



Ammunition selection and reloading for 6.5 Grendel rifles, upper assemblies and barrel kits

Because it is an extremely high-performance cartridge, the 6.5 Grendel stretches the performance limitations of the AR-15 platform. As it is also relatively new on the market, ammunition manufacturers may not have adequate data or rifle samples in their test libraries to make accurate determinations of what constitutes a safe load in all rifles chambered for this cartridge. Do not assume that ammunition is safe in your 6.5 Grendel® rifle just because it comes in a factory box. If you see indications of case expansion in front of the head, extrusion into the ejector pin hole or extrusion into the firing pin hole, this ammunition should be considered unacceptable in your rifle. Stop shooting this ammunition immediately. As a safe and reliable ammo option, we recommend the Alexander Arms or Hornady factor ammo.

If you reload for the 6.5 Grendel, we offer several suggestions. First, buy only Lapua or Hornady 6.5 Grendel cases, as they have superior metallurgy and will more safely tolerate the chamber pressures associated with this cartridge. Do not try to fabricate your own cases out of another parent case; it is not worth the trouble and is not safe. Second, we recommend loading on a single station press or a press that allows you to feel the primer seating tension. This does not require sophisticated equipment and is a very important indicator of the case's condition. Still, most progressive presses tend to isolate the loader from the feel of the primer seating into the case. Lee Precision, Inc. offers a fine hand primer that provides excellent response for the priming operation.

Once you've begun reloading ammunition, never start at the top of any load data tables. Work towards a load that delivers the best accuracy, not necessarily the peak velocity. Typically, peak accuracy is obtained 5-10% below peak velocity with any bullet/powder combination. When developing a load, pay close attention to case head expansion and primer retention. If the primer seating force declines obviously, you're past the acceptable pressure limitations for that combination, and you should reduce the load or change powders. Finally, watch for flattened primers, cratered primers and especially extrusion of the case head into the ejector pin hole in your reloads; these are all indications of unacceptable pressure. You should be able to reload the Lapua cases at least eight to ten times if your pressures are within acceptable limitations. Discard the cases once they show any indications of over-pressured loads.

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