

Biathlon Rifle Cleaning and Maintenance:

These notes assume you always use standard velocity, lead-only cartridges.

Cold, Snowy or Rainy Weather:

When you bring a cold rifle indoors, water vapour will condense on it. You must wait for the rifle to warm up to room temperature before cleaning it. Take it out of its soft cover, place in a warm dry location and cover with a towel or blanket. When it is warm and dry, you can proceed.

If you use a hard case for transport and/or storage, the case should be left open until the sponge lining is warm and dry.

Warm Dry Weather:

You must remove all surface dust from the rifle and its moving parts after each practice. Similarly, your soft and hard cases should be kept dust, grass, seed, etc. free.

Routine Barrel Cleaning:

NB: *You must remove the bolt and clean the barrel from the breach end. Make every effort to protect the muzzle-end from scratches. Scratches on the muzzle can irreparably affect accuracy.*

After every use: Use your cleaning rod to put a dry patch through the barrel. Examine the patch for burnt carbon and metal particles. If there is significant accumulation, clean with a very wet patch (below). If the barrel appears clean, clean with a second dry patch or a slightly wet patch (below).

“Wet” refers to gun oil or synthetic gun treatment. Synthetic gun treatment is usually preferred for cold weather shooting.

Wet patch: Enough oil or treatment to barely coat the inside of the barrel. It should only take 1 or 2 dry patches to remove any excess oil after this patch.

Very wet patch: Is saturated with oil or treatment. Clean with enough dry patches to remove shooting debris plus excess oil. This could take 4 – 6 dry patches or more, depending on the original state of the barrel.

Routine Maintenance:

Bolt: Examine the bolt for surface wear. Clean all visible dirt. Pay particular attention to the firing pin, the extractors and the face of the bolt. Before competitions, dismantle the bolt and check the firing pin and spring(s). Clean all parts. Lightly oil all surfaces and then wipe very clean.

Sights, Trigger and Fittings: Check all fittings for damage; check all nuts, screws and bolts for tightness; remove any dust and debris. Pay particular attention to the front sight insert, the rear sight screw threads, eye-cup, the trigger, butt plate and harness.

Lightly oil all metal parts.

Bedding Bolts: Check that the barrel is snugly attached to the stock. Bedding bolts should be hand tight only. Over-tightening bedding bolts will damage the stock and will eventually affect accuracy.

Floating barrel: Make sure there is free space between the barrel and the stock. Clean under and over the barrel with an oily rag to prevent external rust.

Magazines: Check the springs in the magazine holder for wear; lightly oil the surfaces of the magazine holder and the outsides of the magazines.

Stock: Check the stock for cracks or other damage. Repair as necessary.

Season End Cleaning:

You should do this at the end of each season, any time you store your rifle for two or more weeks, and before you sell it.

Seasonal Barrel Cleaning:

Keep the barrel slopped downwards so that cleaning fluids flow away from the breech.

- Start with a dry patch to remove surface dust and debris from the last shooting.
- Clean with Hoppe's fluid and a brass brush. Follow the manufacturers instructions.
- Follow with dry patches to remove all the fluid and debris.
- Make sure you clean all the fluid off the muzzle
- Flush with a very wet patch.
- Use enough dry patches to remove excess oil or treatment.
- Finally, once through with a clean wet patch. This will leave a thin coat of protective oil/treatment on the inside of the barrel.

BEFORE USE: Clean the bore with dry patches to remove all storage oil,

Seasonal Maintenance:

Do this at season end or if you crash while carrying your rifle.

Bolt: Examine the bolt for surface wear. Clean all visible dirt. Pay particular attention to the firing pin, the extractors and the face of the bolt. Dismantle the bolt and check the firing pin and spring(s) for wear. Clean all parts. Lightly oil all surfaces and then wipe clean.

Sights, Trigger and Fittings: Check all fittings for damage; check all nuts, screws and bolts for tightness; remove any dust and debris. Pay particular attention to the front sight insert, the rear sight screw threads, eye-cup, the trigger, butt plate and harness.

Surface clean the trigger mechanism and lightly oil.

Lightly oil all metal parts.

Bedding Bolts: Some people take the action off the stock for long term storage and cleaning. [When you reassemble] Check that the barrel is snugly attached to the stock. Bedding bolts should be hand tight only. Over-tightening bedding bolts will damage the stock and will eventually affect accuracy.

Floating barrel: Make sure there is free space between the barrel and the stock. Clean under and over the barrel with an oily rag to prevent external rust. This cleaning is easy if the stock is removed first.

Magazines: Check the springs in the magazine holder for wear; lightly oil the surfaces of the magazine holder and the outsides of the magazines. Check magazine springs.

Stock: Check the stock for cracks or other damage. Repair as necessary. This would be a good time to refinish the stock, remove unwanted stickers, markings, etc..