

## Putting the Two Halves Together & Function Checking at the Bench

All of the subassemblies of your rifle have now been installed and your upper and lower receivers are complete. It's time to put the two halves together.



1. Make sure your pivot and take down pins are fully extended.
2. Line up the pivot pin with the pin hole of the upper receiver and push the pin all the way in.
3. Close the two halves together and push in the take down pin.



Now, we'll do some simple function checks here at the bench. Before starting we want to ensure that the rifle is unloaded and that there isn't any live ammunition on the bench or available to you. Remember a good rule to live by is to treat all firearms as if they are always loaded.

1. Lock back the carrier, inspect the magazine well and chamber to ensure that the rifle is actually unloaded.

2. Whenever you handle a firearm always keep it pointed in a safe direction.

Once you have confirmed that the rifle is unloaded we can begin testing.

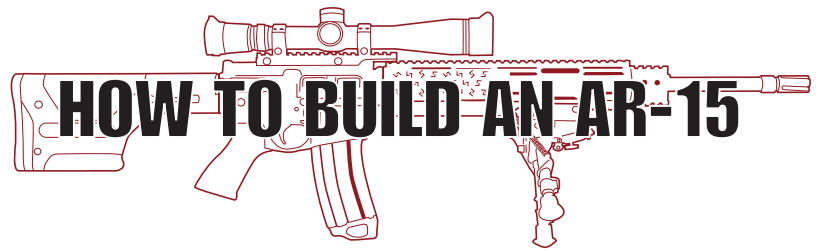
1. Pull the charging handle to the rear and let the bolt carrier go forward under the force of the action spring a few times. The bolt carrier should slam closed completely and not bind at all.
2. Press in the ejection port cover, and pull back on the operating handle. The ejection port should snap open quickly.



3. Pull the charging handle back and use the bolt catch button to lock it in place by pushing on the bottom of the catch. Lock the charging handle in the forward position. Close the ejection port cover and then push the bolt catch pad to release the bolt. The bolt carrier should slam forward crisply, opening the ejection port cover, and lock into battery.

4. Next, install an empty magazine in the magazine well into the rifle with the bolt carrier forward. The magazine should lock into place.





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5. When you push the magazine release button the magazine should drop free.

6. Reinstall the magazine and pull the charging handle back. The magazine follower should push against the bolt catch causing it to lock the bolt back. Push the charging handle forward and remove the magazine. The bolt catch should still hold the carrier to the rear.



7. Next load your magazine with at least 5 action proving dummies NOT LIVE AMMUNITION. Action proving dummies are the same size and approximate the weight of live ammunition. They're a great way to safely function test your firearm and are available in all calibers.

8. Remember to keep the rifle pointed in a safe direction and insert the magazine into the magazine well fully. Press the bolt catch pad and let the carrier slam forward under the force of the action spring. The carrier should have stripped an action proving dummy out of the magazine and closed fully into battery.

9. Pull back the charging handle sharply and let the carrier slam forward under the force of the action spring again. The dummy round in the chamber should have been extracted and ejected out of the rifle and the next cartridge should have been properly loaded into the chamber with the bolt in battery. Repeat this process until the bolt locks back on an empty magazine.

This concludes the bench testing of the rifle. If you've followed all of our directions and performed all of the tests we did as you built your rifle, it should have performed as well as ours did. If you've had any issues with the functioning of the rifle during these tests, go back and review the section pertaining to the assembly of that specific part and review it to see what steps you may have missed or misinterpreted. If this doesn't resolve your problem please feel free to call one of our gun techs or visit your local gunsmith for further help.

If everything is working as it should now it's time to clean your rifle and lubricate it for shooting. We have provided one last segment at the end of this series that covers rifle cleaning and maintenance, so be sure to watch it before you head out to the range.

There is one other set of tests we'll perform with live ammunition at the range. To perform these tests you'll need a magazine, your action proving dummies and good quality, live ammunition. We have provided written instructions for all of these lessons, but unless you have internet at the range, this would be a good time to print the instructions for the next segment to take with you.