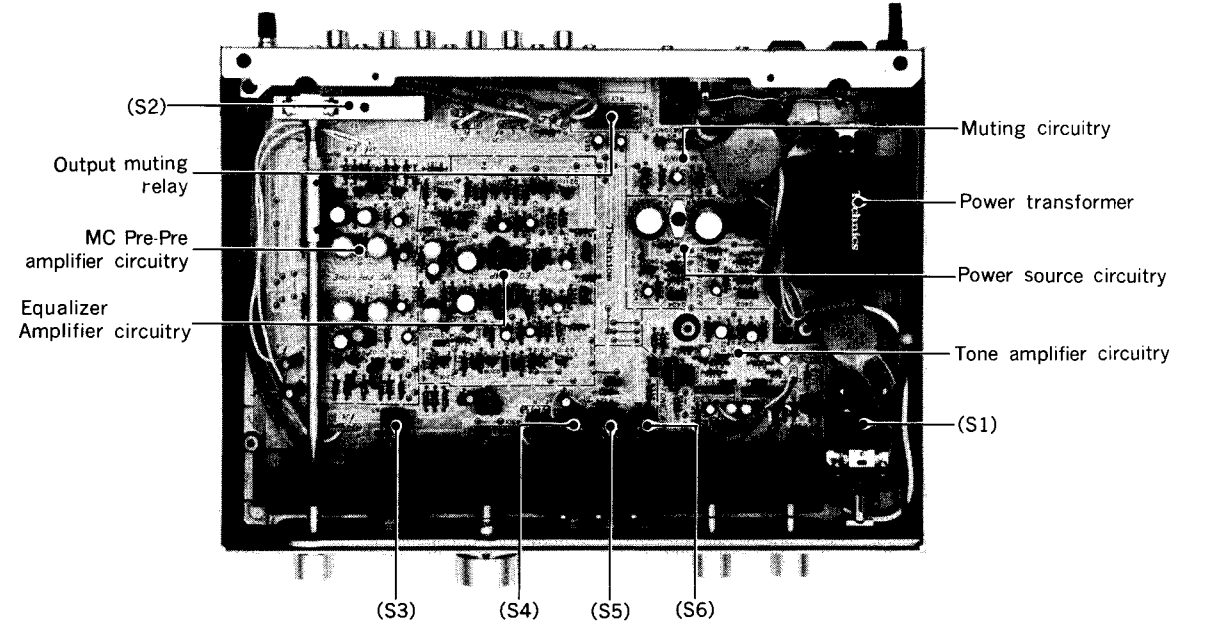


[PHOTO 1]



[PHOTO 2]

■ PRINTED CIRCUIT BOARD VIEW



■ REPLACEMENT PARTS LIST Electric Parts

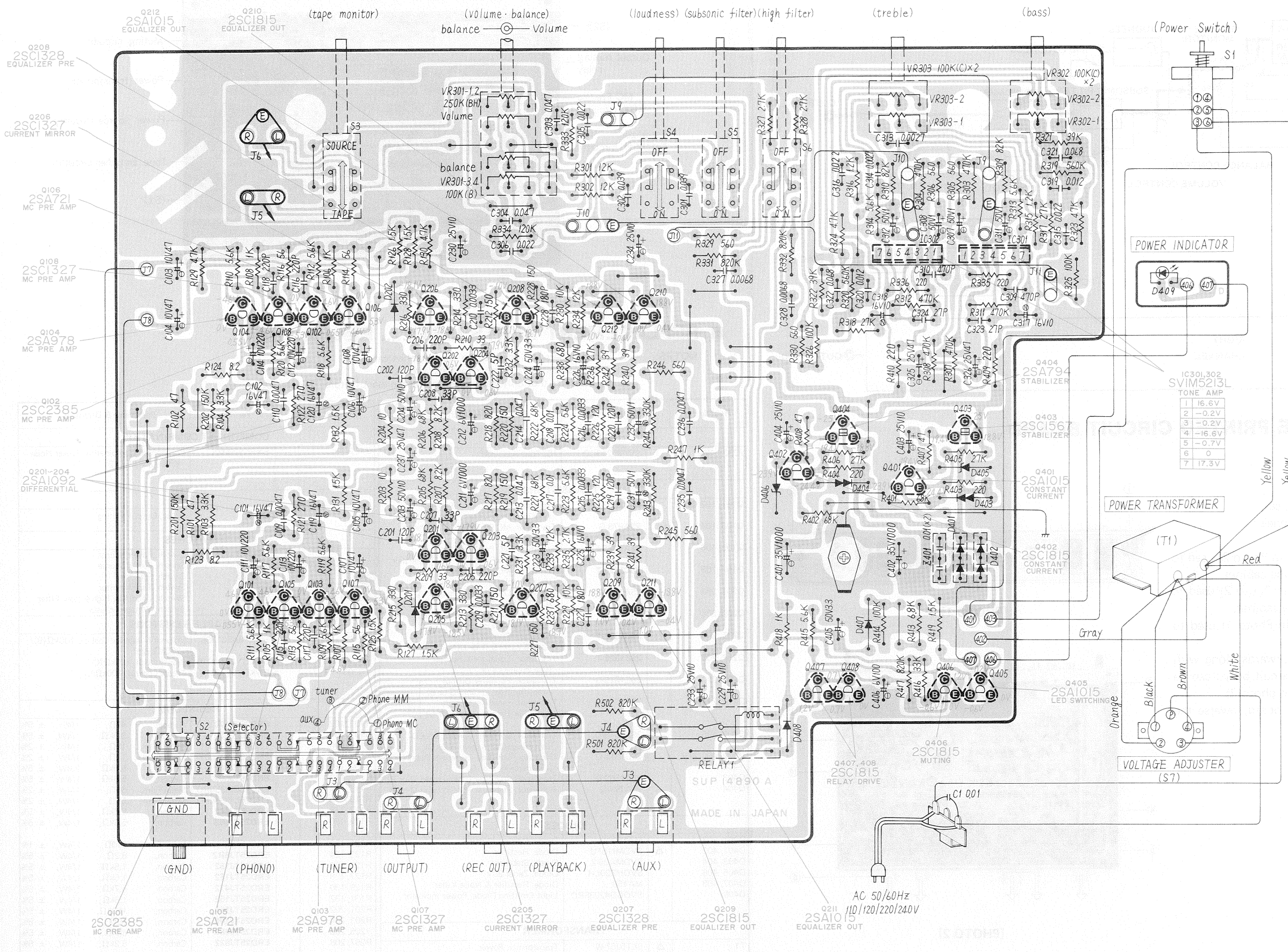
- NOTES:
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
 2. Δ indicates that only parts specified by the manufacturer be used for safety.

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
INTEGRATED CIRCUITS			COMPONENT COMBINATION		
IC301, 302	SVIM5213CO	IC, Tone Amplifier	Z401	EXRFS203ZS	Component Combination, Power Noise Killer, 0.01μF (X2)
TRANSISTORS			RELAY		
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)	SWITCHES		
Q105, 106	2SA902S-F	Transistor, MC Pre Amplifier (Use in ranks F or G)	S1	SSH113	Switch, Power Source
Q107, 108	2SC1328-T	Transistor, MC Pre Amplifier (Use in ranks S, T or U)	S1 [X, XA] only	SSH119	Switch, Power Source
Q201, 203	2SA1092-T	Transistor, Differential Amplifier (Use in ranks T or U)	S2	SSR133	Switch, Selector
Q202, 204	2SA1092-T	Transistor, Differential Amplifier (Use in ranks T or U)	S3	SSH83	Switch, Tape Monitor
Q205, 206	2SC1328-T	Transistor, Current Mirror (Use in ranks S, T or U)	S4, 5, 6	SSH361	Switch, Loudness, High & Low Filter
Q207, 208	2SC1328-T	Transistor, Equalizer Amplifier (Use in ranks S or T)	S7	ESE372	Switch, Voltage Adjuster
Q209, 210	2SC1815-G	Transistor, Equalizer Output Amplifier (Use in ranks G or B)	VARIABLE RESISTORS		
Q211, 212	2SA1015-O	Transistor, Equalizer Output Amplifier (Use in ranks Y or O)	VR301	EWKP8AS01386	Volume & Balance Control, 100kΩ(B)/250kΩ(BH)
Q401, 405	2SA1015-O	Transistor, Constant Current & LED Switching (Use in ranks Y or O)	VR302	EWKGY035C15	Bass Control, 100kΩ(C)
Q402, 406, 407, 408	2SC1815-O	Transistor, Constant Current & Relay Drive (Use in ranks Y or O)	VR303	EWKGY0035C15	Treble Control, 100kΩ(C)
Q403	2SC1567-Q	Transistor, Stabilizer (Use in ranks Q or R)	RESISTORS		
Q404	2SA794-Q	Transistor, Stabilizer (Use in ranks Q or R)	R101, 102	ERD25TJ470	Carbon, 47Ω, 1/4W, ± 5%
DIODES			R103, 104	ERD25TJ332	Carbon, 3.3kΩ, 1/4W, ± 5%
D201, 202	MA150	Diode, Current Mirror	R105, 106	ERO25CKG1001	Metal Film, 1kΩ, 1/4W, ± 2%
D401, 402	SVDMI151U	Diode, Rectifier	R107, 108	ERO25CKG1001	Metal Film, 1kΩ, 1/4W, ± 2%
D403, 404	SVDMA26-2	Diode, Stabilizer	R109, 110	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%
D405, 406	SVDH220L-1	Diode, Zener 20V	R111, 112	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%
D407, 408	MA150	Diode, Rectifier & Noise Killer	R113, 114	ERO25CKG56RO	Metal Film, 56Ω, 1/4W, ± 2%
D409	SVDGD4203SRD	Light Emitting Diode, Power Indicator	R115, 116	ERO25CKG56RO	Metal Film, 56Ω, 1/4W, ± 2%
TRANSFORMER			R117, 118	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%
T1	SLT5J67-W	Transformer, Power	R119, 120	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%
R121, 122	ERO25CKF2700	Metal Film, 270Ω, 1/4W, ± 1%	R123, 124	ERD25TJ8R2	Carbon, 8.2Ω, 1/4W, ± 5%
R125, 126	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%	R127, 128	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%
R129, 130	ERD25TJ472	Carbon, 4.7kΩ, 1/4W, ± 5%	R131, 132	ERD25TJ152	Carbon, 1.5kΩ, 1/4W, ± 5%
R201, 202	ERD25TJ154	Carbon, 150kΩ, 1/4W, ± 5%	R203, 204	ERD25TJ100	Carbon, 10Ω, 1/4W, ± 5%
R205, 206	ERD25TJ683	Carbon, 68kΩ, 1/4W, ± 5%	R207, 208	ERD25TJ822	Carbon, 8.2kΩ, 1/4W, ± 5%

(Continued to Page 11)

PRINTED CIRCUIT BOARD WIRING VIEW

Earth (Ground) Lines



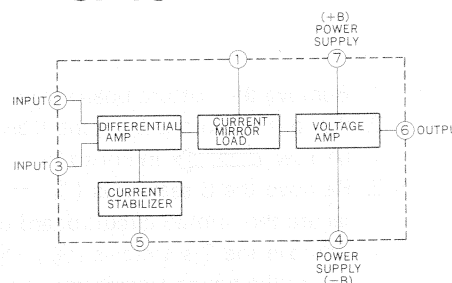
Notes:

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.
8. 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.

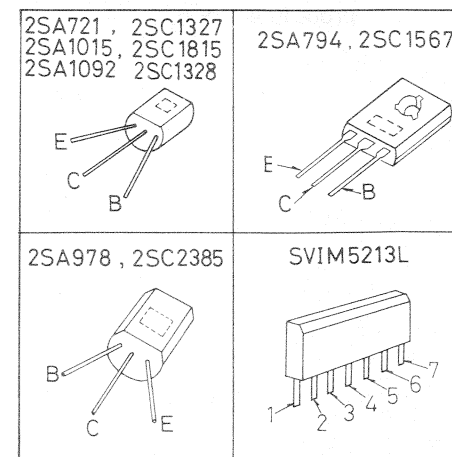
1	110V
2	120V
3	220V
4	240V
9. The Δ mark has been used for the indication of specified parts for an assurance of safety, but it has been changed to Δ mark. When replacing parts, be sure to use parts with correct numbers with reference to the circuit drawing or the repair parts list.

Δ	Standards values
Δ	(new mark)
10. To represent transistors, Q is used instead of TR (Ex. TR1 $\rightarrow$ Q1)
11. $\rightarrow$ Phono signal lines of left channel.
12. This schematic diagram may be modified at any time with the development of new technology.

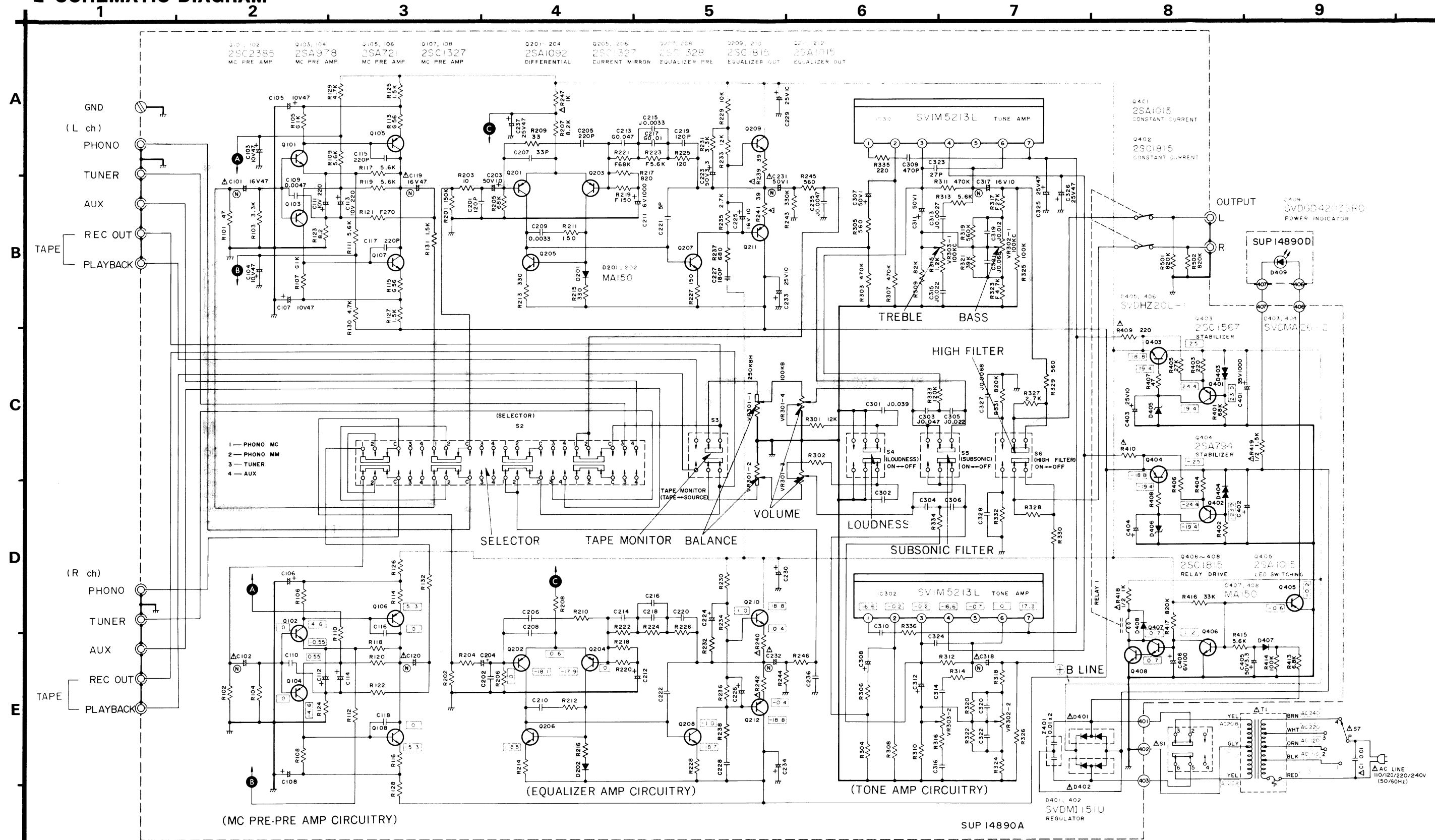
BLOCK DIAGRAM OF IC

IC301, 302
(SVIM5213L)
Tone Amplifier

TERMINAL GUIDE OF TRANSISTOR & IC

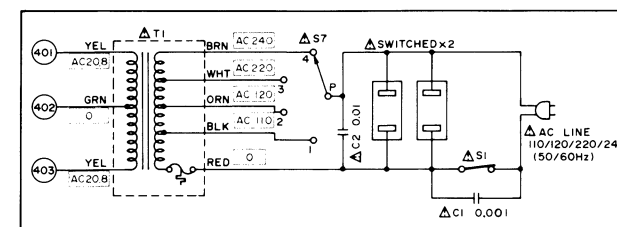


■ SCHEMATIC DIAGRAM

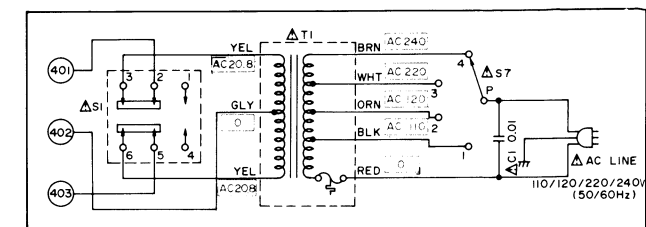


Ref. No.	Production Part	Standard Part
Q105, 106	2SA721	2SA902S-F
Q107, 108, 205, 206	2SC1327	2SC1328

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

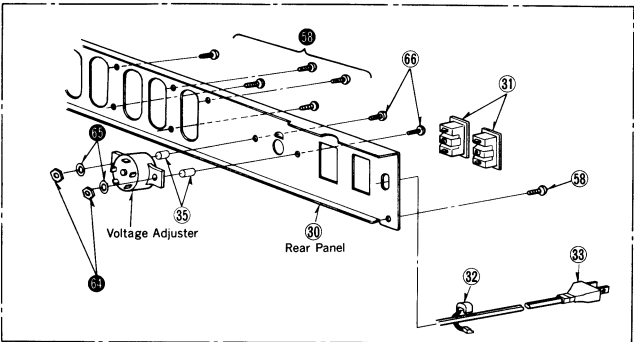


• Power Supply Circuitry of Product for (XAL) only.

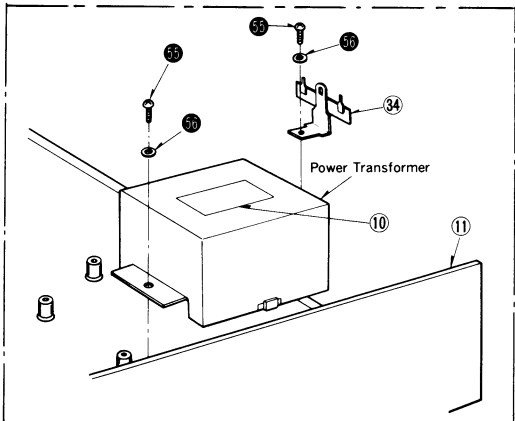


EXPLODED VIEWS

Available in [X] and [XA] only



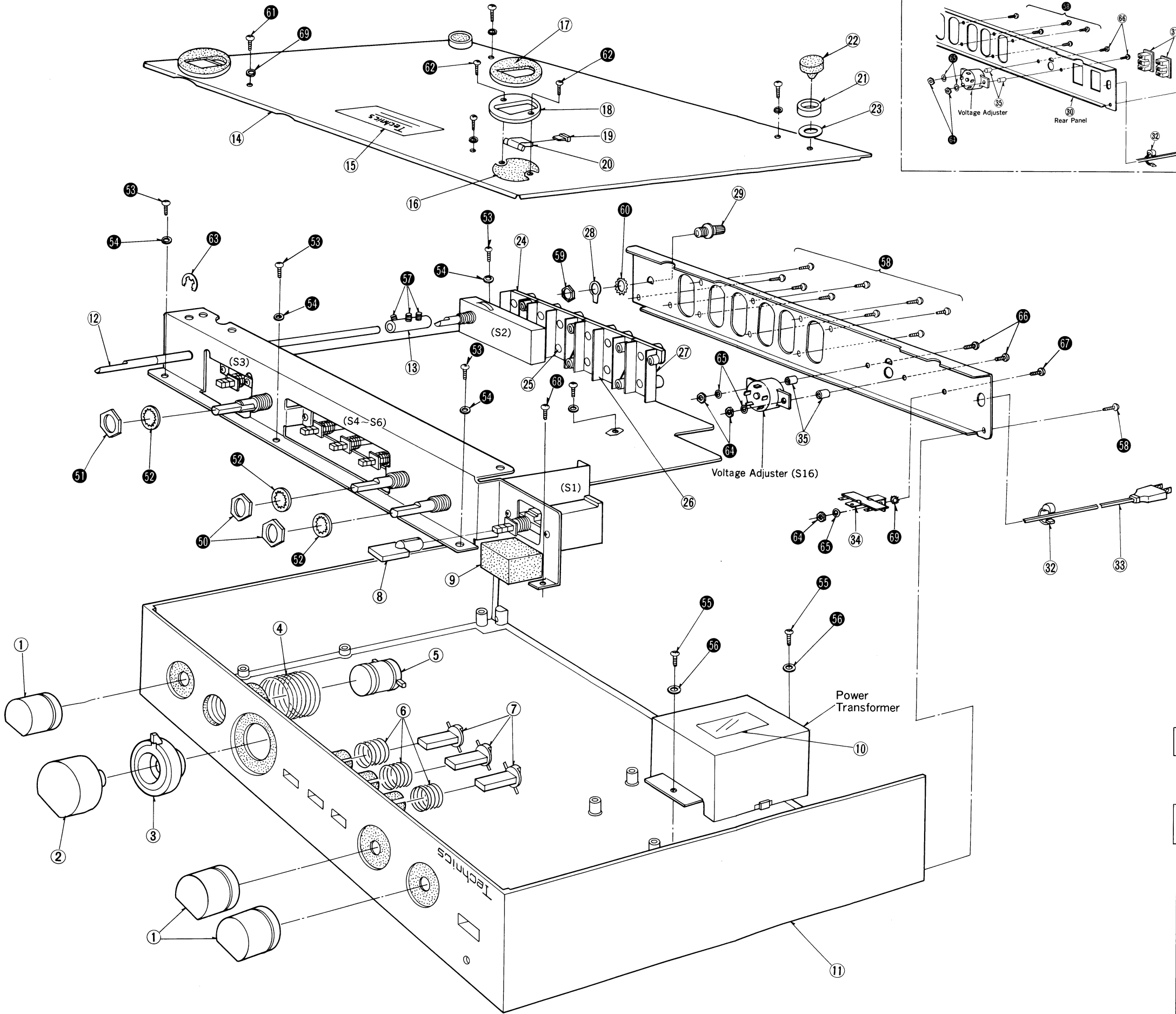
Available in [X] and [XA] only



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 Loudness Switch
7	SBC205-1	Button, High Filter, Subsonic Filter Loudness Switch
8	SBC207-1	Button, Power Switch
9	SHG1491	Rubber Cushion, Power Switch
10	SGB497-1	Label, Technics
11	SGWUC01D	Panel, with Cabinet
11 [XE] only	SGWUC01E	Panel, with Cabinet
11 [X, XA, XAL] only	SGWUC01M	Panel, with Cabinet
12	SUB23	Shaft, Selector Switch
13	SUBA21-1S	Coupler, Selector Switch Shaft
14	SKU7291	Bottom Board
15 [E, XGF, XGH, EB, EG]	SGT19490	Name Plate
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 :**
- Part numbers are indicated on most mechanical parts.
Please use this part number for parts orders.
 - 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
R209, 210	ERD25TJ330	Carbon, 33Ω, 1/4W, ± 5%	CAPACITORS		
R211, 212	ERD25TJ151	Carbon, 150Ω, 1/4W, ± 5%	C1	Δ ECKDHS103SE2	Ceramic, 0.01μF, 400VAC, ±50%
R213, 214	ERD25TJ331	Carbon, 330Ω, 1/4W, ± 5%	C1 [X, XA] only	Δ ECKDDS102MD	Ceramic, 0.001μF, 250VAC, ±20%
R215, 216	ERD25TJ331	Carbon, 330Ω, 1/4W, ± 5%	C2 [X, XA] only	Δ ECKDHS103SE2	Ceramic, 0.01μF, 400VAC, ±50%
R217, 218	ERD25TJ821	Carbon, 820Ω, 1/4W, ± 5%	C101, 102	Δ ECEA16NA47	Non-Polar Electrolytic, 47μF, 16V
R219, 220	ERO25CKF1500	Metal Film, 150Ω, 1/4W, ± 1%	C103, 104	ECEA10Z47	Electrolytic, 47μF, 10V
R221, 222	ERO25CKF6802	Metal Film, 68kΩ, 1/4W, ± 1%	C105, 106	ECEA1AS470	Electrolytic, 47μF, 10V
R223, 224	ERO25CKF5601	Metal Film, 5.6kΩ, 1/4W, ± 1%	C107, 108	ECEA1AS470	Electrolytic, 47μF, 10V
R225, 226	ERD25TJ121	Carbon, 120Ω, 1/4W, ± 5%	C109, 110	ECKD1H472MD	Ceramic, 0.0047μF, 50V, ±20%
R227, 228	ERD25TJ151	Carbon, 150Ω, 1/4W, ± 5%	C111, 112	ECEA1AS221	Electrolytic, 220μF, 10V
R229, 230	ERD25TJ103	Carbon, 10kΩ, 1/4W, ± 5%	C113, 114	ECEA1AS221	Electrolytic, 220μF, 10V
R231, 232	ERD25TJ332	Carbon, 3.3kΩ, 1/4W, ± 5%	C115, 116	ECCD1H221K	Ceramic, 220pF, 50V, ±10%
R233, 234	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%	C117, 118	ECCD1H221K	Ceramic, 220pF, 50V, ±10%
R235, 236	ERD25TJ272	Carbon, 2.7kΩ, 1/4W, ± 5%	C119, 120	Δ ECEA16NA47	Non-Polar Electrolytic, 47μF, 16V
R237, 238	ERD25TJ681	Carbon, 680Ω, 1/4W, ± 5%	C201, 202	ECCD1H121K	Ceramic, 120pF, 50V, ±10%
R239, 240	Δ ERD25FJ390	Carbon, 39Ω, 1/4W, ± 5%	C203, 204	ECEA50M10R	Electrolytic, 10μF, 50V
R241, 242	Δ ERD25FJ390	Carbon, 39Ω, 1/4W, ± 5%	C205, 206	ECCD1H221K	Ceramic, 220pF, 50V, ±10%
R243, 244	ERD25TJ334	Carbon, 330kΩ, 1/4W, ± 5%	C207, 208	ECCD1H330K	Ceramic, 33pF, 50V, ±10%
R245, 246	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	C209, 210	ECKD1H332MD	Ceramic, 0.0033μF, 50V, ±20%
R247	Δ ERD25FJ102	Carbon, 1kΩ, 1/4W, ± 5%	C211, 212	ECEA0JS102	Electrolytic, 1000μF, 6.3V
R301, 302	ERD25TJ123	Carbon, 12kΩ, 1/4W, ± 5%	C213, 214	ECQP1473GZ	Polypropylene, 0.047μF, 125V, ± 2%
R303, 304	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%	C215, 216	ECQM1H332JZ	Polyester, 0.0033μF, 50V, ± 5%
R305, 306	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	C217, 218	ECQP1103GZ	Polypropylene, 0.01μF, 125V, ± 2%
R307, 308	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%	C219, 220	ECCD1H121K	Ceramic, 120pF, 50V, ±10%
R309, 310	ERD25TJ823	Carbon, 82kΩ, 1/4W, ± 5%	C221, 222	ECCD1H050K	Ceramic, 5pF, 50V, ±10%
R311, 312	ERD25TJ474	Carbon, 470kΩ, 1/4W, ± 5%	C223, 224	ECEA50Z3R3	Electrolytic, 3.3μF, 50V
R313, 314	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%	C225, 226	ECEA1HS100	Electrolytic, 10μF, 50V
R315, 316	ERD25TJ122	Carbon, 1.2kΩ, 1/4W, ± 5%	C227, 228	ECCD1H181K	Ceramic, 180pF, 50V, ±10%
R317, 318	ERO25CKF2702	Metal Film, 27kΩ, 1/4W, ± 1%	C229, 230	ECEA1HS100	Electrolytic, 10μF, 50V
R319, 320	ERD25TJ564	Carbon, 560kΩ, 1/4W, ± 5%	C231, 232	Δ ECEA50N1	Non-Polar Electrolytic, 1μF, 50V
R321, 322	ERD25TJ393	Carbon, 39kΩ, 1/4W, ± 5%	C233, 234	ECEA1HS100	Electrolytic, 10μF, 50V
R323, 324	ERO25CKF4701	Metal Film, 4.7kΩ, 1/4W, ± 1%	C235, 236	ECQM1H472JZ	Polyester, 0.0047μF, 50V, ± 5%
R325, 326	ERD25TJ104	Carbon, 100kΩ, 1/4W, ± 5%	C237	ECEA1ES470	Electrolytic, 47μF, 25V
R327, 328	ERD25TJ272	Carbon, 2.7kΩ, 1/4W, ± 5%	C301, 302	ECQM1H393JZ	Polyester, 0.039μF, 50V, ± 5%
R329, 330	ERD25TJ561	Carbon, 560Ω, 1/4W, ± 5%	C303, 304	ECQM1H473JZ	Polyester, 0.047μF, 50V, ± 5%
R331, 332	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	C305, 306	ECQM1H223JZ	Polyester, 0.022μF, 50V, ± 5%
R333, 334	ERD25TJ124	Carbon, 120kΩ, 1/4W, ± 5%	C307, 308	ECEA50M1R	Electrolytic, 1μF, 50V
R335, 336	ERD25TJ221	Carbon, 220Ω, 1/4W, ± 5%	C309, 310	ECKD1H471KB	Ceramic, 470pF, 50V, ±10%
R401, 402	ERD25TJ683	Carbon, 68kΩ, 1/4W, ± 5%	C311, 312	ECEA50Z1	Electrolytic, 1μF, 50V
R403, 404	ERD25TJ221	Carbon, 220Ω, 1/4W, ± 5%	C313, 314	ECQM1H272JZ	Polyester, 0.0027μF, 50V, ± 5%
R405, 406	ERD25TJ273	Carbon, 27kΩ, 1/4W, ± 5%	C315, 316	ECQM1H223JZ	Polyester, 0.022μF, 50V, ± 5%
R407, 408	ERD25TJ470	Carbon, 47Ω, 1/4W, ± 5%	C317, 318	Δ ECEA16N10	Non-Polar Electrolytic, 10μF, 16V
R409, 410	Δ ERD25FJ221	Carbon, 220Ω, 1/4W, ± 5%	C319, 320	ECQM1H123JZ	Polyester, 0.012μF, 50V, ± 5%
R413	ERD25TJ682	Carbon, 6.8kΩ, 1/4W, ± 5%	C321, 322	ECQM1H683JZ	Polyester, 0.068μF, 50V, ± 5%
R414	ERD25TJ104	Carbon, 100kΩ, 1/4W, ± 5%	C323, 324	ECCD1H270K	Ceramic, 27pF, 50V, ±10%
R415	ERD25TJ562	Carbon, 5.6kΩ, 1/4W, ± 5%	C325, 326	ECEA1ES470	Electrolytic, 47μF, 25V
R416	ERD25TJ333	Carbon, 33kΩ, 1/4W, ± 5%	C327, 328	ECQM1H682JZ	Polyester, 0.0068μF, 50V, ± 5%
R417	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	C401, 402	ECEA1VS102	Electrolytic, 1000μF, 35V
R418	Δ ERD50FJ102	Carbon, 1kΩ, 1/2W, ± 5%	C403, 404	ECEA1HS100	Electrolytic, 10μF, 50V
R419	Δ ERD50FJ152	Carbon, 1.5kΩ, 1/2W, ± 5%	C405	ECEA50Z3R3	Electrolytic, 3.3μF, 50V
R501, 502	ERD25TJ824	Carbon, 820kΩ, 1/4W, ± 5%	C406	ECEA1AS101	Electrolytic, 100μF, 10V

■ REPLACEMENT PARTS LIST (Cabinet and Chassis Parts)

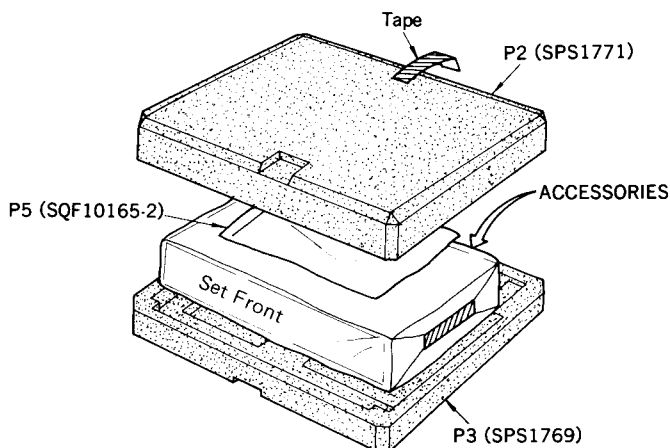
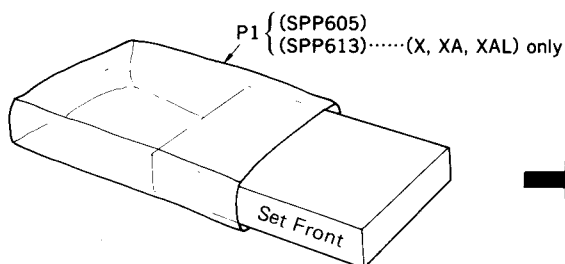
Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
30 [E, XE, XGF, XGH, EB, EG]	SGP1434A	Rear Panel	●	XWC3B	Washer, Printed Circuit Board Screw M'tg
30 [X, XA]	SGP1434-1A	Rear Panel	●	XTN3+8BFZ	Screw, Power Transformer M'tg
30 [XAL]	SGP1434-2A	Rear Panel	●	XWG3FZ	Washer, Power Transformer Screw
31 [X, XA] only	Δ SJA66-1	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	●	XWC6B	Washer (Spring), Ground Terminal Nut
33 [E, XGF, XGH, EB, EG]	Δ RJA23ZC	AC Cord	●	XTB3+8BFN	Screw, Bottom Board M'tg
33 [X, XA]	Δ SJA97	AC Cord	●	XSS3+6S	Screw, Front Foot M'tg
33 [XE]	Δ RJA45ZC	AC Cord	●	XUC5FT	Circlip, Selector Switch Shaft M'tg
33 [XAL]	Δ QFC1207M	AC Cord	●	XNG3 S	Nut, Voltage Adjuster Switch & 2 pin Terminal Strip M'tg
34	SJR205	Terminal Strip, 2 Pin	●	XWA3B	Washer, Voltage Adjuster Switch & 2 pin Terminal Strip Nut
34 [X, XA] only	Δ RJA41	Terminal Strip, 2 Pin	●	XSB3+14BNS	Screw, Voltage Adjuster Switch M'tg
35	SUDA41	Spacer, Voltage Adjuster Switch	●	XSB3+8BNS	Screw, 2 pin Terminal Strip M'tg
SCREWS and WASHERS			●	XTB3+6BFZ	Screw, Printed Circuit Board Ass'y M'tg
●	XNS8	Nut, Bass and Treble Control M'tg	● [XAL] only	XWC3B	Washer, Bottom Board & 2 pin Terminal Strip Screw
●	XNS9	Nut, Volume and Balance Control M'tg			
●	XWC9B	Washer, Bass, Treble and Volume Control			
●	XTB3+8BFZ	Screw, Printed Circuit Board Ass'y M'tg			

■ REPLECEMENT PARTS LIST Accessories and Packing Parts

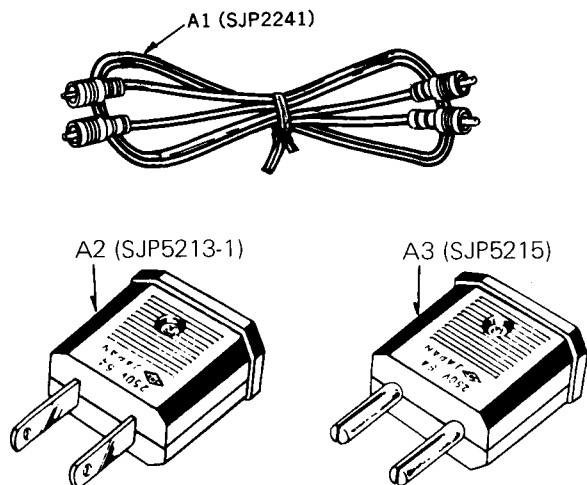
Ref. No.		Part No.	Part Name & Description
ACCESSORIES			
A1		SJP2241	Cord, Connection
A2 [X, XA] only	▲	SJP5213-1	Plug Adapter, AC power
A3 [X, XA] only	▲	SJP5215	Plug Adapter, AC Power
PACKING PARTS			
P1		SPP605	Polyethylene Bag
P1 [X, XA, XAL] only		SPP613	Polyethylene Bag
P2		SPS1771	Pad, Set Top 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.

