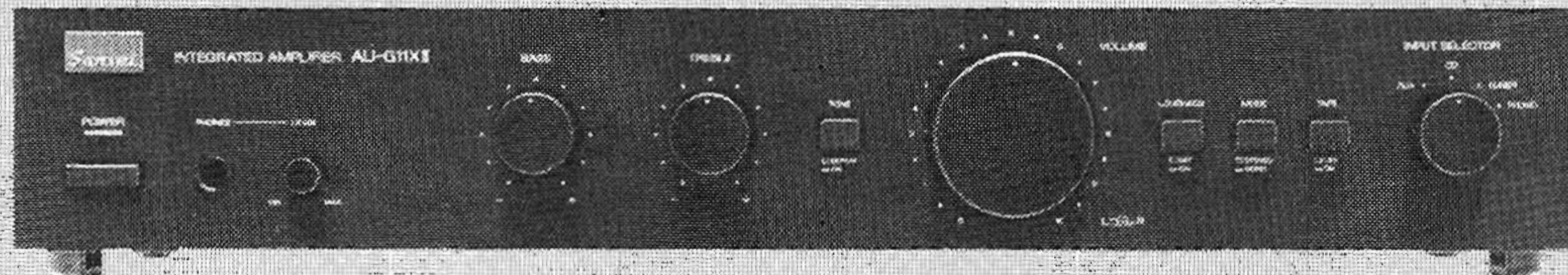


SERVICE MANUAL

INTEGRATED AMPLIFIER

SANSUI AU-G11XII



CAUTION

1. Parts identified by the \triangle symbol on the schematic diagram and the parts list are critical for safety. Use only replacement parts that have critical characteristics recommended by the manufacturer.
2. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

•SPECIFICATIONS

Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz, with no more than 0.05% total harmonic distortion.

25 watts per channel into 8 ohms.

Load impedance..... 8~16 ohms

Total harmonic distortion

..... less than 0.05% at or below rated min. RMS power output

Intermodulation distortion

(60 Hz: 7 kHz = 4:1 SMPTE method)

..... less than 0.05% at rated power output

Frequency response (at 1 watt)

Overall (from AUX)..... 10 Hz to 80,000 Hz, +0 dB, -3.0 dB

RIAA curve deviation (PHONO, 20 Hz to 20 kHz)

..... +0.3 dB, -0.3 dB

Input sensitivity and impedance (at 1 kHz)

PHONO..... 2.5 mV/47 kohms

(Max. input capability; 150 mV at 1 kHz, less than 0.1% total harmonic distortion)

CD, AUX, TUNER..... 150 mV/27 kohms

TAPE PLAY..... 150 mV/27 kohms

Signal to noise ratio (short-circuit, A-network)

PHONO..... 70 dB

CD, AUX, TUNER..... 100 dB

TAPE PLAY..... 100 dB

Controls and Filter

BASS..... +5 dB, -5 dB at 50 Hz

TREBLE..... +5 dB, -5 dB at 10 kHz

LOUDNESS..... +8 dB at 50 Hz

+4 dB at 20 kHz

(VOLUME: -30 dB position)

Power requirements

Power voltage..... 120/220/240V (50/60 Hz)

Power consumption.... 100 watts Rated

140 watts Maximum

Dimensions..... 430 mm (16-15/16") W

75 mm (2-9/16") H

280 mm (11-1/4") D

Weight..... 5.5 kg (12.1 lbs) net

6.2 kg (13.6 lbs) packed

* Design and specifications subject to changes without notice for improvements.

* Due to local laws and regulations, this unit sold in some areas are not equipped with variable voltage selectors.

Sansui

SANSUI ELECTRIC CO., LTD.

NOTE

1. The symbols, UL, CSA, SA, BS, UK, EU, AS, SEV, XX <EXPORT> and XX-V <EXPORT(V)> on the parts list and the schematic diagram mean followings respectively.
 - UL..... Manufactured for U.S.A market.
(Underwriters Laboratories approved model.)
 - CSA..... Manufactured for Canadian market.
 - SA..... Manufactured for South African market.
 - BS, UK Manufactured for United Kingdom market.
 - EU Manufactured for European market.
 - AS..... Manufactured for Australian market.
 - SEV Manufactured for Swiss market.
 - XX..... Standard Version with Inner Voltage Selector.
<EXPORT>
 - XX-V Standard Version with Outer Voltage Selector.
<EXPORT(V)>
 - NON MARK Common Parts.

2. Some printed circuit boards are not supplied assembled. To separate these in this service manual, the stock numbers are not indicated for these boards. However, stock numbers for individual parts are indicated.

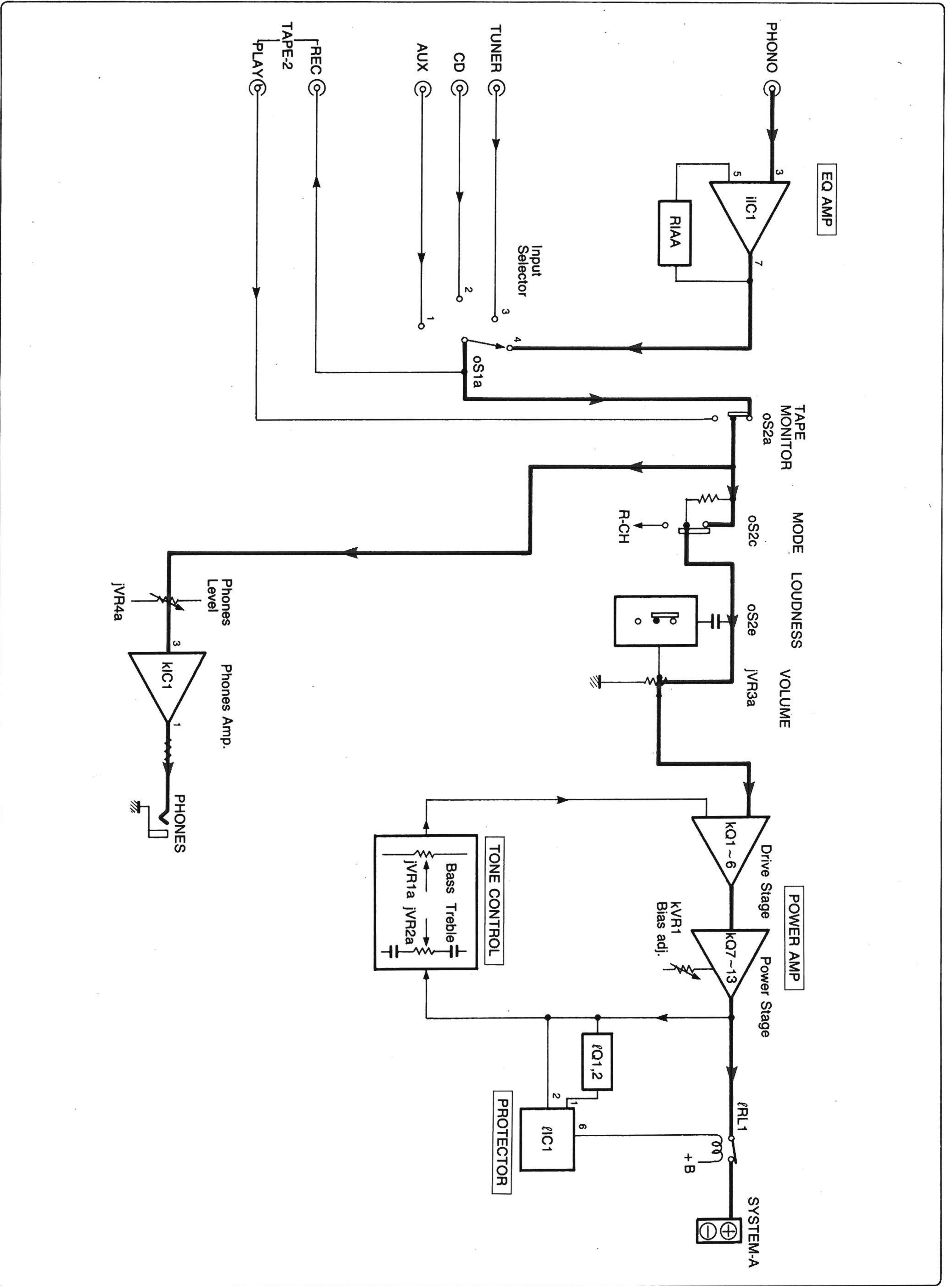
3. Since some capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors and resistors, which was issued on February 1983.

4. Abbreviations in this service manual are as follows.

•Abbreviations List

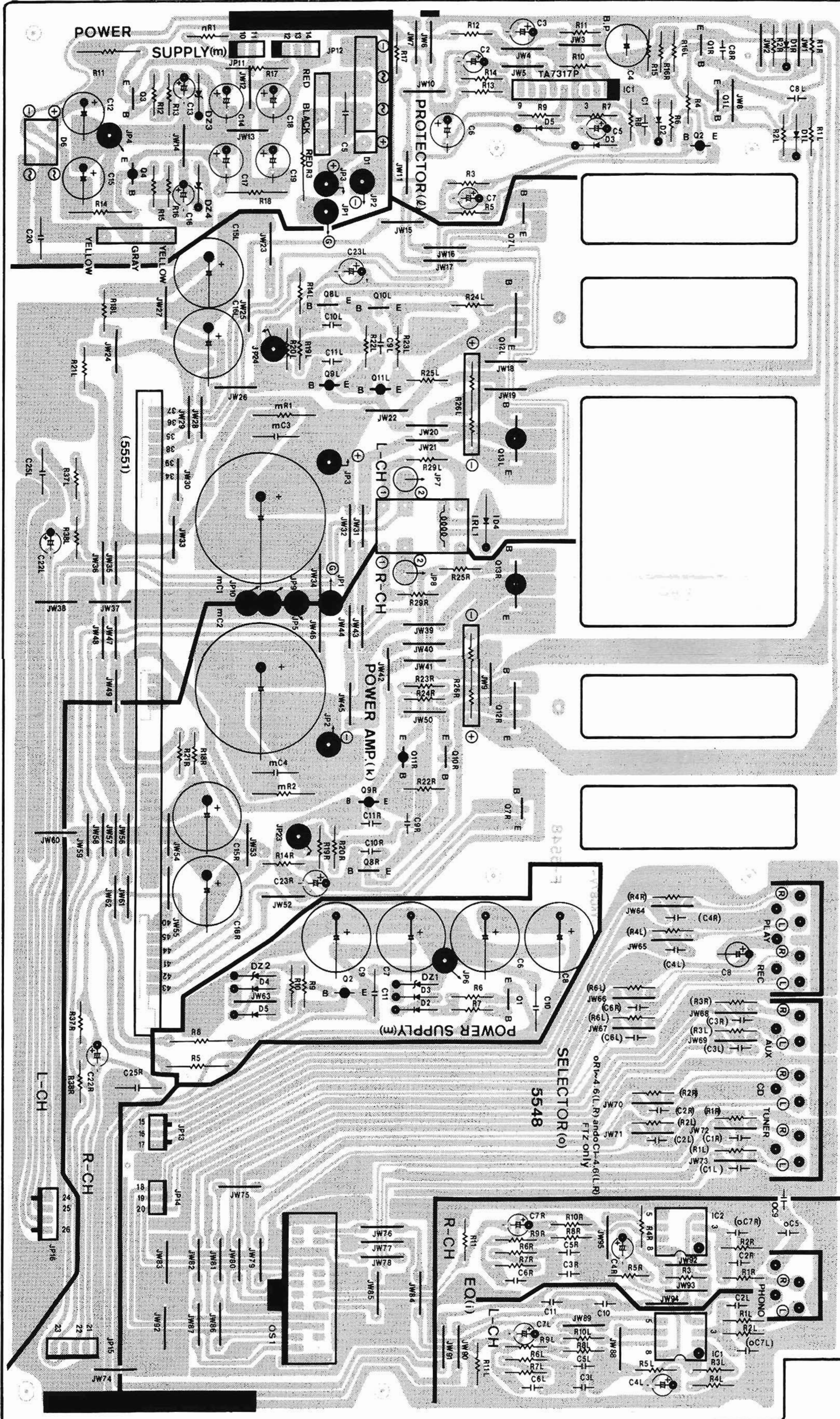
C.R.	: Carbon Resistor	E.B.	: Bi-Polar Electrolytic Capacitor
S.R.	: Solid Resistor	E.B.L.	: Low Leakage Bi-Polar Electrolytic Capacitor
W.R.	: Wire Wound Resistor	Ta.C.	: Tantalum Capacitor
M.R.	: Metal Film Resistor	F.C.	: Film Capacitor
F.R.	: Fusing Resistor	M.P.	: Metallized Paper Capacitor
N.I.R.	: Non-Inflammable Resistor	P.C.	: Polystyrene Capacitor
R.A.	: Resistor Array	C.A.	: Capacitor Array
C.C.	: Ceramic Capacitor	V.R.	: Variable Resistor
C.T.	: Ceramic Capacitor, Temperature Compensation	SW.	: Switch
E.C.	: Electrolytic Capacitor	Chip R.	: Chip Resistor
E.L.	: Low Leakage Electrolytic Capacitor	Chip C.	: Chip Capacitor

1. BLOCK DIAGRAM



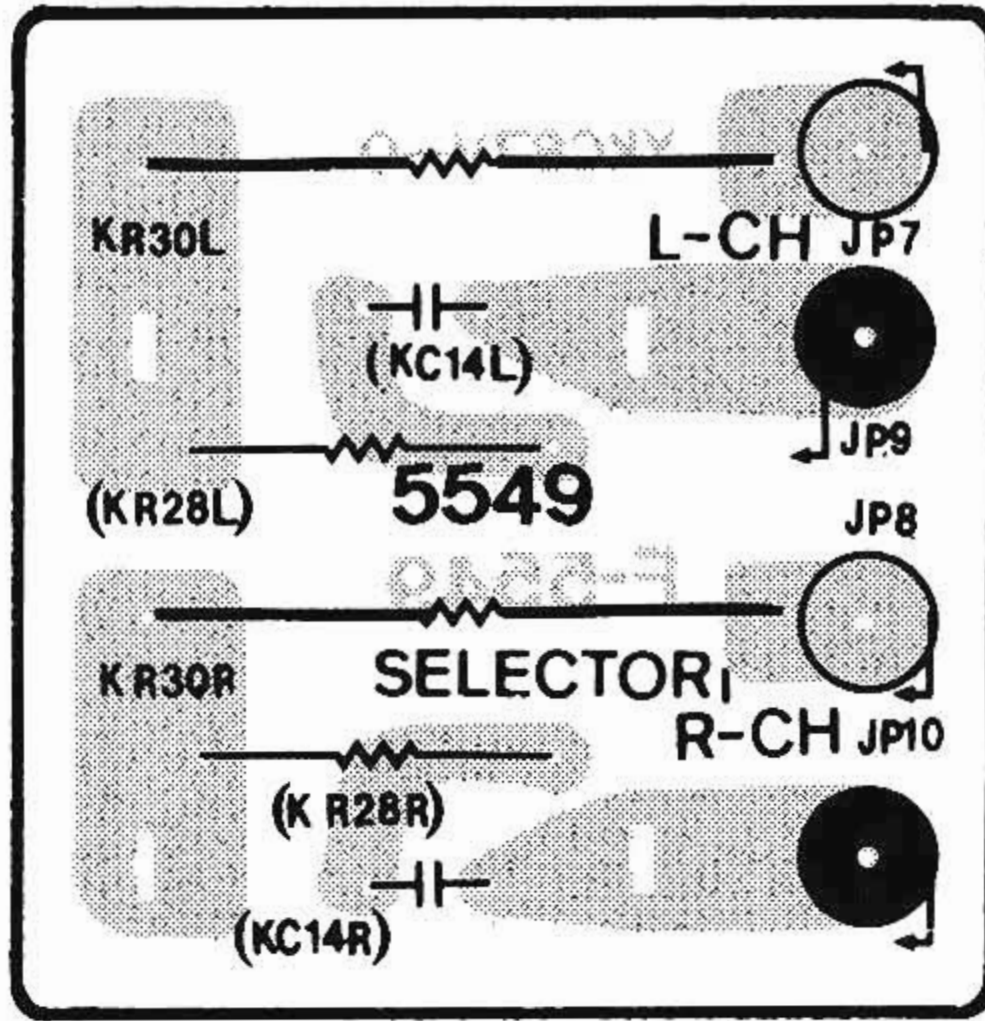
2. PARTS LOCATION ON BOARD

2-1. F-5548 Main Board Component Side

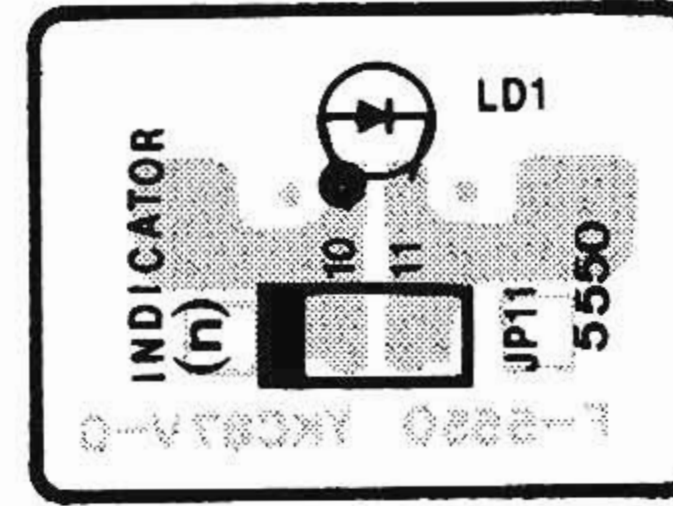


- 2SA949
- 2SA992
- 2SA1145
- 2SA1284
- 2SC1845
- 2SC2229
- 2SC2705
- 2SC3244
- 2SB631KF
- 2SD600KF
- 2SA768
- 2SC1826
- 2SA1115
- 2SA1175
- 2SC2603
- 2SA1489
- 2SC3853
- 2SC2785
- 2SA1349
- M5216L
- M5218P
- TA7317P
- 1S1588
- 1S2473D
- 10E2
- SV-02
- DBB10B
- DBB10C
- RBV-402
- 05Z15

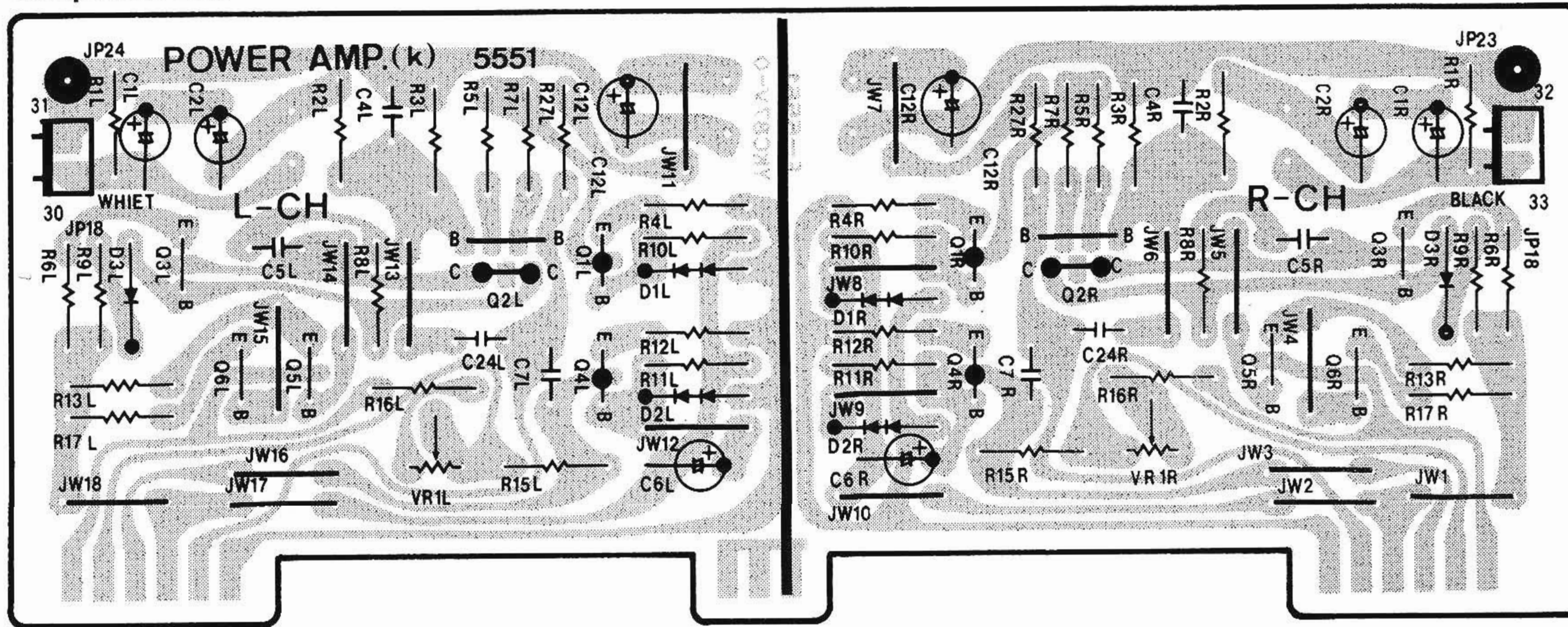
2-2. F-5549 Speaker Terminal Board
Component Side



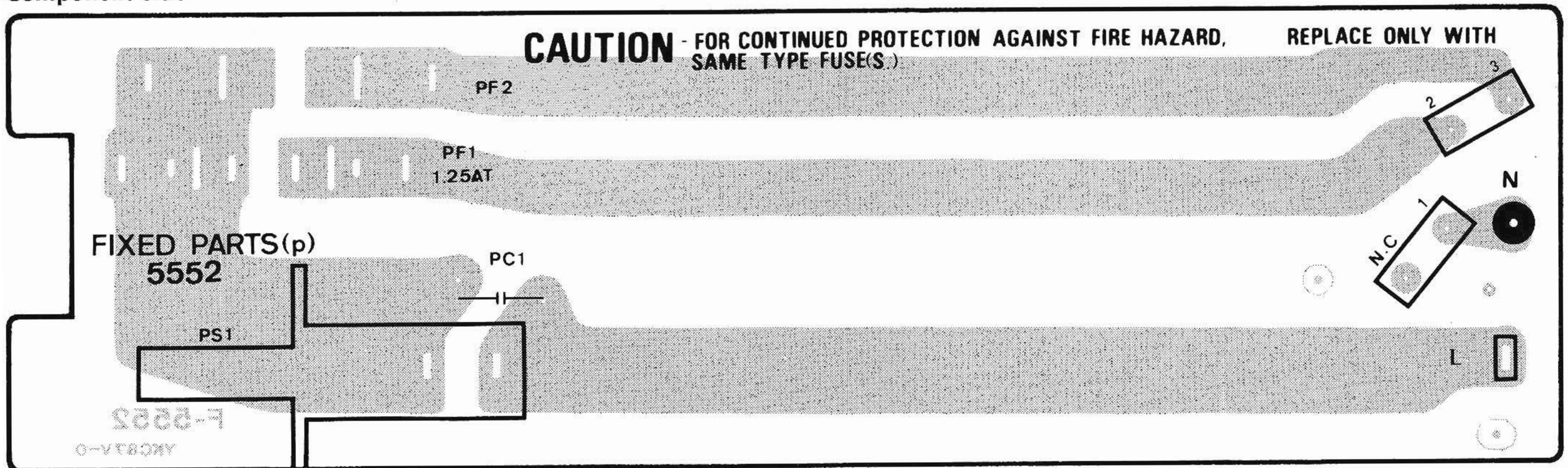
2-3. F-5550 Power Indicator Board
Component Side



2-4. F-5551 Driver Amp. Board
Component Side



2-5. F-5552 Power Switch Board
Component Side



3. ELECTRIC PARTS LIST OF BOARD

3-1. F-5548 Main Board (Stock No. 01013101)

Parts No.	Stock No.	Description
•IC		
iIC1	46673800	M5218P
iIC2	46673800	M5218P
iC3	46694700	6200pF 50V F.C.
iC5	46693500	2000pF 50V F.C.
iC6	46693900	3000pF 50V F.C.
iC10	46282900	0.01 μ F 50V F.C.
iC11	46282900	0.01 μ F 50V F.C.
•Transistor		
kQ7	03067401	2SC1845
kQ8	48061801	2SC3244
kQ9	48064001	2SA1284
kQ10	07206401	2SD600K
kQ11	07206301	2SB631K
Δ kQ12	48577901	2SC3853
Δ kQ13	48577801	2SA1489
Δ kR18	46228800	68 Ω 1/2W N.I.R.
Δ kR21	46228800	68 Ω 1/2W N.I.R.
Δ kR22	46230300	1.2k Ω 1/2W N.I.R.
Δ kR23	46229100	120 Ω 1/2W N.I.R.
Δ kR24	46227400	4.7 Ω 1/2W N.I.R.
Δ kR25	46227400	4.7 Ω 1/2W N.I.R.
Δ kR26	46644300	0.22 Ω X2 3W W.R.
kC9	46282900	0.01 μ F 50V F.C.
kC25	46222800	0.22 μ F 100V F.C.
•Transistor		
IQ1	46581701	2SC1845
IQ2	46581601	2SA992
•IC		
iIC1	46207600	TA7317P
•Diode		
ID1	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID2	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID3	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID4	03117700	10E-2
ID5	03117600	1S2473T77
	or 46086000	1S1588TP-3
IC4	48104200	220 μ F 6.3V E.B.
IC8	46283300	0.022 μ F 50V F.C.
IRL1	48429900	Relay, Protector
•Transistor		
Δ mQ1	48113001	2SC2229
Δ mQ2	48112901	2SA949
Δ mQ3	48369801	2SC1826
Δ mQ4	48369701	2SA768
•Diode		
Δ mD1	48581600	RBV-402
mD2	03117600	1S2473T77
	or 46086000	1S1588TP-3
mD3	03117600	1S2473T77
	or 46086000	1S1588TP-3
mD4	03117600	1S2473T77
	or 46086000	1S1588TP-3
mD5	03117600	1S2473T77
	or 46086000	1S1588TP-3
Δ mD6	46273600	DBB10B
Δ	or 46273700	DBB10C

< F-5548 >

Parts No.	Stock No.	Description
•Zener Diode		
mDZ1	46114400	05Z15-X
	or 46114500	05Z15-Y
mDZ2	46114400	05Z15-X
	or 46114500	05Z15-Y
mDZ3	46114400	05Z15-X
	or 46114500	05Z15-Y
mDZ4	46114400	05Z15-X
	or 46114500	05Z15-Y
Δ mR1	46251600	8.2k Ω 1W N.I.R.
Δ mR2	46251600	8.2k Ω 1W N.I.R.
mR3	46907400	4.7 Ω 3W N.I.R.
Δ mR5	46625100	470 Ω 2W N.I.R.
Δ mR8	46625100	470 Ω 2W N.I.R.
Δ mR11	46248700	33 Ω 1W N.I.R.
Δ mR14	46248700	33 Ω 1W N.I.R.
Δ mR17	46248800	39 Ω 1W N.I.R.
Δ mR18	46248800	39 Ω 1W N.I.R.
mC1	48583900	5600 μ F 42V E.C.
mC2	48583900	5600 μ F 42V E.C.
mC3	46222800	0.22 μ F 100V F.C.
mC4	46222800	0.22 μ F 100V F.C.
mC5	48527800	0.01 μ F 630V F.C.
mC10	48527800	0.01 μ F 630V F.C.
mC11	48527800	0.01 μ F 630V F.C.
mC20	08680400	0.01 μ F 500V C.C.
oC5	46283700	0.047 μ F 50V F.C.
oS1	48581200	Slide SW., Input Selector
oZ1	48528300	6P Terminal, TUNER•CD•AUX
oZ2	48528500	4P Terminal, TAPE
oZ3	48528400	2P Terminal, PHONO

3-2. F-5549 Speaker Terminal Board

Parts No.	Stock No.	Description
oZ4	48699700	4P Terminal

3-3. F-5550 Power Indicator Board

Parts No.	Stock No.	Description
•LED		
nLD1	48172100	BR3447S

3-4. F-5551 Driver Amp. Board (Stock No. 01013401)

Parts No.	Stock No.	Description
•Transistor		
kQ1	46367001	2SA1115
	or 46392001	2SA1175
kQ2	48577701	2SA1349
kQ3	46367101	2SC2603
	or 46391901	2SC2785
kQ4	46728201	2SA1145
	or 48112901	2SA949
kQ5	46728301	2SC2705
	or 48113001	2SC2229
kQ6	46728301	2SC2705
	or 48113001	2SC2229
kD1	03104900	Varistor SV-02
kD2	03104900	Varistor SV-02
•Diode		
kD3	03117600	1S2473T77
	or 46086000	1S1588TP-3
kVR1	10336100	470Ω (B) V.R., Bias

3-6. F-5553 Tone Control & Volume Board
(Stock No. 01013601)

Parts No.	Stock No.	Description
jC1	46696600	0.039μF 50V F.C.
jC2	48103000	0.22μF 50V E.B.
jC4	46692800	1000pF 50V F.C.
jC5	46695200	0.01μF 50V F.C.
jC6	46694800	6800pF 50V F.C.
jC7	46697200	0.068μF 50V F.C.
jC10	46697200	0.068μF 50V F.C.
jVR1	48581400	50kΩ (C) V.R., BASS
jVR2	48581400	50kΩ (C) V.R., TREBLE
jVR3	48581300	150kΩ (B) V.R., VOLUME
oS2	48581100	Push SW., LOUDNESS, TAPE, MODE
oS3	48581000	Push SW., TONE

3-5. F-5552 Power Switch Board

Parts No.	Stock No.	Description
△pC1	48732700	0.01μF 400V C.C.
△	or 48733500	0.01μF 400V C.C.
△pF1	48721200	Fuse 1.5A (XX-V)
△	07184800	Fuse 1.25A (EU, UK, SEV)
△pF2	48721200	Fuse 1.5A (XX-V)
△pS1	46360300	Push SW., Power

3-7. F-5554 Phones Amp. Board (Stock No. 01013701)

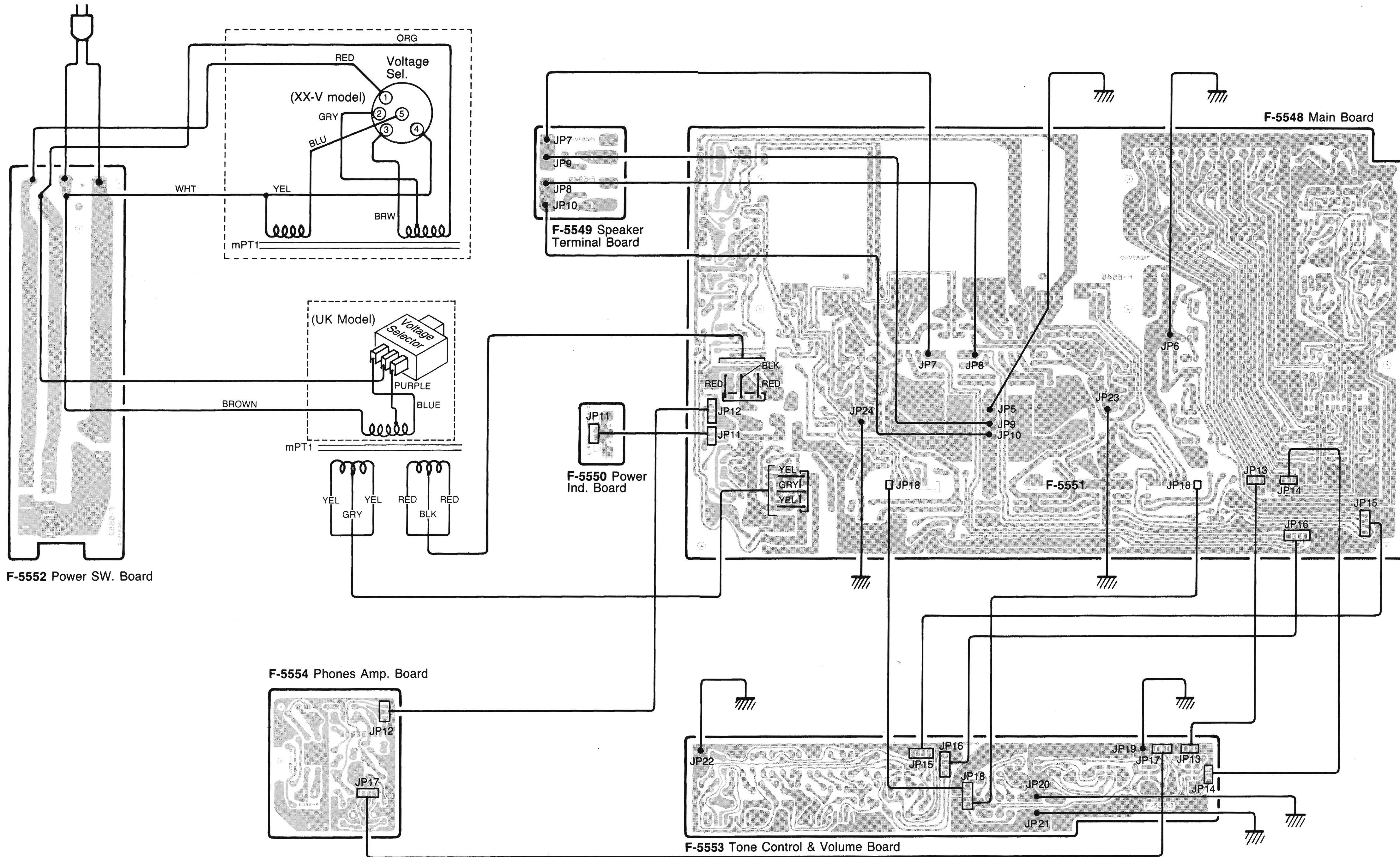
Parts No.	Stock No.	Description
jVR4	48581500	250KBX2 V.R., Phones Level
•IC		
kIC1	48577000	M5216L
kC21	46282000	1500pF 50V F.C.
oJ1	46579600	Jack, PHONES

4. ADJUSTMENT (See Top View on page 10)

- Note:** 1) Master Volume Minimum
 2) Room Temperature 18°C ~ 28°C (65°F ~ 83°F)
 3) For this adjustment, run the unit for more than 5 minutes after the power is switched ON.
 4) Before turning ON power switch, set kVR1 on F-5551 to center position.

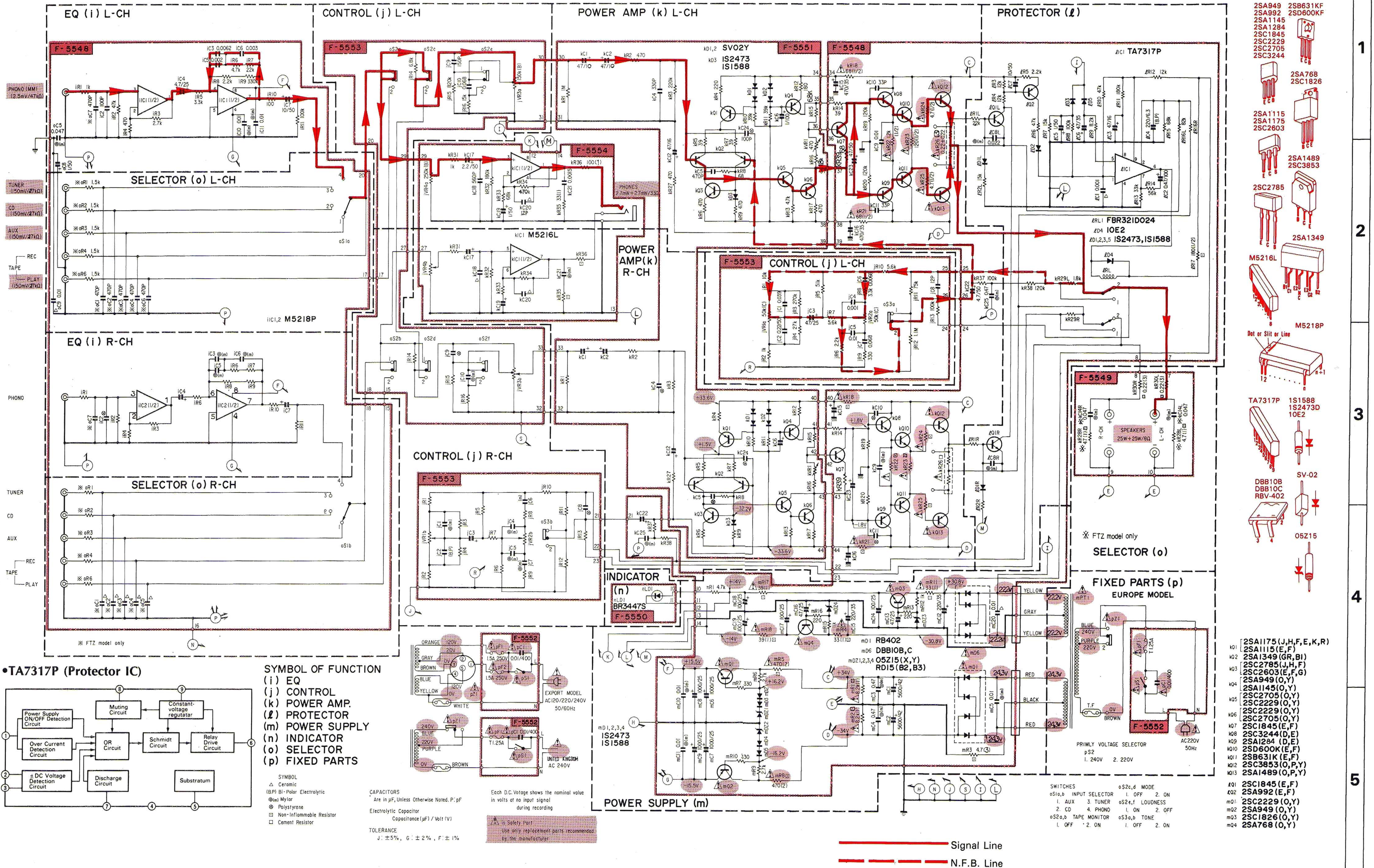
STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Bias Current Adj. L-CH	Between emitters of power transistors (kQ12L & kQ13L) <Across kR26L>	kVR1, L-ch (F-5551)	DC 20mV ± 2mV	•This bias value is converted from current value to voltage by ohms law.
2.	Bias Current Adj. R-CH	Between emitters of power transistors (kQ12R & kQ13R) <Across kR26R>	kVR1, R-ch (F-5551)	DC 20mV ± 2mV	

5. OVERALL WIRING DIAGRAM

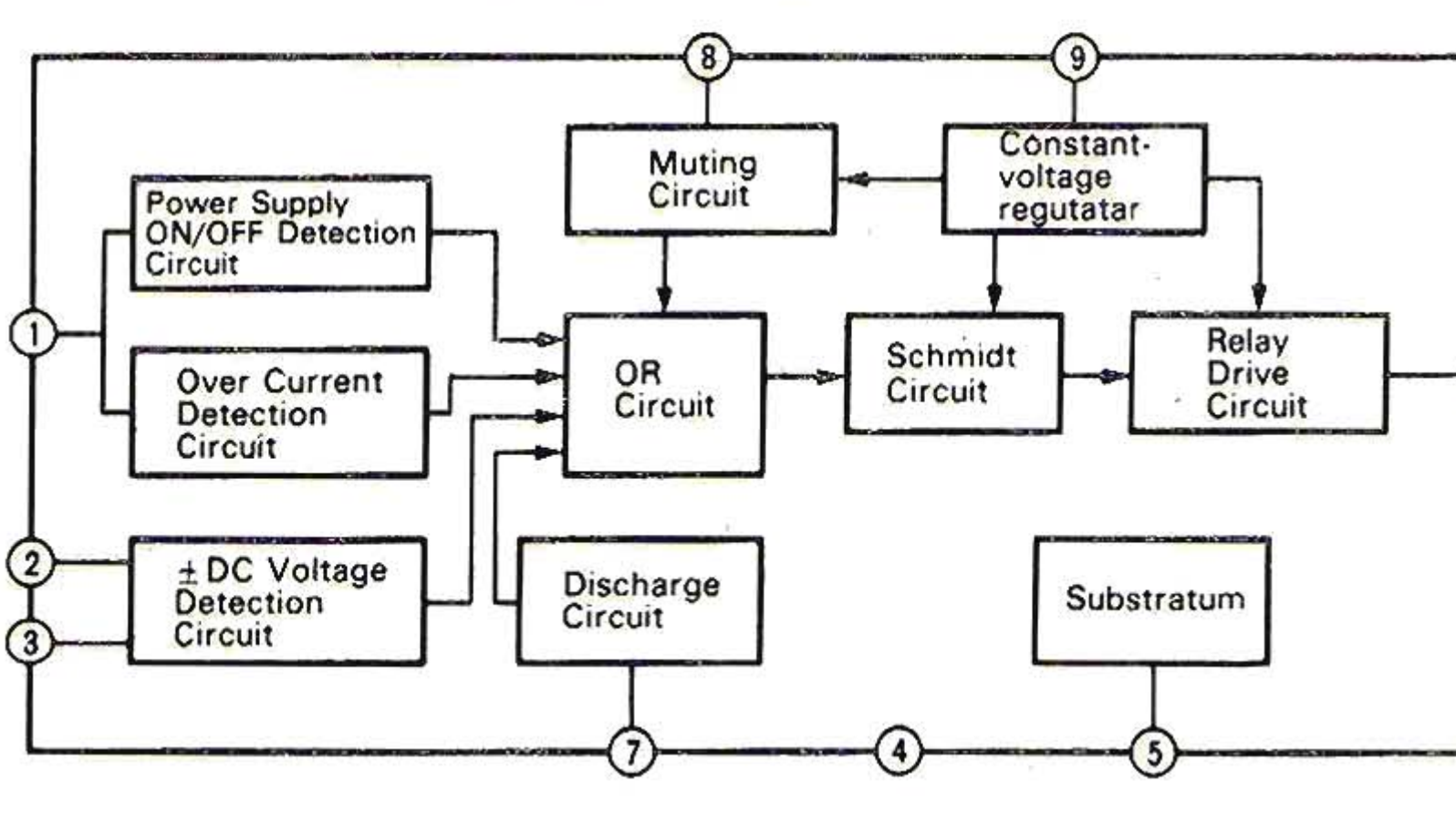


6. SCHEMATIC DIAGRAM

Design and specifications subject to change without notice for improvement.
 La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



•TA7317P (Protector IC)



SYMBOL OF FUNCTION

- (i) EQ
- (j) CONTROL
- (k) POWER AMP.
- (l) PROTECTOR
- (m) POWER SUPPLY
- (n) INDICATOR
- (o) SELECTOR
- (p) FIXED PARTS

- SYMBOL
 △ Ceramic
 (BP) Bi-Polar Electrolytic
 ⊗ Mylar
 ⊕ Polystyrene
 □ Non-Inflammable Resistor
 □ Cement Resistor

CAPACITORS
 Are in μ F, Unless Otherwise Noted. P: pF
 Electrolytic Capacitor
 Capacitance (μ F) / Volt (V)

TOLERANCE
 J: $\pm 5\%$, G: $\pm 2\%$, F: $\pm 1\%$

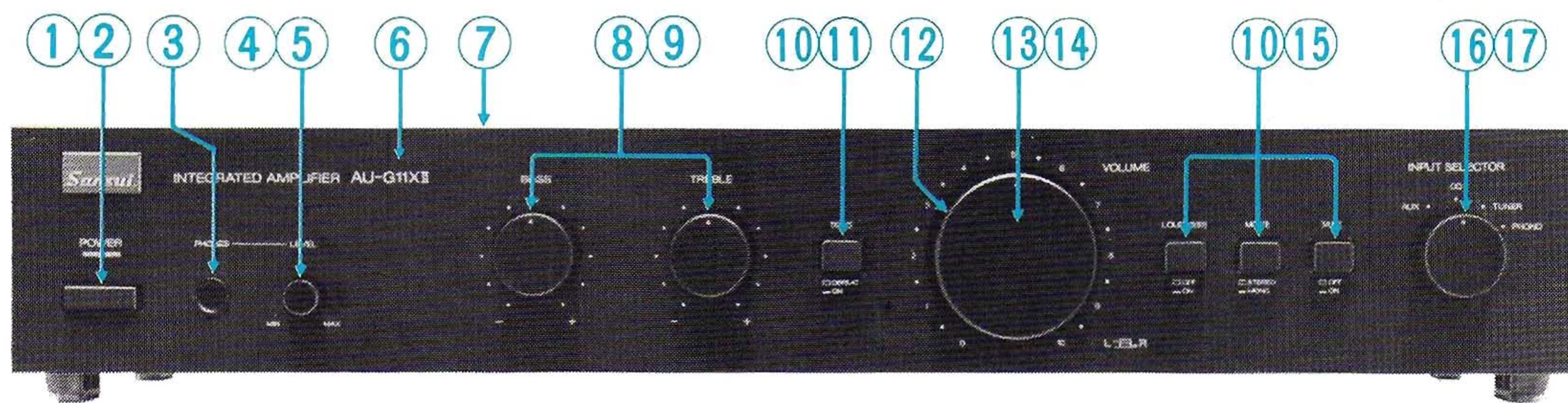
Each D.C. Voltage shows the nominal value in volts at no input signal during recording
 △ is Safety Part
 Use only replacement parts recommended by the manufacturer

- 2SA949
- 2SA992
- 2SA1145
- 2SA1284
- 2SC1845
- 2SC2229
- 2SC2705
- 2SC3244
- 2SB631KF
- 2SD600K
- 2SA768
- 2SC1826
- 2SA1115
- 2SA1175
- 2SC2603
- 2SA1489
- 2SC3853
- 2SC2785
- 2SA1349
- M5216L
- M5218P
- TA7317P
- IS1588
- IS2473D
- IOE2
- DBB10B
- DBB10C
- RBV-402
- SV-02
- 05Z15

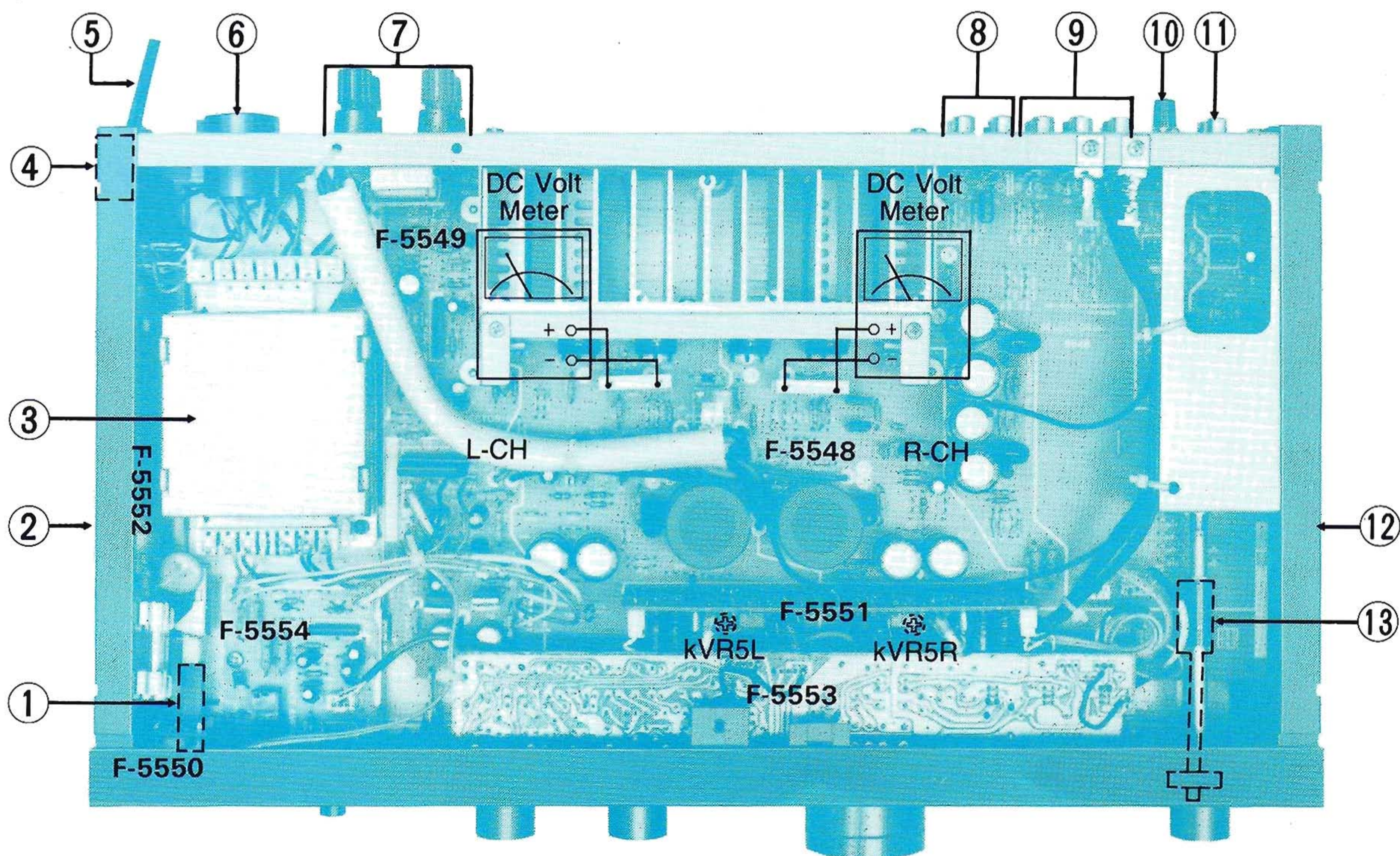
- K01 2SA1175 (J,H,F,E,K,R)
- K02 2SA1115 (E,F)
- K03 2SA1349 (GR,BI)
- K04 2SC2785 (J,H,F)
- K05 2SC2603 (E,F,G)
- K06 2SA949 (O,Y)
- K07 2SA1145 (O,Y)
- K08 2SC2705 (O,Y)
- K09 2SC2229 (O,Y)
- K10 2SC2705 (O,Y)
- K11 2SC1845 (E,F)
- K12 2SC3244 (D,E)
- K13 2SA1284 (D,E)
- K14 2SD600K (E,F)
- K15 2SB631K (E,F)
- K16 2SC3853 (O,P,Y)
- K17 2SA1489 (O,P,Y)
- K18 2SC1845 (E,F)
- K19 2SA992 (E,F)
- K20 2SC2229 (O,Y)
- K21 2SA949 (O,Y)
- K22 2SC1826 (O,Y)
- K23 2SA768 (O,Y)

7. OTHER PARTS

7-1. Front View



7-2. Top View



Parts List < Front View >

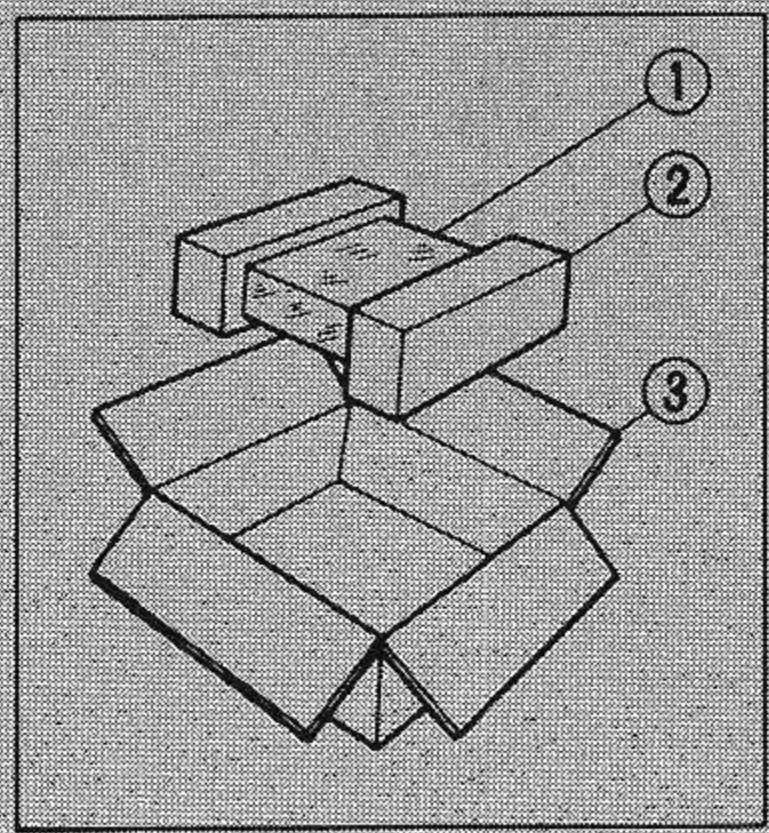
Parts No.	Stock No.	Description
1	27315200	Knob, Power
△ 2	46360300	Push SW., Power
3	46579600	Jack, PHONES
4	07895410	Knob, Phones level
5	48581500	250kΩ V.R., Phones level
6	27270300	Front Panel Ass'y
7	47708300	Bonnet
8	27271600	Knob, BASS, TREBLE
9	48581400	50kΩ V.R., BASS, TREBLE
10	27181800	Knob, TONE, LOUDNESS, MODE, TAPE
11	48581000	Push SW., TONE
12	27268610	Knob, VOLUME for R-CH
13	27268500	Knob, VOLUME for L-CH
14	48581300	150kΩ V.R., VOLUME
15	48581100	Push SW., LOUDNESS, MODE, TAPE
16	27332500	Knob, INPUT SELECTOR
17	48581200	Slide SW., INPUT SELECTOR

Parts List < Top View >

Parts No.	Stock No.	Description
1	47637300	Joint Shaft, power SW.
2	47847100	Left Side Panel Ass'y
△ 3	15027409	Power Transformer (XX-V)
△ 4	15027405	Power Transformer (EU, UK, SEV)
4	47157300	AC Cord Cover
△ 5	38005700	Power Supply Cord (XX-V)
△ 6	38004500	Power Supply Cord (EU, SEV)
△ 7	38004300	Power Supply Cord (UK)
△ 8	48175200	Plug, voltage selector (XX-V)
△ 9	07204700	Slide SW., voltage selector (EU, UK, SEV)
7	48699700	4P Terminal, SPEAKER
8	48528500	4P Terminal, TAPE
9	48528300	6P Terminal, TUNER, CD, AUX
10	22301510	Ground Terminal
11	48528400	2P Terminal, PHONO
12	47893400	Right Side Panel Ass'y
13	27269900	Joint Shaft Ass'y selector SW.

8. PACKING LIST

Parts No.	Stock No.	Description
1	47859300	Vinyl Bag
2	07827220	Styrofoam Packing
3	27270200	Carton Case



9. ACCESSORY LIST

Parts No.	Stock No.	Description
	49018100	Operating Instruction (*E•F•S)
	49018200	Operating Instruction (*G•I•Sw)

***Note:**
E•F•S: English•French and Spanish Version
G•I•Sw: German•Italian and Swedish Version



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 17150 South Margay Ave. Carson, California 90746 U.S.A.
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 SANSUI ELECTRONICS G.M.B.H.: Pau Ehrich Strasse 8, 6074 Rödermark 2, West Germany