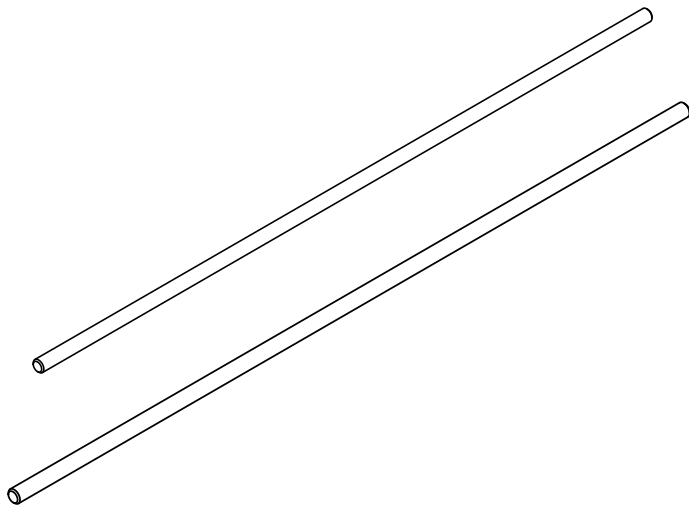


# GEISSELE<sup>®</sup>

## AUTOMATICS

We Manufacture Confidence<sup>®</sup>



### SUPPRESSOR ALIGNMENT GAGE

5.56MM & 7.62MM  
User's Guide

#### READ THIS FIRST

Firearm safety is **YOUR** responsibility. You must memorize and put into practice the 4 Rules of Firearm Safety:

1. **ASSUME EVERY WEAPON IS LOADED.**
2. **KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOU ARE READY TO SHOOT.**
3. **DO NOT LET THE MUZZLE POINT AT ANYTHING YOU ARE NOT WILLING TO DESTROY.**
4. **KNOW YOUR TARGET AND WHAT IS BEYOND.**

The Geissele Suppressor Alignment Gage is a precision gaged rod that is used to verify the alignment of a suppressor to the bore of a firearm barrel.

Suppressor alignment is determined by several factors:

1. *Centerline alignment (offset and angular) of the barrel threads to the bore.*
2. *Perpendicularity of the barrel shoulder to the threads.*
3. *Alignment of the muzzle device's internal diameter threads and torque shoulder to the suppressor attachment geometry.*
4. *Alignment of the suppressor mounting ID geometry to the bore of the suppressor.*

It is important to understand that the length of the suppressor is usually much longer than the length of the barrel / muzzle device / suppressor interface geometry. A small deviation at the mounting interface means a much

larger deviation of the suppressor exit hole. The deviations from nominal can also be additive which compounds suppressor misalignment.

The Geissele SAG is manufactured from hardened steel that has been ground 0.002" under nominal bore diameter. The outside diameter of the SAG is finely finished and straight to 0.001" over its length. Geissele hardens the SAR so that it will not wear by sliding exposure to abrasive powder residue, pull burrs if it slides against misaligned baffles nor allow abrasive particle to imbed into the surface of the gage.

There can be a wide variation in barrel bore diameters and bore straightness. 0.002" under nominal bore diameter has been found to be the best size of the SAG that will fit most barrels. The long length of the SAG aligns the gage to the bore; it is not necessary to have a very tight fitting gage with the long length of the Geissele SAG.

#### INSTRUCTIONS

1. Make weapon safe and field strip upper receiver. Ensure that the weapon is cleared and safe. Separate the upper and lower receiver. Remove the bolt carrier and charging handle from the upper receiver. Ensure that there is nothing inside the upper receiver which would obstruct the gage from entering the barrel.
2. Guide the SAG through upper receiver into the barrel, from the chamber end. Gently guide the SAG through the upper receiver into the barrel extension and barrel. You will feel the gage fit into the barrel.
3. Place your hand in front of the end of the barrel to catch the SAG. Before tilting the barrel, place your hand in front of the weapon. This is to stop the gage from traveling completely through and out of the barrel.
4. Tilt the barrel downward until SAG begins to travel. Slowly tilt the upper receiver until the barrel points slightly downward. Continue to tilt until the SAG begins to travel down the length of the barrel towards the suppressor.
5. Catch the SAG before it leaves the barrel. Stop the SAR after it is protruding a few inches from the end of the suppressor.
6. Observe results of the gage test. The SAG can yield three results (*On Reverse Side Of This Page*). Look closely at where the gage protrudes from the suppressor.
7. Remove SAG from barrel before reinstalling upper receiver. Check barrel for any obstruction before shooting.
8. Repair Methods. Suppressor misalignment can result in baffle strikes, decreased weapon accuracy or catastrophic failure to the suppressor. If your suppressor is found by the Geissele SAG to be misaligned, Geissele advises that the weapon be repaired by a talented gunsmith. The Geissele shop has fixed weapons with misaligned suppressors by differentially cutting the torque shoulders and/or chasing threads on muzzle attachments on our tool room lathes. A good gunsmith should be able to do the same.

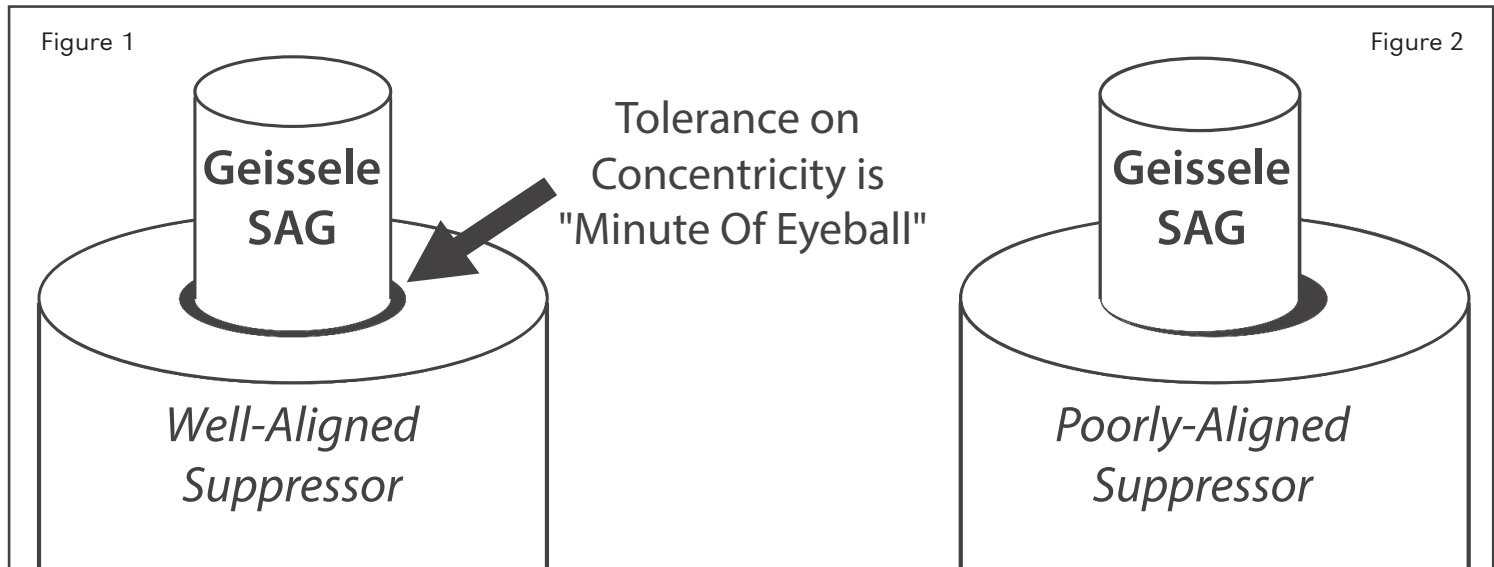
Thank You For Your Purchase.  
Contact Geissele Automatics with any questions.

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SUPPRESSOR ALIGNMENT GAGE (SAG)



### GAGE TEST RESULTS

**A. Complete Pass:**

In order for the gage to yield a complete pass, there will need to be a somewhat even spacing around the SAG between it and the opening in the suppressor. This is the only passing result for the alignment test (*Figure 1*).

**B. Partial Fail:**

A partial failure occurs when the gage is able to pass through the suppressor, but comes in to contact with the interior baffles of the suppressor. This is a failure and the suppressor will need to be re-aligned (*Figure 2*).

**C. Complete Fail:**

A complete failure of the alignment occurs when the SAG gets stuck before it can emerge from the end of the suppressor. This is a failure and the suppressor will need to be re-aligned.

