



**DANGER: BLACK POWDER IS EXTREMELY FLAMABLE AND EXPLOSIVE**

Failure to use in strict accordance with these precautions may result in severe injury, including death, or property damage. Before using this product know characteristics of black powder and black powder substitutes and safe operation of the cannon.

Loading precautions:

- \* Before use, read all instructions and safety precautions free of charge at [www. Americancannons.com](http://www.Americancannons.com).
- \* Always follow loads exactly as recommended by American Cannons LLC.
- \* Never load with spark or static producing tools or machinery.
- \* Never mix powders.
- \* Keep out of reach of children or minors.
- \* Do not dispense black powder directly from the container to the cannon.
- \* Be certain no embers are smoldering in cannon before putting in powder.
- \* Seat projectile firmly against powder charge, as air space between powder charge and projectile can create a hazardous situation.
- \* Use no bullet/bore lubes
- \* Follow all firearm loading and handling instructions provided by the manufacturers of black powders and American Cannons LLC.

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**American Cannon LLC disclaims all warranties, whether express or implied (including the warranties of merchantability and fitness for a particular purpose). Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries (including death), losses or damage to persons or property arising from the use of this product.**

## **WARNING:**

**Loading and firing antique or replica muzzleloading cannon is a highly dangerous activity, likely to result in death, dismemberment or serious injury. Structural integrity of the barrel, powder charge preparation, premature discharge as a result of burning embers remaining in the barrel from previous cannon fire, reliance on others to follow proper procedures and other unforeseen and unanticipated conditions may contribute to accidents, serious injury or death. The authors and publishers of these Rules and Procedures specifically recommend you do not engage in this activity unless you are thoroughly trained by competent instructors, and fully aware of the potential for injury or death. DO NOT RELY ON THE INFORMATION CONTAINED HEREIN TO PROTECT YOU FROM THE DANGERS OF ENGAGING IN THE LOADING OR FIRING OF ARTILLERY. This document is ONLY a summary of what the publishers consider the essential safety rules and procedures they themselves follow when engaging in this extremely hazardous activity, You should be forewarned that SEVERAL DISMEMBERMENTS AND FIVE DEATHS HAVE OCCURRED in the United States and Canada since 1975 to persons while loading or shooting antique artillery or replicas. In addition, gun tubes have failed, sending fragments in all directions at high speed and causing damage and injury. If you decide to engage in this activity, use only black powder in Cannon Grade or Fg grade. Just because the color of the powder is black it doesn't mean it is "Black Powder." Know your propellant and get it from a reliable source in labeled containers.**

These rules were compiled by American Cannons and reflect a consensus of safety procedures developed from historical records and practical experience of many present shooting organizations. They were written and edited by the American Cannon representatives taking reference from the Artilleryman Magazine.

# Shooting Instructions

## SAFETY ZONE

Establish a 50-foot wide safety zone between the spectators and the cannon. No one is to be forward of the muzzle at any time. Only crew members or authorized personnel are to be in this zone.

## FIVE-STEP STANDARD PROCEDURE

### I: Clean The Barrel & Chamber

Clean the barrel as the first step in each cleaning, loading, firing sequence. Use the cleaning brush provided and brush the entire barrel while it is screwed into the chamber three times. Run the brush up and down the cannon three times, twisting it to make sure the barrel and chamber is completely free of powder remnants. Turn the cannon over and tap to remove powder remnants and repeat two more times.

See instructional video on [www.americancannons.com](http://www.americancannons.com)

Important: clean and turn over to empty at least 3 times. Wait 3 minutes between firing and loading.

### II: Load Powder

Use a plain wooden pole (provide by American Cannon) with out a head, or with a smoothly tapered head, so that it might force the hand open should a premature ignition occur.

- The rammer is marked in advance to show the amount of shaft which should be left sticking out of the barrel when the charge and projectile is fully seated and the other to show when the rammer is fully seated at the breech.
- Important: Notice the different barrel length markings and use accordingly with your barrel length.
- The ammunition chest should be located 25 feet behind the cannon. Powder charges should be prepared in advance and wrapped in aluminum foil.

- See instructional video at [www.americancannons.com](http://www.americancannons.com)
- Keep powder container at least 25 feet from cannon at all times and keep lid tightly closed at all times to keep dry.
- Note: Black powder will absorb moisture out of the air. Try to keep lid closed tightly as much as possible.
- Do not proceed to load unless 3 minutes has elapsed since the cannon was last fired (even though cleaning procedure has been completed). Use a stopwatch.
- Create and take your foil-wrapped charge and place it in muzzle with one hand while wearing heavy leather welding gloves, hot stove or foundry worker's gloves.
- Wearing the heavy gloves, stand to the side of barrel with as much of your body as possible behind the plane of the muzzle. Grasp rammer **underhand, with one hand, thumb-to-the-side**. Seat the charge lightly with smooth, short strokes. **Do not pound the rammer against the charge.**
- Immediately upon feeling the charge reach the breech, drop your hand away, releasing the rammer. After 10 seconds and after ascertaining the charge is fully home remove the rammer, one hand, underhand, thumb-to-the-side. This may require grasping and releasing the shaft a few times. At no time should more of the body than absolutely necessary be forward of the muzzle face and never in front of it **Never have two hands on the rammer.**
- **Note: see instructional video at [www.americancannons.com](http://www.americancannons.com)**

### **III: Load Projectile**

- The projectile loading procedure is the same as that for powder. The rammer is operated with short strokes, **one hand, underhand, thumb to the side**, until the mark shows the projectile has been fully seated.
- With a golf ball as the cannon projectile, rap your golf ball with at least 3 layers of wax paper.
- As with all muzzleloaders, to avoid bursting the barrel it is essential there is no air gap between powder charge and projectile when the cannon is fired.  
When the rammer is removed, after the projectile is seated, the vent may

be released. Use your marking gage on your rammer for reference.

#### **IV: Pick The Charge**

- The pick is provide by American Cannons
- To insure ignition, pick the powder charge wrapper through the vent with a pick held by the shaft, between glove protected fingers.
- The pick should not be so long that it reaches the bottom of the bore when fully inserted so as to avoid making pits under the vent.
- Insert at least 6 inches of Cannon fuse allowing several inches to remain outside of the cannon. The fuse only needs to penetrate your foil powder charge.

#### **V: Fire The Gun**

The man designated to ignite the charge calls out "Ready to Fire" in a loud voice to alert other crews on the line that his cannon is about to fire and to notify that the piece is primed. At this call, any open ammunition chests are immediately closed. The gun captain makes a quick visual inspection of the range forward of the muzzle to make sure no one (photographers, children, pets, etc.) is in danger and then commands "Fire". The fuse is then ignited.

The 3-3-3 Rule: (3strokes, 3dumps, 3minutes)

After firing your cannon, you may start your cleaning process. Remember to brush avidly 3 times up and down and dump out after. Do this a total of 3 times and then wait 3 minutes minimum before loading. Start your stopwatch to be sure at least 3 minutes elapses before powder is reloaded.

### **MISFIRES**

If the fuse ignites, but the cannon fails to fire:

- Command: "Do not advance, the fuse has failed." Start stopwatch. Wait 3 minutes.

- When 3 minutes has elapsed, step to the side of the cannon (never front or directly behind) so you will be out of recoil path should the cannon discharge unexpectedly.
- **Do not get in front of muzzle at any time.** Use good judgment.
- Wearing gloves, use the pick provided to clear the vent. Grasp by shaft only. Keep head away from vent. When vent is clear, refuse and fire.
- If three attempts fail to fire the cannon, wait 10 minutes stand to the side of cannon and unscrew barrel slowly pulling barrel out with projectile.
- Do not allow anyone to stand in front of the cannon.
- Still standing to the side, use hook to unload powder charge and dispose properly.
- Do not look down into the cannon chamber at anytime until you have properly emptied it.

### **TEN BASIC SAFETY REGULATIONS**

- 1. Maximum blank powder charges for American Cannons should not exceed 3 oz.**
- 2. Maximum powder charges with projectile should not exceed 2 oz.**
3. All crew members should wear eye and ear protection devices.
4. No one should cross in front of the muzzle at any time during the cleaning, loading or firing procedure.
5. The ammunition box shall be located 25 feet behind cannon and attended at all times or locked. The interior shall be lined with a non-sparking material and the box itself shall be stoutly constructed of wood or metal.
6. No smoking at any time within the safety zone.
7. No drinking alcoholic beverages for 10 hours prior to serving on a cannon crew. Any crew member showing signs of the effects of alcohol or other drug should be replaced.
8. Projectiles shall be constructed so that they easily pass through the barrels.

9. Projectiles should not weigh more than a golf ball.

**10. When blank firing no wadding should be used nor should be necessary for a realistic report.**

### **EIGHT KEY POINTS FOR SAFE SHOOTING**

A. Always allow 3 minutes between firing and reloading next powder charge! There is a valid reason for every rule and procedure contained herein. Follow them and make this a safe sport.

B. Use black powder only. Inspect your cannon barrel regularly for signs of stress.

C. Maintain the 50-foot safety zone with a rope or string marker.

D. Walk. Do no run. Work at a smooth steady pace.

E. Train your crew. Run through a dry fire evolution at least twice before commencing operations with live charges each day. Be sure each crew member performs his duties smoothly and accurately.

F. Make sure each crew member has knowledge of procedures and safety rules.

G. 1. Clean barrel and chamber. 2. Load powder, 3. Load projectile, 8. Pick charge, 9. fuse, 10. Fire. Wait 3 minutes and repeat if desired.

H. Use good common sense. If something is done wrong, STOP. Think it through. Then act to correct it. The stop and think approach gives more opportunity to avoid accidents than the press onward-out-of-sequence method.