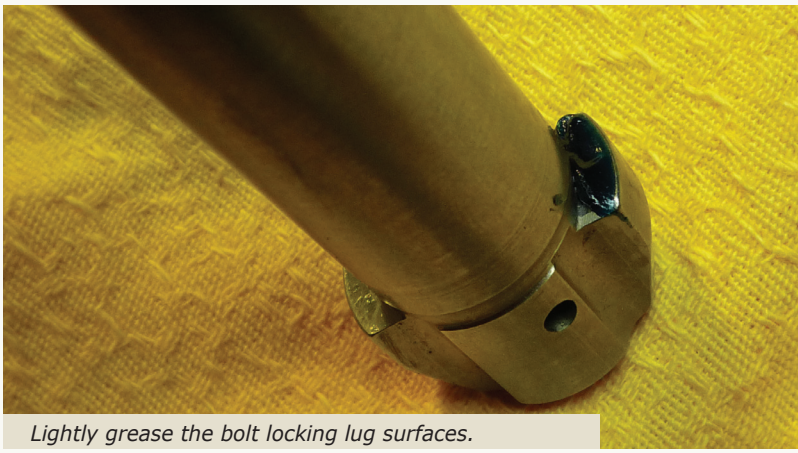
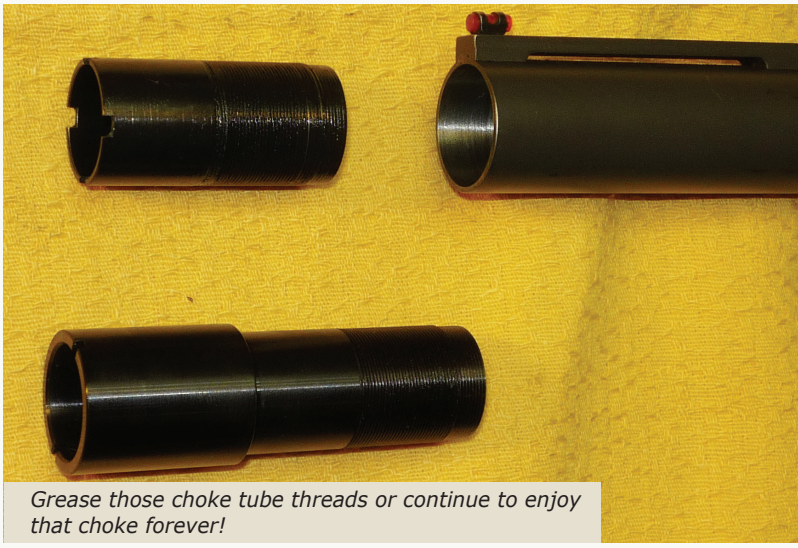
FROM THE GUNSMITH'S BENCH
MAINTENANCE – JUST DO IT!

Autumn, winter and spring are the main seasons for hunting in New Zealand but they can also coincide with some of our most inclement weather. No one really likes being out in the pouring rain but often, when we're out in the back country, 'it' happens. In this article, we will discuss a few issues and tips for the maintenance of hunting rifles and shotguns.

Rust forms in places you can't see, strip your bolt down and clean it after a wet trip.



Lightly grease the bolt locking lug surfaces.



Grease those choke tube threads or continue to enjoy that choke forever!

SHOTGUN BARRELS

Generally, the main items you will need for cleaning a shotgun are a cleaning rod, bristle brush, "Tornado brush" (for stubborn fouling) and oily cotton patches. There are lots of good solvents on the market for dissolving powder and plastic wad residue, use them. A lot of shotgun barrels are chrome-lined these days, but there are still many that aren't. Non-chromed barrels will rust spot and then form pitting marks if not properly cleaned and oiled after use. I also recommend cleaning and oiling chrome-bored barrels as well when not in use, as this can help to ease fouling removal. Just remember to clean the oil out with a few dry cotton patches before you fire the gun.

Choke tubes are almost a standard item on all new shotguns but unfortunately a lot of guys neglect to lubricate the threads and just install them 'dry', which can result in them rust-seizing into place if not removed for some months (or even years!) I recommend applying a high pressure type lube grease to the choke threads and tube recess in the barrels then install the tubes and run a few clean patches down the bore. Grease seems to last and perform better than just gun oil for this task. Be aware that, inevitably, some choke tubes will be bulged by steel shot and this can also make them difficult or impossible to remove. I am seeing this a lot now, mainly with the shorter type choke tubes or tubes that are of too tight a construction for the steel shot sizes used. Do not use stubby flush-mount full or ¾ choke tubes with steel shot, regardless of what the manufacturer claims. Extended type tubes especially for steel shot use are the only exception to this. If you can't get the choke tube out easily with the choke wrench, then it's a trip to the gunsmith. Don't bugger up the end of the tube and or the barrel by applying too much force and attempting to get it out.

RIFLE BARRELS

As with shotgun barrels, clean and oil when not in use – including those with chrome-lined bores or barrels made from 416 stainless steel. Be aware that 416 stainless rifle barrels are not rustproof, and they will rust spot or pit if conditions are right to allow oxidation. A barrel that has been fired, not cleaned, then exposed to a wet or warm-moist environment will start to rust. Trust me, I have inspected hundreds of barrels with a bore-scope and I can assure you that stainless barrels definitely can rust spot or pit – 416 is a totally different grade of stainless to that used in sinks and bench tops. Stainless rifles are not maintenance free – you still have to clean and maintain them, although you do have a little more time to get onto the cleaning before the rust starts compared with regular chrome-moly (blued) steel barrels.

There are lots of good cleaning products on the market, use them!

Clean the inside of your barrel carefully and with the right accessories.

COPPER FOULING

If you are trying to maintain the best accuracy potential for your rifle, you will need to keep copper fouling build-up in your rifle barrel to a minimum. This is best achieved by using a good firearms-specific bore-cleaner designed for copper and carbon fouling removal. Some good standbys are Hoppe's Benchrest 9 (Black Label), Butch's Boreshine, Boretech Eliminator and TM solution bore cleaner. The latter two are water soluble and brushes etc can be cleaned up straight away with hot water so that the bronze brushes last longer. Most of these cleaners can usually be safely left in the bore for a few hours to allow the chemicals to actually do their job and dissolve the copper. There are some high-strength cleaners on the market, but I would advise caution. Some are a bit volatile and some have high ammonia content so do not inhale the fumes. And never mix different bore cleaners together in some attempt to make a 'special brew' wonder cleaner!

Abrasive type cleaners are probably best avoided by most shooters unless you have a really rough bore. Firearm-specific products, such as JB bore paste, can be okay if used carefully, but avoid using general purpose abrasives – some of the ones I've heard of guys using, such as Autosol, Jif and even Scotchbrite, send a shiver down my spine. I've heard a few bizarre things over the years, but one that stands out was a guy who told me he was concerned about copper fouling on his new stainless rifle, so he decided to "get stuck into it" – unfortunately, and probably through ignorance, this "getting stuck into it" involved using some green Scotchbrite pads (i.e. pot scrubbers) spinning around down and into the bore in an attempt to scrub the copper out. This is simply never going to work without damaging the bore, which is exactly what happened in this case. Just use a good bore solvent instead and allow some time for the solvent to do its job. I have never used any copper remover that is a simple wipe-in, wipe-out cleaner – all products will need some time to act on the copper fouling and dissolve it – some just take longer than others.

Oil-down the bore with an oily patch and then put the rifle into storage. Remember to run a clean patch through the bore before you next fire it though so that you don't get an oil bulge in the bore, which will degrade the accuracy and possibly ruin a good barrel.

ACTIONS

Actions should be cleaned out occasionally with kerosene (or similar 'washing solvent'), blown off dry with compressed air and the surfaces and working parts lightly oiled. I should emphasise the word lightly – drowning the action in a copious amount of oil is not what we want as this is only going to create other problems, such as oil in the trigger mechanism (we don't want that) or oil-penetrated wood which can lead to a damaged stock (we definitely don't want that). Old-school oils such as "Young's 303" can gum-up moving parts badly with age and can be a real bugger to remove when it goes hard or tacky. This sort of thing can retard a firing pin fall and lead to misfires or cause other parts like trigger and sears to not reset properly. Also, be aware of rust forming in places you can't see, such as the inside of the rifle's bolt assembly. This should be stripped and cleaned occasionally, especially after a wet hunting trip. Tikka T3 owners should take note of this – I have found several of these recently with rust forming between the firing pin shaft and collar which was causing misfires. All these rifles had been out in the wet and none had been cleaned properly afterwards.

Lightly grease the locking lug surfaces – especially on stainless steel bolts. Dry stainless contact surfaces under pressure can cause galling and binding marks to occur. I have even seen this on some high-end custom actions, which is unfortunate.

STOCKS

Wooden stocks may need more care and attention than fibreglass or plastic stocks. Look out for cracks, loose screws or other damage and repair or correct any issues as required. Anything that you can't competently handle yourself should be referred on to your local gunsmith.

With a bit of time, care and effort, you can keep your gun or rifle in good condition and this should save you some money in not having to buy a new gun/rifle every few years (unless you want to of course!), and to maintain a higher value in your investment. Routine maintenance can also help to avoid or minimise firearms breakages or mishaps out in the field.