

Installing the Delta Ring Assembly & the Barrel into the Upper Receiver

To install the barrel and handguard slip ring assembly and gas tube you'll need the upper receiver vise block with the insert, a barrel wrench, a torque wrench, snap ring pliers, and a number 2 roll pin holder and punch. A small flashlight would be handy also. The methods for installing a mil spec barrel are the same for all barrel lengths.

1. From the rear of barrel, slide the handguard slip ring with the narrow end facing forward, the slip ring spring, and the handguard retainer ring.



2. Use your snap ring pliers to expand the handguard retainer ring and seat it into place in the cut on the barrel nut.



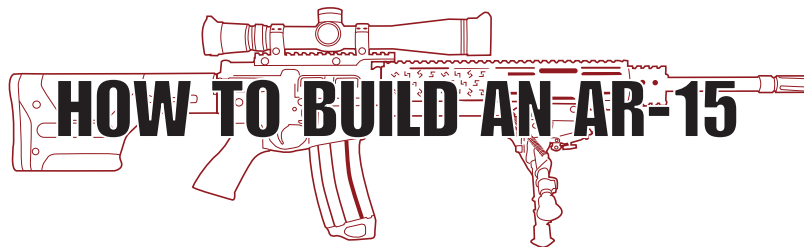
3. Place your upper receiver into the upper receiver vise blocks and install the insert into the back of the receiver. Put the entire grouping into your vise jaws up to the lips on the side of the vise blocks and tighten down your vise until you have a firm grip on the blocks.

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

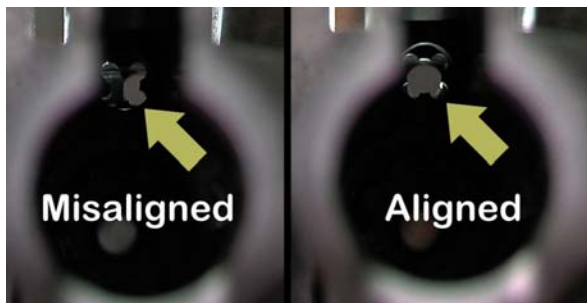


5. Take your barrel wrench and attach it to your torque wrench which is set to 30 foot pounds. Pushing against the slip ring assembly tighten the barrel nut down to 30 lbs. 30 foot pounds of torque is the minimum amount needed to secure the barrel. We've typically found that you will achieve better accuracy with a minimal amount of torque above 30 ft. lbs. Make sure the cuts in the handguard retainer ring and spring are on top of the barrel. Look down the top of the barrel into the cuts of the barrel nut and into the receiver. It may be helpful to remove the vise block insert from the receiver and shine a flash light from the back of the receiver. You're looking for one of the cuts in the barrel nut to align with the gas tube port on the front of the receiver. Typically this doesn't happen with your first turn.





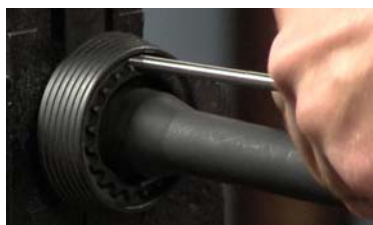
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6. Note the distance that you'll have to turn the nut to align with the next cut on the barrel nut and increase the torque setting on your wrench to 40 lbs.

7. Replace your insert back into the receiver if you've taken it out.

8. Tighten the barrel nut a bit more; it is always better to do this in small steps so that you don't go past the next cut you're trying to align. Check the alignment again. Keep repeating these steps and increase the torque setting on your wrench until you get visual alignment.



9. Once you have visual alignment, place your gas tube with the bend upward and the bulge towards the rear through the barrel nut into the receiver. It should pass through without any binding or resistance. If you encounter any resistance, remove your gas tube and turn the barrel nut either on or off to fine tune the alignment. A handy tool that prevents damage to the gas tube is to use the barrel nut alignment rod instead.

10. Once you've achieved proper alignment, you can install the gas tube into the front sight base.



11. Remove your barreled receiver from the vise block and place it into the front sight base block with the words PINS IN facing up. Align the gas tube with the roll pin hole in the front sight base.

12. Use your number 2 roll pin holder to start the gas tube roll pin in and finish driving in the pin with the roll pin punch until the roll pin sits flush with the side of the front sight base.

13. Finally, compress the hand guard slip ring and install each handguard front end first.

In the next segment we'll install the flash hider.