## **INSTALLATION OF THE SHOOTINGSIGHT S1S AR-15 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, use substitute parts, or disassemble the trigger to attempt repair. Contact the vendor for a replacement. Also enclosed are two pivot pins, a tapered installation pin, these instructions/safety warning, and a warranty

**WARNING.** Always verify the rifle is unloaded before working on it. Some of the items in the trigger group contain springs under tension, and small parts that can pop out. Wear safety glasses. 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. If you are not competent to install and safety check/function check a trigger, have the installation done by a gunsmith/armorer.

- 1. **Disassembly**. Assure that the rifle is unloaded. Separate the upper and lower receivers. Cock the hammer.
  - a. Remove pistol grip, allowing the removal of the spring and the detent for the safety cam.
  - b. Remove the safety cam.
  - c. Hold the hammer to prevent it from snapping against the lower receiver, and pull the trigger, bringing the hammer forward.
  - d. Use a pin punch, or other suitable object, and remove the hammer pivot pin. The hammer will now come out. Caution, the hammer spring is under tension, even when it is forward.
  - e. Remove the trigger pivot pin, and the trigger will lift out.

## 2. Insert the ShootingSight S1S trigger.

- a. Apply a thin film of grease in the trigger/hammer pivot holes and on the pivot pins. Use the provided trigger spring.
- b. Insert the trigger and the trigger pivot pin. Check for free movement.
- c. Insert the safety. Note that for the S1S trigger, the safety must be inserted BEFORE the hammer.
- d. Insert the safety detent, the detent spring, and re-attach the pistol grip, being careful not to kink the safety detent spring.
- e. Lay the legs of the hammer spring on top of the trigger pivot, and align the hammer. The included hammer spring is an extrapower spring, so it will take some finger strength. If it is too strong, use a pair of vise grips to clamp the sides of the hammer to allow a better grip. Do not apply the vise grip front-to-back, or on any of the sharp sear edges.
- f. The tapered installation tool is helpful here: as soon as the holes are partially aligned, insert the pointed end of the tool. Thread the tool through the hammer, and out the opposite hole in the receiver. The fat end of the taper tool is approximately the same diameter as the pivot pin, so as the pin slides through the receiver, it will pull the hammer into alignment. Just as the tapered pin begins to pass fully into the receiver, the holes will be lined up so the hammer pivot pin can be inserted.

## 3. Adjustment: There is no adjustment possible with this trigger. It is made to function correctly with the pin spacing used on mil-spec receivers.

## 4. Function/Safety Check. After reassembly,

- a. Verify that all components (hammer, trigger, disconnector, and safety selector), move freely without binding.
- b. Verify that after cocking, the trigger has a second stage.
- c. 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.
- d. Verify sear function by cocking the hammer 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.
- e. Following this test, pull the trigger to verify that the hammer is released properly (prevent the hammer from hitting the receiver).
- f. Verify that the safety is functioning correctly by cocking the hammer, engaging the safety, and pulling the trigger to make sure the hammer does not fall.
- g. Disengage the safety with your finger off the trigger, making sure the hammer does not fall upon safety disengagement.
- h. Pull the trigger and make sure the hammer does fall after the safety is disengaged.
- i. With the hammer in the forward position, verify that the safety will not engage.
- j. Note that the safety is a mechanical part, and like all mechanical parts, can fail. Never count on the safety to prevent the gun from going off if you pull the trigger. Never point a gun at anything you do not intend to shoot.

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.