

**Motorcycle Hand Warmer Installation Instructions**  
**for the following kits:**  
**210019MT, 210019RR, 0631-0046**  
**Warning: Heaters require a heat sink. DO NOT energize before installing.**

**Components:** This motorcycle Grip Heater Kit includes the Clutch and Throttle Heaters, a power cord, a Round Rocker or Metal Toggle Switch, electrical connectors and tie wraps, and installation instructions.

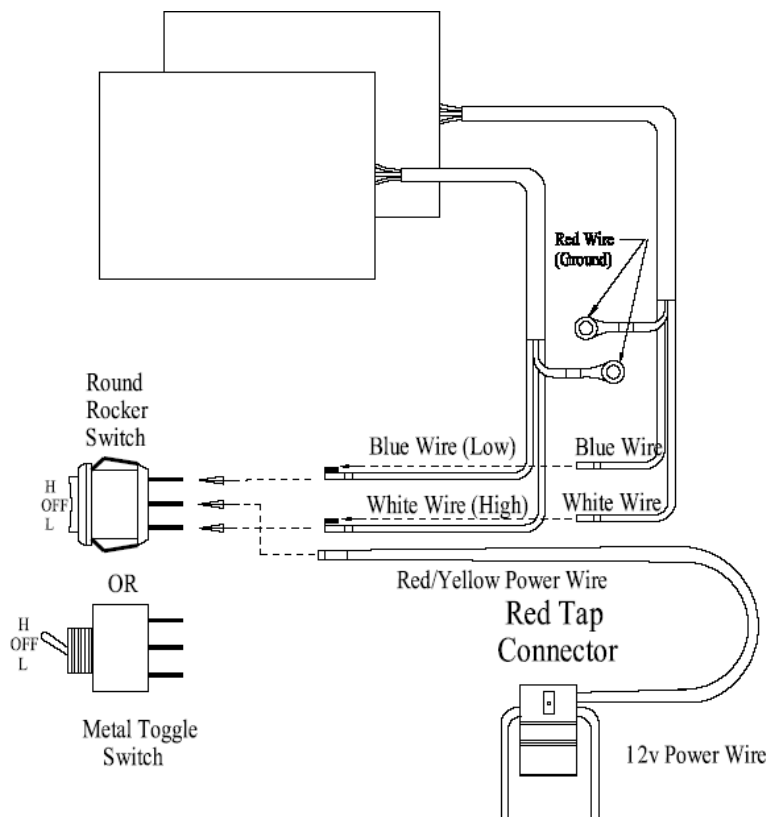
**Mounting the Heaters:**

1. Disconnect the Positive (+) terminal from the battery.
2. 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.
3. Clean the handlebar where the grip was removed with alcohol or a solvent to remove all residue and dry with a clean cloth.
4. Determine where the Clutch side heater will be mounted. Take the heater marked "Clutch" and place it on the handlebar approximately ½" from the end and decide the position of the wires. It is recommended to mount the heater so the wires are at 9:00 o'clock or they can be positioned on the bottom for appearance. Peel off the release paper and adhere the heater to the handlebar with the wires toward the headlight.
5. Apply a high temperature adhesive (such as JB Weld) to the inside of the Clutch side grip. Install the grips over the heaters and let the adhesive cure as instructed by the adhesive manufacturer.
6. The Throttle side heater is installed on the throttle sleeve under the rubber cover. Remove the rubber cover that is installed over the throttle sleeve so the Throttle side heater can be applied. Some of the throttle sleeves have ribs which need to be cut or ground off so the heater can make full contact with the sleeve surface or it will over heat in the void areas.
7. Determine where the throttle side heater will be mounted. Take the heater marked "Throttle" and place it on the throttle sleeve approximately ½" from the end and decide the position of the wires. It is recommended to mount the heater so the wires are at 3:00 o'clock with a loop to allow for the twisting motion of the throttle. Peel off the release paper and adhere the heater to the throttle sleeve with the wires toward the headlight.
8. Apply a thin coat of adhesive (such as J.B. Weld) to the surface of heater only and reroll the rubber hand grip over the entire throttle sleeve. Wipe off any excessive adhesive that may have rolled out.

**MOUNTING THE SWITCHES:**

9. Choose a location for the switch that is convenient and has sufficient rear clearance for the electrical connections. The switch should be within 18" of a voltage-controlled wire (like a wire in the lighting circuit).
10. To mount the **Round Rocker Switch** drill a 13/16" hole in this location. A ¾" hole can be drilled and then sanded or filed open to 13/16" or a ¾" hole saw or blade drill will provide the correct size. To mount the **Metal Toggle Switch** drill a ½" hole.
11. Route the wires from the Clutch and Throttle heaters along the handlebar and secure with the supplied wire ties. Assure that there is a loop in the cable and free movement of the Throttle when securing this wire to the handlebar. Route the wires to the back of the panel near the drilled hole and cut to length so there is an extra 4" to make the connections to the Switch.

**Figure 1**



12. Attach the female slip-on connectors, piggyback connectors and ring terminals as shown in Figure 1. A crimping tool works best or a pliers will work using a double crimp approach (top crimp first and then a side crimp). For the Ground connection (red wires) use a frame component or a Ground wire, not a rubber isolated component such as a handlebar or steering assembly.

13. Connect the Clutch and Throttle heater wires to the switch according to Figure 1

A. For the Round Rocker Switch push the wires through the hole from the back side of the panel and connect to the Switch according to Figure 1. Also connect the Yellow/Red Power wire to center lug of switch. Align the switch as you want it to read and insert it into the hole drilled in Step #9.

B. For the Metal Toggle Switch connect the wires to the Switch on the back side of the panel according to Figure 1. Also add the Yellow/Red Power wire. Leave the strain relief nut on the switch and install the Switch from the back with the keyway (notch in the barrel) down. On the front, install the Hi/Low indicator tab and secure the switch and tab using the metal nut. The amount of switch barrel protruding can be adjusted by turning the strain relief nut.

14. Locate a voltage controlled power wire (such as one leading to a headlight, taillight, or auxiliary power outlet). Using the red tap connector, place this power wire into the continuous channel. Insert the yellow or red 18" wire (do not strip the insulation) into the adjacent channel. Using a pliers, press the metal contact flush with the top of the connector. Close the hinged cover until latched. Note: For added protection, install a 4 or 5 amp fuse (not included) between the tap connector and the switch.

15. Reconnect the positive battery terminal. Confirm no battery drain when the ignition key is in the off position.

**Caution:** Older motorcycles may not provide sufficient wattage to operate the headlight and the heated grips at the same time without dimming the headlight. Turn heated grips OFF during low light conditions if visibility is poor/limited.

**Warning:** After the installation, assure that there is free movement of the throttle and the handlebar!!

**For technical information regarding this product, please call 763-571-9193 ext 106.**