This Manual Does Not Cover All Aspects of The T/C Pro-Hunter Model Muzzleloaders. Refer To The Specific Instructions Regarding Those Models

THOMPSON/CLENTIER



OWNERS MANUAL

A DANGER

The material in this booklet must be read and understood before attempting to use your Thompson/Center firearm. If pertinent safety information is not read, and the -&WARNING - statements are not understood and adhered to, death or injury could result. READ THIS MANUAL IN ITS ENTIRETY BEFORE USING YOUR FIREARM.



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Table Of Contents



Subiect: Page Number Encore Magnum Muzzleloader Nomenclature10 Operating the Encore Magnum Muzzleloader11 Understanding the Encore Trigger Mechanism12 Changing Barrels on the Encore14 Adjusting the Trigger on the Encore......15 Encore Magnum Muzzleloader Takedown Procedure......17 Understanding Black Powder and Pyrodex™19 Black Powder Pressures and Velocities25 Cleaning Your Encore Magnum Muzzleloader41 Using Cleaning Implements With Your Encore Magnum Muzzleloader Iron Sight Adjustment46 Suggested Loads for the Encore Magnum Muzzleloader Rifle51 through 62

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IMPORTANT NOTE:

This book has no specific references to the T/C muzzleloaders other than the Encore 209x50^{cc}. Separate Owner's Manuals for the other models of muzzleloaders which Thompson/Center offers are available free from the factory upon request. Call or write with your specific needs.

NOTE: The loading data found in this manual was compiled using Black Powder or Pyrodex as a propellant. With any other approved Black Powder Substitute follow the instructions supplied by the manufacturer and heed all warnings as they apply to loading and usage of that product.



This booklet contains information that is essential to the safe use and maintenance of Thompson/Center Encore Magnum Muzzleloader. You must read this material in its entirety and fully understand its significance before you can safely use this rifle or pistol. If a Thompson/Center muzzleloading firearm is loaned or sold (by an individual or a dealer), this booklet must accompany the firearm. Replacement booklets are available at no charge from our factory.

If, after reading this booklet, you still have questions concerning the safe use of your Thompson/Center firearm, write or call our Customer Service Department at the following address:

Thompson/Center Arms Company, Inc. P.O. Box 5002 Rochester, New Hampshire 03866 Telephone: 1-603-332-2333

• And Remember •

The Fundamental National Firearm Association Rules for Safe Gun Handling Are: 1 - Always keep the gun pointed in a safe direction. 2 - Always keep your finger off the trigger until ready to shoot. 3 - Always keep the gun unloaded until ready to use.

WARNING

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.

Know Your Firearm Before You Attempt To Use It!

Designed as a Hunting/Sport Firearm, the Encore Magnum Muzzleloader is a unique firearm. It is a modern firearm, equipped with a muzzleloading barrel.

Make no mistake about it; with the muzzleloading barrel attached, it is a muzzleloader only and as such, all the general rules for use and handling of a muzzleloader, as well as the specific rules for handling the Encore Magnum Muzzleloader must be understood and strictly adhered to.

Its single shot, break open action is relatively simple to understand, and safe when the required ingredients of "common sense" and safe gun handling are applied to its use and care.

However, because the Encore Magnum Muzzleloader is equipped with a muzzleloading barrel, there are many more things you must know which deal specifically with the use of a muzzleloading firearm.

The Encore operates differently than other break open firearms on the market, and differently from most other muzzleloaders. It is therefore important that you identify your firearm as being an Encore Magnum Muzzleloader, in conjunction with reading the instructions.

Do not assume that a familiarity with other modern or muzzleloading firearms has equipped you with knowledge of "safe gun handling" as these words now apply to your Encore Magnum Muzzleloader.

Each gun design is different from another, and each function accordingly.

All machines, be they chain saws, automobiles, lawn mowers or firearms are built to function as **mindless mechanical slaves. They serve only as well as your intellect dictates**. Carefully used, your chain saw will cut up a winter's supply of firewood. Carelessly used, your chain saw will cut other things with able willingness. A firearm is no differentit is equally non-selective as to target or purpose.

Inasmuch as the responsibility for the use of a firearm rests with its user, you must understand the mechanics before you can shoulder the responsibility for its use.

That is what this booklet is all about.

You Must Read This Material Before Using The Encore[™] Magnum Muzzleloader

General Rules for Use and Handling of Thompson/Center Black Powder Muzzleloading Firearms

Follow the rules for use and handling of the Encore Magnum Muzzleloader. Failure to follow these rules may cause injury and/or death to the shooter or bystanders and damage to property.

1 If you are unfamiliar with muzzleloading firearms seek professional instruction. Qualified organizations such as local gun clubs, The National Rifle Association, The National Muzzleloading Rifle Association and state Hunter Safety Programs offer approved courses which teach safe gun handling and proper hunting procedure. Those who are unfamiliar with muzzleloading firearms should seek guidance from an instructor who is qualified by one of these organizations.

2 If you are uncertain of the terminology or meaning of any word used in this booklet, write to Thompson/Center Arms. Throughout this booklet the term "Prime" or "Primed" applies to the act of placing a #209 shotshell primer in the breech plug. "Unprime" or "Unprimed" refers to the opposite condition and indicates the #209 primer has been removed or is not in place. "Charge" or "Charged" applies to the presence of a propellant powder charge and projectile in the bore of the firearm. "Uncharge" or "Uncharged" refers to the opposite condition and indicates that the powder charge and projectile have been either fired or removed and that the bore is completely clear.

3 Know the muzzleloading firearm before attempting to use it. The overall functioning and safety features of a muzzleloading firearm are different from modern firearms, shotguns, and pistols. Because the Encore Magnum Muzzleloader is a modern firearm with a muzzleloader barrel, you must read and understand the workings of the Encore as both a modern firearm, and, as a muzzleloading firearm.

4 Use Only Black Powder or an approved Black Powder Substitute, such as Pyrodex, to load your muzzleloading firearm. WARNING: The use of smokeless powder, or a mixture of smokeless and Black Powder (duplex loads) or the wrong type or granulation of Black Powder or an approved Black Powder substitute, such as Pyrodex, or overloading may cause serious injury and/or death to the shooter or bystanders and damage to property. See section on "Black Powder or an approved Black Powder substitute, such as Pyrodex" in this booklet. Thompson/Center muzzleloaders are designed and intended to be used only with a commercially manufactured Black Powder or an approved Black Powder substitute, such as Pyrodex, of the specific granulation or type called for in this booklet. By Black Powder we mean a powder which is manufactured specifically for use in muzzleloading firearms as opposed to smokeless powder which is manufactured for use in metallic cartridges or shotshells. NO smokeless powder, even those which appear black in color, should ever be used in a muzzleloading firearm. Be sure you know what type and granulation of powder you are loading. Never buy or use powder unless you have seen it poured from the original manufacturer's container which is clearly identified on the label. Use Black Powder or an approved Black Powder substitute, such as Pyrodex, only of the type and granulation specified in this booklet and never load charges heavier than those listed.

5 Always point the muzzle of your Black Powder Gun downrange. The possibility of accidental discharge is a constant danger when using a firearm. If the muzzle is pointed downrange, away from yourself, away from other people, away from domestic animals or property, then injury and/or death and damage to property from an accidental discharge is less likely to occur.

6 Be sure of your target. Never fire a muzzleloading firearm unless there is a backstop behind your target. Never fire your muzzleloader in the field unless you have a clear view of your target. Never fire at noise or movement in the brush. If hunting with companions or in an area where there are other hunters, know where members of your party and/or hunters are located. Never fire your muzzleloader if there is a possibility that other hunters are downrange. Never shoot at flat, hard surfaces such as rocks or water. **WARN-ING: A projectile may ricochet off these surfaces and may cause serious injury and/or death to the shooter or bystanders and damage to property.**

7 Never prime your muzzleloading gun until you are ready to fire it. Your muzzleloader should remain unprimed until the instant before firing. After you prime the firearm, your full concentration should be on the target and the act of firing. WARNING: Failure to follow this rule can result in an accidental discharge which may cause serious injury and/or death to the shooter or bystanders and damage to property. Uncharge the firearm by firing it into a suitable backstop before returning to the road or vehicle.

8 Never transport or carry a charged muzzleloading firearm in a vehicle. WARNING: Uncharge the firearm by firing it into a suitable backstop before returning to the road or vehicle. Failure to follow this rule may cause serious injury and/or death to the shooter or bystanders and damage to property. Due to the large number of firearms accidents which occur in or near vehicles, this is a most important rule. The game laws in most states prohibit the taking of game from a road or vehicle. The rules of sportsmanship and common sense dictate that the firearm should not be charged until you are a safe distance away from the vehicle, road and companions. Never prime the firearm until you are actually ready to fire.

9 The Encore Magnum Muzzleloader is a modern style muzzleloader that uses a shotgun primer for powder ignition. WARNING: The Encore should be carried with the hammer in the "At Rest" position, with no primer in the breech plug. The hammer should be moved to the "Cocked" position only after a primer has been installed and you are ready to fire. Failure to follow this rule may cause serious injury and/or death to the shooter or bystanders and damage to property.

10 Never hand a charged muzzleloading firearm to another person. Once charged, a muzzleloading firearm requires your complete attention. Never charge the firearm and then hand it to another shooter. Equally you should never shoot a muzzleloading firearm that has been charged by someone else. Only the person doing the loading knows whether the firearm has been charged properly. WARNING: Overloads and/or improper loading may cause serious injury and/or death to the shooter or bystanders and damage to property.

11 Never lean a charged and primed firearm against a tree, wall or any surface. Once the firearm has been charged it is your responsibility to guard it against accidental bumps.

12 Never store a charged muzzleloading firearm in a home, camp, vehicle or building. WARNING: After use, a muzzleloading firearm should be discharged (fired) into a suitable backstop before returning to the home or camp. Failure to follow this rule may cause serious injury and/or death to the shooter or bystanders and damage to property.

13 Never attempt to clean a charged or primed muzzleloading firearm.

14 Use pure lead only when casting round balls, Maxi-Balls or Maxi-Hunters[®]. Lead alloys which contain large amounts of antimony or other metals are not suitable for muzzleloading projectiles. Do not use commonly found alloys such as wheel weights or Linotype because they produce hard, oversize projectiles that are difficult to load. WARNING: Improper loading (projectile not seated on powder charge) may cause serious injury and/or death to the shooter or bystanders and damage to property. See section on "Bullet Molds" in this booklet.

15 Wear protective gear when firing your muzzleloading firearm. Always wear shooting glasses to protect your eyesight from air borne particles and ear protectors to guard against hearing loss due to loud noise when firing your muzzleloader. Protect your arms from flying particles of percussion caps or priming powder by wearing a heavy shirt

or jacket with long sleeves. WARNING: When firing, stand well forward of all bystanders to ensure that they are not struck by particles of powder or caps. Failure to follow this rule may cause serious injury and/or death to the shooter or bystanders and damage to property. Those wearing long hair or beards should use extra caution when firing a flint lock. A flint lock can torch hair.

16 Do not load or prime your muzzleloading firearm directly from a can, horn or flask. A spark from a previous firing may ignite the stream of powder being poured into the gun and cause the container to explode. WARNING: The explosion of powder can, horn or flask may cause serious injury and/or death to the shooter or bystanders and damage to property. Use a separate pre-calibrated measuring device containing small quantities of powder to load and prime your gun and keep your face, hands and body well away from the muzzle when loading and the pan when priming.

17 Do not smoke while using your muzzleloader. The spark from a lighted cigarette, cigar, or pipe can ignite Black Powder or a Black Powder substitute, such as Pyrodex, Primers or Percussion Caps. WARNING: Smoking around a charged and/or primed muzzleloader, percussion caps, primers, priming powder or supply of powder may cause premature firing of the gun or an explosion of the powder can, horn or flask causing serious injury and/or death to the shooter or bystanders and damage to property.

18 Keep powder, primers and percussion caps well away from a firing position or shooting bench. A powder horn, flask, powder can, box of primers or percussion caps can ignite with deadly force if exposed to sparks or intense heat. Follow the manufacturer's instructions for safe handling and storage of powder, primers or caps. WARN-ING: Keep unused caps, primers and powder well away from firearms that are being discharged. Sparks from the discharge of a muzzleloading firearm may cause an unused supply of powder, primers or caps to ignite causing serious injury and/or death to the shooter or bystanders and damage to property.

19 Give the firearm your complete concentration. Never cross a fence, jump a ditch or engage in any activity which distracts your attention while holding or carrying a charged and primed muzzleloading firearm.

20 Know the condition of your muzzleloading firearm before charging, priming or firing. Function the hammer and trigger of your gun to be sure that the parts are working properly before loading a charge. Be sure the muzzleloading firearm is properly loaded. Use only the recommended loads of BLACK POWDER or an approved BLACK POWDER substitute, such as PYRODEX for your specific model and caliber. Mark your ramrod as explained in this booklet and always be certain that the ball, bullet or shot charge is seated properly on top of the powder charge. Be sure the barrel is clear of obstructions (including excess oil, mud, dirt, snow or any foreign material). WARNING: Failure to observe any of these rules may cause serious injury and/or death to the shooter or bystanders and damage to property.

21 Be physically fit and mentally alert when using your muzzleloading firearm. The use of your muzzleloader involves forceful physical actions which require strength and concentration. Never use alcoholic beverages or drugs before or when shooting or handling a muzzleloader or a modern firearm. Never use your firearm when you are overly tired. If you use medication or have medical implants, consult your physician before using your muzzleloading firearm.

22 At their very best, tree stands are potentially hazardous. Even with good equipment, safety depends upon the age, health, dexterity and sound judgement of the user. If you feel that you must use a tree stand, purchase a top quality brand only and follow the manufacturer's instructions to the letter. WARNING: Never climb to or descend from a tree stand with a primed muzzleloading firearm or a loaded modern firearm. Never raise or lower a primed muzzleloading firearm, or a loaded modern firearm, to or from a tree stand. Failure to follow this rule may cause serious injury and/or death to the shooter or bystanders and damage to property.

23 Respect the muzzleloading firearm. Used properly your muzzleloader will give you years of pleasure. Used improperly, carelessly or abused, your muzzleloading firearm is a dangerous instrument and is capable of causing serious injury, death or property damage. Always treat your muzzleloader as if it were loaded. Do not drop your muzzle-loader or allow it to be struck a blow. Dropping or striking it may cause movement and/or damage to internal parts in such a manner as to cause an accidental discharge. If the gun is dropped it should be examined. WITH THE FIREARM UNPRIMED slide your ramrod into the bore to ensure that the barrel is not obstructed. Check your ramrod mark to be certain that the projectile is seated firmly on the powder charge. Check the firearm for external damage. Check the firing mechanism to be sure that hammer and trigger are functioning properly.

24 Use extreme care in the selection and/or use of accessories, implements or components. Thompson/Center muzzleloaders are manufactured to a controlled tolerance and are intended for use with accessories and implements of Thompson/Center brand only. For example, Thompson/Center mold dimensions are carefully calculated to produce cast (pure lead) round balls, Maxi-Balls or Maxi-Hunters of a proper size and hardness which are consistent with the specific caliber requirements of our product line. Patch material bearing the T/C brand is of the proper size and thickness for the caliber and round balls specified in this booklet and in our catalog. The reader is warned against

the use of any unauthorized accessories, implements or components which are not of our manufacture and over which we have no control. Before purchasing or using accessories, implements or components, the reader must assure himself that such items are safe to use with Thompson/Center firearms. Responsibility for the safe use of such items rests totally with their manufacturer and/or dealer selling these products. If you are unsure as to the safety or compatibility of accessory items to use with our firearms, write to us at the address shown on page 9.

25 The reader is warned against custom alterations and conversions. Thompson/Center does not endorse or recommend any type of alteration other than those performed by the Thompson/Center Custom Shop. Replacement nipples, replacement barrels, priming devices or any other unit not of Thompson/Center manufacture and used as a replacement part or attachment to a Thompson/Center firearm is potentially dangerous. Responsibility for such devices rests totally with the manufacturer of the device and/or with the dealer selling the device or the person or persons installing it.

26 Use Thompson/Center scope mounts only. The Thompson/Center Catalog lists a series of scopes and mounts which are designed specifically for use with our firearms. These mounts replace the factory rear sight on our muzzleloading firearms and make use of existing screw holes. Those who desire a scope sight should make use of Thompson/Center mounts. WARNING: Do not drill additional holes in the barrel as this could weaken the barrel structure leading to a rupture. A ruptured barrel can cause serious injury and/or death to the shooter or bystanders and damage to property.

27 Follow Kit instructions carefully (where applicable). A copy of this booklet is included with all Thompson/Center factory finished muzzleloaders - both kit and finished models. Readers who purchase kits must realize that Thompson/Center Arms Co., Inc. has no control over the final finishing and assembly of kit products. The kit builder must follow instructions to the letter. Alteration of factory parts, the drilling of additional holes in the barrel, excessive heat and/or removal of excess quantities of metal from the barrel or breech plug can weaken the firearm or cause it to malfunction.

The foregoing general rules and cautions are printed to contribute to your safety when using Thompson/Center muzzleloading firearms. These rules must be read, understood and adhered to. The remainder of this book is equally important. It contains information which is essential to the proper use and care of your muzzleloading firearm. **Do not attempt to load or fire your muzzleloading firearm until you have read this booklet in its entirety**. If, after reading this booklet, you still have questions concerning the safe use of your Thompson/Center firearm, write or call our Customer Service Department at:

Thompson/Center Arms Co., Inc. P.O. Box 5002 Rochester, New Hampshire 03866 Telephone: 1-603-332-2333

→**▲**WARNING ←

Do not assume that a familiarity with other firearms has equipped you with a knowledge of "safe gun handling", as these words apply to the Encore. Each gun is different, and functions differently. Although the Encore is equipped with an automatic hammer block, the user is responsible for practicing "safe gun handling" at all times. Failure to do so can cause injury and/or death to the shooter or bystanders and damage to property.

Encore™ Magnum Muzzleloader Rifle & Pistol Nomenclature

Know your Encore Muzzleloading firearm before attempting to use it. This booklet will help you to become familiar with the various terms associated specifically with this type of firearm. The diagram below points out the more commonly mentioned parts associated with the Encore.



Operating The Encore™ Muzzleloading Rifle & Pistol



The Encore Muzzleloader is a single shot, break open style firearm. To open the Encore, grab the firearm with your left hand at the balance point on the forend. (Use right hand if you are left handed). With your other hand, pull rearward on the trigger guard spur with your trigger finger. Place your finger low on the spur for maximum leverage, and give it a fast sharp pull. Pull rearward and up at the same time.



Pulling back on the trigger guard spur will allow the barrel to pivot downward. To close the Encore, pull the barrel upward while securely holding the firearm grip of the Encore stationary with your right hand. Practice opening and closing the Encore firearm before attempting to load and fire this firearm.

Dry firing the Encore with the muzzleloading barrel in place is not recommended.

→**▲**WARNING ←

Read this manual in its entirety before attempting to load and fire this firearm. Failure to read this material in its entirety and fully understand its significance may cause injury and/or death to the shooter or bystanders and damage to property.

Understanding the Trigger Mechanism of the Encore[™] Magnum Muzzleloader

The Encore firearm has an automatic hammer block built into the internal working mechanism. The hammer block is an integral part of the sear. The automatic hammer block prevents the hammer from traveling forward and making contact with the firing pin, unless the trigger has been pulled and held fully rearward.









If the hammer does not return to the "at rest" position, the gun must be returned to the factory for inspection and repair. Failure to follow this rule can result in an accidental discharge which can cause injury and/or death to the shooter or bystanders and damage to property.

Changing Barrels on the Encore™

First, open the action to ensure that the firearm is not loaded. Then close the action. With the action closed, use a suitable screw driver to remove both forend screws. Then remove the forend. Open the action to relieve the tension on the hinge pin. With a suitable punch or screw driver, gently tap out the hinge pin. The hinge pin may be tapped out in either direction. Remove the barrel from the frame.

Install the new barrel making sure the hole in the frame and in the barrel are aligned. Tap in the hinge pin from either side, close the action and re-install the forend.

→**▲**WARNING ←

Always make sure the chamber and bore of every barrel is both empty and unobstructed prior to removing or installing a barrel. Working on a loaded firearm could result in an accidental discharge. An obstructed bore could result in a burst barrel. Either condition can result in injury and/or death to the shooter or bystanders and damage to property.

Note about Encore Forends:

Different Encore barrel configurations i.e. rifle, shotgun and muzzleloading barrels require different forends. Check with your dealer or consult your T/C catalog for the appropriate forend for your barrel.

Trigger Adjustment For The Encore[™] Rifle & Pistol

→**▲**WARNING ←

Make sure that the firearm you are working with is uncharged and unprimed prior to making any trigger adjustments. Failure to heed this warning could result in accidental discharge which may cause injury and/or death to the shooter or bystanders and damage to property.

Adjustments can only be made to the Trigger Stop Screw shown in this diagram. A .050" hex wrench is required to perform adjustments.



The Trigger Stop Screw is used to adjust "over-travel". Over-travel is the amount of rearward trigger movement after the trigger releases the hammer.

→**▲**WARNING ←

Encore triggers are factory set to an optimal pull. Physical alteration of the trigger, or adjustments other than those described above with Trigger Stop Screw may lead to a situation where a dangerously light trigger pull results. A trigger pull that is too light can cause premature firing which may lead to injury and/or death to the shooter or bystanders and damage to property.

Assembly & Disassembly Of The T/C Encore[™] Rifle & Pistol

The Encore has three (3) basic parts groups:



1. The Muzzleloading Barrel Assembly - This includes the barrel, breech plug, ramrod, thimbles and sights. It is held to the receiver by a hinge pin which anchors the barrel lug to the frame.



2. The Frame Assembly - This assembly is held on the stock by a stock draw bolt. The fire control mechanism (hammer, sear, firing pin, etc.) is housed within the frame.



3. **The Stock (or Grip) Assembly** - Includes the stock (the rifle butt stock has sling swivel studs and a butt pad), grip, grip cap and applicable forend.

Encore[™] Takedown Procedure

1st Step - Make sure that the gun is unprimed and uncharged.

2nd Step - Remove the ramrod from the thimble(s).

3rd Step - Remove the two forend screws. Turn these screws out counter-clockwise (as viewed from the bottom of the gun). Remove the forend from the barrel.

4th Step - Tip the barrel open and remove the barrel hinge pin by tapping it out (in either direction). Remove the barrel from the frame.

5th Step - Remove the screw that retains the extractor in the barrel lug. Then, remove the extractor from its slot.

6th Step - Using a $7/_{16}$ " socket wrench, or the breech plug wrench that was supplied with the Encore muzzleloader (barrel), remove the breech plug by turning it counter-clockwise (as viewed from the breech end of the barrel).

If you need to hold the barrel more firmly than you can with just your hand, a crescent wrench or vise on the barrel lug will supply the needed holding power. This procedure will give you the necessary leverage to "break" the gas seal which was formed when the breech plug was originally "snugged" to the barrel during installation. There will be initial resistance between these parts which must be overcome.

7th Step - To reassemble, reverse these steps, making sure that you check for proper functioning of the trigger, striker & safety mechanism prior to loading and firing. The breech plug of the Encore Magnum Muzzleloader should be seated in the barrel until it is "snug". "Snug" is defined as being as tight as you can turn it into the barrel by using the breech plug wrench and turning it clockwise, while holding the barrel in your hand. When you can no longer grip the barrel, and it turns in your hand, the breech plug is "snug".

NOTE: If the breech plug is not seated fully, the extractor will interfere with the standing breech upon closing and keep the barrel from locking up correctly with the frame. In this case, the barrel will not close and lock into the frame. If this occurs, the breech plug should be removed, checked for fouling or debris, cleaned and lubed, and reinstalled until fully seated. If you still can't seat the breech plug fully, return the barrel and the breech plug to Thompson/Center's Service Department with a letter describing the problem.

Basic Equipment For Shooting Your Encore[™] Muzzleloader

In order to shoot your Encore with a muzzleloader barrel, a minimum of accessories or equipment will be necessary, these items include:

Do Not attempt to shoot your muzzleloading firearm until you have read this manual in its entirety and understood it fully. Failure to read and follow these instructions could result in an accidental discharge, causing injury and/or death to the shooter or bystanders and damage to property. If you are unable to understand any or all of this material, call the Customer Service Department at (603) 332-2333.

- 1. Proper eye protection
- 2. Proper ear protection
- **3.** Black Powder or an approved Black Powder substitute, such as Pyrodex only, in the appropriate granulation for your firearm.
- 4. Powder Measure.
- 5. Projectiles of the appropriate caliber for your firearm.

- 6. #209 Shotshell Primers.
- 7. Patch worm for retrieving lost cleaning patches.
- 8. Cleaning patches
- 9. Jag for cleaning patches (One comes with each new T/C muzzleloader)
- 10. An appropriate bore cleaner and bore lubricant.
- 11. An anti-seize lubricant for reinstallation of the breech plug.

Understanding Black Powder or an approved Black Powder substitute, such as Pyrodex[™]

Make no mistake about it, Black Powder or an approved Black Powder substitute, such as Pyrodex, are the only propellant powders that are safe to use in a muzzleloading firearm. Oh, you will hear, or possibly read, advice to the contrary but don't follow it - for you will never hear such advice from a competent source.

The reason for using a low yield powder such as Black Powder or an approved Black Powder substitute, such as Pyrodex, is quite basic and it is related to firearm design. When used as a propellant, Black Powder or an approved Black Powder substitute, such as Pyrodex, generates a relatively low breech pressure. Muzzleloading firearms, even those with modern steel barrels, are not designed to withstand the high pressures produced by a Smokeless Powder charge. Think about it for a minute and you will understand why. The ignition hole in a muzzleloading firearm is a direct port into the combustion chamber. This port is sealed only by the thin metal of a shotshell primer or percussion cap. In the flint lock design this port is not sealed at all. The high pressure of a Smokeless Powder charge would destroy this ignition system and the gun itself.

To avoid any misunderstanding on the part of the reader let us explain further why Smokeless Powder cannot be used in a muzzleloader in any quantity. People who become interested in muzzleloading tend to research and to seek out some of the early journals which describe loading implements, components and powders of yesterday. **Reading these old books can be pleasurable. Never assume, however, that obsolete printed material has a safe application in today's world.** In the early days of the breech loader there were powders manufactured which were called "Bulk Smokeless". These powders were measured by the volume and used interchangeably with Black Powder in early cartridge firearms. Even in their time these powders were never used in muzzleloading firearms.

Early "Bulk Smokeless" powders are not available today and, even if they were, their erratic performance (extreme variations in pressure) would not meet current industry standards. By modern standards, such early bulk powders were unsafe, even in the days of their use. The same type of misinformation exists concerning "duplex loads" or the mixing of Smokeless Powder with quantities of Black Powder. This practice was popular in the days of the early breech loaders. It was dangerous then and it is even more dangerous now for modern Smokeless Powders are far more complex in their composition.

All presently available Smokeless Powders are designed for use with metallic cartridges and shotshells in strong modern breech loading firearms. They should never be used in a muzzleloading firearm of any type. Some of these powders are "Black" in color making proper identification extremely important. It is the characteristic of Smokeless Powders to burn in a controlled manner within a given pressure range. Control of this pressure range requires the proper application of the powder to the specific purpose and in the quantities for which it was designed to be used.

→▲WARNING ←

Never use smokeless powder of any type or in any quantity in a muzzleloading firearm, and never mix powders. The use of any smokeless powder could result in a detonation or explosion which could cause injury and/or death to the shooter or bystanders and damage to property.

Confine your use to Black Powder or an approved Black Powder substitute, such as Pyrodex, and learn how to identify these powders and to use them correctly in your muzzleloading firearm. Here we will deal first with Black Powder for certainly it is the oldest of our propellant powders.

Black Powder is manufactured in four specific types or granulations for use in firearms. Generally speaking, it is the granule size which determines the appropriate use of Black Powder. Coarsest granulations are naturally the slowest burning and, therefore, work best in large caliber firearms and shotguns. Pistols or small caliber firearms require a finer or faster burning powder. The priming powder used in the pan of a flint lock is extremely fine and fast burning. The accompanying chart will help you to recognize the various granulations of Black Powder and to relate them to their proper use.

Black Powder Chart Showing The Appropriate Use Of The Various Granulations

FC FC FC FC FC FC FC FC FC FC	FG (commonly called Single "F") The muzzleloading enthusiast finds little use for this very coarse black powder. It's use is restricted to the large bore (10, 8, 4 gauge) shotguns of yesterday.
FFG FG FG FG FG FG FG FG FG FG	FFG (commonly called Double "F") This is a very popular powder for the larger (.45 to .58 cal) firearms. It is also used for 12, 16, and 20 gauge muzzleloading shotguns. While it is not considered a pistol powder, it is sometimes used in very large caliber single shot pistols. It is recommended for use in the Encore Magnum Muzzleloader.
	FFFG (commonly called Triple "F") Due to its wide range of uses, Triple "F" is the black powder that is most commonly found on a dealer's shelf. It is used in all percussion revolvers, most single shot pistols, and most of the smaller (under .45 cal- iber) firearms. In a pinch, it can also be used to prime a flint lock.
FFFG FFFG FOR ALLAND STATES FOR ALLAND STATES F	FFFFG (commonly called Four "F") The finest of all currently available black powders, Four "F" is best used for priming flint locks. Due to its limited use, it is sometimes difficult to obtain.

When purchasing Black Powder be certain that it is in the original manufacturer's container and that its granulation or type is clearly marked on the label. Follow the storage and handling precautions which are on the label. If you have any questions concerning the safe handling or storage of Black Powder, write to the manufacturer of the powder. Additional information on powder storage is available from :

> National Fire Protection Association, P.O. Box 9146, Quincy, Mass. 02269. Or call 1-800-344-3555. Ask for pamphlet #495.

This instructional booklet lists a range of Black Powder loads which are proper for your Thompson/Center firearm. Use only the granulation of Black Powder that is listed for your specific caliber and model. You will note that a series of charges are shown in each instance. The lightest charge shown for your firearm is **the starting load**. The heaviest charge listed is **the maximum load**. Start with the lightest load and work upwards gradually until you reach your best performing load. **You will find that the best shooting load is well below the maximum charge listed**.

Never exceed the maximum load listed for your particular firearm. Overloads may cause damage to the firearm and injury and/or death to the shooter or bystanders and damage to property.

Pyrodex is a propellant powder designed for use in muzzleloading cap lock firearms, pistols and shotguns. Pyrodex is not a Black Powder. In accordance with the manufacturer's instructions, Pyrodex relates closely to Black Powder **on a volume to volume basis** (**not weight of charge**). In other words, a black powder measure set to dispense 70 grains of black powder will, in fact, dispense approximately 52 grains of Pyrodex (by weight). **However, this lighter charge of Pyrodex will provide a charge which is ballistically similar to 70 grains of Black Powder. For all practical purposes, knowing the actual weight of a charge of Pyrodex may be informative, but not necessary. Your black powder measure will dictate the proper amount by its graduations according to volume.** If you want to know the actual comparative weight of a Pyrodex charge, contact the manufacturer, Hodgdon Powder Co. Inc., Shawnee Mission, KS. 66201.

Pyrodex does not ignite as easily as Black Powder and, consequently, it is not recommended for use in flint lock firearms. Flint locks require strong, positive ignition and should be charged and primed with Black Powder of the appropriate granulation only.

PYRODEX[™] Chart Showing Appropriate Use Of The Various Grades

Rodition Products Pro

PYRODEX[™] "CTG"

FOR BLACK POWDER CARTRIDGES. This powder was designed to be used in early model breech loading cartridge firearms (firearms, pistols & shotguns) which were intended for use with Black Powder only. It has no application in Thompson/Center muzzleloading firearms. It is listed here simply for your identification.



PYRODEX™ "RS" (or PYRODEX SELECT "RS")

FIREARM & SHOTGUN POWDER. Designed for use in all calibers of percussion muzzleloading firearms and shotguns, this powder has a wide application. It may be used with all Thompson/Center cap lock firearms and shotguns including the Encore. Pyrodex Select (RS) may also be used in this application.



PYRODEX[™] "P"

PISTOL POWDER. Designed for use in some percussion muzzleloading pistols and cap and ball revolvers, this powder has application in the Thompson/Center Patriot Pistol.



PYRODEX™ PELLETS

Designed for use in T/C Muzzleloaders.

Pre-formed Pyrodex charges are available in .45, .50 & .54 caliber. Use the appropriate caliber pellet for your firearm.

→**▲**WARNING ←

The reader should bear in mind that Thompson/Center does not manufacture or sell powder of any type. If there is ever a question as to the proper application of a particular powder or the safety of a given charge, write to the manufacturer of the powder. Adhere to the safe handling and storage precautions printed on the manufacturer's container and never purchase or use powders which have been removed from their original container. USE OF THE WRONG PROPELLANT may cause injury and/or death to the shooter or bystanders and damage to property. For information on Pyrodex write to Hodgdon Powder Co., Inc., Shawnee Mission, Kansas 66202.

Ignition in the Encore[™] Magnum Muzzleloader

Considering that Black Powder ignites easily and burns almost instantaneously, it would not seem that ignition could create problems for the muzzleloading enthusiast. Yet, it was in the age of Black Powder that such terms as misfire, hangfire and flash-in-the-pan found their origins. The problem, of course, is that the muzzleloader requires a great deal more care in its cleaning and handling than does a modern cartridge firearm (see section in this manual on "Cleaning Your Muzzleloading Firearm.")

The propellant Black Powder charge may not ignite if the primer port is blocked by fouling, if the charge is dampened by oil or water or if the powder and/or caps have been allowed to deteriorate by improper storage (exposure to extreme temperature changes and/or dampness). Maintain the high quality of your Thompson/Center muzzleloader by meticulous cleaning. Make certain that the chamber, primer port, pan and flash hole are free from oil, water or powder fouling. An appropriate nipple pick is a handy tool for cleaning nipple ports and flash holes. Thompson/Center's Encore Magnum Muzzleloaders use a #209 shotshell primer and it is important that the primers fit properly. Use only high quality primers.

Pyrodex, while cleaner burning, is somewhat harder to ignite than Black Powder. If while shooting, you should experience a misfire, hold the firearm downrange and treat the firearm as if it could go off at any minute - it might. After waiting at least one minute, remove the #209 primer. Double check to make sure the charge is still fully seated against the breech plug. Replace the #209 primer and try firing the firearm again. Continue to point the firearm downrange to prevent injury in the event of a discharge and clean out the ignition channel with a nipple pick. If, after several tries, the firearm still refuses to fire, then the charge must be deactivated and pulled (See section on "Pulling a Charge"). Failure to follow these instructions may cause damage to the firearm and injury and/or death to the shooter or bystanders and damage to property.

Black Powder Pressures And Velocities

It is not the purpose of this manual to delve deeply into the complex subject of chamber pressure or how it relates to all firearms. There are, however, some basic differences between a muzzleloader and a modern cartridge firearm. The reader must understand and respect these differences if he or she is to use their Thompson/Center muzzleloader in a safe manner.

Shooting muzzleloading firearms requires rethinking all that you have learned about firearms. It requires discipline to cope with the requirements of being a reloader and rifleman at the same time. It requires strict adherence to the instructions set forth in this booklet. Failure to follow these instructions may cause damage to the firearm and injury and/or death to the shooter or bystanders and damage to property.

Odd as it sounds, your safe introduction to muzzleloading firearms requires a good deal of reverse thought. Our forefathers, trained in the use of muzzleloaders, had little difficulty using the products of their day or adapting to improved concepts as each new idea presented itself in a normal progression. The transition from flint lock to cap lock to breech loader each represented a step forward toward a more technically sophisticated era. Users of firearms had hundreds of years to adapt to these changes. In a single lifetime, no one was exposed to drastic change.

The muzzleloading enthusiast of today, however, has been trained in the use of cartridge firearms. To safely use a muzzleloader he must adjust his thinking backward - bridging hundreds of years of product development - in one giant step! Those reading this booklet must face the realization that the design of a muzzleloading firearm is rooted in tradition. In other words, a manufacturer of muzzleloading firearms, while he does have the benefit of using modern steel, proper heat treating and other technical advances, does not have the option of drastically altering a design which is centuries old. To use a muzzleloader safely requires considerable mental adjustment on the part of today's shooter.

Modern cartridge firearms depend heavily upon the strength of a brass cartridge case to seal the chamber and to safely confine expanding gas. Equally it is the cartridge case which holds the bullet in a fixed position, confines the powder charge to a given volume and controls headspace. Modern cartridge firearms are designed to withstand high working pressures since these same pressures make possible the high velocities, flat trajectories and increased range of modern ammunition. Yet, the modern firearm is no stronger than the cartridge case that is used in its chamber. If the case ruptures, the primer punctures or if the headspace is altered, hot powder gases under extreme pressure will flow back through every seam in the action possibly destroying the firearm and causing injury to the shooter.

The propellant charge in a muzzleloader is poured directly into the barrel of the firearm and then compressed by the projectile in the chamber area. Think about this for a minute! Lacking the restraints and protection supplied by a modern cartridge case, the muzzleloading charge rests directly against the steel chamber walls and the face of the breech plug. The ignition port in a cap lock or flint lock is a simple hole leading directly into the chamber. Certain surfaces of the breech plug and nipple are directly exposed to chamber pressure. Judged by the design standards set for modern firearms, the muzzleloader is extremely primitive. Its design will not tolerate high pressure.

The following text applies to the use of your Thompson/Center muzzleloader with Black Powder or an approved Black Powder substitute, such as Pyrodex charges properly restricted to the loading information shown in this booklet. It deals with those conditions which singularly or cumulatively can affect muzzleloading pressures.

For years it has been assumed that it is impossible to overload a firearm using Black Powder. The theory was that only a certain portion of a heavy Black Powder charge will burn and that the remaining powder is blown out of the bore in unburned condition. This thinking led to the belief the pressures created by a Black Powder charge would reach a certain (undetermined) range and climb no higher. Our testing indicates that this theory is completely unfounded. As heavier and heavier charges were loaded our pressure readings climbed accordingly. At no time was there any indication of a leveling off of pressure. Unreasonably heavy charges of Black Powder or an approved Black Powder substitute, such as Pyrodex, can be dangerous. Restrict yourself to the loads listed in this booklet and start with the lightest load shown for your particular model and caliber. Bear in mind that the following conditions can be cumulative. If you load the heaviest charge listed without following instructions (working slowly upward) then other conditions such as powder fouling, hard projectiles and improper loading, can carry you well beyond the maximum safe pressure range of muzzleloading firearms. All propellant powders (depending upon their design and composition) will function most efficiently within a given pressure range. Our testing indicates that the Black Powder used in our testing operated most efficiently at or near the midway point in our loading charts, and recorded the highest velocity in relation to the lowest pressure. Heavier loading showed marked increases in pressure and substantially more recoil for only minor gains in velocity.

Fouling in the bore of a muzzleloader will increase pressure. When shooting a muzzleloader, consecutive shots without cleaning will display rapid shot-to-shot increases in pressure, a variation in velocity and a resultant decrease in accuracy. As Black Powder fouling builds in the bore of your muzzleloader, loading will become more difficult until it reaches the point where it becomes impossible to properly seat the projectile.

This is especially true when firing modern plastic sabots. For optimum accuracy in a range situation, the bore should be swabbed after each shot. Pressures will then be more consistent, and better accuracy will result.

In a hunting situation, this will be impractical, and 1, 2, or even 3 shots may have to be taken without swabbing the bore. Keep in mind however that when loading becomes increasingly more difficult, it is because of fouling building up and accuracy will suffer.

Any increase in bullet weight with a given powder charge will increase pressure. If a shooter has been loading a 240 grain bullet and sabot combination and then decides to use the heavier 300 grain bullet/sabot combination, he must go back to the starting charge and work up slowly to the best performing load.

Improper loading can lead to a serious and dangerous pressure condition. To function properly the muzzleloading projectile must be seated tightly against the powder charge. **Never fire a muzzleloading firearm if the projectile is only part way down the barrel.** Mark your ramrod, as explained in the "Loading Section", and follow instructions carefully.

Variations in patch lubricants and bullet lubricants will effect velocity and accuracy, as well as having an effect on the amount of fouling which develops. Use of T/C's Natural Lube 1000 Plus Bore Butter, an all-natural lubricant, developed far less fouling, and permitted extended reloading between shots without the necessity to clean between these shots when used with our all-lead conical bullets. Velocity and accuracy improved over other lubricants used. However, when using bullets inside plastic sabots, lubricating the barrel is not recommended, as accuracy is sure to suffer as a result. Sabots should be loaded without being lubricated and any lubricant in the bore should be removed prior to loading a sabot.



Charging And Priming The Encore[™] Magnum Muzzleloader

If you have not read this manual in its entirety, do so before attempting to load your firearm. Improper loading and use of your firearm can cause injury and/or death to the shooter or bystanders and damage to property

The photo on page 34 shows a shooter in the process of loading the Encore Magnum Muzzleloading Rifle. Study this photo carefully and read all the captions before you proceed to charge your Encore.

Before charging your muzzleloader, break open the action. Look into the breech plug primer pocket and check to make sure there is no primer in the pocket. Hold the muzzle up to the light and look through the ignition channel to ensure that there is no charge present. Insert the ramrod into the muzzle and tap it up and down several times. You will hear the metal cap of the ramrod "clink" as it contacts the steel face of the breech plug.

The next precharging exercise is to wipe the bore free of all oil. **Be meticulous with** your cleaning for the presence of any amount of oil in the barrel or chamber can dampen the powder charge and cause the firearm to misfire or hangfire (see section on "Cleaning"). Point the muzzle in a safe direction and snap several #209 primers on the nipple before charging. This will ensure ignition and clear away any oil that may have accumulated in the primer port.

Adjust the powder measure to the desired charge and fill it with Black Powder or an approved Black Powder substitute, such as Pyrodex. To achieve accuracy, consistency in the powder charge is required. Fill the measure exactly the same each time. Set the firearm on its butt and hold the muzzle away from your face and body as pictured on page 34. Pour the measured charge down the barrel and strike the side of the barrel several sharp raps with the heel of your hand. This will settle the powder into the chamber area of the barrel.

If you are using Pyrodex Pellets, insert each pellet with the black ignitor end (darker portion) into the barrel first. Seat the projectile firmly on top of the pellet or pellets. Do not pound on the ramrod, or seat the projectile with excessive force, so as to crush the pellet(s) into bits.

Loading Sabots When Using Loose Black Powder or Granular Pyrodex[®]

The procedures for loading sabots or conical bullets when using loose Black Powder or Pyrodex are basically the same as when using Pyrodex Pellets; the only difference being that instead of dropping Pyrodex pellets down the bore, you will be pouring **premeasured** charges of Black Powder (FFG) or Pyrodex (RS) powder. As with pellets, care should be taken to seat the sabot firmly against the powder. Do not pound it. Again, mark your ramrod at the muzzle, ensuring that each time you load; the projectile will be seated at the same depth.

If you are loading an all-lead conical like T/C's Maxi-Ball or Maxi-Hunter, proceed as follows; do not use a cloth patch with these projectiles. They should be lubed, and are designed to be shot as cast (not sized). T/C Maxi-Balls and Maxi-Hunters now come from the factory pre-lubed. However, if you find some un-lubed bullets, we recommend that you lube these bullets with an all-natural lubricant, free of petroleum, like T/C Natural Lube 1000 Plus Bore Butter. Maxi-Balls and Maxi-Hunters do not have to be sized. Sizing will alter the diameter of the forward bearing band, and this will destroy the accuracy of the projectile and dangerously decrease its diameter (a loose fitting projectile can move off the powder charge). When loading a Maxi-Ball or Maxi-Hunter bullet, you will note how only the forward most bearing band grooves to the rifling when loading. The base of the bullet upsets (increases in diameter) on firing, causing it to fill the grooves, thus stabilizing the projectile.

When loading sabots, do not lubricate them. They are intended to be loaded into the muzzleloader just as they come from the package. In fact, for best results, it is recommended that all evidence of oil or lubricant be removed from the bore before loading a sabot - the drier the bore the better for optimal accuracy.

Hold the rifle as pictured on page 34 and pour your measured powder charge into the barrel. Start the lubricated bullet or sabot into the bore with your fingers. The base of the projectile will enter the bore easily with finger pressure. Drive the projectile down about four inches into the barrel with the rod end of the starter. Using short strokes with the ramrod, push the projectile the remainder of the way down the barrel until it contacts the powder charge. The sabot or conical bullet must be seated firmly against the powder charge. Seat the projectile with exactly the same pressure shot after shot. Study Photo "A". Remove the ramrod before you prime the firearm.

PHOTO A Using short strokes with the ramrod, push the projectile down the barrel and seat it against the powder charge. PROJECTILES MUST ALWAYS BE SEATED FIRMLY AGAINST THE POWDER CHARGE.



After the projectile is seated tightly against the charge, mark your ramrod to indicate the correct loaded depth of the powder plus the projectile (as shown below)

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Mark the ramrod at the muzzle. Use a pencil to mark the ramrod. This will allow you to ensure that each projectile is seated to the same depth. Erase and remark each time you adjust the charge or change projectiles. when you arrive at the desired charge, cut a clean notch in the ramrod so you will have a permanent reference mark. This reference mark will serve as an indicator only with the charge and projectile used when it was marked. When the charge and/or projectile change, the reference mark will also change.



→**▲**WARNING ←

Never fire a muzzleloader unless you are sure the projectile is firmly seated on the powder charge and the ramrod has been removed from the bore. Shooters should bear in mind that the muzzleloading projectile is not crimped into position as is the fixed cartridge projectile. If a projectile does not fit tightly then jarring or movement of the firearm can cause it to move forward. If the firearm is fired when a projectile is forward or off the powder charge,or the ramrod is still in the bore, then the projectile or ramrod may act as a bore obstruction. This can cause a ruptured or burst barrel. A RUPTURED OR BURST BARREL MAY CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY. If, due to fouling, a bullet or ball becomes lodged part way down the barrel, the firearm must be disassembled and the charge removed. See section on "Cleaning". Also see the section in this manual on "Pulling a Charge".

Loading Sabots or Conical Bullets with Pyrodex[®] Pellets

If you are loading sabots, like T/C's Mag Express Sabots, make sure that the bore has been swabbed and that all of the oil or lube has been removed. The drier the bore, the better with sabots, as this will improve accuracy.

Start by loading (2) 50 grain Pyrodex pellets, dropping each pellet down the bore with the black end going in first. The black end actually contains black powder, which acts as the igniter. Because black powder ignites at a lower temperature than Pyrodex, this will increase reliable ignition significantly.

Insert your sabot (with bullet installed) or conical bullet into the muzzle using your fingers. Push the projectile into the barrel as far as you can, until it stops. This portion of the muzzle is the recessed portion of T/C's QLA Muzzle System. Your projectile is now perfectly aligned to the center axis of the bore, surrounded by 360° of barrel.

Photo A Projectile inserted in the Quick Load Accurizor (QLA) Muzzle, perfectly aligned.



Choking up on your ramrod, or with a short starter, drive the projectile into the bore. There will be a minimal amount of resistance to overcome initially. (See Photo B)

Photo B Drive the projectile into the barrel with firm pressure or a short rap.



Once the projectile is in the bore, using short strokes with your ramrod, push the projectile the remainder of the way down the bore, until it makes contact with the Pyrodex pellets. Seat firmly, but do not pound on it, as this will likely crush the Pyrodex pellets, which will affect accuracy and the reliability of ignition. It could also deform the bullet. (See Photo C)

Photo C Use the ramrod to push the projectile down the barrel and seat it against the Pyrodex pellets.



With successive shots, fouling in the bore may build up in sufficient quantity to make loading of subsequent shots more difficult, or even impossible. This is especially true when shooting sabots out of a dry bore. The more fouling present, the more difficult it will be to seat your sabots at the same depth. This will cause differences in pressure, which will affect your accuracy. For maximum accuracy, you should swab your bore (with a powder solvent like T/C's Number 13) after each shot, and while on the range, this will be possible. In the field, you can expect that you will be able to go 2 to 3 shots before swabbing may become necessary, especially if you are using magnum charges of 150 grains (3 50 grain Pyrodex pellets). The more powder you use, the more fouling you will build up. When you experience progressively more difficult loading due to build up of fouling, you must clean the bore or safe loading will become impossible. See the sections on "Cleaning" and on " Pulling a Charge".

Photo D

Once the sabot has been loaded, it is necessary to carefully mark your ramrod.



Priming Your Charged T/C Encore Magnum Muzzleloader. If you have followed the preceding instructions your firearm will now be charged with Black Powder or Pyrodex and a projectile will be firmly seated against the powder charge. **Your ramrod will be marked to the exact seating depth allowing you to ensure that each future projectile is seated in the same careful manner.**



Do not prime the firearm until you are actually ready to fire and you have double checked to ensure that the ramrod has been removed from the bore. Thompson/Center does not recommend priming the firearm until the instant before actual firing. Carrying a charged, primed T/C Encore Magnum Muzzleloader can be dangerous. Accidental discharge is a constant hazard which, if it occurs, can cause injury and/or death to the shooter or bystanders and damage to property. The only safe way to guard against an accidental discharge is to carry your T/C Encore Magnum Muzzleloader unprimed, with the hammer in the "at rest" position and the muzzle pointed downrange away from yourself, bystanders or property.

РНОТО "G"

WHEN YOU ARE READY TO FIRE YOUR T/C ENCORE 209X50, PRIME IT AS SHOWN IN THIS PHOTO.



Hold the T/C Encore Magnum Muzzleloader firmly with the muzzle pointed in a safe direction and open the action by pivoting the swinging breech down - using the trigger guard as the lever - then press a 209 shotshell primer down tightly into the breech plug. Close the breech and the rifle is ready to fire. **COCK THE HAMMER AND FIRE THE SHOT!**

When firing the Encore Rifle, hold it tightly against the shoulder, allowing your body weight to absorb and buffer the force of the recoil. An improperly held firearm can "kick" upwards causing facial injury and/or bruising.

Encore[™] Muzzleloading Rifle

Improperly charging your T/C muzzleloading rifle can be dangerous. Study this photo carefully before proceeding.

Barrel held securely with muzzle upwards directed away from your body. Stay mentally alert. This task requires your complete attention.

Eyes, ears & arms protected.

Do Not Smoke while loading any muzzle-loader.

Use Black Powder or an approved Black Powder substitute, such as Pyrodex[™], ONLY! Use a T/C graduated powder measure only and do not overcharge. NEVER charge directly from a powder flask, can or powder horn. If using Pyrodex Pellets, insert black ignitor end first.

Keep components & reserve powder well away from the firearm.

Butt resting firmly on the ground & supported by the side of the shooter's foot to prevent slipping.

Rifle unprimed with the hammer in the "At Rest" position.

Loading And Use of a Encore[™] Muzzleloading Rifle
Encore[™] Muzzleloading Pistol

→**▲**WARNING ←

Improperly charging your T/C muzzleloading pistol can be dangerous. Study this photo carefully before proceeding.

Barrel held securely with muzzle upwards - directed away from your body.

Use Black Powder or Pyrodex ONLY! Use a T/C graduated powder measure only and do not overcharge. NEVER charge directly from a powder flask, can or powder horn. If using Pyrodex Pellets, insert black ignitor end first.



For field loading - see illustration above for proper procedure. Loading And Use of a Encore[™] Muzzleloading Pistol

Should You Decide NOT To Fire The Encore After The Hammer Has Been Cocked, Then You Must Take The Following Steps:

If, after cocking the rifle or pistol, the shooter decides not to fire, the following procedure must be followed:

1. Keeping the Encore pointed in a safe direction, lower firearm from the firing stance.

2. Firmly hold your thumb on the hammer so that it cannot drop freely. Pull the trigger rearward only long enough to disengage the hammer. Remove your finger from the trigger at his point.

3. Carefully lower the hammer forward, allowing the automatic hammer block to engage in the "at rest" position as shown on page 13.

- 4. Open the barrel by pulling rearward on the trigger guard spur.
- 5. Remove the #209 primer from the breech plug.

→**▲**WARNING ←

If the firearm is no longer going to be used, uncharge it by firing into a suitable backstop or pull the charge before returning it to your vehicle, camp or home (see section on "Pulling a Charge"). An accidental discharge can cause injury and/or death to the shooter or bystanders and damage to property.

Summary of Charging & Priming Your Encore[™] Muzzleloader

- 1. Check to ensure that the firearm is uncharged.
- 2. Wipe the bore free of all oil.

3. Pointing the muzzle in a safe direction, snap several #209 primers in the breech plug, clearing away any oil residue which may be in the breech plug's fire channel.

4. Ensure that the hammer is in the "At Rest" position.

5. Set firearm on its butt, holding muzzle away from your face and body.

6. Pour a pre-measured powder charge down the bore and settle powder by rapping the side of the barrel with your hand.

7. Place your projectile over the muzzle and proceed to drive the projectile down the bore with a short starter or your ramrod.

8. Firmly seat the projectile on the powder charge.

9. Remove the ramrod and return it to its proper location in the thimbles under the barrel of the firearm..

10. Open the barrel by pulling rearward on the trigger guard.

11. Insert the #209 primer into the breech plug and close the barrel.

12. Pull the hammer back to "cocked" position only when the target has been identified and you are ready to fire the shot.

Removing a Charge From Your Encore[™] Muzzleloader

Never attempt to pull a charge from your Encore until you are absolutely certain that the firearm is de-capped (Primer is removed from the breech plug). Do not attempt to pull a charge from any gun until the powder charge has been rendered inert (barrel removed and its breech section submerged in water for at least one-half hour) as explained in the following text dealing with pulling a charge. An accidental discharge can cause injury and/or death to the shooter or bystanders and damage to property.

REMOVING A CHARGE FROM A MUZZLELOADING FIREARM

Under normal conditions a Encore muzzleloader is unloaded simply by firing it into a suitable and safe backstop. There are, however, some conditions under which the firearm cannot be fired and the charge must be removed. This will require the removal of the breech plug.

SOME OF THE MOST COMMON CONDITIONS THAT CALL FOR REMOVING A CHARGE ARE AS FOLLOWS:

1. If the ball or bullet is not seated firmly against the powder charge, stop immediately! Do not attempt to fire the firearm. You must pull the charge and clean the barrel.

2. If the firearm is loaded in a proper manner yet fails to fire after repeated repriming and clearing of the ignition ports (as explained in the "Ignition" section).

3. If you are in a location that is unsuitable for discharging a firearm before you can transport it.

REMOVING THE BREECH PLUG

To remove the breech plug from the barrel - the extractor must first be removed from the barrel lug. If you have already installed T/C's EZ-Tip extractor (sold separately as an accessory item) you merely have to swivel the EZ-Tip extractor out of the way and you can then unscrew the breech plug.

If you have the non-swiveling extractor that came with your gun from the factory, it will be

necessary to take the firearm down - separating the barrel from the receiver and stock - in order to remove the breech plug. Follow these steps to disassemble your Encore.

Encore Takedown Procedure

1st Step - Make sure that the gun is unprimed (no primer in the breech plug).

2nd Step - Remove the ramrod from the thimble(s).

3rd Step - Remove the two forend screws. Turn these screws out counter-clockwise (as viewed from the bottom of the gun). Remove the forend from the barrel.

4th Step - Tip the barrel open and remove the barrel hinge pin by tapping it out (in either direction). Remove the barrel from the frame.

5th Step - Remove the screw that retains the extractor in the barrel lug. Remove the extractor from its slot and proceed to remove the breech plug.

Using a 7/16" socket wrench, or the breech plug wrench that was supplied with the Encore muzzleloader (barrel), remove the breech plug by turning it counter-clockwise (as viewed from the breech end of the barrel). If you need to hold the barrel more firmly than you can with just your hand, a crescent wrench or vise on the barrel lug will supply the needed holding power. This procedure will give you the necessary leverage to "break" the gas seal which was formed when the breech plug was originally "snugged" to the barrel during installation. There will be initial resistance between these parts which must be overcome.

6th Step – Once the breech plug has been removed, point the muzzle up. Gravity should then cause the Pyrodex pellets to drop out, or the loose powder to pour out. The sabot or bullet can then be poked out with your ramrod, inserting it through the muzzle. It will be necessary to add the extended super jag (which came with your rifle) to your ramrod, or you may use the longer "range rod" if you have access to one.

7th Step – If your propellant (Pyrodex pellets or loose powder) doesn't come out as a result of gravity, pour water into the breech to fully saturate the Pyrodex pellets or powder. Then proceed by pushing the entire charge out (propellant and projectiles) from the muzzle by use of your ramrod.

8th Step - To reassemble, reverse these steps, making sure that you check for proper functioning of the trigger and hammer prior to loading and firing. The breech plug of the Encore should be seated in the barrel until it is "snug". "Snug" is defined as being as tight as you can turn it into the barrel by using the breech plug wrench and turning it clock-

wise, while holding the barrel in your hand. Both the breech plug and the threads inside the breech area of the barrel should be cleaned with a bristle brush and lubricated with an anti-seize lubricant like T/C's Super Lube before re-installing the breech plug.

NOTE: If the breech plug is not seated fully, the extractor will interfere with the standing breech upon closing and keep the barrel from locking up correctly with the frame. *If you can't remove the breech plug.*

1. If you can't remove the breech plug you will have to pull the charge and it will be necessary to submerge the breech section of the barrel in a pail or bucket of water (hot water if possible). Make certain that at least 8" of the breech section is submerged in the water for at least 30 minutes.

2. Once the powder has been soaked for 30 minutes and rendered inert, try pulling the projectile from the bore by using your ramrod (or a range rod) with a bullet puller. Screw the bullet puller onto your rod, insert from the muzzle end, and when you make contact with the projectile, turn the rod clockwise, screwing the bullet puller into the projectile. Once screwed into the projectile, pull the projectile out. If you are using a sabot, make sure that both the projectile and the sabot are pulled out.

3. To reassemble, reverse these steps, making sure that you check for proper functioning of the trigger and hammer prior to loading and firing. The breech plug and the interior threads of the breech area of the Encore MAgnum Muzzleloader should be lubricated with an anti-seize lubricant like T/C's Super Lube. The breech plug should then be seated in the barrel until it is "snug". "Snug" is defined as being as tight as you can turn it into the barrel by using the breech plug wrench and turning it clockwise, while holding the barrel in your hand. **NOTE**: If the breech plug is not seated fully, the extractor will interfere with the standing breech upon closing and keep the barrel from locking up correctly with the frame.

4. If for any reason you are unable to remove the charge in the manner recommended, soak the barrel again. Squirt oil into the primer pocket and into the ignition channel in order to render the Pyrodex pellets or powder more inert, (if you were to use water only - it will just dry out over a period of time), and return the barrel to the service department at the address shown below with a letter describing the problem.

Thompson/Center Arms Company, Inc., Farmington Road, Rochester, New Hampshire 03867

Cleaning Your T/C Encore™ Muzzleloader

Never attempt to clean a charged or primed muzzleloading firearm. AN ACCI-DENTAL DISCHARGE CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

General Comments on Cleaning

Black powder and Pyrodex are very corrosive, and the fouling or residue left over in the bore after firing your firearm can be destructive to the steel, causing oxidation, rust, and pitting. Leaving your firearm unclean with this fouling present can lead to a ruined firearm.

Also, the build up of this fouling from shot to shot will produce shot to shot increases in pressure that will greatly affect accuracy. Lubricants, the amount of your powder charge, and your projectile (sabot or all lead conical bullet) will all affect the amount of fouling you will produce with each shot. Eventually, if not cleaned, the muzzleloading firearm will become impossible to load properly. Driven part way down the bore and blocked by powder fouling, the projectile will hang up and refuse to budge further.

→**▲WARNING** ←

A projectile which is seated only part way down the barrel sets up a highly dangerous condition WHICH MAY CAUSE A BURST BARREL AND INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDER AND DAMAGE TO PROPERTY. The projectile must be seated firmly against the powder charge. If the ball or bullet is not seated against the powder charge the firearm must be disassembled and the charge removed (see section on "Pulling a Charge"). Never fire a muzzleloading firearm unless the projectile is firmly seated on the powder charge.

The use of T/C's Natural Lube 1000 Plus Bore Butter, a non petroleum based lubricant will reduce fouling of black powder or Pyrodex over conventional petroleum based lubes. T/C's Natural Lube actually seasons the bore with repeated use, and is also the lube used in our pre-lubed all lead conical bullets, the Maxi-Ball and Maxi-Hunter. If shooting these conicals, the Natural Lube will eliminate a lot of cleaning and accuracy problems associated with fouling build up.

However, if shooting sabots like T/C's Mag Express Sabots, any lubricant used to protect the bore should be removed prior to actually loading and shooting sabots. The very nature of what a sabot is ie a plastic sleeve encompassing a bullet, calls for as dry a bore as possible for maximum accuracy. Because of that fact, there will be more fouling build up (including plastic), and swabbing the bore will have to be done more frequently. For maximum accuracy at the range, you should swab the bore between **each** shot.

Types of Cleaning

The user of a muzzleloading rifle or pistol has two types of cleaning with which to contend. One is "total or complete cleaning" which is done after shooting for the day, or at seasons end, prior to storing the firearm. The other is simply "wiping out the bore" which is done between shots, or as necessary when fouling builds up to the point of making it difficult to load. This is called "field cleaning".

Field cleaning is merely wiping the bore with a damp patch with a bore cleaner like T/C's No.13 all-natural Bore Cleaner, or even water, and running it up and down the bore to remove the fouling. Follow with a dry patch and you are ready to load again.

Cleaning From The Breech

The basic approach to cleaning the Encore muzzleloading firearm is to clean the firearm from the breech end, similar to cleaning a centerfire shotgun barrel.

1. Remove the barrel of your Encore as detailed on pages 16 & 17. Once the barrel has been removed, remove the breech plug.

2. Fill a pan with very hot soapy water. Submerge the muzzle end of the barrel in the water and push a wet patch down the barrel on the end of your ramrod(that has a jag installed on it) A jag comes with every new T/C muzzleloader. Pump the rod and patch up and

down in the barrel. This will draw water into the barrel and flush it out. When the barrel is clean, wipe off the excess water and set the barrel aside to dry.

3. Clean the breech plug and extractor with a stout bristle brush, and wipe off any powder residue on the inside of the frame.



4. Dry the parts thoroughly before reassembly.

5. Now that the barrel and parts are completely dry, lightly lube the bore with a quality lubricant or, in keeping with the all-natural method, T/C's Natural Lube 1000 Plus Bore Butter. Reinstall the breech plug, after lubricating the external threads of the breech plug and the internal threads in the breech of the barrel with an anti-seize lube like T/C's Super Lube. Also, be careful not to cross-thread or over-tighten the breech plug.

6. Fouling on the stock, receiver and exterior parts should be wiped off with a silicone saturated cloth or T/C's Wonder Cloth saturated with Bore Butter.

7. Your Encore may now be reassembled in the reverse order of the takedown procedure detailed on page 16 & 17.

After your Encore has been reassembled, check the hammer/trigger mechanism to ensure that there is no excess lubricant on any surface which could impede safe performance.

Cleaning From The Muzzle

The Encore Magnum Muzzleloader can also be cleaned from the muzzle, as most conventional cap lock and flint locks are cleaned. Patches soaked in T/C's No.13 Bore Cleaner can be run up and down the bore until the bore is clean. Then, a dry patch should be run up and down the bore, followed by a patch saturated with T/C's Natural Lube 1000 Plus Bore Butter. A more thorough cleaning from the muzzle can be accomplished by removal of the barrel and breech plug and then submerging it in a pan of hot, soapy water.

While cleaning from the muzzle may be preferred by some and cleaning from the breech by others, in all cases, before the firearm is put away, the breech plug should be removed, cleaned and lubricated with an anti-seize lube like T/C's Super Lube and then re-installed. Both the breech plug and the threads inside the breech area of the barrel should be cleaned and lubricated before re-installation.

Black Powder and Pyrodex are very corrosive, and the residue or fouling left over in the bore after firing your firearm can be very destructive to the steel, causing oxidation, rust, and pitting. Leaving your firearm un-cleaned with this fouling present can lead to a ruined firearm.



The saturated patch is then followed by several dry patches to absorb moisture and make sure the bore is dry.

For complete cleaning when using either Pyrodex or Black Powder the best solvent is hot soapy water. It is necessary that the water be very hot so that it heats up the barrel metal. A hot barrel will dry rapidly without rusting.

Using Cleaning Implements With Your Encore[™] Muzzleloader

Thompson/Center Muzzleloading Firearms are supplied with a cleaning jag which is the proper size for the particular caliber. For cleaning use commercial cleaning patches (round or square) or pieces of discarded clothing.

When using the cleaning jag,keep in mind that patch size and thickness are important. Start with a patch that is approximately $2\frac{1}{2}$ square (or in diameter). Position it over the jag as pictured in the illustration and try it in the bore of the firearm (wet patches will enter more easily than dry ones). If it seems to be too tight - don't force it. If your trial patch proves to be too tight, use a smaller size patch and/or thinner material.

A patch which is too small or thin will pull free from the jag teeth during the cleaning process. Such "lost patches" can be quickly retrieved by use of the worm (see illustration). Cleaning will go easier, however, if you establish and maintain an optimum patch/jag/bore fit.



Thompson/Center does not package the worm with each firearm. This is an optional tool and must be purchased separately (one size fits all calibers - see current catalog). The worm is an extremely important muzzleloading tool and every shooter should carry one in his implement bag. While its prime purpose is to retrieve "lost patches", it can also be used for field cleaning. To do so you simply catch the cleaning patch on the tines of the worm and push it into the bore in the conventional manner.

Iron Sight Adjustment For The Encore[™] Muzzleloader

Encore Magnum Muzzleloaders are equipped with a standard rifle rear sight (Diagram "B" Below) which is adjustable for elevation by moving the elevation "blade" up or down to change the point of impact. To do this, turn the Elevation adjustment Screw clockwise (as viewed from the receiver end) to lower the point of impact, and counter-clockwise, to raise the point of impact.

To adjust the windage it is necessary to move the entire rear sight leaf left or right by using the slotted screw head on the right side of the rear sight (as viewed from the receiver end of the sight). Move the rear sight blade in the direction you want your shots to hit- (Example; Turn the screw clockwise - thereby moving the sight blade to the right, to move your shots to the right and counter-clockwise to move the shots to the left).



→**▲**WARNING ←

Do not drill additional holes in the barrel as this could weaken its structure and contribute to a rupture causing injury and/or death to the shooter or bystanders and damage to property.

See the current T/C Catalog for scope mounting systems which can be used on your Encore. The receiver is factory drilled and tapped for these accessories.Questions should be addressed to our Service Department, at Telephone #603-332-2333.

Should your firearm require adjustment, repair or refinishing, we strongly recommend that the firearm be returned to the factory. There is no other way to ensure that the work

will be done by a competent staff of trained technicians.

Firearms returned to the factory should be marked to the attention of the service department. A letter of instructions should be enclosed to facilitate handling. Firearms should be uncharged, disassembled and shipped via United Parcel Service (U.P.S.).

Our Service Department will give your firearm a complete inspection and evaluate the problem. If the work required is not covered by our "Lifetime Warranty" you will receive a quotation which must be authorized by you.

Statement Of Liability From Thompson/Center

This gun is classified as a FIREARM OR DANGEROUS WEAPON and is surrendered by us with the express understanding that we assume no liability for its resale or unsafe handling under local laws and regulations. Thompson/Center Arms assumes no responsibility for physical injury or property damage resulting from either intentional or accidental discharge, or for the function of any gun subject to influences beyond our control, and will honor no claim which may result from careless or improper handling, unauthorized adjustments, improper loading, use of improper powder or components, corrosion or neglect.

For your protection, examine your firearm carefully at the time of purchase. Fill out and mail the registration card promptly. Be certain that it bears the firearm's serial number which you will find on the receiver.

Thompson/Center does not approve or recommend any type of custom conversion or alteration other than those performed by the T/C Custom Shop. Muzzleloading firearms subjected to alteration are not covered by our factory warranty. Responsibility for alterations rests totally with the gunsmith or individual performing the work. The consumer is warned that if such work is done improperly or without proper judgement, the firearm can malfunction or rupture causing injury and/or death to the shooter or bystanders and damage to property.

Thompson/Center Arms Co., Inc. - Limited Warranty -

THOMPSON/CENTER ARMS provides a warranty for all factory finished firearms for the LIFETIME OF THE ORIGINAL CONSUMER PURCHASER. Any firearm or part thereof returned, postage paid, to the factory at Farmington Road, Rochester, New Hampshire 03867, will be repaired or replaced to our commercial standard free of charge, and returned to the consumer purchaser postage prepaid. This warranty is established by return of our authorized warranty card which should be done within (30) days of purchase. This warranty does not cover the finish of the stock or steel components from scratches, dings or rust which may occur through normal usage or improper care, or any damage caused by custom alteration of the firearm other than those performed by the T/C Custom Shop! Thompson/Center Arms reserves the right to refuse to repair or replace firearms, or parts thereof, damaged by abuse or misuse.

This warranty does not cover "Kit models. While Thompson/Center does guarantee the quality and workmanship of the parts contained in each kit (and will replace any part which is proven, by our inspection, to be faulty in either workmanship or material) we have no control over the final finishing and assembly of these products. Therefore, no responsibility for either the construction or use of kit models is implied or assumed. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State. Address all correspondence and inquiries to:

THOMPSON/CENTER ARMS Company, Inc. P.O. Box 5002 Rochester, New Hampshire 03866

PARTS LISTS AVAILABLE UPON REQUEST: SPECIFY MODEL, CALIBER & SERIAL#



Bullet Data For T/C Muzzleloading Firearms

Maxi-Balls® For T/C Firearms



• .45 Caliber (240 grs.) For small to medium (deer-sized) game. Now factory lubricated with T/C Natural Lube 1000 Plus Bore Butter.

• .50 Caliber (370 grs.) A medium and big game bullet for .50 caliber firearms. Factory lubricated with T/C Natural Lube 1000 Plus Bore Butter.

• .50 Caliber (460 grs.) A big game bullet for .50 caliber firearms. Now factory lubricated with T/C Natural Lube 1000 Plus Bore Butter.

Maxi-Hunters® For T/C Firearms



For Maximum expansion on deer-sized game!

• .45 Caliber (255 grs.) A bullet designed specifically for medium (deer-sized) game. Factory lubed with Natural Lube 1000 Plus Bore Butter.

• .50 Caliber (275 grs.) A bullet designed for .50 caliber T/C firearms and deer sized game. Lubed with Natural Lube 1000 Plus Bore Butter.

• .50 Caliber (350 grs.) A bullet designed for .50 caliber firearms and deer sized game. Factory lubed with Natural Lube 1000 Plus Bore Butter.

Thompson/Center's Break-o-Way[™] Sabots



• .50 Caliber (For .429" to .430" Bullets) Designed for using jacketed pistol bullets in a muzzleloader. With a Woven Wool "doughnut" that is factory lubricated with Natural Lube 1000 Plus Bore Butter.



• .50 Caliber Sabots For XTP[™] Bullets (For .429" to .430" Bullets) Designed for using jacketed or lead bullets in a muzzleloader.

• .50 Caliber For PTX^{**} Bullets (For to .451" Bullets) Designed for using jacketed or lead bullets in a muzzleloader.

Thompson/Center's Big Shot Sabots



- .50 Caliber (for .475" 325 GR XTP Bullet)
- .50 Caliber (for .475" 400 GR XTP Bullet)

Thompson/Center's Cheap Shot Sabots



• .50 Caliber (for .429" - .430" 240 GR All Lead Hollow Point Bullet)

Thompson/Center's Super 45 XR Sabots



- .45 Caliber Sabots with XTP[™] Bullets</sup> .400" dia., 155 grain bullet.
- .45 Caliber Sabots with XTP[™] Bullets .400" dia., 180 grain bullet.

Thompson/Center's Shockwave Sabots



- .45 Caliber with Spire Point Bullet 200 Gr Bullet
- .50 Caliber with Spire Point Bullet 200 Gr Bullet
- .50 Caliber with Spire Point Bullet 250 Gr Bullet
- .50 Caliber with Spire Point Bullet 300 Gr Bullet

Suggested Black Powder Loads For The Encore[™] Muzzleloader

The following charts show recommended charges for Thompson/Center's Encore Magnum Muzzleloader. Charges are listed by caliber, style of firearm and type of projectile. Note that in each instance a series of charges are listed. More than one charge is shown in each category to clearly illustrate the safe loading range for that particular caliber, model and projectile.

→**▲**WARNING ←

Maximum loads are not to be exceeded nor is a substitution of powder or granulations to be attempted! Only use loads that are listed for your particular caliber, model and bullet style. Failure to follow these instructions may result in injury and/or death to the shooter or bystanders and damage to property.

→**▲**WARNING ←

The charges recommended in this manual are for the Encore Magnum Muzzleloader only. They should not be used with any other muzzleloading rifles unless the manufacturer of that muzzleloader specifically recommends such loads. The Encore Magnum Muzzleloader is designed to use these loads. Exceeding the listed loads for any muzzleloader could result in injury and/or death to the shooter or bystanders and damage to property.

The shooter is instructed to start with the lightest charge listed. As you become familiar with the firearm, increase your charges gradually until you reach your best performing load. Thompson/Center Arms is not responsible for loading information printed in sources other than this booklet.

NOTE: All loading data contained in this book is the result of testing by Thompson/Center Arms. Testing was done under carefully controlled conditions with the components specified in the text. A 26 inch barrel was used to produce the data (unless otherwise specified).

Since Thompson/Center has no control over the components or equipment which may be used with this information, no responsibility is implied or assumed for the results obtained.

Suggested Black Powder Loads For The Encore[™] 209 x 50 Magnum Rifle



For Use With .50 Caliber T/C Encore 209x50 Magnum Rifle Bullets Lubricated with Bore Butter Use #209 Shotgun Primer		.50 Caliber Rifle Using T/C .50 Caliber Maxi-Ball & Maxi-Hunter Loads	
.50 Cal. Lead Bullet Weight (Grains)	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
	80 grs. FFG	1395 F.P.S.	1383 Ft. Lbs.
275 Grain	90 grs. FFG	1455 F.P.S.	1504 Ft. Lbs.
Maxi Hunter®	100 grs. FFG	1509 F.P.S.	1618 Ft. Lbs.
and 220 Croin	110 grs. FFG	1570 F.P.S.	1751 Ft. Lbs.
320 Grain Maxi-Ball®	120 grs. FFG	1618 F.P.S.	1860 Ft. Lbs.
Lead	130 grs. FFG	1663 F.P.S.	1965 Ft. Lbs.
Bullet	140 grs. FFG	1686 F.P.S.	2020 Ft. Lbs.
	150 grs. FFG	1723 F.P.S.	2109 Ft. Lbs.
	80 grs. FFG	1327 F.P.S.	1447 Ft. Lbs.
350 Grain	90 grs. FFG	1418 F.P.S.	1652 Ft. Lbs.
Maxi Hunter®	100 grs. FFG	1465 F.P.S.	1764 Ft. Lbs.
and 370 Grain	110 grs. FFG	1525 F.P.S.	1911 Ft. Lbs.
370 Grain Maxi-Ball®	120 grs. FFG	1533 F.P.S.	1931 Ft. Lbs.
Lead	130 grs. FFG	1580 F.P.S.	2051 Ft. Lbs.
Bullet	140 grs. FFG	1609 F.P.S.	2127 Ft. Lbs.
	150 grs. FFG	1645 F.P.S.	2273 Ft. Lbs.
	80 grs. FFG	1225 F.P.S.	1566 Ft. Lbs.
470 Grain	90 grs. FFG	1297 F.P.S.	1756 Ft. Lbs.
Maxi Hunter®	100 grs. FFG	1374 F.P.S.	1970 Ft. Lbs.
and 460 Groin	110 grs. FFG	1416 F.P.S.	2093 Ft. Lbs.
460 Grain Maxi-Ball®	120 grs. FFG	1449 F.P.S.	2145 Ft. Lbs.
Lead	130 grs. FFG	1489 F.P.S.	2240 Ft. Lbs.
Bullet	140 grs. FFG	1520 F.P.S.	2360 Ft. Lbs.
	150 grs. FFG	1540 F.P.S.	2423 Ft. Lbs.
	Load Shown in I	Red is Maximum	

52

For Use With .50 Caliber T/C Encore 209x50 Magnum Rifle Bullets Lubricated with Bore Butter Use #209 Shotgun Primer

.50 Caliber Rifle Using T/C .50 Caliber Maxi-Ball & Maxi-Hunter Loads

50 Grain Pyrodex [®] Pellet Loading Data					
.50 Cal. Lead Bullet Weight (Grains)	Powder Charge (50 Gr. Pellet)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)		
275 Gr. Maxi Hunter® & 320 Gr. Maxi-Ball®	2 Pellets	1694 F.P.S.	2039 Ft. Lbs.		
	3 Pellets	1995 F.P.S.	2828 Ft. Lbs.		
350 Gr. Maxi Hunter® & 370 Gr. Maxi-Ball®	2 Pellets	1634 F.P.S.	2194 Ft. Lbs.		
	3 Pellets	1866 F.P.S.	2861 Ft. Lbs.		
470 Gr. Maxi Hunter® & 460 Gr. Maxi-Ball®	2 Pellets	1485 F.P.S.	2253 Ft. Lbs.		
	3 Pellets	1752 F.P.S.	3163 Ft. Lbs.		
Load Shown in Red is Maximum					

Assembly And Loading Of T/C Break-O-Way[™] Sabots

→**▲WARNING** ←

When loading T/C's Break-O-Way Sabots, make sure that your gun is unprimed, and that your Break-O-Way Sabot has been properly assembled. Failure to assemble and load your sabot correctly could result in the bullet, sabot halves, or woven wool doughnut separating and disengaging from themselves. This could result in an air space between the components. Under such a condition, one or more of the components may act as a barrel obstruction and firing can result in possible injury and/or death to the shooter or bystanders and damage to property.

To properly assemble your T/C Break-O-Way Sabot, position 2 sabot halves together forming a complete sabot cup. Press the woven wool "doughnut" firmly on the base, allowing the flange to protrude through the hole. Your sabot is now ready to accept a .429" - .430" diameter .44 cal bullet. Use only bullets of these dimensions.

Note: The Break-O-Way Sabot performs best when used with Black Powder (or Pyrodex equivalent) charges of 80 to 100 grains. For heavier charges you should use the T/C Mag Express Sabot for best performance.



→**▲WARNING** ←

Use only bullets measuring .429" - .430" designed for use in .44 caliber pistols or rifles. Using bullets of lesser diameter may cause the bullet to separate from the sabot resulting in a barrel obstruction. Using bullets of larger diameter could result in difficult loading, or a condition where the sabot is not seated all the way down in the powder charge, resulting in a barrel obstruction. Either case could result in injury and/or death to the shooter or bystanders and damage to property. The photo on page 34 pictures a shooter in the process of loading a muzzleloading rifle. Study this photo carefully and read all the captions before you proceed to charge your rifle.

The complete sabot unit should be seated firmly on the powder charge as indicated in the illustration below.



Do not exceed the recommended loading data in this manual when using T/C Break-O-Way Sabots in Thompson/Center rifles. When using rifles not manufactured by Thompson/Center, do not exceed the recommended loads provided by the manufacturer of your rifle.



Suggested Black Powder Loads For Break-O-Way[™] Sabots in the Encore[™] 209x50 Magnum Muzzleloader

For Use With .50 Caliber T/C Encore 209x50 Magnum Rifle Use #209 Shotgun Primer		.50 Caliber Rifle Using T/C .44 Caliber Break-O-Way Sabot Loads		
For Use With Bullets Weighing	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)	
000.0	80 grs. FFG	1634 F.P.S.	1186 Ft. Lbs.	
200 Grain Bullet	90 grs. FFG	1673 F.P.S.	1243 Ft. Lbs.	
Dullet	100 grs. FFG	1730 F.P.S.	1329 Ft. Lbs.	
040 Orein	80 grs. FFG	1466 F.P.S.	1146 Ft. Lbs.	
240 Grain Bullet	90 grs. FFG	1606 F.P.S.	1375 Ft. Lbs.	
	100 grs. FFG	1640 F.P.S.	1434 Ft. Lbs.	
075 0	80 grs. FFG	1435 F.P.S.	1275 Ft. Lbs.	
275 Grain Bullet	90 grs. FFG	1489 F.P.S.	1354 Ft. Lbs.	
Dullet	100 grs. FFG	1574 F.P.S.	1513 Ft. Lbs.	
000.0	80 grs. FFG	1417 F.P.S.	1337 Ft. Lbs.	
300 Grain	90 grs. FFG	1466 F.P.S.	1432 Ft. Lbs.	
Bullet	100 grs. FFG	1519 F.P.S.	1537 Ft. Lbs.	
Load Shown in Red is Maximum				

For Use With .50 Caliber T/C Encore 209x50 Magnum Rifle Use #209 Shotgun Primer .50 Caliber Rifle Using T/C .44 Caliber Break-O-Way Sabot Loads

50 Grain Pyrodex [®] Pellet Loading Data					
For Use With Bullets Weighing	Powder Charge 50 Gr. Pellets	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)		
200 Gr. Bullet	2 Pellets	1816 F.P.S.	1465 Ft. Lbs.		
240 Gr. Bullet	2 Pellets	1665 F.P.S.	1478 Ft. Lbs.		
275 Gr. Bullet	2 Pellets	1611 F.P.S.	1585 Ft. Lbs.		
300 Gr. Bullet	2 Pellets	1422 F.P.S.	1347 Ft. Lbs.		
Load Shown in Red is Maximum					

Assembly And Loading Of T/C Mag Express[™] Sabots

T/C Mag Express Sabots come in several variations for .50 caliber muzzleloading applications; some accept 44 caliber (.429" - .430" diameter) bullets and others accept 45 caliber (.451" - .452" diameter) bullets. In either case, insert the correct diameter projectile into the sabot and press firmly, making sure the bullet is fully seated.

→**▲**WARNING ←

When loading T/C's Mag Express Sabots, make sure that your gun is unprimed, and that your Mag Express Sabot has been properly assembled. Failure to assemble and load your sabot correctly could result in the bullet disengaging from the sabot. This could result in an air space between the components. Under such a condition, one or more of the components may act as a barrel obstruction and firing could result in injury and/or death to the shooter or bystanders and damage to property.

To properly assemble your T/C Mag Express Sabot, insert the projectile into the sabot and press firmly, making sure the bullet is fully seated. Use only bullets of the correct diameter.



→**▲**WARNING ←

Use only bullets of the correct diameter that were designed for the sabots you are using. Using bullets of lesser diameter may cause the bullet to separate from the sabot resulting in a barrel obstruction. Using bullets of larger diameter could result in difficult loading, or a condition where the sabot is not seated all the way down on the powder charge, resulting in a barrel obstruction. Either case can result in a damaged firearm and possible injury and/or death to the shooter or bystanders and damage to property.

The photo on page 34 pictures a shooter in the process of loading a muzzleloading rifle. Study this photo carefully and read all the captions before you proceed to charge your rifle.

The complete sabot unit should be seated firmly on the powder charge as indicated in the illustration below.



Do not exceed the recommended loading data in this manual when using T/C Mag Express Sabots in Thompson/Center rifles. When using rifles not manufactured by Thompson/Center, do not exceed the recommended loads provided by the manufacturer of your rifle.



Suggested Black Powder Loads For T/C Mag Express[™] Sabots in the Encore[™] 209x50 Rifle

For Use Only With .50 Caliber T/C Encore 209x50 Magnum Rifle Use #209 Shotgun Primer.		.50 Caliber Rifle Mag Express [™] Sabot Loads Using Black Powder	
Black Powder Charge (Grains)	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
	80 grs. FFG	1634 F.P.S.	1186 Ft. Lbs.
	90 grs. FFG	1673 F.P.S.	1243 Ft. Lbs.
	100 grs. FFG	1730 F.P.S.	1329 Ft. Lbs.
200 Grain	110 grs. FFG	1759 F.P.S.	1374 Ft. Lbs.
Bullet	120 grs. FFG	1809 F.P.S.	1454 Ft. Lbs.
Duilet	130 grs. FFG	1835 F.P.S.	1528 Ft. Lbs.
	140 grs. FFG	1911 F.P.S.	1622 Ft. Lbs.
	150 grs. FFG	1924 F.P.S.	1644 Ft. Lbs.
	80 grs. FFG	1466 F.P.S.	1146 Ft. Lbs.
	90 grs. FFG	1606 F.P.S.	1375 Ft. Lbs.
	100 grs. FFG	1640 F.P.S.	1434 Ft. Lbs.
240 Creain	110 grs. FFG	1686 F.P.S.	1515 Ft. Lbs.
Grain Bullet	120 grs. FFG	1729 F.P.S.	1593 Ft. Lbs.
Duilet	130 grs. FFG	1770 F.P.S.	1669 Ft. Lbs.
	140 grs. FFG	1821 F.P.S.	1767 Ft. Lbs.
	150 grs. FFG	1846 F.P.S.	1816 Ft. Lbs.
	80 grs. FFG	1445 F.P.S.	1275 Ft. Lbs.
	90 grs. FFG	1533 F.P.S.	1435 Ft. Lbs.
	100 grs. FFG	1590 F.P.S.	1544 Ft. Lbs.
275 Grain	110 grs. FFG	1640 F.P.S.	1643 Ft. Lbs.
Bullet	120 grs. FFG	1687 F.P.S.	1738 Ft. Lbs.
Duilet	130 grs. FFG	1726 F.P.S.	1820 Ft. Lbs.
	140 grs. FFG	1762 F.P.S.	1896 Ft. Lbs.
	150 grs. FFG	1794 F.P.S.	1966 Ft. Lbs.
	80 grs. FFG	1434 F.P.S.	1370 Ft. Lbs.
	90 grs. FFG	1512 F.P.S.	1523 Ft. Lbs.
	100 grs. FFG	1582 F.P.S.	1666 Ft. Lbs.
300 Croin	110 grs. FFG	1619 F.P.S.	1747 Ft. Lbs.
Grain Bullet	120 grs. FFG	1637 F.P.S.	1786 Ft. Lbs.
Dullet	130 grs. FFG	1661 F.P.S.	1838 Ft. Lbs.
	140 grs. FFG	1685 F.P.S.	1892 Ft. Lbs.
	150 grs. FFG	1726 F.P.S.	1985 Ft. Lbs.
	Load Shown in	Red is Maximum	

For Use Only With .50 Caliber T/C Encore 209x50 Magnum Rifle Use #209 Shotgun Primer.

.50 Caliber Rifle Mag Express™ Sabot Loads with Pyrodex Pellets

5	50 Grain Pyrodex [®] Pellet Loading Data					
For Bullets Weighing	Powder Charge 50 Grain Pellet(s)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)			
200 Grain	2 Pellets	2015 F.P.S.	1804 Ft. Lbs.			
Bullet	3 Pellets	2258 F.P.S.	2265 Ft. Lbs.			
240 Grain	2 Pellet	1868 F.P.S.	1860 Ft. Lbs.			
Bullet	3 Pellets	2203 F.P.S.	2587 Ft. Lbs.			
250 Grain	2 Pellet	1849 F.P.S.	1898 Ft. Lbs.			
Bullet	3 Pellets	2182 F.P.S.	2644 Ft. Lbs.			
275 Grain	2 Pellet	1740 F.P.S.	1849 Ft. Lbs.			
Bullet	3 Pellets	2079 F.P.S.	2640 Ft. Lbs.			
300 Grain	2 Pellet	1707 F.P.S.	1942 Ft. Lbs.			
Bullet	3 Pellets	2021 F.P.S.	2721 Ft. Lbs.			
	Load Shown in Red is Maximum					

Suggested Loads For the Encore™ 209x45 Muzzleloading Rifle

For Use Only With .45 Caliber T/C Encore 209x45 Magnum Rifle Use #209 Shotgun Primer.

.45 Cal. Rifle Mag Express™ Sabot Loads with Pyrodex Pellets

50 Grain Pyrodex [®] Pellet Loading Data					
For Use with Bullets Weighing	Powder Charge 50 Grain Pellet(s)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)		
155 Grain Bullet	2 Pellets	1989 F.P.S.	1362 Ft. Lbs.		
	3 Pellets	2657 F.P.S.	2430 Ft. Lbs.		
180 Grain	2 Pellet	1896 F.P.S.	1437 Ft. Lbs.		
Bullet	3 Pellets	2493 F.P.S.	2485 Ft. Lbs.		
	Load Shown in I	Red is Maximum			

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For Use Only With .45 Caliber T/C Encore 209x45 Magnum Rifle Use #209 Shotgun Primer.		Mag Express"	I. Rifle " Sabot Loads k Powder
For Use with Bullets Weighing	Black Powder Charge (Grains)	Muzzle Velocity Muzzle Energy (Feet Per Second) (Foot Pounds)	
	80 grs. FFG	1883 F.P.S.	1220 Ft. Lbs.
	90 grs. FFG	1945 F.P.S.	1302 Ft. Lbs.
	100 grs. FFG	2053 F.P.S.	1451 Ft. Lbs.
155 Grain	110 grs. FFG	2125 F.P.S.	1554 Ft. Lbs.
Bullet	120 grs. FFG	2176 F.P.S.	1630 Ft. Lbs.
	130 grs. FFG	2223 F.P.S.	1701 Ft. Lbs.
	140 grs. FFG	2281 F.P.S.	1791 Ft. Lbs.
	150 grs. FFG	2326 F.P.S.	1862 Ft. Lbs.
	80 grs. FFG	1711 F.P.S.	1170 Ft. Lbs.
	90 grs. FFG	1786 F.P.S.	1275 Ft. Lbs.
	100 grs. FFG	1843 F.P.S.	1358 Ft. Lbs.
180 Grain	110 grs. FFG	1902 F.P.S.	1446 Ft. Lbs.
Bullet	120 grs. FFG	1948 F.P.S.	1541 Ft. Lbs.
	130 grs. FFG	1999 F.P.S.	1598 Ft. Lbs.
	140 grs. FFG	2084 F.P.S.	1736 Ft. Lbs.
	150 grs. FFG	2131 F.P.S.	1815 Ft. Lbs.
	Load Shown in I	Red is Maximum	

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For Use Only With .45 Caliber T/C Encore 209x45 Magnum Rifle Using Bullet Weights Shown Below Use #209 Shotgun Primer.		.45 Cal. Rifle Pyrodex Pellets with ShockWave™ Sabot Loads	
5	O Grain Pyrodex®	Pellet Loading Da	ta
For Use with Bullets Weighing	Powder Charge 50 Grain Pellets	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
200 Grain	2 Pellets	2035 F.P.S.	1840 Ft. Lbs.
Bullet	3 Pellets	2398 F.P.S.	2554 Ft. Lbs.
	Load Shown in I	Red is Maximum	
T/C Encore 209x45 Magnum Rifle Using Bullet Weights Shown Below Pyro			I. Rifle ellets with ullets Loads
5	0 Grain Pyrodex®	Pellet Loading Da	ta
For Use with Bullets Weighing	Powder Charge 50 Grain Pellets	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
255 Gr. Maxi-Hunter	2 Pellets	1878 F.P.S.	1998 Ft. Lbs.
or 240 Gr. Maxi-Ball	3 Pellets	2267 F.P.S.	2911 Ft. Lbs.
	Load Shown in I	Red is Maximum	
For Use Only With .45 T/C Encore 209x45 Ma Using Bullet Lubricate 1000 Plus Bore Butter Use #209 Shotgun Prin	gnum Rifle d with Natural Lube	.45 Ca Pyrodex Po T/C Maxi-Bu	ellets with
For Use with Bullets Weighing	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
	80 grs. FFG	1541 F.P.S.	1345 Ft. Lbs.
	90 grs. FFG	1608 F.P.S.	1464 Ft. Lbs.
	100 grs. FFG	1680 F.P.S.	1599 Ft. Lbs.
255 Gr. Maxi-Hunter or	110 grs. FFG	1745 F.P.S.	1725 Ft. Lbs.
240 Gr. Maxi-Ball	120 grs. FFG	1789 F.P.S.	1813 Ft. Lbs.
	130 grs. FFG	1826 F.P.S.	1888 Ft. Lbs.
	140 grs. FFG	1868 F.P.S.	1976 Ft. Lbs.
	150 grs. FFG	1914 F.P.S.	2075 Ft. Lbs.
Load Shown in Red is Maximum			

Suggested Black Powder Loads For The Encore[™] 209 x 50 Magnum Pistol



For Use With .50 Caliber T/C Encore 209x50 Magnum Pistol Only Bullets Lubricated with Bore Butter Use #209 Shotgun Primer		.50 Caliber Pistol Using T/C .50 Caliber Maxi-Ball & Maxi-Hunter Loads	
.50 Cal. Lead Bullet Weight (Grains)	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
275 Gr. Maxi Hunter®	80 grs. FFG	1235 F.P.S.	1084 Ft. Lbs.
Or	90 grs. FFG	1269 F.P.S.	1145 Ft. Lbs.
320 Gr. Maxi-Ball®	100 grs. FFG	1336 F.P.S.	1269 Ft. Lbs.
Lead Bullet	110 grs. FFG	1387 F.P.S.	1367 Ft. Lbs.
350 Gr. Maxi Hunter®	80 grs. FFG	1187 F.P.S.	1159 Ft. Lbs.
or	90 grs. FFG	1240 F.P.S.	1264 Ft. Lbs.
370 Gr. Maxi-Ball®	100 grs. FFG	1275 F.P.S.	1336 Ft. Lbs.
Lead Bullet	110 grs. FFG	1303 F.P.S.	1395 Ft. Lbs.
470 Gr. Maxi Hunter®	80 grs. FFG	1080 F.P.S.	1192 Ft. Lbs.
or 460 Gr. Maxi-Ball®	90 grs. FFG	1130 F.P.S.	1305 Ft. Lbs.
	100 grs. FFG	1160 F.P.S.	1375 Ft. Lbs.
Lead Bullet	110 grs. FFG	1186 F.P.S.	1437 Ft. Lbs.
Load Shown in Red is Maximum			

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For Use With .50 Caliber T/C Encore 209x50 Magnum Pistol Only Bullets Lubricated with Bore Butter Use #209 Shotgun Primer

.50 Caliber Pistol Using T/C .50 Caliber Maxi-Ball & Maxi-Hunter Loads

50 Grain Pyrodex [®] Pellet Loading Data				
.50 Cal. Lead Bullet Weight (Grains)	Powder Charge (50 Gr. Pellet)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)	
275 Gr. Maxi Hunter® & 320 Gr. Maxi-Ball®	2 Pellets	1505 F.P.S.	1609 Ft. Lbs.	
350 Gr. Maxi Hunter® & 370 Gr. Maxi-Ball®	2 Pellets	1473 F.P.S.	1783 Ft. Lbs.	
470 Gr. Maxi Hunter® & 460 Gr. Maxi-Ball®	2 Pellets	1297 F.P.S.	1719 Ft. Lbs.	
Load Shown in Red is Maximum				

Suggested Black Powder Loads For Break-O-Way[™] Sabots in the Encore[™] 209 x 50 Pistol

For Use Only With .50 Caliber .50 Caliber Pistol T/C Encore 209x50 Magnum Pistol Only Using T/C .44 Caliber Using .429" - .430" Bullets Use #209 Shotaun Primer. **Break-O-Way Sabot Loads** For Use With Black Powder Muzzle Velocitv Muzzle Energy Charge (Grains) (Feet Per Second) (Foot Pounds) **Bullets Weighing** 80 grs. FFG 719 Ft. Lbs. 1272 F.P.S. 200 Grain 90 grs. FFG 1327 F.P.S. 782 Ft. Lbs. Bullet 100 ars. FFG 1369 F.P.S. 833 Ft. Lbs. 80 grs. FFG 1229 F.P.S. 805 Ft. Lbs. 240 Grain 90 grs. FFG 1296 F.P.S. 895 Ft. Lbs. Bullet 100 ars. FFG 1350 F.P.S. 971 Ft. Lbs. 1188 F.P.S. 80 grs. FFG 862 Ft. Lbs. 275 Grain 90 ars. FFG 1245 F.P.S. 947 Ft. Lbs. Bullet 100 grs. FFG 1302 F.P.S. 1035 Ft. Lbs. 80 grs. FFG 1158 F.P.S. 893 Ft. Lbs. 300 Grain 90 grs. FFG 1211 F.P.S. 977 Ft. Lbs. Bullet 100 ars. FFG 1266 F.P.S. 1068 Ft. Lbs. Load Shown in Red is Maximum

For Use Only With .50 Caliber T/C Encore 209x50 Magnum Pistol Only Using .429" - .430" Bullets Use #209 Shotgun Primer. .50 Caliber Pistol Using T/C .44 Caliber Break-O-Way Sabot Loads

		Dieak-O-way Sabot Loaus	
50 Grain Pyrodex [®] Pellet Loading Data			
For Use With Bullets Weighing	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
200 Gr. Bullet	2 Pellets	1627 F.P.S.	1176 Ft. Lbs.
240 Gr. Bullet	2 Pellets	1570 F.P.S.	1313 Ft. Lbs.
275 Gr. Bullet	2 Pellets	1502 F.P.S.	1377 Ft. Lbs.
300 Gr. Bullet	2 Pellets	1417 F.P.S.	1338 Ft. Lbs.
Load Shown in Red is Maximum			

Suggested Black Powder Loads For T/C Mag Express[™] Sabots in the Encore[™] 209x50 Pistol



For Use Only With .50 Caliber T/C Encore 209x50 Magnum Pistol Only Use #209 Shotgun Primer.		.50 Caliber Pistol Mag Express [™] Sabot Loads Using Black Powder		
Black Powder Charge (Grains)	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)	
	80 grs. FFG	1360 F.P.S.	829 Ft. Lbs.	
200 Grain	90 grs. FFG	1420 F.P.S.	896 Ft. Lbs.	
Bullet	100 grs. FFG	1479 F.P.S.	972 Ft. Lbs.	
Duilet	110 grs. FFG	1530 F.P.S.	1039 Ft. Lbs.	
	80 grs. FFG	1306 F.P.S.	909 Ft. Lbs.	
240 Grain	90 grs. FFG	1379 F.P.S.	1014 Ft. Lbs.	
Bullet	100 grs. FFG	1416 F.P.S.	1069 Ft. Lbs.	
Dunet	110 grs. FFG	1454 F.P.S.	1124 Ft. Lbs.	
	80 grs. FFG	1272 F.P.S.	988 Ft. Lbs.	
275	90 grs. FFG	1335 F.P.S.	1089 Ft. Lbs.	
Grain Bullet	100 grs. FFG	1391 F.P.S.	1182 Ft. Lbs.	
Duilet	110 grs. FFG	1447 F.P.S.	1270 Ft. Lbs.	
300 Grain Bullet	80 grs. FFG	1268 F.P.S.	1071 Ft. Lbs.	
	90 grs. FFG	1313 F.P.S.	1149 Ft. Lbs.	
	100 grs. FFG	1372 F.P.S.	1254 Ft. Lbs.	
	110 grs. FFG	1417 F.P.S.	1328 Ft. Lbs.	
Load Shown in Red is Maximum				

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For Use Only With .50 Caliber T/C Encore 209x50 Magnum Pistol Only Use #209 Shotgun Primer.

.50 Caliber Pistol Mag Express™ Sabot Loads with Pyrodex Pellets

50 Grain Pyrodex [®] Pellet Loading Data			
For Bullets Weighing	Powder Charge 50 Grain Pellet(s)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
200 Gr. Bullet	2 Pellets	1760 F.P.S.	1376 Ft. Lbs.
240 Gr. Bullet	2 Pellets	1659 F.P.S.	1467 Ft. Lbs.
275 Gr. Bullet	2 Pellets	1583 F.P.S.	1530 Ft. Lbs.
300 Gr. Bullet	2 Pellets	1550 F.P.S.	1601 Ft. Lbs.
Load Shown in Red is Maximum			

B	allistics Usi	ing .50 Cal	iber Conic	al Bullets	
Bullet	50 Grain Pyrodex® Pellets	Range in Yards	Impact from line of Sight	Velocity f.p.s	Energy ft./lbs.
350 Grain	2	0	8	1649	2235
Maxi-Hunter®	2	50	+1.9	1383	1572
or 370 Grain	2	100	0.0	1176	1137
Maxi-Ball®	2	150	-8.1	1041	891
Lead Conical	2	200	-21.8	951	743
350 Grain	3	0	8	1866	2861
Maxi-Hunter®	3	50	+1.5	1574	2036
or 370 Grain	3	100	0.0	1326	1445
Maxi-Ball®	3	150	-4.6	1142	1072
Lead Conical	3	200	-15.2	1016	848
Ba	Ilistics Usi	ng .50 Cali	iber Mag E	xpress Sab	ots
	2	0	8	1868	1860
	2	50	+1.1	1696	1532
240 Grain XTP™	2	100	0.0	1539	1261
AII	2	150	-4.8	1399	1043
	2	200	-14.1	1276	867
	3	0	8	2203	2587
	3	50	+.7	2006	2143
240 Grain XTP™	3	100	0.0	1830	1783
VIL	3	150	-3.2	1660	1468
	3	200	-9.6	1507	1210
	2	0	8	1740	1848
	2	50	+1.4	1571	1506
275 Grain XTP™	2	100	0.0	1420	1232
ATT	2	150	-5.7	1289	1014
	2	200	-16.6	1177	846
	3	0	8	2079	2639
	3	50	+.8	1887	2175
275 Grain XTP™	3	100	0.0	1705	1775
A11	3	150	-3.8	1540	1447
	3	200	-11.4	1393	1185
300 Grain XTP™	2	0	8	1707	1942
	2	50	+1.4	1573	1649
	2	100	0.0	1452	1404
	2	150	-5.6	1343	1200
	2	200	-15.9	1244	1030
	3	0	8	2010	2692
300 Grain XTP™	3	50	+.8	1862	2310
	3	100	0.0	1718	1965
	3	150	-3.8	1583	1669
	3	200	-11.1	1461	1421

.50 Caliber Ballistics Cont'd					
Bullet	50 Grain Pyrodex® Pellets	Range in Yards	Impact from line of Sight	Velocity f.p.s	Energy ft./lbs.
250 Grain PTX™	2	0	8	1849	1898
	2	50	+1.2	1629	1472
	2	100	0.0	1437	1145
	2	150	-5.5	1273	899
	2	200	-16.4	1144	727
	3	0	8	2182	2643
250 Grain PTX™	3	50	+.8	1934	2077
	3	100	0.0	1707	1617
	3	150	-3.7	1504	1255
	3	200	-11.5	1330	982

Service for Your THOMPSON/CENTER Muzzleloader

Should your T/C muzzleloading firearm require adjustment, repair or refinishing, we strongly recommend that the rifle be returned to the factory for such work. There is no other way to ensure that the work will be done by a competent staff or trained technicians. Send your rifle back to the factory unloaded with a letter describing the problem.

Any T/C muzzleloader should be sent prepaid (we will not accept collect shipments). Do not include gun case, sling, scopes or other custom accessories and packaging and product literature that you consider to be collectable. These items may be damaged or lost in transit.

The Federal Gun Control Act allows an individual (who is not otherwise barred from purchasing or possessing a firearm) to ship a firearm directly to the manufacturer for purposes of repair. However, before shipping your rifle to us, be certain that your state and local laws permit such shipments and that they will also permit us to return the rifle directly to you. If receiving a rifle is not permitted, then arrangements will have to be made to ship your rifle to a Federally Licensed Firearms Dealer. We will need a signed copy of that dealers Federal Firearms License (EEL.).

Muzzleloading firearms that are returned to the factory should be marked for the attention of the service department. A letter of instructions should be enclosed with the gun. Adherence to these suggestions will prevent loss of time and facilitate handling at the factory.

Our service department will give your muzzleloading firearm a complete inspection. They will evaluate the problem or problems specified in your covering letter. If the work required is not covered by our "Lifetime Warranty" you will receive a quotation which must be authorized by you.

Ship complete muzzleloading firearms via U.P.S. or Parcel Post. The shipment should be insured.

Notes And Loading Information

T/C Shipping Address:

Thompson/Center Arms Company, Inc. Farmington Road Rochester, New Hampshire 03867

T/C Mailing Address:

Thompson/Center Arms Company, Inc. P.O. Box 5002 Rochester, New Hampshire 03866

Notes And Loading Information

For Your Records

Important Note: For fire, theft and insurance purposes, retain this record with your important papers in a safe place.		
My Thompson/Center:		
Was Purchased From:		
On (date):	20	
Serial Number:	Caliber:	
	on:	
Notes:		

This area is provided for your convenience. We suggest that you make a list of important information that pertains to your specific firearm (best performing load, etc.). Keep this booklet with your firearm and review your notes before each hunting season or whenever the firearm has not been used for extended periods of time.



This Manual Does Not Cover All Aspects of The T/C Pro-Hunter Model Muzzleloaders Refer To The Specific Instructions Regarding Those Models.

REV 02/2006

This Manual Does Not Cover All Aspects of The T/C Pro-Hunter Model Muzzleloaders Refer To The Specific Instructions Regarding Those Models.



Thompson/Center Arms Co., Inc. P.O. Box 5002 Rochester New Hampshire 03866

Pyrodex as a propellant. With any other approved Black Powder Substitute follow **NOTE: The loading data found in this manual was compiled using Black Powder or** the instructions supplied by the manufacturer and heed all warnings as they apply to loading and usage of that product.