

INSTALLATION OF THE SHOOTINGSIGHT LLC SCAR TRIGGER

CONTENTS. This package contains a hammer, a trigger assembly, a hammer spring, and a trigger spring. If any component is missing or damaged, do not try to install a partial kit, or disassemble the trigger to attempt repair. Contact the vendor for a replacement. Also enclosed is a wrench, these instructions/safety warning, and a warranty.

1. **WARNING. Always verify the rifle is unloaded before working on it.** Some of the items in the trigger group contain springs or other parts that can pop out unexpectedly. Wear safety glasses when working on trigger group parts. These instructions are meant as a guide for a qualified armorer or gunsmith. They are not meant as a complete procedure for someone who is not properly trained to do trigger work.
2. **Disassembly.** Assure that the rifle is unloaded. Separate the upper and lower receivers. Cock the hammer.
 - a. Remove the right side safety selector lever, then twist/pull the safety selector cam out the left side of the rifle. Be aware that there are a detent spring, and detent, under the safety selector. These can remain in place, but do not invert the lower, or they can fall out and get lost.
 - b. De-cock the hammer slowly, by holding it as you pull the trigger. Do not let it snap forward and impact the receiver.
 - c. Remove the left side locking plate by sliding it backward, then swinging the front edge up.
 - d. With the hammer forward, remove the hammer pin from the left side to release tension on the hammer spring.
 - e. If there is a right side locking plate, slide the hammer spring support slightly to the left to create a gap between the receiver wall, and swing the right side locking plate up. There is no need to remove the front pin from the right side plate. Re-insert the hammer spring guide in the receiver. If there is no right side plate, skip this step.
 - f. Remove hammer and hammer spring assembly.
 - g. Remove the trigger pin from the left side and remove the trigger, disconnect, disconnect spring, and trigger spring. **Caution**, these components are under tension and can eject forcibly once the pin is removed. Check all components in the trigger group for serviceability. Repair/replace any parts, as necessary.
3. **Insert the ShootingSight trigger.** Apply a thin film of grease in the trigger pivot hole and on the trigger pin. Use the provided trigger spring, which will result in a total pull weight of approximately 4.5 to 5.0lb. Easiest re-assembly is to partially slide the trigger and trigger spring into position, and push the trigger pin in part-way, through the spring loop. This traps the trigger spring before pushing the trigger fully down to line up the trigger pivot hole. Push the trigger pin all the way through the trigger/spring assembly, assuring that the trigger pin passes through the coils on both sides of the trigger spring, as well as through the pivot hole in the trigger. After installation, pull the trigger to assure it swings freely without binding, and that the trigger spring returns the trigger to its forward position. Note that if you have an after-market grip, it is possible the grip screw projects into the receiver, and bumps against the trigger. If this is the case, replace the FN grip screw with the supplied 6mm grip screw, which is shorter.
4. **Replace the hammer spring.** Replace the FN spring with the supplied ShootingSight spring. Assure it seats fully forward on the spring guide.
5. **Insert the ShootingSight hammer.** Apply a thin film of grease in the hammer pivot hole. Seat the back of the hammer spring in the spring guide, and engage the front end of the spring guide on the hammer. While holding the hammer vertical, and allowing it to rest against the front wall of the trigger well, slide it downwards till the pin holes align. Insert the hammer pivot pin. Verify that the hammer moves without binding. Make sure that the hammer is fully to the right on the pin, leaving a narrow gap on the left side for the lock plate to engage.
6. **Replace side locking plate(s).** If you have a right side locking plate, re-engage it into the hammer spring guide before inserting the hammer pivot pin. Engage back of the left plate in the locking groove on the hammer spring support, slide all the way back, pivot it down, so it fits in the gap between the hammer and the left receiver wall. Then slide locking plate forward.
7. **Cock the hammer and insert safety selector from left side.** This is easiest done by orienting it so it is in the 'fire' position. Use finger pressure to position the shaft above the detent, press down on the shaft to compress the detent, and slide the safety fully into position.
8. **Adjustment: Warning, incorrect adjustment can cause the trigger to not function as intended, possibly creating a dangerous situation. If you are not competent to adjust a trigger and verify its correct function, take it to a gunsmith for correct adjustment.**
 - a. **Second stage sear engagement.** The screw at the rear of the trigger controls second stage creep. Screwing it in will decrease second stage sear engagement, screwing it out will increase second stage sear engagement. Cock the hammer, and pull the trigger to determine if there is a second stage, or if the hammer releases without a second stage (hold hammer to prevent it snapping on lower receiver). If there IS a second stage, screw in the screw, in ¼ turn increments, to determine when the second stage disappears. From that position, unscrew the screw by 1 full turn to set the second stage creep properly. If the initial setup has NO second stage, unscrew the setting screw in ¼ turn increments to find where the second stage just contacts the trigger prior to release of the hammer, then unscrew it another 1 turn. Loctite is not necessary for this screw. The second stage is intended to give the user an additional pressure point during trigger pull, to alert them that the hammer is about to be released. Because this setting is adjustable, it is subject to being mis-adjusted such that it might not provide this additional pressure point prior to discharge. The second stage mechanism must therefore never be relied upon as a primary safety mechanism to prevent an accidental discharge. The installer of this trigger must verify that the trigger still functions correctly and safely.
9. **Function/Safety Check.** After reassembly, verify that all components (hammer, trigger, and disconnect), all move freely without binding. Verify that after cocking, the trigger still has a second stage. Verify that after pulling up to the second stage and releasing the trigger without having dropped the hammer, the trigger returns to the full-forward position without hanging up or sticking. Verify sear function by cocking the rifle while the trigger is held back. Check that the sear catches the hammer, check that the trigger resets when released, check that the hammer is not released during reset of the trigger. Following this test, pull the trigger to verify that the hammer is released properly. Verify that the safety is functioning correctly by cocking the rifle, engaging the safety, and pulling the trigger to make sure the hammer does not fall. Disengage the safety with your finger off the trigger, making sure the hammer does not fall upon safety disengagement. Pull the trigger and make sure the hammer does fall. With the hammer in the forward position, verify that the safety will not engage. If any of these tests fail, do not shoot the rifle, as it might be unsafe. Have a qualified gunsmith or armorer repair the defect before attempting to use.