

JP Adjustable Gas System: *.936 bore aluminum, stainless steel*

Parts Included:

- .936 bore gas block
- Three (3) 8-32 x 1/2" socket head cap screws
- One (1) 6-32 x 3/8" stainless set screw
- 1/16 hex key
- 5/64" x 1/2" roll pin

Installation Instructions

CAUTION: REMOVE MAGAZINE AND VISUALLY CHECK CHAMBER TO MAKE SURE THAT FIREARM IS UNLOADED.

This large-bore JP Gas Block is designed for use on contour barrels from .935 to about one inch at the gas block position. Most commonly available bull barrels are .935, which this gas block should fit with little or no modification. When installing, it will be necessary to have a very solidly mounted padded vise to prevent damage to the barrel.

If you are installing this device on a barrel that is already in assembly in your upper, first remove the takedown pins and separate the lower and upper assemblies to make the job easier. Securely lock your vise around the section of barrel between the front sight and muzzle, and then remove the flash suppressor or muzzle brake. It may be necessary to apply heat with a propane torch to the flash suppressor if it is too tight to remove otherwise.

Remove the existing front sight/gas manifold piece or gas block. With a 1/16" drift, remove the gas tube roll pin and gas tube from the existing gas block or front sight. If it is installed, remove the gas adjustment set screw from the side of the JP Gas Block, and install the gas tube and roll pin in the JP Gas Block. It may be helpful to slightly enlarge the pin hole on the side that you insert the roll pin to make it easier to start. Make sure that the gas port in the gas tube is aligned with the gas port in the block. Now, run a 6-32 tap into the gas screw hole to blend the gas tube into the tapped hole and allow the screw to fully engage.

With the gas tube installed, slide the JP gas block over the gas port collar of the barrel. Tighten the center clamp screw on the gas block until it is hand tight but can still be rotated and squared to the receiver. On a flat-top rifle, using a couple of small level blocks is an easy way to achieve perfect alignment of components while mounted in the vise. Alternately, you can place the complete upper assembly upside down on a smooth, flat surface and allow it to tilt forward in order to align the front edge of the upper receiver rail and the front edge of the gas block. Once the gas block is level, tighten the middle clamp screw to retain this position. Then, sequentially tighten all three clamp screws to fully secure the gas block. As an option for added stability, you can apply green Loctite 609 between the barrel and gas block to more permanently secure them.

Gas Block Setup

The main purpose of our adjustable gas block is to allow you to adjust the port pressure to the operating system and thereby fine-tune the bolt velocity, which will result in a smoother shooting rifle especially if you already have a JP Recoil Eliminator or JP Compensator. Additionally, the JP Gas Block is useful in obtaining optimum port pressure on otherwise difficult to run setups such as suppressed weapons, short-barreled weapons, or unusual chamberings for nonstandard cartridges. Most rifles cycle faster than necessary and the resulting "bolt slamming" effect is a noticeable part of the recoil impulse. To adjust for your load, turn the gas adjustment screw in all the way to close it off. Then, back it out approximately two full turns, and load one round in the magazine and fire. If the bolt holds open, the gas block is set. If the bolt does not stay open, it is short-stroking, and the valve should be opened about another half turn. Continue backing the gas adjustment screw out until the bolt holds open consistently on last round. Test this again with one round in the magazine.

Remember, if you change ammo, the rifle may not cycle reliably and should be tested again with any ammunition that you intend to use in actual competition. If you must use untried ammo, back out the valve several turns to ensure full cycling. You may want to Loctite the valve screw. It is also possible to shut the valve completely if you want to cycle the rifle manually for any reason.

If your rifle is used for law enforcement or military purposes, we recommend the full open setting so as not to compromise reliability. A new rifle or bolt assembly will have a great deal of friction between the gas rings and carrier and may require a break-in period during which the gas block must be run wide open for complete cycle. As the path through our gas block is a bit longer than a standard front sight manifold, it is a bit less efficient initially, and a new rifle with an extremely stiff bolt may not cycle completely until broken in. It helps to polish the bore of the carrier on a new bolt to reduce friction and mate the parts.

Our large bore gas blocks features a Picatinny quick-detach point for any accessory you may wish to use on that point such as flash lights, lasers or electronic sights. We also offer a quick-detach, height-adjustable front sight (JPFS-ALS) featuring a 7/8" globe with sixteen interchangeable inserts that is compatible with the original handle sight as well as many other quick-detach rear sights on the market. Call us with any questions you may have.

THANKS FOR YOUR BUSINESS!