

SYMTEC ATV Thumb Warmer Installation Instructions for ATV Models 210012MT

Application: Plastic throttles as on Polaris Model Year 2000 and newer

- **Do not cut or needlessly flex the warmer**
- **Please read all instructions before beginning installation**

Throttle Preparation/Warmer Attachment

Clean the throttle of any dirt, grease or oil. Do not cut away the existing rubber covering. Peel the release paper from warmer and press on throttle front (where thumb rests) (Figure 1).

Slide shrink tubing over the end of throttle and position such that it will cover warmer (Figure 1). The shrink tubing has a 3 to 1 shrink ratio in diameter and up to 15% longitudinally. Use a heat gun, lighter or match to heat the shrink tubing. If you use a lighter or match, remove the throttle to allow rotation for more even heating. Be careful not to overheat in one area as this can split or burn the shrink tubing. Reinstall throttle if necessary.

Hi/Low Switch Installation

Choose a location for the switch which is convenient and has sufficient rear clearance for the electrical connections and is within 18" of a voltage controlled wire (a wire in the lighting circuit). Drill a 1/2" (13mm) hole and install the switch from the back. Leave the strain relief nut on the switch. 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 moving the strain relief nut.

Wire Routing and Connections

Slide the supplied black tubing over the lead wires until it reaches warmer. Route wires/tubing along the handlebar to switch area and a Ground and secure with supplied tie wraps, electrical tape, or both. Cut/strip for proper length.

WARNING: Lead wire slack in the area of the throttle must be neither excessive nor tight. Ensure no binding occurs when the throttle is open fully.

Soldering connections is the most durable method, but the following will provide years of service. Attach a 1/4" female slip-on connector and #10 ring terminal to warmer leads as shown in Figure 2. (A crimping tool works best, but a Vise Grips or pliers will work).

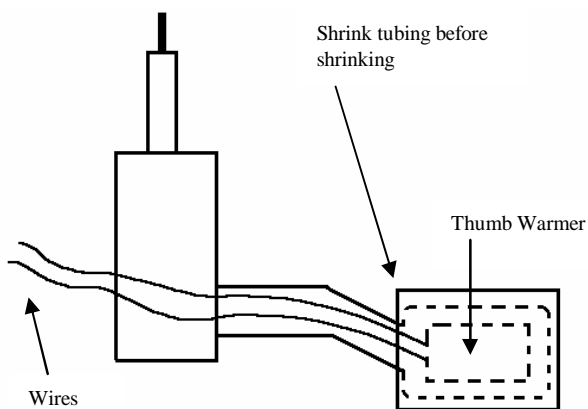


Figure 1. Throttle View

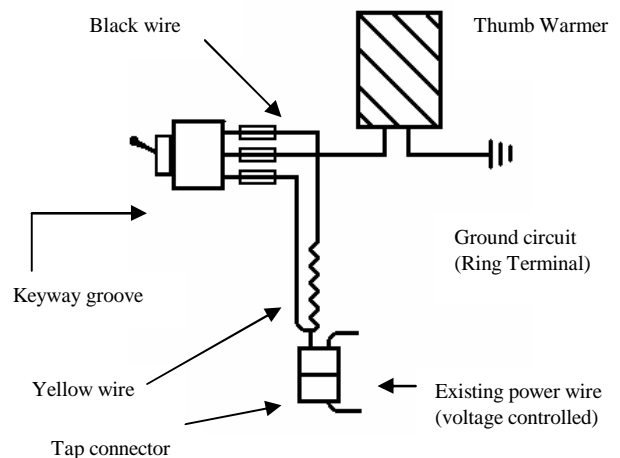


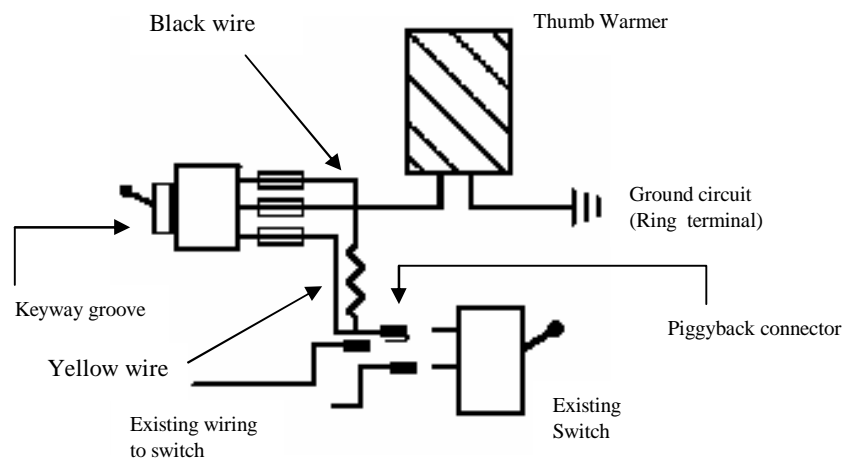
Figure 2. Switch Connections (Option B)

Connect the resistor assembly to a regulated (lighting) circuit using Option A (ATV has a switch in a lighting circuit with a 1/4" tab) or Option B:

Option A) Strip end of yellow wire in the resistor assembly and crimp the supplied piggyback connector to the wire (Figure 3). Unplug the existing power wire from the constant power side of the existing switch, slip on the piggyback connector, and reinstall the slip-on connector on the male terminal of the piggyback connector.

Option B) Locate a power wire (usually yellow) leading to a headlight, taillight, or dash light (Figure 2). Using the red tap connector, place this power wire into the continuous channel and insert the yellow wire (do not strip insulation) completely to stop. Make the connection by squeezing (w/pliers) the metal contact flush with the top of the connector. Close the hinged cover until latched.

Complete connections to switch and ground circuit.



**Figure 3. Power from Existing Switch
(Option A)**

Notes:

1. If the warmer does not get hot, check electrical connections.
2. CAUTION: SINCE THE THUMB DOES NOT DETECT HEAT WELL, USE CAUTION WHEN OPERATING THE WARMER OVER EXTENDED PERIODS .
3. Heater resistance should be 48 +/- 5 ohms. The resistor is a 12-ohm/5 watt. For added security, a 7-amp fuse could be integrated into the circuit.

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