So you want to install an inverter, but with all the features and complexity of today's more sophisticated units, you're hesitant to take the plunge? Or, perhaps you've had some problems with your inverter, and you're not sure if it's a faulty unit … or a simple installation problem?

Let the Tech Doctor help! This issue offers up some basic troubleshooting tips to help ensure your inverter is installed correctly in order to deliver maximum, trouble-free delivery. Success in this area will save aggravation and potentially money associated with having to engage a support technician for unwarranted and unnecessary repairs.

**LET'S GET STARTED.**

First, an overview. When working with electrical circuits, you must always ensure the circuit is powered down and cannot be re-energized while you are working on it. If you’re not entirely comfortable with this task (or any other cited in this article) then by all means, leave it to the experts. Your attention and compliance to all safety directives must always be first and foremost!

**THE BASIC BENCHMARK.**

If for any reason, things don’t seem to be working as they should with your inverter, understand that these types of products simply don’t “kind-of” fail. When an inverter goes bad, typically nothing will work … or, one of the features simply won’t work consistently.

**STRATEGIES FOR INVERTER INSTALLATION SUCCESS.**

1. **Revert all settings to factory defaults.**

This may seem obvious, but the factory default settings are usually default for a reason. They are the values that allow the inverter to work in the vast majority of environments. While you don’t want to leave these settings to factory default in the long term, for a quick test, it’s ideal. After completing the test, then you can easily readjust the settings to meet your specific needs. Check the settings, one by one, until the problem is identified, or the settings are adjusted to work.

Note: If the inverter came installed with your vehicle/vessel, the manufacturer would likely have changed the factory default settings to custom settings to suit the design and application. In such circumstances, once you reset the inverter to the default OEM/manufacturer setting, you may not need any further changes.
A FINAL TROUBLESHOOTING REVIEW.

1. For the most part, inverters either work, or they don’t.

2. From my own experience and in working with dozens of tech service centers, I have concluded that more than 80% of inverters that are returned without hands-on troubleshooting have absolutely no issues on the bench. The problem in at least 20 percent of the returns correlate directly to faulty installations.

3. Erratic behavior, or inconsistent problems, are almost always a loose connection…somewhere. While it’s not easy to find them, it’s worth the time and the effort.

4. A quality volt-meter is worth the investment. While there is a cost associated with ownership, it may pay off in eliminating shipping and diagnostic bench time at the service center that is unnecessary.

5. Safety first!. Power down as much as reasonable when working with circuits. Always use one hand when working with wiring. If you’re not qualified, or are not 100% confident in the process you’re attempting, hire a qualified electrician.

SUMMARY.

Remember, inverters are nothing more than an appliance that does what it’s told to do. If it doesn’t receive the right instructions, or can’t interpret its input, it likely will not perform to your expectations, through no fault of its own. Take the time to ensure the proper installation in order to maximize the performance of your hard-working inverter! Then, you will realize its ultimate return on investment.

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