

## Laura Watson

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**From:** Cochran, Melissa  
**Sent:** 05/27/2004 04:39:18 PM  
**To:** Watson, Laura M.  
**CC:**  
**BCC:**  
**Subject:** Model 700 Muzzleloader

Model 700 Muzzleloader

Model 700 Muzzleloader

The legendary family of Model 700 Muzzleloaders revolutionized the world of in-line black powder muzzleloading with its state-of-the-art design and unprecedented performance when introduced in 1996.

The Model 700 Muzzleloader is designed with the 3 rings of steel:

Receiver

Barrel

Breech plug

Thus making it the strongest receiver on the market today.

Each version of the Model 700 ML comes with Cleaning Tube, Breech Plug/Nipple Wrench, Ramrod Handle, Ramrod Extension, Allen Wrench, Patch Jag, Weather Shroud and De-Priming Tool. And for current owners of standard Model 700 ML and Model 700 MLS, Remington now offers a Model 700 ML Conversion Kit through the Remington Accessories line of black powder products.

The 3-Way Ignition system on all versions of the Model 700 ML allows the shooter to utilize standard No. 11 Percussion Caps, Musket Caps or .209 Shotshell Primers. A universal firing pin design and interchangeable nipples provide ease of ignition selection and added reliability with use of up to 150 grains of black powder or black powder equivalent. With the choice of a custom-designed 209 nipple, black powder enthusiasts can expect hotter ignition, maximum efficiency and performance, even in the harshest weather conditions. Add the magnum 26-inch barrels and shooters can achieve greater velocities and accuracy, not expected from a muzzleloader.

### MUZZLELOADING CALIBERS COMPARED

.36

A light black powder rifle primarily used for small game like rabbits and squirrels.

.45

Used most often for deer and smaller game.

.50

Probably the most popular caliber for muzzleloading hunters. Favored for its versatility in effectively taking both medium and large game such as antelope, whitetail deer, mule deer and perhaps elk.

.54

An ideal choice for western hunters who prefer the additional striking energy to bring down big game like mule deer, elk, moose and bear.

The Remington Black Powder Heritage.

Eliphalet Remington The long-standing tradition of Remington accuracy began with a muzzleloader -- hand-crafted by Eliphalet Remington.

In 1816, with a flintlock muzzleloading rifle barrel hand-forged in his father's blacksmith shop, Eliphalet Remington started one of the most legendary traditions in the history of sporting firearms: Remington accuracy. Accuracy always built in, not added on. So you see, Remington is no newcomer to black powder shooting. This is where we began. And it could be no more fitting that we now return to our heritage by bringing hunters today's most advanced, state-of-the-art muzzleloading firearms, ammunition and accessories.

Remington Family Blacksmith Shop

Circa 1816. The Remington family blacksmith shop. Birthplace of the original Remington muzzleloader and, along with it, what is today Remington Arms Company, Inc.

There are three types of powders typically used in today's muzzleloaders are Pyrodex, Go Ex, Clean Shot. These types of powders do not have the nitrogen content of conventional black powder.

Many years back, there was the invention of smokeless powder. We do not recommend the use of this type of powder in our firearms. Smokeless powder is measured differently than regular black powder substitute. Smokeless powder is measured in grains of weight not by volume. Where black powder substitute is measured in volume.

The key to black powder accuracy is experimentation. There are several types of projectiles on the market today. You may choose from the Lead Conicle (this is chunks of lead), Round Balls, and Sabots (these are typically more accurate in the Model 700ML).

700ML Suggested Loading Data

.50 Caliber

Projectile

Grain Weight

Black Powder Charge (grains)

Muzzle Velocity (feet per second)

Muzzle Energy (foot pounds)

Core-Lokt Bullets with Sabots

Core-Lokt JHP

275

90 grs. FFg

1450 f.p.s.

1284 ft.-lbs.

100 grs. FFg

1505 f.p.s.

1383 ft.-lbs.

110 grs. FFg

1565 f.p.s.

1495 ft.-lbs.

120 grs. FFg max

1610 f.p.s.

1583 ft.-lbs.

Core-Lokt JHP

303

90 grs. FFg

1397 f.p.s.

1313 ft.-lbs.

100 grs. FFg

1480 f.p.s.

1474 ft.-lbs.

110 grs. FFg

1515 f.p.s.

1544 ft.-lbs.

120 grs. FFg max

1570 f.p.s.

1558 ft.-lbs.

**Gamemaster Pre-lubed Lead Bullets**

**Flat Base HP**

365

90 grs. FFg

1350 f.p.s.

1477 ft.-lbs.

100 grs. FFg

1405 f.p.s.

1600 ft.-lbs.

110 grs. FFg

1470 f.p.s.

1751 ft.-lbs.

120 grs. FFg max

1525 f.p.s.

1885 ft.-lbs.

Flat Base Solid

365

90 grs. FFg

1315 f.p.s.

1479 ft.-lbs.

100 grs. FFg

1370 f.p.s.

1605 ft.-lbs.

110 grs. FFg

1435 f.p.s.

1760 ft.-lbs.

120 grs. FFg max

1470 f.p.s.

1847 ft.-lbs.

Premier Golden Lead Round Balls

.490" dia. Ball

179

80 grs. FFg

1650 f.p.s.

1082 ft.-lbs.

90 grs. FFg

1750 f.p.s.

1197 ft.-lbs.

100 grs. FFg

1840 f.p.s.

1346 ft.-lbs.

110 grs. FFg max

2050 f.p.s.

1670 ft.-lbs.

.54 Caliber

Projectile

Grain Weight

Black Powder Charge (grains)

Muzzle Velocity (feet per second)

Muzzle Energy (foot pounds)

Core-Lokt Bullets with Sabots

Core-Lokt JHP

303

90 grs. FFg

1410 f.p.s.

1337 ft.-lbs.

100 grs. FFg

1460 f.p.s.

1435 ft.-lbs.

110 grs. FFg

1510 f.p.s.

1534 ft.-lbs.

120 grs. FFg max

1565 f.p.s.

1648 ft.-lbs.

Gamemaster Pre-lubed Lead Bullets

Flat Base HP

400

90 grs. FFg

1235 f.p.s.

1355 ft.-lbs.

100 grs. FFg

1290 f.p.s.

1478 ft.-lbs.

110 grs. FFg

1355 f.p.s.

1631 ft.-lbs.

120 grs. FFg max

1410 f.p.s.

1766 ft.-lbs.

Premier Golden Lead Round Balls

.530" Dia. Ball

226

80 grs. FFg

1680 f.p.s.

1416 ft.-lbs.

90 grs. FFg

1760 f.p.s.

1534 ft.-lbs.

100 grs. FFg

1830 f.p.s.

1680 ft.-lbs.

120 grs. FFg max

1960 f.p.s.

1928 ft.-lbs.

Our guns were specifically designed for sabots. They have different weights of sabots, our guns work best with around a 300 grain projectile and from 90 to 120 grains of powder.

Some states ban the use of sabots, you will need to recommend that the consumer check his local regulations before suggesting that they use sabots. Every state has different regulations. If they can't use sabots they can use the lead conical or round balls.

The rate of twist in a Remington Model 700 Muzzleloader is

The rate of twist in a Remington Model 700 Muzzleloader is 1 in 28". This allows for exceptional accuracy with a variety of round balls, conical bullets and our specially designed Core-Lokt bullets with sabots.

To load the powder:

1. Using the ramrod with extension handle and cleaning jag, swab the bore to the breech plug with a cleaning patch that has been saturated with Remington All-Natural Bore Cleaner to remove any debris or fouling that may have accumulated in the bore while the rifle was in storage.
2. Swab the bore with cleaning patches until the patches come out clean and dry.
3. Swab the bore with a cleaning patch lubed with Remington Wonder Lube paste for black powder.
4. Point the firearm in a safe direction and fire at least two percussion caps, musket caps or No. 209 primers to make sure the flash hole through the nipple is clear and dry. Residual bore cleaner at the breech could saturate the powder and increase the possibility of a misfire or a hang fire.
5. Place the butt of the rifle on a firm, stable surface with the muzzle pointed up and well away from your body. Treat the firearm as if it were loaded at all times!!
6. Use individual powder measure to pour the correct amount of powder into the bore. Make sure to use 2F or FFg black powder or black powder equivalent such as PXRODEX RS only. Never use ANY quantity of any other powder. Never pour powder directly into the muzzle from a powder flask or container. A lingering spark could ignite the entire container of powder. Always use an individual charge measure. Never exceed the maximum charge of powder.
7. Keep the muzzle pointed up and away from your body at all times to keep the powder in the bottom of the barrel and to avoid accidents or injury.
8. Proceed to load the projectile.

To load the projectile:

1. Keep the butt of the rifle on a firm, stable surface with the muzzle pointed up and away from your body.
2. If you choose to use a Remington Wonder Wad, place it evenly on the muzzle so it plugs the entire bore. Push the wad into the bore a short distance with a short starter.
3. Load ONE of the projectiles as follows:
  - \* To load a Saboted Conical, firmly seat the projectile in the sabot and push the sabot and projectile into the bore by hand.
  - \* To load a Lubed Conical, push the lubricated projectile by hand into the bore.
  - \* To load a Patched Round Ball, lay a lubricated patch evenly over the muzzle and push a round ball into the center of the patch and into the bore by hand.
4. Use the ball end of a short starter to start the projectile and align it with the bore. Push the projectile approximately six inches into the bore with the shaft of the short starter.
5. Use the ramrod to seat the projectile (and Remington Wonder Wad if used) firmly on the power charge. Do not pound on the ramrod to seat the projectile. Black powder and PYRODEX are impact sensitive and may ignite from impact. The impact may also deform the projectile, adversely affecting the accuracy.
6. Be sure that projectile is firmly seated on the powder charge so there isn't a gap between the powder and the projectile. To provide a reference mark for future loading, mark the ramrod at the muzzle once a projectile has been loaded to the proper depth. (Be sure to recheck the ramrod mark if you change loading components or after the ramrod.)
7. Remove the ramrod from the barrel and replace it in the stock under the barrel.

Placing the Percussion Cap, Musket Cap or No. 209 primer

Note: Only use the caps or primers intended for use with the nipple installed in the firearm.

1. Place the correct percussion cap, musket cap or No. 209 primer on the nipple.
2. Slide the bolt handle forward and push the bolt handle down.

NOW THE RIFLE IS LOADED.

To make the rifle ready to fire, put the safety mechanism in the "F" position.

NOW THE RIFLE IS READY TO FIRE.

Pulling the trigger fires the rifle.

Warning: wait at least one full minute after firing the last round before pouring powder into the bore to allow time for any residual sparks to be extinguished.

Model 700 Parts and Misc Facts

Trigger: The trigger on the Model 700 ML is the same as used on the Model 700.

Trigger Guard Screws: The front and rear trigger guard screws can be removed with a 5/32 allen hex key. The center screw is 3/32.

Trigger Assembly: Use Rem Action Cleaner to clean the trigger assembly. We recommend that you use only one drop of oil on the trigger pin.

Receiver: The receiver on the Model 700 ML is basically cut the same as the Model 700, the difference in the guns is that the Model 700 ML has a breech plug and the nipple.

Cleaning the ML: The bolt needs to be taken apart and cleaned every time the firearm is cleaned and used. You can use the bolt disassembly tool or follow instructions in the owner's manual. When you fire the ML you get what is called "Blow Back" which is the powder that is blown back on the face of the bolt. Black powder is very corrosive. Do not use petroleum based products on the ML except for the one drop of Rem oil on the trigger.

Bolt Stop Screw: This screw can be removed with a 5/32 hex key.

Bolt: There is no headspacing of the ML so a consumer CAN purchase the bolt. We do not sell the Model

700 rifle bolts.

Misfires: Misfires can be caused by a dirty bolt, bad caps, wet caps or powder and a flattened nipple (if the nipple is flattened the consumer will need to purchase a new one).

Ram Rod: The ram rod is made out of aluminum because it is softer than steel and it will not hurt the bore. Only use the ram rod for loading the ML not for cleaning applications. Always use a brass rod for cleaning of the bore. If the ram rod will not stay in the stock, take the ram rod spring and bend this piece of steel back down (you can view this part as #18 on your schematic). Many hunters will mark their ramrods with a round loaded so they will know when they put it in the bore that it is in fact loaded.

Weather Shroud: The weather shroud goes on the front of the bolt to protect from bad weather. The only time that the weather shroud should be used is in bad weather. It is used with the Musket nipple and the #11 percussion cap. You do not use the weather shroud with the 209 Primer. It is not needed with this application. Use of the weather shroud with the 209 will result in the weather shroud cracking, melting or shattering.

Scope Bases: The Model 700 ML uses Model 700 short action scope bases. We do not recommend a specific brand.

Model 700 ML FYI:

Very very IMPORTANT- NEVER run a nylon dry patch down the barrel of the Model 700 ML except if the gun is unloaded and dry. Always use a cotton patch. Lick the patch if necessary. Static electricity could cause the powder to ignite!!

Fred Supry (ext. 3606) handles all calls for PERSONAL INJURY AND PROPERTY DAMAGE.

MOST COMMON QUESTION:

Q: I had to bolt my gun twice and it didn't go off, why?

A: You may want to use a metal cap to ensure that you have a tight fit, or you may want to replace your nipple (we recommend that you change these once a year). Also make sure that your firing pin assembly has been taken apart and cleaned thoroughly. If it is gummed up and dirty this will interfere with the ignition of the firearm. Maintenance is the key for successful operation.

There are 3 types of ignition systems for the Model 700 ML:

Musket Cap (top hat)

#11 Percussion Cap

209 Shotgun primer (introduced in 2002) we offer a conversion kit for Models manufactured prior to 2002 for around \$40.00 from our retailers (we do not offer this is parts) We do not supply these for free for guns manufactured prior to 2002. This is the most effective ignition on the market.

We haven't made a side lock muzzle loader in more than 100 years EXCEPT for in 1995. This was designed in the custom shop and an anniversary edition. It was called the Eliphalet Anniversary Special. It had a 35" barrel with flint lock (the hammer hits a piece of flint for ignition).

We started the manufacture of Model 700 ML in 1996.

We do not make black powder or substitute. There are only 3 manufacturers of powder in the US: DuPont, the US Government and one other company. Laws governing the manufacture of black powder are very strict.

We test our Model 700 ML with Pyrodex granular powder. We recommend the use of granular powder over pellets for an accuracy standpoint.

Do not use smokeless powder in a Model 700 ML!!

Use a 7/16 in. deep socket wrench to take the musket cap nipple of and put a new one on.