

The Difference Between 223 Rem and 5.56 Military Cartridges

There is a general misperception by the shooting public that the 223 Rem and 5.56 Military cartridges are identical – just different designations for commercial and military – and can routinely be interchanged. The fact however is that, although somewhat similar, they are not the same.

- The cartridge casings of each have basically the same length and exterior dimensions.
- Mil Spec 5.56 ammo typically has higher velocity and chamber pressure than the 223 Rem.
- The 5.56 cartridge case may have a thicker sidewall and a thicker head - to better withstand the stresses generated by the higher chamber pressures. This, however, reduces the powder capacity of the case - which is of concern to the reloader.
- The 5.56mm and 223 Rem. chambers are similar but not identical. The difference is in the "Leade". Leade is defined as a portion of the barrel directly in front of the chamber where the rifling has been conically removed to allow room for the seated bullet. This portion of the chamber is more commonly known as the throat. Leade in a 223 Rem. chamber is usually .085". In a 5.56mm chamber the leade is typically .162", or almost twice as much as in the 223 Rem. chamber.
- You can fire 223 Rem. cartridges in 5.56mm chambers with this longer leade, but you will generally have a slight loss in accuracy and velocity – compared to firing the 223 round in the chamber with the shorter leade it was designed for.
- Problems may occur when firing the higher pressure 5.56mm cartridge in a 223 chamber with its much shorter leade. It is generally known that shortening the leade can dramatically increase chamber pressure. In some cases, this higher pressure could result in primer pocket gas leaks, blown cartridge case heads, and gun functioning issues.
- The 5.56mm military cartridge fired in a 223 Rem. chamber is considered by SAAMI (Small Arms and Ammunition Manufacturers Institute) to be an unsafe ammunition combination and is listed in the "Unsafe Arms and Ammunition Combinations" Section of the SAAMI Technical Correspondent's Handbook. It clearly states; "In firearms chambered for 223 Rem – do not use 5.56 Military cartridges." Federal Cartridge is a member of SAAMI and supports this position.
- Federal's XM193 packaging currently has a warning that states "For use in standard 5.56 Chambers. Do not use in non-standard 5.56 chambers." This warning is also listed on the XM193 Product Specification Sheet. Winchester also has a similar warning on their USA brand 5.56 ammunition packaging: "Use only in firearms in good condition designed and chambered by firearm manufacturer specifically for this 5.56 ammunition and so marked on the firearm."
- It is our understanding that commercially available AR15's and M16's – although some are stamped 223 Rem on the receiver – are manufactured with 5.56 chambers. Our advice however should be that it is the customer's responsibility to know what their firearm is chambered for and choose their ammo accordingly.