

Installing the GRT-4G trigger in Gamo guns with the plastic triggers. These instructions apply to both spring guns and gas ram powered guns.

Be sure to read the special note near the bottom of these instructions when installing in guns using a gas ram. If not properly installed, your gun will not cock when assembled.

CAUTION

Please read this in it's entirety before beginning the project.

Reading this entirely, maybe even two or three times, will make it much easier and understandable as you are working on your gun. Although it looks like a lot when reading, it's really quite simple. I try to be as thorough as possible to make it easier for you and for it to be an enjoyable project. Take your time and think about what you are doing as you are doing it.

WARNING...WARNING...WARNING

DO NOT ATTEMPT to remove the plastic cover on the trigger assembly (under the glide and held in place by the two small screws) without first removing the trigger module from the action first. To do so will cause immediate and irreparable damage to the cover and trigger assembly and will cause the trigger to no longer function properly. Also, the damaged parts are not available from Gamo or any other source. YOU HAVE BEEN WARNED and I can't help you.

Important: If you do not possess some mechanical and tool skills, or do not have the correct tools needed to do this project safely, don't. Remember, unless done properly, it can be dangerous. If in doubt, it would better left to a professional.

Be careful not to lose any parts because it is very difficult if not impossible to get Gamo replacement parts.

You must use a spring compressor for the GRT-IV installation if installing a new spring during an installation or tune procedure.

It is suggested to use a spring compressor for disassembly and assembly. Keep in mind that there is a considerable amount of pressure here and up to from 2 to 4 inches of relief before the spring is completely decompressed.

That said, it is possible to install the GRT-4G trigger blade without a spring compress and if a new spring is not going to be installed. This is because the spring has been set and is shorter than a new spring. It does require two people to make it easier and for safety reasons. **PLEASE..... if in doubt, use a spring compressor.** More later regarding this.

Also, if you have a gun with a gas ram or (Gamo IGT), although you need to only depress the trigger block a few thousandths to relieve the pressure on the pin enough to remove the pin, it requires a lot of applied pressure. It also requires a lot of pressure to reinstall the pin. It requires depressing the trigger block about 1/16 to 3/32 of an inch to reinstall the pin. It does take a lot of pressure to depress it, can be difficult and I suggest using a spring compressor.

If installing a new spring during assembly, a spring compressor is a must to avoid a possible accident and injury.

The first step of course is disassembly. **Be sure that the gun is not cocked.**

1. Remove two stock screws at the forearm. Remove the rear trigger guard screw. The screws will differ from gun to gun but most need either Phillips screw driver or #25 Torx screw driver. The #25 screw driver is available at just about any hardware store.

NOTE: On many guns, the screws are covered by pads on the fore stock that pop off by slipping a small screw driver under them enough to get a grip on it and popping them off. When reinstalling, just pop them back on.

Separate the action and stock, and remove the plastic end cap from the rear of the action if applicable.

NOTE: Be aware of the little roller and washer on the side of the cocking linkage and the little “u” shaped glide that sets in the notch on the under edge of the cocking linkage. It acts as a glide between the action and the linkage to keep it from rubbing metal to metal. **DO NOT LOSE THESE PARTS.**

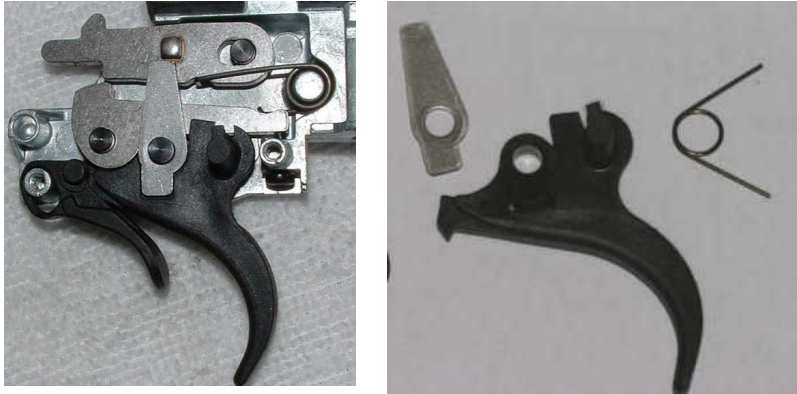


Take notice of the bear trap link (the long wire attached on one end to the cocking linkage and other end connected the plastic guide/slide on the side of the trigger). You will see on the side of the plastic guide/slide and a torsion return spring. Carefully note the orientation of the torsion return spring and how it is installed and to be reinstalled. Remove this spring and set it aside.

Lift the front edge of the bear trap plastic glide that the beartrap linkage is connected and it slide out of the trigger housing.

Note the large cross pin that passes through the action and trigger block. This pin must be removed to release the pressure of the spring in the action and remove the trigger assembly.

pocket blade screwdriver and grind it down just a tiny bit at a time to a good fit catch the screw and unscrew them. We did it to test it and it was no problem as they are not real tight due to being screwed into plastic and are so small. (The #8 Torx screw driver or bit should be available at most good hardware stores) Carefully work the cover off of the trigger exposing the internals.



Remove the little metal bear trap block that sets on top of the plastic trigger. Note it's orientation on the trigger.

Using a small screw driver push the spring loaded intermediate lever up (see picture below) towards the sear lever and lift out the plastic trigger. **Note that there is a torsion spring inside behind the trigger that will come out with it.** (This spring will not be reinstalled with the GRT-4G trigger).

If the plastic safety switch did not lift out with the trigger, remove/lift out the plastic safety switch. Note the orientation of the switch and the little hole that the safety pivot sets in. Note how the nose of the trigger sets in the slot of the safety switch.

PLEASE NOTE THAT THE LATEST PRODUCTION OF THE GRT-4G TRIGGER BLADE DOES NOT HAVE THE 1ST STAGE ADJUSTMENT SCREW. It will also no longer have the hole where the spring is visible.

The next step is a little tricky and requires that the safety switch and trigger be installed at the same time almost as an assembly and at the same time raising the spring loaded intermediate lever to clear the trigger and may require an extra set of hands depending on your dexterity. One to hold the lever up while installing the trigger.

Using your small screw driver push the spring loaded intermediate lever up again towards the sear lever. With the lever pushed up, install the GRT-4G trigger on the trigger pivot and the safety switch with the nose of the trigger setting in the slot of the safety while inserting it in its pivot hole. A little tricky huh...lol...



Install the little metal bear trap block on the new trigger in its proper orientation so that it sets into the side of the trigger. It may be a tight fit and may need to be tapped with a small hammer to seat. It should seat just about flush with the surface of the trigger. **NOTE:** Another suggestion if it is a tight fit Before installing the trigger into the housing, you can lay the trigger on a flat surface, position the block in place and gently tap it into the recess and then install it as an assembly.

Install the supplied fat pin into the fat pin hole of the trigger with the small side of the pin facing out.

Set the safety switch in the engaged position. Reinstall the cover the cover and screws.

NOTE.... Check this: With the safety off, move the trigger back and forth to be sure that it is free moving and that there is no interference. Be sure that the fat pin moves in the slot and does not come in contact with the surface edge of the slot in the cover. If it does, you may need to file the surface slightly for the needed clearance. **Also, the safety switch is pretty solid and does take a little effort in some triggers to switch on and off. This is normal.**

ALSO.... Check this: Be sure when moving the trigger back and forth that the bear trap block that sets into the side of the trigger is not rubbing on the inside of the plastic cover. If it is, remove the cover and reset the bear trap block so that it is setting deeper in the recess of the trigger.

AND FINALLY.... Check this: While pulling the trigger back and forth, be sure that the nose of the trigger that sets in the slot of the safety switch is not coming in contact with the plastic in the switch. Although there have been no incidents of it, it was something that we thought might possibly be encountered.

Now let's check the adjustments

PLEASE NOTE THAT THE LATEST PRODUCTION OF THE GRT-4G TRIGGER BLADE DOES NOT HAVE THE 1ST STAGE ADJUSTMENT SCREW.

There are two reasons for this. One is that the geometry is such that the optimum adjustment has now been built into the trigger blade and two, it prevents accidentally disabling the safety.

The trigger pull weight cannot be adjusted.

Initial adjustment check.... Although you're GRT-4G trigger was pre-adjusted prior to shipping, let's check it.

The stainless steel slotted screw is the second stage adjustment.

Check to see when you move the trigger back and forth if you feel the second stage bump. If not, adjust the second stage screw back and forth in very small increments until you feel it. The second stage will be a slight bump. Keep in mind that the trigger pull weight will be heavier and the bump feel much lighter when it is actually under a load and may need to be readjusted once installed. The final feel may be totally different and to be expected.

Reinstall the spring guide, plastic spring block and steel washer in the trigger block. Also, be sure that the rubber inserts are in the cross pin holes on each side of the trigger.

Reinstall the trigger assembly by assembling it in the reverse of the disassembly in the instructions above. Reinstall the safety glide and then install the torsion return spring for it.

Reinstall the trigger into the gun and reassemble the action using the reverse assembly process that you disassembled it with.

IMPORTANT NOTE..... IF YOU'RE GUN HAS A GAS RAM POWER PLANT

When reinstalling the trigger block during reassembly of a gun using a gas ram power plant, be sure that the silver rod end and bushing of the gas ram that goes up inside the trigger housing is properly aligned and seated up inside the trigger housing. If it is not properly seated, your gun will not cock when done.

You may want to fine tune your trigger to your feel. When making adjustments to the second stage, do it in very small increments

That's it... your done. Have fun, happy shooting and be safe.

SEE THE TROUBLE SHOOTING GUIDE BELOW

TROUBLE SHOOTING SECTION

YOUR GUN WILL NOT COCK

This is very rare if all else has been installed properly but if it happens, it is usually because the trigger is not properly adjusted and the adjustment screw is adjusted in just a little too far. Simply turn the slotted 2ND stage counterclockwise screw slightly in very small increments and checking as you go. It normally should not need to go more than ¼ turn. Keep in mind where you started so that you can return to that point if need be.

If that does not resolve the problem, then you probably have an incorrect installation problem.

OTHER ISSUES

The biggest problems will be the fact that the parts are stamped or plastic and the variance in tolerances in the factory parts that may cause clearance interference. This can cause the trigger to hang up or to not be free to move forward after the gun has been cocked and fired. They were covered above but here they are again.

NOTE.... Check this: With the safety off, move the trigger back and forth to be sure that it is free moving and that there is no interference. Be sure that the fat pin moves in the slot and does not come in contact with the surface edge of the slot in the cover. If it does, you may need to file the surface slightly for the needed clearance.

ALSO.... Check this: Be sure when moving the trigger back and forth that the bear trap block that sets into the side of the trigger is not rubbing on the inside of the plastic cover. If it is, remove the cover and reset the bear trap block so that it is setting deeper in the recess of the trigger.

AND FINALLY.... Check this: While pulling the trigger back and forth, be sure that the nose of the trigger that sets in the slot of the safety switch is not coming in contact with the plastic in the switch. Although there have been no incidents of it, it was something that we thought might possibly be encountered.

*** If you cannot engage the safety.** It is unlikely this will be encountered but if so... If pulling the safety to the safe position and it will not engage. **NOTE: The safety switch is pretty solid or stiff and does take a little effort in some triggers to switch on and off. This is normal.**

Looking at the tip of the hooked nose of the GRT-4G trigger you will see the sharp tip on the nose. Using a small file, simply file that sharp nose surface edge evenly and very very slightly. It will require only a thousandths or so of surface removal to provide the clearance needed.

WARNINGImportant Safety note regarding balked fires:

When starting to shoot and a decision is made not to follow through and you release the trigger (balk fire), the trigger does not reset.

If you start to pull the trigger, but then release it without firing, the sear will not reset to its original (as-cocked) state automatically. This may leave your rifle on the verge of firing and therefore in an unsafe

condition where the slightest jolt or vibration might cause a misfire. Therefore, if you begin to take a shot, but then change your mind after having already started to pull the trigger, it is important to always re-cock the gun to reset the sear.

The non-resetting sear is not a side effect of the GRT-4G trigger blade modification. It is like that in all Gamo rifles and Gamo clones whether the new models or early models. You probably never noticed it before only because the blade return spring of the unmodified trigger creates the illusion of automatic reset when the trigger blade is released. A partial pull-through has always had this potential for leaving the sear in a state of partial disengagement. I suggest that you always re-cock a gun whenever a trigger is even touched without actual firing on any gun.