The Ruger® 10/22 Auto Bolt Stop

Problems, Modifications and Fixes

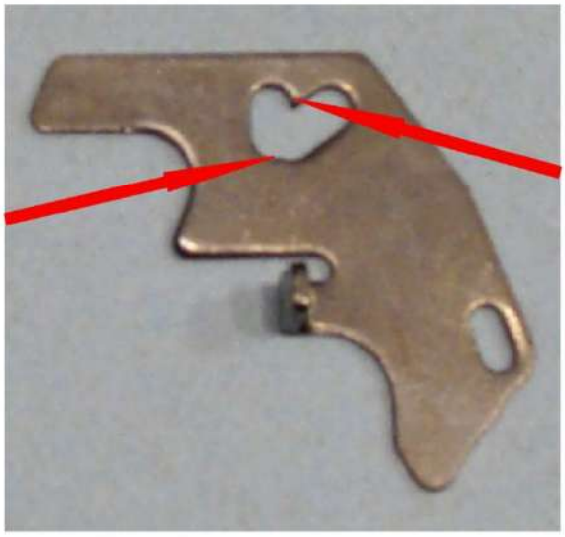
Problem: After modifying the auto bolt stop so that the bolt travels forward when you pull the handle to the rear, the bolt hangs up and will not close.

Overview: There's a simple technique to modify your auto bolt release so that it will travel forward once you pull the handle to the rear. Doug describes this procedure in detail at ***TheWorks1022.com***. However, there is a possibility that the modifications made to the auto bolt stop might not be sufficient to allow the bolt to travel forward. This is appearing in the new polymer trigger housings as well. It appears that the specs are slightly different such that the auto bolt stop needs to re-shaped to allow more vertical travel.

The Fix:

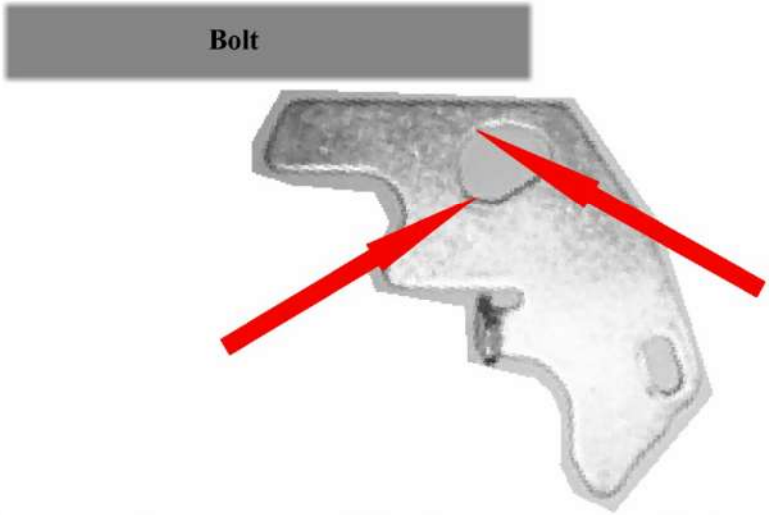
1. Here's what a stock auto bolt stop appears like right out of the box.

Unmodified Auto Bolt Stop. The two areas shown by red arrows must be ground down so the bolt can depress the stop and ride forward.



2. Here's a modified bolt stop. The cuts allow the bolt stop to depress so as to facilitate the bolt traveling over the stop and fully forward.

Modified bolt stop. Both areas (arrows) have been ground down so as to remove the stop that rests on the bolt. Removal of the two points facilitates the bolt traveling forward after the handle is pulled to the rear.



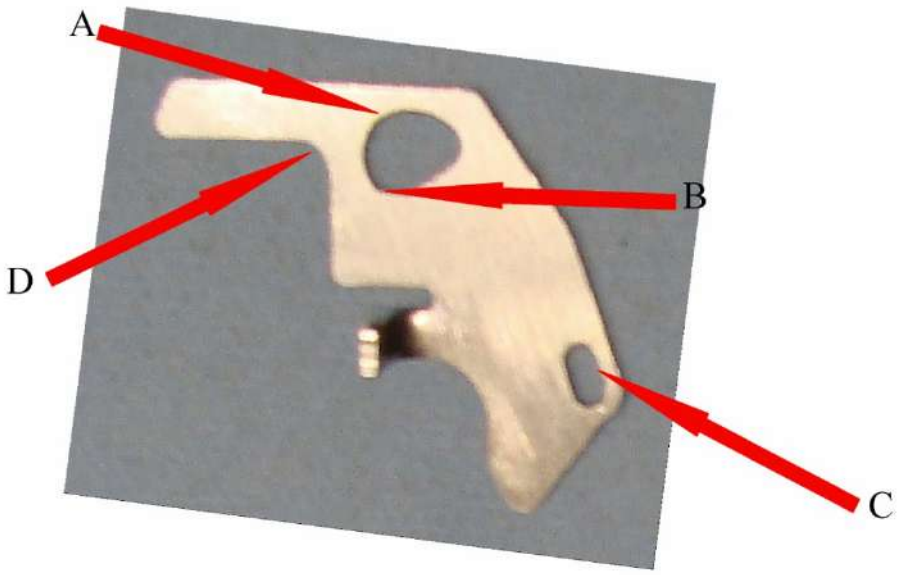
In the event these two modifications are not sufficient to allow the bolt to easily release after pulling the handle to the rear, additional changes to the bolt stop will be required.

3. If after making the modifications to the bolt stop, it will not allow the bolt to travel forward, here are the recommend fixes.
    a. The upper cut: Increase the radius (making it slightly concave) so that it can ride over the hammer pin with less friction. Be sure to polish the area you just cut to allow it to slide as smoothly as possible
    b. The lower cut: Slightly increase the radius of the curve.
    c. The lower pin: Polish the inside of this slot. If it is binding between the lower pin that holds both the magazine release and the bolt release, it will not allow the bolt release to drop free of the bolt.

d. The hammer bushing: Polish the inside of this radius to reduce friction on the hammer bushing.

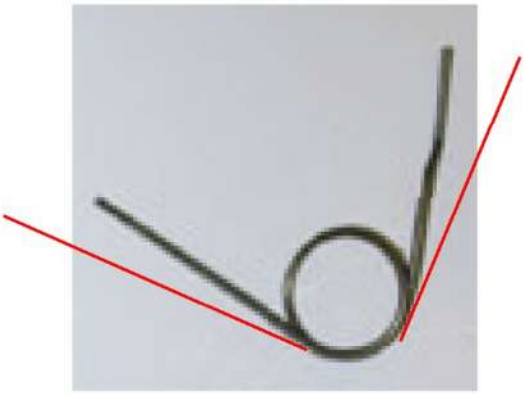
Once these modifications have been made, be sure to polish the outside (left) of the bolt stop with either a cratex wheel or 500 grit paper on a flat surface. Anything to reduce friction will help the bolt stop travel more freely.

A. Upper cut: Increase this radius to reduce friction on the hammer pin
B: Lower cut: Slightly increase this radius
C: The lower pin: Polish the inside of this slot
D: The hammer bushing: Polish the inside of this radius



e. The spring: Tension on the auto bolt stop spring may need to be increased by simply (and carefully) bending the legs outward slightly. This too will push the bolt stop down when the bolt is moving forward. This is shown in the following diagram:

While maintaining the integrity of the loop, bend the legs outward an additional 3/8" to 1/2". This will increase downward tension on the bolt release which will allow it to drop free from the bolt.



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