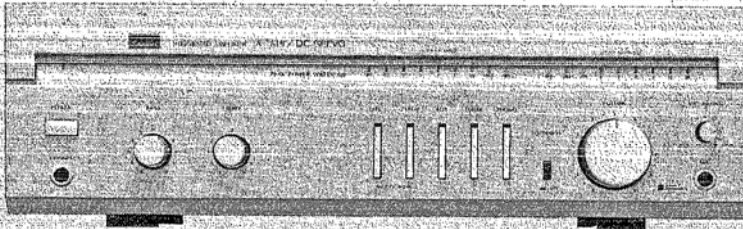


# SERVICE MANUAL

## INTEGRATED AMPLIFIER

# SANSUI A-M9



### • SPECIFICATIONS

#### Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz,  
with no more than 0.07 % total harmonic distortion  
70 watts per channel into 8 ohms

Load impedance . . . . . 8 ohms

#### Total harmonic distortion

. . . . . less than 0.07 % at or below rated  
min. RMS power output

#### Frequency response (at 1 watt)

. . . . . 10 to 60,000 Hz/+0.5 dB, -2 dB

#### RIAA curve deviation (PHONO, 30 Hz to 20 kHz)

. . . . . +0.5 dB, -0.5 dB

#### Input sensitivity and impedance (1 kHz, for rated power output)

PHONO . . . . . 2.5 mV/47 kilohms

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

#### AUX, TUNER, TAPE PLAY

. . . . . 150 mV/47 kilohms

MIC . . . . . 0.5 mV/10 kilohms

#### Output level (1 kHz)

TAPE REC . . . . . 130 mV into 47 kilohms

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

PHONO . . . . . 72 dB

#### AUX, TUNER, TAPE PLAY

. . . . . 100 dB

#### Power requirements

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

For U.S.A. & Canada

. . . . . 120 V (60 Hz)

#### Power consumption

. . . . . 230 watts 280 VA Rated

. . . . . 290 watts Maximum

#### Dimensions

. . . . . 345 mm (13-9/16") W

. . . . . 105 mm (4-7/8") H

. . . . . 248 mm (9-3/4") D

#### Weight

. . . . . 4.8 kg (10.6 lbs.) net

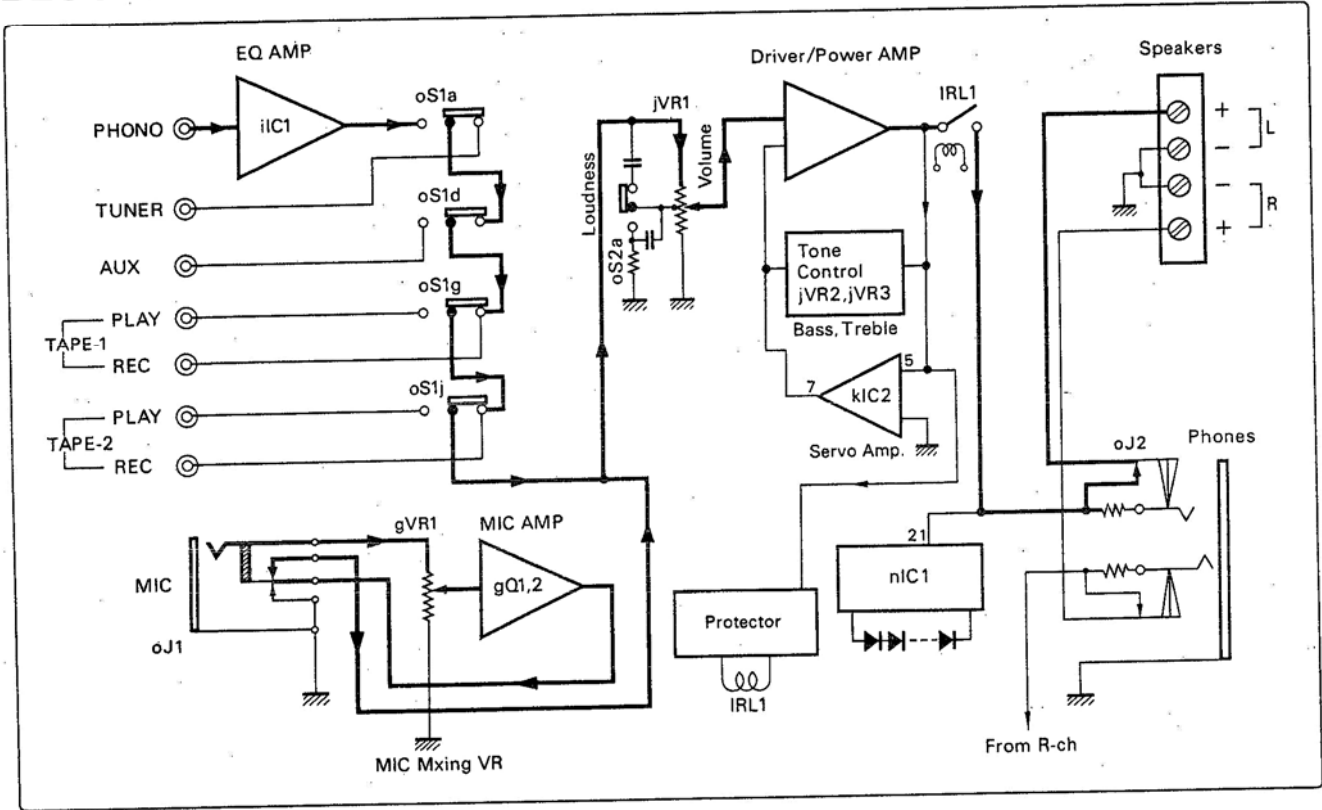
. . . . . 5.4 kg (11.9 lbs.) packed

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

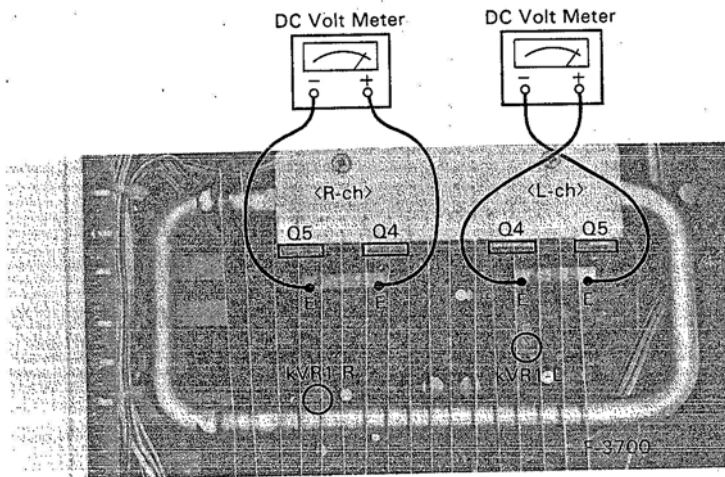
**Sansui**

SANSUI ELECTRIC CO., LTD.

# 1. BLOCK DIAGRAM



# 2. BIAS CURRENT ADJUSTMENT (Refer to picture below)

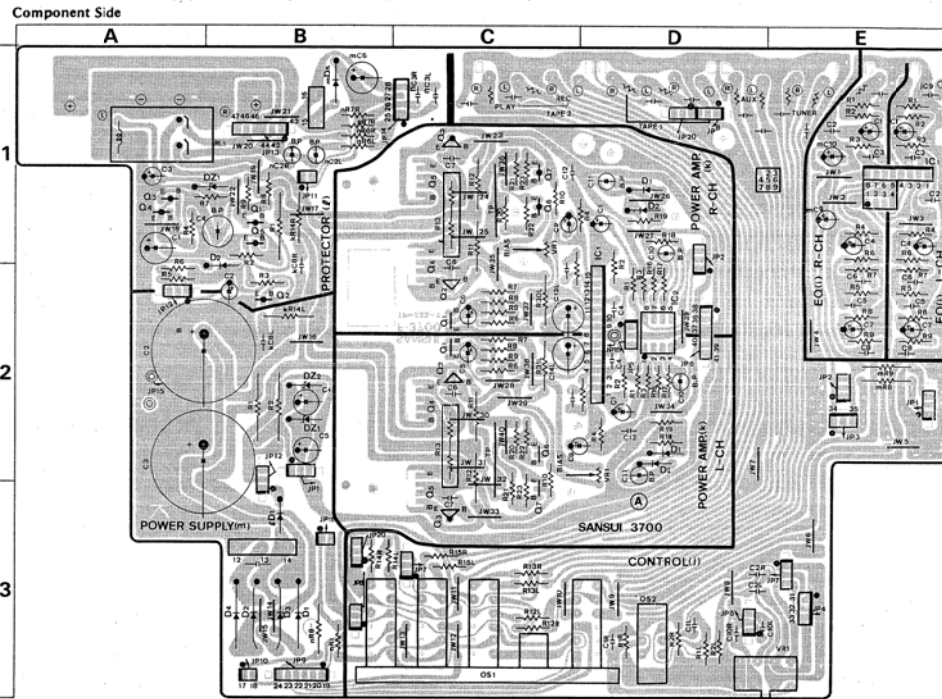


- Note:**
1. Room Temperature ..... 18°C ~ 38°C
  2. For adjustment, run the unit for more than 3 minutes after the power is switched on.
  3. Before turning ON POWER switch, turn kVR1 on F-3700 fully counterclockwise.

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	L-CH	Connect DC volt meter between emitters of kQ4, kQ5 on F-3700	kVR1 (L-CH) F-3626	DC 3mV	This bias current adjustment converts current value into voltage by ohms law.
2.	R-CH	Same as above	kVR1 (R-CH) F-3626	DC 3 mV	

### 3. PARTS LOCATION & PARTS LIST

#### 3-1. F-3700 EQ Amp./Power Amp. Circuit (Stock No. 00686601)



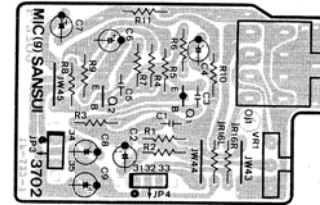
**Parts List**

Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
jVR1	46170200	100Ω (B) x 2 VR, VOLUME	•Transistor			mC2	08301800	6800μF 63V E.C.
•Transistor			IC1	03010901	2SA992	mC3	08301800	6800μF 63V E.C.
kQ1	03067401	2SC1845	IC2	07194701	2SA1015	oS1	46164800	Push SW, SELECTOR
kQ2	07206401	2SD600	IC3	07194701	2SA1015	oS2	46164900	Push SW, LOUDNESS
kQ3	07206301	2SB631	IC4	07194701	2SA1015		07249000	2P Input Terminal Board
kQ4	46085301	2SC2581	IC5	03010901	2SA992		07249100	4P Input Terminal Board
or 07203301		2SC2579	•Diode				46118300	Speaker Terminal Board
kQ5	46085401	2SA1106	ID1	03117600	1S2473D	•IC		
or 07203201		2SA1104	ID2	03117600	1S2473D	iIC1	46078900	M5218L
kQ6	07194801	2SC1815	•Zener Diode					
kQ7	07194701	2SA1015	IDZ1	03180200	RD24E-B			
•IC			IR1	00186300	1.2kΩ 2W N.I.R.			
kIC1	46253800	STK3082	IC4	08460200	220μF 6.3V E.C.			
kIC2	03607700	NJM4558D	IRL1	46254900	Relay			
kR13	00091700	0.33Ω x 2 5W Ce.R.	•Diode					
kR14	00179000	10Ω 1W N.I.R.	mD1~4	03115300	30D-2			
kC10	08450900	4.7μF 16V E.B.	•Zener Diode					
kC11	08450100	10μF 6.3V E.C.	mDZ2	03180000	RD22E-B			
kC13	46306200	10μF 6.3V E.C.	mR1	00187400	1.8kΩ 2W N.I.R.			
kC14	46306200	10μF 6.3V E.C.	mR2	00187400	1.8kΩ 2W N.I.R.			
kVR1	07240900	500Ω (B) SVR, bias						

•Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the Common Parts List for capacitors & resistors, which was appended previously to Sansui Manual.

#### 3-2. F-3702 Mic Amp. Circuit Board (Stock No. 00686801)

Component Side

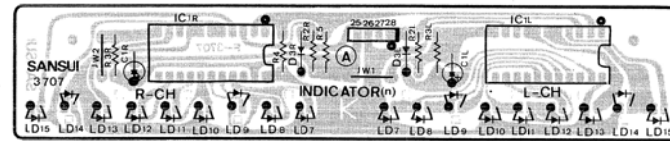


Parts List

Parts No.	Stock No.	Description
oJ1	46164600	Jack, MIC
•Transistor		
gQ1	03010901	2SA992
gQ2	07225401	2SC2320L
gC5	46137800	680pF 50V C.C.
gVR1	07106701	20kΩ (A) SVR, MIC MIXING

#### 3-3. F-3707 Level Indicator Circuit Board (Stock No. 00687301)

Component Side



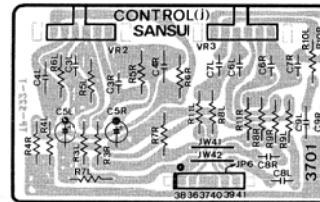
Parts List

Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
•IC			nLD7~15	46169300	Light Emitting Diode SEL-1210S
nIC1	07246000	IR2431	nC2	08451700	1μF 50V E.B.
•Diode					
nD3	03103300	1N60			

•Note: The circuit board, F-3701, F-3703, F-3704, F-3705 & F-3706 are not supplied as the assembled. However, the individual parts on the circuit board are provided by orders.

#### 3-4. F-3701 Tone Control Circuit Board

Component Side



Parts List

Parts No.	Stock No.	Description
jVR2,3	46254800	50kΩ (C) VR, BASS, TREBLE
jC6	46137800	680pF 50V C.C.

#### 3-6. F-3704 Indicator Circuit Board

Parts List

Parts No.	Stock No.	Description
nLD1~5	46095200	Light Emitting Diode TLR123

#### 3-7. F-3705 Power Fuse Circuit Board

Parts List

Parts No.	Stock No.	Description
pF1	07189100	Fuse 5A (120V)
	07188700	Fuse 2.5A (240V)

#### 3-8. F-3706 Power Indicator Circuit Board

Parts List

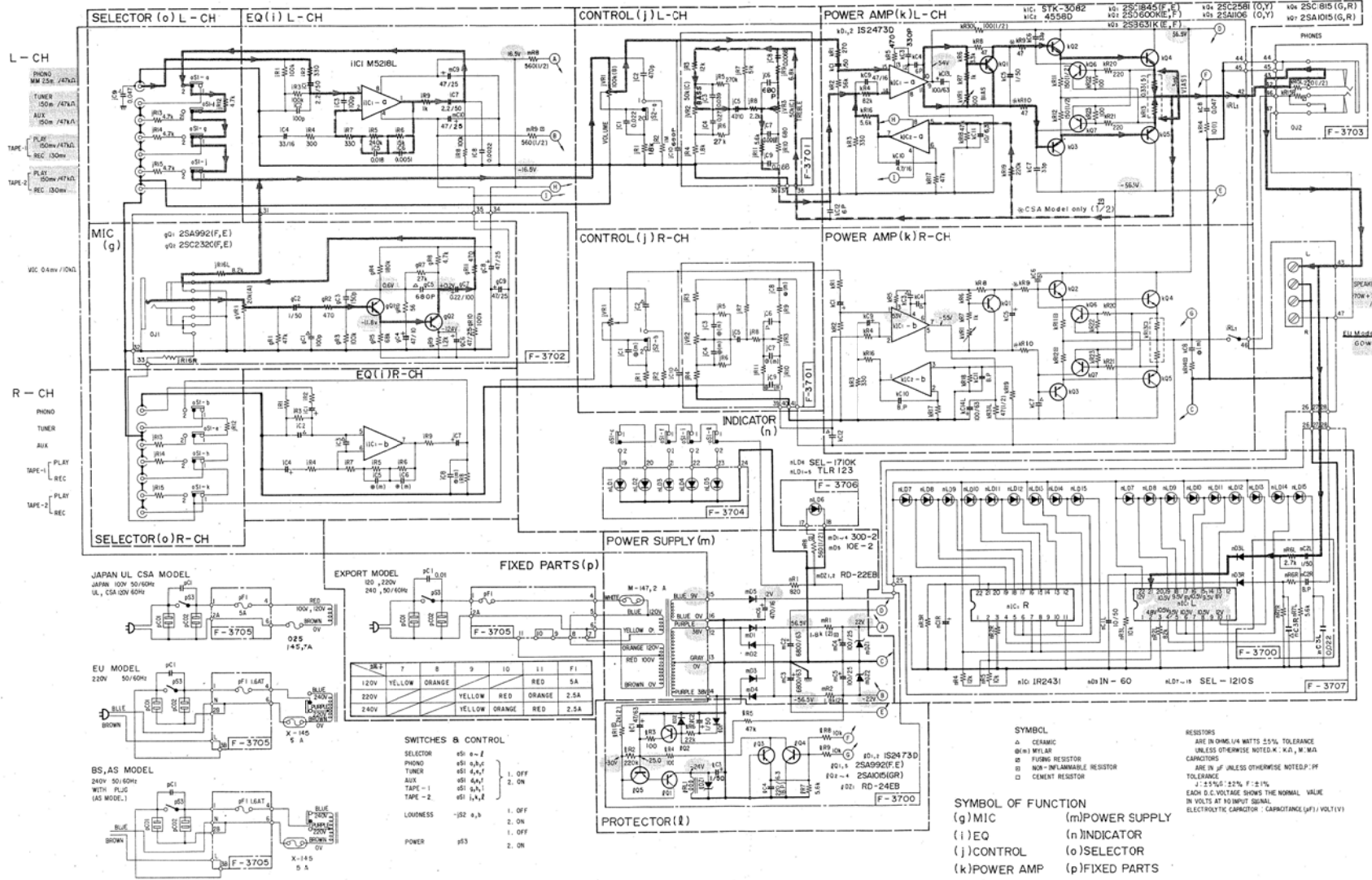
Parts No.	Stock No.	Description
nLD6	07209100	Light Emitting Diode

•Abbreviations

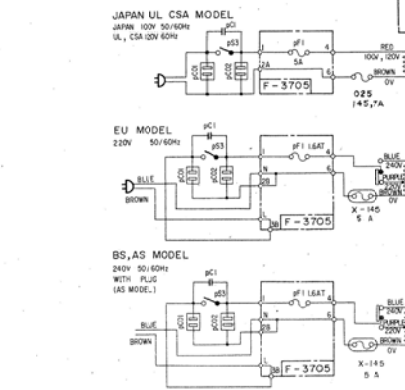
C.R. : Carbon Resistor	E.B. : Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	E.B.L. : Low Leak Bi-Polar Electrolytic Capacitor
Ce.R. : Cement Resistor	Ta.C. : Tantalum Capacitor
M.R. : Metal Film Resistor	F.C. : Film Capacitor
F.R. : Fusing Resistor	M.P. : Metallized Paper Capacitor
N.I.R. : Non-Inflammable Resistor	P.C. : Polystyrene Capacitor
C.C. : Ceramic Capacitor	G.C. : Gimmic Capacitor
C.T. : Ceramic Capacitor, Temperature Compensation	V.R. : Variable Resistor
E.C. : Electrolytic Capacitor	S.V.R. : Semi Variable Resistor
E.L. : Low Leak Electrolytic Capacitor	SW. : Switch

# 4. 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.



- L - CH**  
 PHONO MM 25k / 47kΩ  
 TUNER 50m / 47kΩ  
 AUX 50m / 47kΩ  
 TAPE-1 PLAY 50m / 47kΩ  
 REC 30m  
 TAPE-2 PLAY 50m / 47kΩ  
 REC 30m
- MIC 0.4mV / 70Ω
- R - CH**  
 PHONO  
 TUNER  
 AUX  
 TAPE-1 REC  
 TAPE-2 PLAY  
 REC

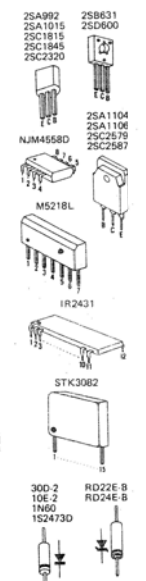


**FIXED PARTS (p)**

7	8	9	10	11	F1
120V	YELLOW	ORANGE	RED	ORANGE	5A
240V	YELLOW	ORANGE	RED	ORANGE	2.5A

**SWITCHES & CONTROL**

SELECTOR	s51-a-f	1. OFF
PHONO	s51-a,h,i	2. ON
TUNER	s51-a,h,i	1. OFF
AUX	s51-a,h,i	1. OFF
TAPE-1	s51-a,h,i	1. OFF
TAPE-2	s51-a,h,i	1. OFF
LOUDNESS	s52-a,b	1. OFF
		2. ON
		1. OFF
POWER	s53	2. ON



**SYMBOL**

△ CERAMIC  
 ⊞ RELAY  
 ⊞ FUSING RESISTOR  
 ⊞ NON-INFLAMMABLE RESISTOR  
 ⊞ CEMENT RESISTOR

**SYMBOL OF FUNCTION**

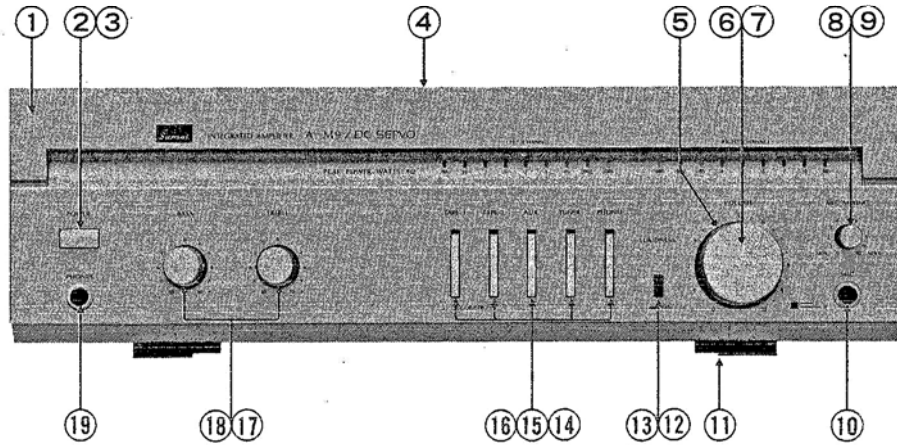
(g) MIC (m) POWER SUPPLY  
 (i) EQ (n) INDICATOR  
 (j) CONTROL (o) SELECTOR  
 (k) POWER AMP (p) FIXED PARTS

**RESISTORS**  
 ARE IN OHMS 1/4 WATT 5% TOLERANCE  
 UNLESS OTHERWISE NOTED: K, A, Ω, M, KA  
**CAPACITORS**  
 ARE IN μF UNLESS OTHERWISE NOTED: P, PP  
 TOLERANCE  
 J: ±5% 25% F: ±1%  
 EACH D.C. VOLTAGE SHOWS THE NORMAL VALUE  
 IN VOLTS AT 100μV SIGNAL  
 ELECTROLYTIC CAPACITOR: CAPACITANCE (μF) / VOLT (V)

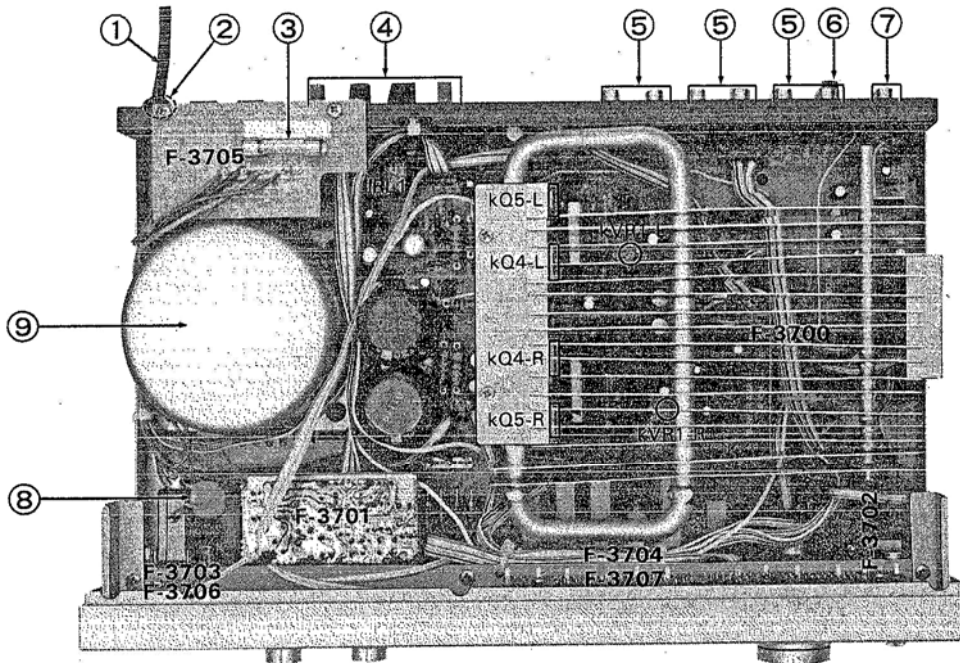
————— Signal Line  
 - - - - - N.F.B. Loop Line

# 5. OTHER PARTS

5-1. Front View



5-2. Top View



Parts List <Front View>

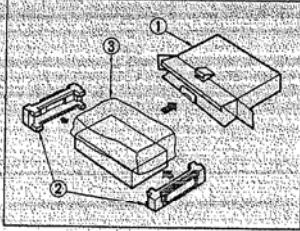
Parts No.	Stock No.	Description
1	07887300	Front Panel Ass'y
2	07828200	Push Knob, } POWER
3	07224300	Push SW., }
4	07884510	Bonnet
5	07831900	Knob, master VR R-ch
6	07832000	Knob, master VR L-ch
7	46170200	100kΩ (B) VR, master
8	07834700	Knob, MIC VR
9	07106701	20kΩ (A) VR, MIC
10	46164600	Jack, MIC
11	07847500	Leg
12	07828800	Push Knob, } LOUDNESS
13	46164900	Push SW., }
14	07828300	Push Knob, } TAPE-1, 2, AUX,
15	46164800	Push SW., } TUNER, PHONO
16	46169300	L.E.D. SEL-1210S
17	07884300	Knob, } TREBLE, BASS
18	46254800	50kΩ VR, }
19	46164700	Jack, PHONES

Parts List <Top View>

Parts No.	Stock No.	Description
1	38004700	Power Supply Cord
2	39106000	Strain Relief
3	07189100	Fuse 5A (120 V)
	07188700	Fuse 2.5A (240 V)
4	46118300	4P Output Terminal, speaker
5	07249100	4P Input Terminal, TUNER, AUX, TAPE
6	22301500	Gnd Terminal
7	07249000	2P Input Terminal
8	08302600	0.01μF 125V C.C.
9	15006901	Power Transformer

## 6. PACKING LIST

Parts No.	Stock No.	Description
1	07886900	Carton Case
2	07884400	Styrofoam Packing
3	09453300	Vinyl Cover



## 7. ACCESSORY LIST

Stock No.	Description
46256400	Operating Instruction



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SANSUI ELECTRONICS (U.K.) LTD.:

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