

## Notice to Owners of Ruger M-77 Bolt Action Rifles



The trigger overtravel adjustment set screw (shown on right) in a few of these rifles may not be securely tightened and may move too readily. This change in original adjustment can, in extreme cases, either cause the rifle to fire unexpectedly (with the safety "off) or cause the rifle to not fire at all. This may occur suddenly, without warning.

Current production rifles have this set screw permanently secured. These rifles have a "T" inscribed on the under-



side of the bolt handle. This condition cannot occur in any of our other firearms, such as the 77/22, 10/22, No. 1, No. 3, or the .44 Carbine, as their trigger mechanisms differ.

For your safety, we ask that all owners of M-77 rifles (except those with a "T" underneath the bolt handle) contact us, using the coupon below.

You will receive a new locking screw that will replace your present overtravel adjustment set screw and detailed instructions for quick, easy installation. *There is no charge for this service* and replacing the screw will have no adverse effect on trigger pull.

Do not use your M-77 rifle until you have received and installed the replacement screw.

Sturm, Ruger & 0	ostcard and mail to: Company, Inc., Dept. M-77 Southport, Connecticut 06490	
(Please Pr	int) BOX	
CITY	STATE	ZIP
Number of M-77's	owned:List seri	ial numbers here:



SINGLE COPIES OF INSTRUCTION MANUALS FOR ALLMODELS OF RUGER FIREARMS ARE AVAILABLE ON REQUEST - PLEASE SPECIFYMODELFOR WHICH YOU REQUIRE A MANUAL.

STURM, RUGER & Company, Inc.
140 Lacey Place

Southport, Connecticut 06490 U.S.A.

ALL RUGER FIREARMS ARE DESIGNED AND MANUFACTURED IN RUGER FACTORIES IN THE UNITED STATES OF AMERICA

## INSTRUCTION MANUAL



# M-77<sup>®</sup> BOLT ACTION RIFLE

CAUTION: CHECK THE SERIAL NUMBER OF YOUR RIFLE BEFORE USING THIS MANUAL. This manual applies only to M-77 rifles having serial numbers "79-50000" and above. This includes *all* 3 digit prefixes, beginning with "770-00001". Please call or write us giving the full serial number of your M-77 and an applicable Manual will be sent promptly.



#### READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL CAREFULLY BEFORE USING THIS FIREARM

THIS INSTRUCTION MANUAL SHOULD ALWAYS ACCOMPANY THIS FIREARM AND BE TRANSFERRED WITH IT UPON CHANGE OF OWNERSHIP, OR WHEN THE FIREARM IS LOANED OR PRESENTED TO ANOTHER PERSON.

A COPY OF THE INSTRUCTION MANUAL FOR EACH MODEL RUGER FIREARM IS AVAILABLE FROM THE FACTORY ON REQUEST.

THESE INSTRUCTION MANUALS CONTAIN IMPORTANT WARNINGS WHICH MUST BE UNDERSTOOD BEFORE USING THESE FIREARMS.

STURM, RUGER and Company, Inc. Southport, Connecticut 06490 U.S.A.

ALL RUGER FIREARMS ARE DESIGNED AND MANUFACTURED IN RUGER FACTORIES IN THE UNITED STATES OF AMERICA

#### FIREARMS SAFETY — YOUR RESPONSIBILITY

SAFETY MUST BE THE FIRST AND CONSTANT CONSIDERATION OF EVERY PERSON WHO HANDLES FIREARMS AND AMMUNITION.

This Instruction Manual is designed to assist you in learning how to use and care for your rifle properly.

Only when you are certain you fully understand the Manual and can properly carry out its instructions should you practice loading, unloading, etc. with live ammunition. If you have any doubts about your ability to handle or use a particular type of gun

safely, then you should seek supervised instruction.

Such personalized instruction is often available from gun dealers, gun clubs or police departments. If none of these sources can help you, write to the National Rifle Association, Washington D.C. 20036. They will assist you.

The person with a gun in his possession has a full-time job. He cannot guess; he cannot forget. He must know how to use his firearm safely. Do not use any firearm without having a complete understanding of its particular characteristics and safe use. Remember: There is no such thing as a foolproof gun.

#### TABLE OF CONTENTS

raj	
General Information and Mechanical Characteristics	
Ammunition	3
The Safety and its Operation	5
Operation of the Rifle — Loading and Unloading	6
Trigger Adjustment	7
Attaching Ruger Scope Rings	8
Sight Adjustment	
Basic Disassembly and Reassembly	9
Care and Cleaning	10
Service and Parts Policy	1
Parts List and Prices	12
The Basic Rules of Safe Firearms Handling	15
Warranty Information	16

## WARNINGS OF GREAT IMPORTANCE ARE FOUND ON THE FOLLOWING PAGES:

Alteration	2	Handling	7
Ammunition	4	Firing	7
Bore Obstruction	4	Lubrication	8
Loading	4	Parts Purchasers	13
Other Cautions and Warnings A	p	pear Throughout the Manual	

#### **ALTERATION WARNING**

Sturm, Ruger & Company, Inc. will not be responsible for any alteration of any part of this firearm after it leaves our control, or for the addition or substitution of parts or accessories not manufactured by Sturm, Ruger & Company, Inc. This product was designed to function properly in its original condition. Any changes made in this product are specifically contrary to our instructions and we expressly do not authorize any changes to be made after manufacture. Do not jeopardize your safety or the safety of others by making modifications to your firearm.

Entire contents copyright 1990 by Sturm, Ruger & Company, Inc.

<sup>&</sup>quot;RUGER" and "M-77," are U.S. registered trademarks.

## FIREARMS ARE DANGEROUS WEAPONS— READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL THOROUGHLY AND CAREFULLY BEFORE USING THIS FIREARM

#### THE RUGER M-77 BOLT ACTION RIFLE

## GENERAL INFORMATION AND MECHANICAL CHARACTERISTICS

The Ruger M-77® is a bolt action, magazine-fed, repeating rifle.

The M-77 is available in two action lengths, the Short Stroke (magazine box length of 2.92") and the long (magazine box length of 3.34"). The Integral Base receiver is machined on top to form integral scope mount bases which accommodate the Ruger steel one-inch, tip-off ring mounts.

A set of two rings is packed with each Integral Base receiver rifle at the factory. Other notable features of the M-77 rifle are: Hand-checkered walnut stock, patented bedding system, quick release hinged floor plate, long spring-type extractor, safety located on the receiver tang, conveniently located external bolt stop, steel trigger and, on those models equipped with open sights, a ramp gold bead front sight and folding leaf rear sight — adjustable for elevation and windage.

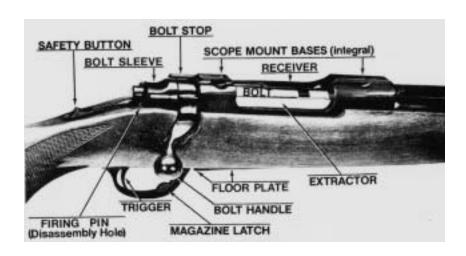


FIGURE 1. Components frequently referred to are identified. In this illustration the firing pin is shown cocked (protruding from the rear of the bolt sleeve) revealing the disassembly hole in the lower portion of the firing pin.

#### **AMMUNITION**

M-77 rifles are chambered for many of the most efficient and popular factory loaded cartridges manufactured in accordance with U.S. industry practice. The particular caliber for each rifle is rollmarked on the barrel. *Use cartridges only of the designated caliber that is marked on the barrel*. Please see AMMUNITION NOTICE, AMMUNITION WARNING, and LOADING WARNING on page 4.

#### DANGER—AMMUNITION WARNING

Firearms may be damaged, and death or serious injury to the shooter or other persons may result from any condition which contributes to the generation of excessive pressure, or the uncontrolled release of gas, within a firearm. The foregoing adverse conditions can be caused by bore or chamber obstructions, propellant powder overloads, or by defective, incorrect, or improperly loaded and assembled cartridge components.

It is extremely dangerous to use a cartridge whose pressure is greater than that developed by cartridges loaded to Industry Standards. Even the strongest firearm can be blown up as a result of excessive pressure.

#### **AMMUNITION (CARTRIDGES) NOTICE**

WE SPECIFICALLY DISCLAIM RESPONSIBILITY FOR ANY DAMAGE OR INJURY WHATSOEVER OCCURRING IN CONNECTION WITH, OR AS THE RESULT OF, THE USE IN RUGER RIFLES OF FAULTY, OR NON-STANDARD, OR "REMANUFACTURED" OR HAND LOADED (RELOADED) AMMUNITION, OR OF CARTRIDGES OTHER THAN THOSE FOR WHICH THE FIREARM WAS ORIGINALLY CHAMBERED.

#### LOADING WARNING

Be certain the primer of each cartridge is seated flush with, or below, the surface of the cartridge case base. A primer discharged by the closing of the bolt can result in a premature discharge of the cartridge with possible serious injury to the shooter and those nearby. Also, do not use exceptional *force* to close the bolt over a cartridge. If a cartridge does not chamber readily, check the bore and chamber to be certain they are free of obstructions. If the cartridge does not chamber readily, then check the cartridge to be certain it is the proper caliber, and of correct dimensions, for the rifle.

#### **BORE OBSTRUCTIONS WARNING**

Before loading or shooting the rifle, be certain the bore is unobstructed. Firing the rifle with any obstruction in the bore may result in severe damage to the rifle and serious injury to the shooter and other persons nearby.

If you suspect the rifle may have excess oil, grease or cosmoline in the barrel, or if it may have been exposed to humid conditions which could cause condensation, or to rain or snow which might have entered the bore, inspect the bore visually to be sure that it is clear.

A gun user should know that a lodged bullet is a common form of bore obstruction. Therefore the following information on how a bullet may become lodged in the bore, and how it should be removed, deserves careful reading and heeding!

1) A bullet may become lodged in the bore if (assuming the trigger has been pulled with a live cartridge in the chamber) the cartridge contains no powder, or the powder fails to ignite, and only the primer charge ignites, resulting in insufficient force to propel the bullet out of the bore.

2) A bullet may become lodged in the bore if, in unloading an unfired cartridge from the rifle, the cartridge case only is removed, thus leaving the bullet lodged in the bore

The two conditions described above occur most frequently with reloaded ammunition but, however an obstruction occurs, proceed as follows, with the rifle pointing in a safe direction:

—Open the bolt and, if present, extract the cartridge case.

— Any cartridges in the magazine should be removed by releasing the floor plate (by pressing on the magazine latch) and catching the cartridges as they drop out of the opening.

— Insert a proper size cleaning rod (without a tip or brush) into the bore from the muzzle and remove the bullet. If the bullet does not readily dislodge, it may be necessary to lightly tap the handle end of the cleaning rod. Do not attempt to remove a lodged bullet using a blank cartridge, or a cartridge from which the bullet has been removed, or by any means other than the use of a cleaning rod. Be certain all loose powder has been removed from the bore and action before inserting the rod.

After removing the obstruction, reinspect the bore to be certain it is free of powder particles or other debris. Clean the mechanism of unburned powder grains.

REMEMBER: Always check the bore for an obstruction if you experience difficulty in chambering a cartridge, experience a failure to extract, have a misfire, or the rifle does not make a normal loud report on firing.

A misfire or unusual report is always a signal to cease firing and immediately examine the bore of the firearm. Inspect the bore visually—and with a rod if necessary—to be certain it is completely clear of any obstruction.

CAUTION: CHECK THE SERIAL NUMBER OF YOUR RIFLE BEFORE PROCEEDING. The information on this and several of the following pages applies only to M-77 rifles which have the serial number prefix "79-" followed by the number 50000, or above. This includes all 3 digit prefixes, beginning with "770-00001". If your rifle has a serial number below "79-50000", do not use this manual. Please telephone or write us giving the full serial number of your M-77 and an applicable Manual will be sent promptly.

#### THE SAFETY AND ITS OPERATION

WARNING: THE USER SHOULD NEVER DEPEND ON A SAFETY MECHANISM OR ANY OTHER MECHANICAL DEVICE TO JUSTIFY CARELESS HANDLING OR PERMITTING THE RIFLE TO POINT IN AN UNSAFE DIRECTION.



SAFE

Figure 2. Safety is 'on' only when it is in its extreme rearward position and the "S" is fully showing.

Figure 3.
Safety is
'off' when
safety is in
its extreme
forward
position
and the
"F" is fully
showing.



FIRE

The M-77 safety button can be moved to the safe position ("S" showing) only when the firing pin is cocked. Fully raising the bolt handle cocks the firing pin. The bolt handle can be fully raised and lowered (and the bolt can be opened and closed) when either the "F" or "S" is showing.

The cocking piece section of the firing pin protrudes from the rear of the bolt sleeve when the firing pin is cocked—as shown in Figure 1. This protrusion serves as a cocking indicator which can be felt as well as seen.

NOTE: When the safety button is positioned so the "S" is fully showing, the safety is said to be "on" (safe). When the safety button is positioned so the "F" is fully showing the safety is said to be "off" (ready to fire)

showing, the safety is said to be "off" (ready to fire).

When the rifle is loaded, unless it is to be fired immediately, THE SAFETY SHOULD BE AT ITS EXTREME REARWARD POSITION with the "S" fully showing. When operating the safety button (with the thumb) the user will feel additional resistance to movement of the safety before it reaches its extreme rearward

position. That resistance should *not* be assumed to indicate the safety button is in the safe position.

wARNING: The safety is *not* on safe until it is 'clicked' into its *extreme* rearward position and the "S" is fully showing. Practice (with an unloaded rifle) moving the safety button into the safe position until you know by feel and sight that it is correctly positioned. See Figure 2 and Figure 3.

#### **OPERATION OF THE RIFLE**

Practice the important aspects of gun handling described below (with an unloaded rifle) until you can perform each of the steps with skill and confidence. But before loading the rifle, please first read completely thru this manual.

#### LOADING AND UNLOADING

Before attempting to load or unload the rifle, be certain the muzzle is pointing in a safe direction and the safety is on—the "S" showing.

MAGAZINE CAPACITY AND CARTRIDGES. Magazine capacity is 3 cartridges with Magnum calibers, 4 cartridges with caliber 220 Swift and 5 cartridges with all other calibers. Do not put more cartridges into the magazine than is specified in the foregoing. Each M-77 rifle is chambered for a specific caliber. Know the caliber of the rifle you are loading and load cartridges of *only* that caliber into the rifle. If cartridges will not fit into the magazine or will not chamber properly, do not force them. If you cannot determine why the cartridge will not fit, clear the rifle of all cartridges and write to or call the factory.

Loading the magazine: (Safety should be on—the "S" showing.)

Lift the bolt handle and pull the bolt rearwardly until it stops against the bolt stop. Load cartridges directly into the magazine by pressing one cartridge at a time into the magazine.

Loading the chamber: (Safety should be on—the "S" showing.)

After loading the magazine, push the bolt handle forward, stripping a cartridge from the magazine and pushing the cartridge ahead of the bolt into the chamber, Close the bolt. Never lower the firing pin with a loaded cartridge in the chamber. Under such circumstances the firing pin will be in direct contact with the primer of the loaded cartridge and a light accidental blow to the firing pin can readily cause the gun to discharge.

**To single-load:** (Safety should be on—the "S" showing.)

Place a cartridge directly into the chamber and close the bolt. If there are cartridges in the magazine and it is desired to single load a cartridge directly into the chamber, depress the top cartridge until the bolt face is well ahead of the rims of the cartridges in the magazine and the bolt will pass over them.

Unloading the chamber and magazine: (Safety should be on—the "S" showing.)

Lift the bolt and pull to the rear, to eject chambered cartridge. Leave bolt open.

Push forward the small latch in the front of the trigger guard to open the hinged floorplate and release the cartridges in the magazine. Hold the other hand under the floorplate so as to retard the opening of the spring loaded floorplate, and catch the cartridges in the palm of the hand.

#### To fire the rifle:

When a cartridge is chambered, and the safety button is positioned so the "F" is showing, pulling (squeezing) the trigger will discharge the cartridge. Always be certain that you know where the bullet will strike when you fire the rifle. (See Handling Warning in this Manual.)

WARNING: DO NOT TOUCH THE TRIGGER UNTIL YOU ARE ACTUALLY READY TO FIRE THE RIFLE.

#### HANDLING WARNING

Do not load the rifle until you are ready to use it, and unload it immediately when you have completed shooting.

Do not chamber a cartridge until you are in the immediate area where you plan to shoot. Never carry the rifle loaded with the safety in the fire position.

The rifle should be carried and handled so it will not be dropped or struck. With the safety off, the rifle is in the ready-to-fire mode. Therefore, as in any firearm, any blow or jar which is of sufficient force to actuate components of the firing mechanism may cause a chambered cartridge to discharge. Such a discharge can occur with or without the trigger being directly struck or touched.

Never rest a loaded rifle against any object (wall, fence, vehicle, tree, etc.) because there is always the possibility that the rifle will be jarred or slide from its position and fall with sufficient force to discharge.

Never store a firearm in such a manner that it may be pulled from a shelf or

'hidden place' as some other item is moved.

The shooter should always be alert to the possibility of accidental discharge regardless of the position of the safety. The only safe rifle is one in which the bolt is open and the magazine and chamber are empty.

#### FIRING WARNING

When firing the rifle, be sure that other shooters and bystanders are a safe distance to the rear. Empty cartridge cases are ejected from the rifle with some velocity and could cause injury to any person in their path. All shooters should wear shooting glasses when firing any firearm. Hearing protection must also be worn because exposure to shooting noise can damage hearing.

The table below shows the correct cartridges to be used in the short action and long action models:

SHORT ACTION	LONG ACTION
.220 Swift .22-250 Remington .223 Remington .243 Winchester 6 mm Remington .250 Savage .284 Remington 7 mm/08 Remington .308 Winchester	.25-06 Remington .257 Roberts .270 Winchester .280 Remington 7 x 57 Mauser 7 mm Remington Magnum .30-06 Springfield .300 Winchester Magnum .338 Winchester Magnum
.350 Remington Magnum	.35 Whelen .358 Winchester .458 Winchester Magnum

#### TRIGGER ADJUSTMENT

The minimum weight of pull is established by the trigger return spring, part D-49. This spring should not be modified. The weight of pull can be increased beyond this minimum by tightening the adjustment screw for weight of pull, D-43. Do not attempt to decrease the weight of pull below this pre-set minimum, or an unexpected discharge may result.

All other trigger adjustment screws are pre-set at the factory and permanently secured. Do not attempt to adjust these. Any change in this original adjustment, can in rare circumstances, either cause the rifle to fire unexpectedly (with the safety "off") or not permit the rifle to fire at all. See exploded parts diagram page 14.

WARNING: BE CERTAIN RIFLE IS NOT LOADED BEFORE WORKING

ON IT.

#### ATTACHING RUGER SCOPE RINGS

Each Ruger telescope ring is a mated assembly of a top and a base. Do not mix the parts of the two ring assemblies as they are not interchangeable.

On the underside of each mounting ring assembly there is an integral lug, located off center with respect to the front and back sides of the mount. The lug is nearer to the front surface. By reference to the lug, the mounting ring can be correctly assembled with the front of the ring toward the muzzle of the rifle.

Disassemble one ring and reassemble over the scope body between the turret and the eyepiece. (Note: High ring goes on rear mount. Low ring on front mount.)

Install the four top screws. Do not tighten.

Disassemble the other ring and install it on the forward section of the scope tube with the lug forwardly also. Install the four top screws. Again, do not tighten.

Assemble the rings to the receiver with the lugs engaging the recesses in the top surface of the receiver. Tighten the clamp nuts so that the rings are locked to the semi-circular cuts on the sides of the receiver. Rotate the scope until cross-hairs are aligned properly, and slide scope to desired eye relief.

Then tighten the eight top screws each a bit at a time to grip the scope body. Sight in according to the directions with your scope.

#### SIGHT ADJUSTMENT

The folding leaf rear sight (standard on some models) is adjustable for elevation and windage. The amount the elevation slide must be moved to change point of impact varies with caliber and load. Shooting to determine the slide setting should be done from a bench rest and over a measured distance. Use only a small screwdriver with a blade tip that exactly fits the screw-head. Loosen the screws only slightly so the slide doesn't move too freely. When the slide is positioned at the desired height, carefully tighten both screws.

Lateral (windage) adjustment is made by moving the entire sight within its base. To move the sight, loosen the slotted screw (in the front section of the base) until the sight can be moved. Position the sight in the desired location and then tighten the slotted screw.

NOTE: The 'rule' of rear sight adjustment is: Move the sight in the direction that you want the point of impact of the bullet to move. As examples, to raise the point of bullet impact, raise the elevation slide (blade). To move the point of bullet impact to the right, move the sight to the right.



#### SUGGESTED SIGHT PICTURE

Top of front sight even with top of rear sight slide. Front sight centered in notch of rear sight slide. Target bullseye centered on top of front sight.

#### LUBRICATION WARNING

Firing a rifle with oil, grease, or any other material even partially obstructing the bore may result in damage to the rifle and injury to the shooter and those nearby.

Do not spray or apply lubricants directly on ammunition. If the powder charge of a cartridge is affected by the lubricant, it may not be ignited, but the energy from the primer may be sufficient to push the bullet into the bore where it may become lodged. Firing a subsequent bullet into the obstructed bore may damage the rifle and cause injury to the shooter and those nearby. Use lubricants properly. You are responsible for the proper care and maintenance of your firearm.

#### BASIC DISASSEMBLY AND REASSEMBLY

DISASSEMBLY WARNING: Never clean, lubricate, disassemble or work on a firearm while it or its magazine is loaded.

CAUTION: Before starting disassembly, remove sling, scope and rings and place the rear sight blade in its down (flat) position.

#### **DISASSEMBLY:**

- 1. Check to ensure that chamber and magazine are clear of ammunition.
- 2. To remove bolt: Open bolt and pull to the rear while at the same time pivoting open the bolt stop (located on the left side of the receiver). Remove bolt from gun.
- 3. To remove firing pin assembly from bolt: With bolt out of the rifle and firing pin cocked, insert a pin or nail into the "disassembly hole", as shown in Figure 1.

NOTE: The pin or nail should be as close as possible in size to the hole diameter, and at least 2 inches long so that it can be used to 'lever' the firing pin to the rear when reassembling the firing pin assembly into the bolt.

Unscrew firing pin assembly and remove from bolt. (Caution: Do not remove the restraining pin until firing pin assembly is reassembled into bolt.)
CAUTION: The firing pin assembly is intended to be a permanent assembly and should not be disassembled. The parts are under great spring pressure and if disassembled could fly apart with sufficient force to cause serious injury. Also, special tools are required to correctly reassemble this part.

Special note regarding disassembly of the International Model: Before attempting to remove the stock (Mannlicher-type) as described in paragraph number 4 (below), first remove the cap screw (D-13200) and then the cap (D-01340).

- 4. To Remove Stock: Open floor plate and while holding it up out of the way, loosen and remove the screw that holds the floor plate hinge assembly. Next, loosen and remove the screw that is just forward of the trigger guard. Next, loosen and remove the screw which is to the rear of the trigger guard. Remove trigger guard. Remove magazine box. (If magazine box does not come out readily, do not force it. It can be lifted out with the barrel-receiver assembly, but it must be done with great care.) Lift barrel from the stock very carefully. Lift the receiver at the same time as the barrel is lifted so that the barrel-receiver assembly comes out of the stock level, and not at an angle.
- 5. In the event that further disassembly is required, do not disturb the trigger adjustment screw (engagement) (Part D-22) or the trigger adjustment screws (over travel) (Parts D04501 and D-44.)

#### REASSEMBLY

- 1. To reassemble firing pin assembly into bolt, screw the assembly fully into the bolt. The assembly is properly positioned in the bolt when the flat on the bottom left side of the bolt sleeve (front of bolt facing you) is aligned with the flat on the bottom end of the bolt handle. Note that there is a shallow notch on the rear end of the bolt body—at the end of the cam cut—into which the nose of the cocking piece 'fits'. When the firing pin assembly is being turned into the bolt body, it may be necessary to use the restraining pin as a lever to slightly retract the cocking piece nose so it can be moved into the notch. When the firing pin assembly is correctly positioned in the bolt body, the restraining pin can be removed. But not before!
- To replace bolt: With bolt handle in an upward position and bolt head away from you, align the extractor with the right hand locking lug. Align the locking lugs with the channels in each side of the rear of the receiver and partially insert the bolt. Push bolt fully forward.

3. To replace stock: First, install magazine box on receiver. Place barrel-action assembly—with magazine box in place—into stock. Replace trigger guard and loosely install screws. Install floor plate hinge assembly and firmly tighten screw. (This screw is angled and draws the barrel-action assembly into the bedding surface of the stock.) Tighten the two trigger guard screws as follows: Do not tighten one screw all the way and then tighten the other. Instead, alternately tighten each one—a partial turn at a time—so that the screws will be tightened equally until both are snugly tightened. On the International Model, carefully slide cap onto the end of the stock and install and tighten screw.

#### CARE AND CLEANING

Before cleaning, be certain the rifle and its magazine contain no cartridges.

A firearm must be free of rust, dirt, grease and firing residues to function safely and reliably. Periodic maintenance, which includes inspection of components to determine if they are in proper working order, is absolutely essential.

Best accuracy requires a clean dry bore. A fouled or oily barrel will materially increase group sizes. Before sighting in your new rifle, clean the bore well to remove any preservative oil, powder or metal fouling.

For best accuracy the rifle should be cleaned after every 15 or 20 shots. Rapid or prolonged firing between cleanings encourages heavy fouling which will greatly impair accuracy until a thorough cleaning is performed.

Basic cleaning equipment includes: A correct size Cleaning Rod equipped with bore brushes (fiber and brass) and a tip in which a cloth patch can be inserted, Patches, Powder Solvent, Lubricant, Small lint-free Cloths and a Toothbrush.

Some hints for effective use of the equipment: use correct size brushes and patches; if they are too small they don't do the job; if too large they bind in the bore. Insert rod from the chamber end and push firmly so the patch or brush emerges from the muzzle. Don't reverse the rod when a brush or patch is being used—it may bind. Don't use patches or brushes dripping with solvent or oil. Wet them, and squeeze out excess before using. Use rod and brushes with care so as not to damage gun.

- 1. To clean the rifle thoroughly, disassemble to the extent described above, taking care to put pins, screws and similar easily mislaid and 'rolling' components in a tray.
- 2. Push-pull a solvent-wetted patch through the bore several times. Next, using a solvent-wetted brush, run it the full length of the bore as many times as is necessary to completely remove all foreign matter from the bore and chamber. Dry the bore with clean patches and examine it. If bore remains fouled, repeat the brushing because bullet jacket fouling can greatly reduce accuracy and grease can interfere with proper chambering of the cartridge. Complete the cleaning by dry-patch wiping of bore and chamber. Wipe the cleaning rod with a dry patch frequently to remove residues. Failure to thoroughly dry the bore before firing will result in greatly enlarged groups.
- 3. Use a clean, solvent-wetted patch to remove firing residue and dirt from all components and 'reachable' surfaces inside the receiver. Carefully clean the bolt and bolt face with solvent, then dry and lubricate very lightly. Use the solvent-wetted toothbrush to dislodge caked dirt from components and from surfaces inside the receiver that can't be reached with a patch. Now use cleaning patches or the cloth to dry off the solvent.
- 4. Wipe all surfaces—internal and external—with oil-wetted patch or cloth that will deposit only a very light and sparing coat of oil. Apply a small drop of lubricant to all pivot points in the trigger assembly. Oil and similar preparations 'collect' dirt particles, and may congeal in cold weather, which can interfere with reliable functioning of the rifle. Therefore, use these preparations very sparingly.
- 5. Reassemble the rifle and carefully wipe all solvent, lubricating and preservative preparations from the stock and forearm wood. Dry the chamber and bore if rifle is to be fired immediately.
- 6. If the rifle is to be stored for an extended period, rewipe all external surfaces with the cloth containing the oil or preservative.

CAUTION: Do not store the rifle in a leather case or scabbard. Leather attracts moisture, even though it may appear to be dry.

WARNING: Never store a firearm in such a manner that it may unintentionally be dislodged. A *firearm should be stored securely and unloaded*.

**REGARDING ACCURACY:** If your rifle is not as 'accurate' as you believe it should be, before concluding that some serious fault exists, run the following checks: (1) Be certain the two trigger guard screws and the floor plate hinge screw are snugly tightened as described in the Reassembly section of this Manual. (2) Be certain the bore is clean and free from accumulated metal fouling (deposited by metal jacketed and lead bullets). See the cleaning section of this Manual. (3) Check the sights for tightness, setting and alignment.

If everything is tight, the bore is clean and the sights OK, and the accuracy problem persists, DO NOT alter the stock bedding in any way. Do not scrape away wood, and do not bed with 'glass', plastic, epoxy, etc. Once a rifle stock has been altered, it cannot be reworked by our Service Department. If you have an accuracy problem, write a brief letter to the Service Department (Newport, N.H. 03773) and describe the nature of the problem based on the use of Factory Loaded cartridges—not reloads.

You will receive a prompt response from us and, if indicated, detailed instructions with regard to the return of the rifle.

#### SERVICE AND PARTS POLICY

If you have any question with regard to the performance of your rifle, please write to our Newport, N.H. Service Department, fully describing the problem.

If you should return your rifle to the factory for repair, or order parts for it, please comply with the following suggestions for prompt service:

#### SHIPPING FIREARMS FOR REPAIR:

Ruger M-77 rifles returned to the factory for repair should be sent to: Sturm. Ruger & Co., Inc., Service Department, Newport, N.H. 03773, Phone: (603)863-3300. Guns should be sent prepaid. We will not accept collect shipments.

The Federal Gun Control Act, as well as the laws of most States and localities, does not prohibit an individual (who is not otherwise barred from purchasing or possessing a firearm) from shipping a firearm directly to the manufacturer for repair. However, before you ship your rifle to us, be certain that your State or locality does not have a law or regulation which will prohibit you from receiving the rifle from us after it has been repaired. If such receiving is prohibited, then please have a Federally Licensed firearms dealer ship the gun to us. If your rifle is sent to us by a dealer, it will be returned to him after being repaired. If a handgun (pistol or revolver) is shipped by an individual who does not hold a Federal Firearms License, it *must* by shipped via UPS. Persons who do not hold a Federal Firearms License are prohibited by Federal law from shipping a handgun by Mail. Handguns mailed in violation of the law are impounded by the Post Office.

Please do *not* include rifle case, sling, telescopic sight, or custom accessories with a firearm being shipped to the factory for service. Rifles and shotguns may be shipped via Parcel Post. Always insure your shipment.

Enclose a letter which includes your name, address, telephone number, and serial number and model of the firearm. Describe in detail the trouble you have experienced with your firearm, or the work you wish to have done. Merely stating that the firearm 'needs repair' is inadequate information.

Work performed will bear a net minimum labor charge of \$10.00 plus a \$5.00 shipping and handling charge. The charge for rebluing the rifle is \$35.00 plus a \$5.00 shipping and handling charge.

WARNING: Before shipping any firearm, be absolutely certain that it and its' magazine are unloaded. Do not ship cartridges with a firearm.

#### **ORDERING PARTS:**

All Ruger M-77 rifle parts orders should be sent to:

Sturm, Ruger & Co., Inc., Service Department, Newport, N.H. 03773.

Payment — in the form of check or money order — must accompany the parts orders. We cannont comply with open account, credit card or COD requests. Minimum parts order is \$1.00. Please include \$1.50 for shipping and handling.

Order parts by Part Number and Part Name and include the entire serial number of the firearm for which the parts are being ordered.

\*Parts designated by an asterisk must be factory fitted. The price shown for these

parts does not include the *minimum* net labor charge of \$10.00 plus a \$5.00 shipping and handling charge. After factory fitting of barrel and certain other components, the rifle is proof-tested with Industry Proof Loads. That procedure ensures maximum protection to the gun user. All parts in the Parts List marked with an asterisk are factory replaced on an exchange basis only. We will not return the replaced parts. We will not return modified, broken, malfunctioning or badly worn parts. See "Warning To Parts Purchasers", page 13.

Because it is a serial numbered component, the M-77 rifle receiver is defined as a "firearm" by Federal law and is not sold as a separate component.

Firearms users are cautioned that a gun containing modified, broken, malfunctioning, or badly worn parts, should not be fired!

Prices and Specifications subject to change without notice.

#### PARTS LIST AND SUGGESTED RETAIL PRICES

PARTS LIST AND SUGGESTED RETAIL PRICES				
Part No.	Part Name	Price		
D-3	*Barrel (only) (specify caliber)	\$ 65.25		
***D-66	Barrel Band	5.75		
***D-86B	Barrel Band Screw (not illus.)	.50		
D-10	*Bolt (only)	49.25		
D-35A	Safety Retainer (Complete serial number of rifle must be specified.)	.50		
D-53	Bolt Stop	5.50		
D-56	Bolt Stop Plunger	.50		
D-57	Bolt Stop Plunger Spring	.50		
D-59	Bolt Stop Plunger Spring Retaining Pin	.50		
D-54	Bolt Stop Screw Stud	.50		
D-55	Bolt Stop Stud Bushing	.50		
**D-8	Ejector	.50		
D-41	Ejector Retaining Pin	.50		
**D-9	Ejector Spring	.50		
**D-14	Extractor	11.25		
**D-15	Extractor Band	.50		
D-11	*Firing Pin (assembly only)	23.00		
**D-5	Floor Plate	6.75		
D-7	Floor Plate Hinge	4.25		
D-6	Floor Plate Pivot Pin	.50		
**D-5S	Floor Plate, STEEL (For Long Action Only)	25.70		
***B-51	Forend Escutcheon (2 reg'd) (not illus.)	(each) .50		
**D-27	Magazine Box	2.50		
D-127	Magazine Box Assy. (.220 Swift only)	3.50		
**D-30	Magazine Follower (stainless steel)	6.50		
D-31	Magazine Latch	1.00		
D-40	Magazine Latch Pin	.50		
D-32	Magazine Latch Spring	.50		
**D-33	Magazine Spring	1.00		
C-97	Pistol Grip Cap	.75		
C-107	Pistol Grip Cap Medallion	.50		
C-96	Pistol Grip Cap Screw	.50		
D04600	Receiver, Mounting Screw (front)	.50		
D-47	Receiver, Mounting Screw (center)	.50		
D-48	Receiver, Mounting Screw (rear)	.50		
S-63	Recoil Pad	5.00		
D-84	Recoil Pad Screws (2)	(pair) .50		
D-38	Safety Button	2.75		
D-39	Safety Link	.75		
D-58	*Safety Shaft Assembly	2.00		
D-37	Safety Spring	.50		
D-23	*Sear	2.00		
D-42	Sear Pivot Pin	.50		
D-24	Sear Spring	.50		
D-71	Scope Ring Assembly (std.) (set of two)	33.60		
D-71H	Scope Ring Assembly (high) (set of two)	33.60		
D-74	Scope Ring Clamp	1.00		
	12			

Part No.	Part Name	Price
D-73	Scope Ring Nut	.75
D-76	Scope Ring Screw	(set of 8) 1.00
D-68	Sight (front)—Plunger	.50
D-69	Sight (front) — Plunger Spring	.50
**D-65	Sight Base (front)	12.25
D-70	Sight Base (front) — Set Screw	.50
D-67	Sight Blade (front)	3.00
D-77	Sight (rear) Folding, Complete	5.00
**D-60	Sight (rear) Base Only	7.75
D-61	Sight Base (rear) — Center Screw	.50
D-62	Sight Base (rear) — Rear Screw	.50
D-83A	Williams Gib Lock (sight clamp rear)	.75
D-83B	Screw For Part #D-83A	.50
D-86	Sling Swivel Front Screw With Nut	1.75
D-87	Sling Swivel Rear Mounting Stud	.75
**D-4	Stock (complete with pad and checkered)	148.75
***D-106	Stock Cross Bolt (not illus.)	2.75
***D-107	Stock Cross Bolt Nut (not illus.)	.75
***D-104	Stock Reinforcement Assy. (not illus.)	7.50
***D-75	Stock Reinforcement Screw (not illus.)	1.50
D-2	Trigger Guard	6.25
D-2S	Trigger Guard (STEEL) Fits all models	25.70
KD-20	*Trigger	8.00
D-20	*Trigger Adjustment Screw (engagement)	.50
D-43	Trigger Adjustment Screw (weight of pull)	.50
D-44	Trigger Adjustment Screw (over travel)	.50
D04501	Trigger Adjustment Set Screw (over travel)	.50
D-25	*Trigger Housing	3.75
D-26	Trigger Housing Cross Pin	.50
KD-21	Trigger Pivot Pin	.50
D-49	Trigger Return Spring	.50
D-51	Trigger Return Spring Seat	.50
*Mount ha fits	ad at the factors	

<sup>\*</sup>Must be fitted at the factory.

#### **ULTRA LIGHT AND INTERNATIONAL MODEL PARTS**

The following parts are for the M-77 International and Ultra light models only and are not interchangeable with corresponding parts from the basic model M-77. (The International Model is the rifle with the Mannlicher-type stock.)

Part No.	Part Name	Price	Part No.	Part Name	Price
D-3M	*Barrel	\$ 72.50	D-06502	Sight Base (front)	\$12.25
D-3UL	*Barrel				
	ULTRA LIGHT	72.50			
D-08001	Pistol Grip Cap	1.00	D-06702	Sight Blade (front)	3.00
D-00404	Stock	162.75	D-13101	Sling Swivel (front)	2.50
**D-4UL	Stock				
	ULTRA LIGHT	168.50			
D-01340	Stock Cap	2.75	D-13000	Sling Swivel Screw	.50
D-13200	Stock Cap Screw	.50	D-12900	Sling Swivel Escutcheon	.50

#### **WARNING TO PARTS PURCHASERS**

It is the purchaser's responsibility to be absolutely certain that any parts ordered from the factory are correctly fitted and installed. Firearms are complicated mechanisms and IMPROPER FITTING OF PARTS MAY RESULT IN A DANGEROUS MALFUNCTION, DAMAGE TO THE FIREARM, AND INJURY TO THE SHOOTER AND OTHER PERSONS. The purchaser and installer of parts must accept full responsibility for the correct adjustment and functioning of the rifle after such installation.

<sup>\*\*</sup>Caliber must be specified.

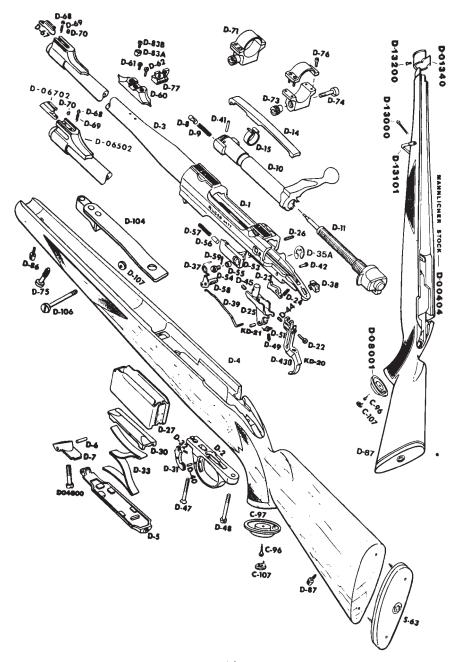
<sup>\*\*\*</sup>Required for .458 Caliber rifles only.

NOTE: The Mannlicher style stock (D-00404) used on the Ruger M-77 International Model (RSI) fits only the International Model. Neither the stock nor its fittings are interchangeable with corresponding parts of other M-77 models.

The front sight base (D-06502) and blade (D-06702) for the International Model are

not interchangeable with corresponding parts of other M-77 models.

The stock for the M-77 Ultra Light Model (D-4UL, not illustrated below) is not interchangeable with stocks of other M-77 models.



#### THE BASIC RULES OF SAFE FIREARMS HANDLING

We believe that Americans have a right to purchase and use firearms for lawful purposes. The private ownership of firearms in America is traditional, but that ownership imposes the responsibility on the gun owner to use his firearms in a way which will ensure his own safety and that of others. When firearms are used in a safe and responsible manner, they are a great source of pleasure and satisfaction, and represent a fundamental part of our personal liberty.

Firearms do not cause accidents! Firearms accidents are almost always found to have been the result of carelessness, or ignorance on the part of the shooter of the basic rules

of safe gun handling.

The following rules must be observed by gun users at all times. Safe gun handling is not just desirable, it is absolutely essential to the continuation of gun ownership and sport shooting as we know it today.

- 1. LEARN THE MECHANICAL AND HANDLING CHARACTERISTICS OF THE FIREARM YOU ARE USING. Not all firearms are the same. The method of carrying and handling firearms varies in accordance with the mechanical provisions for avoiding accidental discharge and the various proper procedures for loading and unloading. No person should handle any firearm without first having thoroughly familiarized himself with the particular type of firearm he is using, and with safe gun handling in general.
- 2. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. Be sure of the bullet stop behind your target, even when dry-firing. Never let the muzzle of a firearm point at any part of your body or at another person. This is particularly important when loading or unloading a firearm. In the event of an accidental discharge, no injury can occur as long as the muzzle is pointing in a safe direction. A safe direction means a direction which will not permit a discharged bullet to strike a person, or to strike an object from which the bullet may ricochet. A safe direction must take into account the fact that a bullet may penetrate a wall, ceiling, floor, window, etc., and strike a person or damage property. Make it a habit to know exactly where the muzzle of your gun is pointing whenever you handle it, and be sure that you are always in control of the direction in which the muzzle is pointing, even if you fall or stumble.
- 3. FIREARMS SHOULD BE UNLOADED WHEN NOT IN USE. Firearms should be loaded only when you are in the field or on the target range or shooting area, ready to shoot. Firearms and ammunition should be securely locked in racks or cabinets when not in use. Ammunition should be safely stored separate from firearms. Store your firearms out of sight of visitors and children. It is the gun owner's responsibility to be certain that children and persons unfamiliar with firearms cannot gain access to firearms or ammunition.
- 4. BE SURE THEBARREL IS CLEAR OF OBSTRUCTIONS BEFORE SHOOT-ING. Even a bit of mud, snow or excess lubricating oil or grease in the bore may cause the barrel to bulge, or even burst on firing, and can cause injury to the shooter and bystanders. Be sure that you are using ammunition of the proper caliber and loading for the gun you are using. If the report or recoil on firing seems weak, or doesn't seem quite right, CEASE FIRING IMMEDIATELY and check to be sure that no obstruction has become lodged in the barrel.
- **5. BE SURE OF YOUR TARGET BEFORE YOU SHOOT.** Don't shoot unless you know exactly where your bullet is going to strike. Be sure of the bullet stop behind your target, even when dry-firing with an unloaded gun. If you are in the field hunting, do not fire at a movement or noise. Take the time to be absolutely certain of your target before you pull the trigger.
- 6. WEAR SHOOTING GLASSES AND HEARING PROTECTORS WHEN YOU SHOOT. All shooters should wear protective shooting glasses and some form of hearing protectors when shooting. Exposure to shooting noise can damage hearing, and adequate vision protection when shooting is essential.
- 7. NEVER CLIMB A TREE OR FENCE WITH A LOADED FIREARM. Put the firearm down carefully before climbing a fence, and unload it before climbing or descending a tree or jumping over a ditch or other obstruction. Never pull or push a loaded firearm toward yourself or another person. When in doubt, unload your gun!

- **8. DON'T. SHOOT AT A HARD SURFACE, OR AT WATER**. Bullets can glance off many surfaces like rocks or the surface of water and travel in unpredictable directions with considerable velocity.
- 9. NEVER TRANSPORT A LOADED FIREARM. Firearms should always be unloaded before being placed in a vehicle. A suitable carrying case or scabbard should be used to carry an unloaded firearm to and from the shooting area.
- 10. AVOID ALCOHOLIC BEVERAGES WHEN SHOOTING. Don't drink until the day's shooting is over. Handling firearms while under the influence of alcohol in any form constitutes a criminal disregard for the safety of others.

#### AN EXTRAORDINARY ACHIEVEMENT: RUGER FIREARMS

One of the few American firearms manufacturers whose management has remained unchanged since starting in business, Sturm, Ruger & Company, Inc., had its beginning in a small machine shop occupying a rented frame building in Southport, Connecticut. In January, 1949, with an initial investment of only \$50,000 and an idea, William B. Ruger and Alexander M. Sturm started production of a .22 caliber automatic pistol—a design which was so successful that it became the cornerstone upon which one of the most comprehensive lines of sporting firearms ever made in America was established. After Alex Sturm's death in 1951, William B. Ruger continued to direct the company alone and today, as President and Chairman of the Board, he is actively involved in the creative engineering of new products and continues to provide the leadership which has made this 41-year old company a sound and successful enterprise.

Sturm, Ruger & Company, in this relatively short time, has established itself as a leading small arms design organization, developing a unique and broad line of fine quality sporting, military and police firearms to become one of the world's most famous producers of revolvers, pistols, rifles and shotguns.

During its four decades of growth and progress under the leadership of William B. Ruger, the company has developed a business philosophy and implemented policies which represent a constructive influence in the life of modern America. From the beginning, Sturm, Ruger & Company played a positive role in conservation efforts and has supported the interests of its customers through its membership and participation in the programs of the National Rifle Association, National Shooting Sports Foundation, and many regional sportsmen's organizations. The company has always endeavored to market its firearms for constructive or recreational purposes, to emphasize the traditional aspects of shooting, to render meaningful public services and to encourage shooters in constructive and responsible participation in the shooting sports.

Today, Sturm, Ruger & Company is particularly mindful of those elements which have contributed to the creation of its success, and extends heartfelt thanks to its many loyal employees and customers.

## WHY NO WARRANTY CARD HAS BEEN PACKED WITH THIS NEW RUGER FIREARM

The Magnuson-Moss Act (Public Law 93-637) does not require any seller or manufacturer of a consumer product to give a written warranty. It does provide that if a written warranty is given, it must be designated as "limited" or as "full" and sets minimum standards for a "full" warranty.

Sturm, Ruger & Company, Inc. has elected not to provide any written warranty either "limited" or "full", rather than to attempt to comply with the provisions of the Magnuson-Moss Act and the regulations issued thereunder.

There are certain implied warranties under state law with respect to sales of consumer goods. As the extent and interpretation of these implied warranties varies from state to state, you should refer to your state statutes.

Sturm, Ruger & Company wishes to assure its customers of its continued interest in providing service to owners of Ruger firearms.