MAINTENANCE & ZEROING(2)

continued from Maintenance & Zeroing(1)

Locking lug recess & bolt lugs

- Where the bolt lugs lock into the action is difficult to access and yet important to clean.
- An action cleaning kit with cotton dental rolls should be used to clean out any accumulated dirt.
- Bolt lugs should be wiped off and lubricated every time the rifle is used. Use a very small quantity of light grease.

Cocking cam

- Apply a small quantity of grease to this area to aid smooth operation and reduced wear.

Firing pin assembly

- A consistent firing pin strike on the primer is critical for best accuracy. Do not pack full of grease as this will only impair a consistent strike.
- Light oiling should be sufficient to ensure no corrosion takes place around the firing pin. It is advisable to remove tension from the firing pin when the rifle is not in use for long periods.
- If unsure about disassembling the firing pin, consult a gunsmith for further instruction.

Bedding

- If the rifle has a floating barrel check there are no obstructions, dirt or water between the barrel and the stock. Use a stiff piece of card to check the clearance between them.
- If the rifle has a fully bedded barrel, check (with the stock of the rifle in a vice) there is no movement between the barrel and the stock.
- When the action is required to be removed from the stock for thorough cleaning and drying, specialist advice should be sought in the first instance until you are competent to carry out the task yourself.

Stock

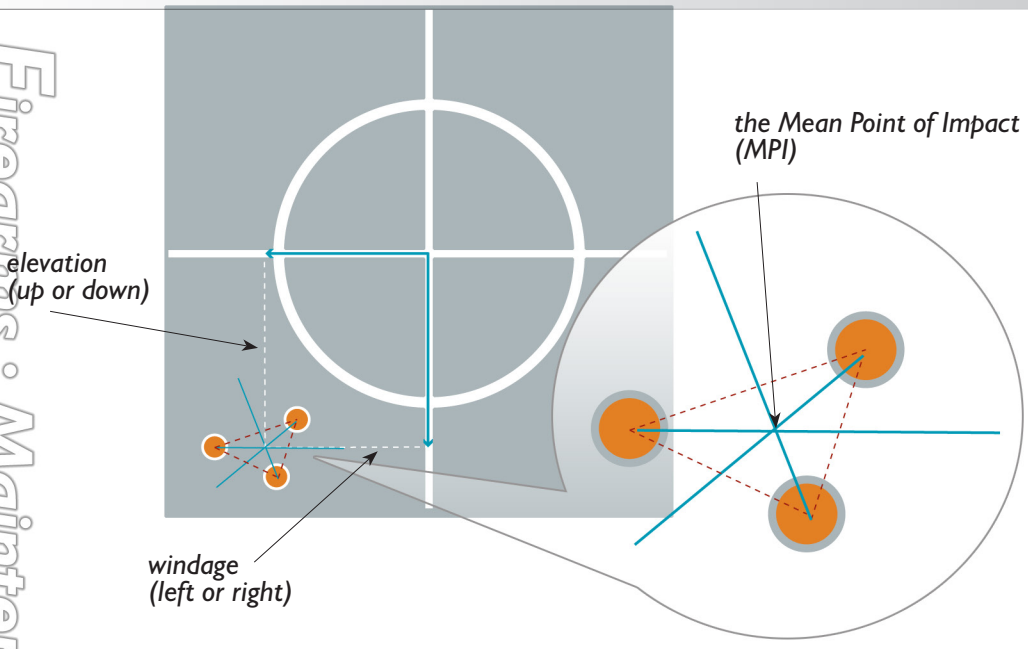
- A rifle will maintain its point of impact and accuracy in a more consistent fashion if the stock stays stable. This not only means excluding water from the stock but also avoiding large variations in humidity and temperature over a short period of time. The common stock finishes such as oil and varnish work perfectly well providing they are maintained. Synthetic stocks can simply be wiped over with a cloth to ensure they are dry.

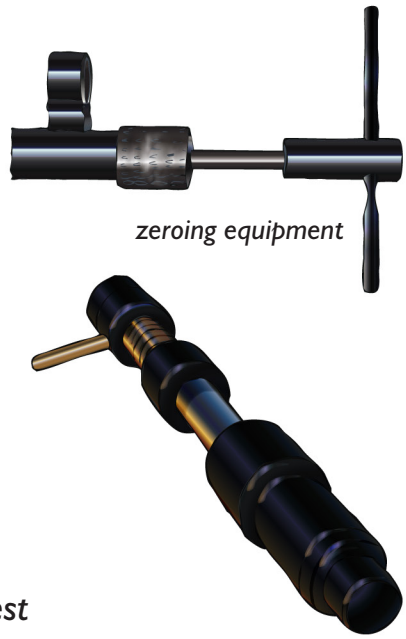
Trigger

- Do not lubricate the trigger mechanism except with a dry lubricant if necessary.
- Triggers should be operated clean and dry as grease and oil only serve to attract and hold dirt.

Scope

- Protect the lenses whilst cleaning the barrel as oil can destroy the lens coating. Care should also be taken when using any sprays near a scope.
- Blow loose dust off with an air supply.
- Soft, clean cloths should be used with the aid of lens cleaning fluid.
- Periodically check the position of the scope on the action to make sure it has not moved rearward. Reposition & tighten as required.
- Re-zero rifle to ensure accuracy*.





Zeroing of Firearms

Basic principles

2 Before zeroing check that all screws on the rifle action and telescopic sight are tight and that the rifle barrel is clean.

2 Allow sufficient time between shots to prevent the barrel from overheating.

3 Adopt a comfortable firing position*, and use a rest - either prone, or a purpose made bench rest.

3 Use the same ammunition that will be used when stalking.

3 Do not zero in extreme weather conditions.

3 Use a target that will allow you to take a consistent and accurate aiming point.

3 Decide the range at which you wish your rifle to be zeroed.

3 Do not allow anything to come in contact with the rifle barrel, including fingers wrapped around or touching the barrel.

Bore sighting

Bore sighting roughly zeroes the rifle and scope to ensure the shots at least fall on the target page. Fine tuning can then continue more effectively.

3 Remove the bolt and secure the rifle on a firm bench where it can be aligned with a suitable aiming point by looking down the barrel.

3 Adjust the telescopic sight so that the reticule centre corresponds with the aiming point, as seen through the rifle barrel.

25 yard range test

3 Set a target up at a range of 25 yards.

3 Fire at least two three-shot groups, calculate the mean point of impact (MPI) and adjust the reticule.

3 Remember that, if your telescope adjustment is four clicks for an inch at 100 yards, it will be sixteen clicks for an inch of movement at 25 yards.

3 Fire an additional three shots to confirm adjustments.

100-200 yards range test

3 Set a target up at your chosen furthest out zero range, between 100-200 yards.

3 With the same sight setting, fire a minimum of three shots to calculate the MPI and adjust the reticule.

3 Check the adjustment by firing a second group.

3 The reticule should be adjusted so that the mean point of impact is in the same place as your point of aim.

3 Remember that if your telescope adjustment is four clicks for an inch at 100 yards it will be two clicks for approximately an inch of movement at 200 yards.

Testing either side of zero

3 Once zeroed, take shots at greater and lesser ranges than the furthest out zero to check the trajectory of the ammunition.

*See BPG Firearms: Firing Positions