

# Re: Broken Cheap 400W Power Inverter

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- *From:* "Charles Schuler" <[charleschuler@xxxxxxxxxxx](mailto:charleschuler@xxxxxxxxxxx)>
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"BperryB" <[wrongaddress@xxxxxxx](mailto:wrongaddress@xxxxxxx)> wrote in message  
[news:1165266672.983830.236460@xx](mailto:news:1165266672.983830.236460@xx)

A neighbor gave me a little Coleman 400 watt power inverter to try and repair and I found 2 of the MOSFETS bad and one of the driver transistors controlling the upper side of the bridge shorted. Replaced the bad parts and got it working with a small 25 watt light as a load.

Unfortunately it failed again with same symptoms when installed in his motor home and connected to a 13 inch TV set. As it failed, the fault light and beeper came on indicating a fault and the input voltage was only 10 volts. I assume the fault was due to too much drop in the long wires. But it was too late to shut it off. The unit continued to indicate a fault after the load was removed.

Is this one of the usual failure modes where the input is too low to support the output? I would think the unit should be protected from overloads and low voltage, but apparently it fails easily when the battery voltage is too low? Also I don't know if a battery charger was attached to the battery or what condition the battery was in. The connection at the unit read 12.3 volts with no load and 10 volts after it failed. I don't know how much current was being drawn after it failed.

This thing is only worth about \$40 and I see them on sale at Harbor Freight for \$19.99 so it's probably not worth spending too much time on. If he buys another unit, what brand would you recommend for long life and ruggedness? Something more expensive perhaps?

Do not waste any more time (unless you enjoy troubleshooting). Tell him to replace it and select one with better specs (if the size and cost are not a problem).