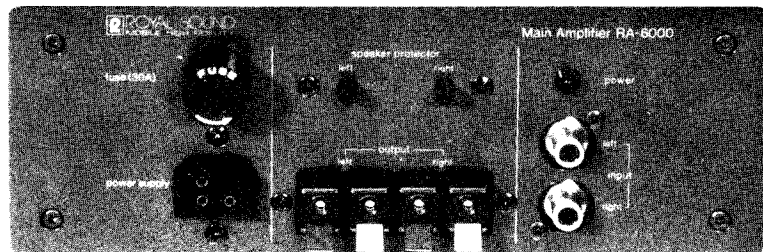


OWNER'S  
MANUAL

**R** ROYAL SOUND  
MOBILE HIGH FIDELITY



# RA-6000

Custom Series Mobile Hi-Fi

THE  
STEREO AMPLIFIER  
WITH PULSE REGULATION



# RA-6000

Custom Series Mobile Hi-Fi

## THE STEREO AMPLIFIER

WITH PULSE REGULATION

Thank you for purchasing ROYAL SOUND RA-6000 Stereo Amplifier. This equipment employs state-of-the-art engineering and most advanced product design. The performance achieved will rival high fidelity sound of high quality home-type stereo amplifier. The big power output, despite the miniature size of the RA-6000, is constantly maintained by the incorporation of a pulse-regulated (ultra-high-frequency switching) power supply.

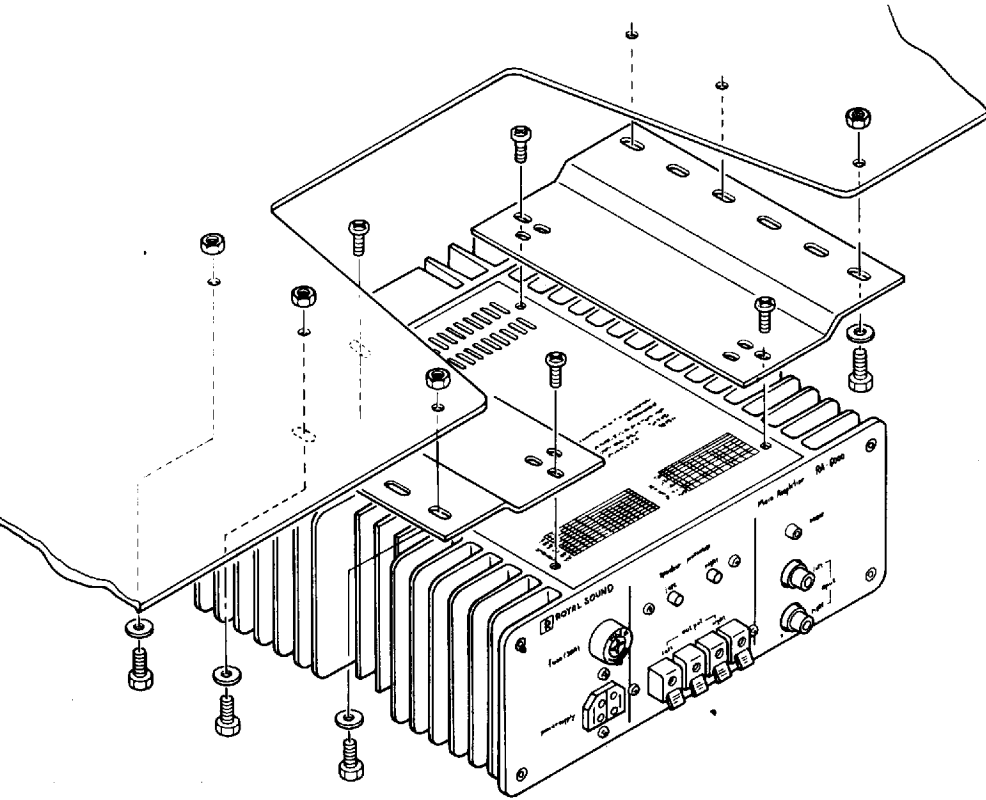
By properly installing the RA-6000 according to the directions in this manual, you will enjoy many years of high fidelity music listening.

## I INSTALLATION

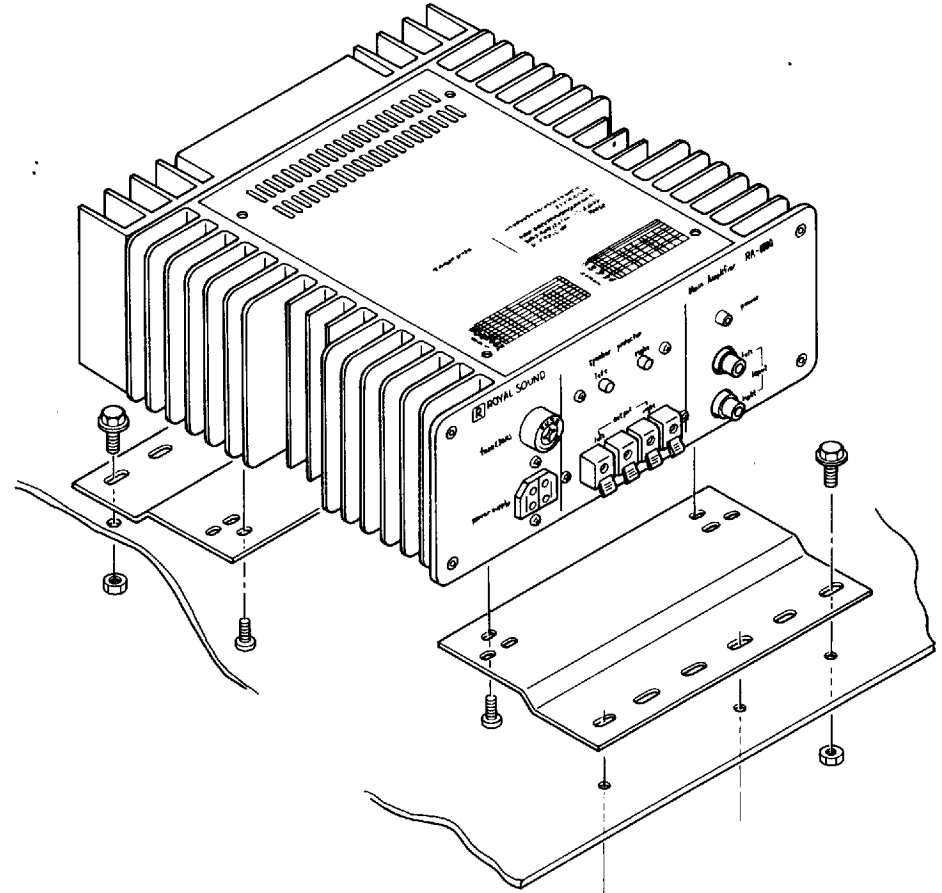
The amplifier should be mounted under-dashboard by means of the pair of brackets provided, as shown in Fig. 1. Be careful of the sharp edges of the amplifier heat sink. If you need to mount on floor, make sure proper ventilation is provided on all sides and on top.

FIG. 1

Under-dashboard



On floor



# II WIRING

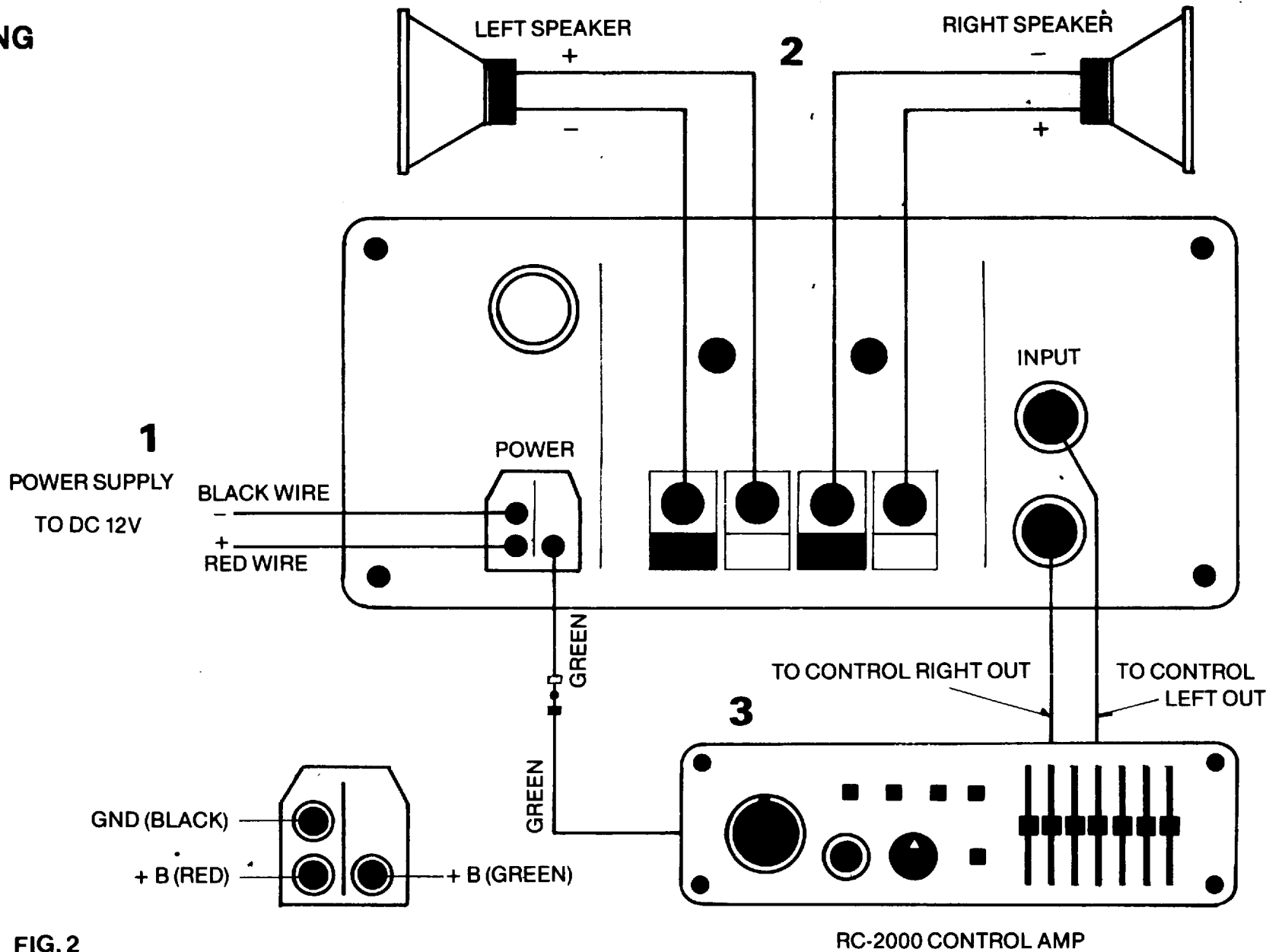


FIG. 2

RC-2000 CONTROL AMP

## IV PRECAUTIONS

### A. Voltage Regulation

Since the size and capacity of the battery and alternator of vehicles vary, there will be some vehicles whose electrical system will not be able to maintain good voltage regulation when the amplifier is operated at high output levels, thereby causing a serious increase in distortion. Should this condition occur, reduce the volume level to restore high fidelity results.

### B. Special Attention

Prolonged listening at high acoustic levels, which are within the capability of this system, may cause a loss of hearing acuity.

## V SPECIFICATIONS

Continuous Power Output. . . . .	60 watts *per channel, min RMS both channels driven at 4 ohms from 20 to 20,000Hz with no more than 0.2% total harmonic distortion.
Signal-to-Noise Ratio. . . . .	>95dB (IHF, A Network)
Total Harmonic Distortion. . . . .	<0.2% at rated power <0.06% at 30 watts per channel
IM Distortion. . . . .	<0.2% at rated power, -1dB
Frequency Response. . . . .	10~50,000Hz, $\pm$ 1dB, 1 watt per channel
Input Sensitivity/Impedance. . . . .	0.8V/25kohms
Crosstalk. . . . .	>60dB at 10kHz
Power Consumption. . . . .	320 watts
Power Supply Voltage. . . . .	13.6V (DC)
Dimensions. . . . .	202(W) $\times$ 72(H) $\times$ 238(D)mm
Weight . . . . .	3.2kg (7.04 lbs)

NOTE: Specifications and design subject to possible modification without notice.

\*Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Claims for Amplifiers. (Applicable to the U.S.A. only)

## 1. POWER SUPPLY

Plug the attached power cords to this socket. The other ends (red and black wires) of power cords must be connected directly to car battery (DC 12V). Ensure the red and black wires are secured tightly onto the battery, as a loose connection may result in current loss affecting power output.

## 2. SPEAKER CONNECTION

Ensure speaker wires are connected properly to correct polarities (+ to +, - to -, as well as left speakers to left terminals and right to right). Insert each speaker wire properly into corresponding terminal post without stranded sprouts of wire to cause shorting with the adjacent wire.

## 3. CONNECTION TO RC-2000 CONTROL AMPLIFIER

Connect the input of the RA-6000 to the output of the RC-2000 using the proper connection cables (for left and right channels) with RCA-type pin plugs. Connect the green wire originating from the power supply socket of RA-6000 to the similar green wire of RC-2000; this will allow the power of RA-6000 to be controlled (on-off) by the power switch of RC-2000.

### NOTE:

1.) If power cords are made longer than 1.5 meters (about 5 feet), there will be some loss to power output (it means that the rated output may not be achieved and lower output resulted, but this will not affect normal operation). If you need to extend power

cords, be sure to use heavy duty type which can handle high electric current. Ensure any interconnection of wires for extension is done securely so no shorting or overheating will occur.

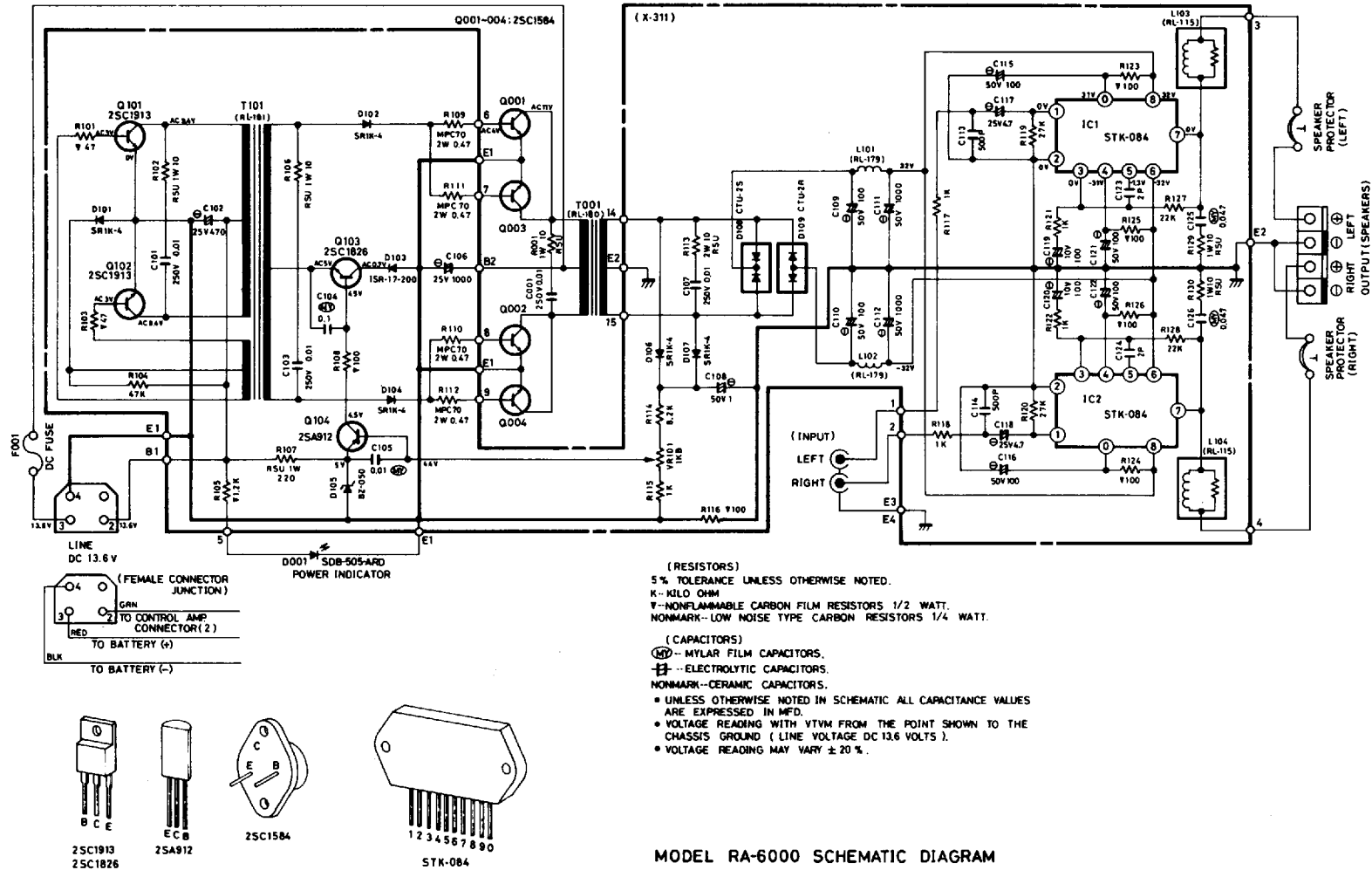
- 2.) A great care should be taken to provide as much ventilation space to the amplifier.
- 3.) When installing with the mounting brackets, remove the screws from top bonnet (or bottom bonnet when mounting on floor) and reuse them again to secure the brackets in place.

## III OPERATION

1. Power indicator lamp will light up when the power is on.
2. When the speaker wires are shorted or overloading occurs, the amplifier will cut off the power instantly. Check and correct any malfunction, then reset the power on by pushing the circuit breakers. If the power cuts off constantly despite resetting, consult your nearby authorized service center or your dealer.
3. The DC fuse (20A) will not blow unless very abnormal malfunction occurs inside the amplifier chassis. Be sure to replace with same fuse value should it be blown.

A very slight power current flows within the amplifier when it is not in use. This does not affect the car battery energy for normal period, but disconnect the power cords from the battery if not using the amplifier for long period.

# VI SCHEMATIC DIAGRAM



## NOTE

As part of our commitment to product excellence, Royal Sound routinely introduces design refinements, or improved materials, or production methods into existing products. Since it would be impractical to publicize every change in every product, we reserve the right to make such changes without notice or obligation.