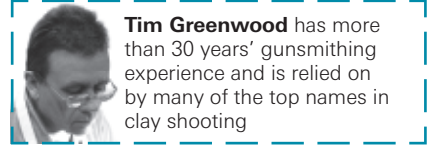
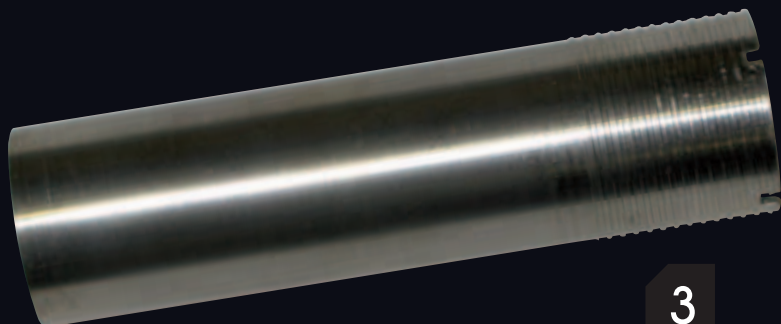
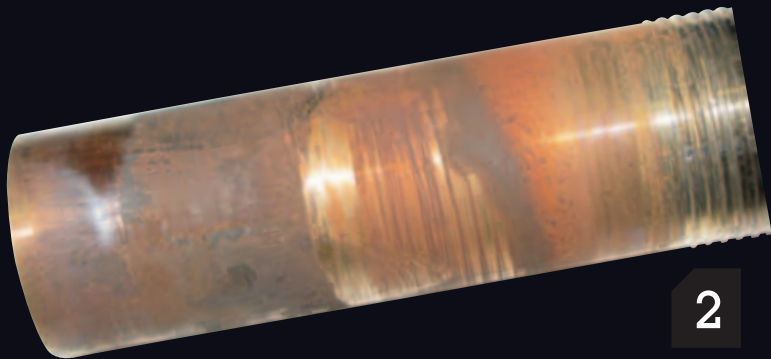




CLEANING THE CHOKES

Next in the gun cleaning series, **Tim Greenwood** gives you the lowdown on choke maintenance



Tim Greenwood has more than 30 years' gunsmithing experience and is relied on by many of the top names in clay shooting

In the January issue of Clay Shooting, I started answering an email from one of our readers regarding basic gun maintenance, cleaning and how to choose a gun. So far I have dealt with barrel cleaning and ejectors, so this month we have a lot more to cover.

Let's start with "multichokes". I am sure you are all aware that a multichoke is a sleeve that screws into the muzzle and introduces a restriction or "choke" which shot has to pass through before leaving the gun. The theory is that the shot is bunched together by the restriction to produce a tighter pattern of shot at the muzzle, which in turn means it stays together more to kill targets or birds at a longer range. I say "in theory" because it is my personal belief that while chokes have a huge effect on cartridges with a felt/fibre drive wad and low antimony lead (less hard), I am not convinced it has such a huge effect on modern cartridges with plastic cup wads containing the shot fully and high antimony (harder shot). I shoot with much more open chokes than I used to with no deterioration in the kills I achieve.

The choke tube, when screwed into the muzzle of the gun, must form a gas-tight seal with the barrel. At the back of the aperture, the choke tube sits into a slightly recessed shoulder, which encourages the gas from the shell detonation to flow over the joint instead of trying to find an alternative exit route.

Chokes in the condition shown in pictures (1) and (2) may not sit or tighten properly into the recess, allowing the gasses to try and force their way between the wall of the choke and the wall of the barrel. A choke should be pristine before being inserted into the muzzle as in picture (3). This is how the choke shown in picture (2) looked after proper cleaning.

What do I mean when I say "trying to find an alternative exit route"? Have a look at pictures (4) and (5) - nasty aren't they? But this could be how the muzzle of your gun ends up if the chokes are not cleaned or tightened fully into the recess. The only solution to this kind of damage



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is to chop the end of the barrel off if you are lucky, or throw the barrels in the bin. Shot that emerges from such a fracture can spin off in a random trajectory that could blind, maim or kill anyone nearby.

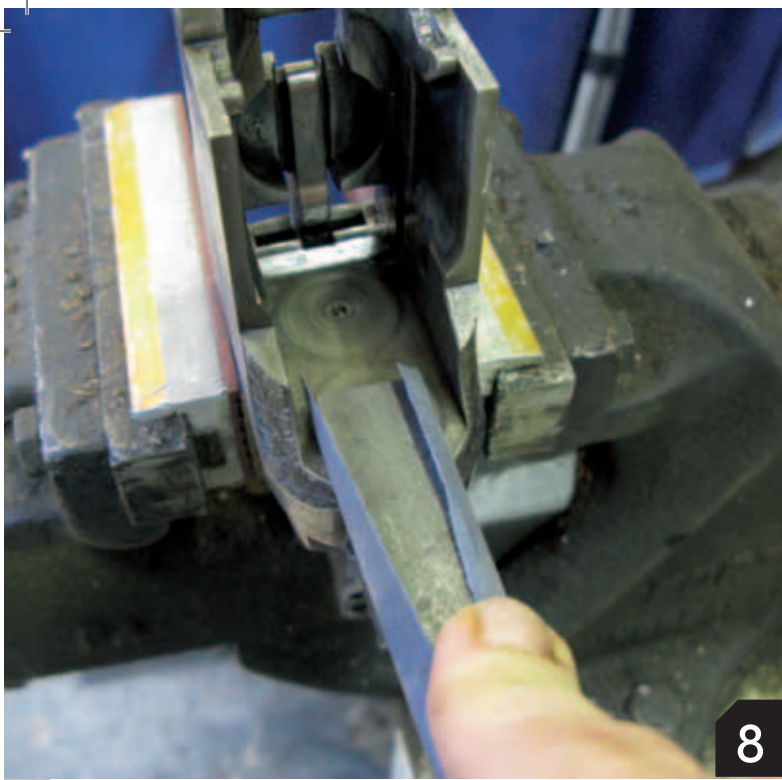
So, how do you clean your chokes effectively? Leave them in the gun while carrying out your usual barrel cleaning regime to ensure no dirt gets onto the threads in the muzzle. This should also ensure the inside of your choke is thoroughly cleaned. Then, remove the choke and use the same solution as for cleaning the barrel on the outside of the choke. An old toothbrush is very useful for the threaded section. At the same time, use some of the cleaning solution in the choke aperture and a patch over your phosphor bronze brush to wipe away any dirt.

If the choke is of an internal type (no collar or extension on the outside of the barrel) and particularly dirty, you can leave it overnight in a jar of solution to soak before cleaning. I have even put stainless chokes, as in picture (2), in the dishwasher (when my wife wasn't looking). Although this can discolour the steel, they have come out spotlessly clean unless very heavily fouled. Do not put blued or external chokes with coloured collars in the dishwasher, as the detergent will strip the entire colour and even destroy plastic or alloy.

Once the choke is clean, apply a light grease to the back part before inserting, then screw home tightly into the aperture using the tool provided. This has to be a gas-tight seal and your fingers will just not produce it. Manufacturers give you a key for a very good reason; use it or you are playing 'Russian roulette' with the muzzle of your gun, as shown in pictures (4) and (5) and anyone standing nearby.



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As a guide, when you take your chokes out to clean, if there is any carbon around the outside of the choke near the back end where it sits in the barrel, gas is escaping into the joint. Ultimately the gas will lift a flap of metal at the back of the choke, causing a restriction with the consequential destruction you have already seen when the next shot is fired.

The next point of maintenance should be your action. Every so often, if you have the stock key and are reasonably adept, take the stock off and check inside for rust and dirt. Your stock may be stuck to the action and require a light tap with a rubber mallet to remove it (6). Make sure it doesn't drop onto the ground or you will be spending time at your local gunsmith's, making sure he can afford a holiday this year. Spray inside the action lightly with WD40 or similar oil, then wipe off any excess



and allow the action to drain onto a piece of kitchen roll. This will help to prevent rust and remove any bits of dirt or flecks of wood from the stock that may be loose in the action. Make sure when you put the stock back on that it is done up as tightly as possible. Stocks don't break (if they have been fitted to the action correctly) from over-tightening. They will break if they are too loose on the action.

Wipe around the action head with a piece of cotton waste and use an old toothbrush (7) or a cotton bud to get into all the corners.

If the standing breach (8), ejectors (9) or the breach face (10) are heavily fouled, use a piece of very fine (800 or finer) wet-and-dry paper wrapped around a flat object such as an old file to gently polish away any discolouration or rust.

Finally, before putting your gun away, apply a light coating of grease to the sides of the barrels (known as the lump), the locking surfaces (two holes on the breach face of a Beretta, two lugs on the breach face of a Perazzi and one long slot across the base of the breach face on a Miroku/Browning), the hinge pin and the knuckles (where the forend ironwork rubs on the action) and possibly leave a light coat of oil down the bores if the gun is not to be used for a while. Wipe over all the metal surfaces with a lightly oiled rag and remember, store your gun with the muzzles down in your gun cabinet to allow any excess oil to drain and prevent the action from soaking into the stock and ruining it.

Next time I will try to answer the last part of our reader's email... Which gun to choose? ■

What can Tim Greenwood do for you and your gun?

- Tim offers a full gunfitting service and free help and advice
- He can do anything required to your stock, barrels or action
- He specialises in wooden stock extensions matched to your existing stock
- Tim will also make any specialist parts as required and offers full servicing and maintenance services
- Visit the website: www.greenwoodgunsmiths.co.uk or ask Tim's advice by emailing: asktheexperts@blazepublishing.co.uk