

# Service Manual

Stereo Integrated Amplifier

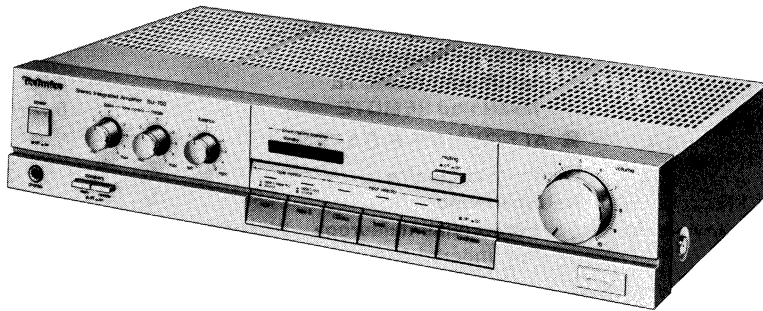
Amplifier

SU-700

SU-700

## Color

(K) . . . . Black Type  
(S) . . . . Silver Type



Color	Area
(K)(S)	[E] . . . . . Continental Europe
(K)(S)	[EH] . . . . . Holland
(K)(S)	[EB] . . . . . Belgium
(K)(S)	[EF] . . . . . France
(K)(S)	[EK] . . . . . United Kingdom
(K)(S)	[EG] . . . . . F.R. Germany
(K)(S)	[Ei] . . . . . Italy
(K)(S)	[XL] . . . . . Australia
(K)(S)	[XA] . . . . . Asia, Latin America, Middle Near East, Africa & Oceania

## SPECIFICATIONS (DIN 45 500)

### ■ AMPLIFIER SECTION

40 Hz~20 kHz continuous power output both channels driven	2 × 60W (8Ω)
1 kHz continuous power output both channels driven	2 × 70W (8Ω)
Total harmonic distortion rated power at 40 Hz~20 kHz	0.04% (8Ω)
half power at 1 kHz	0.03% (8Ω)
Intermodulation distortion rated power at 60 Hz: 7 kHz=4:1, SMPTE, 8Ω	0.05%
Power bandwidth both channels driven, -3 dB	10 Hz~30 kHz (8Ω, 0.04%)
Damping factor	50 (8Ω)
Input sensitivity and impedance	
PHONO	2.5 mV/4.7kΩ
TUNER, CD/AUX	150 mV/22kΩ
TAPE 1, 2/EXT	150 mV/22kΩ
PHONO maximum input voltage (1 kHz, RMS)	150 mV
S/N	
rated power (8Ω)	
PHONO	71 dB (IHF, A: 72 dB)
TUNER, CD/AUX, TAPE 1,2/EXT	90 dB (IHF, A: 98 dB)
Frequency response	
PHONO	RIAA standard curve ±0.8 dB (30 Hz~15 kHz)
TUNER, CD/AUX, TAPE 1,2/EXT	5 Hz~90 kHz (-3 dB)

### Tone controls

BASS	50 Hz, +10 dB~-10 dB
TREBLE	20 kHz, +10 dB~-10 dB
Loudness control (volume at -30 dB)	50 Hz, +9 dB
Output voltage and impedance	
REC OUT	150 mV
Channel balance, CD/AUX 250 Hz~6,300 Hz	±1 dB
Channel separation, AUX 1 kHz	45 dB
Headphones output level and impedance	560 mV/330Ω
Load impedance	
MAIN or REMOTE	4Ω~16Ω
MAIN and REMOTE	8Ω~16Ω

### ■ GENERAL

Power consumption	360W
Power supply	
For Australia and United Kingdom	AC 50 Hz/60 Hz, 240V
For continental Europe	AC 50 Hz/60 Hz, 220V
For others	AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D)	430 × 86 × 240 mm (16-15/16" × 3-3/8" × 9-7/16")
Weight	5.3 kg (11.7 lb.)

### Note:

Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Specifications are subject to change without notice for further improvement.

# Technics

Matsushita Electric Trading Co., Ltd.  
P.O. Box 288, Central Osaka Japan

## ■ TECHNISCHE DATEN

### (DIN 45 500)

#### ■ VERSTÄRKERTEIL

Dauer-Ausgangsleistung bei 40 Hz ~ 20 kHz beide Kanäle ausgesteuert	2 × 60W (8 Ω)
Dauer-Ausgangsleistung bei 1 kHz beide Kanäle ausgesteuert	2 × 70W (8 Ω)
Gesamtklirrfaktor	
Nennleistung bei 40 Hz ~ 20 kHz	0,04% (8 Ω)
halbe Nennleistung bei 1 kHz	0,03% (8 Ω)
Intermodulationsfaktor	
Nennleistung bei 60 Hz: 7 kHz = 4:1, nach SMPTE, 8 Ω	0,05%
Leistungsbandbreite	
beide Kanäle ausgesteuert bei -3 dB	
	10 Hz ~ 30 kHz (8 Ω, 0,04%)
Dämpfungsfaktor	50 (8 Ω)
Eingangsempfindlichkeit und -impedanz	
Phono	2,5 mV/4,7 kΩ
Tuner, CD/Aux	150 mV/22 kΩ
Tape 1/2/EXT	150 mV/22 kΩ
Maximale TA-Eingangsspannung (1 kHz, eff.)	150 mV
Geräuschspannungsabstand	
Nennleistung (8 Ω)	
Phono	71 dB (nach IHF, A: 72 dB)
Tuner, CD/Aux, Tape 1, 2/EXT	90 dB (nach IHF, A: 98 dB)

#### Frequenzgang

Phono	RIAA-Standardkurve, ±0,8 dB (30 Hz ~ 15 kHz)
Tuner, CD/Aux, Tape 1, 2/EXT	5 Hz ~ 90 kHz (-3 dB)

#### Klangregler

Baßregler (BASS)	50 Hz, +10 dB ~ -10 dB
Höhenregler (TREBLE)	20 kHz, +10 dB ~ -10 dB

#### Gehörliche Lautstärkekorrektur (Loudness)

(bei -30 dB Ausgangsleistung)	50 Hz, +9 dB
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#### Ausgangsspannung und -impedanz

Aufnahmeausgang (REC OUT)	150 mV
Kanalabweichung (CD/Aux, 250 Hz ~ 6300 Hz)	±1 dB
Übersprechdämpfung (Aux, 1 kHz)	45 dB
Kopfhörerpegel und -impedanz	560 mV/330 Ω
Lautsprecherimpedanz	
MAIN oder REMOTE	4 Ω ~ 16 Ω
MAIN und REMOTE	8 Ω ~ 16 Ω

#### ■ ALLGEMEINE DATEN

Leistungsaufnahme 360W

#### Netzspannung

Für Kontinentaleuropa	Wechselstrom 50 Hz/60 Hz, 220V
Für andere Länder	

Wechselstrom 50 Hz/60 Hz, 110V/127V/220V/240V

#### Abmessungen (B×H×T)

430 × 86 × 240 mm

#### Gewicht

5,3 kg

#### Bemerkung:

Der Gesamtklirrfaktor wurde mit einem digitalen Rauschspektrometer (Anlage H.P. 3045) gemessen.

(Die technischen Daten können infolge von Verbesserungen ohne Ankündigung geändert werden.)

## ■ CARACTERISTIQUES

### (DIN 45 500)

#### ■ SECTION AMPLIFICATEUR

Puissance de sortie continue de 40 Hz~20 kHz, les deux canaux en circuit	2 × 60W (8Ω)
Puissance de sortie continue à 1 kHz les deux canaux en circuit	2 × 70W (8Ω)
Distorsion harmonique totale	
à puissance nominale (40 Hz~20 kHz)	0,04% (8Ω)
à demi-puissance (1 kHz)	0,03% (8Ω)
Distorsion d'intermodulation	
à puissance nominale à 60 Hz: 7 kHz=4:1, SMPTE, 8Ω	0,05%
Réponse de fréquences	
les deux canaux en circuit, -3 dB	
	10 Hz~30 kHz (8Ω, 0,04%)
Coefficient d'amortissement	50 (8Ω)
Sensibilité et impédance d'entrée	
PHONO	2,5 mV/4,7kΩ
SYNTONISATEUR, CD/AUX (TUNER, CD/AUX)	150 mV/22kΩ
BANDE 1, 2/EXT (TAPE 1, 2/EXT)	150 mV/22kΩ
PHONO (tension d'entrée maximum, 1 kHz RMS)	150 mV
Signal/Bruit	
à puissance nominale (8Ω)	
PHONO	71 dB (IHF, A: 72 dB)
SYNTONISATEUR, CD/AUX, BANDE 1, 2/EXT (TUNER, CD/AUX, TAPE 1, 2/EXT)	90 dB (IHF, A: 98 dB)
Réponse de fréquence	
PHONO	Courbe nominale RIAA ±0,8 dB (30 Hz~15 kHz)

#### SYNTONISATEUR, CD/AUX, BANDE 1, 2/EXT (TUNER, CD/AUX, TAPE 1, 2/EXT)

5 Hz~90 kHz (-3 dB)

#### Réglage de la tonalité

BASSES (BASS)	50 Hz, +10 dB ~ -10 dB
AIGUS (TREBLE)	20 kHz, +10 dB ~ -10 dB

Compensateur physiologique (volume à -30 dB) 50 Hz, +9 dB

#### Tension de sortie et impédance

SORTIE ENREGISTREMENT (REC OUT)	150 mV
Equilibrage des canaux, CD/AUX 250 Hz~6 300 Hz	±1 dB
Séparation des canaux, AUX 1 kHz	45 dB
Niveau de sortie des casques et impédance	560 mV/330Ω

#### Impédance de charge

PRINCIPALE ou AUXILIAIRE (MAIN or REMOTE)	4Ω~16Ω
PRINCIPALE et AUXILIAIRE (MAIN and REMOTE)	8Ω~16Ω

#### ■ DIVERS

#### Consommation

Alimentation 160W

#### Pour l'Europe

CA 50 Hz/60 Hz, 220V

#### Autres

CA 50 Hz/60 Hz, 110V/127V/220V/240V

#### Dimensions (L×H×Pr)

430 × 86 × 240 mm

#### Poids

5,3 kg

#### Remarque:

On mesure la distorsion harmonique totale au moyen d'un analyseur de spectre digital (Système H.P. 3045).

(Sujet à changement sans préavis)

## ■ ESPECIFICACIONES (DIN 45 500)

### ■ SECCION AMPLIFICADOR

Potencia continua de 40 Hz~20 kHz en ambos canales	2 × 60W (8Ω)
Potencia continua de 1 kHz en ambos canales	2 × 70W (8Ω)
Distorsión armónica total	
potencia de régimen a 40 Hz~20 kHz	0,04% (8Ω)
mitad de potencia a 1 kHz	0,03% (8Ω)
Distorsión por intermodulación	
potencia de régimen a 60 Hz: 7 kHz=4:1, SMPTE, 8Ω	0,05%
Ancho de banda de potencia con ambos canales, -3 dB	10 Hz~30 kHz (8Ω, 0,04%)
Factor de amortiguamiento	50 (8Ω)
Sensibilidad e impedancia de entrada	
TOCADISC. (PHONO)	2,5 mV/4,7kΩ
SINTON., CD/AUX., GRAB. 1, 2/EXT (TUNER, CD/AUX, TAPE 1, 2/EXT)	150 mV/22kΩ
Voltaje máximo de entrada de PHONO (1 kHz, RMS)	150 mV
Relación de señal a ruido	
potencia de régimen (8Ω)	71 dB (IHF, A: 72 dB)
TOCADISC. (PHONO)	
SINTON., CD/AUX., GRAB. 1, 2/EXT (TUNER, CD/AUX, TAPE 1, 2/EXT)	
potencia de régimen	90 dB (IHF, A: 98 dB)
Respuesta de frecuencia	
TOCADISC. (PHONO)	curva RIAA estándar ±0,8 dB (30 Hz~15 kHz)

SINTON., CD/AUX., GRAB. 1, 2/EXT  
(TUNER, CD/AUX, TAPE 1, 2/EXT)  
5 Hz~90 kHz (-3 dB)

Controles de tono	
BAJOS (BASS)	50 Hz, +10 dB~-10 dB
AGUDOS (TREBLE)	20 kHz, +10 dB~-10 dB
Control de sonoridad (volumen a -30 dB)	50 Hz, +9 dB
Voltaje e impedancia de salida	
SAL. GRAB. (REC OUT)	150 mV
Equilibrio de canales, CD/AUX 250 Hz~6 300 Hz	±1 dB
Separación de canales, AUX 1 kHz	45 dB
Impedancia y nivel de salida de los auriculares	560 mV/330Ω
Impedancia de carga	
MAIN o REMOTE	4Ω~16Ω
MAIN y REMOTE	8Ω~16Ω

### ■ GENERAL

Consumo de energía	360W
Alimentación de energía	
Para Europa continental	CA 50 Hz/60 Hz, 220V
Para otros países	CA 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensiones (An.×Al.×Prof.)	430 × 86 × 240 mm
Peso	5,3 kg

**Nota:**  
La distorsión armónica total se mide con el analizador de espectro digital (sistema H.P. 3045).

(Estas especificaciones están sujetas a cualquier cambio sin previo aviso.)

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## ■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

### Note:

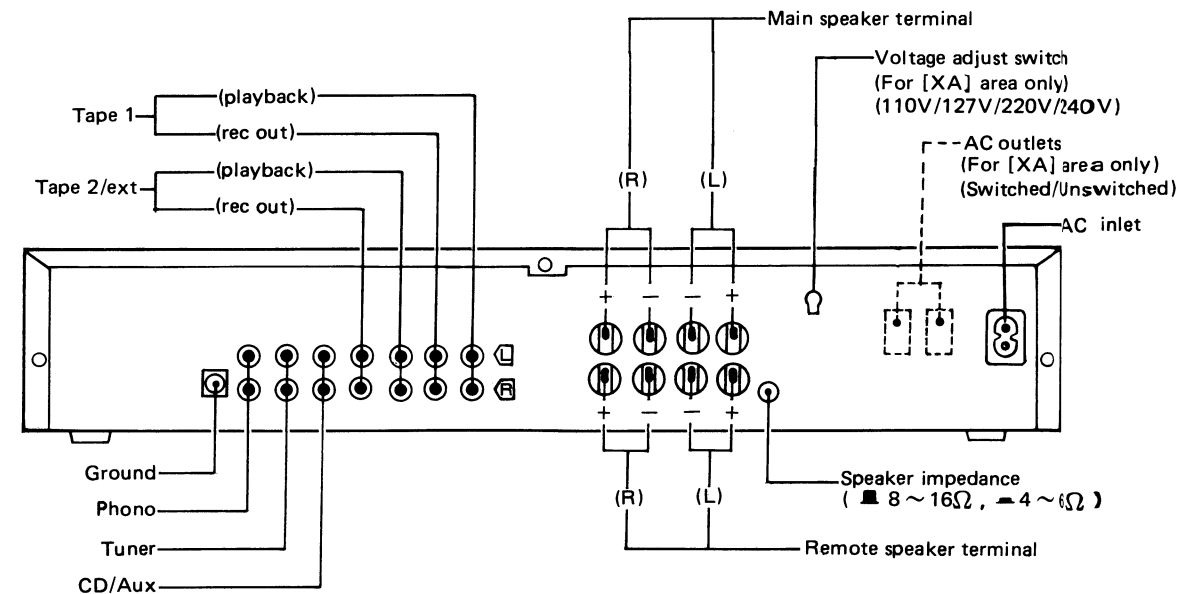
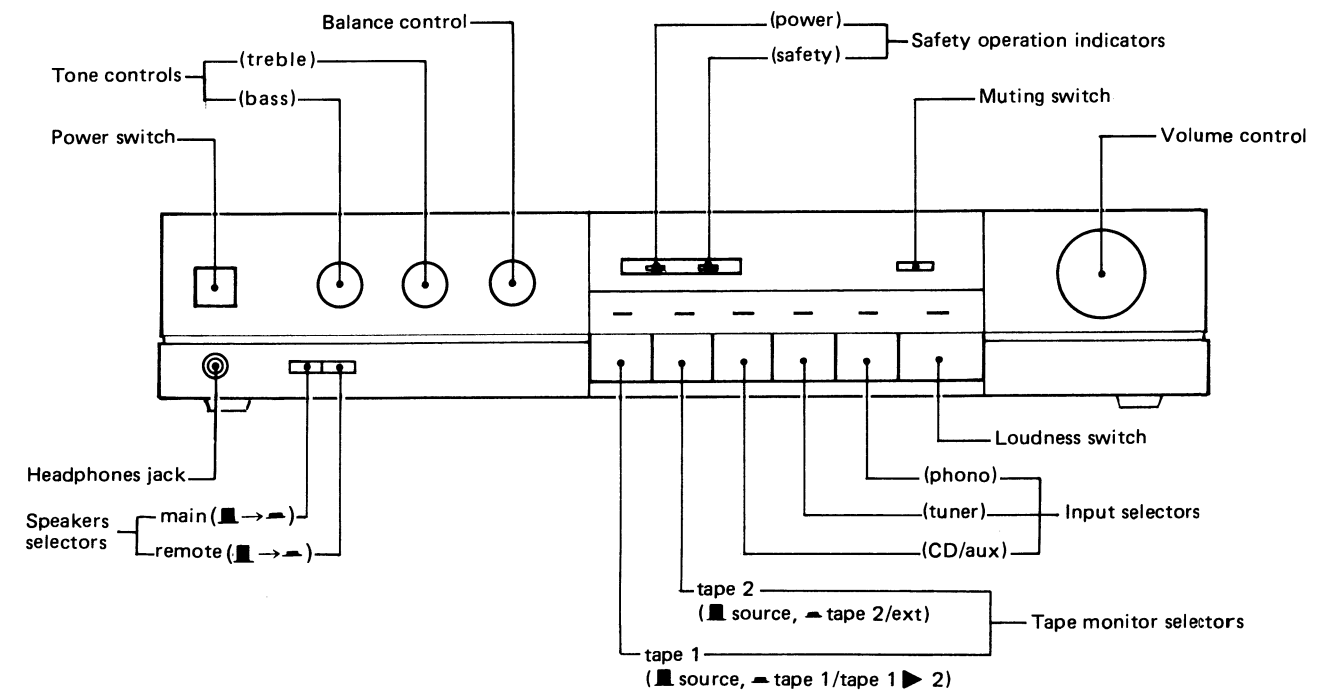
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

## ■ BEFORE REPAIR AND ADJUSTMENT

- (1) Turn off the power supply. Using a 10Ω, 5W resistor, shortcircuit both ends of power supply capacitors (C901, C902, 6800μF) in order to discharge the voltage.
- (2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50/60 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 110V/127V/220V/240V.

Power supply voltage		AC110V	AC127V	AC220V	AC240V
Consumed current	50Hz	230 ~ 410mA	210 ~ 390mA	100 ~ 220mA	80 ~ 200mA
	60Hz	210 ~ 390mA	190 ~ 370mA	80 ~ 200mA	70 ~ 190mA

## ■ LOCATION OF CONTROLS



- The power supply for this unit varies depending upon the areas. Also, the parts used for power supply are different. So, refer to the circuit diagram and replacement parts list.
- \* [XA] area is provided with voltage selector and AC outlets.
- \* 240V (50/60Hz) for Australia and United Kingdom.
- \* 220V (50/60Hz) for Continental Europe.
- \* 110V/127V/220V/240V (50/60Hz) for other [XA] area.
- \* Phono input capacitance is about 150pF.

# DISASSEMBLY INSTRUCTIONS

<b>Ref. No.</b> 1	<b>How to remove the main P.C.B.</b>
<b>Procedure</b> 1	<ol style="list-style-type: none"> <li>1. Remove the cabinet.</li> <li>2. Remove the 3 screws ( ❶ ~ ❸ ).</li> <li>3. Remove the 6 screws ( ❹ ~ ❹ ).</li> </ol>
<b>Ref. No.</b> 2	<b>How to remove the Power IC</b>
<b>Procedure</b> 1 → 2	<ol style="list-style-type: none"> <li>1. Remove the 2 screws ( ❶ , ❷ ).</li> <li>2. Remove the sub heat-sink.</li> <li>3. Unsolder the power IC.</li> <li>4. Remove the 4 screws ( ❸ , ❹ ).</li> </ol>
<p>Sub heat-sink Hexagonal spanner Power IC</p> <p>• When mounting the power IC, apply silicon thermal compound (SZZ0L15 or equivalent) to the rear of the power IC.</p>	
<b>Ref. No.</b> 3	<b>How to remove the front panel</b>
<b>Procedure</b> 3	<ol style="list-style-type: none"> <li>1. Remove the cabinet.</li> <li>2. Remove the 3 screws ( ❶ ~ ❸ ).</li> <li>3. Remove the 4 nuts ( ❹ ~ ❷ ).</li> <li>4. Remove the connector (J401, J801)</li> <li>5. Remove the front panel in the direction of the arrow.</li> </ol>
<p>Front panel</p> <p>J401 J801</p>	

<b>Ref. No.</b> 4	<b>How to remove the P.C.B.</b>
<b>Procedure</b> 3 → 4	<ol style="list-style-type: none"> <li>1. Remove the 4 screws ( ❶ ~ ❹ )</li> <li>2. Remove the muting switch, selector LED P.C.B. and operation LED P.C.B.</li> <li>3. Remove the 4 tabs ( ❺ ~ ❻ )</li> <li>4. Remove the volume P.C.B. and headphones P.C.B.</li> </ol>

## • Terminal guide of transistors, diodes and IC's

<p>AN6552F 8pin AN6558F 8pin</p>	<p>SVI3104 18pin</p>	<p>M5218L M5220L</p>	<p>2SA992</p>
<p>MA165 1SR35200 SVDS3V40</p>	<p>MA4130M MA4068M MA4075M</p>	<p>LN846RP LN446YP</p>	<p>LN863RC LN463YC</p>

# RESISTORS & CAPACITORS

- Notes:**
- Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
  - Important safety notice: Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
  - Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
  - The "S" mark is service standard parts and may differ from production parts.
  - The unit of resistance is OHM ( $\Omega$ ).  
K = 1000 $\Omega$ , M = 1000k $\Omega$
  - The unit of capacitance is MICROFARAD ( $\mu$ F).  
P = 10<sup>-6</sup>  $\mu$ F

## Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value

## Numbering System of Capacitor

Example

ECKD	1H	103	Z	F
Type	Voltage	Value	Tolerance	Peculiarity

ECEA	50	M	R47	R
Type	Voltage	Peculiarity use	Value	Special use

Resistor Type	Wattage	Tolerance
ERD : Carbon	25 : 1/4W	J : $\pm$ 5%
ERX : Metal film	S1 : 1/2W	K : $\pm$ 10%
	S2 : 1/4W	

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
ECEA : Electrolytic	0J : 6.3V	1H : 50V DC	J : $\pm$ 5%
ECCD : Ceramic	1C : 16V		K : $\pm$ 10%
ECKD : Ceramic	1E : 25V		Z : +80%, -20%
ECQM : Polyester	1H : 50V		P : +100%, -0%
ECFT : Semiconductor	42 : 42V		
ECET : Electrolytic			

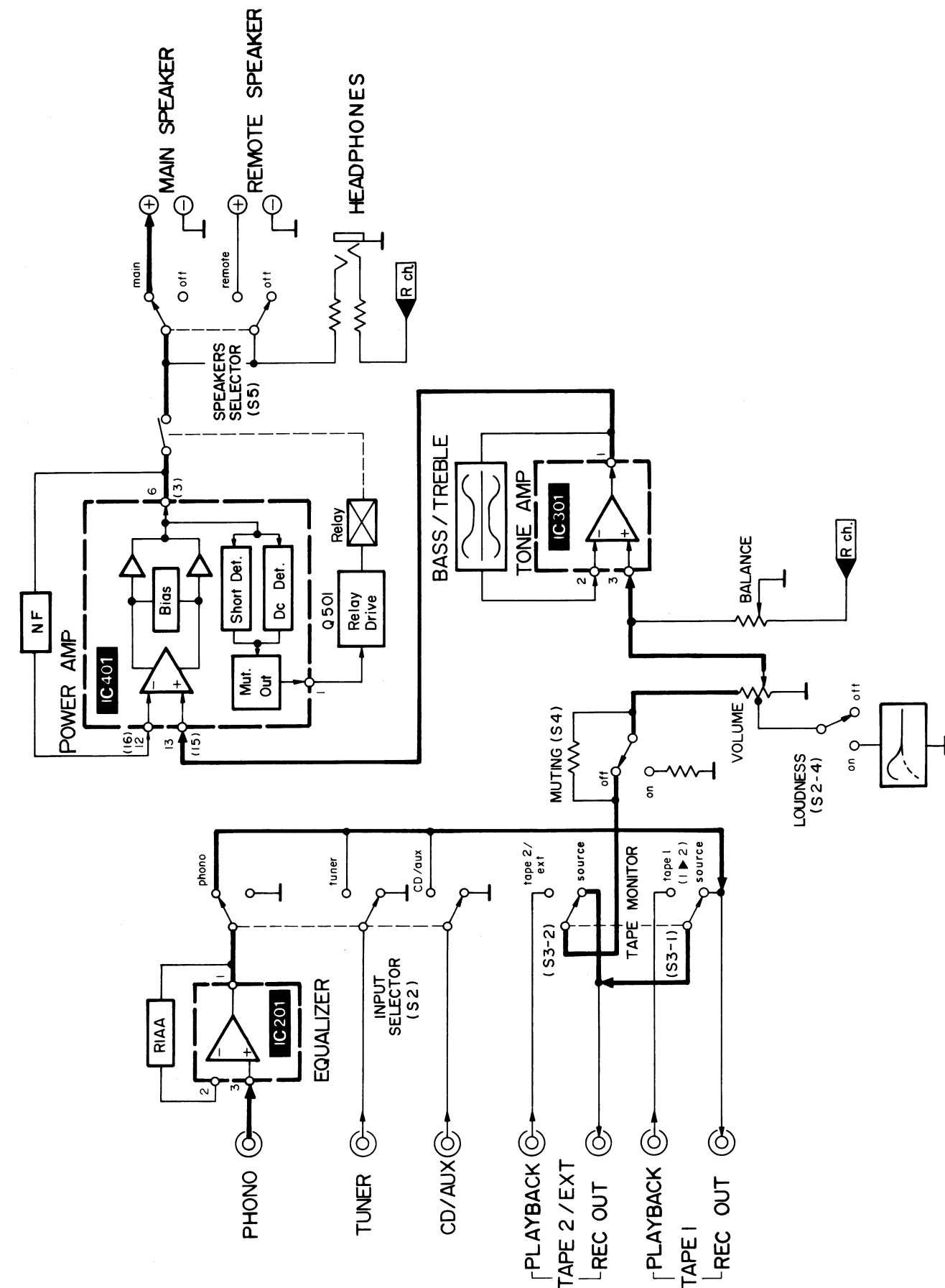
## Resistor

Ref.No.	Part No.	Value	Ref.No.	Part No.	Value	Ref.No.	Part No.	Value	Ref.No.	Part No.	Value
R101,102	ERDS2TJ471	470	R211,212	ERDS2TJ123	12K	R325,326	ERDS2TJ392	3.9K	R504	ERDS2TJ684	680K
[EG only]			R213,214	ERDS2TJ563	56K	R327,328	ERDS2TJ223	22K	R505	ERDS2TJ154	150K
R103,104	ERDS2TJ471	470	R215,216	ERDS2TJ561	560	R329,330	ERDS2TJ332	3.3K			
[EG only]			R301,302	ERDS2TJ222	2.2K	R401,402	ERDS2TJ222	2.2K	R506	ERG2ANJ271	270
R105,106	ERDS2TJ471	470	R303,304	ERDS2TJ123	12K	R403,404	ERDS2TJ393	39K	R601	ERDS2TJ561	560
[EG only]			R307,308	ERDS2TJ563	56K	R405,406	ERDS2TJ272	2.7K	R602	ERDS2TJ391	390
R107,108	ERDS2TJ471	470	R309,310	ERDS2TJ474	470K				R801	ERDS2TJ561	560
[EG only]			R311,312	ERDS2TJ474	470K	R407,408	ERDS2TJ393	39K	R802	ERDS2TJ471	470
R109,110	ERDS2TJ471	470	R313,314	ERDS2TJ183	18K	R409,410	ERDS1FJ4R7	4.7	R901	ERG2ANJ681	680
[EG only]			R315,316	ERDS2TJ332	3.3K	R411,412	ERDS2TJ470	47	R902	ERG2ANJ561	560
R201,202	ERDS2TJ391	390				R413,414	ERG2ANJ331	330	R903	ERG2ANJ681	680
R203,204	ERDS2TJ224	220K	R317,318	ERDS2TJ152	1.5K	R415,416	ERDS2TJ561	560	R904	ERG2ANJ561	560
R205,206	ERDS2TJ563	56K	R319,320	ERDS2TJ681	680	R501	ERDS2TJ223	22K			
R207,208	ERDS2TJ271	270	R321,322	ERDS2TJ223	22K	R502	ERG2ANJ271	270			
R209,210	ERDS2TJ184	180K	R323,324	ERDS2TJ682	6.8K	R503	ERDS2TJ473	47K			

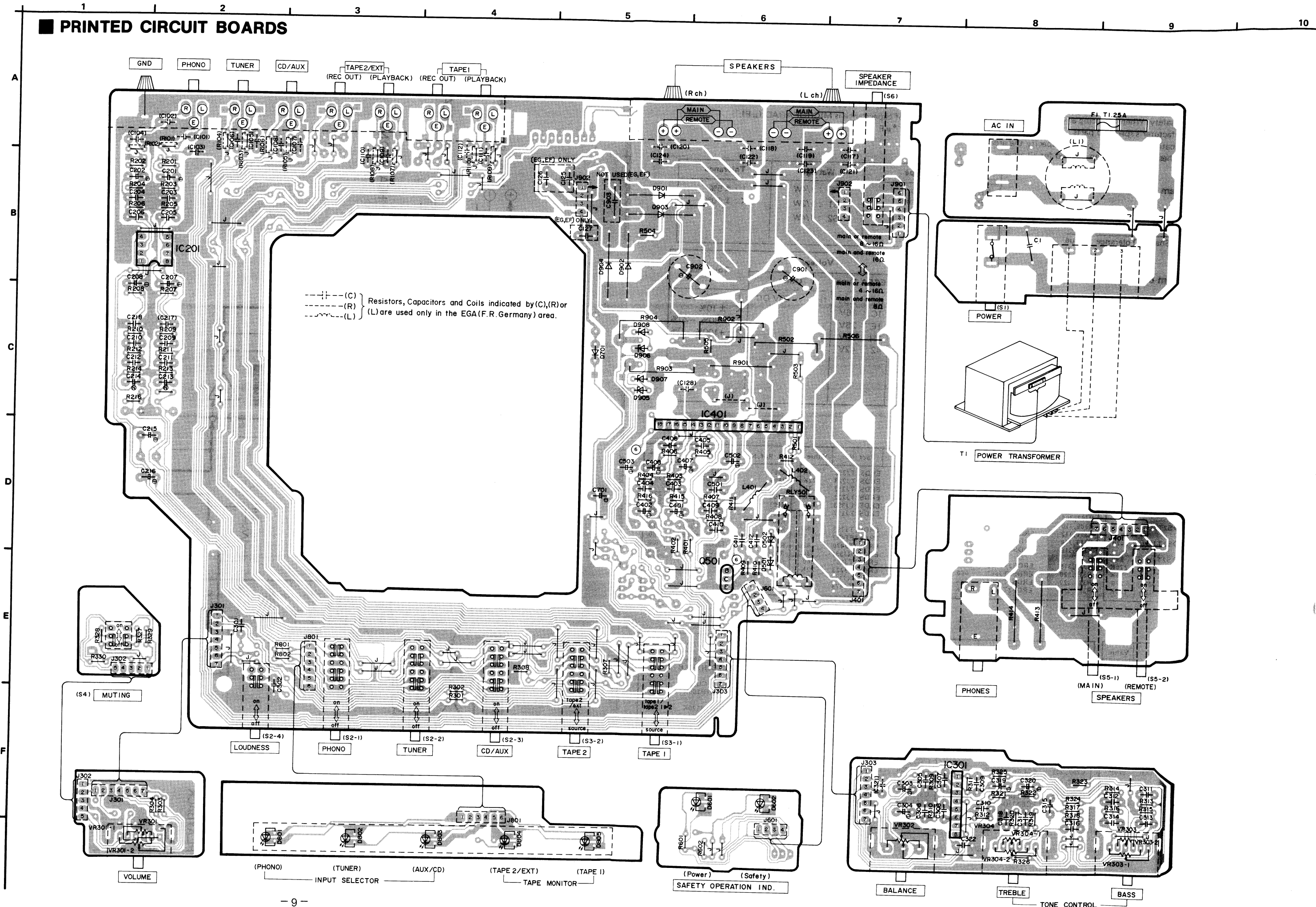
## Capacitor

Ref.No.	Part No.	Value	Ref.No.	Part No.	Value	Ref.No.	Part No.	Value	Ref.No.	Part No.	Value
C1	$\Delta$ ECKDKC103PF2	0.01	C123,124	ECKD1H223ZF	0.022	C217	ECKD1H103ZF	0.01	C403,404	ECKD1H391KB	390P
C101,102	ECCD1H180K	18P	[EG only]			[EG only]			C405,406	ECKD1H102KB	0.001
[EG only]			C125,126	ECAE1104KN	0.1	C218	ECKD1H103ZF	0.01	C407,408	ECEA1CU220	22
C103,104	ECCD1H151K	150P	[EG,EF only]			C301,302	ECFTD333KXL	0.033	C409,410	ECCD1H100K	10P
[EG only]			C127	ECKD1H103ZF	0.01	C303,304	ECEA1EU3R3	3.3	[EG only]		
C105,106	ECCD1H151K	150P	[EG,EF only]			C305,306	ECCD1H101K	100P	C409,410	ECCD1H120K	12P
[EG only]			C128	ECKD1H103ZF	0.01	C307,308	ECKD1H331KB	330P	[other]		
C107,108	ECCD1H151K	150P	C201,202	ECEA1EU3R3	3.3	C309,310	ECCD1H270K	27P			
[EG only]			C203,204	ECCD1H101K	100P				C411,412	ECKD1H473ZF	0.047
C109,110	ECCD1H151K	150P	C205,206	ECKD1H102KB	0.001	C311,312	ECFTD123KXL	0.012	C501	ECKD1H473ZF	0.047
[EG only]			[EG only]			C313,314	ECFTD683KXL	0.068	C502	ECEA0JU330	33
C111,C112	ECCD1H151K	150P	[other]			C315,316	ECFTD562KXL	0.0056	C503	ECEA0JU331	330
[EG only]			C205,206	ECKD1H471KB	470P	C317,318	ECFTD273KXL	0.027	C701	ECEA1CU471	470
C117,118	ECKD1H271KB	270P	C207,208	ECEA0JU330	33	C319,320	ECEA1CU100	10	C901,902	ECES1JU682U	6800
[EG only]			C209,210	ECFTD223KXL	0.022	C321	ECKD1H103ZF	0.01	C903	ECKD2H103PE	0.01
C119,120	ECKD1H271KB	270P				[EG only]					
[EG only]			C211,212	ECFTD682KXL	0.068	C322	ECKD1H103ZF	0.01			
C121,122	ECKD1H223ZF	0.022	C213,214	N ECEA1HN010S	1	C401,402	ECEA1EU3R3	3.3			
[EG only]			C215,216	ECEA1CU101	100						

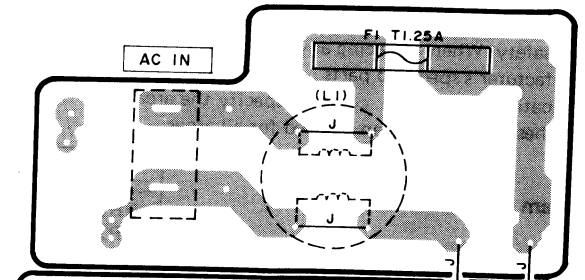
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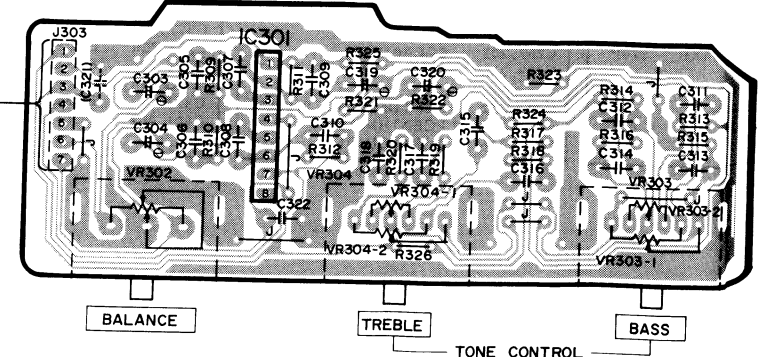
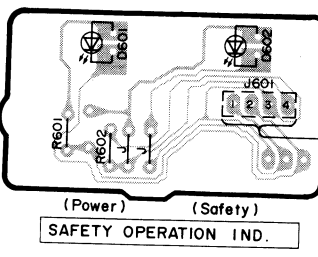
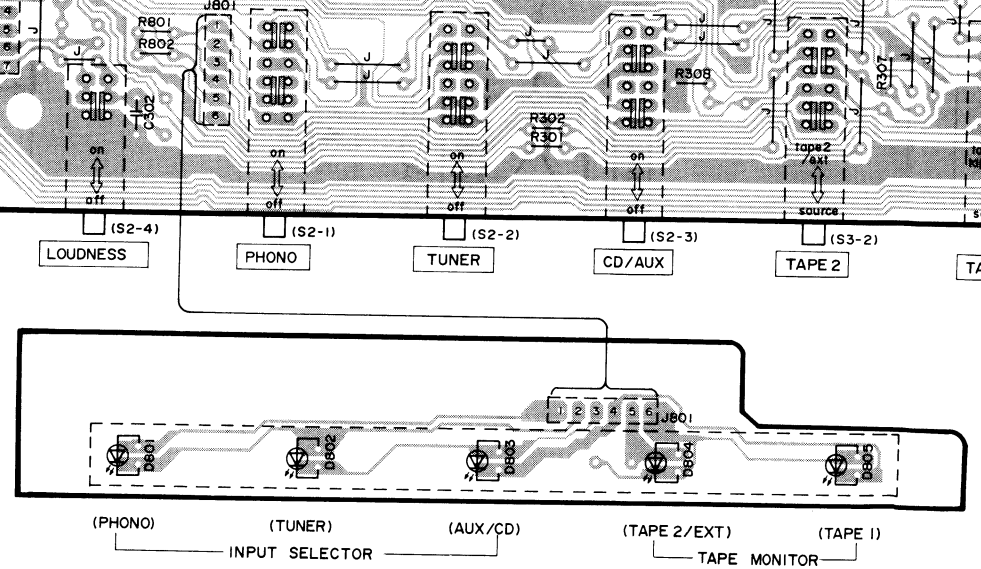
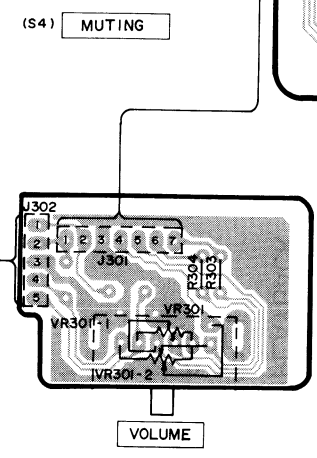
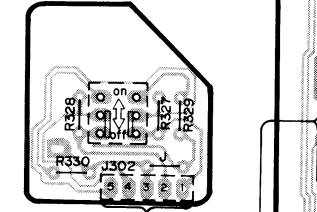
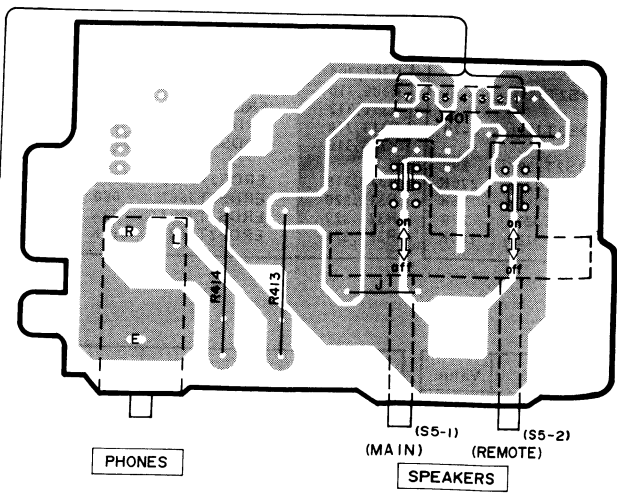
# PRINTED CIRCUIT BOARDS



---(C)--- Resistor, Capacitor and Coils indicated by (C), (R) or (L) are used only in the EGA (F.R. Germany) area.



T1 POWER TRANSFORMER



A

B

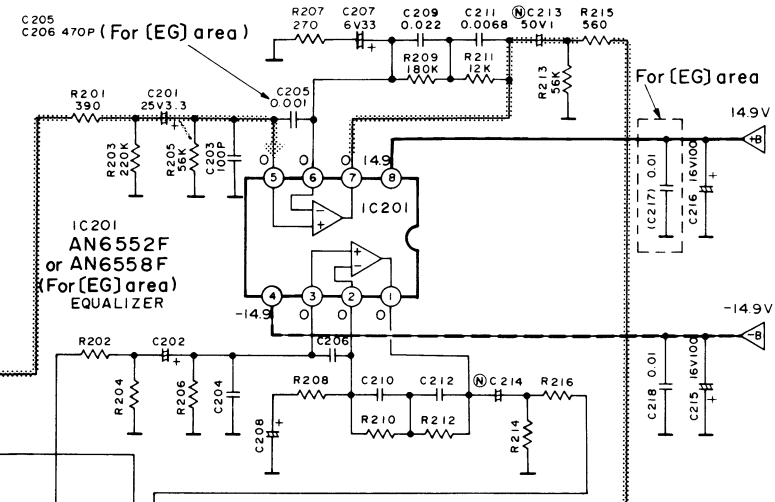
C

D

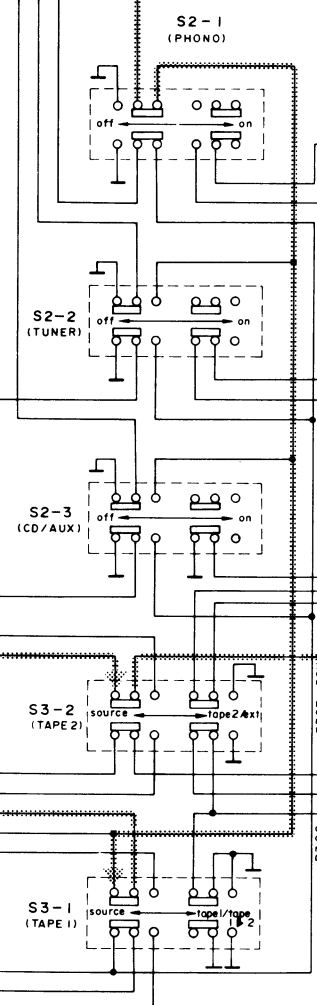
E

F

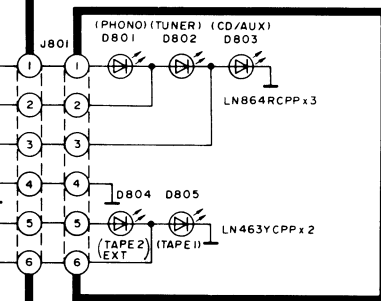
**PHONO EQUALIZER**



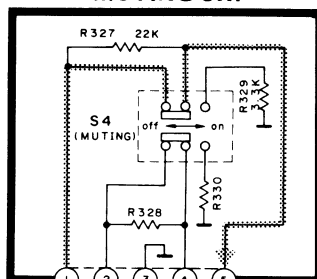
**INPUT SELECTOR**



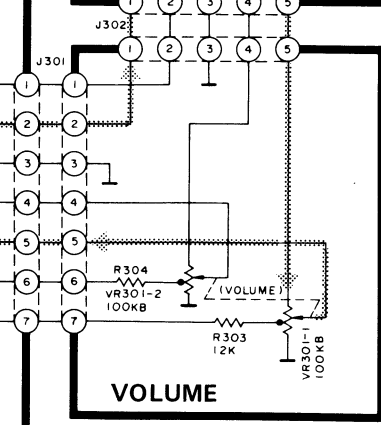
**INPUT POSITION IND.**



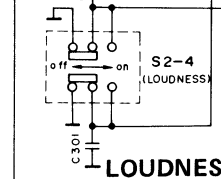
**MUTING SW.**



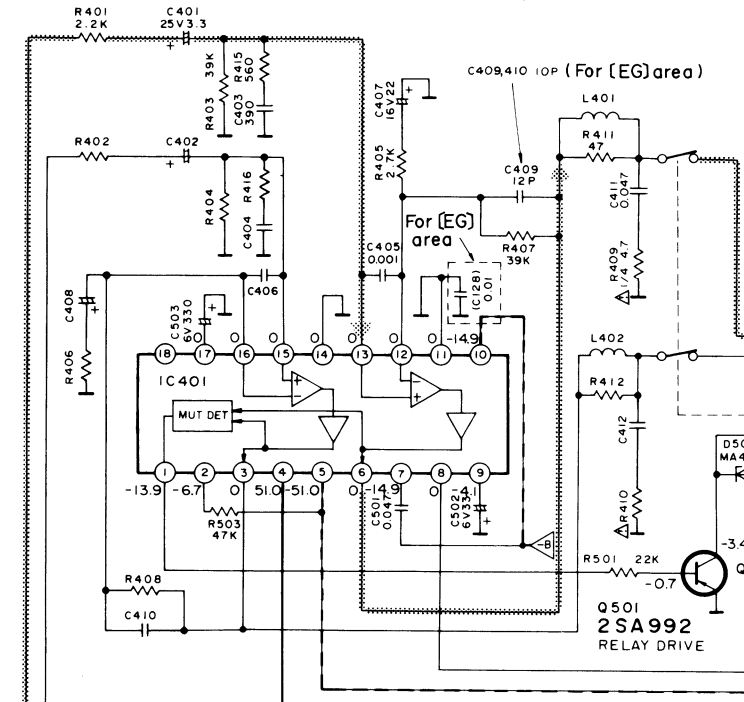
**VOLUME**



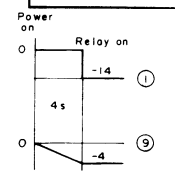
**LOUDNESS**



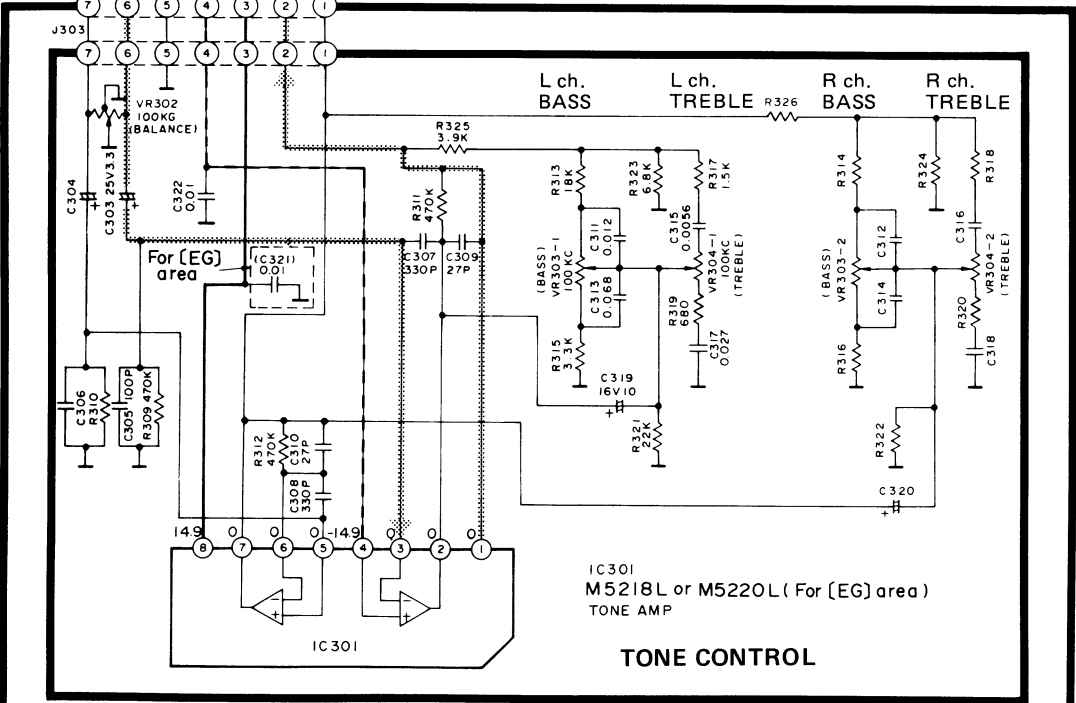
**POWER AMPLIFIER/MUTING**



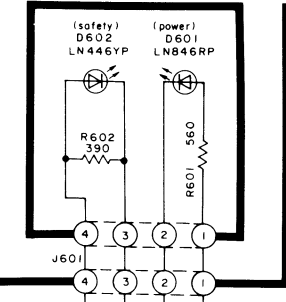
IC401  
SV13104  
POWER AMP  
& PROTECTION



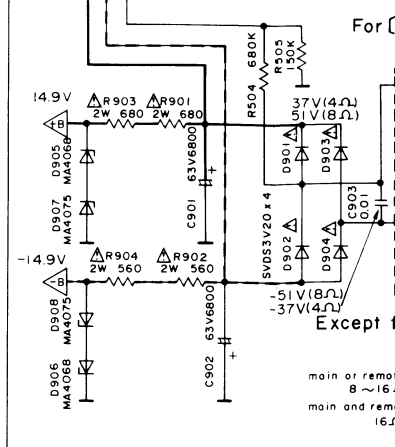
**TONE CONTROL**



IC301  
M5218L or M5220L (For [EG] area)  
TONE AMP



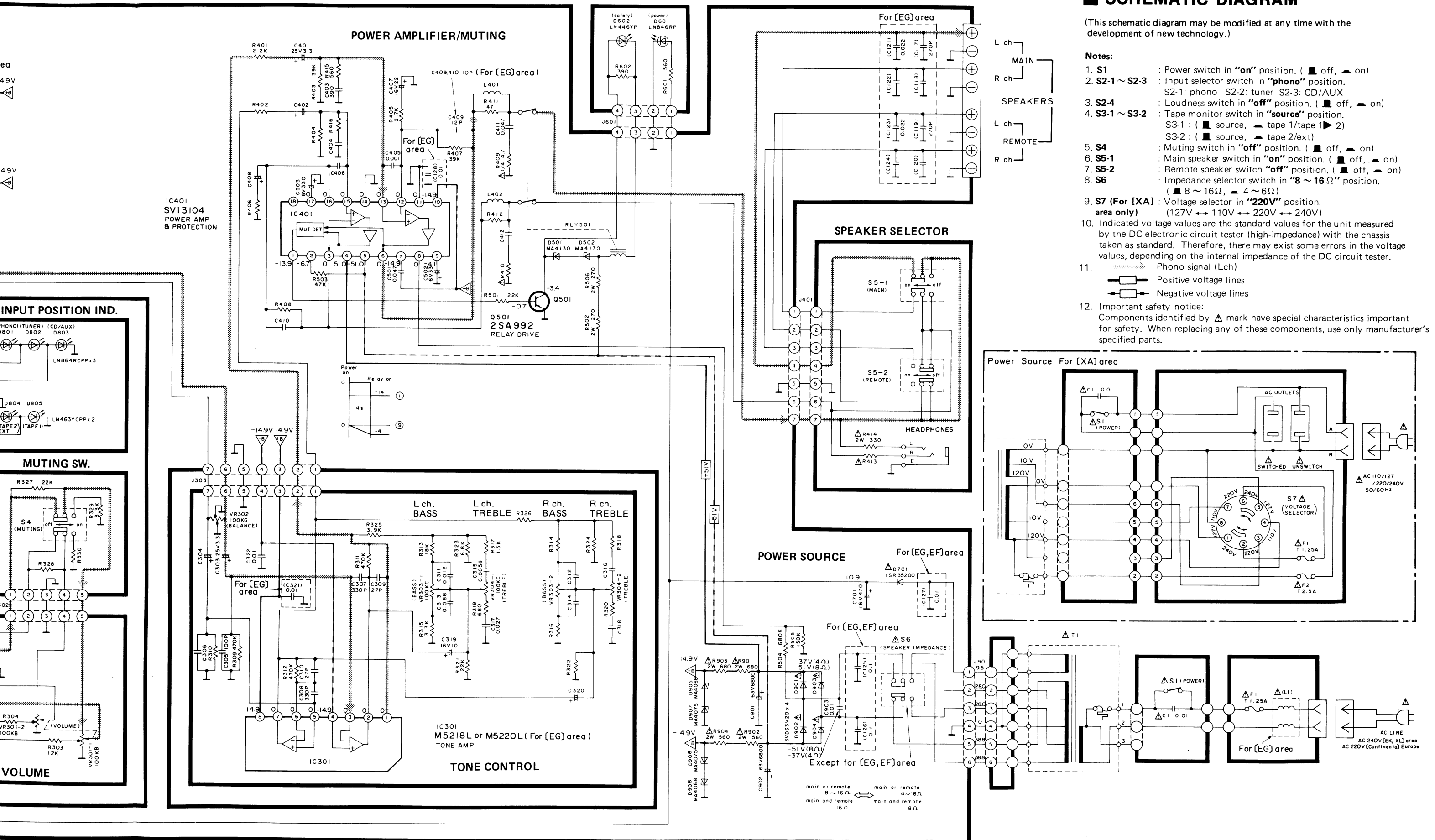
**POWER SOURCE**



# SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

- Notes:**
- S1** : Power switch in "on" position. (  off,  on)
  - S2-1 ~ S2-3** : Input selector switch in "phono" position.  
S2-1: phono S2-2: tuner S2-3: CD/AUX
  - S2-4** : Loudness switch in "off" position. (  off,  on)
  - S3-1 ~ S3-2** : Tape monitor switch in "source" position.  
S3-1 : (  source,  tape 1/tape 2 )  
S3-2 : (  source,  tape 2/ext )
  - S4** : Muting switch in "off" position. (  off,  on)
  - S5-1** : Main speaker switch in "on" position. (  off,  on)
  - S5-2** : Remote speaker switch "off" position. (  off,  on)
  - S6** : Impedance selector switch in "8 ~ 16 Ω" position. (  8 ~ 16 Ω,  4 ~ 6 Ω)
  - S7 (For [XA] area only)** : Voltage selector in "220V" position. (127V ↔ 110V ↔ 220V ↔ 240V)
  - 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.
  - 
  - Important safety notice: Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.





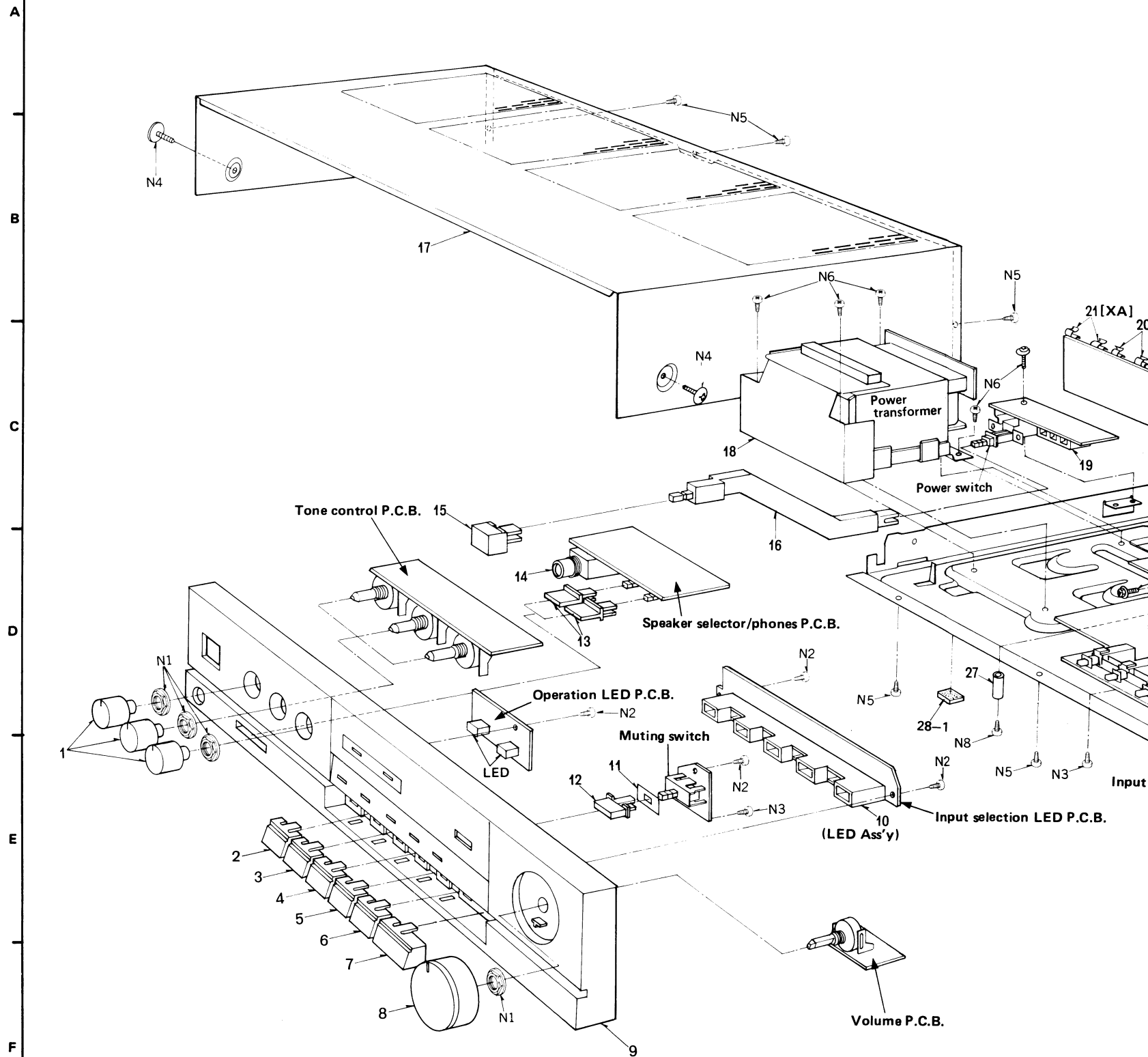
# REPLACEMENT PARTS LIST

**Notes:**

1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3.  $\text{\textcircled{X}}$  -marked parts are used for black only, while  $\text{\textcircled{O}}$  -marked parts are for silver type only.
4. Part other than  $\text{\textcircled{X}}$  - and  $\text{\textcircled{O}}$  -marked are used for both black and silver type.
5. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
6. The parenthesized numbers in the column of description stand for the quantity per set.

Area	
[E]	... Continental Europe
[EG]	... F.R. Germany
[EK]	... United Kingdom
[EF]	... France
[EH]	... Holland
[EB]	... Belgium
[Ei]	... Italy
[XL]	... Australia
[XA]	... Asia, Latin America, Africa, Middle Near East and Oceania

# EXPLODED VIEW

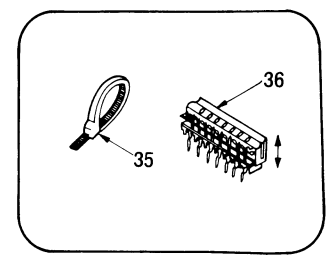
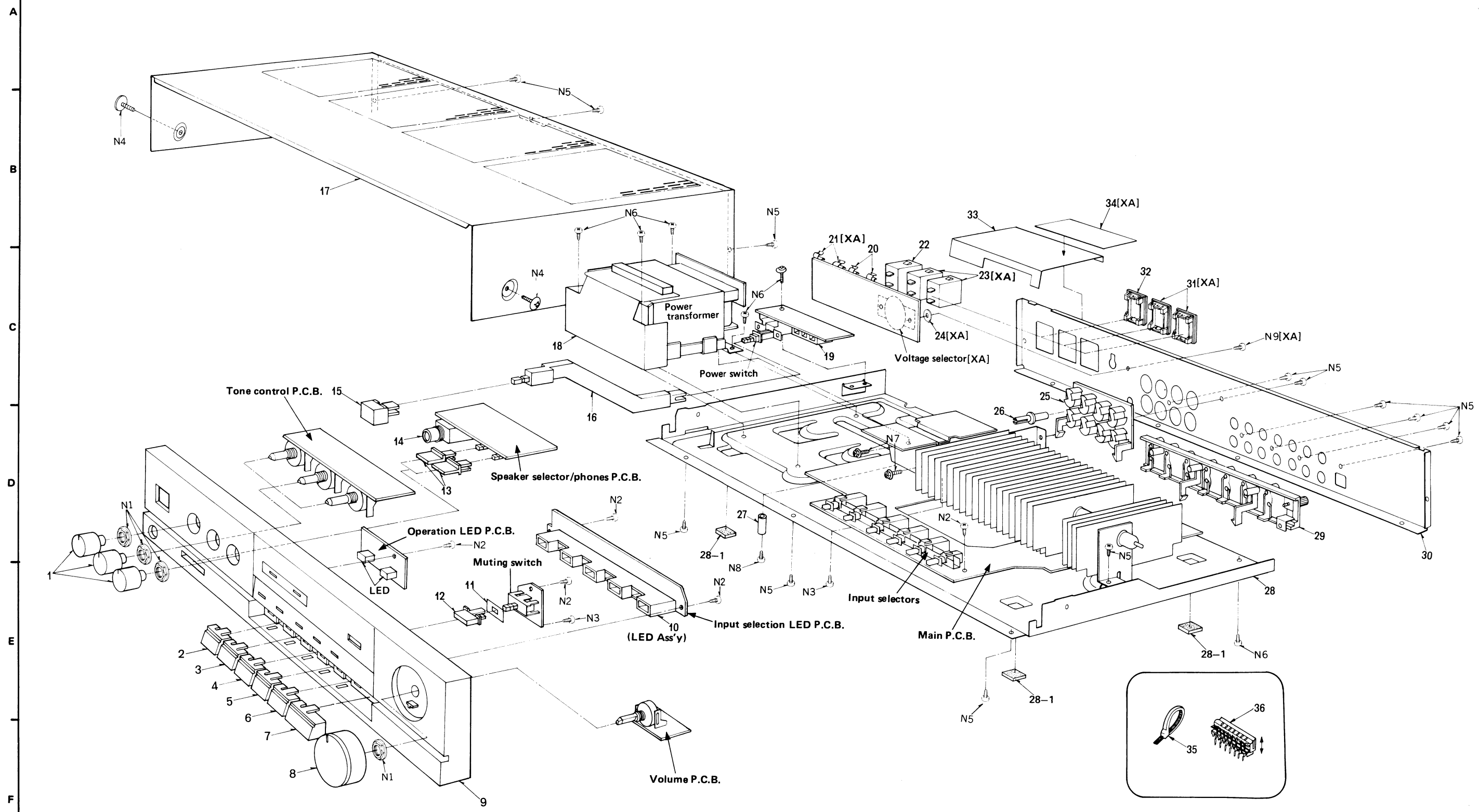


Ref.No.	Part No.	Description
<b>INTEGRATED CIRCUITS</b>		
IC201[EG]	AN6558F	IC, Equalizer
IC201[other]	AN6552F	IC, Equalizer
IC301[EG]	M5220L	IC, Tone Amp.
IC301[other]	M5218L	IC, Tone Amp.
IC401	SV13104	IC, Power
<b>TRANSISTORS</b>		
Q501	2SA992E	Relay Drive
<b>DIODES</b>		
D501, 502	MA4130M	Diode
D601	LN846RP	L.E.D
D602	LN446YP	L.E.D
D701	1SR35200	Diode
D801-803	LN863RCP	L.E.D
D804, 805	LN463YCP	L.E.D
D901-904	SVDS3V40	Diode
D905, 906	MA4068M	Diode
D907, 908	MA4075M	Diode
<b>COILS</b>		
L1[EG]	$\Delta$ SLQZ650MH49	Coil
L401, 402	SLQY07G-40	Coil
<b>TRANSFORMERS</b>		
T1[XA]	$\Delta$ SLT5U64	Power
T1[EK, XL]	$\Delta$ SLT5U63	Power
T1[other]	$\Delta$ SLT5U62	Power
<b>VARIABLE RESISTORS</b>		
VR301	EWCXUAF20B15	Volume, 100k $\Omega$ (B)
VR302	EWHF5AF20G15	Balance, 100k $\Omega$ (G)
VR303, 304	EWCS6A020C15	Tone, 100k $\Omega$ (C)
<b>FUSES</b>		
F1[EK]	$\Delta$ XBA2C12TB0	250V, T1.25A
F1[other]	$\Delta$ XBA2C12TR0	250V, T1.25A
F2[XA]	$\Delta$ XBA2C25TR0	250V, T2.5A
<b>SWITCHES</b>		
S1[XA]	$\Delta$ ESB8248V	Power
S1[other]	$\Delta$ ESB8249V	Power
S2, 3	SSH659	Input Selector
S4	SSH1198	Muting
S5	SSH2122	Speaker Selector
S6	$\Delta$ SSH1193-1	Speaker Impedance Selector
S7[XA]	$\Delta$ ESE37263	Voltage Selector
<b>RELAY</b>		
RLY501	SSY129	Relay

Ref.No.	Part No.	Description
<b>CABINET AND CHASSIS</b>		
1	$\text{\textcircled{O}}$ SBN1032-2	Knob, Tone (3)
1	$\text{\textcircled{X}}$ SBN1032-4	Knob, Tone (3)
2	$\text{\textcircled{O}}$ SBC839-1E	Button, Tape 1 (1)
2	$\text{\textcircled{X}}$ SBC839E	Button, Tape 1 (1)
3	$\text{\textcircled{O}}$ SBC839-1D	Button, Tape 2 (1)
3	$\text{\textcircled{X}}$ SBC839D	Button, Tape 2 (1)
4	$\text{\textcircled{O}}$ SBC839-1C	Button, CD/AUX (1)
4	$\text{\textcircled{X}}$ SBC839-C	Button, CD/AUX (1)
5	$\text{\textcircled{O}}$ SBC839-1B	Button, Tuner (1)
5	$\text{\textcircled{X}}$ SBC839B	Button, Tuner (1)
6	$\text{\textcircled{O}}$ SBC839-1A	Button, Phono (1)
6	$\text{\textcircled{X}}$ SBC839A	Button, Phono (1)
7	$\text{\textcircled{O}}$ SBC840-1A	Button, Loudness (1)
7	$\text{\textcircled{X}}$ SBC840A	Button, Loudness (1)
8	$\text{\textcircled{O}}$ SBN1125	Knob, Volume (1)
8	$\text{\textcircled{X}}$ SBN1125-2	Knob, Volume (1)
9	$\text{\textcircled{O}}$ SYU700SE	Front Panel Ass'y (1)
9	$\text{\textcircled{X}}$ SYU700KE	Front Panel Ass'y (1)
10	$\text{\textcircled{O}}$ LN051330P	LED Ass'y (1)
11	SHW54C50-1	Spacer (1)
12	$\text{\textcircled{O}}$ SBC439	Button, Muting (1)
12	$\text{\textcircled{X}}$ SBC439-2	Button, Muting (1)
13	$\text{\textcircled{O}}$ SBC315-4T	Button, Speaker (2)
13	$\text{\textcircled{X}}$ SBC315-7	Button, Speaker (2)
14	SJJ134B	Headphone Jack (1)
15	$\text{\textcircled{O}}$ SBC666	Button, Power (1)
15	$\text{\textcircled{X}}$ SBC666-4	Button, Power (1)
16	SUB257	Connection Rod, Power Switch (1)
17[EK]	$\text{\textcircled{O}}$ SKCU700-SK	Cabinet (1)
17[other]	$\text{\textcircled{O}}$ SKC1550S1	Cabinet (1)
17[EK]	$\text{\textcircled{X}}$ SKCU700-KK	Cabinet (1)
17[other]	$\text{\textcircled{X}}$ SKC1550BB1	Cabinet (1)
18	SMCU700-KM	Shield Cover (1)
19[XA]	SJS702	Socket, 7Pin (1)
19[other]	SJS305	Socket, 3Pin (1)
20	SJT388	Fuse Holder (2)
21[XA]	SJT388	Fuse Holder (2)
22[XL]	$\Delta$ SJS9234B	AC Inlet (1)
22[other]	$\Delta$ SJS9231B	AC Inlet (1)
23[XA]	$\Delta$ SJS9232B	AC Outlet (2)
24[XA]	SHW35K150-1	Spacer (1)
25	SJF4818-1	Speaker Terminal (1)
26	SBC165	Button, Impedance Selector (1)
27	SUD472	PCB Holder (1)
28	SKUU700-KE	Bottom Board (1)
28-1	SKL293	Foot (4)
29	SJF3062NK1	Input Terminal (1)
30[EG]	SGP6840-2B	Rear Panel (1)
30[EK]	SGP6840-2C	Rear Panel (1)
30[XL]	SGP6840-2D	Rear Panel (1)
30[XA]	SGP6840-3A	Rear Panel (1)
30[E]	SGP6840-2A	Rear Panel (1)
30[other]	SGPU700-KF	Rear Panel (1)
31[XA]	SJS9232A	AC Outlet Cover (2)
32[XL]	SJS9234A	AC Inlet Cover (1)
32[other]	SJS9231A	AC Inlet Cover (1)
33	SMX879	Insulation Cover (1)
34[XA]	SMX884	Insulation Cover (1)
35	SHR301	Cord Clamper (1)
36	SJT30643-V	Socket, 6Pin (2)
36	SJT30743-V	Socket, 7Pin (1)

Ref.No.	Part No.	Description
<b>SCREWS</b>		
N1	SNE4021	Nut (4)
N2	XTB3+8G	Tapping, $\oplus$ 3x8 (5)
N3	XTW3+8T	Tapping, $\oplus$ 3x8 (2)
N4	$\text{\textcircled{O}}$ SNE2095-4	Cabinet (2)
N4	$\text{\textcircled{X}}$ SNE2095-5	Cabinet (2)
N5	XTBS3+8JFZ1	Tapping, $\oplus$ 3x8 (12)
N6	XTB3+6FFZ	Tapping, $\oplus$ 3x6 (9)
N7	SNE2118	Power IC (2)
N8	XTB3+16J	Tapping, $\oplus$ 3x16 (1)
N9[XA]	SNE2095-5	Voltage Selector (1)
<b>ACCESSORIES</b>		
A1[EK]	$\Delta$ SFDAC05G02	AC Cord (1)
A1[XL]	$\Delta$ SJA173	AC Cord (1)
A1[XA]	$\Delta$ SJA168-1	AC Cord (1)
A1[other]	$\Delta$ SJA171	AC Cord (1)
A2[XA]	$\Delta$ SJP9215	Plug Adaptor (1)
A3[EG]	SQF12750	Instruction Book (1)
A3[EK]	SQF12751	Instruction Book (1)
A3[XA]	SFQ12752	Instruction Book (1)
A3[other]	SQF12749	Instruction Book (1)
<b>PACKING</b>		
P1[EK]	$\text{\textcircled{O}}$ SPG5679	Carton Box (1)
P1[EK]	$\text{\textcircled{X}}$ SPG5678	Carton Box (1)
P1[EF]	SPG5680	Carton Box (1)
P1[other]	$\text{\textcircled{O}}$ SPG5677	Carton Box (1)
P1[other]	$\text{\textcircled{X}}$ SPG5676	Carton Box (1)
P2	SKS4748	Pad, Left (1)
P3	SPS4749	Pad, Right (1)
P4	SPS4141	Pad, Upper (1)
P5	$\text{\textcircled{O}}$ SPP699	Polyethylene Bag (1)
P5	$\text{\textcircled{X}}$ SPP735	Polyethylene Bag (1)
P6[EF]	$\text{\textcircled{X}}$ SGK1413	Label (2)

EXPLODED VIEW



oton	
(4)	
3x8	(5)
3x8	(2)
(2)	
(2)	
3x8	(12)
3x6	(9)
(2)	
3x16	(1)
ctor	(1)
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Book	(1)
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Bag	(1)
Bag	(1)
(2)	