

**Unobtainium Supply Co**  
When it's NLA, who do you call?



## **Headlight Twist Knob Installation Instructions**

Rev. B  
Effective: 31-DEC-2015

**Unobtainium Supply Co.**  
523 Longley Rd  
Groton, MA 01450  
978.448.2110  
[www.UnobtainiumSupply.com](http://www.UnobtainiumSupply.com)

## Headlight Twist Knob Installation Instructions

These instructions are for twist switches that have contacts that come together in a V at inside the twist knob.

- 1) Note the following:
  - A small round hole in the side of the contact holder. I.e.: the plastic cylinder that is molded onto the end of the headlamp stalk and has the contacts riveted to it.
  - The orientation of the tab inside of the knob relative to the 2 grooves along the hole into the knob. In particular, note which groove is NOT in-line with the tab.
- 2) Verify the following:
  - That the spring and ball each fits freely inside of the hole. If either is even slightly snug, do not try to force it in as it may not be possible to get it out again! Contact me & I'll see if I can locate a slightly smaller ball and/or spring.
  - That the spring is long enough so that the ball barely begins to enter the hole when there is no pressure on the spring. (ie: Most of the ball should be protruding out of the hole). If the spring is too long, clip off 1/2 of a coil & try again. If the spring is too short, cut the 2<sup>nd</sup> (longer) spring to the proper length.
- 3) Insert the cut coil end of the short spring into the hole in the cylinder. (The short spring has a smoothly machined end, and the other end is either smoothly machined, or a cut coil.)
- 4) Slide the knob onto the cylinder until the end of the knob almost covers the end of the spring.
- 5) Orient the knob so that the tab is cross-wise between the two switch contacts, letting the contacts close. (You don't want to jam the tab onto the end of a contact & risk breaking the tab, or bending the contact).
- 6) Align the internal knob groove that is closest to the end of the spring so that it lines up with the spring.
- 7) Press the metal ball down onto the spring & far enough into the hole in the cylinder so that the groove in the knob will slide over the ball, & slide the knob onto the cylinder.

This is the only tricky part as the spring is surprisingly strong, and it can launch the ball so far that you'll never find it! Having a 2<sup>nd</sup> person to slip the knob on while you're holding the ball down might be a good idea.

BTW, the purpose of the ball is to make the switch feel like it is 'clicking into position' when the ball drops into one of the grooves. Twisting the knob forces the ball back into the cylinder until the knob's other groove is over the ball.

- 8) Snap the plastic retaining ring into the knob.
- 9) Test the switch to make sure it works.