

BoonDocker Power Resistor Installation

When the headlights are unplugged, many snowmobiles (especially Polaris) produce a low voltage at high rpms that is not sufficient to activate the nitrous solenoid. This occurs because the voltage regulator is overloaded. The voltage regulator must now dissipate the power that would normally go to the headlights (50-60W each). The regulator is not designed to handle this much load so it dumps current straight to ground, which causes a low voltage.

This 100W 2 ohm power resistor is designed to dissipate the power that would normally go to the headlights. Use it only when not running headlights – disconnect it when running headlights, otherwise your electrical system may be overloaded.

<u>Warning</u>: This resistor will get <u>very hot</u> - you can burn yourself if you touch it! Be sure to mount it to a solid metal object that can easily dissipate heat. Keep it away from heat sensitive items.

- Find a suitable location to mount the power resistor. This must be a large flat metal surface that can easily dissipate heat. For Polaris snowmobiles, the resistor can be mounted behind the footrest next to the existing voltage regulator or on the aluminum brace in front of the bellypan (close to the wiring harness connector for the hood).
- 2. When mounting the resistor, connect the black wire to ground be sure there is a good connection.



- 3. Connect the red wire to the lighting coil voltage (usually a heavy yellow wire). If mounting near the front of the sled on a Polaris, the red wire from the resistor can be plugged into the yellow wire on the wiring harness connector. If mounted near the voltage regulator, the red wire can be connected (spliced) to the yellow wire from the voltage regulator. Be sure this is a good solid connection.
- 4. When running headlights, disconnect the red wire.