



**WHITE
MUZZLELOADING**

Performance Others Can Only Shoot For

W SERIES THUNDERBOLT



THUNDERBOLT

OFFICIAL INSTRUCTION MANUAL

Congratulations! You now own the most advanced Muzzleloading rifle available today.

Your WHITE muzzleloading firearm is designed with the goal of providing you with an affordable and technologically advanced muzzleloading firearm that does not compromise safety, strength or effectiveness. Your WHITE in-line bolt-action muzzleloading firearm will serve you for a lifetime.

Thank you for purchasing our muzzleloading rifles, bullets and accessories. White Rifles LLC, along with Doc White, are proud to have developed these new high performance muzzleloading rifles, bullets and accessories. Our in-line muzzleloading rifles provide true muzzleloading designs with modern applied technological innovation. We call it “**Design Integrated Performance.**” The results are revolutionizing the muzzleloading industry.

You have purchased the Model 02 ThunderBolt which is the finest in-line bolt-action percussion muzzleloading rifle ever produced. At the heart of each WHITE rifle is Doc White's New “White Muzzleloading System.” Doc White's system redefines muzzleloading performance with the most advanced technology that has come to muzzleloading in the past 100 years. The system approaches muzzleloading “holistically,” in that it takes formerly separate systems, (i.e., bullet, rifling, ignition, locktime, recoil, and overall gun design), and interlocks them into one functionally interdependent yet functionally elegant system. Just pick up your new WHITE muzzleloading rifle. You will notice its safeties, functionality, pointability and superb balance. Go to the range and you will see and feel what easy loading, reduced recoil, reduced locktime, shot to shot consistency, and down range accuracy really means. When you take it hunting, be prepared to stare in astonishment as big game collapse under the incredible knockdown power of PowerPunch and PowerStar bullets. You will soon feel the pride and satisfaction of harvesting big game

cleanly, reducing wounding loss and conserving our precious wildlife resources. When you get back from the range or field, you will still have WHITE working for you: reducing maintenance and cleaning to one simple little word - easy! White's Performance Integration and Doc White's System do it all for you! With your new muzzleloading firearm purchase it is now your exclusively from WHITE Rifles.

At White, we see little point in chasing the imaginary claims and advertising hyperbole of others. There's no redemption in muzzleloading products that violate the muzzleloading envelope. We practice pure and simple muzzleloading theology. As a result, we are blessed with true muzzleloading rifle performance and the peace of mind that comes from being at the pinnacle of muzzleloading performance. No gimmicks, no gadgets, no tricks. Just functionally elegant muzzleloading rifles built the time proven way with Advanced Technology, Advanced Designs, Advanced Materials and Advanced Workmanship!

A MESSAGE FROM DOC WHITE

Thank you for purchasing our product. My name is Gary "Doc" White. I was born in the West better than 60 years ago and started hunting before I was a boy scout. It just seemed natural to take to the fields and mountains every day I was out of school. I fell in love with old guns and was soon enmeshed in traditional muzzleloading.

I built my first muzzleloader before I was 16 and have made hundreds since. It was natural to use the guns I made and the old-time guns I collected for hunting, and I became extremely familiar with the quirks and problems of hunting with primitive single shot arms.

The first rifles I built were frank copies of the old originals, both in flintlock and percussion; that is, until I read Greener's *Guns*, noting his comments on Jean Samuel Pauly, a displaced Swiss who took out a British patent in 1812 for an in-line percussion action complete with coil spring. All the current fuss over modern looking muzzleloaders is just ridiculous. Coil springed, in-line action muzzle-guns are just as "authentic" and "traditional" as any other side-look muzzleloading long arm.

This knowledge tickled my imagination and I had an in-line rifle designed and shooting by the early 1970's. It proved to have many handling and safety advantages over more primitive muzzleloaders, the best being that it shot as well as any black powder rifle in the same caliber, handled as slickly as any modern firearm, and had a very positive safety. Now, WHITE's new muzzleloading lineup with the White Muzzleloading System is at the pinnacle of muzzleloading development yet remains very much in the muzzleloading envelope. *Soon, you too will see why I'm so excited about these rifles.*

So get out to the range and get shooting! You have chosen what I consider to be the best muzzleloading rifle ever made. And thank you for choosing to be numbered in the ranks of the many hunters and sportsmen enjoying the benefits of WHITE's "Muzzleloading System."

Good Hunting - Gary "Doc" White

SAFETY

WHITE firearms are powerful and can be dangerous without proper handling. Always take proper care of your muzzleloading firearm and handle it with caution and safety so that accidents and injuries do not occur. Before you do anything with your new WHITE muzzleloading firearm, read this instruction book very carefully. Also obey the following code:

- CAREFULLY read this instruction manual
- ONLY use Pyrodex, Black Powder, Clearshot, Cleanshot, or Hodgden 777
- ALWAYS use the White double safety system
- ALWAYS assume the firearm is loaded
- ALWAYS point the firearm downrange and toward a safe area
- ALWAYS wear hearing and eye protection
- ALWAYS be sure bullet is seated on powder charge
- NEVER use "smokeless" propellants in your rifle.

Read This Manual Forget the old adage, "When all else fails, read the instruction manual." This approach could be dangerous and costly. Remember, your WHITE muzzleloading rifle is a powerful firearm. If used improperly, it is capable of harming you and/or those around you. Read through the entire manual before using your WHITE muzzleloading rifle. Use the table of contents to find the information you need, and always follow the instruction steps carefully.

If you have any problems with your WHITE muzzleloading rifle or have any questions, refer to the "Answers to Common Questions" and the "Troubleshooting" sections first.

DUAL SAFETY SYSTEMS

The Thunder Bolt rifle is equipped with two (2) separate and independent safety systems. These safety systems lock the trigger/ hammer sear or the hammer. Thoroughly acquaint yourself with the operations of these two (2) safety systems.

***WARNING!** You must have a clear understanding of the operation of both safety systems! Always use these dual safety systems while handling this firearm!*

ENGAGING THE SAFETIES

1. Point your muzzleloader in a safe direction.
2. Pull the primary trigger safety lever, located on the right rear side of the receiver, rearward toward the buttstock. This is the primary trigger "SAFE" position.
3. Pull the rear-cocking knob toward the buttstock until it catches. The muzzleloader is now cocked with the primary trigger safety on "SAFE". The action bolt should be locked in the down position.
4. Continue pulling the hammer cocking knob rearward while turning it clockwise until it stops. Let the hammer-cocking knob down slowly until the safety detent rests in the hammer housing safety detent cutout. This is the secondary hammer block "SAFE" position.

DISENGAGING THE SAFETIES

1. Point your muzzleloader in a safe direction.
2. Pull back on the hammer rear-cocking knob while turning it counter-clockwise. Ease the hammer rear-cocking handle forward to the "Cocked/Fire" position. This is the secondary hammer block safety "FIRE" position. Make sure the action bolt is in the down position.
3. Push the primary trigger safety lever forward toward the muzzle. This is the primary safe "FIRE" position. "Your muzzleloading firearm is now ready to FIRE!"

(Note: Both safeties must be in the "FIRE" position and the bolt must be turned down for the firearm to function. If either safety is left on, or the bolt is up, the hammer will not release to ignite the cap.)

THUNDERBOLT DESCRIPTION

The Thunder Bolt is the newest of the White Muzzleloading rifles and comes with a bolt action and 209 ignition system. (Optional 336 primer system available later) The bolt and hammer is designed to almost completely enclose and seal the 209 shotgun cap. This protects the cap from wet weather conditions and prevents ignition gases from escaping. The rifle was designed specifically for today's Elite big game hunter. Whether hunting from Alaska's highest peaks to the African bush, the Thunder Bolt is a unique in-line percussion rifle that blends traditional muzzleloading balance with modern performance and appeal. It is also engineered with all the benefits of the White Muzzleloading System.

The Thunder Bolt has everything needed for a successful hunt, starting with ordnance-grade stainless steel for strength and durability. Its twenty-six inch (26") straight tapered barrel provides traditional balance and pointability, while featuring two (2) ramrod guides for easy operation. The action's large recoil block and two-point stock engagement system increases accuracy while the stock design minimizes felt recoil with heavy loads. Field stripping the Thunder Bolt is easy and requires no tools. The short throw in-line hammer with rear cocking knob and internal guided coiled hammer spring reduces locktime and is easily removed from the action as a single assembly without tools for easy cleaning.

The Thunder Bolt features WHITE's new and exclusive Thunder Bolt 209 one-piece nipple/breechplug, or the optional 336 primer breechplug, which uses a short brass reloadable case for small pistol primer). The Thunder Bolt uses a 209 shotgun primer and increases performance by accelerating flash speed and increasing flash temperature and pressure. The short Thunder Bolt nipple/breechplug drives the cap flame deep into the powder charge, igniting the powder from the inside-out, improving powder ignition and firing dependability. The Thunder Bolt is fitted with a fully adjustable custom trigger set for a crisp, and clean, three and a half to four and a half pound (3 ½ to 4 ½ lb.) trigger release. It is also equipped with custom high visibility, fully adjustable hunting sights and WHITE's solid aluminum PowerRod™ threaded to 10/32 at both ends for add-on shooting accessories. Each PowerRod™ is equipped with an integral bullet puller and cleaning jag.

The barreled action is perfectly fitted to a smooth black laminate, or checkered black composite stock with recoil pad and sling swivel studs. Each stock features a fourteen inch (14") length of pull, a straight comb for undisturbed sight and a target acquisition, a slender pistol grip for hand comfort and rifle control, and a broad English buttstock for quick shouldering pointability, comfort and felt recoil reduction. The Thunder Bolt is drilled and tapped for easy scope or peep sight mounting, and weighs eight pounds (8 lbs.), depending on stock material. It is covered by WHITE's Exclusive Limited Lifetime Warranty. Available in standardized caliber of .451 (1-20 twist) and .504 (1 in 24" twist.) Each Thunder Bolt is shipped in a hard Kolpin gun case and includes twenty (20) Power Punch bullets, EasyOut nipple/breechplug wrench and a 5/32 Hex wrench.

DISASSEMBLY & REASSEMBLY

WARNING! BEFORE DISASSEMBLING OR CLEANING YOUR MUZZLELOADER FIREARM, MAKE SURE IT IS UNLOADED! USE YOUR POWERROD™ TO CHECK!

REMOVING THE BARRELED ACTION

1. Remove the ramrod.
2. Remove the large stock screw located at the mid-forestock in front of the trigger guard
3. Remove the rear trigger guard screw.
4. Lift the barreled action out of the stock.

REMOVING THE TRIGGER ASSEMBLY

1. Turn the barreled action upside down. Put on the secondary safety.
2. The trigger assembly retaining screw is located at the muzzle end of the trigger assembly. Using the allen wrench provided, turn the trigger assembly retaining screw counterclockwise and remove.
3. Remove the trigger assembly.

REMOVING THE BOLT ASSEMBLY

1. Place the primary safety lever located at the right rear side of the receiver in the forward "FIRE" position.
2. Remove the bolt assembly retaining screw located on the left side of the receiver.
3. Lift the action bolt upwards until it stops.
4. Pull the bolt and bolt body/ hammer assembly to the rear and out of the action.

DISASSEMBLY OF THE BOLT BODY/HAMMER ASSEMBLY

While firmly holding the bolt body/hammer assembly housing, pull back on the hammer cocking knob while turning it clockwise to the secondary "SAFE" position.

Using the small hex wrench provided, loosen the small screw located on the forward hammer shroud, then unscrew the hammer shroud, turning it off counterclockwise. This will expose the hammer. Now place the secondary safety in the forward "FIRE" position to take the pressure off the hammer spring.

Unscrew the hammer from the hammer assembly by holding the bolt body/hammer housing in one hand while turning the hammer counterclockwise with the other hand. **WARNING!** The hammer is under tension from the hammer spring. Remove the hammer carefully!

Remove the exposed hammer and hammer spring from the front of the bolt body/hammer assembly.

Remove the hammer cocking knob/sear and hammer spring guide assembly from the rear of the hammer housing.

Unscrew the rear cocking knob shroud from the bolt body/hammer assembly.

REMOVING THE FLASHFIRE NIPPLE/BREECHPLUG

Insert a White EasyOut Wrench or a 3/8" inch socket and extension into the rear of the receiver and engage the 3/8" hex nut on the Thunder Bolt 209 nipple/breechplug and turn counterclockwise. (A 3/8" box-end wrench may also be used, engaging the hex nut through the Receiver cutout.)

Remove the Thunder Bolt 209 nipple/breechplug from the receiver cutout.

When placing the Thunder Bolt 209 nipple/breechplug back into the barrel, make sure you place EasyOut Grease on the Thunder Bolt 209 nipple/breechplug threads. Do not over-tighten the Thunder Bolt 209 nipple/breechplug. Tighten the Thunder Bolt 209 nipple/breechplug finger tight only, then back out just enough that the breechplug plus 209 or 336 primer fits snugly against the bolt face

Warning! Over-tightening the Thunder Bolt nipple/breechplug may cause it to seize in place when fired!

RE-ASSEMBLING THE THUNDER BOLT

Reassemble your Thunder Bolt in the following order:

1. Reinstall the Thunder Bolt 209 nipple/breechplug with EasyOut Grease on the threads.
2. Reinstall the trigger assembly.
3. Reinstall the barreled action in the stock.
4. Reassemble the bolt body/hammer assembly.
5. Reinstall the bolt body/hammer assembly.
6. Reinstall the bolt body/hammer assembly retaining screw.

Perform each reassembly step as you did when you removed each part, but in reverse sequence. Here are some helpful tips:

Apply Super Blue Breechplug Grease to the FlashFire nipple/breechplug threads before reassembly.

Carefully align the trigger assembly with the trigger cutout in the receiver. Tighten the trigger assembly securely.

When reassembling the barreled action, tighten the large stock screw in the mid-forearm of the stock first. Then place the rear trigger guard screw in place and tighten. Try to be consistent. Establish a consistent tightness for each screw each time you reassemble.

After reassembling the bolt body/hammer assembly, pull back the hammer and place it in the secondary hammer block safe position.

With the primary trigger safety lever pushed forward in the "Fire" position, pull the trigger while inserting the hammer assembly into the receiver. Remember to align the exposed trigger hammer sear with the hammer sear groove cut into the bottom of the of the hammer assembly housing. After hammer assembly housing inspection, align the bolt body/hammer assembly detent screw hole located on the left rear side of the receiver with the corresponding hole located on the bolt body/hammer assembly housing.

Tighten the bolt body/hammer assembly retaining screw, locking the hammer (bolt) assembly in place.

Once re-assembled, check the Thunder Bolt for proper fit and function. Make sure both safeties and the trigger function properly and safely and that the primer fits snugly against the bolt face

WARNING! Never attempt to remove the barrel from the action or alter the primary or secondary safeties. These items should only be repaired or serviced at the factory.

CLEANING & MAINTENANCE

We recommend WHITE WipeAway Cleaning Solution for all your muzzleloading cleaning needs. WipeAway is a powerful black powder and black powder substitute cleaning solution. It will easily remove lead and plastic fowling even without the use of a brush. When used properly it will keep your firearm clean for a lifetime of use and enjoyment.

Receiver and Hammer Cleaning

1. Dis-assemble the action and remove the Thunder Bolt 209 nipple/breechplug according to the instructions preceding this section.
2. Place fouled disassembled parts into a WipeAway Cleaning Kit Jar and let soak.
3. While parts are soaking, use the included brush and Pre-Saturated WipeAway Patches to scrub the receiver around the breech cutout free of all powder and black back residue. Also scrub scope mounts and scopes if applicable. Doc's Medical forceps's are useful here.
4. After cleaning the receiver, scrub each part that has been soaking until clean. Make sure all powder residue is removed.
5. Dry the receiver and each part, then protect with **White's Water**

Displacing Oil.

Barrel Cleaning & Oiling

1. Screw **PowerGrip T-Handle** onto the PowerRod end opposite from the cleaning jag.
2. Place a WipeAway Pre-Saturated Patch on the ramrod cleaning jag.
3. Work the patch back and forth the full length of the barrel. Repeat this step, replacing pre-saturated patches as necessary until barrel is sparkling clean (3 to 5 patches should be enough).
4. Repeat step three above using dry patches until the bore is completely dry and free from cleaning solution residues.
5. After drying, spray the inside and outside of the barrel and action with **White's Water Displacing Oil**.
6. Run a pre-saturated **White's Water Displacing Oil Patch** down the bore with your ramrod/cleaning jag.
7. If the rifle will be stored for a prolonged time, finish the bore cleaning process by running a patch coated with **WHITE PowerLube** down the barrel.

Trigger Cleaning & Maintenance

Special attention should be given to the trigger since it is not made of stainless steel and is subject to rust and corrosion. If hunting in inclement conditions, clean, dry and lubricate the trigger assembly often. Make sure you protect the trigger from rust, corrosion and debris.

WARNING! RUST, CORROSION AND DEBRIS CAN CAUSE THE TRIGGER TO FAIL, THEREBY CAUSING THE FIREARM TO MALFUNCTION WHICH MAY CAUSE SERIOUS INJURY OR DEATH TO THE SHOOTER AND/OR BYSTANDERS.

1. Inspect the trigger for function, making sure the safety works correctly and that the sear and trigger move freely.
2. Scrub away all powder residues and debris, then dry.
3. Lubricate the trigger sear, trigger and safety plate with **White's Water Displacing Oil**.
4. Inspect for fit and function and re-install on the rifle. Tighten the retaining screw securely.

Reassembly, Inspection & Storage

Now that your WHITE muzzleloading firearm is clean, you can reassemble it following the instructions in the previous Model sections of this manual. After assembly is complete, inspect the sights, ramrod and stock for fit and function. If the rifle will be stored for a long time, then lightly coat the exterior of the muzzleloader with **White's EasyOut Grease**.

Keep your WHITE muzzleloading firearm stored with muzzle horizontal or down, in a cool dry place out of the reach of children. Never store it in a **leather wool-lined gun case, or with the muzzle up. Muzzle up promotes moisture build up and the collection of oil and debris in the breech area.** Your muzzleloading firearm is now clean and ready for your next hunting or shooting adventure.

LOADING YOUR RIFLE

Easy loading is one outstanding feature of WHITE muzzleloading firearms. While the rest of the industry preached the "pound the bullet down the barrel" technique, Doc White invented the White Muzzleloading System, which carefully matches barrel, bullet, and action to precisely deliver easy loading, consistent accuracy, and effective down range performance.

Your **WHITE** muzzleloading firearm will shoot any conical bullet, sabot/rifle bullet, sabot/pistol bullet, or Patched round ball; but White's Power-Punch™ conical bullets and patented PowerStar™ Saboted rifle bullets deliver greater accuracy and greater energy at longer distances than any other bullet, sabot, or ball combo currently available.

We recommend Pyrodex Select and 2 Fg 777 powders in the ThunderBolt, but for simplicity's sake, we will use "Pyrodex" in our text for powder. You may use Pyrodex RS or Select, Arco Black Mag's Clean Shot, Goex' ClearShot, or Black Powder in your new WHITE muzzleloading firearm as well, however, you will achieve better performance by using Pyrodex Select or 2Fg 777. Any other black powder substitute will require WHITE's written approval before use. We do not strongly advocate the use of Pyrodex Pellets. While we find the convenience, ignition, and velocity characteristics of Pyrodex Pellets favorable, our testing has proven Pyrodex Pellets to be somewhat inconsistent and inaccurate especially once they have aged. If you desire to try Pyrodex Pellets, you may do so, however if poor accuracy is experienced, switch back to Pyrodex. We recommend Remington 209-4 shotgun primers; however, for simplicity's sake, we will use the term "#209 shotgun primer"

***WARNING!** Carefully read and follow these instructions when loading your WHITE firearm. Never carry a capped and loaded muzzleloader while in a vehicle, riding a motorcycle or horse (even if the rifle is in a scabbard), or while hiking through difficult terrain or undergrowth. Remember to play it safe: don't cap until you are in shooting position and ready to shoot.*

Six Simple Loading Steps:

1. Make sure your muzzleloading firearm is not loaded. (Use your ramrod to check).
2. Make sure the primer pocket is empty.
3. Fire a squib load (when loading a clean barrel).
4. Engage the safeties
5. Pour a charge of Pyrodex (by volume).
6. Firmly seat the bullet on the powder charge.
7. Insert a 209 primer into the primer pocket of the muzzleloader when ready to shoot.

Before performing any of the steps above, read the detailed explanations and instructions listed below. DO NOT attempt to load your muzzleloading firearm without fully understanding these instructions. Failure to do so could result in injury or death to the shooter and/or bystanders!

CHECKING THE MUZZLELOADER

Make sure the muzzleloading firearm is not loaded by sliding the ramrod

down the barrel. It should be close to flush with the muzzle if unloaded.

Check the barrel for cleanliness and obstructions. The ramrod is useful here, too.

CLEARING THE NIPPLE

1. Engage the primary safety lever to the "SAFE" position.
2. Place a 209 shotgun cap in the primer pocket.
3. Push the bolt forward and down to its locked position. The hammer is now cocked.
4. Keep the muzzleloader pointed in a safe direction.
5. Disengage the primary trigger safety and fire the primer.
6. Repeat as necessary to clear the nipple.

FIRING A SQUIB LOAD

A squib load is a **PYRODEX ONLY** load that fouls the bore and breech. **You must fire a squib load before loading a previously cleaned barrel! This provides greater accuracy, shot-to-shot consistency, and ensures that the bore is dry and ready for a full power load. Never load a projectile while firing a squib load!**

1. Pour 20 to 30 grains by volume of Pyrodex powder down the muzzle.
2. Engage the primary safety.
3. Place a 209 shotgun cap in the primer pocket.
4. Push the bolt forward and down to its locked position.
5. Point the muzzleloading in a safe direction.
6. Disengage the primary trigger safety and fire.
7. Your muzzleloading firearm will report weakly, fouling your bore. If not, repeat steps 1-7 above.

POURING THE PYRODEX CHARGE

Measure your Pyrodex powder by volume equivalent. The maximum loads for WHITE muzzleloading rifles are 150 grains volume equivalent (.50 caliber), 120 grains volume equivalent (.45 caliber) and 90 grains volume equivalent (.41 caliber). We recommend that you start with 80 grains by volume of Pyrodex P powder for .50 caliber, 70 grains by volume of Pyrodex P powder for .45 caliber, and 60 grains by volume of Pyrodex P powder for .41 caliber.

Pre-measure your powder charges using White's Volumetric Powder Management System.

DO NOT Place the buttstock of the rifle on the ground or secure surface.

Pour your previously measured charge of powder into the muzzle.

SEATING THE BULLET

***WARNING!** Failure to seat the bullet properly on the powder charge could result in injury or death to the shooter and/or bystanders.*

Place a PowerPunch™ bullet or PowerStar™ sabot bullet base first into the muzzle and push it into the barrel with your thumb or ramrod.

Place the ramrod on the bullet and push the bullet down the barrel until it is seated FIRMLY on the powder charge. **Do not tap or bounce the ramrod on the bullet. Doing so deforms the nose of the bullet and will affect accuracy.**

ALWAYS PRESS THE RAMROD FIRMLY ON THE BULLET FOR SECURE BULLET SEATING.

CAPPING THE RIFLE.

1. Point the muzzleloader in a safe direction.
2. Engage the primary trigger safety to the "SAFE" position.
3. Using White's Hunting Capper, place a #209 shotgun cap in the Breech Plug primer pocket.
4. Close the bolt, locking it down firmly.
5. Engage the secondary hammer block safety

YOUR MUZZLELOADER IS NOW LOADED AND READY TO FIRE!

Firing

Remember, a loaded muzzleloading firearm can cause serious injury or death. Always keep your muzzleloading firearm pointed in a safe direction. Before you fire your WHITE muzzleloading rifle, remember that they are extremely powerful. **Carefully identify your target and know what you are shooting at and what lies beyond.**

1. Select your target.
2. Disengage the secondary hammer block safety.
3. Take careful aim.
4. Disengage the primary safety.
5. Finish the aiming sequence, holding the rifle tightly against your shoulder.
6. Squeeze the trigger and fire!

Sighting In

We suggest you sight in your WHITE muzzleloading firearm according to the following chart. Although WHITE muzzleloading rifles come equipped with fully adjustable hunting sights, you'll get better accuracy using sighting equipment such as White's receiver sight (side-mounted) with our ClearView™ adjustable aperture or a rifle scope.

OF AIM	DISTANCE	POINT
On Point	25 yards	
Above Point	75 yards	3"

Adjust your first three shot group to point of aim at 25 yards, then re-adjust it to strike 3" high at 75 yards. This will put your **WHITE** muzzleloading rifle 3 inches high at 75 and 100 yards, dead-on at about 125 yards and fifteen to twenty inches (15"-20") low at 200 yards, depending on the load you have chosen. These are approximate figures and could vary depending upon the load, bullet, and sight picture.

WHITE muzzleloading firearm rifles are capable of Minute-of Angle (MOA) groups from the bench with careful loading and practice. For optimum accuracy use a bench rest, telescopic sights, carefully measured charges and very careful shooting. These measures are rarely needed under hunting conditions and are not ordinarily recommended. However, in-the-field groups should average 2.0 to 3.0 MOA or less, depending on the shooters ability and choice of sights.

Practice shooting your new **WHITE** muzzleloading rifle extensively to learn how your particular gun shoots and which load you like best. Adjust your loads up or down in five-grain increments by volume until the most accurate load is found. The load and sight picture may be adjusted entirely to your liking and comfort level. You will be pleasantly surprised at the level of accuracy and performance that your **WHITE™** rifle will deliver.

Adjustable Hunting Sights

WHITE™ muzzleloading rifles are equipped with custom high visibility hunting sights that are fully adjustable for windage and elevation.

MARBLE FOLDING SIGHT (Out Of Production): The blade of our folding sight models can be folded down when not in use or when using a scope or peep sight. A strong spring in the base holds the sighting leaf firmly in the upright position or the folded position.

The sight insert has a reversible notch piece with an enamel diamond, giving the shooter the choice of a "U" or "V" shaped notch. The notch piece is adjustable for elevation and is held in place by a set screw. Windage adjustment is located in the folding sight's hinge. Turn the windage screw clockwise to move bullet impact to the right, counterclockwise to move bullet impact to the left.

MARBLE RAMP SIGHT: The sight blade assembly is adjustable for elevation and is held in place by a set screw on the right side of the ramp

base. Simply loosen the set screw and slide the sight blade assembly up or down the ramp, locking it in the desired position by tightening the set screw.

The windage adjustment set screw is located in front of the sight blade on top of the sight blade assembly base. Loosen the set screw and move the sight blade left or right to the desired position and lock in place by tightening the set screw.

ADJUSTABLE RECEIVER SIGHTS

WHITE muzzleloading rifles are drilled and tapped for our **WHITE's** Receiver Sight which is manufactured exclusively to our specifications. The **WHITE's** Receiver Sight features steel and aluminum construction and custom knurled target/hunting knobs for easy elevation and windage adjustment in the field. **White's** Receiver Sight mounts easily on the right rear of the receiver. Adjustment instructions are included with the sight.

For increased performance, you can add our ClearView™ adjustable aperture to **White's** Receiver Sight. The **ClearView™** is like a camera aperture. Dial in the desired aperture peep opening from large (for low light conditions) to small (for bright conditions). Shooters with vision problems will find the ClearView™ a helpful accessory that brings the sights and game clearly into focus.

SCOPE MOUNTING

WHITE muzzleloading rifles are also drilled and tapped for **White's** exclusive TrueLock™ detachable scope mounting system. TrueLock™ was tested by the NRA and returned to within one-half (½) minute of angle at 100 yards when detached and reattached. TrueLock™ makes cleaning a snap and provides your **WHITE** muzzleloading rifle with increased versatility to meet every hunting condition. Other Weaver style bases can be used as well. The rear receiver fits a Weaver style #35 base and the front receiver fits a Weaver style #11 base.

ADJUSTABLE TRIGGERS

WHITE triggers are manufactured to exacting specifications and are extremely sensitive. Each state-of-the-art trigger is fully adjustable for poundage, creep and sear engagement.

WARNING! WHITE RECOMMENDS THAT TRIGGER ADJUSTMENTS BE MADE ONLY BY AN EXPERIENCED GUNSMITH.

Factory Trigger Settings

Trained factory technicians have preset your trigger for a crisp and clean three and a half to four and a half pound (3 ½-4 ½ lb.) pull with standard hunting creep. Industry experts agree that WHITE's factory settings provide shot-to-shot reliability, consistency, safety, and accuracy for normal muzzleloading hunting conditions.

Warranty Disclaimer

If you must adjust your trigger, find an experienced gunsmith to do it or return it to our warranty repair shop for adjustment.

WARNING! AN IMPROPERLY ADJUSTED TRIGGER CAN BE A SAFETY HAZARD!

If you adjust your trigger improperly, you will void your Limited Lifetime Warranty.

BULLETS, BALLISTICS & POWDERS

This section has been included to help you understand the differences between common muzzleloading bullets and WHITE's uniquely designed bullets that are an important part of the WHITE Rifle.

Muzzleloading Bullets in General

For many years muzzleloading enthusiasts have debated the bullet question: Which bullet and design is the best and which is the most faithful to the traditions of muzzleloading? We'll leave this acrimonious debate to the writers and historians and give you some practical, down-to-earth advice and recommendations so that you can choose a truly effective bullet, for hunting.

ROUND BALL

Without a doubt the oldest type of muzzleloading projectile is the round ball. It's easy to cast, but difficult to load. In general, the round ball is fast but loses energy very quickly. It can be accurate at close range. If you choose to use round balls in your WHITE muzzleloading firearm, carefully select a round ball that is four to five thousandths (.004 to .005)

of an inch smaller in diameter than your bore rifle:

.54Cal.=.540" so use a .535" or smaller ball

.50Cal.=.504" so use a .500" or smaller ball

.45Cal.=.451" so use a .445" or smaller ball

.41Cal.=.410" so use a .405" or smaller ball

Then select a cotton round ball patch of .015" to .020". PowerLube™ pre-lubricated patches will increase accuracy and will help ball and rifling engagement. Remember that with WHITE's fast twist shallow groove rifling system, you will need to shoot reduced powder charges for good accuracy. For most small game hunting, a patched round ball is adequate; however, experience dictates that conical bullets are more effective and more accurate at a greater distances with far better harvest ratios on big game.

CONICAL BULLETS

While conical bullets have been around for a long, long time, many muzzleloading enthusiasts do not understand the reasons behind the advantages gained when using them. Conical bullets are ballistically superior to round balls simply because they are heavier and longer. A conical bullet's higher ballistic coefficient provides greater efficiency and aerodynamic performance downrange than round balls can provide. Conicals, in general, are more accurate and carry more punch at greater distances.

WHITE insists that you use PowerPunch conical bullets or PowerStar sabot bullets with your new WHITE rifle. Please read the following section devoted to the entire WHITE bullet lineup.

SABOTED BULLETS

Sabots were developed so that smaller caliber lighter weight bullets could be used in a larger caliber muzzleloader. The sabot encloses the smaller caliber bullet in what looks like a plastic shotcup. The popularity of the modern sabot pistol bullet depends on the "Compromise Zone™". Conical bullet barrels have fast twist ratios ranging from 1 to 17 to 1 in 28. Round ball barrels have twists ranging from 1-48 to 1-120 inches. Barrels with moderate twist ratios between 1 in 28 and 1 in 48 are "Compromise Zone™" barrels. That is, the twist rate has been compromised to try and shoot both conicals and patched round balls. Unfortunately, as most compromises go, "compromise barrels" shoot neither projectile up to its true potential. Nevertheless, the vast majority of muzzleloading manufacturers produce this type of barrel today. The forgiving nature of plastic sabots seem to enhance the performance of a "Compromise Zone" barrels. Thus the popularity. Unfortunately, whatever is gained by higher muzzle velocity is lost quickly due to the poor ballistic coefficients of the pistol bullet. Pistol bullets simply cannot maintain energy downrange even with the extra muzzle velocity. Pistol

bullets in sabots turn your muzzleloading rifle into nothing more than a high velocity muzzleloading pistol and all you can expect from it is pistol performance. WHITE insists that if you want to use sabots, you use our PowerStar™ Saboted bullet with your WHITE rifle. Please read the following section for more information.

WHITE's Muzzleloading Bullets

The White's Muzzleloading System dictates a perfect match of barrel, bullet, and action. That is why WHITE's bullets are so important to your new rifle's performance. The principles of the White System demand that the barrel, action, and bullet work together to produce superior accuracy, ballistic performance downrange, ease of loading, and safety. **WHITE** bullets are true elongated rifle bullets designed to provide maximum rifle performance downrange. For easy loading, these PowerLead™ bullets ride on the lands of barrel until seated firmly on the powder charge. Upon firing, inertia causes the heavy bullet to shorten and expand into the rifling along the bullet's entire length.

The result is a ballistically perfect rifle bullet traveling downrange with greater accuracy and energy. These heavy elongated bullets are not as fast initially as pistol bullets in sabots; however, they retain their velocity much better and outperform the lightweight pistol bullets downrange. For hunting, penetration and energy are more important than velocity.

POWERPUNCH™ BULLETS

WHITE's PowerPunch™ Bullets are made with PowerLead™ and engineered to fit within .001 of an inch of the land-to-land diameter of the barrel. Each PowerPunch™ elongated bullet features a hard-hitting angled nose, straight sidewalls, and a solid boat tailed base for precise rifling engagement and reduced drag.

When loading, the bullet easily rides along the lands until seated on the powder charge. Upon firing, inertia of the heavy PowerLead™ bullet causes it to shorten and expand into the rifling along the bullets entire length, providing complete rifling engagement. The result is a ballistically perfect rifle bullet traveling downrange with greater accuracy and energy.

PowerPunch™ bullets are lubricated with WHITE's PowerLube™ to reduce leading, fouling, and corrosion. PowerLube leaves the barrel with just the right amount of fouling to secure the next bullet and prepare the barrel for the next consistent shot.

We highly recommend that you use PowerPunch™ bullets in your WHITE muzzleloading rifle. The White Muzzleloading System depends on your use of the entire barrel, action, and bullet system to achieve consistent shot-to-shot accuracy.

POWERSTAR SABOTS

WHITE's patented PowerStar Saboted bullets are Star hollow-pointed spitzer-boat tailed rifle bullets in a long petaled, thick based, LubeGrooved sabot. This combination resembles the outside dimensions of the PowerPunch bullet. This is a true "rifle" bullet.

The sabot can be lubricated with PowerLube to reduce leading, fouling,

and corrosion. PowerLube leaves the barrel with just the right amount of fouling to secure the next bullet and prepare the barrel for the next consistent shot. It also makes the plastic residue left in the barrel easy to clean with Whites WipeAway™ Cleaning Solvent

The PowerStar bullet operates on White Muzzleloading System principles as well. The sabot bullet rides on the lands until seated on the powder charge. Upon firing, the inertia is transmitted to the bullet through the patented sabot PowerBase. The PowerStar bullet shortens and expands the sabot into the rifling along its entire length. Upon exiting the muzzle, the sabots patented PowerChute ensures quick and clean bullet sabot separation. The result is a ballistically perfect "rifle" bullet traveling downrange with greater accuracy and energy.

WHITE Approved Powders

WHITE recommends Pyrodex Select and 2Fg 777 powders in the ThunderBolt. Additionally, Goex' ClearShot, CleanShot, , Arco Black Mag powder and Black Powder may also be used in all **WHITE** muzzleloading firearms. **WHITE** recommends measuring all powder charges by volume, using **WHITE**'s Volumetric Measuring System.

WARNING! USE ONLY PYRODEX, ARCO BLACK MAG, GOEX' CLEARSHOT, HODGDEN 777, OR CLEANSHOT POWDERS. ANY OTHER POWDER WILL VOID YOUR WARRANTY!

DO NOT USE SMOKELESS POWDER IN YOUR WHITE RIFLE!!

Powder Types & Recommendations

BLACK POWDER

The oldest of the propellant powders, black powder, is made in four granulations for use in muzzleloading firearms. The granule size generally determines the application of the powder. Coarser granulations burn more slowly and work best in large caliber rifles and shotguns. Pistols or small caliber rifles require finer, faster burning granulations.

Black Powder granulations are labeled as Fg, Ffg, FFFg, and FFFFg, from coarse to fine, respectively. FFG is recommended for use in your **WHITE** muzzleloading rifle when using black powder.

Pros and Cons

Black powder is generally available and is easy to ignite. It is also much dirtier than Pyrodex or other black powder substitutes, so fouling buildup can be a problem. It can be very accurate. With black powder, you will generally have to swab your barrel after every shot for target and every third to fifth shot or so when hunting. Let the ease of loading determine when to swab the barrel. Black powder is also more volatile than its substitutes and must be handled with great care. Black powder residues are extremely corrosive. Clean your firearm immediately after every shooting or hunting session.

PYRODEX

Pyrodex ignites at a higher temperature than black powder and is

somewhat safer to handle. It is lighter by weight but has similar ballistic attributes when measured by volume equivalent. Pyrodex is black powder with additional oxidizers, scrubbers and other ingredients. As a result, it burns cleaner and produces less fouling than Black Powder. When using Pyrodex in your **WHITE** muzzleloading rifle, you will be able to shoot many more shots without having to swab the barrel to remove excess fouling. While Pyrodex does not ignite as easily, WHITE's FlashFire nipple/breechplug accelerates and maximizes cap flash from a standard #11 percussion cap so well that Pyrodex P ignites instantaneously.

WHITE recommends Pyrodex P because of its predictable pressure curve and its consistent ignition and burning characteristics in most WHITE rifles using WHITE bullets, but recommends Pyrodex Select in the ThunderBolt. Remember that Pyrodex powder residues are still corrosive! Clean your firearm as soon as you get back from shooting or hunting.

777 POWDER

777 is a relatively new product that has proven to be very successful in muzzleloading arms. It does not contain any sulfur, so does not have the characteristic smell of black powder. Smoke is also reduced, as is the amount of residue left in the barrel after a shot. It also has the advantage of being highly soluble in water, which makes cleaning a lighter chore than with other powders. Of course, this very solubility means that on humid days, watery contamination of the powder charge and especially of the residues left in barrel and breech after firing will be worse than with other powders. 777 is also about 10% more potent than Pyrodex, so charges should be reduced accordingly. White has found it to be easy to use, consistent, accurate and an excellent propellant. Its only real disadvantage is that it is more expensive than other powders. Use 2Fg 777 in the ThunderBolt.

Cleanshot, Clearshot and Arco Black Mag

These powders are much less used than either Pyrodex or 777. All are sugar or ascorbic acid based. All approximate the power of Black Powder when measured by volume. All have had problems with production and availability. All are useful.

WARNING! USING NON-APPROVED POWDERS OR PROPELLANTS MAY BE UNSAFE AND MAY CAUSE BODILY INJURY OR DEATH!

If you have any questions about powders not covered in this section, please call our Customer Service Department for the latest information on approved powders.

Powder Charges

Depending upon caliber, we recommend starting with 60-90 grains by volume of Pyrodex powder. ***DO NOT EXCEED THE RECOMMENDED MAXIMUM*** for your rifle! The maximum volume equivalent loads are as follows:

MAXIMUM LOADS FOR RIFLES & PISTOLS

		Caliber	.54	.50
.45	.41			
gr.	120 gr.	Load	180 gr. 90 gr.	150

LOADS AND ACCURACY

Every muzzleloading rifle has a harmonic sweet spot. The secret of optimum muzzleloading accuracy is finding the powder charge and bullet that shoots best. Most muzzleloading rifles shoot their best groups at the lower end of the volumetric scale. More powder does not necessarily mean better performance. There is always a trade off between velocity, leading and fouling. Typically, large powder charges produce less accuracy and a greater chance of a miss, even though downrange energy levels are enhanced.

ANSWERS TO COMMON QUESTIONS

1. What do I need to get started?

- *WHITE's Powder Management System* or other powder-measure, one that will measure powder by volume up to about 150 grains.
- *White's™ Hunting Capper* or other straight-line or tear drop cappers to make capping or priming your muzzleloader easier and faster.
- *PowerLube™* or other bore and bullet lubricant.
- *Super-Blue Grease* or other lubricant with active polymers to lubricate the nipple/breech plug.
- *White's™ Water Displacing Oil* or other water displacing gun oil to protect your clean gun from the elements.
- *WipeAway™ Kit* or other small parts cleaning kit for muzzleloaders.
- *WipeAway™ Patches* or other pre-saturated patches for use in the field or on the range in cleaning the bore of your muzzleloader.
- *FlushAway Valve™* for easy barrel and nipple/breech plug cleaning while in the field.
- *EasyOut™ Nipple Wrench & Pick* for easy removal of your side-lock hexagonal nipple.
- *PowerGrip™ T Handle* for easy cleaning, bench shooting, and bullet pulling.
- *WHITE's™ Hunting Pouch* or other muzzleloading bag made from tough and rugged double-stitch cotton - or other tough material - to carry your powder, bullets, and accessories afield.
- *Powder* - We recommend Pyrodex, Arco Black Mag, Black Powder FFg, CleanShot, 777 and ClearShot for your WHITE muzzleloading rifle.
- *SuperChargers* for easier and faster loading afield. We do not recommend any other **quick loaders**.
- *PowerPunch or PowerStar Saboted Bullets* - We recommend that you use only WHITE bullets. They have been especially engineered for your WHITE firearm.

2. What bullet & load should I use on my hunt?

The following recommendations are just that, recommendations! You should always consult local and state laws with regard to caliber, bullet weight, and any other restrictions for your particular hunt.

Remember that your new WHITE firearm may behave very differently with other manufacturer's recommended loads and bullets. Try WHITE's recommended loads at the range, adjusting powder charges in five grain increments until the most accurate and effective load for your firearm is found.

SMALL GAME: JAVELINA, VARMINTS, Target, ETC.

- .41 caliber with 400 grain PowerPunch plus 60 Jr. Pyrodex P
- .45 caliber with 380 to 430 grain Power Punch plus 70 Jr. Pyrodex P
- .45 caliber with 350 grain PowerStar Sabots plus 80 Gr. Pyrodex P

MID-SIZE GAME: WHITETAIL, MULE DEER, ETC.

- .41 caliber with 400 grain PowerPunch plus 70 Gr. Pyrodex P
- .45 caliber with 380 to 460 grain PowerPunch plus 80 Gr. Pyrodex P
- .50 caliber with 400 to 480 grain PowerPunch plus 100 Gr. Pyrodex P
- .45 caliber with 350 grain PowerStar Sabots plus 70 Gr. Pyrodex P
- .50 caliber with 435 grain PowerStar plus 100 Pyrodex P

LARGE GAME: ELK, BLACK BEAR, MOOSE, ETC.

- .45 caliber with 460 to 500 grain PowerPunch plus 100 Gr. Pyrodex P
- .50 caliber with 480 to 600 grain PowerPunch plus 120 Gr. Pyrodex P
- .54 caliber with 430 to 750 grain PowerPunch plus 180 Pyrodex P

DANGEROUS GAME: BROWN BEAR, ETC.

- .50 caliber with 600 grain PowerPunch Powder: 140 grains by volume
Pyrodex P

.54 caliber with 430-750 grain PowerPunch Powder plus 180 gr. Pyrodex
P

TROUBLESHOOTING

MISFIRE

While uncommon in WHITE muzzleloaders, misfiring in muzzleloaders can happen. If your muzzleloader misfires, IMMEDIATELY point the muzzle in a safe direction.

CHECKING YOUR FIREARM

1. Always point the muzzle toward a safe area to prevent injury should the firearm have a hangfire and suddenly discharge.
2. Examine the primer. If it is damaged but unfired, try another primer. We recommend Remington 209-4 primers.
3. Use a nipple pick or small wire to clear the breech plug flash-hole of any obstruction.
4. Clear the striker of any obstruction such as fired caps, fouling or other debris.
5. Make sure the action housing is secure. In the ThunderBolt action, be sure the striker housing screw is screwed in completely. Make sure the trigger is secure.
6. Try a new cap or primer and re-fire your rifle. If one of these steps fails to correct the problem, you may have wet or contaminated powder.

WET POWDER BULLET REMOVAL

1. If your powder is wet or contaminated and the firearm will not fire, you must remove the bullet and powder load with the bullet puller on the end of your ramrod.
2. Remove the primer from the primer pocket.
3. Engage both safety systems.
4. Remove the cleaning jag from your ramrod, exposing the bullet-pulling screw.
5. Screw WHITE's Power-T-Grip into the opposite ramrod end.
6. Slide the ramrod (bullet screw first) down the barrel carefully, always pointing the gun in a safe direction.
7. Pressing the bullet puller screw into the bullet, twist the ramrod clockwise to embed the puller.
8. Pull the bullet or load out slowly. Dump out the wet powder, dry the barrel and start again with a squib load.

Note: You can always disassemble the rifle, cleaning out the wet powder charge from the breech, clearing the nipple/breechplug, and pushing the bullet out the muzzle for re-use. WHITE rifles are designed for quick and easy problem solving, as disassembly and re-assembly can be done within

a few minutes at home or in the field.

BULLET SLIDES OFF THE POWDER CHARGE

If your WHITE rifle has a sparkling clean barrel when you load it, the bullet may not remain seated snugly against the powder charge. Always foul a clean barrel with a squib before loading.

FOUL THE BARREL

You must fire a fouling or squib load to foul the barrel. Proper fouling will hold the bullet seated firmly on the powder charge. Occasionally you may have a squib load that does not properly foul the barrel. If this problem happens, try a squib load with 10 grains more powder by volume.

BULLET SIZE

Make sure that you are using a properly sized bullet. Any lead conical bullet that is more than one-thousandth of an inch smaller in diameter or more than one one thousandth of an inch wider than the bore will not operate properly with a WHITE rifle. The smaller bullet will be inaccurate and the larger bullet will be impossible to load. Any sabot bullet that is more than one to two hundredths of an inch wider in diameter than the bore will be difficult to load. For this reason, we recommend that you use only WHITE PowerPunch or PowerStar Saboted bullets in your WHITE muzzleloading rifle, they are Design Engineered for each other.

CORROSION

Stainless steel and blued steel are subject to the corrosive effects of Pyrodex, other substitutes and black powders, especially in humid conditions. At the end of a hunting or shooting day, you should always clean your gun thoroughly. Be sure to keep a light coat of water displacing oil on all metal parts of your firearm.

LOSS IN ACCURACY

If you experience an accuracy loss with your WHITE muzzleloading firearm, it is probably due to one, or a combination, of the following:

- Barrel Leading and plastiking. Clean the barrel thoroughly with our lead and plastic removing EasyOut bore cleaner. Use an EasyClean brush if you must.
- Bullet Loading Technique. Make sure you firmly seat the bullet on the powder charge. Do not bounce or bang your ramrod on the bullet.
- Powder Contamination. Replace the powder you are using with fresh new powder. Store your powder in a sealed container in a cool dry place. Store powder away from children.
- Bad Primers. Use only Remington 209-4 primers or, if you must, competing brand primers made for trap/skeet shooting.. If primer contamination has occurred, discard and replace with new, fresh primers. Store your primers in a sealed container in a cool, dry place. Store primers away from children.
- Muzzle Damage. Check the crown of the muzzle. Make sure that there are no dents or dings on the muzzle crown.
- Overloading. Some bullets and sabots will not withstand large

powerful loads. Some granulation's of some powders produce excessive fouling, the combination can be disastrous to accuracy. Find a combination of bullet and powder that works.

Limited Lifetime Warranty

From WHITE to You

The Limited Lifetime Warranty is extended by and WHITE Rifles LLC to the original registered purchaser of all new WHITE muzzleloading firearms purchased from any authorized WHITE firearms dealer.

WHAT WE DO

If your WHITE muzzleloading firearm ever fails because of a manufacturing defect in material or workmanship, we will repair it without charge to you. Parts and labor are included. If we are unable to repair your firearm, we will replace it with another or we will refund the original purchase price to you, less depreciation, at our option.

WHAT IS NOT COVERED

The warranty does not cover cost of repairs or replacement when damage is unrelated to defects in material or workmanship, nor does it cover wear and tear or unreasonable use or abuse by you including, but not limited to, failure to provide proper care or maintenance; alteration not authorized by WHITE, damage through use of improper powders, exceeding maximum charges, improper or insufficient seating of bullet on powder, or barrels damaged by obstructions. WHITE reserves the right to inspect all products prior to making any adjustment covered by this warranty.

EXCEPT AS OTHERWISE EXPRESSLY CONTAINED HEREIN, WHITE DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED AND WHETHER WRITTEN OR ORAL RELATING TO THE FIREARMS WHICH ARE THE SUBJECT OF THIS WARRANTY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY IMPLIED WARRANTIES IMPOSED BY STATE LAW, AND NOT EXCLUDED HEREUNDER, SHALL ONLY REMAIN EFFECTIVE FOR THE PERIOD PROVIDED UNDER LAW, OR FOR THE PERIOD OF THE EXPRESS WARRANTIES PROVIDED HEREIN, WHICHEVER IS SHORTER.

DISCLAIMER OF LIABILITY

The entire liability of WHITE for any claim of defect or breach of warranty, and the sole and exclusive remedy of a Customer shall be the repair or replacement of the firearm purchased. WHITE firearms are designed specifically for use with Pyrodex, ClearShot, 777, CleanShot or Black Powder ONLY.

NEVER USE SMOKELESS POWDER WITH A WHITE FIREARM. You should never exceed the maximum recommended load by volume for Pyrodex, Black Powder or other Black Powder substitute. Failure to follow the instructions and warnings in the owner's manual will void this warranty.

EXCEPT AS OTHERWISE PROVIDED HEREIN, IN NO EVENT WILL WHITE OR ANY OF ITS STOCKHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOST SAVINGS, OR OTHER DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF, INABILITY TO USE, THE RESULTS OF USING, OR MISUSE OF A WHITE FIREARM, EVEN IF WHITE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR ANY CLAIM BY ANY PARTY.

RETURNS FOR SERVICE & REPAIR

If for any reason you need to return your WHITE muzzleloading rifle, call WHITE's Customer Service Department at 801-932-7950. Should you need to return your gun for warranty repair or service, the customer service representative will issue a return authorization number and mail a return authorization.

RETURN AUTHORIZATION NUMBER

When returning a firearm to WHITE, send the convenient return authorization label mailed to you from the Customer Service Dept., or write the return authorization number clearly on the box near the shipping label. **DO NOT SHIP YOUR FIREARM TO WHITE WITHOUT A RETURN AUTHORIZATION NUMBER.** Any firearm package delivered without a return authorization number clearly written on or near the shipping label will be refused and returned at the customer's expense.

CLEANING & PREPARING FOR SHIPMENT

Clear your WHITE muzzleloading rifle according to the directions in this manual before shipping your firearm to WHITE. Remember to use plenty of White's Water Displacing Oil to prevent possible rust or corrosion from moisture encountered en route.

If your firearm requires cleaning when it arrives, WHITE will charge you a \$25.00 cleaning fee.

CROSS SHIPMENT INVOICES

If, due to exceptional circumstances, the customer service representative authorizes an immediate replacement of your firearm, WHITE will ship you a replacement firearm as soon as the defective firearm is received by WHITE or you may authorize a credit card purchase invoice for the replacement firearm. Upon receiving the defective muzzleloading firearm from you, your credit card will be credited with the appropriate invoice charge amount. However, if the defective WHITE muzzleloading firearm is not received, your credit card purchase invoice for the replacement WHITE muzzleloading firearm will not be credited.

"Dedicated To The Hunters And Sportsmen Who Care About The Wildlife They Pursue."



The ABC's of Muzzleloading Hunting

Accuracy - You can hunt confidently knowing your White rifle was designed for accuracy and built for the "Perfect Shot"

Ballistics - White's SUPERSLUG and BUCKBUSTER Bullets will put superior ballistic principles to work for you afield for cleaner kills.

Conservation - White Rifles, Bullets and Accessories are designed to reduce wounding loss, thereby preserving the future of our precious wildlife resource.

WHITE SHOOTING SYSTEMS, INC.

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