

MG42 Barrel Headspace Tutorial

Check Parts List:

1) Bolt with extractor, firing pin, and ejector removed. ****Note that there are a lot of variations in bolts. It is very important to check your bolt with the barrel you are using to verify headspace/safety.**



2) Striker Wedge

3) **Gauges:** 308 and 7.62 NATO are slightly different but can be used interchangeably. It's important to pay attention to gauge lengths rather than names.

(See chart below)

For 7.62 NATO 1.634-1.645 is good

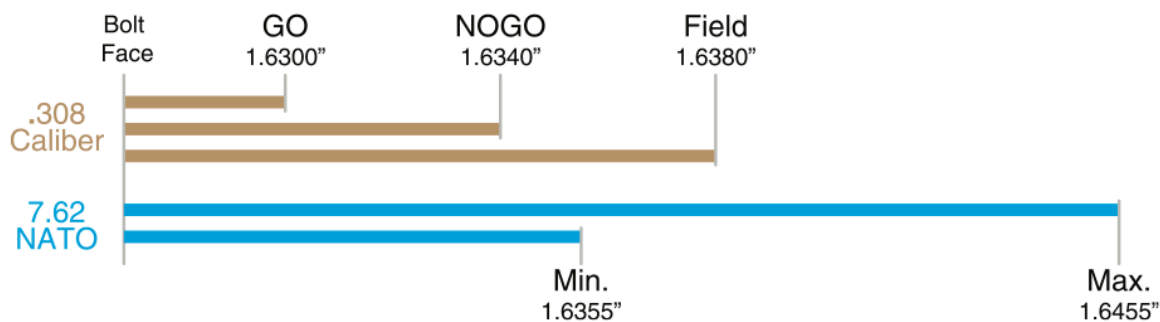
For .308 Win a shorter headspace of 1.63 -1.638 is good.

It's very important to verify headspace with the specific bolt, barrel, and type of ammo you are using. Headspace that is too short can result in very dangerous out-of-battery detonations.

What's the difference between 7.62 NATO and .308 Win caliber Headspace Gages?

The 7.62 NATO chambering has a longer headspace dimension than the commercial 308 chambering. The diagram shows the headspace gage lengths for the .308 Win vs. those for the 7.62 NATO.

.308 Caliber and 7.62 NATO Headspace Gage Lengths



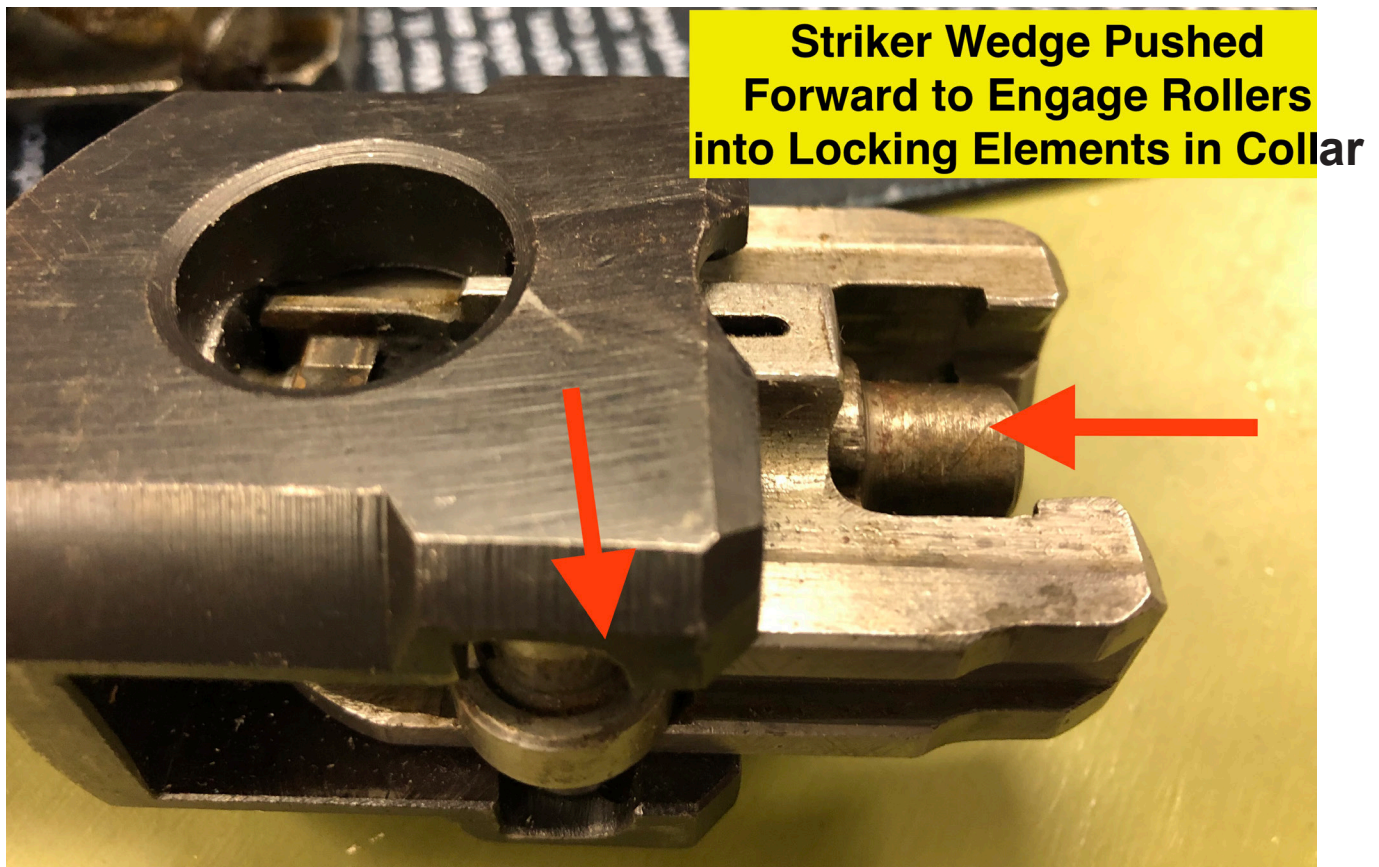
The 7.62 NATO was developed in the early 1950s when the US Government researched and developed a cartridge that was shorter and lighter than the 30-06, with good power and velocity. Soon after, Winchester introduced the 308 Winchester to the commercial market. Although all other case dimensions of the two cartridge cases are the same, one important difference exists: The 7.62 NATO chambering has a longer headspace dimension than the commercial 308 chambering, thus the need to check the rifle chamber with the specific 7.62 NATO headspace gages.

SOURCE:

<https://www.forsterproducts.com>

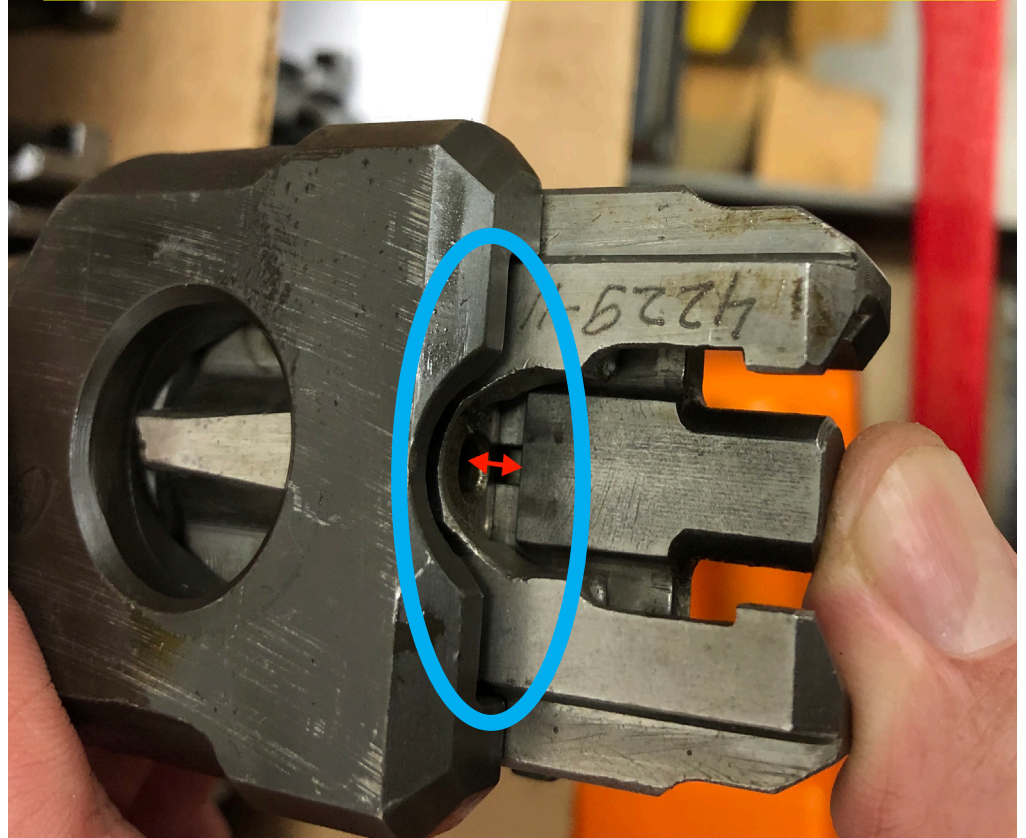
How To Use Gauges To Measure The Barrel-to-Bolt Headspace

1) With gauge in chamber, push the striker wedge forward to engage the locking rollers FULLY into the locking elements in the collar.

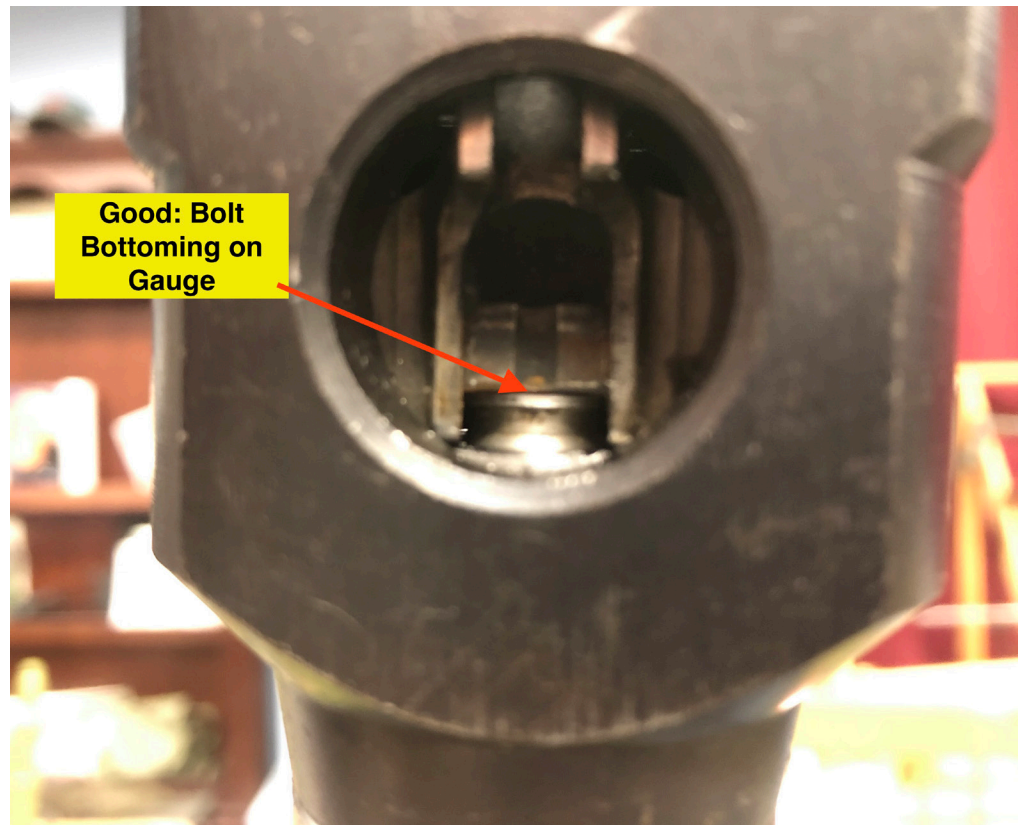


**** If the Striker Wedge cannot be pushed fully forward, the headspace is too short for that gauge.**

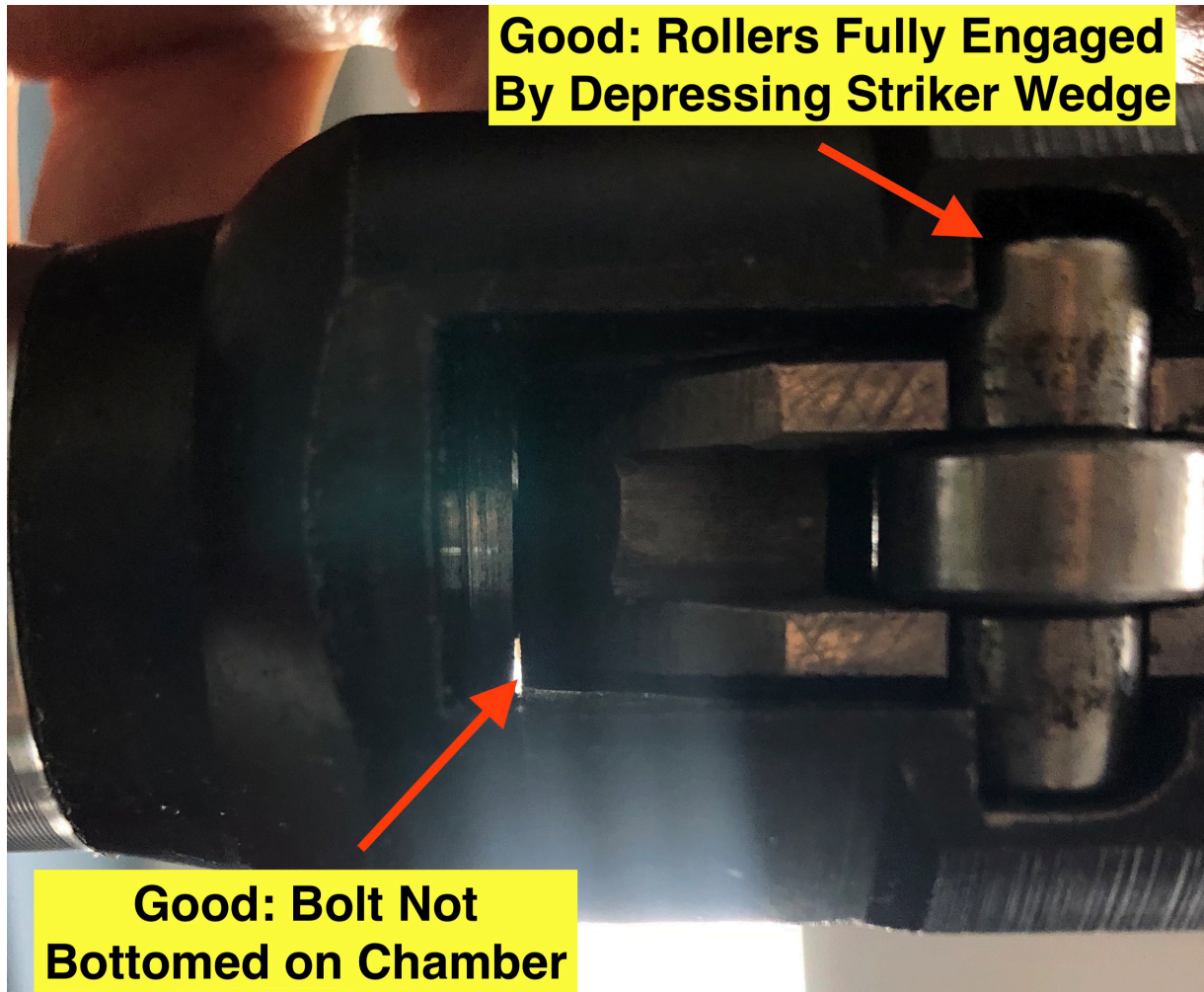
Locking Rollers Cannot Engage in Collar with Striker Wedge Pushed Forward



2) Observe that the bolt face should be 'stopping' / bottoming on the gauge and the rollers should be fully engaged in the locking collar.



3) With the striker wedge positively pushed forward, observe that there is a slight gap between the bolt face and the back of the chamber and there should be a very little backward movement of the bolt with the locking rollers engaged in the collar.



**** If the bolt is resting on the rear of the chamber, the headspace is too long for that gauge.**

***Headspace that is too long can result in poor firing pin contact, dangerous misfires, and ruptured cases.*

Make notes for each bolt and barrel combination of the longest gauge that will fully close and lock. Remember, in an MG42 too short is much more of a problem than too long. Do not use any bolt and barrel combination where the headspace is too short for the ammo you are using (7.62 vs .308 Win.).