



We have had questions about headspace in original Navy 7.62mm M1 Rifles. I inspected many dozens of M2 Mod 1 rifles, or the ones originally barreled with brand-new USGI 7.62mm barrels and prepared a good number of them for use as Marine Corps Award Rifles. I want to point out we received them AFTER they had been through 5th Echelon, Depot Maintenance rebuild, so the Navy considered them

you. separation and possible damage to your rifle and spec. cartridge cases or you risk case cracking or suggest you must only use true USGI 7.62 NATO Gage in your M1 or M14/M1A, I most strongly if the bolt closes on a .308 Win 1.638 Field Reject

1.630	Minimum .308 Win. GO headspace
1.631 - 1.632	Practical minimum headspace for M1 and M14/M1A rifles
1.6335 - USGI 7.62	GO or minimum headspace for the M14 rifle
1.634 - .308 Win.	NO GO headspace
1.6375 - USGI 7.62	NO GO headspace for M14
1.638 - Standard .308 Win.	Field Reject Gage for maximum headspace
1.640 - True SAAMI spec. .308 Win.	Max headspace and some foreign 7.62 NATO Field Reject
1.6415 - USGI 7.62	NATO M14 rebuild standards maximum headspace
1.6445 - USGI 7.62	NATO M14 Field Reject or maximum headspace for safety

Before going further, it is important to list a full headspace chart in inches for reference.

chambers. thinner .308 cases may fail in some military headspace without cracking or having a case separation, while the cases can stretch to those longer headspace dimensions allowed by U.S. Military Standards. The thicker 7.62 headspace gets on the long side, especially as long as

OK, now we will go over some problems with accuracy and function with USGI M118 LR 7.62 NATO ammo in some chambers. This also goes for 175 gr. bullets going up to the maximum weight of 180 gr. for use in these rifles. Back in the 1980's, the Marine Corps Rifle Team (and Jim Adell confirms) the Navy Team also tried the excellent 180 gr. Lapua Match Bullets in our NM M14's and NM M1's, but both Teams found the accuracy disappointing and stopped using them. We never figured out why. During that period and right up to when we first began producing the M14 Designated Marksman Rifles, we cut the headspace to the then-common 1.631 - 1.632. As far as I knew when I retired in 1997, the Navy and the Army both used the same chamber in their various versions of M14 Enhanced Battle Rifles. All these rifles shot well with 168 and 173 gr. NM bullets. However, within a few years when the M118 LR ammo became available, service members began reporting less accuracy with it in their enhanced M14's. Some shooters said it shot well in their standard M14's and it took a while to figure out why.

.308 Win ammo in their Award Rifles. or separated cartridge cases should Marines use ONLY. I wasn't about to take a chance of cracked them as storage, even though they could have been headspace, I marked as unserviceable and returned bolts to do that. On rifles I couldn't get to that Reject Gage. Sometimes I had to try quite a few allow the bolt to close on a 1.638 .308 Win Field swapped bolts so none of them we issued would won the rifles might shoot .308 Win. in them, I cannot prove that. Well, since those Marines who the headspace standards for machine guns, though some went as high as 1.641. I suspect they used Most had a minimum headspace of 1.636 and though still serviceable by M14 Rebuild Standards. was how "loose" the headspace was on those rifles, fully serviceable. What surprised me a great deal

Tools authorized for unit level parts replacement and maintenance.

