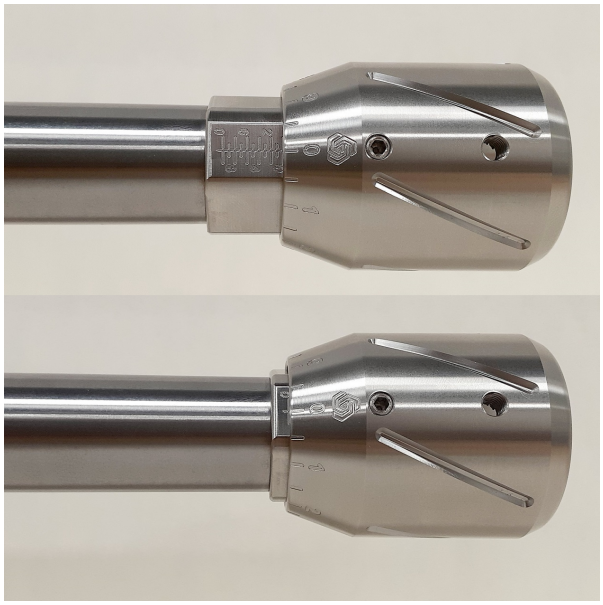
Thank you for choosing the Spearhead barrel tuner! We are confident our barrel tuner will provide the optimal tune for your rifle. Should you have any questions or concerns, please don't hesitate to contact us, your satisfaction is our highest priority. We sincerely appreciate your support and thank you once again.

Barrel tuner installation instructions

Remove all cartridges, ensure the firearm is completely unloaded.

Screw tuner adaptor to muzzle threads, tighten adaptor with 1” or adjustable wrench.

Adapter has 3 sides with scale, choose the side that is most easy to read for you and always reference the chosen side when tuning.



Take the tuner body and screw on to the adaptor so the zero lines up with either end on the scale. You can choose to start at the beginning or end of the scale.

Place the 3 set screws in the holes closer to the engraving marks. Lightly snug the set screws so there is tension but still able to turn the tuner body. Set screws are nylon tipped and won't damage threads.

Depending on if you start at the beginning or at the end of the scale, screw the tuner body toward or away from the receiver for the tuning process.

After the desired tune is achieved, snug the set screws to secure the tuner in the desired position. Do not overtighten set screws as the nylon tip will prematurely wear out.

Tuning procedures

Ensure set screws are lightly snug, so the tuner body is able to turn with slight resistance.

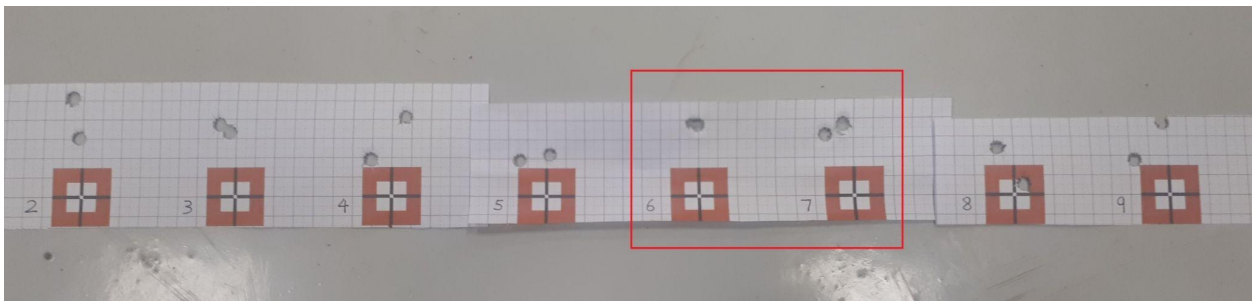
The numbered index marks are arbitrary and used to reference tuner position, you can start at any numbered index mark at any position on the scale.

Begin by taking 3 shots on a selected aiming point, rotate the tuner towards or away from the receiver so the number index ascends/descends to the next number. If you previously shot on #2, rotate the tuner to #3 and take 3 shots on another aiming point. Record and correspond which aiming point was shot with which index number on the tuner body. Continue this process until you see groups patterns change.

Rotating to the next number is usually enough to make a change in the grouping. However depending on the contour profile and length of your barrel, you may wish to increase or decrease the rotation between intervals. For lighter profiles, you can decrease the rotation by going to the next index mark, for heavier profiles, you can choose to rotate two numbers at a time.

Group patterns will change in size as well as the point of impact shift relative to the point of aim, this pattern repeats itself and the optimal tune is found within a revolution or 2. There is no need to go through multiple revolutions.

Pay attention especially to the vertical displacement between group patterns, choose the tightest group with the same relative point of impact where the vertical displacement is stable. Say if #6 and #7 displayed tightest group, fine tune by testing index mark #5.5, #6, #6.5, #7 and #7.5.



Once optimal tune is achieved, snug the set screw to prevent tuner movement. Do not over tighten the set screws as the nylon tip will prematurely wear out.

If you find your loads do not perform as well due to weather/atmospheric conditions, you can rotate your tuner in either direction and usually the group will return to tune.

Should you have any questions, please don’t hesitate to contact us. Thank you once again for your support.

Yours in shooting excellence
-Spearhead Machine