

## #907040, 907050, 907060 BILLET SWITCH HOUSINGS

Please read and understand these instructions completely before installation to avoid any possible injury to yourself or the motorcycle and/or accessory.



Pro-One recommends that these switch housings be installed by an experienced technician familiar with motorcycle wiring and electrical systems.

**NOTE:** Pro-One Switch Housings are available in Single or 3-Button configurations. Although these instructions focus on 3-Button installation, Single Button installation will be similar.

**NOTE:** Pro-One Switch Housings are designed for use with Pro-One Billet Hand controls. We cannot guarantee they will work with other manufacturer's switch housings.

**INTERNAL WIRING NOTE:** If using 1 pc. Handlebars like stock bars or drag bars, we recommend that you begin with a new set of handlebars without dimples or pre-drilled holes. Dimpled handlebars are often out of round and are often more difficult to work with. Pre-drilled handlebars might have the wiring holes in the wrong location.

If using Pullback Handlebars, make sure they are pre-drilled with two internal wiring holes where the bars meet the triple tree as it is very difficult to get a drill in position to drill the lower wiring holes. *Most Pullback Handlebars come pre-drilled.* **See FIG A. on page 3.**

1. Disconnect Battery and remove fuel tank from motorcycle.
2. Loosen clutch cable and throttle cables.
3. Remove the stock switch housings, throttle housing, and clutch and brake hand controls.
4. Cut the stock wires approximately 1" from the stock switches. This will leave a color-coded reference when installing the new switch housings. **See FIG B. on page 3.**
5. Label each bundle of stock wires left or right for identification.

### POSITION HAND CONTROLS:

6. **See FIG C. on page 3:** Remove the bottom half of the switch housing by removing the 2 allen screws using a 7/64" allen wrench.  
**See FIG D. on page 3:** Carefully remove the switches from the Billet Switch Housings noting their location so they are re-installed in the same position. This will make it easier to mark the holes for drilling the internal wire holes. For proper position and fit, you should trial mount the handlebars and controls prior to final installation. Loosely bolt the handlebars to the motorcycle. Slide on all hand controls, Billet Switch Housings (top half only with switches removed), master cylinder, throttle housing, and grips. Do not fully tighten bolts at this time.
7. Sit on the motorcycle and find the most comfortable position for the handlebars.
8. Adjust the angle of the hand controls so your hands rest in the most comfortable position. ***This step is important since once the hand controls are installed, there is very little room for movement.*** Next, tighten the handlebar clamps and hand controls so nothing moves while marking the handlebars for drilling internal wiring holes.

IF YOU ARE ROUTING YOUR WIRES INTERNALLY, PROCEED TO THE NEXT STEP. FOR EXTERNAL WIRING, SKIP TO “FINAL WIRING OF SWITCHES” ON PAGE 4.

### **POSITION THE BILLET SWITCH HOUSINGS AND MARK AND DRILL HANDLEBARS (Internal wiring only)**

**NOTE:** *Internal wiring on 1-piece bars (stock or drag bars) requires 3 holes to be drilled in the handlebars to route electrical wires. Pullback Bars should already be pre-drilled at the bottom.*

1. Locate the wiring hole in the switch housing (top half). Mark the handlebars through the wiring hole to correspond to this hole. Some installers prefer to center punch the hole location at this time. (Do this to both sides).
2. Mark the location for the third hole in the bottom center if using 1-piece handlebars (stock or drag bars). This hole is where the wires will exit the bars and connect to the main wire harness. For Pullback Bars, the wires will exit out the pre-drilled left and right holes at the bottom of the bars.
3. After all holes are marked, remove the handlebars and center-punch the holes prior to drilling. Drill the 2 holes for the switch housings (approximately 5/16”), and the single hole in the bottom center of the handlebars (approximately 1/2”) if using 1-piece bars.
4. Remove all sharp edges and burrs from the drilled holes so that the wires will not be cut when pulled through.

### **PULLING WIRES THROUGH HANDLEBARS (Internal wiring only)**

**NOTE:** *Use care when pulling electrical wires through handlebars so they are not damaged. The wires can be pulled through the handlebars either on the bench or on the bike.*

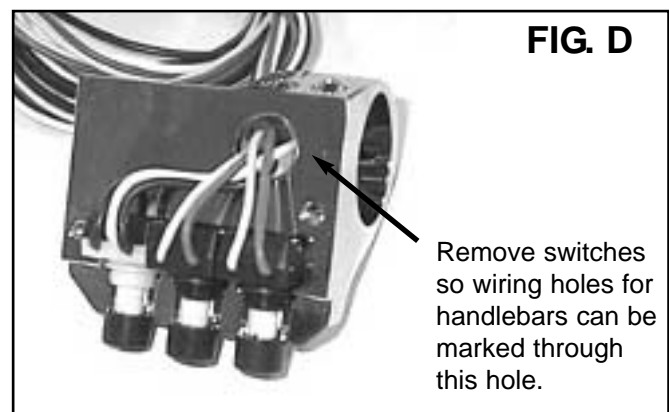
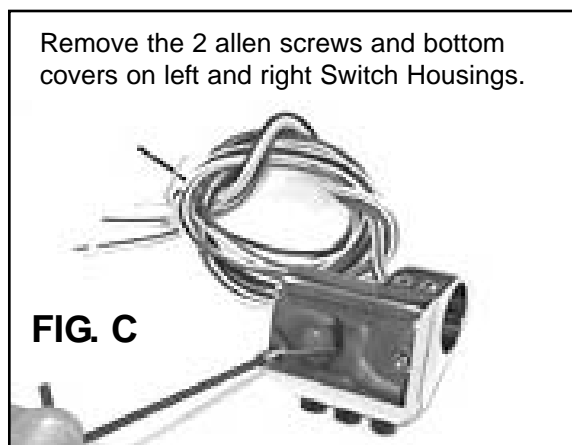
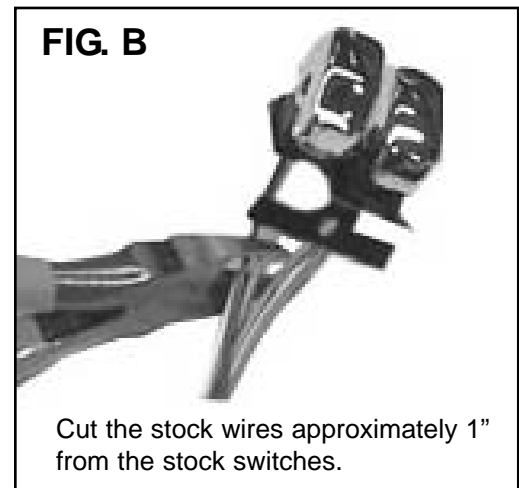
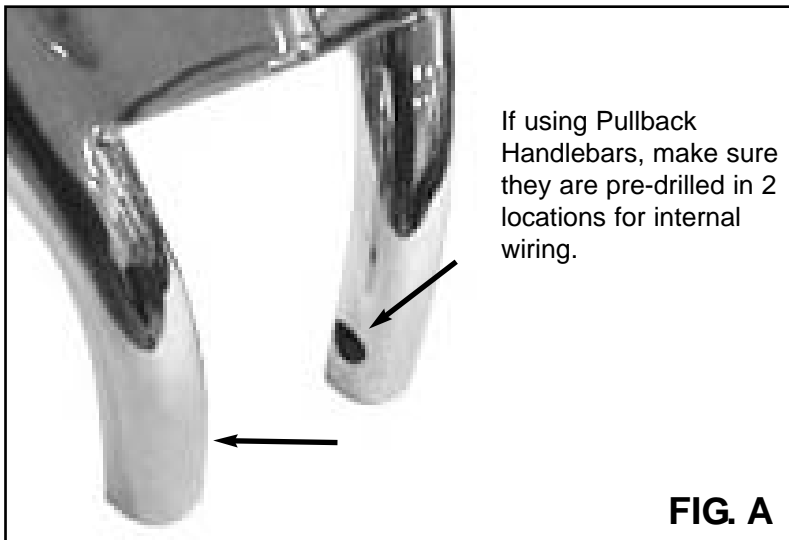
1. Locate the right and left side billet switch housings.
2. Add the **brake light wires** from the master cylinder housing to the bundle of wires from the right side Billet Switch Housing.  
**NOTE:** *We recommend that you put shrink tubing over the left and right wire bundles from the Billet Switch Housings prior to pulling the wires through the bars.*
3. Identify the **brown** and **yellow** wires for the **left** and **right** turn signals and mark with a piece of tape for easy identification later. The remaining brown and yellow wires will be for the **Horn** (left switch housing) and the **Starter** (right switch housing). **NOTE:** *These wires can easily be identified by checking continuity with an ohm meter.*
4. Insert a guide wire into the large center hole in the handlebars and out the smaller switch holes.
5. Bundle the wires from the right and left billet switch housings and attach to the guide wire with electrical tape.
6. Carefully pull each bundle through the handlebars and out the center hole in handlebars for 1-piece bars or the lower holes on each side on pullback bars.

7. The handlebars can now be mounted on the bike.
8. Pull the right and left wire bundles through the triple trees following the stock wiring route.
9. Re-install the lower cover on the left and right Billet Switch Housing using a drop of Loctite on each screw.

**WARNING! Use care not pinch any wires as this will cause an electrical short.**

10. We recommend the final wiring connections be under the tank for the best look.

### FOLLOW THE STEPS ON THE NEXT PAGE FOR FINAL WIRING.

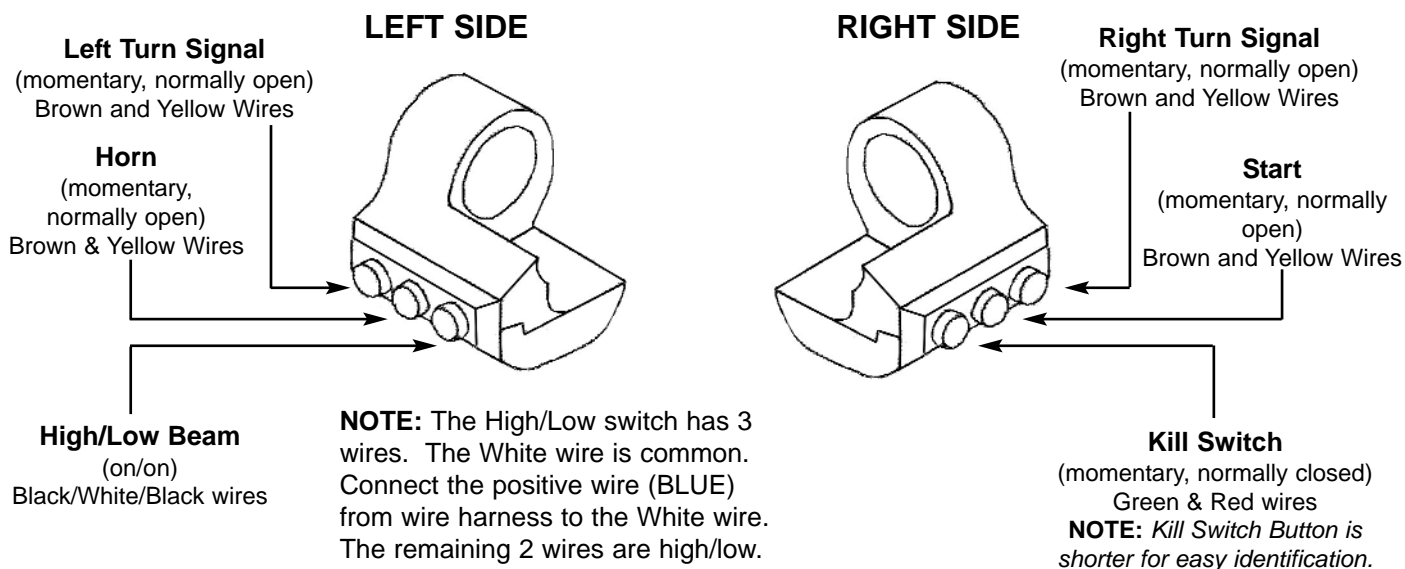


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## FINAL WIRING OF SWITCHES:

**NOTE:** We recommend that **heat shrink tubing** be used over the right and left wire bundles prior to pulling the wires through the bars, as well as at each soldered wire junction.

1. First cover each wire to be soldered with a length of shrink tubing **BEFORE** you begin soldering.
2. Solder each wire to its corresponding connection following the diagram below.



**BRAKE LIGHT WIRES FROM MASTER CYLINDER:** 1 wire will go to the ORANGE/WHITE STRIPE wire, and 1 wire will go the the RED/YELLOW STRIPE wire.

LEFT SIDE:	RIGHT SIDE:																																						
<p><b>TURN SIGNAL</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>Pro-One Wires:</b></td> <td style="width: 50%;"><b>HD Wires:</b></td> </tr> <tr> <td>YELLOW —TO—&gt;</td> <td>ORANGE/WHITE STRIPE</td> </tr> <tr> <td>BROWN —TO—&gt;</td> <td>WHITE/PURPLE STRIPE</td> </tr> </table> <p><b>HORN</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>Pro-One Wires:</b></td> <td style="width: 50%;"><b>HD Wires:</b></td> </tr> <tr> <td>YELLOW —TO—&gt;</td> <td>ORANGE/WHITE STRIPE</td> </tr> <tr> <td>BROWN —TO—&gt;</td> <td>YELLOW/BLACK STRIPE</td> </tr> </table> <p><b>HIGH BEAM</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>Pro-One Wires:</b></td> <td style="width: 50%;"><b>HD Wires:</b></td> </tr> <tr> <td>BLACK —TO—&gt;</td> <td>YELLOW</td> </tr> <tr> <td>WHITE —TO—&gt;</td> <td>BLUE</td> </tr> <tr> <td>BLACK —TO—&gt;</td> <td>WHITE</td> </tr> </table>	<b>Pro-One Wires:</b>	<b>HD Wires:</b>	YELLOW —TO—>	ORANGE/WHITE STRIPE	BROWN —TO—>	WHITE/PURPLE STRIPE	<b>Pro-One Wires:</b>	<b>HD Wires:</b>	YELLOW —TO—>	ORANGE/WHITE STRIPE	BROWN —TO—>	YELLOW/BLACK STRIPE	<b>Pro-One Wires:</b>	<b>HD Wires:</b>	BLACK —TO—>	YELLOW	WHITE —TO—>	BLUE	BLACK —TO—>	WHITE	<p><b>TURN SIGNAL:</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>Pro-One Wires:</b></td> <td style="width: 50%;"><b>HD Wires:</b></td> </tr> <tr> <td>YELLOW —TO—&gt;</td> <td>ORANGE/WHITE STRIPE</td> </tr> <tr> <td>BROWN —TO—&gt;</td> <td>WHITE/BROWN STRIPE</td> </tr> </table> <p><b>STARTER:</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>Pro-One Wires:</b></td> <td style="width: 50%;"><b>HD Wires:</b></td> </tr> <tr> <td>YELLOW —TO—&gt;</td> <td>WHITE/BLACK STRIPE</td> </tr> <tr> <td>BROWN —TO—&gt;</td> <td>BLACK/RED STRIPE</td> </tr> </table> <p><b>KILL SWITCH:</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>Pro-One Wires:</b></td> <td style="width: 50%;"><b>HD Wires:</b></td> </tr> <tr> <td>GREEN —TO—&gt;</td> <td>GREY</td> </tr> <tr> <td>RED —TO—&gt;</td> <td>WHITE/BLACK STRIPE</td> </tr> </table> <p style="text-align: right; margin-right: 20px;">COMMON</p>	<b>Pro-One Wires:</b>	<b>HD Wires:</b>	YELLOW —TO—>	ORANGE/WHITE STRIPE	BROWN —TO—>	WHITE/BROWN STRIPE	<b>Pro-One Wires:</b>	<b>HD Wires:</b>	YELLOW —TO—>	WHITE/BLACK STRIPE	BROWN —TO—>	BLACK/RED STRIPE	<b>Pro-One Wires:</b>	<b>HD Wires:</b>	GREEN —TO—>	GREY	RED —TO—>	WHITE/BLACK STRIPE
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