INSTALLING A PIONEER GUN WORKS COIL MAINSPRING CONVERSION KIT

Model 1873 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. Remove the screw that holds the side plates on, and then remove the side plates.



Next, remove the lever and lifter arm springs by removing the screws that attach them to the receiver. Remove the left and right toggle link assemblies from the receiver, and the pin that goes through the hole in the lever.



Remove the lever screw and 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 and remove the two screws that hold the lower tang assembly to the receiver.







Pull the lower tang assembly out through the bottom of the receiver. Next, remove the screw that attaches the mainspring to the lower tang and remove the mainspring. Use a punch to remove the pin that attaches the hammer to the lower tang, and remove the hammer from the lower tang.





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.





Next, install the coil mainspring conversion onto the lower tang assembly as shown. Mount it in place with the screw that was used to mount the stock mainspring. This screw will have to be shortened for installation into a rifle with a straight stock so it doesn't rub on the spring shaft. Installation into a deluxe rifle with a pistol grip type stock does not require shortening of this screw. The tensioning screw located just in front of the mounting screw should be screwed all the way in, so it will protrude into the hole in the coil mainspring mount. This will help locate and stabilize the mount.



For installation into a deluxe model 73, screw the two 6-40 setscrews into the two threaded holes in the rear of the mount. Screw them in enough to support the back of the coil mainspring mount, and ensure that the coil mainspring assembly lies flat against the front of the lower tang.



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 back 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.