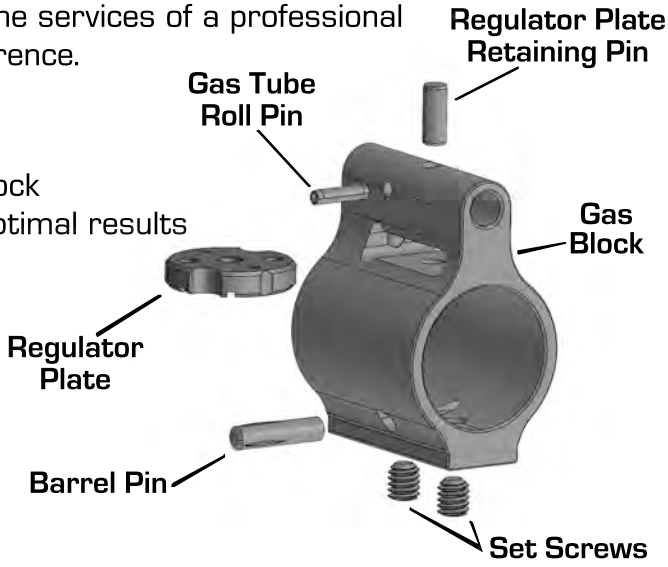
# GRIFFIN ARMAMENT®

# ADJUSTABLE GAS BLOCK

## Installation and Use Instructions

**Installation by a gunsmith or professional armorer is recommended** if you are not comfortable making adjustments to your firearm's gas system, acquire the services of a professional and provide him/her this installation manual for reference.




### OBJECTIVES

1. Install the Gas Block to the firearm's barrel
2. Install your chosen Regulator Plate to the gas block
3. Understand usage of the Gas Block to achieve optimal results

### TOOLS REQUIRED

1. Gas Tube Roll Pin & Set Screws (included)
2. Regulator Plate & Retention Pin (included)
3. Barrel Pin & Gas Block (included)
4. Hammer and Punches for Setting Pins
5. Bench Block or Vice to set pins
6. 5/64" Allen Key for Installing Block Set Screws

### REGULATOR PLATE ORIENTATION

**THIS SIDE UP**
(No Check Grooves)

**THIS SIDE DOWN**
(Gas Check Grooves)

**For Drill Your Own Plates:** We recommend using high speed steel or cobalt drill bits held on axis of the pre-drilled holes, with oil coolant, and slow drill RPMS with light pressure, to ensure positive results.

**Note:** Each regulator plate has a number laser marked on its diameter, for user identification of the disc

### GAS BLOCK ASSEMBLY INSTRUCTIONS

**STEP 1: CLEAR THE FIREARM AND RENDER IT SAFE IN ACCORDANCE WITH ITS USER MANUAL.**



**STEP 1A: Remove Muzzle Device, then slide Gas Block Over Barrel into alignment with the gas port**

- It is recommended to perform this assembly on a barrel installed to the upper receiver without a hand guard installed.

**NOTE:** Lasermark on the gas block should be facing the right side of the receiver, with the "S" lasermark and ball detent and its screw towards the muzzle of the firearm.

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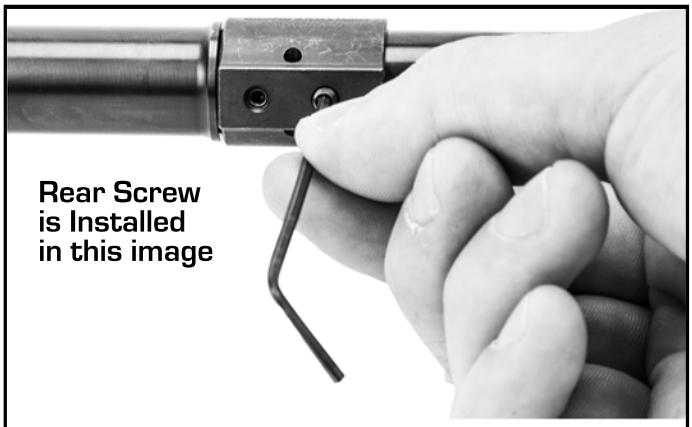
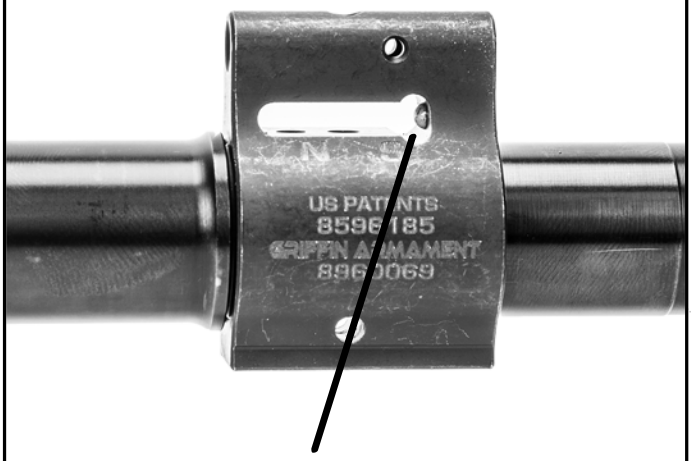



**STEP 2: Install the rear set Set Screw first, on the Bottom of the Gas Block, then the front**

- Ensure the rear screw seats into the dimple/s on the barrel



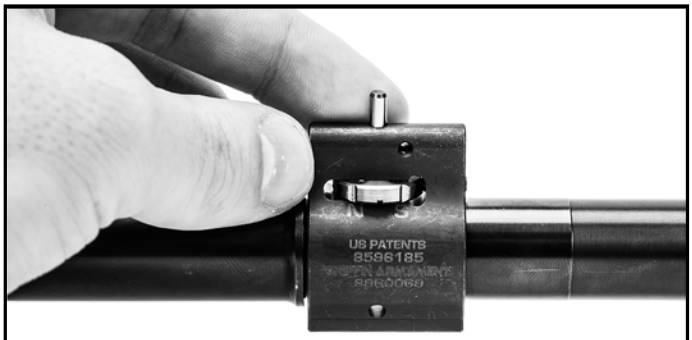

**Step 3: Note the Ceramic Ball Detent on the fore end of the gas block inside the slot cutout**

**STEP 4: Slide the Regulator Plate into the slot with the flat non-cut side of the plate up**

- Line up one of the large half moon cutouts with the ball detent referenced in the previous picture. This will relieve the pressure from the detent spring allowing the floating pin to be inserted

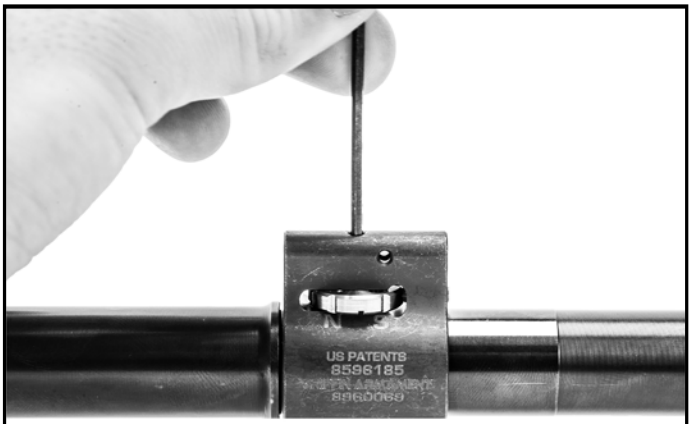
**Step 5: In this position, there should be two gas port holes visible on each side of the block**

- This will confirm the large half moon is lined up with the ball detent for ease of plate positioning to install the pin




**STEP 6: Insert the Plate Retaining Pin through the top hole to secure the plate in place**

- Note, the large half moon cuts are not visible from the side for this step. Refer to step 4 and 5 for explanation




**STEP 7: Using a punch or allen key, push the plate retaining pin all the way in until it contacts the barrel, this will clear the gas tube hole for the gas tube**

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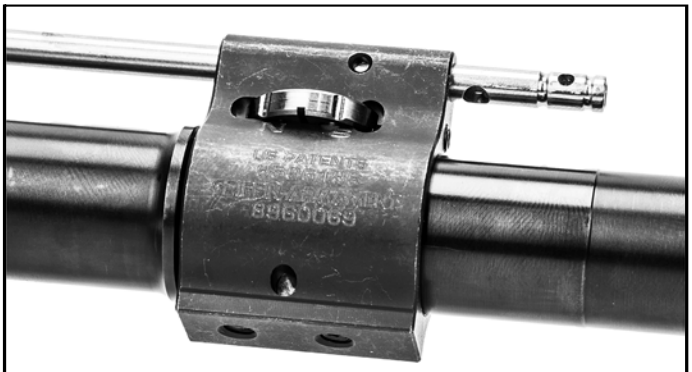
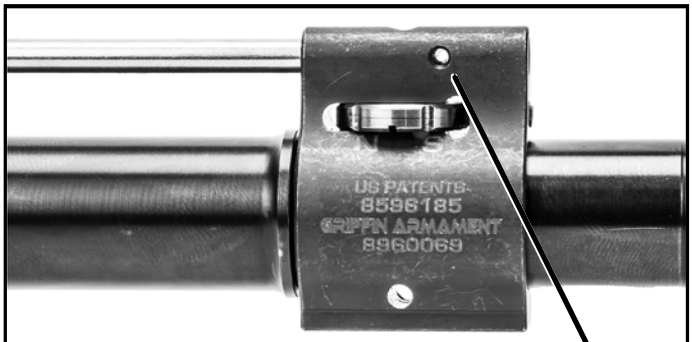
**STEP 8: Slide your STRAIGHT gas tube in through the forward end of the gas block**

- A straight gas tube is required for use with the Griffin Adjustable Gas Block
- If tube does not slide through, this means it is not the required straight tube...



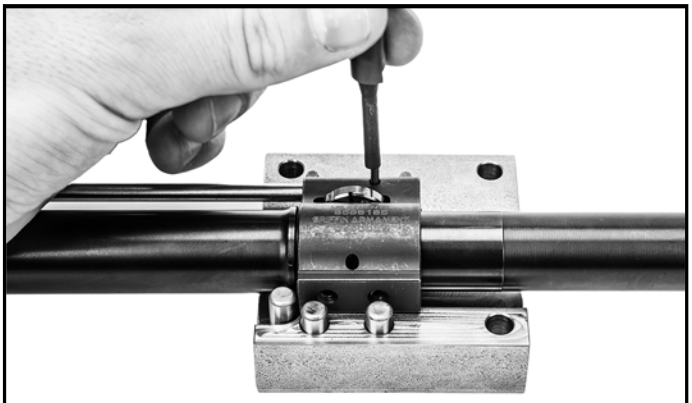

**Step 9: Ensure the gas port on the gas tube is positioned down toward the barrel**

- The gas port needs to be in the 6 o' clock position to communicate with the port in the barrel




**STEP 10: Orient your gas tube so the roll pin hole above the regulator plate is perfectly aligned with the hole in the gas block**

- Take care not to flip the gas tube while doing this, misaligning the gas port which needs to be facing the barrel



**STEP 11: Using a starter punch, start the pin. Use a large, finishing punch to drive the pin flush.**

- Note: A starter punch has a hole in the tip to control the pin for starting

**STEP 12: Forcefully rotate the regulator plate to overcome the ball detent, exposing one of the half moon indicator notches**

- The block above is now in the Suppressed setting


**STEP 13 (Optional): You can use the barrel pin hole as a guide to drill and pin your barrel if you so desire. Bridgeport or similar milling machine and cobalt 1/8" bit with .0015/re olution quill feed & oil coolant recommended**

1. If you are not opting to pin your gas block to the barrel, ensure the set screws are tightly fastened
   It is recommended this operation is performed by a professional gunsmith

**EXPLANATION OF SETTINGS**

1. Each plate has 4 gas ports, 2 being the same size for unsuppressed (normal) operation, and 2 smaller holes for suppressed operation, with a slight size difference between these two holes. This allows the user to choose the better operating of the 2 port sizes for suppressed use.
2. There are two large half-moon cutouts on the radial edge of the regulator plate. One of these notches will have 2 witness grooves cut next to the half moon (FIGS 3 & 4) for distinguishing between side 1 & 2. Looking from the right side of the firearm, the half moon notch will line up with either the N for Normal, or the S for Suppressed. This denotes which setting the rifle is currently in. Rotate the plate between these two positions to change settings on the fly.
   To utilize the alternate suppressed hole, simply spin the plate a full 180 degrees until the other half moon notch with the witness grooves is visible on the right side of the firearm. Switching from suppressed to normal in this alternate configuration is the exact same operation as the other side, due to the duplicated Normalized hole.
   If desired, a vertical "I" mark on the rail would connotate the witness groove side is used, an "L" for Low Back Pressure Plate. These markings would allow an end user to keep the correct setting and suppressors type straight for a collection of firearms without confusion AKA No vertical "I" means the smooth side of the plate was used, no "L" means a conventional plate has been installed.

**FIG. 1**


**NORMAL SETTING #1**

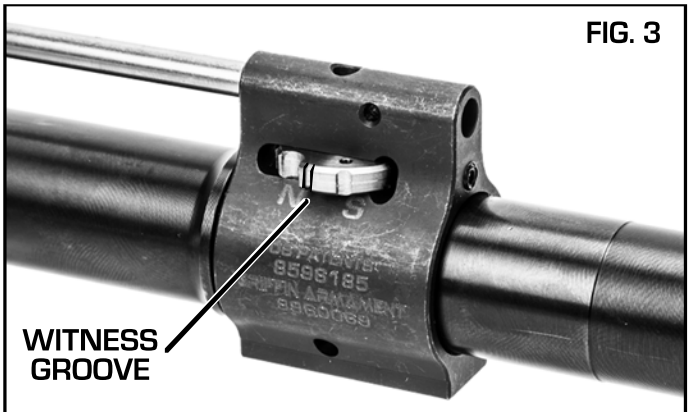
- Note the half moon is over the "N" laser mark indiciating the unsuppressed mode

**FIG. 2**


**SUPPRESSED SETTING #1 (Smaller Hole)**

- Note the half moon is over the "S" laser mark indiciating the suppressed mode

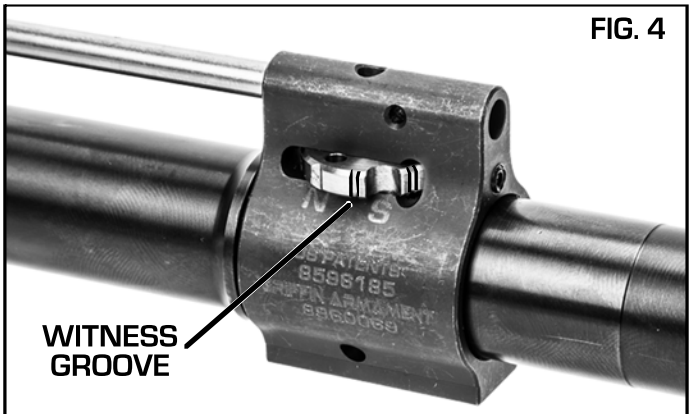
**FIG. 3**




**NORMAL SETTING #2 (Identical to #1)**

- Note the half moon is over the "N" laser mark indiciating the unsuppressed mode
- Note the additional witness groove indicating you are on the alternate side

**FIG. 4**




**SUPPRESSED SETTING #2 (Larger Hole)**

- Note the half moon is over the "S" laser mark indiciating the alt. suppressed mode
- Note the additional witness groove indicating you are on the alternate side
- This is the larger port size

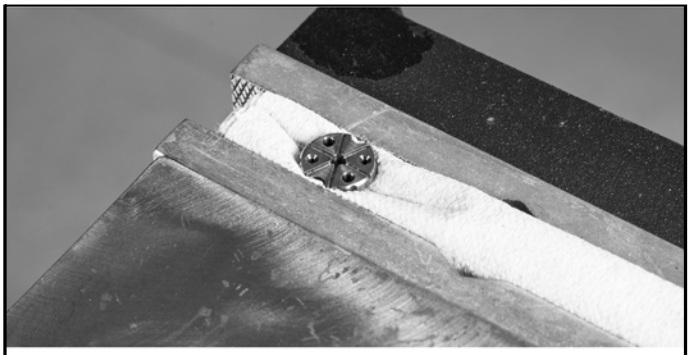
**DRILL YOUR OWN PLATES**

A hand-held drill, a vice, and a properly sized and sharp, 118° high-speed steel or cobalt drill bit are the minimum tools required. **CAUTION: Orient yourself with the product in assembly and ensure you can identify which hole(s) you want to modify. Be aware of the orientation as you flip the plate upside-down for drilling, understand that it is easy to become confused in the process of flipping the plate upside-down. Ensure you are well-oriented before drilling, because there is no going back. If you have to use a marker to mark the intended hole side of the plate to be drilled, be sure to think through this before you start.**

Griffin has developed 2 regulator plates that are configured to allow the end user to decide the specific port size for their intended setup by drilling their own port holes. These plates come predrilled with a small starter hole to ensure proper placement.

There are 2 Drill Your Own Plates available, one is pre-configured with 2 "unsuppressed" ports set as passthroughs to allow your firearm's native port size to do it's thing. The other has 4 small starter holes allowing the end user to customize all aspects of the regulator plate (i.e. whatever operating theory you want within the scope of four holes).

For beginners, we recommend using the 2-hole Drill Your Own Plate rather than the 4-hole Drill Your Own Plate. **If you are not confident, procure the services of a gunsmithing professional.**

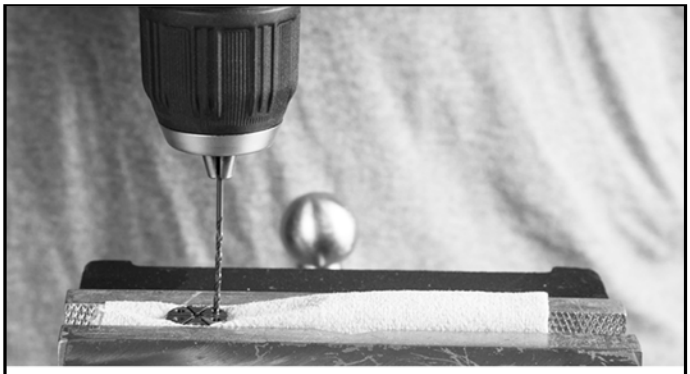


**STEP 1: Clamp Regulator Plate in vice with the gas check grooves and 118° counterbores facing up**

- Use non-marring jaws, or a cloth to protect the plate from damage
- Clamp on the two large notches and ensure it is positioned parrallel to the floor

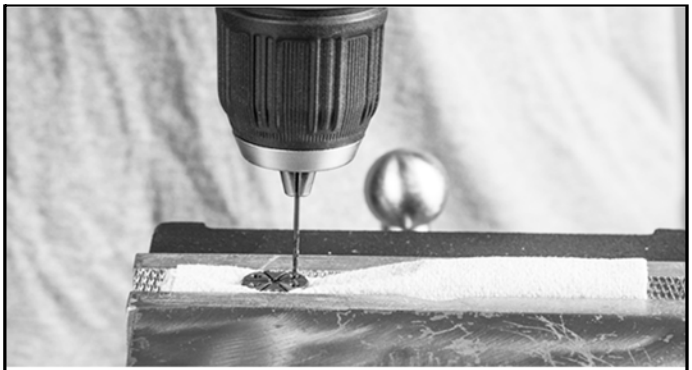
**STEP 2: Use oil to lubricate the hole to be drilled**

- Periodically relubricate while drilling at low RPMs to prevent drill overheat/burnout
- Use cobalt or black oxide 118° drill



**STEP 3: Drill out the pre-drilled holes to the desired port size** *(45-90 seconds of drilling per hole)*

- Use low RPMs, and allow the weight of the drill and your hand to do the work. Do not push on tiny drill bits or they will break
- Take your time, and maintain perpendicularity to the plate



**STEP 4: Use very light force as the bit breaches the other side of the plate to prevent drill breakage on breakthrough**

- Remove chips from the holes, and burs if present from the top side of the plate
- Drill other holes if needed, then reassemble following the steps earlier in this manual