

## INSTRUCTIONS: HOT GRIPS® VARIABLE HEAT CONTROLLER

**WARNING:** You must install a 5 amp fuse (not supplied) prior to installing this controller. Never install any electrical accessory to a vehicle which is not properly fused.

**CAUTION:** Never test this device with a multimeter. This device is not a rheostat but rather an electronic controller and the voltage produced by a multimeter, when measuring ohms (resistance), may permanently damage it.

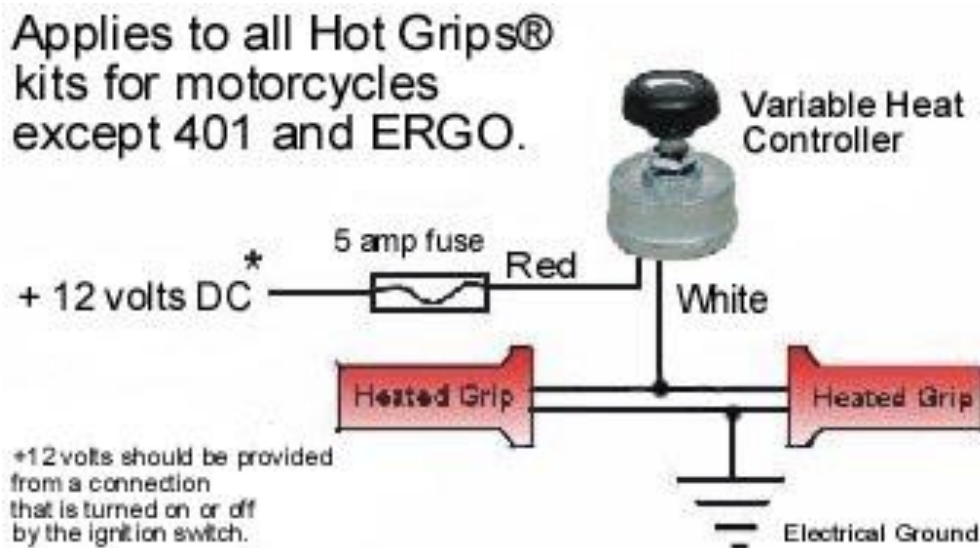
**CAUTION:** Refer installation to a qualified mechanic if you lack expertise in installing electrical accessories on your make and model of vehicle.

**Application:** This controller is only for use with 12 volt DC (Direct Current), negative ground electrical systems. You have direct current (DC) if your vehicle has a battery.

Never use this controller with AC (alternating current). Never use this controller in conjunction with any type of motor. This controller should only be used to vary the heat output from a set (pair) of Hot Grips®. No other use is approved.

**Mounting Location:** Find a safe and convenient location that does not interfere with anything else on the vehicle. Be sure the controller can be easily reached when operating the vehicle. Drill a 7/16" hole in that location. The knob of the controller can be removed by loosening the small screw on the side of the control knob. Washers (not supplied) may be used to vary the height of the unit.

**Wiring:** Connect the variable heat controller as shown in the wiring diagram: Also, refer to the notes below the diagram.



**Power Source:** Many vehicles are provided by the manufacturer with an accessory electrical terminal. Consult with the manufacturer, your dealer's service department, owner's manual or shop manual on where to obtain power for an accessory. Be sure this power source does **not** remain 'on' when the ignition switch is turned 'off'. Otherwise, leaving the grips 'on' when the ignition switch is turned 'off' will drain the battery as quickly as if a headlight were left on.

**Fuse:** You must install a 5 amp fuse (not supplied). The fuse must be installed PRIOR TO connecting any other wiring. Wire the 5 amp fuse directly to the power source you have chosen. A fuse is your only protection against death, injury, electrical fire and/or damage to your electrical system and the variable heat controller.

**Polarity:** The Red Wire from the controller MUST be connected to a fused, switched, positive (+) 12 volts power source. The White Wire from the controller MUST be connected to the grips. There is NO polarity on the wires coming out of the grips. You are free to choose which wire from each grip will be connected to the controller's white wire and which wire from each grip will be connected to ground. HOWEVER, NEVER CONNECT THE WHITE WIRE FROM THE CONTROLLER TO THE WIRES FROM THE GRIPS THAT YOU HAVE CHOSEN TO CONNECT TO GROUND (such a connection would create a "short circuit" which will damage the controller and risks electrical fire).

**Connections:** Solder all connections. Never use wire nuts. Cover all exposed connections with electrical tape or heat shrink tubing.

**Ground:** A ground connection can *often* be made to a metal portion of the **main frame**. Avoid using the handlebars because they are often rubber mounted or otherwise electrically isolated by the steering head bearings. Your ground connection is important, so scrape off any paint and be certain your connection is tight and will not loosen over time. Some vehicles don't use the frame as ground – consult with your dealer.