

INSTALLATION OF THE SHOOTINGSIGHT DMR TRIGGER

1. **Dis-Assembly.** After verifying the rifle is unloaded, remove the trigger group from the rifle. Uncock the hammer. Put pressure on the back of the trigger assembly, and remove the trigger pin. Remove hammer spring and the old trigger. Check the hammer spurs, and all other components in the trigger group for serviceability. Repair/replace any parts, as necessary.
2. **Re-Assembly.** Back the spring plunger finger tight as far back into the threaded hole as possible without forcibly jamming the threads. Re-assemble the trigger group with the ShootingSight trigger and re-insert the trigger pin. It hurts your hand less if you remove the adjustment screw in the disconnecter when compressing the hammer spring. If you are using a lightweight hammer, make sure to use the provided spring guide with the 'nose' installed in the high position.
3. **Check clearance.** Verify the trigger has free movement. Areas where the trigger might drag include where the trigger bow passes through the slot in the trigger housing, or where the top of the trigger slides between the hammer hooks.
4. **Second Stage Sear Engagement Adjustment.** Cock the hammer with the trigger pulled, and make sure the disconnecter catches the hammer, then transfers it to the trigger sear to re-set when you release the trigger. If it does not, the adjustment on the sear is either too far out, or you did not re-insert the adjustment screw after assembly. Screw the set screw in until the trigger resets. Next, pull the trigger up to the second stage, but do not pull far enough to release the hammer. While cycling the trigger between first stage and second stage, slowly tighten the disconnecter adjustment screw further, until you lose the second stage, and the hammer drops before the trigger hits the second stage. Finally, back the disconnecter adjustment screw out by at least 1/4 turn from the position where the second stage is lost. At this setting, there should remain about 0.005" of sear engagement, and felt creep should be virtually zero. Remove the adjustment screw, add Loctite to the screw threads, and re-adjust it, as described above. Allow the Loctite to set up, per the manufacturer's instructions.
5. **Pull Weight Minimum Setting.** With the hammer uncocked, open the trigger guard ½ way, and while assuring the safety is in the forward (fire) position, insert a pencil through the safety opening to block the trigger guard from closing. Insert the allen wrench into the back of the spring plunger, and screw it forward until you feel resistance when the plunger body contacts the hammer spring housing. The trigger might be forced back when this happens. **IMPORTANT** – back the plunger off by ½ to ¾ turn from the point where the spring plunger body contacted the spring housing to assure the plunger body does not inhibit proper movement of the trigger. Check that the trigger returns easily and un-inhibited to its full forward position when it is released. This position of the spring plunger represents the **minimum** pull weight that can be achieved using this trigger and the other components in the trigger assembly. Note that it is possible to set the pull weight so low that the trigger will not cycle properly, or might not reset. Do not attempt to adjust the trigger weight so low that it does not function correctly.
6. **Pull Weight Adjustment.** It is not recommended to set this trigger lower than 4-1/2lb, which is the minimum allowed Service Rifle weight, per NRA competition rules. Use a set of trigger weights to determine if the minimum trigger pull weight is above or below 4-1/2 lb. If it is below 4-1/2 lb, back out the spring plunger to achieve a 4-1/2lb pull weight. If pull weight is above 4-1/2 lbs, check if there are rubbing components in the trigger housing. Do not attempt to adjust the spring plunger further forward to reduce weight, or it may inhibit proper trigger function. After trigger weight is set, back the spring plunger out several turns, add Loctite to the threads, and re-tighten/re-adjust it. Allow Loctite to set up per manufacturer's instructions before using the trigger.
7. **Function/Safety Check.** After reassembly, verify that the trigger's pull weight still meets a 4-1/2 lb minimum. 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 disconnecter function by cocking the rifle while the trigger is held back. Check that the disconnecter catches the hammer, check that the trigger resets when released/reset, check that the hammer passes from the disconnecter to the trigger sear and does NOT follow the bolt forward. 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, and finally, pull the trigger and make sure the hammer does fall. If any of these tests fail, do not shoot the rifle, as it might be unsafe. Have a qualified gunsmith repair the defect before attempting to use.
8. **Hammer Installation.** If you got a hammer with your trigger, the hammer comes with a replacement spring guide. The spring guide has an offset nose. This spring guide must be installed with the nose offset upwards, away from the hammer pivot.
9. **Known issues:**
 - a. Trigger won't reset – Adjustment screw in disconnecter is missing or adjusted too far out. Or, spring plunger is much too far in, so it is bottomed out. There is excessive drag because the trigger is rubbing somewhere.
 - b. Pull weight is much too low/No second stage – adjustment screw on disconnecter is set too far forward.
 - c. Safety is difficult to engage. – The left side of the hammer has a lug, which acts as a detent, and the 'hook' of the safety needs to snap over to engage. Occasionally, shooters will find that while the safety still works, it is difficult to engage. The solution is to polish the tip of the lug on the hammer, or the tip of the 'hook' of the safety.

Second Stage
Sear engagement adjustment screw

Spring Plunger
for pull weight adjustment

