



MODEL[®]
70

Winchester[®] Model 70[®] Bolt-Action Rifle Owner's Manual

Important instructions for the

Winchester® Model 70® Bolt-Action Rifle

Winchester Repeating Arms
Customer Service Department (United States)
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Morgan, Utah 84050-9333
Phone: (800) 945-5237

If you have any questions or comments regarding
your new firearm, please feel free to write or call us.
Use the space below to record information about your
new firearm.

Model _____

Serial Number _____

Purchased From _____

Date of Purchase _____

Winchester is a registered trademark of Olin Corporation.

Specifications within this owner's manual are correct at the time of printing and
subject to change without notice.

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STATE WARNING

According to state law, California requires that firearm manufacturers, distributors and retailers include conspicuous, specific warnings with firearms sold in that state.

▲WARNING

“Children are attracted to and can operate firearms that can cause severe injuries or death. Prevent child access by always keeping guns locked away and unloaded when not in use. If you keep a loaded firearm where a child obtains and improperly uses it, you may be fined or sent to prison.”

▲ADVERTENCIA

“A los niños los atraen las armas de fuego y las pueden hacer funcionar. Ellos pueden causarse lesiones graves y la muerte. Evite que los niños tengan acceso a las armas de fuego guardándolas siempre con llave y descargadas cuando no las esté utilizando. Si usted tiene un arma de fuego cargada en un lugar en que un niño tiene acceso a ella y la usa indebidamente, le pueden dar una multa o enviarlo a la cárcel.”

WARNING: YOU ARE RESPONSIBLE FOR FIREARM SAFETY

▲WARNING

FAILURE TO FOLLOW ANY OF THE FOLLOWING WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

As a firearm owner, you accept a set of demanding responsibilities. How seriously you take these responsibilities can be the difference between life and death.

There is no excuse for careless or abusive handling of any firearm. At all times handle this firearm and all other firearms with intense respect for their power and potential danger.

Please read and understand all of the cautions, warnings, notices, proper handling procedures and instructions outlined in this owner's manual before using your new firearm.

1 ALWAYS KEEP THE MUZZLE OF YOUR FIREARM POINTED IN A SAFE DIRECTION EVEN THOUGH YOU ARE CERTAIN IT IS UNLOADED.

Never point any firearm at anything you do not intend to shoot. Be extremely alert and aware of all persons and property within the range of your ammunition.

2 NEVER RELY TOTALLY ON YOUR FIREARM'S MECHANICAL "SAFETY" DEVICE. LIKE ANY MECHANICAL DEVICE, A "SAFETY" CAN SOMETIMES FAIL; IT CAN BE JARRED OR INADVERTENTLY MANIPULATED INTO AN UNSAFE CONDITION.

The word "safety" describes a firearm's trigger block mechanism, sear block mechanism, hammer block mechanism or firing pin block mechanism.

Mechanical “safeties” are designed to place your firearm in a safer status, and no guarantee can be made that the firearm will not fire even if the “safety” is in the on safe position. Mechanical “safeties” merely aid safe gun handling and are no excuse for pointing your firearm’s muzzle in an unsafe direction. See “Operation of the ‘Safety’” on pages 12-13 for instructions on the operation of this firearm’s “safety.”

Remember, safe gun handling does not stop with your firearm’s mechanical “safety” devices, it starts there. Always treat this firearm with the respect due a loaded, ready-to-fire firearm.

Some firearms do not have a mechanical “safety.” Many target firearms, lever-action firearms and pistols do not have manual “safety” mechanisms. Therefore it is critical to read and understand the owner’s manual for every firearm which explains the safe operation of the firearm.

While it is a good idea to “test” your firearm’s mechanical “safety” periodically for proper function, never test the “safety” while your firearm is loaded or pointed in an unsafe direction.

3 WHENEVER YOU HANDLE ANY FIREARM, OR HAND IT TO SOMEONE, ALWAYS OPEN THE ACTION IMMEDIATELY AND VISUALLY CHECK THE FIREARM’S CHAMBER TO MAKE CERTAIN THAT THE FIREARM IS COMPLETELY UNLOADED.

Make certain the firearm does not inadvertently contain any ammunition. Remember, merely removing the magazine does not mean the chamber is unloaded. Always keep the chamber empty and the “safety” in the on safe position unless shooting is imminent.

4 ALWAYS WEAR EAR AND EYE PROTECTION WHEN SHOOTING.

Unprotected, repeated exposure to gunfire can cause hearing damage. Wear hearing protection (shooting earplugs or muffs) to guard against such damage.

Wear shooting glasses to protect your eyes from flying particles. Allow proper distance (eye relief) between a scope and your eye when firing a scoped pistol, rifle or shotgun. Do not use unorthodox shooting methods that could cause the rearward travel of the slide or bolt of a firearm to contact your eyes, face or hands. Always keep a safe distance between the muzzle of your firearm and any persons nearby, as muzzle blast, debris and ejecting cartridges could inflict serious injury.

Always wear eye protection when disassembling and cleaning any firearm to prevent the possibility of springs, spring-tensioned parts, solvents or other agents from contacting your eyes.

5 KEEP ALL FIREARMS UNLOADED DURING TRANSPORT, EVEN WHEN STORED IN A HOLSTER, GUN CASE, SCABBARD OR OTHER CONTAINER.

6 DROPPING OR JARRING A LOADED FIREARM CAN CAUSE ACCIDENTAL DISCHARGE.

This can occur even with the “safety” in the on safe position. Be extremely careful while hunting or during any shooting activity to avoid dropping any firearm.

7 HUNTING FROM ELEVATED SURFACES SUCH AS TREESTANDS IS DANGEROUS.

Doing so may increase the risk of mishandling a firearm. The following rules should always be observed by you and those you hunt with. Always make certain that the stand being used is safe and stable. Always make certain that your firearm is unloaded when it is being taken up and down from the stand. Always make certain that your firearm is not dropped from the stand, or dropped while it is being taken up or down from the stand. Remember, a loaded firearm may discharge when dropped, even with the “safety” in the on safe position.

8 STORE YOUR FIREARM AND AMMUNITION SEPARATELY, WELL BEYOND THE REACH OF CHILDREN.

Take prudent safeguards to ensure your firearm does not become available to untrained, inexperienced or unwelcome hands. Store all firearms in secure, locked cases or a gun safe. Keep your firearm unloaded when not in use.

9 BEWARE OF BARREL OBSTRUCTIONS.

Mud, snow and an infinite variety of other objects may inadvertently lodge in a barrel bore. It only takes a small obstruction to cause dangerously increased pressures that can damage your firearm and cause serious injury to yourself and others.

BEFORE CHECKING FOR A BARREL OBSTRUCTION, BE CERTAIN YOUR FIREARM IS COMPLETELY UNLOADED, THERE IS NOT A LIVE CARTRIDGE IN THE CHAMBER AND THE “SAFETY” IS IN THE ON SAFE POSITION.

After assuring yourself that the firearm is completely unloaded, open the breech or action and look through the barrel to be sure it is clear of obstructions. If an obstruction is seen, no matter how small it may be, clean the bore with a cleaning rod and patch as described on pages 27-29 of this owner's manual.

10 BE ALERT TO THE SIGNS OF AMMUNITION MALFUNCTION. IF YOU DETECT AN OFF SOUND OR LIGHT RECOIL WHEN A CARTRIDGE IS FIRED, DO NOT LOAD ANOTHER CARTRIDGE INTO THE CHAMBER.

If your firearm fails to fire, keep the muzzle pointed in a safe direction for a minimum of 30 seconds. Rotate the ejection area of the firearm away from you, carefully open the action and remove the cartridge from the chamber. If the primer is indented, the defective cartridge should be disposed of in a way that cannot cause harm. If the primer is not indented, your

firearm should be examined by a qualified gunsmith and the cause of the malfunction corrected before further use. Glance down the barrel to make sure that no obstructions remain in the barrel. Completely clear the barrel before loading and firing again. Failure to follow these instructions can cause extensive damage to your firearm and possible serious injury to yourself and others.

11 NEVER INSERT A CARTRIDGE OF THE INCORRECT CALIBER INTO ANY FIREARM.

The caliber of your firearm is marked on the barrel. Store all cartridges of different calibers in completely separate and well-marked containers. Never store cartridges of mixed calibers in a common container or in your pockets. See pages 15-16 for more information on the correct ammunition for your firearm.

12 EXAMINE EVERY CARTRIDGE YOU PUT IN YOUR FIREARM.

We assume no responsibility for the use of unsafe or improper firearm and ammunition combinations or damage or injury caused by damaged ammunition. It is your responsibility to read and heed all warnings in this owner's manual and on ammunition boxes. See pages 15-16 for more information on the correct ammunition for your firearm.

13 USE ONLY SAAMI APPROVED AMMUNITION.

The barrel and action of this firearm have been made with substantial "safety" margins beyond the pressures developed by established American commercial loads.

Nevertheless, we can assume no liability for incidents which occur through the use of cartridges of nonstandard dimensions or which develop pressures in excess of commercially available ammunition which has been loaded in accordance with standards established by the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI).

14 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.

15 DO NOT SNAP THE FIRING PIN ON AN EMPTY CHAMBER; THE CHAMBER MAY NOT BE EMPTY!

Treat every firearm with the respect due a loaded firearm, even though you are certain the firearm is unloaded.

16 KEEP YOUR FINGERS AWAY FROM THE TRIGGER WHILE LOADING AND UNLOADING UNTIL SHOOTING IS IMMINENT.

17 BE SURE OF YOUR TARGET AND BACKSTOP, PARTICULARLY DURING LOW LIGHT PERIODS.

Know the range of your ammunition. Never shoot at water or hard objects.

18 ALWAYS UNLOAD YOUR FIREARM'S CHAMBER BEFORE CROSSING A FENCE, CLIMBING A TREE, JUMPING A DITCH OR NEGOTIATING OTHER OBSTACLES.

Never place your firearm on or against a fence, tree, car or other similar object.

19 BE DEFENSIVE AND ON GUARD AGAINST UNSAFE GUN HANDLING AROUND YOU AND OTHERS.

Don't be timid when it comes to firearm safety. If you observe other shooters violating any of these safety precautions, politely suggest safer handling practices.

20 BE CERTAIN YOUR FIREARM IS UNLOADED BEFORE CLEANING.

Because so many firearm accidents occur when a firearm is being cleaned, special and extreme care should be taken to be sure your firearm is unloaded before disassembly, cleaning and reassembly.

Keep ammunition away from the cleaning location. Never test the mechanical function of any firearm with live ammunition.

21 TEACH AND SUPERVISE FIREARMS SAFETY TO ALL MEMBERS OF YOUR FAMILY, ESPECIALLY TO CHILDREN AND NON-SHOOTERS.

Closely supervise newcomers to the shooting sports. Encourage enrollment in hunting and shooting safety courses.

22 NEVER DRINK ALCOHOLIC BEVERAGES OR TAKE ANY TYPE OF DRUGS BEFORE OR DURING SHOOTING.

Your vision, motor skills and judgment could be dangerously impaired, making your gun handling unsafe to you and to others.

23 READ AND HEED ALL WARNINGS IN THIS OWNER'S MANUAL, ON AMMUNITION BOXES AND WITH ALL ACCESSORIES THAT YOU INSTALL ON YOUR FIREARM.

It is your responsibility to secure the most up-to-date information on the safe handling procedures of your Winchester firearm. We assume no liability for incidents which occur when unsafe or improper firearm accessories or ammunition combinations are used.

24 PRACTICE PERIODIC MAINTENANCE, AVOID UNAUTHORIZED SERVICING.

Your firearm is a mechanical device which will not last forever, and as such, is subject to wear and requires periodic inspection, adjustment and service. Winchester firearms should be serviced by a Winchester Repeating Arms Authorized Repair Center or by our Service Facility in Arnold, Missouri. We assume no responsibility for injuries suffered or caused by unauthorized servicing, alterations or modifications of Winchester firearms.

25 DO NOT, UNDER ANY CIRCUMSTANCES, ALTER THE TRIGGER, “SAFETY” OR OTHER PARTS OF THE FIRING MECHANISM OF THIS OR ANY OTHER FIREARM EXCEPT AS OTHERWISE DESCRIBED IN THIS MANUAL.

We reserve the right to refuse service on firearms that have been altered, added to or substantially changed. Removal of metal from the barrel, or modifications of the firing mechanism and/or operating parts may lead to a refusal of service on such firearms. You will be charged for parts and labor to return the firearm to original specifications prior to servicing your firearm.

With respect to **AFTERMARKET PARTS OR COMPONENTS** (including, for example, aftermarket trigger systems, barrels, muzzle brakes, suppressors, magazines, etc.), **USE AT YOUR OWN RISK.** Winchester firearms are designed and engineered to meet stringent safety standards. Winchester Repeating Arms is not responsible for personal injuries or property damage caused by alterations to a firearm. This includes the incorporation of aftermarket parts or components that may or may not satisfy Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) standards (for example, an aftermarket trigger system may not satisfy SAAMI minimum trigger pull standards, etc.) or may create other dangerous conditions. These conditions may or may not be apparent to the user (for example, installing an aftermarket barrel may have the effect of altering

critical firearm dimensions, including headspace, and may create an unsafe firing condition, etc.). Aftermarket parts or components that do not satisfy SAAMI standards, or that could create other dangerous conditions, should not be used.

FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH, AS WELL AS CAUSE DAMAGE TO YOUR FIREARM.

BE CAREFUL!

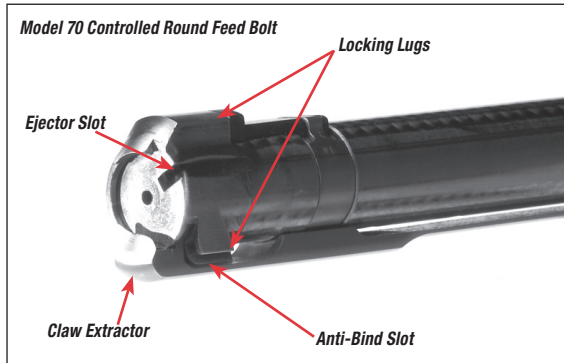
IMPORTANT: This owner's manual pertains to the Model 70 manufactured from 1992 to present. If you have an earlier model, please contact our Customer Service Department at (800) 954-6427 for an earlier owner's manual. Your Model 70 may have a controlled round feed bolt, a controlled round push feed bolt or a push feed bolt. Operation, removal and disassembly of the bolt as discussed in this owner's manual are the same for the three bolt styles.

GENERAL DESCRIPTION OF OPERATION

GENERAL DESCRIPTION

The Winchester Model 70 bolt-action rifle is truly the “Rifleman's Rifle.” Its natural balance, handling, pointability and proven reliability have made it a favorite the world over.

FIGURE 1



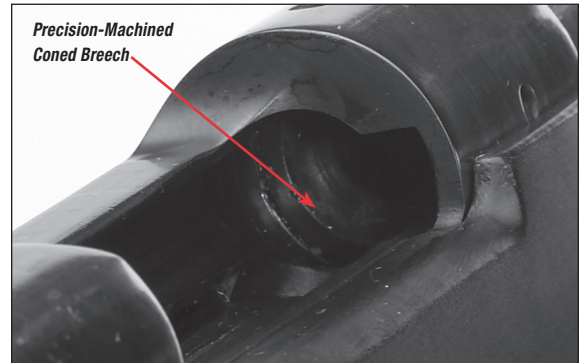
The Model 70 features the highly popular, Pre-'64 type bolt with claw extractor and Controlled Round Feed, proven under actual hunting and shooting conditions.

GENERAL OPERATION

The Model 70 is a bolt-action rifle that operates by lifting the bolt handle, drawing the bolt rearward and then sliding the bolt forward and rotating the bolt handle downward until it stops. This process takes a cartridge from the magazine and loads it into the chamber for firing.

The Controlled Round Feed bolt design is a big part of the Model 70 legacy. Its massive claw extractor (Figure 1, page 7) secures approximately $\frac{1}{4}$ of the cartridge base and fully controls the cartridge as it enters the chamber. This

FIGURE 2

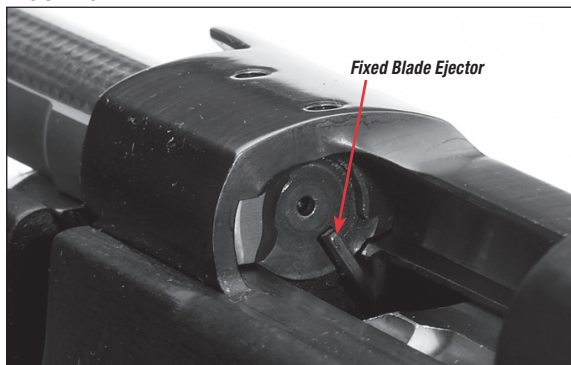


design also allows the cartridge to be extracted even if it is not fully chambered.

The Model 70 features a precision-machined coned breech that aligns the cartridge with the chamber without damaging the bullet point. This improves accuracy and ensures smooth, snag-free feeding as the cartridge neck and shoulder are guided into position (Figure 2, page 7).

A manual ejector gives more control over cartridge ejection. The Model 70's Pre-'64 type design uses a blade system that allows you to vary the amount of ejection force. Pull sharply rearward and the cartridge ejects clear of the rifle. Pull slowly and easily remove the cartridge from the action (Figure 3, page 8).

FIGURE 3



A push feed design with a recessed bolt face and plunger style ejector merely pushes the cartridge forward until it is seated in the chamber. It then snaps over the rim of the cartridge, ready for extraction.

Operation of left-hand models is identical, except that the bolt handle and ejection port are located on the left side of the receiver.

All operations of the Model 70 are illustrated in this owner's manual with a right-hand model.

Prior to using live ammunition, familiarize yourself thoroughly with the operating instructions in this owner's manual. Get accustomed to the feel of your new firearm and know the forces required to operate

the action. Learn how to pull the trigger and, above all, know the location and operation of the "safety." Procedures for disassembly and operation of various components are outlined later in this owner's manual. Please read and study them thoroughly.

NOMENCLATURE

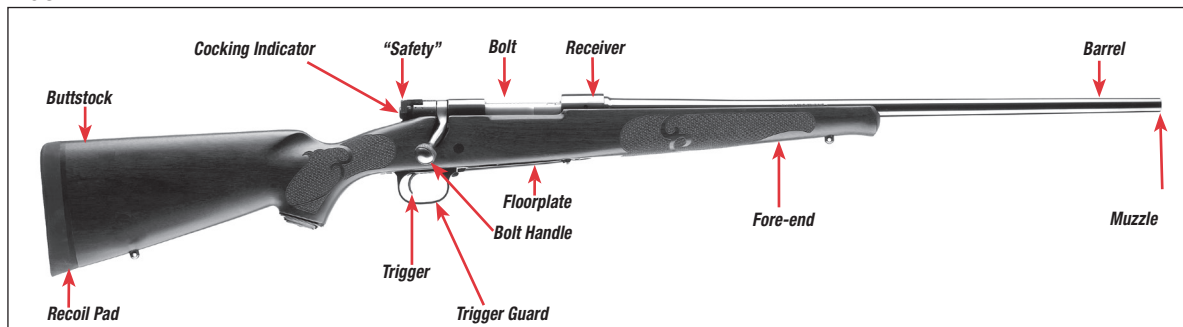
In conventional firearm terminology the position and movement of firearm parts are described as they occur with the firearm horizontal and in the normal firing position: i.e., the muzzle is forward or in front; the buttstock is rearward or to the rear; the trigger is downward or underneath; the sight is upward or on top. For general parts nomenclature, refer to Figure 4 on page 9. Figure 5 on pages 10 and 11 covers the general features and benefits of the Model 70 design.

Throughout this owner's manual the "action" refers to the mechanism of this rifle which loads and secures the cartridges in the chamber.

SERIAL NUMBER

The serial number is located on the right side of the receiver, just forward of the loading/ejection port. Record the serial number at the front of this owner's manual for future reference.

FIGURE 4



INITIAL CLEANING AND OILING

NOTICE

PLEASE TAKE NOTE OF THE FOLLOWING INFORMATION BEFORE CLEANING YOUR FIREARM.

CLEANING PARTS WITH SPECIAL FINISHES

Be especially careful when cleaning firearms with camouflage, Dura-Touch® Armor Coating and other special finishes. Always prevent these surfaces from coming in contact with cleaning solvents, barrel scrubbers and other strong chemicals. It is preferable to clean these surfaces with a light gun oil containing no solvents or with a damp cloth and mild dish soap (be sure to keep water out of the action). When cleaning your firearm's bore and action, protect the external finishes

from any contact with chemicals used. Also, avoid any contact between external finishes and other strong chemicals like those found in DEET-containing insect repellents, sunscreens, etc. Damage to camouflage, Dura-Touch and other finishes caused by chemicals is irreversible and not repairable.

▲WARNING

WEAR EYE PROTECTION WHEN ASSEMBLING AND DISASSEMBLING YOUR RIFLE TO PREVENT SPRINGS, SPRING-LOADED PARTS, SOLVENTS OR OTHER AGENTS FROM CONTACTING YOUR EYES, RESULTING IN INJURY.

Some metal parts of your new firearm have been coated at the factory with a rust preventative compound. Before using your firearm, clean the anti-rust compound from the inside of the barrel, receiver, bolt mechanism and the

(Continued on page 12)

FIGURE 5



The Model 70 three-position "safety" (left) has been proven popular by hunters and shooters for over 50 years — it blocks the firing pin and lets you open the bolt with the "safety" on.

The Model 70 offers our superb anti-bind bolt design — keeping bolt function smooth.



All Model 70 rifles feature a deluxe recoil pad for maximum comfort.



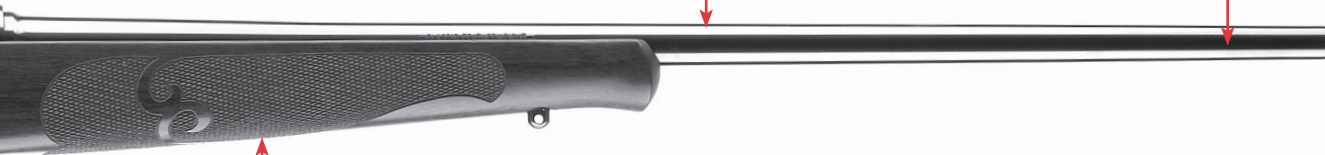
The heart of any rifle is its trigger. The new M.O.A. Trigger System™ features a three-lever design that is crisp with virtually no take-up, creep or overtravel. Trigger pull is set at approximately 3½ pounds from the factory, and can be adjusted. Overtravel is also adjustable.

MODEL[®] 70

RIFLE FEATURES

*Blued barrels are hammer-forged.
Stainless barrels are button-rifled.
Both give you the precision you're
looking for.*

*The barrel crown is recessed
to help prevent damage that
can affect accuracy.*



*Modern Model 70 craftsmanship provides
tighter wood-to-metal and component fit,
excellent checkering, deeper, richer bluing
(or stainless) and a choice of the finest
walnut or durable composite stocks.*

*The innovative fieldstrippable bolt mechanism is easy to inspect
and service — even in the outdoors. It gives you confidence in
extremely cold or dirty conditions.*

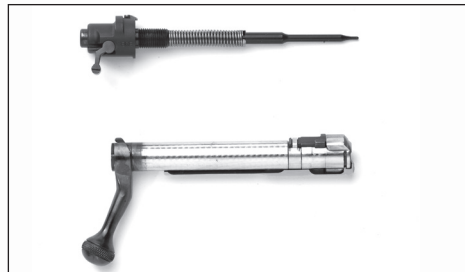
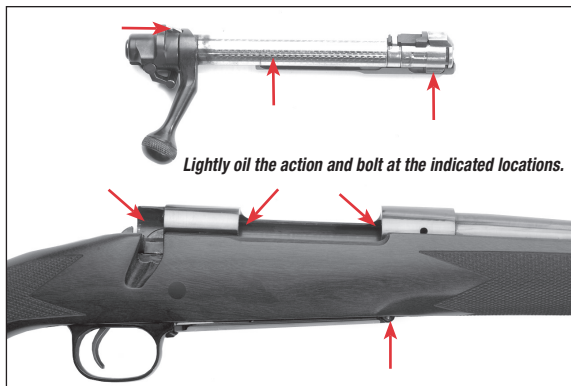


FIGURE 6



action/chamber areas. A high quality, lightweight gun oil should be used to remove this compound and to give your new firearm its first lubrication.

Clean the barrel using a cleaning rod and patch as explained under “Cleaning and Maintenance Suggestions” on pages 27-29 in this owner’s manual.

Apply a few drops of quality oil on the following surfaces (Figure 6, page 12):

- Along the breech bolt surface and where the sleeve contacts the breech bolt.
- Along the breech bolt surfaces on the receiver where the bolt contacts the receiver as it is worked. Only a light film of oil is necessary.

Avoid applying too much oil. Only a light film is necessary. Excessive oil should be wiped off, especially in cold weather.

OPERATION OF THE “SAFETY”

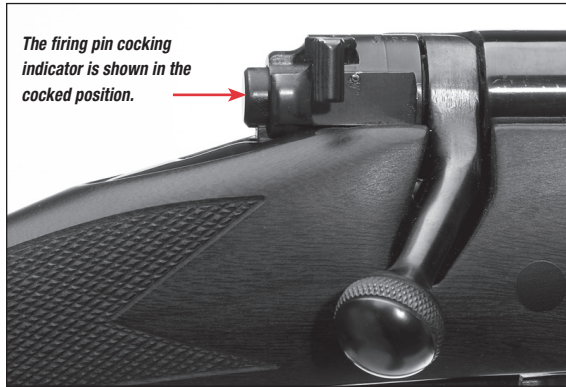
⚠WARNING

ALWAYS KEEP THE “SAFETY” IN THE ON SAFE POSITION UNLESS SHOOTING IS IMMINENT. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

The “safety” can be operated only when the firing pin is cocked. To cock the firing pin, lift up on the bolt handle and then return it to the locked (fully down) position. When the firing pin is cocked, an indicator is visible at the rear of the bolt (Figure 7, page 13). If the indicator is protruding from the bolt sleeve a minimum of $\frac{1}{8}$ ", the firing pin is cocked. The “safety” can be easily operated with the thumb.

- **On Safe:** This is when the “safety” is drawn to the most rearward position and in line with the bolt. Both the firing pin and bolt are locked (Figure 8, page 13). Always maintain the “safety” in this position (fully on) when a cartridge is in the chamber and until shooting is imminent.
- **Intermediate Position:** This is when the “safety” is in the middle position (visually at a right angle to the bolt). In the intermediate position the firing

FIGURE 7



pin remains locked but not the bolt (Figure 9, page 13), allowing you to open the bolt and unload an unfired cartridge from the chamber.

- Off Safe: With the “safety” fully forward, the rifle is ready to fire (Figure 10, page 13).

The “safety” mechanism, when engaged, is designed to block the firing pin and disengage the sear to prevent firing. However, this mechanism will not necessarily prevent the accidental discharge of this firearm as a result of jarring or abuse such as occurs when a firearm is dropped.

Never rely totally on your firearm’s “safety.” It is merely an aid to safe gun handling. Like any mechanical device the

FIGURE 8

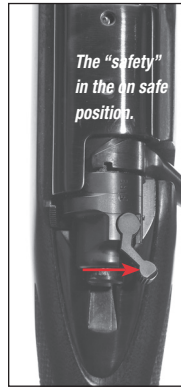


FIGURE 9

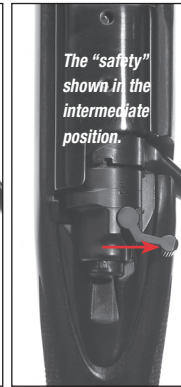
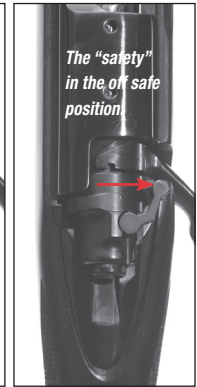


FIGURE 10



“safety” can possibly fail; it can be bumped off or inadvertently manipulated into an unsafe condition. Always keep your rifle pointed in a safe direction.

At all times, keep the “safety” in the on safe position and the barrel pointed in a safe direction. It is advisable to never load your rifle until you are in the field, at the location you intend to begin hunting or you are at your bench on a range and it is clear to shoot. For extra safety on a range, and as a courtesy to others, fully unload the rifle and keep the action in the open position at all times other than when it is clear to shoot.

It is essential that you become very familiar with the feel, look and operation of the “safety” on this rifle before attempting to load and shoot it.

INSTALLING AND REMOVING THE BOLT

⚠WARNING

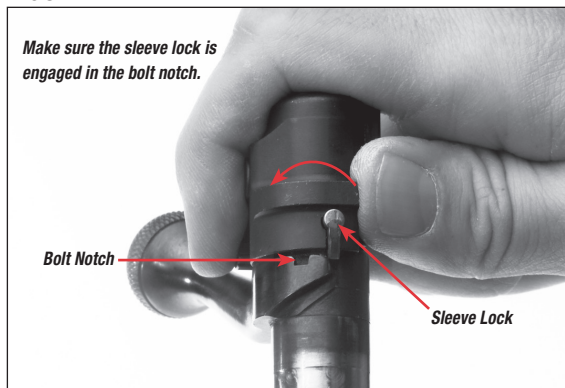
ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. BEFORE STARTING ASSEMBLY OR DISASSEMBLY PROCEDURES, VISUALLY INSPECT THE CHAMBER TO BE ABSOLUTELY CERTAIN THE FIREARM IS COMPLETELY UNLOADED. PLACE THE “SAFETY” IN THE INTERMEDIATE POSITION. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH.

The bolt of your rifle may have been packed separately in the carton in which your rifle is shipped. You will need to insert the bolt into the action. In addition, it is always advisable to remove the bolt before cleaning. Consequently, becoming familiar with removing and inserting the bolt assembly quickly and easily is absolutely essential.

FIRST INSTALLATION OF THE BOLT

Before inserting the bolt into your Model 70 for the first time, make sure the firing pin is cocked and the “safety” is in the intermediate position. Under most conditions it should be (and remain) cocked. When the firing pin is cocked, the cocking indicator is visible at the rear of the bolt. If the indicator is protruding from the bolt sleeve a minimum of $\frac{1}{8}$ ", the firing pin is cocked. If the firing pin is not in the cocked position this means that the bolt has been partially disassembled. To remedy this simply turn

FIGURE 11

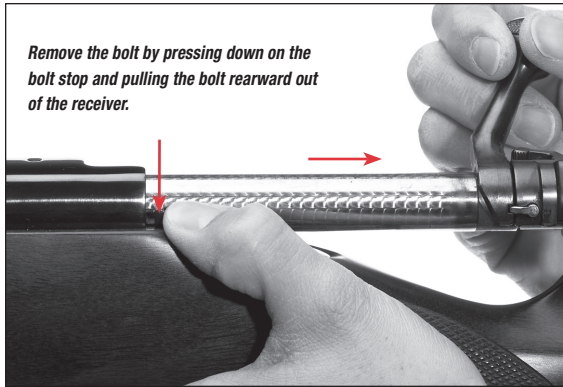


the rear section of the bolt — clockwise when viewed from the indicator end — until the bolt sleeve lock engages the notch in the bolt (Figure 11, page 14). On a new gun where surfaces are not yet burnished from use, it may be difficult to rotate the bolt sleeve by hand. If so, carefully grasp the lower section of the firing pin in a padded vise, pull and turn.

BOLT INSTALLATION

1. Place the “safety” in the intermediate position. Make sure the claw extractor is perfectly lined up with the right-hand locking lug.
2. Insert the bolt into the receiver with the lugs on the bolt aligned with the lug tracks in the receiver.

FIGURE 12



3. Push fully forward and lower the bolt handle down to a locked position. The “safety” can now be operated.
4. Again, make sure the “safety” is already in (or placed in) either the intermediate or rear on safe positions.

BOLT REMOVAL

1. To remove the bolt, the firing pin must be in the cocked position. If it already is, proceed to step 2. If not, first perform the following: With the rifle unloaded and the muzzle pointed in a safe direction, cock the firing pin by raising and lowering the bolt handle.
2. Place the “safety” in the intermediate position.

3. Again, raise the bolt handle and draw the bolt fully to the rear.
4. Depress the bolt stop located at the left rear of the receiver and remove the bolt (Figure 12, page 15).

The bolt has been carefully selected and fitted at the factory to assure correct headspace. The bolt is etched with your rifle’s serial number for identification purposes. To assure your safety, never interchange bolts, as they may not have the proper head space. If the bolt is lost or damaged, return your rifle to the factory for replacement with a properly fitted bolt.

AMMUNITION

⚠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.

DO NOT USE AMMUNITION OTHER THAN WHAT IS INSCRIBED ON THE LEFT SIDE OF THE BARREL. EXAMINE EVERY CARTRIDGE YOU PUT IN YOUR FIREARM.

The barrel and action of this rifle have been made with substantial safety margins over the pressures developed by established American loads. However, we assume no responsibility for incidents which occur through the use of cartridges of nonstandard dimension or those developing pressures in excess of SAAMI (Sporting Arms and Ammunition Manufacturers' Institute) established standards.

MAGAZINE CAPACITY

The magazine capacity of standard calibers is four rounds. On magnum calibers and WSM rifles the capacity is three rounds. It is extremely important that you know the magazine capacity of your Model 70. Under appropriate circumstances, at a range or other suitable shooting location, load your magazine to full capacity and confirm the number of cartridges. Remember, "total" capacity includes an additional round which can be loaded in the chamber in addition to a full magazine.

LOADING

WARNING

WHEN LOADING YOUR RIFLE ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION, ALWAYS PLACE THE "SAFETY" IN THE INTERMEDIATE POSITION AND KEEP YOUR FINGERS AWAY FROM THE TRIGGER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

DO NOT CARRY YOUR RIFLE WITH A CARTRIDGE IN THE CHAMBER TO AVOID ACCIDENTAL DISCHARGE. WHEN FIRING IS NO LONGER IMMINENT, PLACE THE "SAFETY" IN THE INTERMEDIATE POSITION AND UNLOAD THE CHAMBER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

These instructions apply only to Model 70 rifles with conventional hinged magazine floorplates or enclosed magazine designs. There are two methods used to load a cartridge into the chamber of the Model 70: 1) Loading through the ejection port. 2) Loading from the magazine.

LOADING THE MAGAZINE

1. With the "safety" in the intermediate position, lift the bolt handle and pull the bolt completely rearward.
2. Lay a cartridge in the action just forward of the bolt. Press the cartridge down with your thumb until it snaps into the magazine (Figure 13, page 17).
3. Press each succeeding cartridge similarly into the magazine in the same manner.
4. With the magazine loaded to capacity, press down on the top cartridge in the magazine so that it is below the bolt and close the bolt to help prevent chambering a cartridge and help avoid accidental discharge (Figure 14, page 17).

FIGURE 13



LOADING THE CHAMBER FROM THE MAGAZINE

1. Load the magazine to capacity as explained previously.
2. Close the bolt. This picks up a cartridge from the magazine and moves it into the chamber. Immediately place the “safety” in the on safe position.

⚠WARNING

THE RIFLE IS NOW READY TO FIRE BY SIMPLY MOVING THE “SAFETY” TO THE OFF SAFE POSITION AND PULLING THE TRIGGER.

FIGURE 14



LOADING THE RIFLE TO FULL CAPACITY

1. Load the magazine to capacity as explained previously.
2. When you are ready to fire, place a cartridge directly into the chamber.
3. Press down on the top cartridge and close the bolt (Figure 14, page 17). This chambers the cartridge without picking up another cartridge from the magazine.

⚠WARNING

THE RIFLE IS NOW READY TO FIRE BY SIMPLY MOVING THE “SAFETY” TO THE OFF SAFE POSITION AND PULLING THE TRIGGER.

NOTICE

WHEN LOADING A CARTRIDGE DIRECTLY INTO THE CHAMBER (BYPASSING THE MAGAZINE) YOU WILL EXPERIENCE A SLIGHT TO SUBSTANTIAL INCREASE IN RESISTANCE AS THE BOLT IS ROTATED TO THE LOCKED POSITION, AND THE EXTRACTOR CLEARS THE CARTRIDGE RIM.

SINGLE-SHOT LOADING

If you wish to use your Model 70 as a single-shot rifle, it is recommended that you use the following single-shot loading procedure.

1. With the “safety” in the intermediate position, lift the bolt handle and pull the bolt back all the way.
2. Lay a cartridge in the action just forward of the bolt. Press the cartridge down with your thumb until it snaps into the magazine (Figure 13, page 17).
3. When ready to shoot, close the bolt to load the single cartridge from the magazine into the chamber.

⚠ WARNING

THE RIFLE IS NOW READY TO FIRE BY SIMPLY MOVING THE “SAFETY” TO THE OFF SAFE POSITION AND PULLING THE TRIGGER.

DETACHABLE BOX MAGAZINE

Some models are fitted with a special, detachable type box magazine. These models are often referred to with the abbreviation “DBM” in their model name. If your Model 70 has a detachable box magazine, follow the instructions below.

LOADING THE DETACHABLE BOX MAGAZINE

1. With the “safety” in the intermediate position, lift the bolt handle and pull the bolt back all the way.
2. Remove the detachable magazine from the rifle by pressing the magazine release latch. Make certain that bullet points are pointing to the front of the magazine.
3. Place the base of the cartridge on the magazine follower between the lips on the magazine body and the lips on the magazine follower. Do not attempt to force the case base down between the wave-shaped steps at the front of the feed lips on the magazine body as this can damage the magazine.
4. Press the cartridge down with your thumb until it can be pushed rearward under the lips. It may help to push the rear of the follower down a bit with the thumb of your other hand to facilitate sliding the cartridge back under the magazine body lips.
5. Push the cartridge fully to the rear of the magazine so there is maximum clearance between the bullet point and the front of the magazine body.

6. Repeat by pressing the base of another cartridge down on the previous cartridge, just forward of the magazine lips. Again, slide the entire cartridge under the lips and fully rearward. It helps to use your other hand to push down a bit on the rear of the cartridge already in the magazine. Do this until the magazine is fully loaded.

Do not attempt to fill the magazine beyond capacity, as this may cause malfunctions or damage to the magazine.

7. With the safety in the intermediate position, you may add another round to the rifle's capacity by placing a cartridge in the chamber, closing the bolt and then placing the loaded magazine in the firearm as explained below.

Do not carry a firearm with a cartridge in the chamber to avoid accidental discharge.

INSERTING THE DETACHABLE MAGAZINE

1. Before inserting the magazine into the magazine well of your rifle, first make sure the safety is in the fully on or the intermediate position.
2. Position the magazine correctly with bullets pointing forward toward the muzzle.
3. Slide the magazine upward into position evenly, front to back, to prevent binding.
4. Make sure the magazine snaps into place in the magazine opening.

UNLOADING THE DETACHABLE BOX MAGAZINE

1. Place the safety in the intermediate position.
2. Open the bolt, extracting the cartridge in the chamber.
3. Leave the bolt open.
4. Depress the magazine release latch and remove the magazine from the firearm.
5. Using your thumb, slide the cartridges forward, removing them one at a time.

FIRING

⚠WARNING

NEVER CHAMBER A CARTRIDGE OR MOVE THE "SAFETY" FROM THE ON SAFE POSITION UNLESS SHOOTING IS IMMINENT. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

1. Load a cartridge into the chamber (as explained previously) from the magazine or directly to the chamber.
2. With a cartridge in the chamber, you need only move the "safety" to the off safe position to make the rifle ready for firing.
3. When ready to fire, move the "safety" to the off safe position, take aim and squeeze the trigger.

4. After a cartridge is fired, cycle the bolt rearward to eject the empty case. If you wish to continue shooting, push the bolt fully forward. This picks up a loaded cartridge from the magazine and chambers it. You may continue to fire the rifle in this manner until the magazine is empty by pulling the trigger to fire each cartridge.
5. If you are done shooting, leave the bolt to the rear, with the breech in the open position so that you may visually inspect the chamber, barrel and magazine to be sure they contain no cartridges.

⚠WARNING

AFTER FIRING, OR WHEN SHOOTING IS NO LONGER IMMINENT, IMMEDIATELY PLACE THE “SAFETY” IN THE ON SAFE POSITION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

EVEN WITH THE BOLT OPEN AFTER SHOOTING, DO NOT ASSUME THE RIFLE IS UNLOADED. ALWAYS INSPECT THE CHAMBER, BARREL, FEED MECHANISM AND MAGAZINE TO BE CERTAIN THE RIFLE IS COMPLETELY UNLOADED. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

UNLOADING

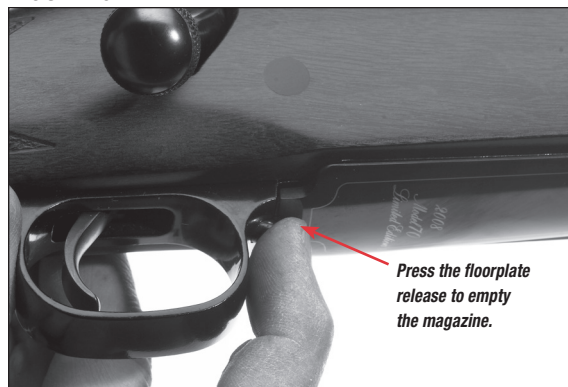
⚠WARNING

WHEN UNLOADING YOUR RIFLE ALWAYS PLACE THE “SAFETY” IN THE INTERMEDIATE POSITION. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND YOUR FINGERS AWAY FROM THE TRIGGER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH. ALWAYS INSPECT THE CHAMBER, BARREL AND MAGAZINE CAREFULLY AFTER UNLOADING TO BE SURE ALL LIVE CARTRIDGES ARE CLEARED FROM THE FIREARM.

UNLOADING THROUGH THE HINGED FLOORPLATE

1. With the “safety” in the intermediate position, lower the floorplate by pressing back the floorplate release in front of the trigger guard (Figure 15, page 21).
2. Allow the magazine cover to swing open (downward). Let the magazine follower lower until it is out of the opening. This will allow any cartridges in the magazine to fall into your hand (Figure 16, page 21).
3. Lift bolt handle up and pull the bolt fully back to remove the cartridge from the chamber.
4. Carefully reposition the magazine follower and magazine spring back into the magazine opening. Close the hinged magazine cover and make sure it snaps into place.

FIGURE 15



5. Recheck the chamber to assure it contains no cartridge. If it does, cycle the action (as explained earlier) to eject the loaded cartridge.

UNLOADING BY CYCLING THE ACTION

1. Place the safety in the intermediate position.
2. With the rifle pointed in a safe direction and your finger off the trigger, cycle the bolt, extracting and ejecting each loaded cartridge from the chamber. Work the bolt very slowly in order to easily capture the loaded cartridges with your free hand as they are ejected. Do not eject them onto the ground. This risks damaging them and affecting their accuracy.

FIGURE 16



TRIGGER ADJUSTMENT

⚠ WARNING

WHEN UNLOADING YOUR RIFLE ALWAYS PLACE THE "SAFETY" IN THE INTERMEDIATE POSITION. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND YOUR FINGERS AWAY FROM THE TRIGGER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

CAREFULLY INSPECT THE CHAMBER, BARREL AND MAGAZINE AFTER UNLOADING TO BE SURE ALL LIVE CARTRIDGES ARE CLEARED FROM THE FIREARM.

FIGURE 17

Remove the two action screws that secure the bottom metal.

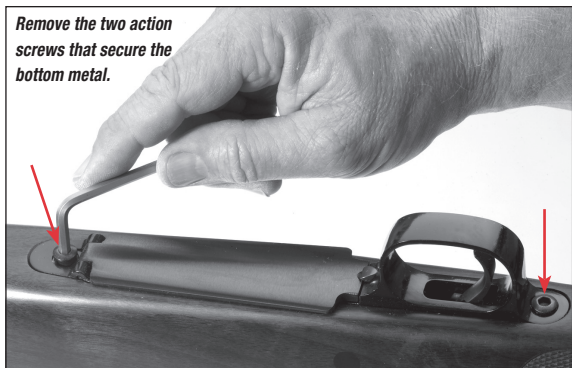
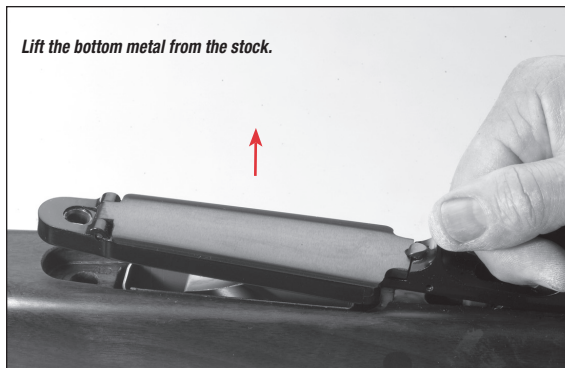


FIGURE 18

Lift the bottom metal from the stock.



Rifles made in 2008 and newer feature the M.O.A Trigger™ System (Minute of Angle) and are pre-set at the factory. The trigger pull weight is pre-set at approximately 3½ pounds and can be adjusted within a range of 3 to 5 pounds. Though trigger adjustments should be unnecessary, the trigger pull weight and overtravel can be tuned to your specifications. We recommend this procedure be performed by a qualified gunsmith.

ADJUSTING TRIGGER PULL WEIGHT

1. Open the bolt and ensure the rifle is completely unloaded. Remove the bolt as explained on page 15.
2. Remove the two action screws with a $\frac{5}{32}$ " Allen wrench (Figure 17, page 22).
3. Lift the bottom metal from the stock (Figure 18, page 22). It is not necessary to remove the magazine box, however, note its orientation should it come out of the stock.
4. Carefully lift the barreled action out of the stock (Figure 19, page 23).
5. There are two screws in front of the trigger housing. The screw that is furthest from the action can be turned to adjust trigger pull weight, and the screw that is closest to the action can be turned to adjust overtravel (Figure 20, page 23).
6. To decrease the trigger pull weight, turn the adjustment screw that is furthest from the action in a counterclockwise direction using a $\frac{1}{16}$ " Allen wrench.

FIGURE 19



NOTICE

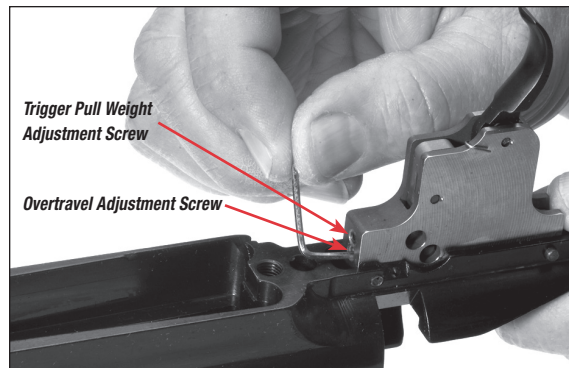
THE TRIGGER PULL WEIGHT SCREW WILL FALL OUT WHEN THE TRIGGER HAS BEEN ADJUSTED TO ITS MINIMUM PULL WEIGHT OF 3 POUNDS.

7. To increase the trigger pull weight, turn the adjustment screw that is furthest from the action in a clockwise direction using a $\frac{1}{16}$ " Allen wrench.

NOTICE

DO NOT TURN THE TRIGGER PULL WEIGHT SCREW IN TOO FAR. DOING SO WILL LIMIT THE TRIGGER TRAVEL, RENDERING THE TRIGGER INOPERATIVE, AND COULD DAMAGE THE PULL WEIGHT SPRING.

FIGURE 20



8. Trigger pull weight can be measured, with the rifle completely unloaded and the bolt closed, using a very accurate spring scale or a commercially available set of trigger pull measuring weights. Most gunsmiths can also measure trigger weight pull for you.

NOTICE

IF TRIGGER PULL WEIGHT IS INCREASED TOO MUCH, THE TRIGGER CANNOT BE PULLED. TURN THE SCREW COUNTERCLOCKWISE UNTIL TRIGGER CAN BE PULLED.

9. When finished making the adjustment, place a drop of serviceable thread locker on the adjustment screw.

10. Place the barreled action back in the stock and reinstall the magazine box (if necessary) and bottom metal. Torque the two action screws to 35 inch pounds.

ADJUSTING TRIGGER OVERTRAVEL

Overtravel is the amount the trigger moves after the firing pin has been released by the sear. It should not be necessary to adjust overtravel on your Model 70. However, should overtravel require adjustment, perform the following procedures:

1. Open the bolt and ensure the rifle is completely unloaded.
2. Remove the two action screws with a $\frac{5}{32}$ " Allen wrench (Figure 17, page 22).
3. Lift the bottom metal from the stock (Figure 18, page 22).
4. Carefully lift the barreled action out of the stock (Figure 19, page 23).
5. There are two screws in front of the trigger housing. The screw that is furthest from the action can be turned to adjust trigger pull weight, and the screw that is closest to the action can be turned to adjust overtravel (Figure 20, page 23).

To increase the amount of overtravel, turn the adjustment screw closest to the action in a counterclockwise direction using a $\frac{1}{16}$ " Allen wrench.

To decrease the amount of overtravel, turn the adjustment screw closest to the action in a clockwise direction using a $\frac{1}{16}$ " Allen wrench.

NOTICE

IF THE OVERTRAVEL SCREW IS TURNED IN TOO FAR, THE TRIGGER CANNOT BE PULLED FAR ENOUGH TO RELEASE THE SEAR AND FIRE THE RIFLE. TURN THE SCREW COUNTERCLOCKWISE UNTIL THE TRIGGER CAN BE PULLED.

6. When finished making the adjustment, place a drop of serviceable thread locker on the adjustment screw.
7. Place the barreled action back in the stock and reinstall the magazine box (if necessary) and bottom metal. Torque the two action screws to 35 inch pounds.

SIGHT ADJUSTMENT

⚠WARNING

BEFORE ADJUSTING THE SIGHTS, PLACE THE "SAFETY" IN THE INTERMEDIATE POSITION. OPEN THE ACTION AND MAKE CERTAIN YOUR RIFLE IS COMPLETELY UNLOADED. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

Some Model 70 rifles are fitted with open sights. The style and adjustment system may vary between models and grades. The proper procedure is to shoot a group with the sights set as they come from the factory (intermediate position on both elevation and windage), and then make

incremental adjustments to move the rear sight blade and blade holder to position the group on your target. The procedures below are for a common style of open sights found on Model 70 rifles.

UP OR DOWN ELEVATION ADJUSTMENTS

Adjusting your rifle to shoot higher requires you to raise the rear notch on your rifle's rear sight elevation adjustment. With most Model 70 sights this is accomplished by first loosening the screw on the elevation adjustment and then moving the rear sight blade (the part with the rear notch) upward. Use your fingers to lift it up, then retighten the screw. Marked index lines give you a reference as you adjust the sight. Adjusting the sight to make your rifle shoot lower is just the opposite — move the rear sight blade down. Remember:

- Move the rear sight blade up to shoot higher on the target.
- Move the rear sight blade down to shoot lower on the target.

RIGHT OR LEFT WINDAGE ADJUSTMENTS

On some Model 70 sights, the entire rear sight blade holder is dovetailed in the rear sight base. To adjust for windage, first loosen the rear sight windage screw, which secures the rear sight blade holder in the dovetail on the base. Gently move the rear sight blade holder to the right with your fingers. Your gun will now shoot more to the right. Moving

the blade holder to the left is just as easily done. The position of the rear sight base with respect to the sight mount on the barrel is marked with index lines. Note how much you adjust the sight as you sight in your rifle. Remember:

- Move the rear sight to the right to shoot farther to the right on the target.
- Move the rear sight to the left to shoot farther to the left on the target.

MOUNTING A SCOPE

⚠WARNING

BEFORE MOUNTING A SCOPE, SIGHT OR OTHER ACCESSORIES TO YOUR RIFLE, PLACE THE “SAFETY” IN THE INTERMEDIATE POSITION. OPEN THE ACTION AND MAKE CERTAIN YOUR RIFLE IS COMPLETELY UNLOADED. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

The top of the Model 70 receiver is drilled and tapped for scope bases. Each scope base is mounted using two screws. The scope base holes are usually fitted with filler screws.

NOTICE

ALWAYS USE THE CORRECT BASES FOR THIS RIFLE AND THE APPROPRIATE LENGTH SCREWS.

1. Place your rifle in a gun vise or on a table or other safe/secure location. Protect the finish with rags or other padding.
2. You should have a compatible one- or two-piece style base and four screws of the correct length.
3. Clean all oil, grease or dirt from the receiver top and from the scope base parts.
4. Position your rifle with the top of the receiver upward.
5. Remove the four filler screws from the top of the receiver using a very small, thin-bladed gunsmithing-type screwdriver.
6. Pre-position the bases on the receiver top to determine the best orientation of the bases.
7. Insert the screws through the bases and screw them into the receiver top using the correct tool.

You must use screws of the appropriate length to ensure proper thread engagement. Once the bases are installed, check inside the receiver to verify that the base mounting screws are not too long and interfering with the operation of the bolt.

Many gunsmiths find it helpful to use a drop of serviceable thread locking compound to assure the screws stay tight. Make sure the thread locking compound does not get into the action or trigger.

Be careful to assure that the threads of each screw engage properly in the threads in the receiver to prevent stripping the threads in the receiver.

8. Tighten the screws snugly, but do not overtighten.
9. Mount your scope rings and scope as outlined in the instructions supplied with your scope rings and/or scope. Always make sure you have the proper eye relief. Always make sure that the saddle crossbolts and cap bolts are fully tightened before using your firearm.

MUZZLE BRAKES AND SUPPRESSORS

⚠WARNING

THE ADDITION OF A RECOIL REDUCING MUZZLE BRAKE SIGNIFICANTLY INCREASES NOISE AND MUZZLE BLAST. YOU, AND EVERYONE IN CLOSE PROXIMITY TO THE FIREARM, SHOULD ALWAYS WEAR HEARING PROTECTION TO HELP PREVENT HEARING LOSS OR DAMAGE AND SAFETY GLASSES TO HELP PREVENT DEBRIS FROM INJURING THE EYES. WHEN USING A SUPPRESSOR, ALWAYS WEAR HEARING AND EYE PROTECTION. EVEN THOUGH SOUND IS REDUCED WHEN USING A SUPPRESSOR, THE NOISE LEVELS ARE STILL SIGNIFICANT ENOUGH TO CAUSE PERMANENT HEARING LOSS.

ENSURE THAT ANY MUZZLE BRAKE OR SUPPRESSOR THAT YOU INTEND TO USE ON YOUR FIREARM IS DESIGNED FOR USE WITH YOUR FIREARM'S CALIBER. NEVER USE A MUZZLE BRAKE OR SUPPRESSOR THAT IS DESIGNED FOR RIMFIRE USE ONLY ON A CENTERFIRE RIFLE. BEFORE INSTALLING OR REMOVING A MUZZLE

BRAKE OR SUPPRESSOR TO/FROM YOUR FIREARM, READ THIS OWNER'S MANUAL AND ANY OWNER'S MANUAL INCLUDED WITH THE DEVICE, AND PRECISELY FOLLOW ALL INSTALLATION AND MAINTENANCE INSTRUCTIONS PROVIDED BY THE SUPPRESSOR OR MUZZLE BRAKE MANUFACTURER. DURING INSTALLATION OR REMOVAL, ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND MAKE CERTAIN THAT THE FIREARM IS COMPLETELY UNLOADED, WITH THE MAGAZINE REMOVED AND THE ACTION IN THE OPEN POSITION.

PERIODICALLY CHECK THE MUZZLE BRAKE OR SUPPRESSOR TO ASSURE THAT IT IS TIGHT AND FIRMLY SEATED. BEFORE CHECKING, FOLLOW ALL SAFETY GUIDELINES PREVIOUSLY OUTLINED. ENSURE THE MUZZLE BRAKE OR SUPPRESSOR IS COOL BEFORE TOUCHING IT.

FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN INJURY OR DEATH TO YOU OR THOSE AROUND YOU!

Most Winchester rifles equipped with a muzzle brake also include a thread protector that can be installed in place of the muzzle brake. Whether using a thread protector, muzzle brake or suppressor, be aware that your firearm's point of impact may change as the harmonics of the barrel are affected when changing the weight at the end of the barrel.

CLEANING AND MAINTENANCE SUGGESTIONS

NOTICE

PLEASE TAKE NOTE OF THE FOLLOWING INFORMATION BEFORE CLEANING YOUR FIREARM.

CLEANING PARTS WITH SPECIAL FINISHES

Be especially careful when cleaning firearms with camouflage, Dura-Touch® Armor Coating and other special finishes. Always prevent these surfaces from coming in contact with cleaning solvents, barrel scrubbers and other strong chemicals. It is preferable to clean these surfaces with a light gun oil containing no solvents or with a damp cloth and mild dish soap (be sure to keep water out of the action). When cleaning your firearm's bore and action, protect the external finishes from any contact with chemicals used. Also, avoid any contact between external finishes and other strong chemicals like those found in DEET-containing insect repellents, sunscreens, etc. Damage to camouflage, Dura-Touch and other finishes caused by chemicals is irreversible and not repairable.

⚠WARNING

BEFORE PERFORMING CLEANING PROCEDURES, PLACE THE "SAFETY" IN THE INTERMEDIATE POSITION. OPEN THE ACTION AND MAKE CERTAIN YOUR RIFLE IS COMPLETELY UNLOADED. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

⚠WARNING

WEAR EYE PROTECTION WHEN DISASSEMBLING AND CLEANING YOUR RIFLE TO PREVENT SPRINGS, SPRING-LOADED PARTS, SOLVENTS OR OTHER AGENTS FROM CONTACTING YOUR EYES, RESULTING IN INJURY.

⚠WARNING

KEEP ALL AMMUNITION AWAY FROM THE CLEANING AREA. NEVER TEST THE MECHANICAL FUNCTION OF YOUR RIFLE WITH LIVE AMMUNITION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

SPECIAL NOTE ON THE BOSS® SYSTEM

If your Model 70 is equipped with the BOSS accuracy device please refer to special instructions on cleaning found in the BOSS special supplement manual. If your special BOSS manual is missing, write or call our Customer Service Department for a free copy, or download a copy at winchesterguns.com.

CLEANING PROCEDURES

Your Model 70 will function better and more reliably over a longer period of time if it is properly maintained and kept clean. Clean your firearm after every day of shooting, and more often if it becomes excessively dirty. A minimum cleaning includes wiping down the firearm and oiling key parts. Regular maintenance will also include cleaning the barrel.

If you encounter a function problem be sure to give your firearm a thorough cleaning to see if it solves the problem before seeking the services of a Winchester Authorized Repair Center or our Service Facility in Arnold, Missouri or a qualified gunsmith.

1. Remove the bolt as explained previously.
2. Inspect the chamber and bore for powder fouling. A normal amount of powder residue can be expected and is not serious. It can usually be removed with a patch saturated with nitro solvent.

Use a cleaning rod with a tip and patch large enough for a snug fit in the bore. Insert the rod and patch into the barrel at the breech end and run it back and forth several times. Care should be exercised to ensure that the cleaning rod does not strike the crown of the muzzle, as damage to this area can affect the accuracy of your rifle.

If, or when, fouling should become heavy, it can be removed with a brass bore brush. Dip or spray the brush with nitro solvent and scrub the chamber and bore until the fouling is removed. To prevent brass bristles from breaking off, the brush should be pushed completely through the barrel before being withdrawn.

To maintain the utmost accuracy of your rifle it is recommended you clean the bore with a copper solvent. Modern bullet jackets are made mainly of copper. Residues from copper bullet jackets stick to the barrel and require more frequent cleaning.

Magnum calibers will require more frequent inspection and cleaning. Swab the bore of your rifle with a good copper solvent using the manufacturer's recommended procedure.

3. After all fouling has been removed, the chamber and bore should be wiped dry. When the bore is dry, pass a slightly oiled patch through it for preservation. A fine, light gun oil is recommended.
4. Inspect the barrel and chamber to be certain no patches have inadvertently been left in them. Remove any that remain.
5. Use a small brush or rag to remove dirt or other foreign matter from inside the receiver and other parts of the action. Lightly lubricate all moving parts with a high-quality, light gun oil. Use oil sparingly, a very light film is sufficient. A fine, light gun oil is ideally suited for this purpose.

NOTICE

DO NOT POUR LARGE QUANTITIES OF OIL INTO THE RECEIVER OR OTHER PARTS. IT CAN DRAIN INTO THE WOOD AND SOFTEN IT, CAUSING PERMANENT DAMAGE AND LOOSENING OF THE STOCK.

6. Wipe all exposed metal surfaces with a lightly oiled cloth making certain that all finger marks are removed. Finger marks provide a place where moisture can accumulate. The metal of the gun should receive a light film of oil any time the rifle has been exposed to weather or handling.

7. Wood surfaces can also be wiped with a quality, lightweight gun oil or they can be polished with any quality furniture wax (but not both).

BOLT MAINTENANCE

⚠WARNING

BEFORE PERFORMING BOLT DISASSEMBLY PROCEDURES, PLACE THE "SAFETY" IN THE INTERMEDIATE POSITION. OPEN THE ACTION AND MAKE CERTAIN YOUR RIFLE IS COMPLETELY UNLOADED. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

⚠WARNING

WEAR EYE PROTECTION WHEN DISASSEMBLING AND CLEANING YOUR RIFLE TO PREVENT SPRINGS, SPRING-LOADED PARTS, SOLVENTS OR OTHER AGENTS FROM CONTACTING YOUR EYES, RESULTING IN INJURY.

⚠WARNING

KEEP ALL AMMUNITION AWAY FROM THE CLEANING AREA. NEVER TEST THE MECHANICAL FUNCTION OF YOUR RIFLE WITH LIVE AMMUNITION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

One of the unique advantages of a Model 70 is the ability to fieldstrip the bolt for cleaning the firing pin

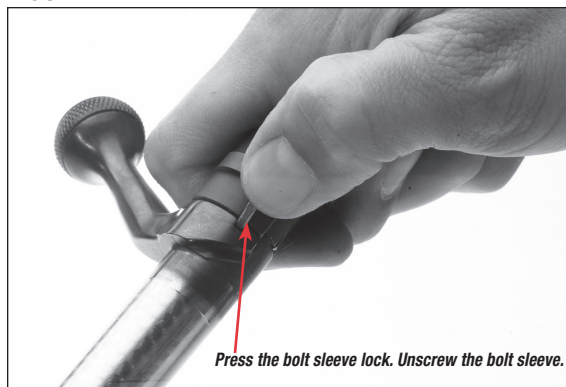
mechanism. Under very harsh weather conditions and in dirty environments just knowing that all firing pin parts are clean and lightly oiled can add an extra measure of confidence to your hunt.

Make sure you have a clean place to work and put the bolt components in order as they are disassembled. Disassembling the bolt can be done in the field, but remember, there are small parts involved, some of which are under spring tension.

DISASSEMBLY

1. To remove the bolt, the firing pin must be in the cocked position. If it already is, proceed to step 2. If not, first perform the following: With the rifle unloaded and the muzzle pointed in a safe direction, cock the firing pin by raising and lowering the bolt handle.
2. Place the “safety” in the intermediate position.
3. Raise the bolt handle and remove the bolt from the rifle as explained previously.
4. Depress the small breech bolt sleeve lock with your thumb (Figure 21, page 30) and turn the breech bolt sleeve to the left (counterclockwise looking from the rear of the bolt). It takes about six turns for the breech bolt sleeve (and the connected firing pin assembly) to unscrew from the breech bolt. Carefully pull the entire assembly out of the breech bolt.

FIGURE 21



5. Be extremely careful to leave the “safety” in the intermediate position.
6. Do not disassemble the firing pin assembly any further than shown in Figure 22 on page 31.
7. Carefully wipe clean and very lightly oil the assembly. Aerosol lubricants are excellent for forcing out any dirt, grit or moisture.

REASSEMBLY

1. Screw the firing pin assembly back into the breech bolt until the breech bolt sleeve lock engages the notch in the breech bolt.

FIGURE 22



Should the "safety" be inadvertently put in the forward (fire) position with the firing pin removed, the firing pin will be released forward and locked in the forward position. This makes reassembling the firing pin into the breech bolt somewhat more difficult.

As the breech bolt sleeve/firing pin assembly is screwed back into the breech bolt, the cocking ramp of the firing pin must compress, then decompress several times before the assembly is fully screwed in. Place the breech bolt on a flat, hard surface, and using the breech bolt handle and the head of the bolt as a support, firmly turn the breech bolt sleeve clockwise until it snaps into position. Once the bolt assembly is

installed in the action and the bolt closed and cycled, the firing pin will cock, and the "safety" can be moved back to the intermediate or rear position.

2. Insert the bolt into the receiver as explained previously.

Your firearm is now fully assembled. Immediately confirm that the "safety" is in the on safe position. Take time to wipe down and clean all external surfaces as explained under "Cleaning and Maintenance Suggestions" on pages 27-29.

NOTICE

NEVER ATTEMPT TO TAKE YOUR FIREARM APART FURTHER THAN EXPLAINED IN THIS OWNER'S MANUAL. YOUR FIREARM IS A SPECIALIZED, FINELY FITTED MECHANISM. YOU MAY PERMANENTLY DAMAGE IT BY ATTEMPTING TO DISASSEMBLE THE INNER MECHANISM. IF FURTHER DISASSEMBLY FOR SERVICE OR CLEANING IS REQUIRED, TAKE YOUR FIREARM TO A QUALIFIED GUNSMITH, OR CONTACT OUR ARNOLD, MISSOURI SERVICE FACILITY AS EXPLAINED UNDER "PARTS, SERVICE, REPAIR AND QUESTIONS."

PARTS, SERVICE, REPAIR AND QUESTIONS

If your Winchester® firearm should ever need service or repair, it is often best to utilize one of our Authorized Repair Centers. In some cases it is appropriate to use the Winchester Repeating Arms Service Facility in Arnold, Missouri. A list of Authorized Repair Centers was included with your new firearm. If you need a new listing,

contact us. We can help you determine the best place to service your firearm.

In order to avoid delays, it is important to never send your firearm directly to our facility without direct authorization from one of our service specialists. This avoids possible delays in obtaining service. Contact us at (800) 322-4626 for details on how to receive service before sending your firearm.

Parts listings, Authorized Repair Center lists, service procedures, service/repair form and general product information are also found on the web at winchesterguns.com.

When returning your firearm for servicing, you must do the following:

1. Be sure it is completely unloaded.
2. Remove the scope or other optics.
3. Package it securely in a cardboard container.
4. Enclose the service/repair form available at browning.com or a letter that clearly describes the trouble experienced, the ammunition used and the repairs desired. Also include your name, e-mail address (if possible) and a daytime phone number where you can be reached.
5. If convenient, send a copy of the service/repair form or letter to us separately.
6. Never return ammunition with your firearm. It is against postal and most commerce regulations.

PARTS, SERVICE, REPAIR STATUS AND TECHNICAL QUESTIONS

Winchester Repeating Arms Parts and Service

3005 Arnold Tenbrook Road
Arnold, MO 63010-9406
(800) 322-4626

GENERAL PRODUCT AND HISTORICAL QUESTIONS

Winchester Repeating Arms Customer Service

275 Winchester Avenue
Morgan, UT 84050-9333
(800) 945-5237

⚠WARNING

**PARTS ARE MADE FOR WINCHESTER BRAND FIREARMS
MANUFACTURED BY OR FOR WINCHESTER REPEATING
ARMS, AND SHOULD NOT BE USED IN OTHER FIREARMS,
EVEN THOUGH MODELS MAY BE SIMILAR. IMPROPERLY
FITTED PARTS MAY BE DANGEROUS.**

WEBSITE INFORMATION

An information resource for Winchester Repeating Arms can be found online.

- List of Authorized Repair Centers.
- Customer Service information.
- Firearm Service/Repair Form.
- Answers to many technical and historical questions.
- Links to helpful sites.

Go to winchesterguns.com



Winchester Repeating Arms

275 Winchester Avenue

Morgan, UT, U. S. A. 84050-9333

winchesterguns.com

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