

Bolt Shim Instructions
LANCE'S TECH TIP:
Rimfire Bolt Shim Installation
~ A General Guide ~

Rimmed Cartridges use the thickness of the **cartridge rim** for head-spacing.

.22 Rimfire Cartridges Headspace on the Case Rim.

The Actual Headspace is in the Recessed Face of the Bolt. You Must Make Sure this Recessed Bolt Face is Equal To or Deeper Than Your Rim for Safety

Generally speaking, there is extra room left in production guns between the Bolt and Breech to accommodate a wide variety of ammunition with varying rim thicknesses.

You should first measure the depth of your bolt face pocket to ensure it meets SAAMI Headspace minimum depth.

Shimming between the two bolt halves ensures the bolt is seating the cartridge up gently against the breech with your chosen brand of ammunition.

You can use our color-coded numbered shims like a gauge to find when the bolt face touches the barrel breech face, and then calculate where you want to be with your bolt headspace depth and rim thickness measurements.

I cannot tell you which shim best works with your rifle; you decide that yourself by fitting and feel and by shooting.

Installing Bolt Shims requires fitting by hand and checking with the Bolt installed in the Rifle and Locked Down - you do not measure with the Bolt out of the Rifle.

To establish the Bolt/Breech fit, shims are installed and fitted on an empty chamber.

If possible, it may give you a better feel if you leave the extractors off some rifles while fitting shims.

Start with a 4 or 5 pack of shims, install the .0015" or .002" thinnest shim and see how your bolt closes.

If it seems to close as normal, then continue to install each thicker shim until the bolt starts to close harder than normal, stacking shims if necessary.

At the point where your bolt begins to close hard, that was the amount of slack that was in your bolt, measured by whatever shim or shims combined were needed to bring the bolt up tight to the breech.

Now it is best to remove that shim and step back one number. For example, if a .005" Red Shim causes the bolt handle to close harder than normal, then take it out and install a .004" Purple Shim.

If you have to force or put undue stress on your bolt to close it, you should reduce the number of shims.

You will generally only use 1 of the 4 or 5 shims in the package, but you can stack shims together if needed.

When you have the correct shim installed, your bolt should close normally or just (ever-so) slightly tighter than normal.

If the bolt closes slightly tight, it is best to back up one step, remove .001".

Put a very small drop of oil on the shim.

Now you can go to the range and, with the barrel pointed in a safe direction, once again check fit with your favorite ammo.

Due to variations in rim thickness, you may have to reduce the thickness of shims. Remember, you have already removed all the excess headspace from the bolt/breech, so now the only thing to do is remove thickness (shims) if/as needed to get to your sweet spot or required headspace for the rim thickness of your favorite cartridge.

For longest shim life, use a drop of oil or a (very small amount of) grease on your shim.

If you have to force or put undue stress on your bolt to close it, you should reduce the number of shims.

A minimum of clearance should be maintained while maintaining proper headspace. Do not put undue stress on the bolt by shimming too tightly as it is unnecessary!

At no time do you want to force the bolt to close or to crush the rim. Did I explain that clearly?

Forcing the Bolt to Close will put premature wear on the bolt shims and will not increase accuracy. If you have any questions, use a headspace gauge to check for proper headspace.

Bolt Shims have in many instances cured light strikes.

Will they help with accuracy? Don't take my word for it. Read our Customer Reviews or ask our Customers.

Simply Chambering More Consistently Yields More Consistent Results.

Your Satisfaction is Guaranteed. If you feel you receive no benefit, you may send your shims back to TriggerShims for a Full Refund.

TriggerShims.com Shim Thickness Color Code

All TriggerShims Gun Shims are Made in the USA from Precision Brand American Made 304 Stainless Steel Stock and have a Guaranteed Factory Tolerance of plus or minus 10%. Shims are marked with colored permanent marker that will wear off or strip off with oils or solvents. If you are testing, plan on keeping your shims in separate marked small envelopes or using a micrometer.

- .0015" - Yellow
- .002" - Black
- .003" - Blue
- .004" - Purple
- .005" - Red
- .006" - Orange
- .007" - Green
- .008" - Pink
- .009" - Brown
- .010" - Yellow

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