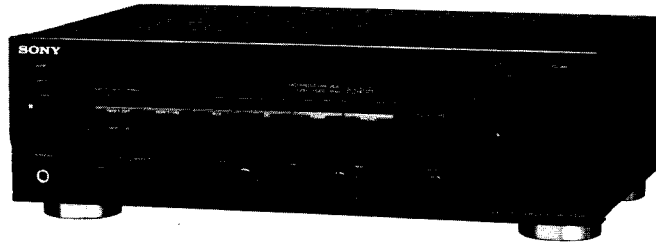


TA-F345R

SERVICE MANUAL

*AEP Model
E Model*



SPECIFICATIONS

Amplifier

Continuous RMS power output (both channels driven simultaneously)

DIN, 1 kHz	8 ohms	55 W + 55 W
20 Hz – 20 kHz	8 ohms	40 W + 40 W

Input

Input jack	Jack type	Sensitivity	Impedance
PHONO (MM)	Phono	2.0 mV	50 kilohms
TUNER, CD, AUX, TAPE 1/DAT, TAPE 2/MD	Phono	150 mV	50 kilohms

S/N

PHONO (MM)	76 dB
TUNER, CD, AUX, TAPE 1/DAT, TAPE 2/MD	100 dB

Output

Output jack	Jack type	Voltage/impedance
REC OUT	Phono jack	Voltage 150 mV Impedance 1 kohm
SPEAKERS	—	8 – 16 ohms
HEADPHONES	Stereo phone jack	Accepts low and high impedance headphones

Tone controls

	Response	Turnover frequency
BASS	±7 dB (100 Hz)	300 Hz
TREBLE	±6 dB (10 kHz)	5 kHz

Harmonic distortion Less than 0.03 % at 10 W output

Intermodulation (IM) distortion (60 Hz : 7 kHz = 4:1)

Less than 0.03 % at 10 W output

Frequency response PHONO: RIAA equalization curve
±0.5 dB

TUNER, CD, AUX, TAPE 1/DAT, TAPE 2/MD: 7 Hz – 100 kHz ± 3 dB

Residual noise Less than 170 μ V (network A)

Damping factor 50 (8 ohms, 1 kHz)

General

System

Preamplifier: Low-noise, equalizer amplifier

Power amplifier: Pure-complementary SEPP OCL power amplifier with all stages directly coupled

Power requirements 220 V – 230 V AC, 50/60 Hz (AEP, German)

120 V/220 V/240 V AC adjustable, 50/60 Hz (E)

Power consumption Model for Scandinavian countries, Switzerland, Spain and Portugal

100 W

Model for other countries

140 W

— Continued on next page —



INTEGRATED STEREO AMPLIFIER
SONY®

Dimensions	Approx. 430 x 135 x 315 mm (w/h/d) (17 x 5 ³ / ₈ x 12 ¹ / ₂ inches)
Mass	Approx. 6.4 kg (14 lb 2 oz)
Supplied accessories	Remote commander RM-S311 (1) Sony SUM-3 (NS) batteries (2)

The above values are measured at 230 V AC.

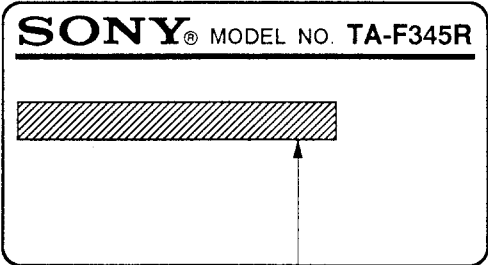
Design and specifications are subject to change without notice.

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	Specifications	1
	Model Identification	2
1.	GENERAL	
	Location of Controls	3
2.	ELECTRICAL ADJUSTMENT	4
3.	DIAGRAMS	
3-1.	Block Diagram	5
3-2.	Printed Wiring Boards	8
3-3.	Schematic Diagram	13
3-4.	IC702 Function Controller (M50761-291P) ...	16
4.	EXPLODED VIEWS	17
5.	ELECTRICAL PARTS LIST	19

MODEL IDENTIFICATION

– Specification Label Printed on Back Panel –



AEP, German model: AC 220 – 230 V ~50/60 Hz
E model: AC 120/220/240 V ~50/60 Hz

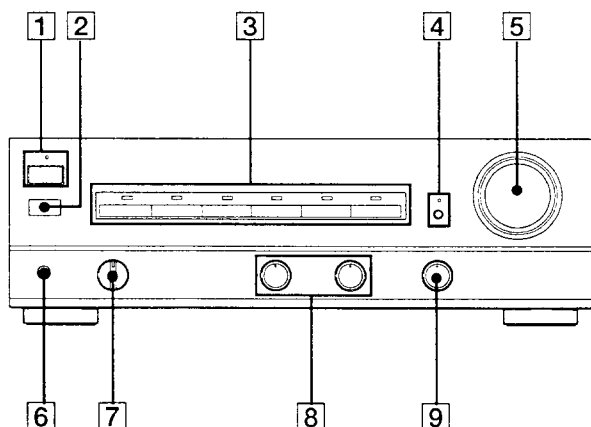
Note:
There are two type of AEP models which are depend on countries.
AEP2 model: Model for Scandinavian countries, Switzerland, Spain and Portugal
AEP1 model: Model for other European countries

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

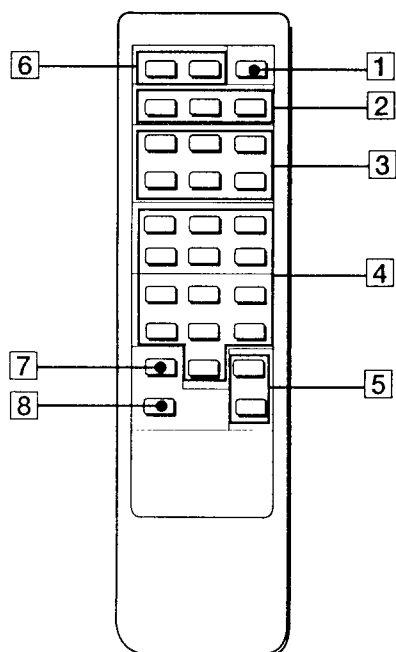
LOCATION OF CONTROLS



Front Panel

- 1 POWER switch and STANDBY indicator
- 2 Remote control sensor
- 3 Function selectors and indicators
TAPE 1/DAT
TAPE 2/MD
AUX
CD
TUNER
PHONO
- 4 SOURCE DIRECT button and indicator
- 5 VOLUME control
Adjusts the sound level.
- 6 HEADPHONES jack
- 7 SPEAKERS selector
- 8 TONE (BASS/TREBLE) controls
- 9 BALANCE control

Remote Commander



- 1 POWER switch
- 2 TUNER operation buttons
TUNER: Select the TUNER mode.
PRESET +/- buttons: Select the preset station.
- 3 CD operation buttons
◀▶: Automatic music sensor.
D. (Disc) SKIP: Disc skip (for CD player equipped with a multi-disc changer)
▶: The amplifier enters the CD mode and the CD player starts playback automatically.
■: Stop.
||: Pause.
- 4 TAPE 2 DECK A/DECK B operation buttons
◀▶: Fast winding.
■: Stop.
◀: The amplifier enters the TAPE 2 mode and the tape deck starts reverse playback automatically.
▶: The amplifier enters the TAPE 2 mode and the tape deck starts forward playback automatically.
- 5 VOL (Volume) +/- buttons
- 6 PHONO operation buttons
START: Pressing START automatically selects the PHONO mode on the amplifier and starts playback of the turntable system.
STOP: Stops playback of the turntable system.
- 7 DAT/TAPE 1 button
Selects the DAT or TAPE 1 mode.
- 8 AUX button
Selects the AUX mode.

● + ▶ : Start recording
● + ◀ : Start recording in the reverse direction
||: Pause. (Only for DECK B)

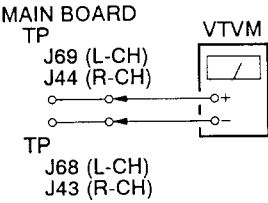
SECTION 2 ELECTRICAL ADJUSTMENT

Note:

1. DC BIAS adjustments should be made within 2 to 3 minutes after the POWER switch is turned on (POWER ON).
2. After replacing the power transistors, DC BIAS adjustments should be made.

DC Bias Adjustment (with no signal input)

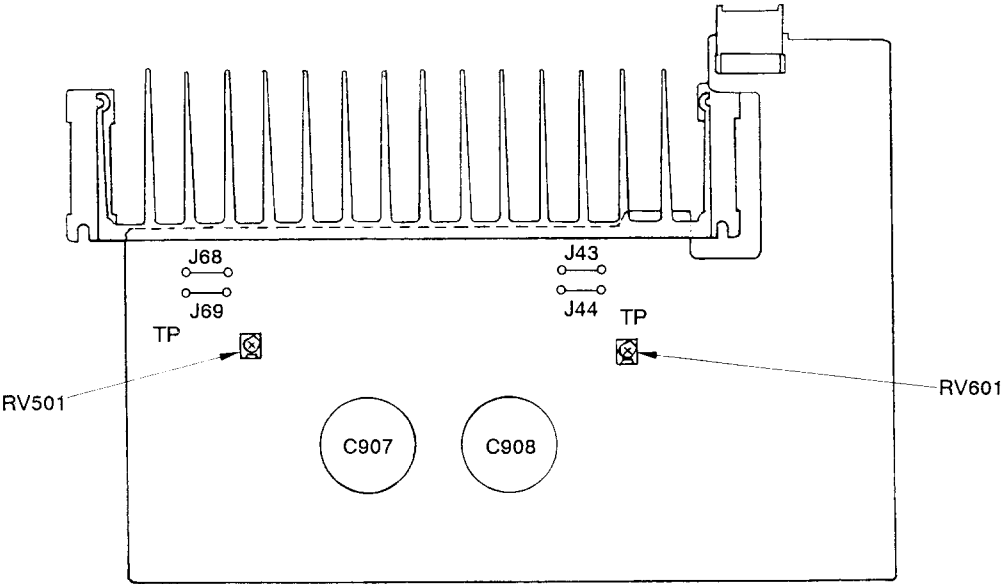
Procedure:



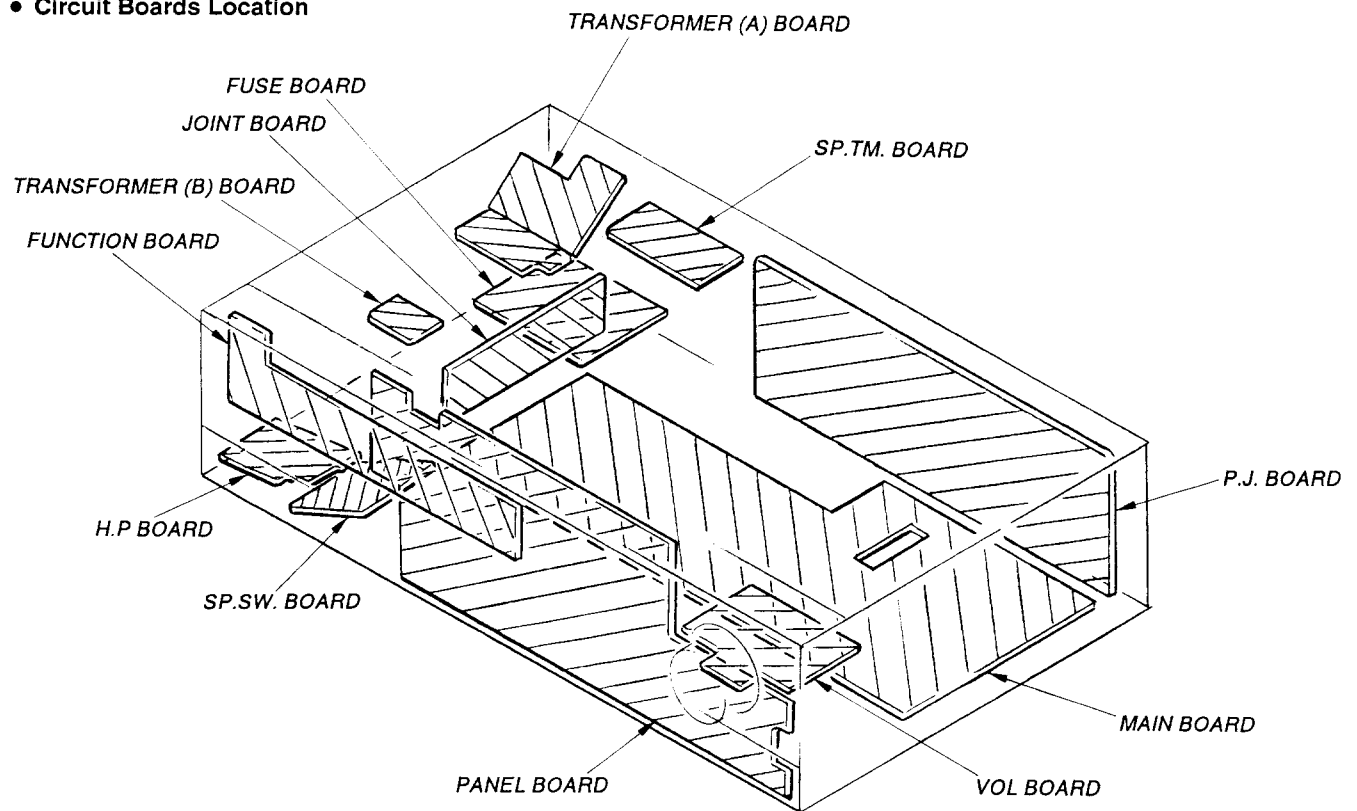
	Adjustment part	Reading on VTVM
L-CH	RV501	6.5 mV
R-CH	RV601	6.5 mV

[ADJUSTMENT LOCATIONS]

MAIN BOARD (COMPONENT SIDE)

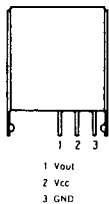


- Circuit Boards Location

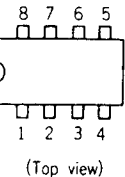


● Semiconductor Lead Layouts

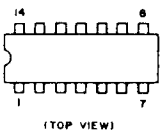
GP1U52XB



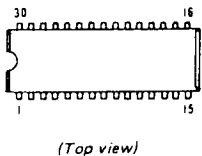
LB1639
M5218AP



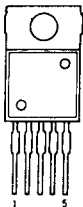
MLC4066BH
LC4966



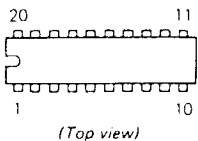
LC7818



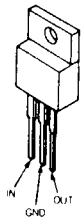
L78MR05



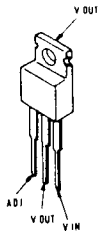
M50761-291P



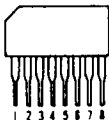
NJM78M09FA



TA7809S



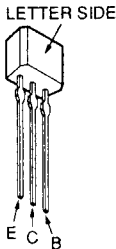
μ PC1237HA



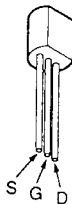
DTA124ES
DTC124ES
2SA1346
2SC2603
2SC3400
2SC3402
2SC3622A
2SC4048



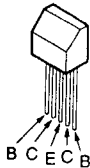
DTC114TS
2SA1175
2SC3860



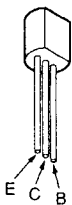
2SA1837



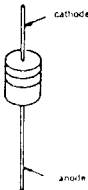
2SA979



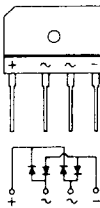
2SA988



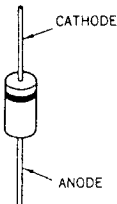
HZS6A1L
HZS6C2L
UZL6H2
UZL6L1
1SS120



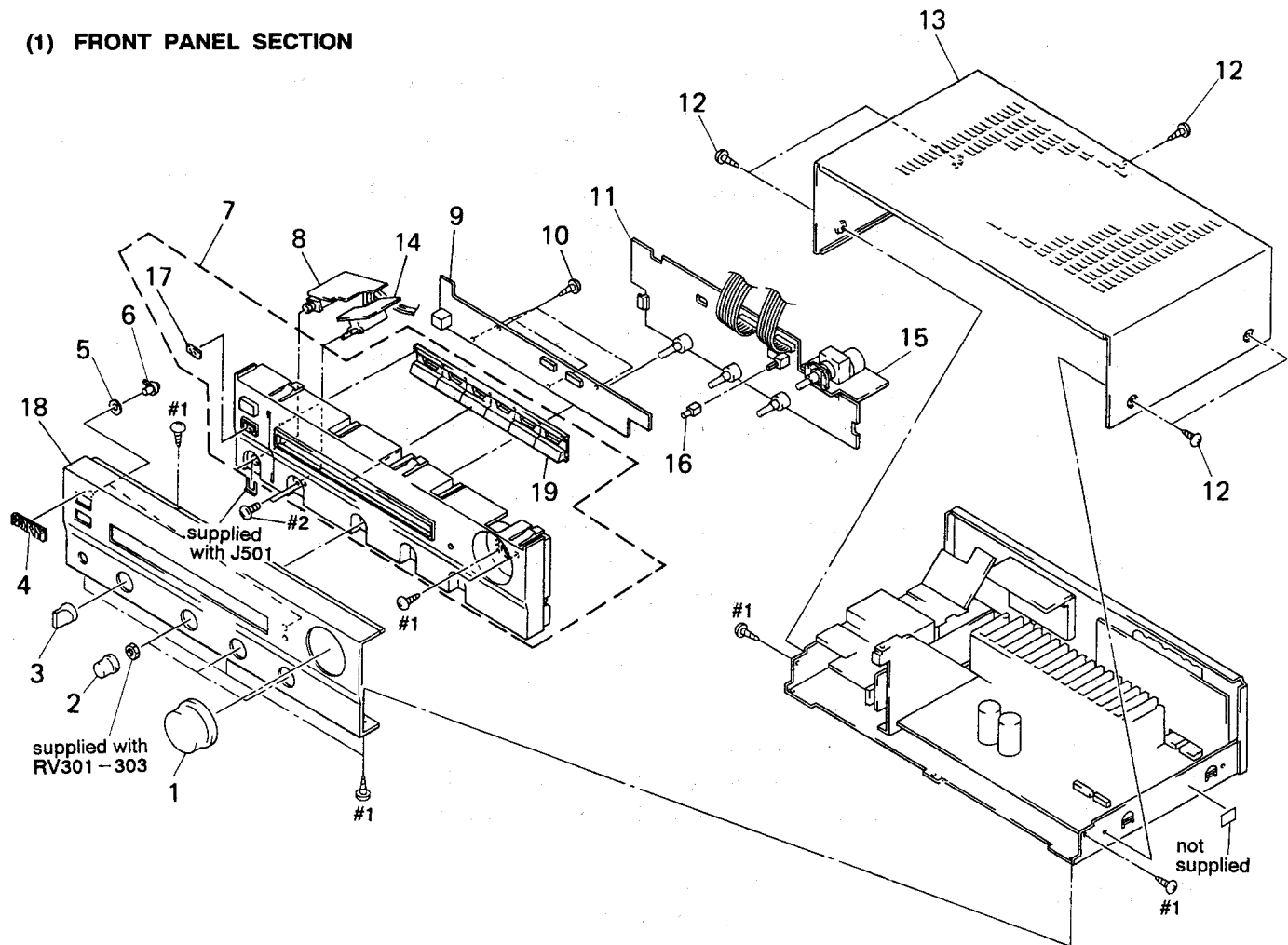
RBV-602
RBV-602-01



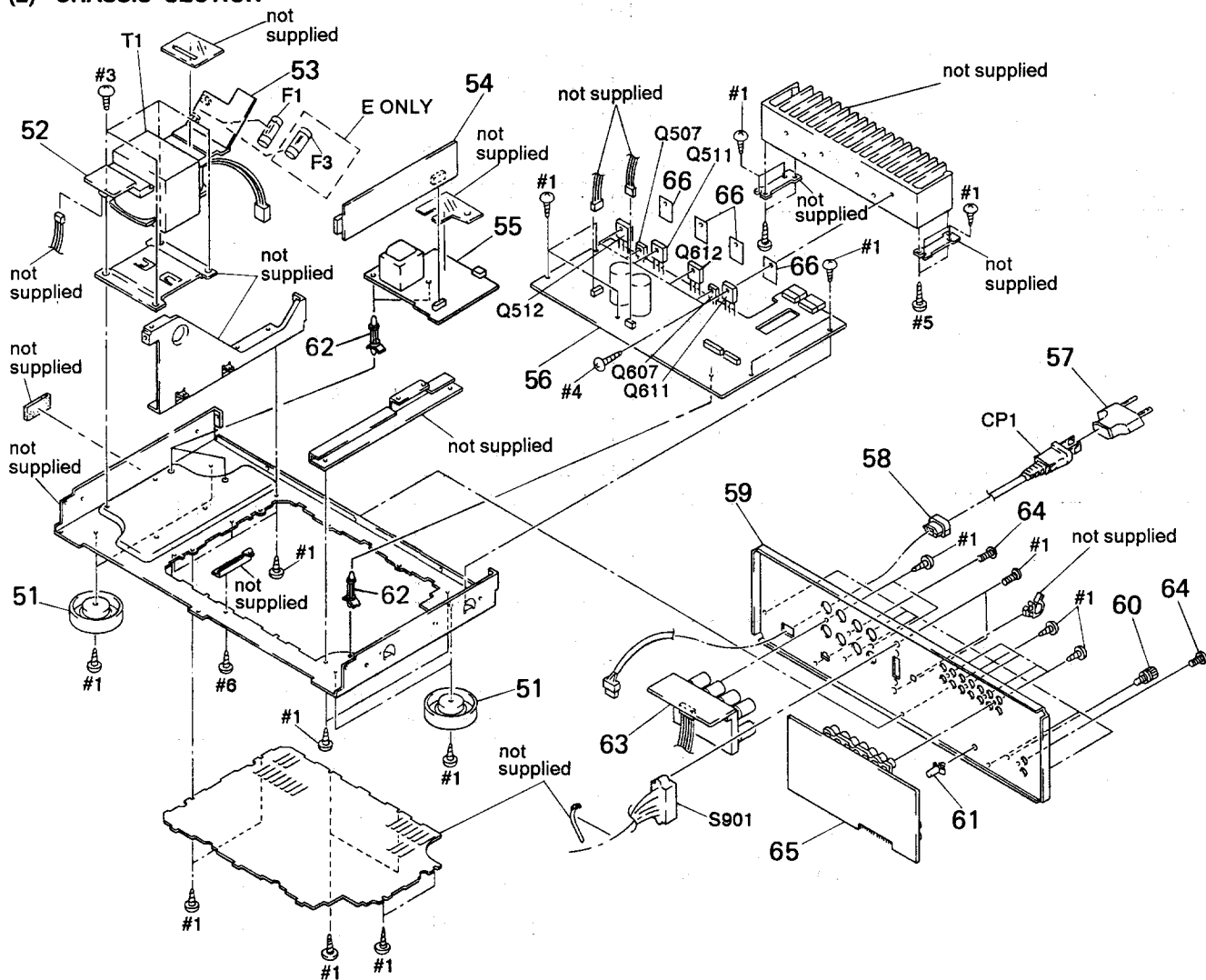
1N4148M
11E2

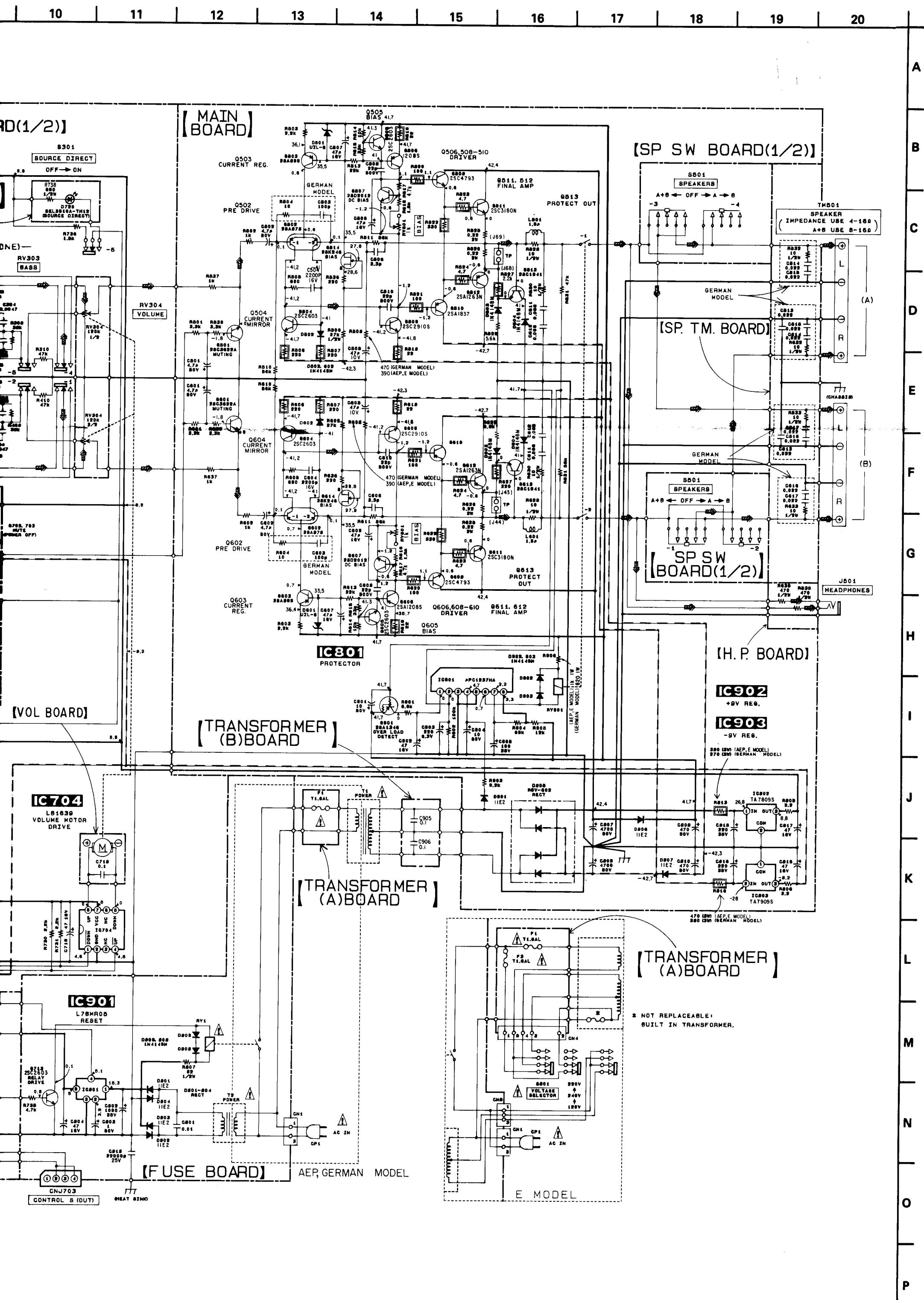


(1) FRONT PANEL SECTION



(2) CHASSIS SECTION





3-3. SCHEMATIC DIAGRAM

