IMPORTANT "<u>SAFETY WARNINGS</u>" — NOTE THE SYMBOL:



These safety warnings are for your protection as well as the safety of others. Disregarding information in this manual could cause injury, damage or death.

You have a responsibility to obtain proper training on how to use and maintain your firearm. Certified and reputable instructions are offered by the National Rifle Association, the National Muzzleloading Rifle Association, Black Powder Association as well as state and local organizations. Seek guidance from an instructor who is qualified by one of these organizations.



Do not attempt to assemble, load or use the Muzzleloading barrel until you thoroughly read and understand the information contained in the shotgun Owner's Manual and the contents of this Muzzleloading Barrel Owner's Manual.



As the owner of a firearm you must undertake the full-time responsibility of safe firearms handling for your own safety and the safety of those around you.



Be certain the shotgun Owner's Manual and the Muzzleloading Barrel Owner's Manual are available for reference and supplied with the shotgun and/or the Muzzleloading Barrel if transferred to another party.



If either manual is lost or misplaced, request a free replacement copy from:

O.F. MOSSBERG & SONS, INC. P.O. Box 497 North Haven, CT 06473 Tel: 203-230-5300 e-mail: service@mossberg.com



Handle a muzzleloader with the same respect due all other firearms.

Use Black Powder or Pyrodex only. Use of smokeless powder in any muzzleloader will result in excessively high pressures and could cause injury, damage or death. Do not use smokeless powder; Do not mix powders.



Never smoke while loading, shooting or handling powder. Always follow the powder manufacturer's safety precautions, as listed on its container.





Always wear shatterproof shooting glasses, ear protection, and a heavy shirt with long sleeves. Percussion guns may shower sparks and bits of primer when fired.



Do not exceed powder manufacturer's recommended powder charge. The proper charge for a muzzleloading firearm is an efficient load which provides consistent ignition, velocity and yields pressure within safe limits.





Do not pour a powder charge directly from a horn or flask into a barrel. If a smoldering ember is present, it could ignite the powder charge in the larger container as well as the powder charge, as it is poured into the barrel. This excessive amount of powder could cause a dangerous explosion. Therefore, be safety minded, use a powder measure or other small measure device.



Never accept or attempt to fire a muzzleloader charged (loaded) by someone else.

Never fire a muzzleloader unless the ball is firmly seated against the powder charge. Firing a muzzleloader with the ball off the powder or part way up the barrel creates an obstruction and could cause serious injury, damage to the barrel or firearm, or death.



Be sure all spectators are safely behind you when firing. Flames and bits of primer sometimes exit to the side of the firearm.



A misfire or failure to fire can fire at any second. Wait at least one minute with firearm pointed at the target or safely downrange.

Consult your local Wildlife or Department of Natural Resources guidelines to confirm that this muzzleloading product will conform to local seasonal and legal requirements.

Remove "limiting plug" from magazine tube before attaching muzzleloading barrel (see Shotgun Owner' Manual).



.50 CAL. RECOMMENDED LOADS

PYRODEX:

BLACK POWDER:



muzzleloader.				
TYPE	PROJECTILE	CHARGE		
PROJECTILE	WGT (GRAINS)	GRAINS VOLU		

TYPE PROJECTILE	PROJECTILE WGT. (GRAINS)	CHARGE WGT. (GRAINS)	APPROX. MUZZLE VELOCITY
.490 ROUND BALL	175 gr.	70 gr. FFg.	1550 FPS
.490 ROUND BALL	175 gr.	80 gr. FFg.	1720 FPS
CONICAL	385 gr.	90 gr. FFg.	1400 FPS
CONICAL	410 gr.	90 gr. FFg.	1400 FPS

Round ball loads require the use of a lubricated .010 linen patch.

PROJECTILE	WGT. (GRAINS)	GRAINS VOLUME	VELOCITY
.490 ROUND BALL	175 gr.	80 gr. RS	1700 FPS
.490 ROUND BALL	175 gr.	72 gr. RS	1630 FPS
CONICAL	385 gr.	90 gr. RS	1400 FPS
CONICAL	410 gr.	80 gr. RS	1400 FPS

Charges are the equivalent volume of black powder.

Refer to the Pyrodex manufacturer's loading and

use information prior to using it in your Mossberg

APPROX. MUZZLE

Round ball loads require the use of a lubricated .010 linen patch

LOADING YOUR MUZZLELOADER



BEFORE LOADING:

- 1) Move the firearm's safety button to the "ON" (SAFE) position.
- 2) Keep the muzzle pointed in a safe direction, away from yourself and others. Failure to do so could cause serious injury, property damage, or death.
- 3) Thoroughly inspect the firearm and the muzzleloading barrel to ensure they are unloaded.
- 4) Clean the bore and breech of the barrel to ensure they are completely dry and free of obstructions.
- 5) Assemble the muzzleloading barrel to the shotgun action as described in the shotgun's Owner's Manual.
- 6) Put on shatterproof safety glasses, hearing protection and a heavy, long-sleeved shirt.
- 7) The rifled muzzleloading accessory barrel is designed for round balls or conical single projectiles. Do not load with multi-pellet bird shot.

- 8) Insert the ramrod down the barrel to the breech plug and mark the ramrod where it protrudes from the muzzle. This reference mark will serve as a future guide indicating an unloaded barrel.
- Refer to the primer manufacturer's loading and use information prior to using it in your Mossberg muzzleloader.

With the safety on, the action open (bolt to the rear) and the muzzle pointed downward in a safe direction, insert a 209 shotshell primer through the ejection port into the breech plug primer cavity. The primer is held in position by gravity.

While observing that it does not dislodge, close the action by sliding the forearm fully forward, locking the bolt.

Point the firearm in a safe direction, move the safety to the "off" position and fire the primer.

Repeat this procedure three times to dry out the barrel's interior. Use caution when extracting a spent primer, it will be hot.

With the safety button in the fully "ON" (SAFE) position, the action open, the muzzle pointed up, with no primer in the breech and with no part of your body extended over the firearm, pour a **MEASURED** charge down the barrel.

Establish the best efficiency level of your muzzleloader by using a **lighter** charge than recommended. Record its performances as you gradually increase the charges to the recommended load. DO NOT EXCEED THE RECOMMENDED CHARGE LIMITS as exceeding the recommended level can cause excessive pressures and could cause serious injury, damage to the barrel or firearm, or death. Use only those loads that are listed for your caliber and bullet style.

Never pour directly from a horn or flask. If a smoldering ember within the barrel ignites the charge as it is poured directly into the barrel, the excessive source of powder could cause a dangerous explosion.

- Slap the side of the barrel firmly at the breech area. This practice will aid the powder to fully settle in the breech.
- If using a round ball projectile, center a well lubricated cloth patch over the bore. A patch is not required with a conical projectile.
- Press lead round ball (with sprue "up") on center of patch.
- With "starter" (shorter) end of ball seater, seat the patched ball or conical projectile just into the muzzle.
- · Use the longer end of ball seater to move the chosen projectile further down the barrel.
- With the larger end of the ramrod, firmly push or lightly tap the projectile on top of powder, **without crushing powder**. When using a ramrod, never grab it more than 8 inches above the muzzle. To do so could cause side stress, break the ramrod and, possibly, puncture your hand.
- Never fire a muzzleloader unless the projectile is firmly seated against the powder charge. A method of determining proper load depth is to insert the ramrod when the firearm is fully loaded. Mark the ramrod at the point where it protrudes from the muzzle. Remove the ramrod. This mark should serve as a reference point each time you load. If the mark is above the muzzle, it indicates the projectile is not against the powder and the charge must be reseated or removed or the powder charge and/or the projectile was double loaded (see Removing Powder Charge).
- Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

With the safety in the fully "ON" (SAFE) position, the action open (bolt to the rear) and the muzzle pointed downward in a safe direction, insert a 209 shotshell primer through the ejection port into the breech plug primer cavity. The primer is held in position by gravity, ensure it is properly seated. While observing that it does not dislodge, close the action by carefully sliding the forearm fully forward locking the bolt. Pressure from the bolt can discharge an improperly seated primer causing serious injury, damage to the barrel or firearm, or death.

The muzzleloader is now loaded and ready to fire.



- If a misfire (failure to fire) occurs, place the safety button in the fully "ON" (SAFE) position; wait one minute with the firearm pointed at the target. Then reseat the projectile on the powder and place a new primer in the breech cavity and refire.
- If the firearm still does not fire, place the safety button in the fully "ON" (SAFE) position. With the firearm pointed at the target, wait for a full minute. The projectile and powder charge must be removed.

REMOVING POWDER CHARGE

Wait at least one full minute with the muzzle pointed downrange and the safety button in the fully "ON" (SAFE) position.

Open the action, remove the primer and place a small amount of bore cleaner through the primer hole, thoroughly soaking the powder. Using a ball puller (a screw-like device placed on the end of a ramrod), screw directly into the projectile. Once the ball puller is anchored, the projectile can be pulled out of the bore. Empty out all powder and thoroughly clean the bore and the inside breech plug powder cavity (see diagram). Depending on factors such as cleanliness of the bore, the projectile may be difficult to remove. Seek guidance from a qualified source if difficulty is encountered.

CLEANING AND MAINTENANCE

The bore of the muzzleloader should be cleaned every few shots during shooting or whenever seating the projectile becomes difficult. This will eliminate fouling which prevents proper seating of projectile on powder and it will also reduce the danger of ramrod breakage.

Powder fouling is corrosive and can rust the barrel and the firearm's components in a short time. Disassembly of the shotgun is required as described in its Owner's Manual. Each component must be thoroughly cleaned and oiled after firing is completed.

Use Bore Cleaner or hot soapy water.

- 1) Move the safety button to the fully "ON" (SAFE) position.
- 2) Remove your barrel from the action and place the breech end into a container of soapy water.
- Alternatively, one end of a small rubber hose can be placed over the primer cavity with other end in a small bottle containing a bore cleaner solvent.
- 3) Pump the soapy water or bore cleaner solvent through the primer cavity with a patch and cleaning rod.



- I he ramrod with a patch serves as a piston to suck the soapy water (or bore cleaner) into the barrel through the primer cavity.
- 4) Flush with hot water and completely patch-dry the bore and the breech plug primer and powder cavity (see diagram) while they are still hot.
- 5) When the barrel is cool, oil the barrel and other metal parts with a rust preventative.
 - a. Store firearms in a dry place with good air ventilation.
 - b. If stored in a container, it should be well ventilated.



This Rifled Muzzleloading Barrel is designed for the Mossberg 500[®] and the Maverick 88[™], 12 gauge, 6-shot, pump action shotguns.

Safety and safe firearms handling is everyone's responsibility.