

Snowmobile Thumb Warmer Hi/Low Model Installation Instructions For the following kit: 210003RR

For Polaris (pre '95), Arctic Cat (pre '98), Yamaha (pre '94), Ski-Doo Tundra

- For full throttle travel, make sure sufficient lead wire slack is allowed
- Proper cleaning of the throttle is critical for warmer adhesion
- Do not cut or needlessly flex the warmer
- Please read all instructions before beginning installation

Throttle Preparation/Warmer Attachment

If the temperature is below 60°F. (18°C.) remove the throttle and work indoors. Drill a 7/32" (5.5 mm) hole in the lower pivot arm of the throttle 1¼" from the lower pivot hole (Figure 1). Clean the back of the throttle using water or alcohol and the enclosed sandpaper. Rinse and dry (air dry or use a cloth, not a paper product, which may contain silicones).

Route the warmer leads through the hole in the throttle (Figure 1). Remove the paper backing from the warmer to expose adhesive. Position carefully and press in place. **DO NOT TRY TO REPOSITION.** Keeping the throttle at room temperature for 8 hours will improve the bond (adhesive will totally cure over first two days of temperatures above 50°). Clean and dry top of warmer. Peel paper backing from insulation patch and press on top of the warmer. Reinstall throttle if necessary.

Hi/Low Switch Installation

Choose a location for the switch that is convenient and has sufficient rear clearance for the electrical connections. Drill a 13/16" hole and push the switch into the hole, after wire connection is made to terminals on switch. See Figure 2 or 3.

Wire Routing and Connections (Power Circuit)

Remove the padded handlebar cushion or covering to expose the handlebar. Attach connectors to warmer leads (Fig. 2 or 3). A crimping tool is best, but pliers will work. Route wires to the area of the switch and secure with the supplied tie wraps. Caution: The wire loop between the throttle and first tie wrap should be neither excessive nor too small (Figure 1). You should be able to close the throttle fully so wire slack is eliminated without the wires being stressed.

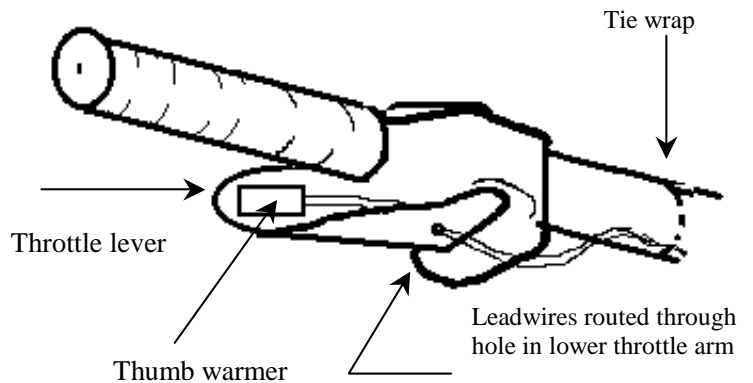


Figure 1. Throttle View

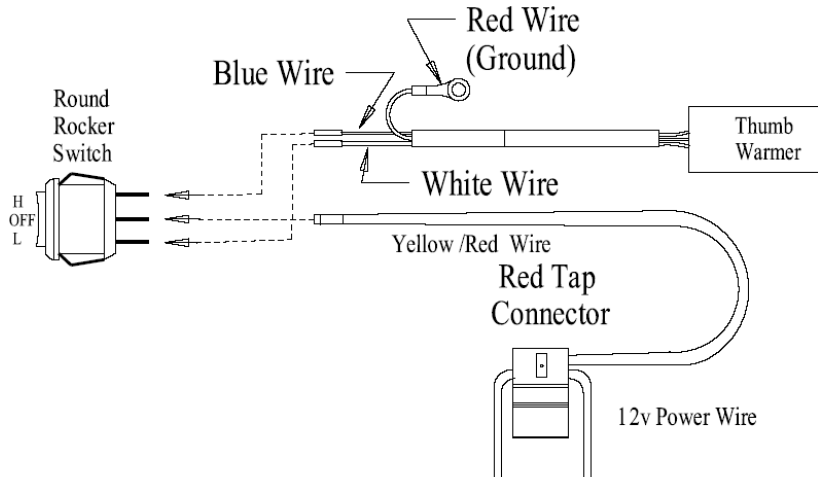


Figure 2

Connection Switch to Power Source (Figure 2)

Locate a power wire (usually yellow) leading to a headlight, taillight, or dash light. Using the red tap connector, place the power wire in the continuous channel and insert the yellow/red wire (do not strip insulation) into the other channel. Complete connection by squeezing (w/pliers) the metal contact flush with the top of the connector. Close the hinged cover until latched.

Connecting to Existing Switch (Figure 3)

Unplug the power wire from the constant power side of the existing hand warmer switch, install piggyback connector onto power wire & connect to switch. Reinstall the slip-on connector onto the male terminal of the piggyback connector.

Information Note: Lighting circuits are AC and starting circuits DC. The above prevents connecting AC and DC circuits, causing dim lights.

Reinstall handlebar pad.

Confirm complete, unrestricted throttle movement.

Wire Routing and Connections (Ground Circuit)

If the snowmobile has an electric start or is equipped for electric start, connect the ground lead from the heater to the ground terminal at the regulator. If not, the wire can be connected to any ground location on the frame.

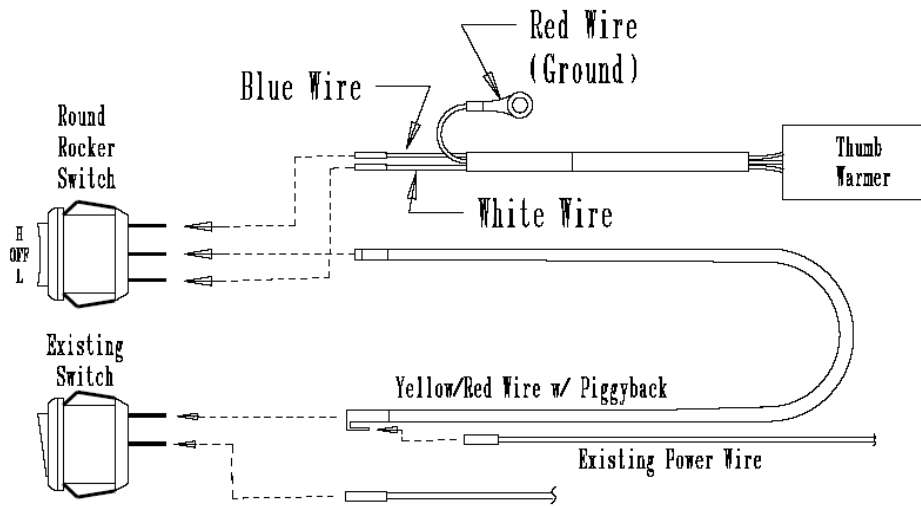


Figure 3

Notes:

- 1) If the heater does not get hot, check the electrical connections.
- 2) If the adhesive fails, let us know. We will return an adhesive chip at no cost.
- 3) Do not connect the warmer to a stock Yamaha hand warmer switch or non-regulated power circuit. (Warmer designed to run at 12 - 13.5 volts. Yamaha factory hand warmers run in an unregulated circuit. Warmer will get too hot.)
- 4) Caution: SINCE THE THUMB DOES NOT DETECT HEAT WELL, USE CAUTION WHEN OPERATING THE WARMER OVER EXTENDED PERIODS OR WITH HANDLEBAR MITTS.
- 5) For your information, resistance should be 35 +/- 5 ohms for the High circuit and 70 +/- 7 ohms for low circuit.

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