

# IRAGGI ALTERNATOR

## TROUBLESHOOTING GUIDE

### STEP #1 – BATTERY RESTING VOLTAGE

- Turn vehicle OFF & remove any isolators you have. If you have multiple batteries, test the front battery
- **If Your Voltage Is HIGHER** than 12.74v: Record your voltage in “Step #1 Results” table titled: (Car Off) Battery Resting Voltage at end of page & continue to Step #2
- **If Your Voltage Is LOWER** than 12.75v: **Do not continue to step # 2.** No further measurements can be taken. You will need to replace your battery or recharge for at least 10 hours at 10 amps to continue with troubleshooting

### STEP #2 – ALTERNATOR & AMPLIFIER VOLTAGE @ IDLE (NO LOAD)

- Test the ALTERNATOR with the engine running @ idle & both meter leads directly on the alternator
- Record results in “Step #2 Results” table titled: (No Load) Alternator @ Idle at end of page
- Now turn your stereo ON but turn the volume all the way down
- Test the AMPLIFIER with the engine running @ idle & both meter leads directly on the amplifier
- Record results in “Step #2 Results” table titled: (No Load) Amplifier @ Idle at end of page
- **CONTINUE TO STEP #3**

### STEP #3 – ALTERNATOR & AMPLIFIER VOLTAGE AT IDLE (MED LOAD)

- Test the ALTERNATOR with the engine running @ Idle & both meter leads directly on the alternator
- Turn your stereo ON and turn volume to a moderate listening level
- Record results in “Step #2 Results” table titled: (Med Load) Alternator Voltage @ Idle at end of page
- Now Test the AMPLIFIER with the engine running @ Idle & both meter leads directly on the alternator
- Turn your stereo ON and turn volume to a moderate listening level
- Record results in “Step #2 Results” table titled: (Med Load) Amplifier Voltage @ Idle at end of page
- **CONTINUE TO STEP #4**

## **STEP #4 – ALTERNATOR & AMPLIFIER VOLTAGE @ 1800 RPM**

- Test the ALTERNATOR with the engine running @ Idle & both meter leads directly on the alternator
- Rev your motor to 1800 RPM
- Record results in “Step #4 Results” table titled: Alternator Voltage @ 1800 RPM at end of page
- Test the AMPLIFIER with the engine running @ Idle & both meter leads directly on the alternator
- Rev your motor to 1800 RPM
- Record results in “Step #4 Results” table titled: Amplifier Voltage @ 1800 RPM at end of page
- **CONTINUE TO STEP #5**

*\*\* If voltage level fluctuates, note the average voltage & minimum voltage levels \*\*\**

## **STEP #5 – ALTERNATOR & AMPLIFIER VOLTAGE @ 1800 RPM**

- Test the ALTERNATOR with the engine running @ idle & both meter leads directly on the alternator
- Turn your stereo to a high listening volume
- Make sure there is no distortion & sound is clean
- Record results in “Step #5 Results” table titled: (Heavy Load) Alternator @ 1800 RPM at end of page
- Now Test the AMPLIFIER with the engine running @ idle & both meter leads directly on the alternator
- Turn your stereo to a high listening volume, but make sure there is no distortion & sound is clean
- Record results in “Step #5 Results” table titled: (Heavy Load) AMPLIFIER @ 1800 RPM at end of page
- **CONTINUE TO STEP #6**

*\*\* If voltage level fluctuates, note the average voltage & minimum voltage levels \*\*\**

## **STEP #6 - (Med-Heavy Load, Car Off) Battery Voltage**

- Turn vehicle off
- Turn stereo to moderate to high listening level
- Monitor the AVERAGE voltage at the front battery for one minuet
- Record in “Step 6 Results” table titled: (Med-Heavy Load, Car Off) Average Battery Voltage at end of page
- Now Monitor the MINIMUM voltage at the front battery for one minuet
- Record in “Step 6 Results” table titled: (Med-Heavy Load, Car Off) Min Battery Voltage at end of page

**IRAGGI ALTERNATOR - TROUBLESHOOTING RESULTS TABLE**  
**ONLY ENTER #'S FOR YOUR VOLTAGE (12.90) NO LETTERS (12.90V)**

It is ok if you cannot fill out every step result. Please complete as much as you can to help up  
troubleshoot for you for accurately

<b>STEP #1 RESULTS</b>
(Car Off) Battery Resting Voltage

<b>Your Voltage</b>	<b>Target Voltage</b>
	12.75v-13.10v

<b>STEP #2 RESULTS</b>
(No Load) Alternator Voltage @ Idle
(No Load) Amplifier Voltage @ Idle

<b>Your Voltage</b>	<b>Target Voltage</b>
	13.50v-14.90v
	13.50v-14.90v

<b>STEP #3 RESULTS</b>
(Med Load) Alternator Voltage @ Idle
(Med Load) Amplifier Voltage @ Idle

<b>Your Voltage</b>	<b>Target Voltage</b>
	13.50v-14.90v
	13.10v-14.90v

<b>STEP #4 RESULTS</b>
(Med Load) Alternator Voltage @ 1800 RPM
(Med Load) Amplifier Voltage @ 1800 RPM
<b>Only provide info below if voltage fluctuates</b>
Alternator Voltage
Amplifier Voltage

<b>Your Voltage</b>	<b>Target Voltage</b>
	12.50v-14.90v
	11.90v-14.90v
<b>Minimum</b>	<b>Average</b>

<b>STEP #5 RESULTS</b>
(Heavy Load) Alternator Voltage @ 1800 RPM
(Heavy Load) Amplifier Voltage @ 1800 RPM
<b>Only provide info below if voltage fluctuates</b>
Alternator Voltage
Amplifier Voltage

<b>Your Voltage</b>	<b>Target Voltage</b>
	12.50v-14.90v
	11.90v-14.90v
<b>Minimum</b>	<b>Average</b>

<b>STEP #6 RESULTS</b>
(Med-Heavy Load, Car Off) Average Battery Voltage
(Med-Heavy Load, Car Off) Min Battery Voltage

<b>Your Voltage</b>	<b>Target Voltage</b>
	110v +
	110v +

It is ok if you cannot fill out every step result. Please complete as much as you can to help up  
troubleshoot for you for accurately

## **CORRECTIVE ACTIONS FOR RESOLUTION**

**We highly recommend completing any of the below corrective actions that you can to avoid shipping your alternator unnecessarily and being without an alternator**

### **CORRECTIVE ACTION FOR STEP #2**

If voltage at the alternator is less than 13.50v @ idle & goes up when you rev the motor, either something is pulling a lot of current or your vehicle has a very low idle rpm, which will make the alternator have less output at idle. Try setting the vehicle's idle higher if possible. Voltage is also dependent on specific vehicle

### **CORRECTIVE ACTION FOR STEP #3**

If there is a voltage drop of more than .2 volts from the battery to the amplifier, you probably have a very poor connection somewhere between the alternator, battery & the amplifier(s). Most often, the problem lies where the amps are still grounded to sheet metal. (This step is often skipped.) Reground the amplifiers to the frame if they are still grounded to sheet metal. Voltage is also dependent on specific vehicle

### **CORRECTIVE ACTION FOR STEP #4**

This voltage may fluctuate a little. Try and monitor the average and compare the alternator voltage to the amplifier voltage. They should be within .4 volts of each other. If not, a larger gauge power (+) wire may need to be run to the amplifiers

### **CORRECTIVE ACTION FOR STEP #5**

*This voltage may fluctuate a little; probably less than in test #4. Try monitoring the average and compare the alternator voltage to the amplifier voltage. The more voltage drops as you go up on volume, the more you need up upgrade your power wire. The wire gauge may be fine, but the point of connection may need to be changed*

**If you get stuck or have any questions you can email Melissa and she will be happy to help:  
[melissa@iraggialternator.com](mailto:melissa@iraggialternator.com)**