

## SM-05108 - LEFT HAND THROTTLE CABLE KIT



### Warning

- We highly recommend a certified professional install this product.
- You as the operator absolve the manufacturer of this from any and all liabilities from use of this product and assume any and all legal fees, should they occur.

### TOOLS NEEDED:

- Pliers
- No. 1 Phillips Screw Driver
- 8mm Wrench
- 10mm Wrench
- 4mm Allen Wrench

### HARDWARE INCLUDED:

Item	Qty	Description	Item	Qty	Description
1	2	Junction Box Half	7	2	Pivot Screw
2	1	Junction Slide	8	2	6mm Screw
3	4	Self-Threading Screw	9	1	Throttle Block
4	4	Retaining Clip	10	1	Throttle Lever
5	2	Throttle Cable	11	5	Cable Tie
6	2	Half Moon Spacer	12	1	Locking Pin



### IMPORTANT SAFETY NOTICES

1. A left side throttle takes practice to get use to. Take time to get comfortable using the left side throttle and the brakes. Start at slow speeds and in open areas.
2. Leave the throttle locking pin installed when the Left Hand Throttle will not be used to limit the possibility of the throttle being pressed accidentally. Also use the throttle locking pin to keep inexperienced users from use.
3. Read and be familiar with the instructions before proceeding with installation. Compliance with the instructions is imperative for safe operation of this device.
4. Do not install or make any adjustments to the Throttle while the snowmobile is running.
5. Before running your snowmobile, please check both throttles. Push each throttle lever to the handlebar wide open and then let it snap back. Repeat this process two or three times.
6. Any vehicle equipped with this product must have a working tether cord kill switch for safety.

### BYPASSING THE THROTTLE SAFETY SWITCH

Some snowmobiles are equipped with a throttle safety device to shut down the machine in the event that the carburetors were to stick open. This Left Hand Throttle will shut off spark to your engine when activated if these devices are left in working order.

Here are instructions for your specific model on how to deactivate these switches.

### ARCTIC CAT:

The throttle safety switch in the right hand stock throttle block needs to be bypassed. 1998-2002 There should be three wires coming out of the throttle block, brown, purple and black. One option is to follow the wires down to the first plug and unplug them, but this will also disconnect the kill switch along with the throttle safety switch. The second option is to disconnect only the throttle safety switch by cutting only the black wire. The third option is to take the switch out of the throttle block, remove the spring and copper jumper, and then reinstall the switch. Please refer to your snowmobiles manual for information and location of these parts.

**WARNING:** You must install a working tether cord for safety to make up for disconnecting the throttle safety switch.

2003 The newer throttle block (like what is on the Firecat) has the throttle safety switch separate from the kill switch. Follow the purple and black wires down to the first plug and unplug.

**IMPORTANT:** You must install a working tether cord for safety to make up for disconnecting the throttle safety switch.

#### **SKI-DOO:**

Ski-Doo snowmobiles do not use throttle safety switches, so you will not have to modify any wiring. Most Ski-Doo snowmobiles come new with a tether cord.

#### **YAMAHA:**



The Left Hand Throttle will not work on Yamaha's which have both the gas and oil cable connected directly into the stock throttle lever. If you use this product on a vehicle with this type of set up, the new left hand throttle would not activate the oil pump when it is used and cause engine failure. The 4-stroke Yamaha models use a single throttle cable at the lever, which will allow the use of this Left Hand Throttle.

#### **POLARIS:**

The throttle safety switch in the right-hand stock throttle block needs to be bypassed. One option is to follow the wires down to the first plug and unplug them, but this will also disconnect the kill switch along with the throttle safety switch. The second option is to disconnect only the throttle safety switch by removing the plastic side cover on the block and cut the two thin black wires that connect the safety switch to the kill switch. This will leave the kill switch operational.

**IMPORTANT:** You must install a working tether cord for safety to make up for disconnecting the throttle safety switch.

#### **INSTALLATION INSTRUCTIONS**

1. Be sure carburetors are correctly in sync and set up before installing. If the snowmobile is not running properly before installation, the snowmobile will not run correctly after installation. The carburetors and the stock throttle will not need to be adjusted to install this product.
2. Remove the stock throttle cable from the stock right hand throttle lever and throttle block, some snowmobiles have a retaining clip that will need to be removed first. Also remove the handlebar pad and/or handlebar cover to gain access to where the cable comes through the dash.
3. Install a retaining clip (item 4) on the cable end fitting that came out of the stock throttle block. Also install one on each fitting at the ball end of the two cables included in the kit.
4. Use a general purpose grease and lightly coat the inside of both junction box halves and all surfaces of the slide.
5. Take both cables that were included in the kit and place them side by side. Install the slide onto the cable so both springs recess into the slide.

**Steps 6-8 will require 2 sets of hands, so find someone to help you.**

6. Hold one of the box halves in one hand and place the two cables, with the slide on it, into the box half. Nest the fittings of the two cables into the two recesses of the junction box half.
7. Place the stock cable end ("T" shape) in the slot of the slide closest to the stock cable end. Pull the slide to compress the springs and nest the stock end fitting into the junction box.

**8.** Be sure retaining clips are properly installed and all three cable end fittings are properly nested into the junction box half. Install the other junction box half making sure it closes the box completely before installing any screws. With the box held closed, install all four screws.

**9:** The throttle block has the option to be mounted over the grip or to be mounted to the bare handlebar. Mounting to the bare handlebar is the recommended option, but some snowmobiles have limited room, so the block has to be mounted over the grip.

- **Mounting to the bare handlebar:** If needed, move the controls over to create about ½” of bare handlebar between the grip and the brake mount. Place both half moon shaped spacers over the handlebars, then position and tighten the throttle block over the top of the spacers.
- **Mounting over the grip:** Disregard the two half moon spacers and mount the throttle block directly over the grip. Do not over tighten the throttle block as it may pinch the hand warmer wires underneath the grip.

**10.** Attach the throttle lever to the throttle block, if it is not already, and tighten the two screws that secure the lever to the throttle block. Use of Loctite on these two screws is recommended.

**11.** Insert the throttle locking pin to make sure it fits. If it does not easily insert through the lever and into the throttle block, the lever is not properly aligned with the block. This can be adjusted by loosening the two screws that hold the two throttle block halves together then retighten one screw more than the other to correct the alignment.

**12.** Route the cables similar to the way the stock cable was routed up through the dash along the handlebars.

**IMPORTANT:** There will be an excess of throttle cable under the hood that will need to be coiled in a way that will not interfere with any moving or rotating parts. If the cable is coiled tightly or has tight bends, the throttle pull may be increased. This Throttle does not increase throttle pull, it actually slightly decreases it. So, if you are experiencing a greater throttle pull than you previously had with your stock set up, it's because of the way the cables have been routed or coiled. Also, be sure the plastic junction box moves freely when turning the handle bars each direction. This could limit your steering or break the junction box.

**13.** Install one cable into the stock throttle block and the other into the left hand throttle block. Be sure to reinstall the stock retaining ring (if applicable) on the right side and install retaining ring Item 4 on the left side. Use the cable ties to secure the cables similar to the way the stock cables were secured.

**14.** Both throttle cables provided in the kit have adjusters so you can adjust each cable individually. Each cable needs to be adjusted so there is slack between the throttle lever and the throttle block. Consult a service manual for your snowmobile to determine the correct amount of slack.

**15.** Before driving the snowmobile, be sure both throttles are working properly and quickly return to idle. Do this by placing the snowmobile on a stand to lift the track off the ground, hook the tether cord to yourself, and run the snowmobile.