FAQ – ADG MODULAR REPLACEMENT BOLT FOR REMINGTON M700 ACTIONS

Q: HOW DOES YOUR REPLACEMENT BOLT HANDLE PRIMARY EXTRACTION ON A REMINGTON 700 ACTION?

A: Primary extraction on the Remington 700 is a well-proven design that has performed reliably in millions of rifles worldwide for decades, including demanding military applications like the M24 and XM2010. Our bolt is engineered to precisely mimic the **nominal factory primary extraction geometry**—providing the same intended cam engagement that Remington designed for smooth, consistent case extraction under normal conditions.

Online discussions often highlight isolated cases where tolerance variations, hot loads, fouled chambers, or other factors contribute to sticky extraction—but these are exceptions, not the rule. The vast majority of unmodified 700s extract flawlessly throughout their service life.

Since our modular bolt system requires rebarreling to a flat-breech barrel (with detailed dimensioned drawings provided for compatibility), your gunsmith will properly headspace and fit the new barrel to your existing receiver during installation. This professional fitting process ensures optimal chamber-to-bolt alignment, which supports reliable extraction right out of the gate—without any modifications to your receiver.

Combined with our robust plate-style extractor, this setup delivers confident performance across a wide range of calibers and conditions. If you're swapping multiple barrels (one of the key advantages of our user-replaceable bolt heads), you'll appreciate the consistent, trouble-free operation that mirrors the factory intent while adding modern modularity.
We're confident you'll find extraction to be smooth and dependable, just like the countless stock 700s in the field. If you have specific load or use-case details, feel free to reach out—we're here to help.

Q. HOW DO WE HANDLE HEADSPACING?

A. Headspacing is accomplished initially by your gunsmith and is dependent upon what type of barrel attachment method you choose for your new barrel.

- If you choose a “Remage” style attachment (a style that utilizes a Savage-like barrel nut to secure the barrel to the action), your gunsmith will machine your barrel to the tenon print provided on our website along with chambering it for the cartridge of your choice. Your barrel with the barrel nut and recoil lug is then hand-tightened and a “Go” headspace gauge and proper fixturing is then used to secure your barrel and/or action as well as positioning your recoil lug,

  Here are some additional notes about the barrel system required and headspacing:

  A Remage barrel combines a **Remington 700**-pattern threaded shank (typically 1-1/16"-16) with a **Savage-style barrel nut**. This design allows users to install pre-chambered "pre-fit" barrels on a Remington 700 action without a lathe, while enabling easy headspace adjustment and quick barrel swaps.

  Headspace measures the distance from the bolt face to the cartridge datum line in the chamber. Proper headspace ensures safe pressures and reliable function—too much risks case ruptures; too little prevents bolt closure. The barrel nut on a Remage system lets you fine-tune headspace by adjusting barrel position relative to the action, unlike traditional shouldered Remington barrels that require precise machining.

  What tools do I need to set headspace on a Remage barrel?
  - GO and NO-GO headspace gauges for your caliber (essential for safety).
  - Action wrench (to hold the receiver).
  - Barrel vise or clamps (to secure the barrel).
  - Barrel nut wrench (Savage-style).
  - A Recoil Lug Alignment Fixture
  - Optional: Torque wrench for final nut tightening.

  How do I set headspace on a Remage barrel? (Step-by-Step)
  1. **Prepare the action and bolt** — Remove the firing pin and ejector/plunger from the bolt for accurate gauge feel (recommended to avoid interference).
  2. **Install the barrel nut** — Thread it fully onto the barrel shank (toward the chamber end).
  3. **Insert the GO gauge** — Place it in the chamber (snap it under the extractor if possible).

4. **Thread the barrel in** — Screw the barrel into the action until it lightly contacts the GO gauge. The bolt should close easily with minimal resistance (or drop by gravity).
5. **Adjust for proper fit** — If the bolt won't close, back the barrel out slightly. If too loose, thread it in further. Aim for the bolt to just close smoothly on the GO gauge.
6. **Hand-snug the nut** — Lightly tighten the barrel nut against the action/recoil lug to hold position.
7. **Remove the gauge and torque** — Open the bolt, remove the GO gauge, then torque the nut to manufacturer specs (often 50-100 ft-lbs).
8. **Recheck headspace** — Re-insert GO (should close easily) and NO-GO (bolt should not close or lugs engage). Tightening the nut can slightly increase headspace, so verify again.
9. **Final check** — Test with a FIELD gauge if available for added safety margin.

Important Warning: Never tighten the barrel nut with the bolt closed on a gauge—this can damage tools or alter readings.

Do pre-fit Remage barrels always need headspace adjustment?

Many are machined so headspace is close or correct when hand-tight, but **always check with gauges**. Variations in actions or barrels can require minor adjustments.

Can tightening the barrel nut change headspace?

Yes—torquing the nut often increases headspace slightly (by pushing the barrel forward). Always recheck after final torquing.

Is it safe to do this at home?

Yes, with proper gauges, tools, and care, it's a common DIY process. If unsure, consult a gunsmith. Incorrect headspace can be dangerous.

Are there alternatives to Remage for easy barrel swaps on Remington 700?

Yes—true shouldered pre-fits (no nut) exist but may require sending the action to the barrel maker for perfect fit due to Remington tolerance variations. Remage offers more user adjustability.

Q. WILL THE ADG MODULAR REPLACEMENT BOLT WORK ON A REMINGTON 700 CLONE?

A. The ADG Modular Replacement Bolt was designed to work with factory Remington M700 receivers. ADG is made up of many former Remington employees with decades of experience with the M700 platform design and manufacturing. While many clone receivers exceed the dimensional consistency of the baseline product, they were not necessarily made with the nominal dimensions and/or tolerances; therefore, ADG cannot guarantee that our modular bolt will work in all clone receivers.

Q. WILL THE ADG MODULAR REPLACEMENT BOLT WORK ON A REMINGTON M700 RECEIVER THAT HAS BEEN "BLUEPRINTED"?

A. The ADG Modular Replacement Bolt was designed to work with factory Remington M700 receivers as originally shipped. Certain modifications in the "blueprinting" process can prevent proper function with our replacement bolt. Specifically, modifications to the receiver's primary extraction cam may no longer be compatible with the feature on our replacement bolt. While you may have no issue with your receiver, we cannot guarantee 100% compatibility.

Q. WILL WE MAKE LEFT-HANDED AND MODEL 7 VARIANTS?

A. We will let the market determine where the expansion of the product line goes. There is nothing inherent in the design that prevents left-handed or M7 variants. We had to pick the most popular offerings initially.

Q. WILL WE OFFER OPTIONS FOR REDUCED DIAMETER FIRING PINS AND/OR BENCHREST STYLE FIRING PINS?

A. Because the ADG Modular Replacement Bolt was designed to work with factory Remington M700 receivers, it was also designed to work with factory Remington M700 firing pin assemblies utilizing the 0.075" firing pin tip diameter. This allows the majority of customers to use their factory firing pin assembly without having to purchase a new one. As the market expands, we may offer our own firing pin assembly with geometries typically associated with custom benchrest options such as smaller firing pin tip diameters as well as more diametrical support near the tip.

Q. WHY DID WE CHOOSE TO DO A FLAT BREECH FACE TENON?

A. We have chosen to utilize a proven sliding plate style extractor, requiring a flat breech face. This design is very robust, easy to install, and provides superior extraction over the factory stamped extractor. It also doesn't require compromising lug strength as some aftermarket extractors require. Also, the barrel is easier to manufacture as no additional counterbore is required.

Q. WHY DIDN'T WE INCREASE THE OUTSIDE DIAMETER OF THE BOLT TO "TIGHTEN THE FIT" SO SPEAK?

A. The ADG Modular Replacement Bolt was designed to work with factory Remington M700 receivers and the tolerances they fall within. While some custom bolt manufacturers offer larger diameter bolts for tighter fit, doing so on our product would lessen our desired universal compatibility. Our bolt is 0.697" in diameter with a tolerance of +/- 0.001". This matches the legacy product that has a tolerance of +/- 0.0015".

Q. WHAT MODIFICATION IS REQUIRED TO A REMAGE BARREL AND ARE BARRELS GOING TO BE AVAILABLE THAT DON'T REQUIRE MODIFICATION?

A. Many third-party quality barrel manufacturers produce "Remage" barrels as an option for current M700 rifle owners. These barrels utilize a barrel nut system like a Savage to secure the barrel to the action. To work with our bolt, the only modification needed on this type of barrel is the removal of material up to the 0.1525" counterbore, resulting in a flat breech. This drawing is provided on our product webpage.

Q. ONCE I HAVE MY ADG MODULAR REPLACEMENT BOLT AND PROPERLY HEADSPACED BARREL, WILL ANY ADDITIONAL MODIFICATIONS TO MY M700 RECEIVER BE REQUIRED?

A. Remington offered the M700 receivers in at least five different magazine feed lip geometries throughout its production history. Depending upon your receiver and your desired feeding system and cartridge of choice, modification to your receiver's internal feed lips may be required. For instance, if your receiver was originally chambered for .223 Remington and your new barrel is chambered in a short magnum like 6.5 PRC, your receiver will have to have the feed lips opened up to work with a BDL-style magazine box/floorplate configuration or possibly removed to work with an AICS-style detachable box magazine bottom metal setup. This is a standard modification frequently performed by gunsmiths.

Q. WHY ARE WE DOING A PRODUCT NON-AMMUNITION/BRASS RELATED?

A. Great question. We are made up of a group of industry professionals with very diverse skillsets and experiences in the development, testing, and manufacturing of firearms and ammunition. The over fifty patents credited to our staff throughout their respective careers cover nearly all aspects of the industry from projectile design to carbon fiber wrapped barrel technology. As ADG, we've been behind the scenes working with many of your favorite companies to develop the firearms they've released over the last decade, all the while manufacturing world class precision (AMERICAN MADE) rifle brass. One half of ADG is dedicated to our cartridge brass line while the other half has been actively involved in product development for the industry. The ADG Modular Replacement Bolt represents our effort to develop a product that complements our cartridge brass. While over 5 million Remington Model 700s have been produced, a very small percentage of those were ever sold as short action magnums. Our short action magnum brass offerings are our best sellers. The ADG Modular Replacement Bolt opens up the possibility of having a short action magnum for some of the millions of owners of non-magnum short action Remington M700s and simultaneously introduces them to all the options of short action brass we offer. Truly a synergistic opportunity that while produced independently, we hope you bring them together in the field.