# **JVC**

# SERVICE MANUAL

## **POWER AMPLIFIER**

# **KS-AX4500**



#### **Area Suffix**

E --- Continental Europe J ----- Northern America

#### Caution

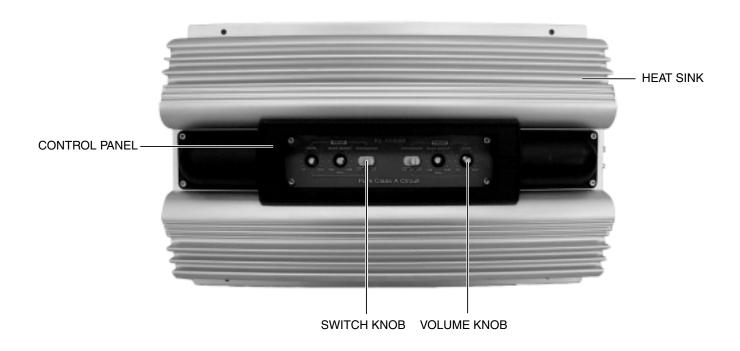
If electricity is connected during disassembly, it must be a no load current. If it is load current, be sure to attach a heat sink to the power-amp IC. This will be damaged if the above precautions are not followed, as it does not have a sub heat sink attached to it.

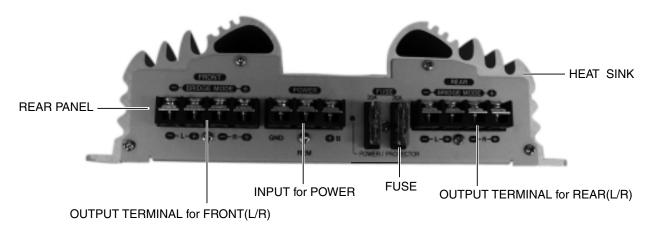
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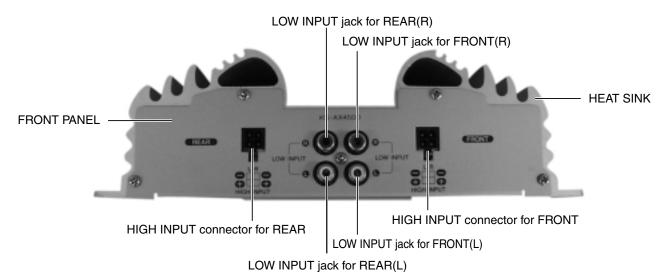
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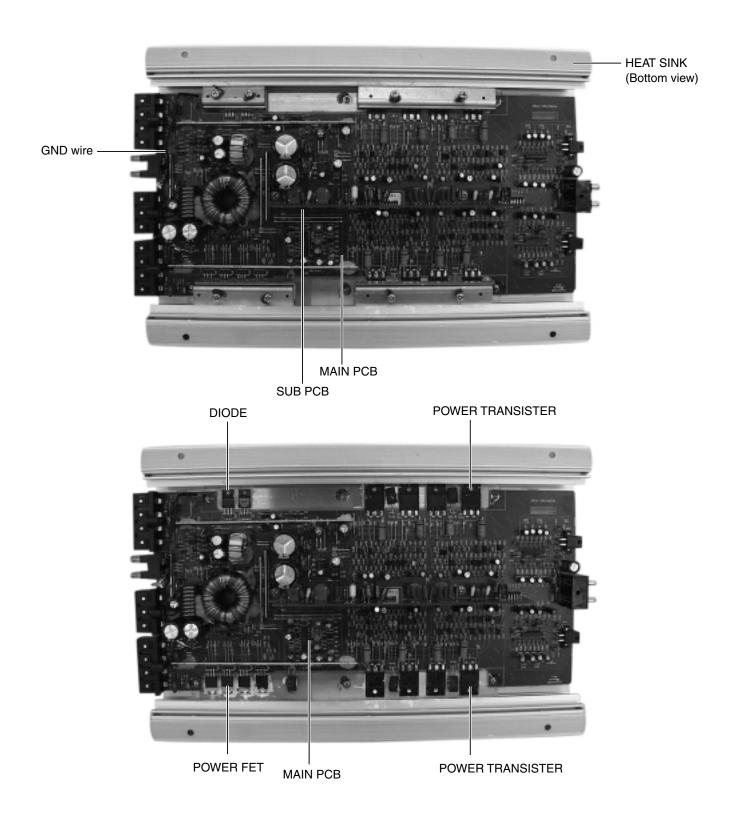
 $\triangle$  CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

## **Location of main parts**







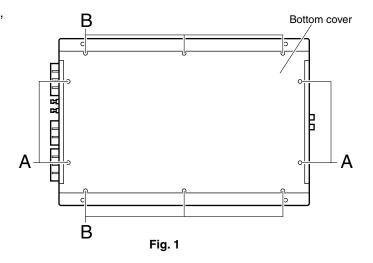


## **Removal of main parts**

CAUTION: If electricity is connected during disassembly, it must be a no load current. If it is load current, be sure to attach a heat sink to the power-amp IC. This will be damaged if the above precautions are not followed, as it does not have a sub heat sink attached to it.

### ■ Removing the bottom cover (see Fig. 1)

- 1. From the bottom side of the main unit, remove the 4 screws A retaining the bottom cover.
- Then remove the 6 screws B retaining the bottom cover.
- 3. Remove the bottom cover.



### ■ Removing the MAIN PCB

(see Fig. 2 to 8)

- 1. Remove the bottom cover from the main unit.
- Loosen and remove the 2 screws C retaining the top plate on the main unit. (Stoppers are attached to the backs of the C screws so that they cannot be removed easily.)

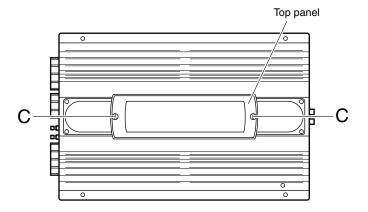


Fig. 2

- 3. Remove the 4 volume knobs on top of the control panel. If it cannot be pulled out easily, insert a rope or wire between the base of the volume knob and the control panel so that the volume knob is raised a little above the surface and then remove it.
  - (Be careful when inserting a lever etc. not to scratch the surface of the control panel).
- 4. Remove the 4 screws D retaining the control panel. Then detach the control panel and the switch knobs.

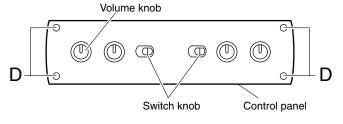


Fig. 3

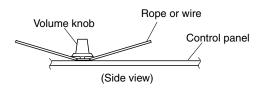
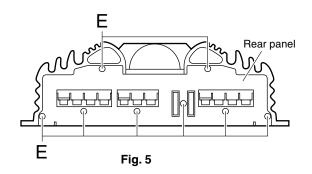


Fig. 4

5. Remove the 13 screws E retaining the panels on both sides of the main unit.



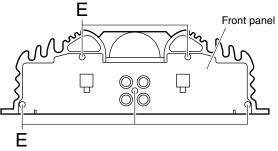


Fig. 6

6. Remove the 14 screws F attaching the MAIN PCB to the bottom of the main unit.

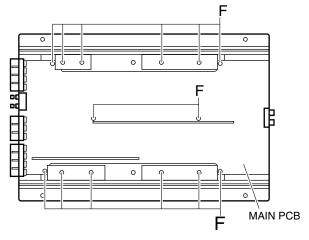


Fig. 7

7. Remove the MAIN PCB by lift up the arrow mark.

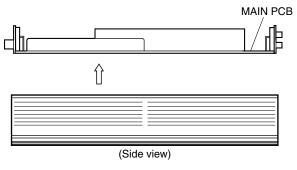


Fig. 8

## **Test method**

- 1. Check the voltage and frequency of the secondary toroidal coil.
- FREQUENCY:22.87kHz ± 50Hz VOLTAGE VALUE:60Vp-p ± 2.5V
- - - -TEST SET **POWER SUPPLY** 14.4V MAIN PCB 0 (+) (-) -0 R60 <u>E</u> Measuring Q01 Points COT C31 MAIN PCB

FREQUENCY COUNTER

2. Measure the secondary toroidal coil, if the standard frequency value of 22.87 kHz  $\pm$  50 Hz is not attained, measure the R60 terminal, then adjust the SV01 so that the R60 terminal becomes 22.87 kHz  $\pm$  50Hz.

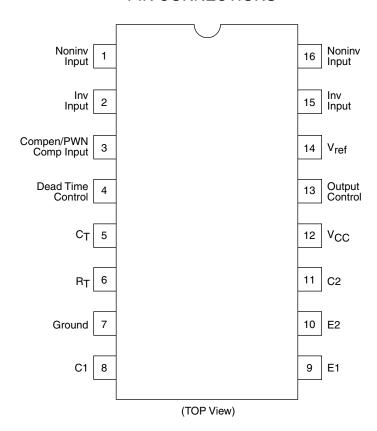
Note: When measuring, adjust and apply power with no signal or load on each board.

#### DC/DC CONVERTER SECOND GENERATOR SWITCHING

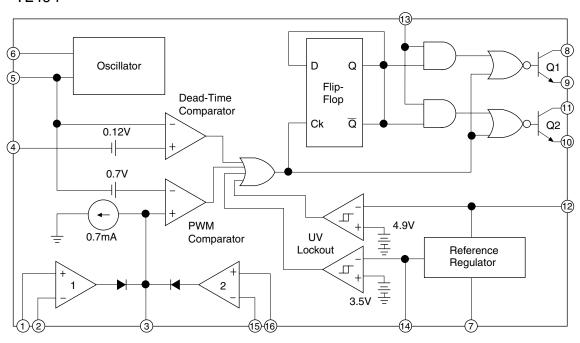
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TEST ITEM	SPECIFICATION	CONDITION				#				
VOLTAGE TEST FREQUENCY CHECK	60Vp-p±2.5V 22.87KHz±50Hz	OSCILLOSCOPE VOLT/DIV: 10 TIME/DIV: 10mcec	 ++++	+++	 ++++	####		 	+++++	60Vp-p ±2.5V
						1				

## **Description of major ICs**

## **PIN CONNECTIONS**



#### TL494





PERSONAL & MOBILE NETWORK B.U. 10-1,1Chome,Ohwatari-machi,Maebashi-city,Japan

