

Installation Guide for the Tom Cole Auto-Bolt Hold Open (Auto-BHO)

READ ALL INSTRUCTIONS AND UNDERSTAND THEM BEFORE ATTEMPTING MODIFICATION TO YOUR FIREARM. MAKE SURE YOUR FIREARM IS CYCLING PROPERLY PRIOR TO INSTALLATION OF THE AUTO-BHO

This is a do it yourself (DIY) guide to help you through the necessary modifications to your firearm to install the BHO.

STEP 1 Field strip your unloaded weapon.

Remove the top cover, recoil spring assembly and complete bolt carrier assembly. You will also be required to remove the magazine latch.

STEP 2 Remove the bolt from the bolt carrier. Remove the bolt face from the bolt. Orient the bolt face (picture #1)

STEP 3 Machine a groove .240 deep and .135 wide in the bolt face (picture #2)

STEP 4 Machine a groove .135 wide 50% of the way though the ejector block from the muzzle end of the firearm. (picture #3)

STEP 5 At this time I usually drill into the ejector block pin that was cut in half. And secure it with a spot of weld. (picture #4) or you may replace with a 10-32 machine screw.

STEP 6 Remove the hammer and narrow the side clearance to allow free movement of the new BHO which is twice as thick as the original.

STEP 7 Remove and replace the existing BHO spring with the new left hand spring supplied with your Auto-BHO.

STEP 8 OPTIONAL *Do this step with the Deluxe Model Only*

Cut the slot for the manual release button at this time.

The deluxe kit can be used with the extended tab which will protrude thru the receiver in the same position that the original BHO used or you may cut a new slot and move the button up onto the side of the receiver. (picture #5)

STEP 9 Install the Auto-BHO lever and check for clearance. The lever is slightly oversized and will usually require some fitting. Once you have the lever in place, install the hammer pin. With the lever installed, and the lever spring not engaged, check for function and fit by installing the bolt and carrier assembly and cycling by hand. The lever should just slightly avoid contact- ing both ends of the bolt and carrier at the same time as the carrier is move forward and aft.

STEP 10 The forward Hawk's Beak of the lever must be fit to your firearm. This lever is hardened 4130 steel and will need to be ground to fit. We have found much variations from weapon to weapon and have oversized the device to fit the broadest range possible. Use a grinder and take off small amounts, avoid overheating the metal and reducing the hardness.

STEP 11 Check the magazine clearance, check the bolt face clearance to be sure a round will be picked up by the bolt face. And check that the lever will be below the level of the bolt face upon opening to allow proper engagement of the ejector.

STEP 12 Once you feel you have achieved the proper fit, re-install the fire control group. Install bolt and carrier.

STEP 13 Using a dummy round (Inert) check the functioning, by cycling the action by hand. Once you have the dummy round cycling thru the magazine, into the chamber, and the bolt being locked back by the lever when the round has been ejected, you are ready to re-assemble the firearm and test fire. *NOTE:* I usually test fire before I re-install the magazine latch assembly, you can hold a magazine in place to test fire by hand. The most common problem at this point is the lever has not been dressed down enough to allow the empty to clear the lever so that it will be properly ejected. (picture #6) If your gun cycled properly prior to the installation and now the empty is not being thrown clear you will need to trim the beak of the lever some more. (picture #7)

If after reading these instructions, you feel you would prefer to have your Auto-BHO installed by a professional gunsmith, call the office (740) 942-3175 or email Office@CadizGunWorks.com and we will be glad to install your Auto-BHO for you.

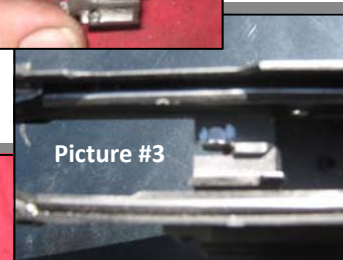
Picture #1



Picture #2



Picture #3



Picture #4

