

SliXprings* - Main

Installation Instructions

This replacement spring system is designed to complement an already properly tuned and short stroked Winchester style 1873 rifle or carbine. Its sole purpose is to provide a faster lock time, a more dependable primer strike and a more durable, longer lasting, smooth cycling competition grade spring operation. It, in most cases, will feel a bit more brisk in the initial cocking action of your rifle, but be assured it will respond much more smoothly throughout the hammer cycle than a normal leaf style spring.

We ask that you, please, read the *Instructions* all the way through before attempting to install the system. ***Due to significant dimensional differences between rifles this unit is NOT an actual "drop-in" and we recommend a qualified gunsmith or Armorer do the installation.*** If you see any part of the process that baffles, scares, or otherwise concerns you, please take it to your "Fixer". You will need: a basic well fitting set of screwdrivers to disassemble the rifle; a good set of pin punches to remove and re-install the pivot pins; a fine saw, rough file or rasp to trim the nose of the stock; a drill press and, **maybe**, a flat file to fit the hammer into the yoke of the frame, a small round file to elongate the main spring through screw bore, and/or a set of inletting tools or a mill to deepen the inletting. And, oh and yes, the infamous Dremel tool.

Basic Instructions:

1. Unload the rifle
2. Remove the butt stock
3. Disassemble the action
4. Remove the lower Tang/Trigger Frame
5. Remove the main spring and hammer
6. Remove the existing "Stirrup" pin and stirrup from the hammer and install the new 'hook.
7. Remove the tension screw

NOTICE: This unit will NOT readily fit the older style trigger/tang frame and some of the Border Rifle lower tang frames (as pictured on the bottom) without modification to match the radius of the Yoke Block (note the line) and remove the step in the frame.

Figure #1



There are obvious differences between the Straight stock and some early and Border Rifle designs.

The straight stock is more easily installed (see bottom tang in Fig. #3) The Border Rifle with the curved Trigger tang is more complicated. You may have to machine the correct radius (see Fig.#1) **and** you **WILL** have to elongate the main-spring through hole so the screw will thread **straight up** into the Yoke Block (see Fig. #2)

Figure #2 Before and After Elongating main spring screw bore.



Straight Stocks: First, **remove the 4-40 set screw** from the rear of the Yoke. Set the Yoke Block on your tang. Take your original tension screw and start it from the top and tighten only part way. Then start your main spring screw from the bottom, again only part way. Be sure the Yoke Block is centered on your tang frame **then** tighten the screws, beginning with the tension screw. Because of the excessive tolerances on different rifles, some fitting for screw alignment may be necessary, you may have to drill the main spring bore hole.

Border Rifles: Set the yoke block on your tang. Insert your original tension screw loosely from the top. While clamping the Yoke Block firmly flush with the front of the trigger frame against the radius, carefully adjust the set screw to just touch the trigger frame. Now snug the tension screw and install your main spring screw. **Carefully**, alternate tightening the two screws until the Yoke block is properly aligned and flush with the tang when tight. You may have to re-adjust the set screw as you tighten the other two.

Please go carefully!

Figure # 3: The Yoke Block unit correctly installed. Be sure to check that the stock tang screw will thread into the tang. Some of the series of tang screw bores are not aligned and centered. You may have to modify either the screw head or the hole. (notice the set screw positioned at the rear of the top Frame)



Step 2: Inlet the “Nose” of the Butt Stock:

Figure # 4



Figure #5



Remove the tang through screw and insert the unit into the stock. Use a scribe or sharp pencil to mark the area to be removed (see fig. #4) then, remove the excess wood all the way to the existing relief line. You can use whatever tools you have to trim the nose flat with the shoulder of the Butt Stock (see fig #5). A simple wood rasp will do it in about two minutes, a small fine toothed saw will take about the same time. Be careful! Some inletting may be necessary later to get the stock to fit.

Step 3: Exchange the Hammer Stirrups. Notice the new “Stirrup” needs to have the “Hook” facing toward the hammer (see fig. #6). Check that the pin will pass freely through the hook, drill as necessary and be sure to *re-peen* the hook pin!

Figure # 6



Step 4: Assemble the Hammer and Axle

Figure # 7 **Properly Assembled SliX-Main System, ready to install**



With the trigger full rear and the hook engaged, lean the hammer up and forward as you insert the hammer pin (drilling the pin bore with a #8 or #9 drill makes it a lot easier). Leave the hammer forward and then insert the selected Spring Axle. Be absolutely sure the spring coils are **inside** the tang frame and the Spring Axle is flush with each side of the frame. Now cycle the hammer to be certain it clears the Yoke Block. File to fit as necessary, pull the hammer to full cock, and you are ready to put it all back together.

Warnings!!! Do **NOT** cock the hammer without the Spring Axle in place!!!

Do **NOT** use a smaller axle than is what is supplied with the kit.

Yes, it will be smoother and lighter, but that isn't the point of the Kit. It **WILL** cause premature "Set Fatigue" with the spring and it will be obvious that it was run without a proper axle.

Step 6: Reinstall the trigger frame/lower tang, assemble the rifle and put it to work.

Be advised that TK4B Enterprises assumes no responsibility or liability for any damage caused by improper installation or use. Except for defective material, there is no warranty expressed or implied.