

Car-tricity™

**Electricity
Where you need it.
When you need it.**

CONGRATULATIONS! You have purchased the world's most compact and powerful electronic inverter in it's class. **Car-tricity** is a very high quality, powerful and flexible product. There are literally hundreds of devices it can be used with. Car-tricity Products, Inc. warrants the Car-tricity to be free of defects in workmanship for a period of one year from the date of purchase.

PRECAUTIONS

1. **The Car-tricity is not a toy!** Children should use the Car-tricity only in the company of an adult.
2. **Do not stick anything inside the Car-tricity case.** The high voltage can cause severe injury *possibly death*.
3. **Keep the Car-tricity away from water.** It can be damaged by contact with water.
4. **Do not operate the Car-tricity when it, you, or any surface is wet.** Many fluids conduct electricity which can cause severe injury, *possibly resulting in death*.
5. **The Car-tricity and/or the plug tip may become extremely hot** (in excess of 140 degrees Fahrenheit) under certain operating conditions. Do not put the Car-tricity and/or plug tip in contact with heat sensitive items or skin.
6. **Do not open the Car-tricity case.** This will *void your warranty*, *possibly* cause damage to the Cartricity or personal injury.
7. **When using the Car-tricity while driving, make sure that it and/or its cords will not hamper shifting, steering, braking, etc.** The Car-tricity and/or its cords may shift during normal driving. Be sure possible shifting objects will not interfere with your driving safety.
8. **Know the electrical requirements of the device you operate.** Some equipment is very sensitive and can be damaged by using the Car-tricity as a power source, such as most laser printers or rechargeable battery operated devices that can be recharged directly from a standard wall socket without use of a transformer. If you are unsure about the requirements, call the manufacturer of the device you are trying to operate. Do not try to operate any device that requires more than 100 watts of continuous power, or requires more than 450 watts of surge to start. {Volts (115 Volts AC) x Amps = Watts}
9. **Do not replace the existing Car-tricity 14 amp fuse with any fuse larger the 14 amps.** Any fuse over 14 amps can create a fire hazard. *The only replacement fuse is SFE 14.*

TROUBLE SHOOTING TIPS AND PROCEDURES

"The Car-tricity doesn't work"

- A. The most common problem is that the Car-tricity is not getting power into it. Try unplugging the Car-tricity and inserting the cigarette lighter, pushing it all the way in to activate the cigarette lighter. If the cigarette lighter does not heat up, then
 1. Turn on the ignition switch of the vehicle to power up the cigarette lighter.
 2. Check the vehicle's circuit fuse to be sure that it is in the proper working condition (use at least a 15 amp auto fuse unless your vehicle owners manual states otherwise, many circuits require a 20 amp vehicle fuse.) If the cigarette lighter is still not working, refer the problem to your vehicle service provider. If the cigarette lighter does heat up, indicating that the Car-tricity should be getting input power, try the following:
 3. Reinsert the Car-tricity's lighter plug into the cigarette receptacle and be sure the plug and receptacle are making good electrical contact. Try pushing the plug in and turning it.
 4. Replace the Car-tricity's fuse located in the tip of the inverter's cigarette lighter plug.

5. Position your ear near the Car-tricity case and listen for a faint buzzing sound, like that of mosquito. This sound indicates that your Car-tricity is now working.
- B. After following these directions without satisfactory results, try starting an electrical load that you know is in working order, like a lamp with a 100 watt or smaller bulb. If the bulb starts, then the problem is with the device you were trying to start or the connection in the set-up. To correct this
1. Be sure the device is properly plugged in and turned to the ON position.
 2. Be sure that the device does not require more power than the Car-tricity can deliver.
 3. Be sure the device you are trying to operate is in proper working condition.

!!! PLEASE READ THESE INSTRUCTIONS AND PRECAUTIONS IN THEIR ENTIRETY BEFORE USING YOUR CAR-TRICITY !!!

COMMON USES

All Devices

Power output is most affected by input voltage (from your battery) and inverter temperature. Keep your Car-tricity at peak operating condition by keeping it cool. Place the Car-tricity in a shaded location where it will get a constant air flow, like near or over an air vent. Air flow is often better than shade. Heat buildup or weak batteries will reduce the output of your inverter. We recommend running your vehicle motor for 10 minutes during every hour of inverter use. It is perfectly safe to operate your device while the vehicle motor is running. *If you use clip leads, "Y" adaptors or other connectors to draw power from a 12 Volt battery, note that reverse polarity will blow the Car-tricity fuse. In some situations, it will damage the inverter.*

Televisions (VCRs and Video Games)

The Car-tricity operates *every* 14" television tested, *most* up to 19" and *many* up to 21". When starting your TV, some TVs require "charging". To do this, simply press the ON or START button of the TV repeatedly while the TV is plugged into the inverter. In general, it is best to turn on the TV first and then other devices, such as VCRs and video games. For some electronic switch or remote control TVs, it is best to turn on the TV first, then plug it into the Car-tricity.

Light Duty Hand Tools

The most important thing is not to overload the tool causing it to stall. If the tool does stall, turn it off. Restart the tool (after replacing the fuse, if necessary) and put less load or pressure on it to prevent stalling.

Blenders

The most important thing is not to overload the blender. Blenders require 250 to 400 watts to operate at full power. Your blender will seem sluggish when using the Car-tricity. Start at slow speeds, gradually going higher. If blending with ice or other solid material, use small chunks. Add material to the blender after you put in the fluids to avoid blocking the blades. If the blender stalls, turn it off. To restart, unplug the blender and make sure the blades are not jammed by use or other material. You may also need to thin fluids or reduce volume. Plug the blender back into the inverter and restart at a low speed.

Computers

We ran a number of 286, 386 and 486 Desktops. Monitors must be powered by a separate Car-tricity than the computer. **The Car-tricity can be permanently damaged by running both a computer and monitor.** All Laptop and Notebook (including color screen) computers are well within the capacity of the Car-tricity. Continuous discharge of any battery can reduce power from the Car-tricity to the computer, similar to a "brown out". **Do not try to operate a laser printer or any device that requires true sine wave, you may damage the laser printer!**

Battery Chargers

Chargers that plug directly into a wall socket and have a transformer between the wall socket and the charger work very well with the Car-tricity. We have charged batteries for hand tools, cellular phones, video cameras, flashlights, radios and many other devices. **Chargers that do not have a transformer built in should never be used with the Car-tricity!** Contact the charger manufacturer if you are unsure about using the Car-tricity (a modified sine wave inverter) with the charger.

FAX Machines

All fax machines tested operate very well on the Car-tricity. We advise that you transmit/receive from a stationary vehicle with a "clean" phone line for best results. If the bulb does not start, check all electrical connections including the Car-tricity fuse located in the tip of the plug, as well as your vehicle fuse and remember to turn switches or buttons to the ON position. If the bulb will not start, it is likely that the Car-tricity is not working properly. Car-tricity's returned to Car-tricity Inc. that work properly or that have been damaged by user abuse may be subject to a fee prior to repair, replacement and/or return. Do not alter or modify any attribute of the Car-tricity and/or do not exceed product specifications, or you will *void your warranty*.

Disconnect the Car-tricity while charging your battery with a battery charger or damage may result.

Do not connect the Car-tricity to any AC power source. Damage will result.

"The device I'm trying to operate isn't working correctly."

A. The most common problem is you are operating a device(s) that requires more than 100 watts continuous power. As an example, a 27-inch color TV will often start, but after a while, the screen will "shrink", the picture will lose color, turning to black and white, or the sound will drop out. Or a 21-inch TV does just fine until you try plugging in a 40 watt light bulb or running a VCR, at which point you may experience problems. This results from the over-tasking of the capacity of the Car-tricity. If any of these conditions occur, turn the device off.

B. The device you are trying to operate is not working properly.

Please be sure that the devices you are trying to operate are in proper working condition by plugging them into a standard wall outlet.

"The inverter seems to get too hot or turns off unexpectedly"

A. The Most common problem is that the electrical contact at the plug is being broken due to motion of the vehicle or pulling of the plug.

B. A second possibility is that you are pushing the Car-tricity beyond its rated limits.

In most circumstances the Car-tricity will simply reduce the output voltage and stabilize in temperature. This lower output voltage may put the Car-tricity below the voltage requirements of the device(s) you are trying to operate and the device(s) may shut off unexpectedly. In this case, turn the device(s) off, allow the Car-tricity to cool down and then start up again. Remember, you can only run more than 100 watts output for a limited period of time before our safety circuitry will reduce the output of the Car-tricity. To keep within the operating parameters:

Do not operate at more than 100 watts continuously.

If you are confident that the device(s) you are running does not require more than 100 watts total power and that each device(s) is in proper working order and you are still having problems, please return your Car-tricity to Car-tricity, Inc. for evaluation and possible warrant replacement and/or repair. You must include original purchase receipt or high quality photocopy for warranty repair coverage.

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Car-tricity, Inc. warrants the Car-tricity to be free of defects in workmanship for a period of one year from the date of purchase against all defects. Car-tricity, Inc. will require proof of purchase receipt (or high quality photocopy) with date and retailer clearly visible for eligibility for warranty repair or replacement. Car-tricity, Inc. does not warrant or cover any loss, injury or damage of any kind, direct or indirect, resulting from the use or loss of use of the Car-tricity for any reason or cause of any kind including but not limited to failure or defect of the Car-tricity of any kind or cause beyond the replacement or repair of the Car-tricity involved. Car-tricity, Inc. further reserves the right to change, modify and/or redefine the performance specifications of the Car-tricity without notice and without obligation of any kind to purchasers or users. The warranty laws and requirements in some states may vary. You may have rights and /or remedies other than those listed here.