



AVON HEATED GRIP KIT INSTALLATION INSTRUCTIONS



This AVON Heated Grip Kit is designed to fit most metric models of motorcycles. The heated grips are installed as replacements for the clutch grip and the throttle grip and the 4 level Controller is mounted on the handlebar.

!!Warning!! A Service Manual is required to install this kit. The rider's safety depends upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have your dealer perform the installation. Improper installation of this kit could result in death or serious injury.

WARRANTY AND DAMAGE: This product has a 1 (one) year Limited Warranty. The warranty does not cover misuse of this product or operation outside of the design specifications. Symtec, Inc. WILL NOT be responsible for damages made to products that are not installed properly. Symtec, Inc. products have recommended installation instructions that are written to provide proper guidelines for product installations. Warranties WILL NOT be honored on broken items or damaged electronics due to shorting or pinched wires.

Components: The AVON Heated Grip Kit includes the heated grips, the 4 level temperature Controller, the backside clamp*, cap screws and washers, the electrical wires and connectors, rubber grommet and Template to assist the installation.

*** The Backside Clamp:** This clamp is used to attach the controller to the handlebar if it is not possible to fasten the controller to the brake reservoir, clutch reservoir or clutch bracket. Add the washers to the cap screws to attach the controller to the backside clamp but do not over tighten.

Tools: A 3/8" Drill Motor, 5 sharp drills from 3/32" to 3/8" or a step drill, a hammer and center punch, a round file, a pliers and wire cutter, a small straight blade screw driver, Allen wrenches, **safety glasses** and a felt tip marker.

Installation:

- A. Open or remove the seat according to the service-manual instructions.

!!! Warning !!! Warning

To protect against shock and accidental start-up of the vehicle, disconnect the battery cables, negative cable first, before proceeding. Inadequate safety precautions could result in death or serious injury.

!!! Warning !!! Warning

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

- B. Disconnect the battery, negative cable first, according to the service-manual instructions.

Installation of Heaters and Controller

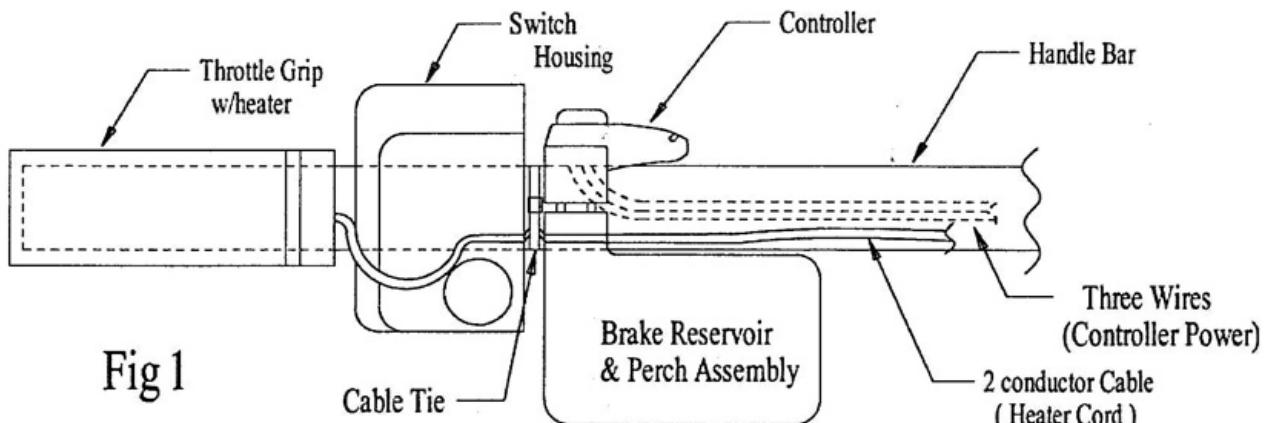
The 4 level Controller can be mounted on the left or right side of the handlebar so choose the side and location that will provide the easiest installation and most convenient operation. The width between the holes will allow the Controller to be mounted directly to the clutch bracket or brake reservoir on many Yamaha, Honda, Kawasaki, Suzuki or Triumph motorcycles. On other motorcycles the back side clamp and cap screws are provided to mount the Controller to the handlebar.

This instruction will describe the installation of the Controller on the throttle or right side; however the same basic steps would be followed for the installation on the clutch or left side.

1. The new 4 level Controller will replace the perch clamp that secures the brake reservoir to the handlebar, like shown in the picture on the front of this package. On some motorcycles the mirror is attached to the perch clamp so the backside clamp in the Kit needs to be utilized to secure the Controller slightly forward toward the yoke. A hole needs to be drilled in the side of the handlebar to install the electrical wires from the bottom of

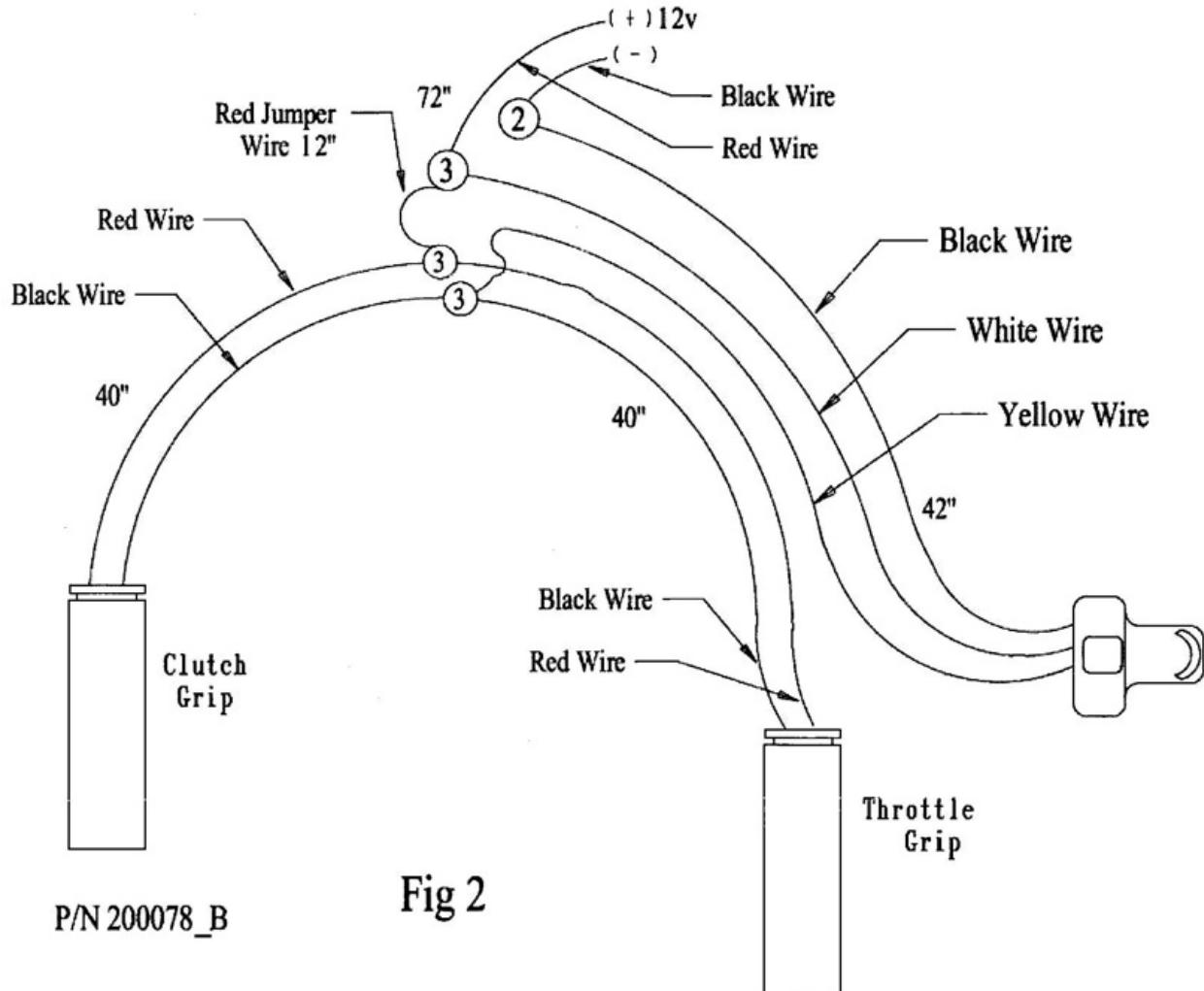
the Controller. To assure that the Controller gets mounted in the same location as the perch clamp, the location of the clamp should be marked before it is removed. With a felt tip pen mark the handlebar where the brake reservoir is mounted. Also place a mark on the bar where the clamp and reservoir meet so the Controller can be remounted in the same orientation around the handlebar.

2. With an Allen Wrench remove the perch clamp that holds the brake reservoir to the handlebar but hold the reservoir against the bar where it was mounted. With the felt tip marker place a line on the handlebar that would be in line with the center of the two screw holes in the reservoir.
3. Remove the reservoir and place the template that is included in the kit on the handlebar where the marks are located. Place the centerline of the holes on the template over the line that you marked on the handlebar indicating the center of the two screw holes in the brake reservoir. Rotate the template so the top edge of the outline lines up with the mark where the clamp and reservoir meet. Place a mark on the handlebar for the hole location where the hole is punched in the template.
4. Center punch and drill a 3/8" hole in the side of the bar. At the spot marked earlier with the template, punch a hole location with a center punch to pierce the chrome. **Use safety glasses that completely cover the eyes to protect from steel chips while drilling!** Start with a small drill like a 3/32" size to make the initial hole. Then use progressively larger drills or a step drill to increase the hole size to 3/8". After the hole is drilled use a round file or deburring tool to remove the sharp edges.
5. Another hole needs to be drilled in the handlebar for routing the Controller wires. A hole should be drilled on the bottom center of the handlebar in the yoke area so the Controller wires can be brought out the bottom and connected to the other wires. The bolts that secure the handlebar can be loosened and the bar rotated so a hole can be drilled in the bottom. Repeat step 4 to add the hole.
6. Use the string in the kit to assist pulling the 3 Controller wires from the first hole and out the bottom hole. The string can be used with a vacuum. Tape off all the holes in the bar except the 2 just added. Apply the vacuum to the bottom hole. Tie a knot in the end of the string and feed it from the top hole out the bottom hole. Once the string is routed between the holes, the 3 wires from the Controller should be attached and pulled through the bar and out the bottom. Attach the Controller to the brake reservoir and perch assembly, as shown in Figure 1, but do not tighten.



7. Remove the existing grip from the Clutch side. Removing the grip may require blowing compressed air in the end between the grip and the bar, injecting brake cleaner fluid, or cutting it off.
8. Clean the handlebar where the grip was removed with alcohol or a solvent to remove all residue and dry with a clean cloth.
9. Slide the clutch side grip onto the handlebar so the heater wires are at 9:00 o'clock or they can be positioned on the bottom for appearance. Tighten the set screws to attach the grip to the bar. Route the cable along the handlebar to the yoke area. Add wire ties as required.
10. Adhere the correct cable attachment for your bike to the throttle grip per the enclosed instructions.
11. Install the throttle grip per the manufacturer's instructions. After the throttle grip is installed route the heater cable along the handlebar to the yoke area. A loop in the cable, as shown in Figure 1, is required to assure there is free rotation of the throttle. Add wire ties as required.
12. Next make the wire connections shown in Figure 2 at the yoke area. The wires from the Clutch and Throttle Heaters and those from the Controller will be attached to a cable in the Kit that will be connected to the 12V supply later. Use a small plastic connector with 2 holes and yellow cap to connect the black wire from the Controller to the black wire in the cable that will supply the 12V power. Push the wires into the plastic connector as far as possible. The wires can be viewed from one side of the clear plastic. With the wires

pushed to the top of the connector, take pliers and push the yellow cap down completely flat. This will pierce the insulation on the wires and make the electrical connection and protective grease will be pushed out of the connector. The cap needs to be pushed down completely so the grease comes out otherwise it will not make a good electrical connection. Wipe off the grease and pull on the wires to make sure they are connected.



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Fig 2

13. The plastic connectors with 3 holes and a red cap should be used to make the other connections shown on Figure 2. The two black wires from the Clutch and Throttle heaters should be connected to the yellow wire from the Controller. Push the wires to the top end of the connector and press the red cap down with pliers like in step 12. The two red wires from the heaters should be connected to the single red jumper wire from the Kit with another red capped connector. The other end of the red jumper wire should be connected to the white wire from the Controller and the red wire from the 12V supply cable with a red cap connector. If desired these same connections can be done by soldering and insulating the wires.

VERY IMPORTANT
CONNECTORS MUST BE FULLY CRIMPED



14. Temporarily connect the power cable to the battery and confirm the proper operation. Press the button on the Controller multiple times and confirm the 4 LED's light from yellow to red and off. Also feel the heaters and confirm that they are starting to heat up.
15. Connect the power wires to the Accessory circuit. Check the service manual or call your dealer for the correct accessory wire connection. The Heat Demon heaters draw 3 amps so a check should be made to assure the circuit is not overloaded. Connect the Red wire to an accessory wire near the battery or behind the head light with the red splice connector from the Kit. Connect the black wire to a good ground with the ring terminal or to another black ground wire with a red splice connector.
16. Reconnect the battery cables. **!!Warning!! Always connect the positive battery cable first.**
17. Tighten the bolts that hold the Controller and brake perch assembly to the handlebar.
18. Turn on the accessory switch and confirm that the Controller is wired properly and the grips heat up.

Operation:

The Controller will provide 4 levels of heat to the heaters to heat the grips.

Press the button on the Controller once and the Yellow light or LED shows that the lowest level of heat is selected. Press the button a second time and the Orange light or LED will indicate the next higher level of heat has been selected. Pressing the button a third or fourth time will select higher levels of heat for colder conditions.

Pressing the button a fifth time will shut off all of the lights and the power.

Holding the button down for 3 seconds will lower the intensity of the LED's for night operation. Holding it down again for 3 seconds will adjust the LED's for daytime use.



124 Osborne Road
Fridley, MN 55432 (763) 571-9193
www.heatdemon.com www.symtec-inc.com
email: sales@symtec-inc.com