

Light Primer Strikes/Light hits

I felt a need for this information because I have seen people have a problem with a light hit and the first thing they, or a “helpful” pard, do is grab a screwdriver. Check all of the items below BEFORE adjusting the screw. All of my rifles are tested and adjusted before you get them. I keep detailed records of all of my builds including primer depth, spring measurements and screw turns. Please let me know if you have changed the adjustments and why, so I will be better prepared if you have trouble in the future.

ALL OF THE FOLLOWING INFORMATION IS USED WITH AN UNLOADED FIREARM

- 1 Ammo is often overlooked and **is by far the biggest reason for light hits**. If a primer is slightly high **or not seated all the way** this will cause a light hit. A primer that is not completely seated to the bottom of the primer hole causes the hammer when striking to first seat the primer. This uses up energy that is needed to dent the primer. To test this, I intentionally set multiple primers slightly high and in a safe place fired them. They were compared to ones that were completely seated. My testing showed there is was a 30% shallower dent in the rounds with high primers. This was measured with a travel indicator on a stand that measures 1/1000 of an inch.
- 2 I have included the following information because I found myself getting primers that were not seated all the way. I have a Dillon 650. The black shell plate that the cases rotate around on can cause high primers if the center bolt is not as tight as you can get it and still index the machine. If you think about this, the primers are forcing the plate up and the seat and crimp are forcing it down causing the plate to cock a little. I found that just barely loosening the bolt will prevent this.
- 3 Notice if your hammer is dragging on the sides of the receiver. This may be caused by dirt or wear. Inserting turbine shims, adding clearance or cleaning may eliminate the issue.
- 4 Place an empty case with a good primer that has a felt tip pen’s line on top of the case and fire it in a safe place to determine if it is hitting in the center. An off center hit takes a considerable more energy to detonate.
- 5 Place an empty case in the chamber with the primer removed, close the bolt. Feel the extension for smooth movement. This may require several tries to notice a problem. You should not feel an occasional clicking or scraping. Refer to the bolt maintenance tab if you notice a clicking.
- 6 Open and close the bolt slightly and notice if the extractor is rubbing the barrel when it enters. This can put a bind on the extension.
- 7 Does the bolt close hard when extractor snaps over the case? This can put a bind on the extension.
- 8 Feel the hammer pressure to determine if it feels stiff, light or soft at the forward or rearward positions. This can help in determining which screw may need adjusting. As a general rule of thumb the rear screw will affect the hammers power at the rearward end of stroke and the small will affect speed at the forward end.
- 9 Drop the hammer and listen if it has a snap or a thud. This is also important in determining what screw to adjust.

I hope this helps if you get a light primer strike. Remember a light hit can cause a hang fire, be safe. And please, you can always feel free to call me with any questions you may have.

Lefty Wheeler