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## *Musket Cleaning and Care in the Field*

**Responsibilities:** All soldiers in the company have the responsibility of cleaning and care for the rifled muskets that they use. This applies whether you own or borrow a rifle. In the past we have had a number of people borrow a musket from the company or a person, use it, then leave without cleaning it or beg, borrow, or steal cleaning supplies in order to clean it. With this in mind, everyone that uses a musket SHOULD HAVE A MUSKET CLEANING KIT. If you recently purchased a musket, then your very next priority should be putting together a cleaning kit. Likewise, if you do not own your own musket but are borrowing one your next priority should also be assembling your own cleaning kit or, at the very least, bring your own cleaning rags and oil to a reenactment.

Often during the battle reenactments we do not have time to completely break down and clean the muskets, so we give them a simpler field cleaning. This consists of cleaning the barrel and bore and then wiping down and oiling all the exposed metal parts. Here are the steps I recommend:

**Step one:** Remove the ramrod from the rifle and set it aside (if you spill water or cleaning solution down the ramrod channel, it tends to rust the ramrod). Then, if possible, remove the hammer screw and hammer, and using a nipple wrench, remove the nipple (it is not always necessary to remove the nipple). You can clean the musket with the hammer and nipple in place, but you are much more likely to get water or cleaning solution on the stock or behind the lock plate if you do.

**Note:** If you do not have a cleaning solution and you intend to use water, you should always use boiling water. Boiling water cleans the powder residue and flash much better than cold water, and it heats the barrel so it dries very quickly and reduces the chance of surface rust if you oil the metal immediately.

**Two:** The next step is to clean the bore with either a cleaning solution or boiling water. Although 409 cleaner works, I highly recommend blue windshield washer fluid because it works better and it is cheaper. If you don't have either, then you can use boiling water. The trick is to hold the rifle at an angle (I usually hold the rifle by the sling,

near the muzzle end, or by the top sling swivel if it does not have a sling), with the top portion of the butt stock resting on the ground and the touch hole (where the nipple screws in) facing towards the ground with the trigger guard facing up. Using a small funnel in the top of the barrel (to keep from spilling on the stock or exterior of the barrel), pour the cleaning solution or boiling water into the bore. Take extra care not to spill the cleaning solution or water on to the exterior of the barrel. When holding the rifle in this manner you direct the liquid out of the touch hole or nipple in such a way that it does not run down the stock or into the lock plate. If you are using a cleaning solution, fill the barrel most of the way and then let it drain at least once (if you try to fill the barrel all the way up it tends to overflow). If you are using boiling water you should continue filling the barrel most of the way and allowing it to drain until the water runs clear through the touch hole or nipple.

**Note:** this portion of the cleaning should be done out of the camp so we don't make a muddy, black mess in the company street.

**Three:** Run a bore brush or cleaning patch on a jag through the barrel. Run it through the barrel several times to loosen up any residue left in the riflings. After running the patch or bore brush through the barrel, repeat pouring the cleaning solution or boiling water into the bore at least a one more time, followed by more brushing or cleaning patches. Continue the process as necessary until the barrel seems clean.

**Four:** Drying the bore. After you have poured the cleaning solution or boiling water into the bore for the second time (or more than twice if the barrel was still dirty), then you need to dry out the bore with cleaning patches. You should put the patches on the end of the jag, not through the slot (as on an Enfield ramrod), this way when you get to the bottom of the barrel or breach you can clean the residue out by twisting the cleaning rod while it is seated at the bottom of the barrel. You want the patches to fit snugly in the bore, so that you clean out the riflings as well, but be careful not to get them so tight that they get stuck in the barrel. You should continue to run patches

through the bore, replacing the dirty ones with new patches, until you can run a patch through the bore and it comes out clean and dry.

**Five:** Oiling the bore. At this point you want to run a patch that is saturated with some kind of oil through the bore. Any gun oil or 3-in-1 oil will do, but they are expensive. I prefer 30 SAE motor oil. It is cheap, it burns out when you fire the musket, and it is heavy enough to give a good coating.

**Note:** If you are going to fire the musket later that same day, then you need to run a clean and dry patch through the bore to wipe out the excess oil and keep it from collecting in the breech and soaking your powder. If you are not going to use it until the following day, leave the excess oil in to prevent the bore from forming surface rust from the night air or morning dew. Just remember to run a dry patch through it before you use it again to wipe out the excess oil that has collected in the breech.

**Six:** Cleaning exposed metal parts. Next you need to wipe down all the exterior metal parts with a rag. If there is powder residue or fowling on any of the parts, particularly the lock plate, hammer, nipple, or breech area, use a small amount of gun cleaning fluid or powder solvent on the rag to clean this off. If there is heavy "flash" or rust you may want to use your wire brush or green pot scrubber. (This is only for bare metal. If you have a blued musket, such as an Enfield, use a rag or a plastic or nylon bristle brush. A wire brush or a green pot scrubber will damage the bluing.) Pay special attention to cleaning out the nipple and making sure that it is clear. Use your nipple pick, both in the nipple and in the touch hole.

**Seven:** Oiling exposed metal parts. After you have wiped down all of the exposed metal parts, take a small rag or cleaning patch coated with oil and rub a good coating of oil on all the exposed metal parts. If you are not going to use the musket until the next day this helps prevent rust overnight. Just remember to take a clean rag and wipe off the excess oil when you get ready to use it again.

**Eight:** Replace the nipple and hammer if you took them off. Then retrieve your ramrod and place it head down in the barrel. "Spring" your rammer. (Drop the ramrod down the barrel two to three inches from the breech). If the breech is clean and clear of residue you will hear a definite metal springing sound. When you withdraw your ramrod from the barrel look at the end of the rod to make sure there is no residue. If there is a residue, continue to run patches through the barrel until there is no

residue on the patches or cleaning rod. When you spring your rammer and come up with a dry, clean ramrod you have completed the field cleaning.

**Note:** Field cleaning your musket is fine at reenactment, as long as you take care not to get any water or cleaning solution on the stock, in the ramrod channel, under the barrel, or behind the lock plate. If you get moisture in these areas, they will immediately develop surface rust. After the reenactment you should always completely disassemble your musket, except for the back of the lock plate mechanism, and clean and oil all the metal parts. You should never take apart the lock plate mechanism other than to remove the hammer for cleaning. I usually spray the back of the lock plate and the mechanism with WD-40 oil to keep it lubricated and to prevent it from rusting.

**Warning:** Don't ever use WD-40, Liquid Wrench, or any of the other spray-on lubricants in the barrel, breech, or nipple, as these kinds of oils do not burn out. They will soak and deactivate the powder charge and musket caps. The only place you should use these products is on the back of the lock plate and on the lock mechanism.

#### **Cleaning Kit**

Cleaning rod with .58 caliber jag (a .58 caliber bore brush and a worm are also recommended)

Cleaning solutions: either automobile blue windshield washer fluid or 409 cleaner

Cotton cleaning patches and cotton rags, a large supply (old 100% cotton tee shirts are perfect)

Large and small phillips-head screwdrivers

Large and a small flat-blade screwdrivers

Small wire brush and an old tooth brush

Steel wool or green pot scrubbers

Nipple wrench

Nipple pick

Pair of pliers

Knife or scissors

Small funnel

Gun cleaning solvent

Gun oil or 30-SAE motor oil

One common complaint from both the public and reenactors concerns the modern tools and plastic containers we use for cleaning our muskets. When ever possible we should have period-looking or authentic tools and containers for our cleaning kits. If we have period-looking cleaning supplies and tools we can clean our muskets while the public is in camp and use it as a living history activity.