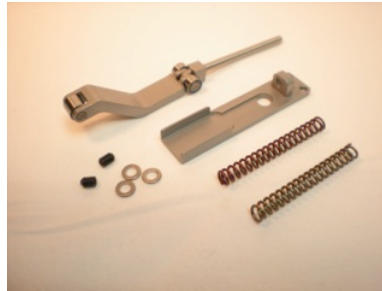


INSTALLING A PIONEER GUN WORKS COIL MAINSPRING CONVERSION KIT

Model 1866 Uberti Rifle



The Coil Mainspring Conversion Kit contains a strut assembly, two coil mainsprings (the red spring is 10% lighter than the other spring), a mounting base, three spring spacers, and two 6-40 setscrews.



Begin by removing the stock. Remove the wood screw that attaches the stock to the lower tang (left photo) and the long machine screw that goes through the upper tang and stock, and threads into the lower tang. Remove the stock and set it aside. Loosen the two screws on the bottom of the receiver enough to relieve the tension on the lever and lifter arm springs inside. There is no need to remove these screws at this time.



Next, remove the screw that holds the side plates on. Loosen the screw that the lever pivots on until it releases its hold on the right side plate, but don't remove it. Turn the rifle over and remove the right side plate, the toggle links, and the lifter arm spring.



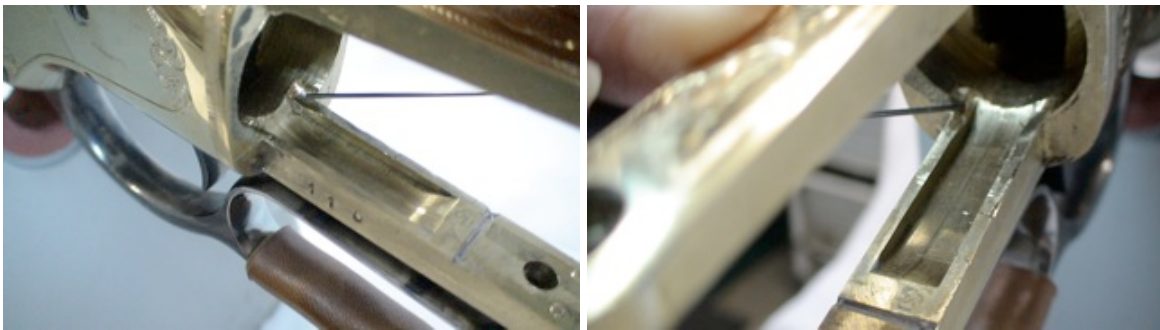
Turn the rifle over. Remove the lever screw, the right side plate, the toggle links, and the lever spring. Pull the lever out the bottom of the receiver, then pull the lifter arm back and out the side of the receiver.



Next, pull the carrier out through the bottom of the receiver. Remove the screw that attaches the mainspring to the lower tang, and remove the mainspring. Now remove the screw that the hammer pivots on, and remove the hammer by pulling it up and out of the receiver.



Next, remove the “T” strut from the hammer by tapping the pin out that holds it to the hammer. It would be a good idea to polish the surface of the inner curve on the back of the hammer. This is the surface that the bearings on the strut ride on. The polishing of this surface will provide a smoother feel to the action.



It's going to be necessary to remove a small amount of material from the area where the lower tang enters the receiver in order to allow the mounting base of the coil mainspring assembly to lie flat against the lower tang when installed.



After re-installing the hammer, install the coil mainspring assembly into place, being sure to position the forward end of the strut against the inner curve on the rear of the hammer. Once it's positioned correctly, attach the mounting base to the lower tang with the original mainspring screw. This screw may need to be shortened to assure that it doesn't interfere with the movement of the spring guide rod. Also, be sure that the guide rod doesn't hit the tang screw when the gun is cocked fully with the lever. This could cause damage to the coil mainspring assembly.



You will have to remove enough wood from the groove on the bottom of the stock to allow enough clearance for the coil mainspring conversion to move freely. A Dremmel tool with a drum sander works well for this. Wood will have to be removed from the front of the stock to the hole where the stock screw passes through.

Check to see if the tip on the back of the hammer touches the strut. If it does, remove some material from the hammer in that area until it clears. Also, before reattaching the stock, check to see if the spring rod touches the stock mounting screw when the hammer is fully cocked. If it does, grind a little from the rod tip. Be careful not to grind too much, though. Doing so will cause the rod to travel forward too far past its guide when the hammer is fully forward.

After reassembling the stock to your rifle, be sure that the coil mainspring conversion kit moves freely while cocking and de-cocking the hammer by hand. Remove the stock and look to see if there is any evidence that the bearings are rubbing the wood. If you see any marks on the wood, remove more wood from that area. It is essential that there is no interference with the free movement of the assembly.

The spring that comes with your coil mainspring conversion kit was designed to provide enough tension to reliably fire a model 73 or 66 rifle of any caliber. If, after test firing, you find that a little more spring tension is required, use as many of the spring spacers as needed to increase the tension to your liking. We hope that you will enjoy your rifle with our coil mainspring installed. This spring setup should last you for years to come. If you have any questions, please contact us for answers or advice.