

Hair trigger fix

7/21/13

READ THIS IN ITS ENTIRITY BEFORE STARTING

WARNING...WHEN WORKING ON YOUR TRIGGER, DO NOT REMOVE... I REPEAT... DO NOT REMOVE ANY PINS OTHER THAN THE TRIGGER PIVOT PIN.

NOTE: There are several things that can cause this problem and is pretty easily remedied usually. These suggestions would apply to the Benjamin Trail NP-XL and some Crosman rifles that may have a very short pull or hair trigger. **You do not need to remove your trigger block from your gun to do these mods.**

First and easiest. Try turning the small Allen adjustment screw counterclockwise $\frac{1}{4}$ to $\frac{1}{2}$ turn. That fixes many of them. If this doesn't resolve it go, return the adjustment back to where it was and go to the next step.

NEXT: AND THE MOST LIKELY CAUSE. It has been determined that most (but not all) of the hair trigger issues in a very few Crosman and Benji guns and are caused by differences and irregularities in some of the intermediate levers in some of the triggers.

First make sure that the original factory adjustment screw has been removed.

Remove the GRT-III trigger and remove the fat pin.

Turn the little Allen screw in the GRT-III trigger 1 to and $1\frac{1}{2}$ turns counterclockwise. Remember where you started.

Now reinstall the GRT-III trigger with the fat pin removed. Reassemble the gun and test it again.

WARNING..Be aware that the beartrap safety will not be operative now so be sure to hang on to the barrel when cocking and loading and until you have returned the barrel to battery.

If it now functions properly and there is no hair trigger, it means that the intermediate lever is not notched or the notch is not deep enough or maybe not wide enough. You will need to file or use a Dremel Tool to make or increase the notch depth a little deeper (several thousandths) as well as a little wider where the fat pin, as it sets in the trigger, makes contact with the intermediate lever.

Below are two pics of the Theoben/Gamo trigger module. Your intermediate lever may not look like the ones in the pictures and may not have a notch at all but these pictures will give you an idea what the detent/notch looks like, and an approximate location where the fat pin sets relative to the intermediate lever. The location does not need to be precise and you don't want it to set it any deeper than necessary. As you can see, it is not very deep and may need to be a little deeper and wider. Trial and check as you go. It may take a couple of times to get it right.

To determine where the notch should be, with the GRT-III trigger removed, look in the long slot that the fat pin extension moves up and down in on the side of the trigger block and you will see the intermediate lever. You can mark the lever with a pencil or fine tip Magic Marker to determine where the notch should be.

Making it easier to work on.. On most triggers there will be a plastic insert that the original factory trigger adjustment screw screwed into in the rear of the trigger as seen in the picture. If your trigger has one these inserts, remove the adjustment screw if it is still in the insert (it should have been removed during the

installation) and pop the insert out. This will allow the intermediate lever to pop up (it is spring loaded) to be accessed and easier to worked on and without disassembling the trigger. When finished, push the lever down while reinstalling the insert. Reinstall the fat pin and trigger and reassemble the gun and test.



AND FINALLY, one final thing to check if the above fails. This can also be checked at the same time while performing the above.

It is known that in a very few trigger assemblies that a few of the Chinese intermediate levers may be a few thousandths thicker than the normal tolerances in most triggers and just enough to not allow it to seat into the slot of the GRT-III trigger properly. A few thousandths one way or the other can make a considerable difference and the Chinese manufacturers seem to be indifferent to tolerances or quality control. The fix is very simple.

Remove the stock and the GRT-III trigger. Then check to see whether or not the intermediate lever, the one that sets up in the slot of the GRT trigger, sets up inside of and seats in the slot freely and does not hang up in the GRT-III.

On some triggers there may be a plastic insert that the original factory trigger adjustment screw screwed into in the rear of the trigger housing. The insert blocks the lever from popping up. If your trigger has one these inserts, remove the adjustment screw if you have not already removed it during the installation and then pop the insert out. This will allow the intermediate lever to pop up (it is spring loaded) to be accessed and worked on without disassembling the trigger. When finished, push the lever down and reinstall the insert.

With the lever free and popped up it is easy to check the lever clearance by setting the lever in the GRT trigger.

If the lever does not seat into the GRT-III trigger slot properly, using a file or Dremel Tool, file the surface of the sides of the lever down a couple thousandths or enough to allow the lever too properly and freely seat in the trigger slot.

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Thank you and enjoy your GRT trigger.

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