

### CAUTION: INSTALLATION IS ALWAYS AT YOUR OWN RISK.

Improper assembly of this device may result in serious injury or even death, not to mention catastrophic damage to your machine. Before beginning, you must carefully read ALL INSTRUCTIONS, as well as attached DISCLAIMER INFORMATION. If you have any questions, no matter how silly, consult an professional mechanic or call to speak with one of our Technical Advisors at (509) 927-7533. While installation is quite simple, it should ONLY be performed by those possessing solid mechanical abilities.

**IF YOU ARE NOT MECHANICALLY INCLINED WE RECOMMEND YOU SEEK OUT EITHER A PROFESSIONAL MECHANIC OR YOUR DEALER TO INSTALL THE GOLDFINGER ON YOUR SNOWMOBILE!**

#### TOOLS NEEDED

Other than the tools supplied with kit, you should only need:

- ◆ a pair of diagonal cutters (dikes) to trim excess cable
- ◆ a pair of slip-joint pliers
- ◆ 1 tube Blue Loctite

#### PARTS LIST

- A. Stainless steel adaptor clip (1)
- B. Short allen bolt (1)
- C. Barrel bolt (1)
- D. Aluminum cable crimp cap (1)
- E. Shiny chrome ferrule end (2)
- F. Cable (1)
- G. Allen wrenches (3, sizes 2.5mm, 3mm, 4mm)
- H. Zip tie (4)
- I. Rubber accordion boot (1)
- J. Washers (5)
- K. Cable housing (1)
- L. GOLDFINGER lever and perch with safety pin installed (1)



### A) Installation of Left-Side Throttle Lever Perch (See Photo A)



On most models the throttle lever perch will fit over the left side handlebar grip with no modifications to the grip. The goal for this section will be to position the throttle lever perch assembly as closely as possible to the left side of the brake reservoir/switch housing on the left side of handlebars, with the lever hanging straight down.

- 1) Using smallest (2.5mm) allen wrench supplied in kit, remove the 2 lever perch allen screws, then remove the perch cap.
- 2) Position lever perch and cap over handlebar grip as closely as possible to the left side of the brake reservoir/switch housing assembly on the left side of handlebars. The GOLDFINGER lever should hang in approximately the 6:00 position, or 90 degrees separated from the brake lever. (Note: If you have wider aftermarket bars and the lever perch will be installed directly over the handlebars instead of the grips, you can use the nylon spacer provided in your kit.)
- 3) Thread allen screws back into perch housing, being careful not to cross-thread screws.
- 4) Once the lever perch fits snugly and the allen screws thread smoothly, tighten the screws to prevent the perch from rotating loosely on the handlebar. **CAUTION:** In no case should your GOLDFINGER throttle lever be parallel or close to your brake lever!

### B) Installation of Right-Side Throttle Adapter Plate (See Photos B)

**IF YOUR SLED IS AN 07' XRS, X, X-SUMMIT OR 08' 600, 800, 1000 MODEL THEN PLEASE REFER TO THE INCLUDED ZIPLOC BAG WITH THE ORANGE LABEL FOR COMPLETION OF STEP B.**

(For your convenience, the right-side cable attachment (hereinafter called "barrel bolt") has been pre-assembled on the adapter plate and does NOT need to be removed for installation.)

- 1) Using 3mm allen wrench, remove the bottom-mounted OEM throttle pivot allen shoulder screw from the throttle block housing.
- 2) Carefully place one flat washer (found in Ziploc bag) between the throttle block housing and the throttle flipper (see arrow in photo B). Apply a small dab of blue loctite to the OEM allen shoulder screw threads, then insert first up through the large center hole of the stainless steel adapter plate (with the bent tab end toward you), then up through the throttle flipper, then through a stainless steel flat washer, and finally thread it up into the throttle block housing.

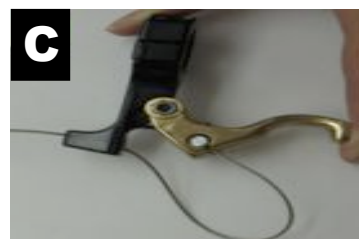


- 3) Tighten the OEM allen shoulder screw (**DO NOT OVERTIGHTEN!**) The plate should float freely (i.e., independent of the movement of the throttle flipper), and the adapter plate tab should be pointed UP so that it fits into the space between the throttle flipper and the throttle block housing.
- 4) Now, hold the adapter plate with your left hand while engaging the throttle with your right hand. You should feel **NO FRICTION** whatsoever, yet the plate should not wobble excessively on the bolt. If there appears to be any friction between the adapter plate and the throttle flipper, place an additional stainless steel washer on top of the first washer. Replace OEM shoulder screw and check again for proper clearance.

**ORDER FROM BOTTOM:** OEM allen shoulder screw, stainless adapter plate, throttle flipper, stainless washer, throttle block housing. (Plate should float freely, with bent tab pointed UP into space between flipper and throttle block housing.)

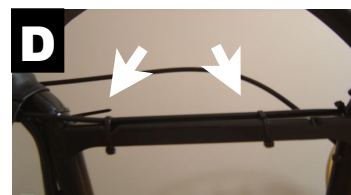
## C) Routing of Cable From Left Throttle to Right-Side Cable Attachment (See Photos C and D)

(CAUTION: Your kit contains a black vinyl cable housing. This cable housing **MUST BE TRIMMED** to the proper length during installation for safe and proper operation.)



- 1) In order to protect your cable from the many hazards of snowmobiling, we recommend that you route your left-throttle-to-right-throttle cable shroud underneath the handlebar padding on models so equipped. To do this you will first need to remove the center handlebar padding. Most snowmobile models have either zippers or a velcro closure system which you will first need to open before removing the foam padding.
- 2) Push the "hammerhead" cable end of the stainless cable into the slot on the back of the **GOLDFINGER** left throttle lever, then thread through the hole in the **GOLDFINGER** throttle perch housing as shown in photo C.
- 3) Insert the stainless cable bare end into the black cable housing (starting at the end with the chrome ferrule end), then push all the way through until it comes out the other end.
- 4) Route the cable housing across the handlebars and through the hole in the rounded end of the barrel bolt (you may need to loosen the short allen screw slightly to allow the cable to pass through the hole). It is very important that the cable follow as straight a line as possible to the right side in order to reduce kinks or binding, which may cause friction. (TIP: On our snowmobile we found it worked best to run the cable **UNDERNEATH** the brake line and wiring harness on the **LEFT SIDE** of the handlebars, but **OVER** the wires and OEM throttle cables on the **RIGHT SIDE** of the handlebars.)

- 5) Secure the newly routed cable shroud with two zip ties on the left and two on the right side of the handlebars. (SEE ARROWS IN PHOTO D.) Pull the zip ties snug, but not so tight as to kink the cable, then cut off the excess length from each zip tie.
- 6) With the left throttle in the fully-closed position, check to make sure chrome-capped cable housing end is pushed all the way into the left throttle perch assembly. Next, measure 1 1/4" to the **LEFT** from the rounded end of the barrel bolt and make a mark on the black cable housing.
- 7) Before trimming cable housing, you **MUST** slide the stainless cable far enough into the housing so you don't cut through the cable itself. Use a sharp pair of diagonal cutters (dikes) to cut the cable housing. After trimming cable shroud, inspect end for any burrs or obstructions which might need further trimming. (TIP: If there is a burr inside the cable housing you can usually clear it with a drill bit or other sharp pointed tool which is slightly smaller than the internal diameter of the cable housing.)
- 8) Lightly crimp the shiny chrome cable end (included in your kit) on to the cut end of the cable housing (slip-joint pliers work nicely), then push stainless cable back through the cable housing, making sure the cable slides smoothly in and out of housing. If there is any friction, refer to burr removal tip found in step 7.
- 9) Next, run the bare end of the stainless cable through the large end of the rubber accordion boot, pulling the boot up until it slides on to the chrome cable housing end.
- 10) Insert stainless cable through hole in the rounded end of barrel bolt. For now, leave excess cable hanging out of the end of the barrel bolt, and do not tighten the barrel bolt allen screw yet. You will do this in step D.
- 11) Replace the handlebar padding and vinyl cover.



## D) Left Throttle Adjustment

**THE FOLLOWING IS THE MOST CRITICAL PART OF THE INSTALLATION PROCESS!**

- 1) With the right throttle in the **FULLY CLOSED** position and while holding the throttle plate from moving, pull the bare cable end tightly to the right to eliminate slack in the cable (slip-joint pliers or vice grips help to grip the cable).
- 2) Using the 4mm allen wrench, tighten the short allen screw into the barrel bolt to secure the cable. **DO NOT TIGHTEN COMPLETELY** until you are satisfied with the adjustment of the cable (this will flatten the cable inside the barrel bolt, making it more difficult to adjust).
- 3) Slowly engage the left throttle (**with the engine off, of course--we had to put that in for obvious legal reasons**) while watching the movement of the right-side adapter plate. If adjusted properly, the right throttle should open fully, and then **CLOSE COMPLETELY** when left throttle is released. If it does not close completely, continue adjusting position of cable inside barrel bolt until throttle opens and closes fully. When satisfied with adjustment, tighten short allen screw into barrel bolt. (NOTE: There should be one washer between the short allen screw head and the top side of the adapter plate, and another washer between the plate and the barrel bolt. When the short allen screw is tightened completely into the barrel bolt it will secure the cable, but there should still be a tiny bit of clearance so the barrel bolt can rotate freely without binding.) Use your best judgment so you don't strip the threads in the barrel bolt (we've never done it yet, but we're sure someone out there might be stronger than us....)
- 4) One more test: Engage the right throttle flipper fully with your right hand while watching the left throttle. Does the left throttle move any more than 1/8" to 1/4"? If so you will need to remove the friction by either adding or removing stainless washers from between the right-side throttle flipper and the throttle block housing.
- 5) Final step: Now you're ready to trim the excess stainless steel cable. It's best to use a sharp pair of diagonal cutting pliers or other sharp wire cutters. You should leave about 1/2" of cable sticking out of the blunt (right) end of the barrel bolt. Push the bare wire into the aluminum crimp cap included with your kit, and crimp lightly with pliers to secure it on to the cable.
- 7) Before starting snowmobile, confirm that OEM throttle is in the fully closed (idle) position.
- 8)

**CONGRATULATIONS -- You are finished with the installation of your GOLDFINGER left-side throttle!**

## PLEASE READ FOLLOWING WARNINGS AND DISCLAIMER FOR SAFE OPERATION!

### BEFORE EACH RIDE

- ◆ Always inspect both ends of the cable, the left throttle lever, and the right-side adapter before each ride. Look for ice buildup from the cold ride on the trailer, loose fasteners and/or kinks in the cable.
- ◆ Make sure before starting snowmobile that both throttles are in the FULLY CLOSED position. If anything looks amiss, either remedy the problem or remove the adapter plate to disable left throttle.
- ◆ After starting engine, check to make sure that GOLDFINGER left throttle engages right side properly, and that engine immediately returns to idle when lever is released.

### CAUTIONS WHEN RIDING

- ◆ Getting accustomed to your newly-installed GOLDFINGER left throttle will probably take a day or two of riding. We recommend that you carry at least the tools that you used to install your kit (allen wrenches and pliers) so that any necessary adjustments can be made while out on the trail.
- ◆ We recommend that you ONLY use your GOLDFINGER when side-hilling or hill-climbing. For this reason, we have included a safety lockout pin with your kit. This pin should ALWAYS be in place when trailriding, loading and unloading (we've heard horror stories of people who have accidentally grabbed wide-open throttle when slowing for a corner, and others of people who have launched themselves through the steel fronts of their enclosed trailers.)
- ◆ NEVER, NEVER, NEVER allow anyone unfamiliar with your sled to operate your machine without your first inserting the safety locking pin!
- ◆ CHILDREN UNDER THE AGE OF 16 SHOULD NEVER BE ALLOWED TO OPERATE A SNOWMOBILE WITHOUT THE SAFETY LOCKING PIN IN PLACE. (TIP: Secure your pin to the plastic clip at the end of the curly black ignition cutoff cord and you won't lose it.)
- ◆ If you lose your lockout pin, please call us at 1-877-fti-sled or (509) 927- 7533 for a FREE REPLACEMENT pin.)

### CAUTIONS AFTER ROLLOVER OR CRASH

- ◆ Any time you roll your sled or crash into something (or worse, someone) it makes sense to thoroughly check out all of your controls before riding further. After any such incidents, we strongly recommend that you remove the handlebar cover and padding to make sure your cable is still routed properly with no kinks which might cause your throttle to malfunction. Also, turn the handlebars from left to right to ensure that such movement does not activate either throttle.
- ◆ If you are unable to restore proper operation of GOLDFINGER throttle on the trail, DISCONNECT left throttle entirely by removing stainless cable from barrel bolt until you can work on the throttle system with the proper tools back at home. It may not be enough to merely insert the lockout pin, as it is possible for a kinked GOLDFINGER cable to cause unwanted operation of the OEM throttle!

**IF YOU HAVE EVEN THE SILLIEST QUESTION, PLEASE CALL US AT:**

**1 (877) FTI-SLED**

**OR VISIT US ONLINE AT:**



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