

Installing Free Float Handguards with an Aftermarket Picatinny Rail Gas Block

Now depending on the dimensions of your gas block you may or may not be able to slide your handguard over it. To test this simply slide your gas block onto the barrel and see if your handguard will slide past it. If it doesn't, you'll have to install the handguard first, then the gas block. If the handguard does fit over the gas block then you can install the gas block before the handguard and it will be easier to install the gas tube. For this demonstration we'll assume that your handguard needs to be installed first.

The tools that you will need are; a small flat head screwdriver, a number 2 roll pin holder and punch, the rifle bench block, a strap wrench and the upper receiver vise block and insert. A small level will be helpful to ensure that your gas block is on correctly. Different handguards and gas blocks may require different tools so check with the instructions provided by the manufacture.

1. Place your assembled receiver into the vise blocks and install the insert in the carrier way. Lock this into your vise with firm pressure.

2. Next slide your barrel into the front of the receiver. Make sure you align the pin on top of the barrel with the cut in the threads.

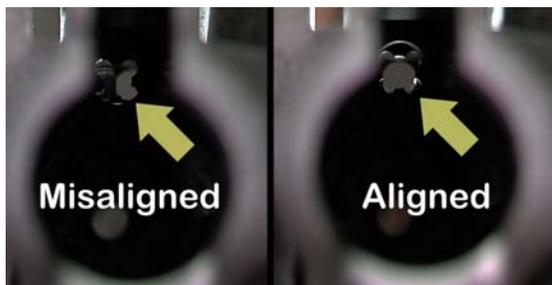
3. Slide the barrel nut down the barrel with the outside threaded portion facing forward, and then tighten the barrel nut down finger tight.



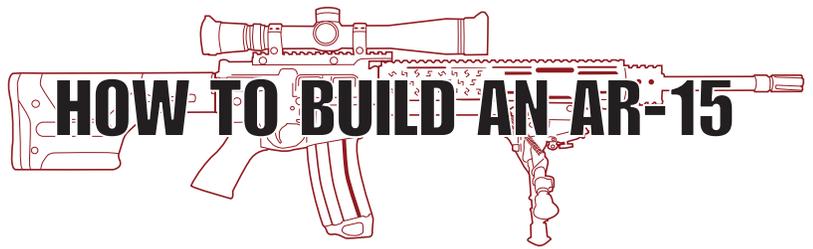
4. Set your torque wrench to 30 foot pounds and attach it to barrel wrench. Tighten the barrel nut down to 30 lbs. Thirty foot pounds of torque is the minimum amount needed to secure the barrel. We've found that you'll achieve better accuracy by keeping the torque as close to 30 ft. lbs. as possible. Do not exceed 80 foot pounds of torque, you risk damage to the barrel nut and the threads of your receiver. If the directions that were provided with your free float handguards contradict our instructions follow the instructions provide by the manufacturer or you may damage the components.

5. Look down the top of the barrel through the holes of the barrel nut and into the receiver. One of the holes in the barrel nut must

align with the gas tube hole on the front of the receiver. Typically this doesn't happen with your first turn.



6. Note the distance that you'll have to turn the nut to align with the next hole on the barrel nut and increase the torque setting on your wrench to 40 lbs.



Installing Free Float Handguards with an Aftermarket Picatinny Rail Gas Block



7. Tighten the barrel nut until you have correct alignment to allow the gas tube to pass through without interference.



8. Slide the handguard down the barrel and hand tighten it onto the threads of the barrel nut.

9. Use your strap wrench to cinch down the handguard, but don't apply too much force, you don't want the barrel nut to turn down any further and cause the holes in the barrel nut to misalign with the receiver.

10. Use your number 2 roll pin punch to help locate the through hole in the gas tube with the hole in the gas block.

11. Once you have these two holes aligned, use your number 2 roll pin holder to drive in the gas tube roll pin. Finish driving the roll pin with the punch so that it is centered in the gas block. If your handguards will fit over your gas block you can perform this operation while the gas block is on the rifle and the rifle bench block will be helpful to support the barrel.

12. Now insert the end of your gas tube with the two holes into the gas block with larger hole facing down toward the gas port on the barrel.

13. You need to be sure that the gas tube gas port on the inside aligns with the gas port on top of the barrel. Most aftermarket gas blocks come with oversized ports so this alignment, while important, does have some provisions for inaccuracy.

14. Now slide the gas block and tube onto your barrel and slip the gas tube through the barrel nut into the receiver.

Adjust the gas block so that it is level and tighten the set screws. Once you've completed the assembly of your rifle, double check the level of the gas block in relation to the receiver. This is easy to do on an A3 upper receiver because you have two flat surfaces to compare. On this A2 you'll need to establish level off of the top of the carry handle and then on the gas block.