#### INSTRUCTION MANUAL FOR

BLUED STEEL



CALIBERS 9MM &. 40 Auto

### RUGER<sup>®</sup> CARBINE PC9, PC4, PC9GR & PC4GR





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

For Product Service on This Model Please Call: (520) 778-6555 (See p. 23)

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

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.



#### WARNING - LOCKING DEVICES



**INSTALL LOCK** 

AS SHOWN HERE

This firearm was originally sold with a key-operated locking device. While it can help provide secure storage for your unloaded firearm, any locking device can fail. All guns are designed to fire if they are loaded and the trigger is pulled. Therefore, never install the locking device inside the trigger guard or in any way that it can possibly pull the trigger! Do not leave the keys in the lock.

The ultimate responsibility for secure storage of any firearm must depend upon its owner and his or her individual circumstances.

Guns should be securely stored unloaded, in a secure location, separate from their ammunition.

See "Storage Warning", page 20.

NEVER INSTALL LOCKING DEVICE INSIDE TRIGGER GUARD

# 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 **RUGER® CARBINE** properly. Please contact us if you have any questions about it.

Only when you are certain you fully understand the Manual and can properly carry out its instructions should you practice loading, 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, 11250 Waples Mill Rd., Fairfax, VA 22030-7400. They will assist you.

The person possessing a gun has a full-time job. You cannot guess; you cannot forget. You must know how to use your 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 fool-proof gun.

#### **TABLE OF CONTENTS**

	Page
General Information	4
Operation of Safety	6
The Slide Stop	7
Ammunition	8
To Load and Fire (With Magazine)	9
To Load and Fire (Without Magazine)	
To Unload	11
To Extract and Eject a Chambered Cartridge	13
To Clear a Malfunction ("Jam")	
To Minimize Malfunctions ("Jams")	13
To Disassemble	
Reassembly	
Magazine Inspection and Care	18
Care and Cleaning	
StorageStorage	
Attaching Ruger Scope Rings	
Sight Adjustment	
Ghost Ring Sight Adjustment	
Service and Parts Policy	
Parts Drawing	
The Basic Rules of Safe Firearms Handling	
Warranty Information	

"RUGER®" is a registered U.S. trademark.

		GREAT IMPORTAN FOLLOWING PA	
Locking Devices	2	Unloading	11
Alterations	4	Malfunctions	14
Manual Safety	6	Disassembly	15
Lead Exposure	8	Lubrication	19
Ammunition	8	Storage	20
Firing	10	Parts Purchasers	24
Handling	11		
OTHER CAUTIONS AND WARNINGS APPEAR THROUGHOUT THE MANUAL.			

#### FIREARMS ARE DANGEROUS WEAPONS-

READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL THOROUGHLY AND **CAREFULLY BEFORE USING.** 



#### This product was designed to function properly in its original condi-

tion. Alterations can make it unsafe. Do not alter any part or add or substitute parts or accessories not made by Sturm, Ruger & Co. Inc.

DO NOT ALTER ANY GUN

#### **GENERAL INFORMATION** AND MECHANICAL CHARACTERISTICS

The **RUGER® CARBINE** is an autoloading rifle chambered for either the 9mm Luger (Parabellum) or .40 Auto cartridges. The correct caliber of each rifle is rollmarked on its receiver. Use only ammunition of the correct caliber for that rifle. It is "blowback" operated and uses standard Ruger P-Series pistol magazines of the same caliber. Retracting the cocking handle cocks the internal hammer and compresses the guide rod/recoil spring assembly. When the slide is manually released, it moves forward (driven by the recoil spring), strips a cartridge from the magazine, if a loaded magazine is in place, and chambers the cartridge. The slide is held against the chambered cartridge by the recoil spring.

When the trigger is pulled, the hammer is released and strikes the firing pin. The firing pin indents the cartridge primer and ignites the priming compound. This ignites the powder in the cartridge case and a great volume of gas is instantly generated, which acts on the interior of the cartridge case in all directions.

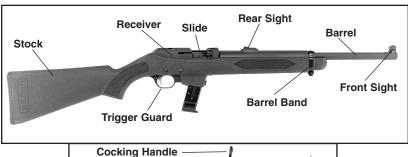
Because the bullet offers the least resistance, it moves out of the cartridge case and exits the muzzle. The bolt then moves rearward automatically, extracting and ejecting the fired cartridge case, and at the same time cocking the hammer and compressing the guide rod/recoil spring assembly, etc., as described above. Once the trigger is released, the rifle is ready to fire again.

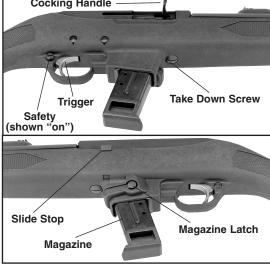
Each time the trigger is pulled and released, the same cycle is repeated until there are no more cartridges in the magazine or in the chamber.

The rifle will fire if there is a cartridge in the chamber and the trigger is pulled, whether or not there is a magazine in place! Removing the magazine does not unload the rifle. Never assume the rifle is unloaded. Visually inspect the chamber and the magazine each time the rifle is handled to be certain there are no cartridges in either.

All models have the same basic operating mechanism and include the following features with which the gun user should be thoroughly familiar.

#### **NOMENCLATURE**





**Figure 1.** In these illustrations the frequently used operating components are identified. Note that the safety is protruding fully from the right side of the trigger guard and is therefore in its "on" (safe) position.

#### **OPERATION OF SAFETY**

The **RUGER® CARBINE** has a cross-button safety which is located in the rear portion of the trigger guard (Figure 1, p. 5).

The safety is "on" when it protrudes fully from the right side (the cocking handle side) of the trigger guard, as shown in Figure 1, p. 5. In this position, the gun cannot be fired from a normal pull on the trigger.

The safety should always be in the "on" (safe) position except when the shooter is actually firing the gun. The safety should be moved to the "on" position whenever the shooter ceases firing, even temporarily.

The safety is "off" (fire) when it protrudes from the left side of the trigger guard, as shown in Figure 2. When the safety is off, the red band shows on the safety button, but do not totally rely on the appearance of the red band to indicate that the safety is off. In poor light or if dirt is present, the red band may not be visible. If the safety is "off" and the trigger is pulled, the rifle will fire if a cartridge is in the chamber.

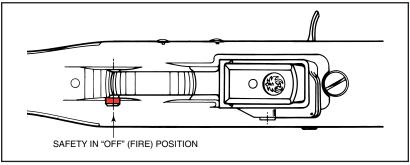
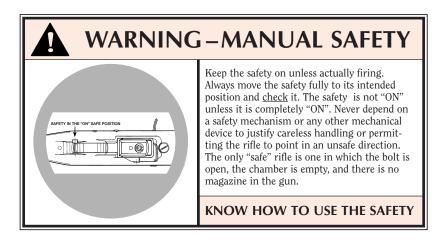


Figure 2. The underside of the trigger guard section of the rifle. In this illustration the safety is shown in the "off" (fire) position. The position of the safety and red band indicate the safety is "off."

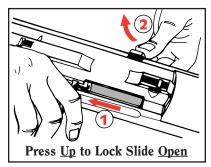


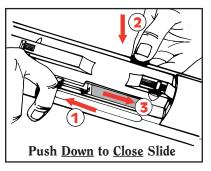
The safety is held in its "on" or "off" position by a plunger that is under spring tension. When the safety is moved to either the "on" or "off" position, a distinct "click" should be heard. Frequently check the position of the safety to be certain the safety has not been inadvertently moved. If the safety seems to move too easily, or if the click is not heard when the safety is moved, the rifle should be discontinued from use and returned to the Prescott Product Service Department for repair (See page 23).

#### THE SLIDE STOP

The slide stop is located on the left side of the receiver (see Figure 1, p. 5). The slide stop is the manually operated means of retaining the slide in the rearward (open) position. When the slide of an <u>empty</u> rifle is held open, the rifle is in an inoperative safe condition for inspection of the chamber, cleaning, etc.

To hold the slide open: Retract the cocking handle to its extreme rearward position and, while holding it there, press the slide stop upward. Release pressure on the cocking handle and the slide will move forward a fraction of an inch, and then be held in its open position.





To release the slide: The slide can be released by drawing back slightly on the cocking handle and depressing the slide stop thumbpiece. When the slide is released, it will move forward under pressure from the recoil spring. The safety of the rifle should always be in the "on" position except when the user is actually firing at a selected target.

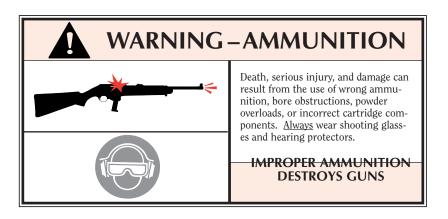
When the last shot has been fired and the magazine is empty, the slide stop automatically holds the slide open. When there is an <u>empty</u> magazine in the rifle and the slide is retracted manually, the slide stop will have to be manually actuated to hold the slide open. If a loaded magazine is inserted in the rifle when the slide is closed and the slide is then retracted fully, the slide stop will not automatically hold open the slide. The user can actuate the slide stop mechanism to hold the slide open at any time by retracting the slide and pushing up the slide stop.

#### AMMUNITION

The **RUGER® CARBINE** is chambered for, and designed to properly function with, only factory loaded 9mm Luger (Parabellum) or .40 Auto ammunition (standard, high velocity, +P, or +P+ ammunition) manufactured to U.S. industry standards.

SPECIAL NOTE: The higher pressures produced by the .40 auto cartridge make the use of aluminum-cased .40 auto ammunition inadvisable in the Ruger Carbine or any other "blowback" -operated firearm. Occasional case separations and jamming of the mechanism may occur. This does not apply to locked-breech firearms such as the Ruger P-94 pistols.

Use only such factory ammunition in good condition that exactly matches the caliber of your rifle that is rollmarked on the receiver.





Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to

lead and other substances known to the state of California to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

SHOOTING OR CLEANING GUNS MAY EXPOSE YOU TO LEAD

#### TO LOAD AND FIRE (WITH MAGAZINE)

Practice this important aspect of gun handling (with an unloaded rifle) until you can perform each of the steps – described below – with skill and confidence. But before you do anything with the rifle, please first read completely through this manual. Keep your finger off the trigger until you are ready to immediately shoot at a target!

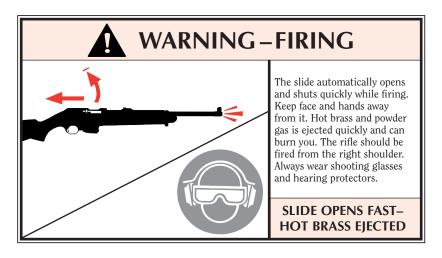
- 1. Keep the muzzle pointed in a safe direction. (See Rule 2, p. 31).
- 2. Put the safety "on" (fully protruding from the right side of the trigger guard). See Figure 1, p. 5.
- 3. Pull the cocking handle rearward. Engage the slide stop so that the slide is held open. Check the chamber to be certain it is empty.
- 4. To remove the magazine, use thumb to depress magazine latch button on the left side of the magazine well and at the same time grasp the magazine between the fingers of the same hand to draw it out of the magazine well. (See Figure 3). Do not drop the magazine out of the rifle onto a hard or dirty surface -- you may damage it or otherwise induce malfunctions.



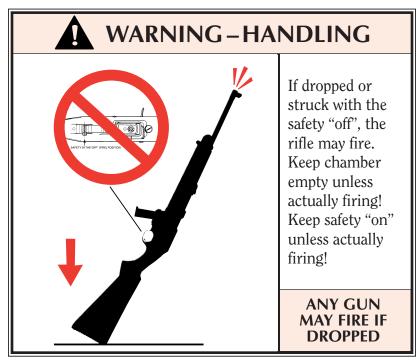
Figure 3. The safety should be "on" when the magazine is being removed or inserted. When the magazine latch button is pushed in, the magazine is released. Depress the latch with the thumb and at the same time grasp the magazine between your fingers and draw it downward out of the gun. REMEMBER to check to be sure the chamber is empty after removing the magazine!

- 5. Load the magazine by sliding up to 15\* 9mm or 11\* .40 Auto cartridges of the same caliber as that marked on the receiver of your rifle into the magazine. The Ruger CARBINE is designed to function properly only with correct Ruger magazines loaded with factory ammunition of the correct type and caliber loaded to U.S. industry specifications.
- Insert magazine fully into the firearm, with bullet end of the cartridges toward the muzzle, until it is locked in place by the magazine latch. (Magazine cannot be seated if reversed).
- \* By Federal Law, newly manufactured magazines with a capacity of greater than 10 (ten) cartridges are designated "For Law Enforcement Use Only" and are only sold to law enforcement and government agencies. Commercially sold rifles are supplied with 10 round magazines *only*.

- 7. Load a cartridge into the chamber by fully retracting the cocking handle, pushing down the slide stop, and then releasing the cocking handle. The slide will forcibly move forward, chambering a cartridge from the magazine. Don't touch the trigger. Do not 'ride' the cocking handle as it moves forward. Do not apply force to the cocking handle to chamber a cartridge. If a cartridge does not readily chamber, eject it from the rifle, hold the slide open with the slide stop, remove the magazine and see MALFUNCTION WARNING, p. 14.
- 8. The rifle is now fully loaded. If the rifle is not to be fired immediately, the safety should remain "ON" (See Figure 1, p. 5). When the safety is moved to the "off" position, the rifle will fire a cartridge each time the trigger is pulled until all the cartridges in the magazine, and the one in the chamber, have been fired. Firing will automatically reload and recock the rifle. Note that every time the trigger is pulled, if a cartridge is in the chamber and the safety is "off", the rifle will fire be careful!

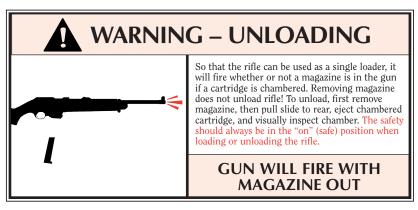


- 9. Immediately following the firing of a shot, if a subsequent shot is not to be fired at once, put the safety "ON" while the rifle is still pointing in a safe direction down range. The safety should be moved to the "on" position as soon as firing is completed, and it should be "on" at all times except when the rifle is on target and being fired.
- 10. If all cartridges are fired from the magazine, the slide remains open after the last shot has been fired. When firing is completed, if the slide is shut, manually retract the slide, hold it open by pushing the slide stop up, and visually check the chamber to be sure it is empty. If the slide is shut, the shooter should always assume that there is a cartridge in the chamber. Don't rely on your memory to know if a gun or magazine is loaded. Visually inspect the magazine and the chamber area.



#### TO LOAD AND FIRE (WITHOUT MAGAZINE)

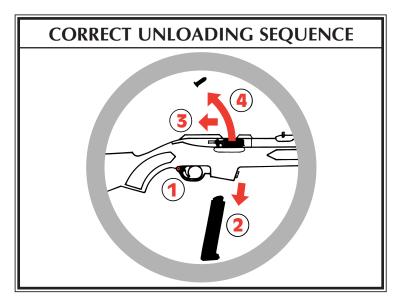
The rifle can be used as a single shot rifle in the absence of a magazine or for safety or training purposes. To do so, follow steps 1 and 2, p. 9. Then load a cartridge into the chamber, and follow steps 7 and 8, p. 10, disregarding the magazine. Engage the safety between shots.



#### **TO UNLOAD**

NOTE: This sequence must be followed exactly as spelled out. Failure to do so can result in the rifle's chamber becoming unintentionally loaded with a cartridge!

- 1. Keep the muzzle pointed in a safe direction at all times and keep the fingers outside the trigger guard. Move the safety to the "on" position.
- 2. Remove the magazine. Remember that even though the magazine has been removed, a cartridge remaining in the chamber can still be fired!
- 3. Retract the slide to its open position and hold it open by pressing the slide stop up.
- **4.** Always visually double check the chamber to be certain it is empty.
- 5. The only "safe" rifle is one in which the slide is open, the chamber is empty, and there is no magazine in the gun.



- 6. Cartridges can be removed from the magazine by simply pushing them lightly downward and forward with the thumb, forefinger, or the rubber eraser end of a pencil against the base of the top cartridge. Do not use a loaded cartridge as a 'tool' to strip cartridges from the magazine.
- 7. If desired, the slide can be left in the open position, being held there by the slide stop. If it is desired to close the slide, again look to be certain the chamber is empty. Keep the safety "on", retract the slide to its rearmost position, push the thumbpiece of the slide stop down, and let the slide snap forward. Keep your fingers out of the receiver!
- 8. With the muzzle pointed in a safe direction, push the safety to the "off" position and pull the trigger to decock it. The rifle can be "dry fired" for practice as long as it is empty and pointed in a safe direction.
- 9. Push empty (unloaded) magazine into the rifle until the magazine latch locks it in place. If an empty magazine is inserted into a rifle with the slide held open, it will be necessary to press the bolt stop downward in order to close the slide.

## TO EXTRACT AND EJECT A CHAMBERED CARTRIDGE

When the rifle is fired, the same gas pressure which drives the bullet forward also acts through the cartridge case to push the slide to the rear. That action causes extraction and ejection of the fired cartridge case. But, when the slide is operated by hand, there can be a failure to extract the cartridge from the chamber, or a failure to eject the cartridge clear of the rifle. These failures usually are the result of the slide not being pulled rearward vigorously, coupled with an accumulation of firing residue in the chamber. From the foregoing it is clear that the gun user must:

- Always visually check the chamber after opening the slide to eject a chambered cartridge. If the slide is not vigorously retracted when being operated by hand, the extracted cartridge can be 'ejected' into the magazine area, instead of outside the rifle. (Remember that the magazine should be removed <u>prior</u> to unloading the chamber.)
- 2. Thoroughly clean the chamber and the extractor as often as necessary to prevent the accumulation of grease and dirt.
- 3. If an empty magazine is in the rifle when the slide is being hand retracted to extract a cartridge, the cartridge may drop on top of the magazine. Then when the slide goes forward, the cartridge will be chambered again! Always remove the magazine before clearing the chamber, and visually ensure that no cartridges remain in the gun.

#### TO CLEAR A MALFUNCTION ("JAM")

Any autoloading firearm may occasionally malfunction. If it does:

- 1. Be certain the muzzle is pointed in a safe direction and the safety is "on".
- 2. If possible, remove the magazine. It may be necessary to manually remove a jammed cartridge which has only partially been stripped from the magazine. If so, use extreme care. Hold the slide open with the slide stop before attempting to clear the jam. Drawing the slide fully to the rear may bring the jammed cartridge along. Keep your face away from the ejection port during this operation. When attempting to clear a jam, use only wood 'tools' so that a cartridge will not be ignited if you strike a primer and so that the chamber and magazine will not be damaged. A 3/16" wood dowel rod with a point on one end is useful.
- Visually check to make sure all cartridges have been removed from the rifle. Safely dispose of any cartridges involved in a malfunction incident. Do not use damaged ammunition in any firearm.

#### TO MINIMIZE MALFUNCTIONS ("JAMS")

Most malfunctions are caused by improper or damaged magazines, incorrect ammunition, or poor maintenance.

1. If it appears that the gun and magazine are not at fault and that the jam was caused by the type of cartridge being used, then try another type.

- 2. If changing to another type or brand of cartridges does not at once eliminate malfunctions, then the following steps should be taken:
  - a. Make certain the gun and the magazine are unloaded and that the safety is "on". Remember, the magazine should be removed first, then check the chamber and be certain it and the magazine well are clear of cartridges.
  - b. Thoroughly clean the magazine and slide mechanism, paying particular attention to removing accumulated grease. Use a bristle brush and solvent to remove grease and fouling from the slide, the extractor, the chamber, and the feed ramp. (See the "Care and Cleaning" section of this manual for detailed cleaning instructions).
  - c. Check to see that the magazine spring tension is adequate and that the magazine follower moves freely up and down.
  - d. Check the magazine lips to be certain they are free of nicks and burrs and are not deformed.
  - e. Remove excess oil and solvent from all cleaned components, load the magazine, and try the firearm again. As always, proceed slowly. Be certain bystanders are not close and that you are wearing eye and hearing protection and that your face is a safe distance from the rifle so that any discharge resulting from a jammed cartridge will not injure anyone.

If the above procedures do not result in a smooth and reliably functioning firearm, don't use the gun. The rifle can be returned directly to our Prescott, Arizona Service Department for repair. See the "Service and Parts Policy" section of this manual for packing and shipping information.

Another precaution: When using any autoloading firearm, form the habit of examining fired cartridge cases. If they have bulged heads or frequently show splits on any part of the case, the rifle should be returned to the factory for inspection.



#### WARNING - MALFUNCTIONS





A cartridge fires when the firing pin impacts the primer, and also can be "discharged" before it is chambered if its primer receives a sharp blow. If a cartridge hangs up, jams, or binds when being chambered or when being fed from the magazine into the chamber, do not attempt to force it into the chamber by pushing or striking the cocking handle. Any jam or feeding problem is a signal to immediately stop using the gun until it can be determined what is wrong. Most failures of a cartridge to feed or to chamber are caused by a damaged magazine, improper gun handling, or defective ammunition. Whatever the cause, cartridge jams can result in the potentially dangerous situation of a cartridge discharging before it is chambered. If this occurs, the cartridge case will rupture and its fragments will fly out of the gun with sufficient force to cause injury. Always wear shooting glasses and hearing protectors! Keep face away from chamber!

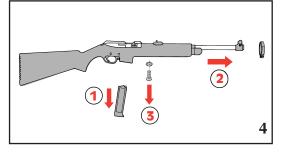
STRIKING COCKING HANDLE CAN BURST CARTRIDGE

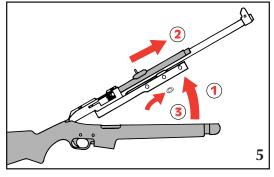


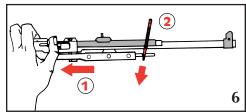
#### TO DISASSEMBLE

#### Make Sure Gun Is Unloaded!

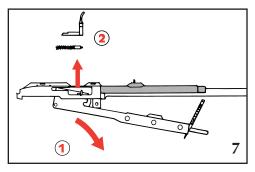
- 1. With the rifle pointing in a safe direction, remove the magazine. (See Fig. 4)
- 2. Remove screw and barrel band from front of stock. (See Fig. 4) It may be necessary to carefully spread the barrel band slightly apart with a screwdriver blade so that the band can be removed from its stock recess. Remove the take down screw and lock washer from the bottom of the stock. (See Fig. 4)
- 3. Lift front end of barrel/receiver assembly and remove it upward from stock. (See Fig. 5) Remove the receiver spacer from the inside of the stock (refer to parts list, p. 27, for applicable serial number range).
- 4. Pull slide assembly to rear far enough to expose a cross hole in the guide rod (about 1 3/4"). Insert a pin/punch to hold slide in this position. (See Fig. 6)



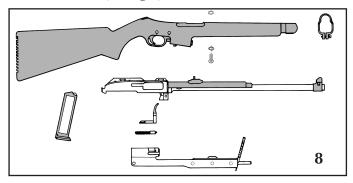




5. Move slide/recoil spring assembly slightly forward to disengage guide rod and rotate it downward out of the receiver. The cocking handle and plunger will pop free. (See Fig. 7)

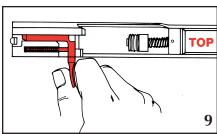


6. Handguard may be removed by carefully placing both thumbs at rear corners and slowly pushing upward; but this is not recommended for routine cleaning or maintenance. (See Fig. 8)



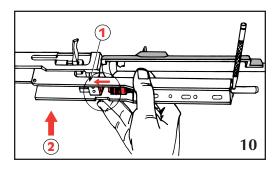
7. Further disassembly is not necessary or recommended for routine service.



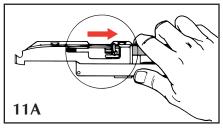


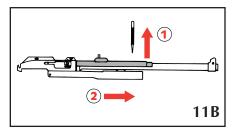
1. Replace cocking handle and plunger into top of slide assembly. (See Fig. 9) Plunger end goes into cocking handle.

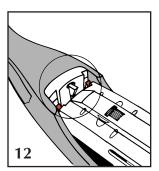
2. Carefully ease assembly back into receiver (See Fig. 10)

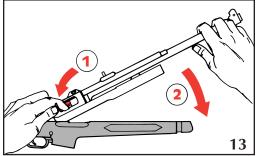


- 3. Making sure the guide rod is engaged in the hole in the front of the receiver, hold the slide assembly in place (See Fig. 11A) while removing the pin/punch and allow slide to go forward slowly. (See Fig. 11B)
- 4. Place the receiver washer in its position around the take down screw hole inside the stock (refer to parts list, p. 27, for applicable serial number range). Then hook rear receiver hooks into stock recesses (See Fig. 12) and lower barrel back into place while holding cocking handle back slightly (approximately 1 inch). (See Fig. 13)



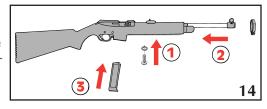






Note: If bolt is not held open slightly while lowering barreled action into stock, it will be impossible to operate action! If this occurs, simply lift the action slightly out of the stock, retract the bolt slightly, and keep it open as you lower the action back into the stock. Once the barrel/receiver assembly is in place in the stock, replace the take down screw and lock washer. While replacing the take down screw and lock washer, ensure that the receiver spacer is in place inside the stock if your carbine is so equipped. (See Fig. 14)

 Replace barrel band and screw. Check to assure free movement of slide and correct functioning of trigger and manual safety. (See Fig.14)



#### MAGAZINE INSPECTION AND CARE

Check the magazine frequently. The magazine follower must move freely and have adequate spring tension so that each cartridge is quickly raised to the feeding position. The magazine lips should be clean and free of cracks, dents, or nicks, so that cartridges are held in their proper feeding position.

If the magazine becomes dirty, it should be disassembled and thoroughly cleaned. You could encounter two types of Ruger magazines, with either a pinned base or a snap-on base. The following disassembly instructions apply:

Pinned Base (used on 10 round 9mm magazines) - Use a punch to remove the roll pin that extends through the side of the magazine body. Once the roll pin has been removed, pull the magazine base from the bottom of the magazine body, taking care to prevent the forcible ejection of the compressed magazine spring. Withdraw the magazine spring from the magazine body. Turn the magazine upside down and remove the follower.

Snap-On Base - Use a punch to press in on magazine spring seat where it protrudes into the hole in the magazine floorplate. Slide the magazine floorplate toward the rear of the magazine, taking care to prevent the forcible ejection of the magazine spring seat and compressed magazine spring. Withdraw the magazine spring seat and magazine spring from the magazine body. Turn magazine upside down and remove magazine follower. Reassemble in reverse order.

When cleaning is necessary, use a solvent that will not rust the metal components or adversely affect the magazine follower. After the magazine has been soaked in solvent to loosen foreign matter, be certain to shake it vigorously (with the loading opening away from you) to remove solvent or residue from within the magazine. Penetrating oils and solvents inside a magazine can "kill" or weaken cartridge primers, which can result in failures to fire or other possibly dangerous malfunctions, such as leaving a bullet in the bore!

After cleaning, always check to be certain that the magazine follower movement and spring tension are correct, and that no solvent or debris remain. Improper reassembly of the magazine spring can cause a potentially dangerous malfunction. If cleaning does not restore proper tension, or if you experience a problem with the magazine, don't use it. Get a new one.

DAMAGED, NON-STANDARD, OR IMPROPERLY ASSEMBLED MAGAZINES SHOULD NOT BE USED. THEY CAN CAUSE THE RIFLE TO MALFUNCTION.

#### **CARE AND CLEANING**

Make Sure Gun Is Unloaded!

Before cleaning, be certain the rifle and its magazine contain no cartridges (see "To Unload", p. 11).

At regular intervals, or whenever the rifle has been exposed to sand, dust, extreme humidity, condensation, immersion in water, or other adverse

conditions, disassemble, clean and oil it. Proper periodic maintenance is essential to the reliable functioning of any firearm.

To clean the rifle, proceed as follows:

- 1. Disassemble (field-strip) the rifle to the extent described on pages 15 & 16.
- 2. Using a cleaning rod, run a solvent-wetted patch through the bore several times. Then attach a solvent-wetted bristle brush to the rod and run it back and forth the full length of the bore as many times as necessary to remove grease and dirt from the bore and chamber. Clean bore with dry patches and examine. Bore fouling can contribute to reduced accuracy, and grease accumulation in the chamber can interfere with proper feeding of cartridges from the magazine.



- 3. Using powder solvent on a clean patch or bristle brush, remove powder residue from all components of the mechanism. After cleaning, run a dry patch through the bore, then follow with a patch that is very lightly oiled. Wipe all surfaces clean with a cloth, then wipe all surfaces with a patch or cloth that has been very lightly oiled.
- 4. NOTE: Only a light application of oil or grease is needed to provide adequate lubrication of moving parts and to prevent rust. Excess accumulations of oil tend to attract particles of dust and dirt and may congeal in cold weather which can interfere with the safe and reliable function of the rifle.

#### **STORAGE**

GUNS SHOULD NOT BE STORED LOADED!

USE THE LOCKING DEVICE SUPPLIED WITH THE RIFLE FOR STORAGE. (SEE PAGE 2)

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

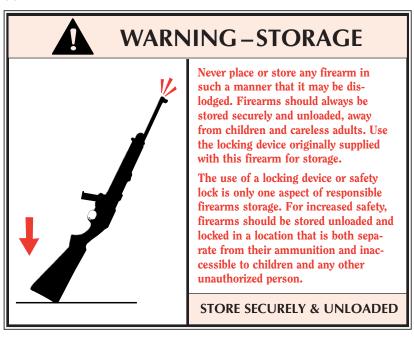
#### TO RENDER THE RIFLE INOPERATIVE FOR SAFE STORAGE

With the muzzle pointed in a safe direction, remove the magazine, open the bolt, and check the chamber to be sure the rifle is completely unloaded! Loosen barrel band screw and slide barrel band forward off stock. Unscrew and remove takedown screw on underside of stock. Carefully lift barrel/receiver assembly out of the stock. Pull slide assembly to the rear far enough to expose cross hole in the guide rod. Insert a pin/punch to hold slide in this position, and then allow slide assembly to move forward to disengage guide rod. Now rotate the assembly downward out of the receiver. Reassemble rifle without slide housing assembly, which contains the bolt and most of the firing mechanism.

Store the rifle and the slide housing/bolt assembly in different locations. When disassembled in this manner, the rifle is inoperable. It is impossible to fire the rifle until the slide housing/bolt assembly has been correctly replaced into the rifle.

To reassemble the rifle for firing, remove the barrel/receiver assembly from the stock as above and reinstall the trigger housing/bolt assembly (see pages 16 - 17 of this manual). Carefully reinstall the barrel/receiver/trigger housing assembly into the stock. Check to be sure the bolt, trigger, and safety mechanisms can be operated fully and freely. The rifle is now reassembled and can be loaded and fired normally.

While the rifle is less likely to be used by unauthorized persons when disassembled in the above manner, it is always safest to store any firearm with the supplied locking device correctly installed or to store the firearm in a gun safe or other secure location, away from children and unauthorized adults. Guns should always be stored securely, <u>unloaded</u> and separate from their ammunition.



#### ATTACHING RUGER SCOPE RINGS

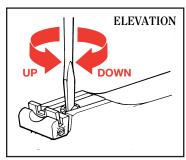
Each Ruger telescope ring is a mated assembly of a top and a base. Do not mix the parts of the two ring assemblies as they are not interchangeable. On the underside of each mounting ring assembly there is an integral lug, located off center with respect to the front and back sides of the mount. The lug 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.

- 1. Disassemble one ring and reassemble over the scope body between the turret and the eyepiece. Remember the lug on the base should be on the front side of the scope.
- 2. Install the four top screws. Do not tighten.
- 3. 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.
- 4. 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 semicircular cuts on the sides of the receiver.
- 5. 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.
- 6. Sight in according to the directions with your scope.

#### SIGHT ADJUSTMENT

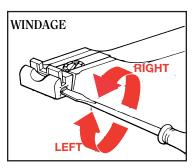
The **RUGER® CARBINE** rifles are equipped with an adjustable rear sight. Each click of the sight adjustment screw (either windage or elevation) will move the point of impact of the bullet approximately 3/4" at a range of 25 yards.

Be careful not to use one of the curved front sight blade protectors as a front sight when you aim -- the front sight is a vertical post.



To <u>raise</u> point of impact: turn screw counterclockwise.

To <u>lower</u> point of impact: turn screw <u>clockwise</u>.



To move the point of impact to the <u>right</u>: turn screw <u>counterclockwise</u>.

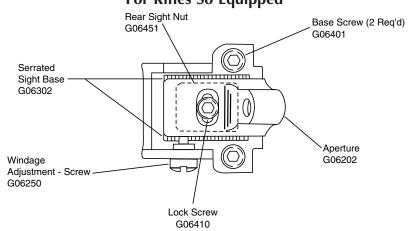
To move the point of impact to the <u>left</u>: turn screw <u>clockwise</u>.



#### SUGGESTED SIGHT PICTURE

Top of front sight even with top of rear sight blade. Front sight centered in notch of rear sight blade. Target bulls-eye centered on top of front sight.

#### GHOST RING SIGHT ADJUSTMENT For Rifles So Equipped



(Must be loosened 1/2 turn prior to any sight adjustment)

#### WINDAGE ADJUSTMENT

- 1. Loosen Lock Screw approximately 1/2 turn.
- 2. Windage Screw can now turn:
  - a. Turn screw\_clockwise to move bullet point of impact to the right.
  - b. Turn screw <u>counter clockwise</u> to move bullet point of impact to the <u>left</u>.





#### **ELEVATION ADJUSTMENT**

- Loosen Lock Screw <u>only</u> enough to permit Aperture to slide across serrations on sight base.
- 2. Aperture elevation can now be adjusted.
  - a. Slide Aperture up Serrated Base to move bullet point of impact up.
  - b. Slide Aperture down Serrated Base to move bullet point of impact down.

#### Tighten Lock Screw when adjustments are completed.

NOTE: Do <u>not</u> remove Lock Screw completely. Complete removal of sight from Carbine will be required to reinstall the Lock Screw so that the sight can be correctly reassembled.

#### SERVICE AND PARTS POLICY

If you have any question with regard to the performance of your **RUGER® CARBINE** rifle please write or call (520-778-6555) our Product Service Department in Prescott, Arizona 86301, fully describing all circumstances and conditions involved. 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:



WARNING: BEFORE SHIPPING ANY FIREARM, BE ABSOLUTELY CERTAIN THAT IT AND ITS MAG-AZINE ARE UNLOADED. DO NOT SHIP CAR-TRIDGES WITH A FIREARM.

#### SHIPPING FIREARMS FOR REPAIR

**RUGER® CARBINE** rifles returned to the factory for repair should be sent to: Sturm, Ruger & Company, Inc., Product Service Department, 200 Ruger Road, Prescott, Arizona 86301-6181. Phone: (520) 778-6555.

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, do 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 be shipped via U.P.S. (Next Day Air) 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 sights or custom accessories with a firearm being shipped to the factory for service. DO NOT SEND GUN BOXES OR LITERATURE THAT YOU CONSIDER TO BE COLLECTOR'S ITEMS – THESE ARE INVARIABLY DAMAGED OR DESTROYED IN SHIPMENT. Rifles and shotguns may be shipped via Parcel Post. Always insure your shipment.

Enclose a letter which includes your name, address, telephone number, 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 \$20.00 plus a \$12.00 shipping and handling charge. The charge for metal refinishing the **RUGER® CARBINE** rifle is \$50.00 plus a \$12.00 shipping and handling charge. Custom gunsmithing service or nonstandard alterations are NOT AVAILABLE from Ruger Product Service Departments.



#### WARNING-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 SERIOUS 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 pistol after such installation.

#### PARTS MUST FIT CORRECTLY

#### ORDERING PARTS

Please contact the Arizona Product Service Department for parts availability and current prices. All parts orders for the **RUGER® CARBINE** rifles should be sent to: Sturm, Ruger & Company, Inc., Parts Department, 200 Ruger Road, Prescott AZ 86301-6181, (520)778-6555. We cannot comply with open account or C.O.D. requests. Payment in the form of a check, money order, Visa or Mastercard must accompany your order. Credit Card orders must include the account number, expiration date and whether it is a Visa or Mastercard account. Minimum parts order is \$1.00 plus a \$3.50 shipping and handling charge. Order parts by Part Number and Part Name, include the entire serial number of the firearm for which the parts are being ordered. There is a minimum net labor charge of \$20.00 plus \$12.00 shipping and handling charge if the parts are factory fitted. All factory-fitted parts are fitted on an exchange basis only. We will not return the replaced parts.

Because the **CARBINE** receiver (part number G00125 or G00101) is a serial numbered component, it is defined as a "firearm" by Federal law and is not sold as a separate component.

\*Parts designated by an asterisk must be factory fitted. These parts are fitted on an exchange basis only. We will not return the replaced parts. We will not return any part that is broken, malfunctioning, badly worn or has been modified. See "Warning – Parts Purchasers" above.



CAUTION: A gun containing modified, broken, malfunctioning, or badly worn parts should not be fired.

#### 100

#### **RUGER® CARBINE**

#### **PARTS LIST**

Design, prices and specifications subject to change without notice.

SPECIFY MODEL AND CALIBER WHEN ORDERING
(See Exploded View on Pages 30).

Part Name	Part No.	Model
* Barrel	G00325	PC9, PC9GR
* Barrel	G00300	PC4, PC4GR
Barrel Band	G06501	PC9, PC4
Barrel Band	G06510	PC9GR, PC4GR
Barrel Band Assembly	G06510-100	PC9GR, PC4GR
Barrel Band Screw	C-69H	All Models
* Bolt Lock	G07301	All Models
Bolt Lock Cross Pin, 2 Req'd	G07900	All Models
Bolt Lock Spring	G09000	All Models
Butt Plate Screw, 2 Req'd	C-91SM	All Models
Cable Lock, 10" - For Ruger Rifles Only	PM120A	All Models
Cocking Handle	G02505	All Models
Cocking Handle Plunger	G07100	All Models
Cocking Handle Plunger Spring	G07200	All Models
Disconnector	G06701	All Models
Disconnector Pivot Pin	G06800	All Models
Ejector	G00802	All Models
Extractor	G01425	PC9, PC9GR

$\sim$
3
•

Part Name	Part No.	Model
Extractor	G01401	PC4, PC4GR
Extractor Spring	G01500	All Models
Extractor Pin	G01601	All Models
Firing Pin	KG01100	All Models
Firing Pin Retaining Pin	G06000	All Models
Firing Pin Spring	KV01850	All Models
* Front Sight	G05603	All Models
Front Sight Cross Pin	MA07201	All Models
Ghost Ring Sight Adjustment Nut	G06451	PC9GR, PC4GR
Ghost Ring Sight Aperture	G06202	PC9GR, PC4GR
Ghost Ring Sight Assembly	G06202-100	PC9GR, PC4GR
Ghost Ring Sight Base	G06302	PC9GR, PC4GR
Ghost Ring Sight Base Screw, 2 Req'd	G06401	PC9GR, PC4GR
Ghost Ring Sight Installation Kit	G06202-200	PC9, PC4
Ghost Ring Sight Lock Screw	G06410	PC9GR, PC4GR
Ghost Ring Sight Windage Adjustment Screw	G06250	PC9GR, PC4GR
Guide Rod/Recoil Spring Assembly	G15101	All Models
* Hammer	G01703	All Models
Hammer Pivot Pin	G01900	All Models
Hammer Spring	G04701	All Models
Hammer Strut	G01801	All Models
Handguard Assembly	G10500	All Models
Handguard Plug, Not Illustrated	G00551	PC9GR, PC4GR
Lever Actuator	G07501	All Models
		·

Part Name	Part No.	Model
Magazine, Complete	P-18/10	PC9, PC9GR
Magazine, Complete	P-17/10	PC4, PC4GR
Magazine Latch	G03125	PC9 PC9GR
Magazine Latch	G03101	PC4, PC4GR
Magazine Latch Retaining Pin	G01200	All Models
Magazine Latch Spring	G05000	PC9, PC9GR
Magazine Latch Spring	G05050	PC4, PC4GR
Pivot Pin Retainer	G05501	All Models
Rear Sight, Adjustable, Complete	A15901-202	PC9
Rear Sight, Adjustable, Complete	A15901-203	PC4
Rear Sight Body, Complete	A15901-102	PC9
Rear Sight Body, Complete	A15901-103	PC4
Rear Sight Body	A05900	PC9, PC4
Rear Sight Base	A06100	PC9, PC4
Rear Sight Base Set Screw	A06200	PC9, PC4
Rear Sight Blade	G08701	PC9
Rear Sight Blade, with White Outline Notch	H07203	PC4
Rear Sight Detent Ball	MR05908	PC9, PC4
Rear Sight Elevation Screw	MR05902	PC9, PC4
Rear Sight Elevation Spring	MR05906	PC9, PC4
Rear Sight Windage Adjustment Screw	E05903	PC9, PC4
Rear Sight Windage Spring	MR05907	PC9, PC4
† Receiver Spacer	G09900	PC9, PC4

<sup>†</sup> For PC9 rifles with serial numbers below 470-01666 and For PC4 rifles with serial numbers 480-02000 to 480-03110

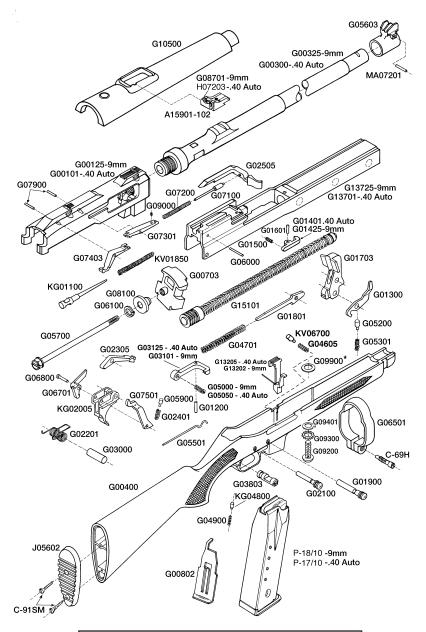
A	4
1	•
^	ø
u	٠

	Part Name	Part No.	Model
	Recoil Block	G00703	PC9, PC4
	Recoil Block	G00704	PC9GR, PC4GR
	Recoil Pad	J05602	All Models
	Reversing Lever	G07403	All Models
	* Safety	G03803	All Models
	* Safety Plunger	KG04800	All Models
	* Safety Plunger Spring	G04900	All Models
	* Sear	G02305	All Models
	Sear Interrupter	G01300	All Models
	Sear Interrupter Plunger	G05200	All Models
	Sear Interrupter Plunger Spring	G05301	All Models
28	Sear Spring	G02401	All Models
ω	Sear Spring Plunger	G05900	All Models
	* Slide	G13725	PC9, PC9GR
	* Slide	G13701	PC4, PC4GR
	Slide Stop Assembly	G13202	PC9, PC9GR
	Slide Stop	G03205	PC4, PC4GR
	Slide Stop Plunger	KV06700	PC4, PC4GR
	Slide Stop Spring	G04605	PC4, PC4GR
	Sling Swivel, Front	S-85	PC9GR, PC4GR
	Sling Swivel Adapter, Front	B08600	PC9GR, PC4GR
	Sling Swivel Rear Mounting Screw	S-87	PC9GR, PC4GR
	Stock	G00400	All Models
	Stock Bolt	G05700	All Models

Part Name	Part No.	Model
Stock Bolt Bushing	G08100	All Models
Stock Bolt Lock Washer	G06100	All Models
Take Down Screw	G09200	All Models
Take Down Screw Flat Washer	G09401	All Models
Take Down Screw Lock Washer	G09300	All Models
Trigger	KG02005	All Models
Trigger Pivot Pin	G02100	All Models
Trigger Spring	G02201	All Models
Trigger Spring Support	G03000	All Models

<sup>\*</sup> PARTS SO MARKED MUST BE FACTORY FITTED

## RUGER® CARBINE EXPLODED VIEW



The receiver spacer (Part No. G09900) is for PC9 rifles with serial numbers below 470-01666 and for PC4 rifles with serial numbers 480-02000 to 480-03110.

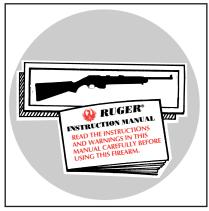
#### THE BASIC RULES OF SAFE FIREARMS HANDLING

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 your safety, the safety of others, and 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.

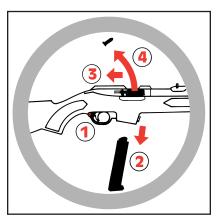
Be sure of the bullet stop behind your target, even when dry-firing. Never let the muzzle of a firearm point at any part of your body or at another person. This is particularly important when loading or unloading a firearm. In the event of an accidental discharge, no injury can occur as long as the muzzle is pointing in a safe direction. A safe direction means a direction which will not permit a dis-



charged 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. Keep your finger off the trigger until you are ready to shoot.

## 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 safes, racks or cabinets, or by using the locking device supplied with the firearm, when not in use. Ammunition should safely be 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 unfamil-

iar with firearms cannot gain access to firearms, ammunition, or components.

### 4. BE SURE THE BARREL IS CLEAR OF OBSTRUCTIONS BEFORE SHOOTING.

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 serious 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, unload your firearm, and check to be sure that no obstruction has



become lodged in the barrel. Never try to shoot out an obstruction!



## 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 adequate hearing protectors when shooting. Exposure to shooting noise can damage hearing, and adequate eye 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, or whenever you are about to do anything awkward, 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, or medications that could affect your judgment or co-ordination, constitutes a criminal disregard for the safety of others.



## A BRIEF ACCOUNT OF 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 autoloading 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 Chairman Emeritus of the Board, he continues to provide the guidance which has made this 52-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. From 1949 thru 2001 Ruger craftsmen have built many millions of firearms.

During its five 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 shooters through such groups as 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 and recreational purposes, to emphasize the traditional aspects of shooting, to render meaningful public services and to encourage shooters in constructive, responsible, and safe 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.

A current catalog of Ruger firearms is available free upon request to Sturm, Ruger & Co., Inc., Southport, CT 06490.

### 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.



# STURM, RUGER & Company, Inc. Southport, Connecticut 06490 U.S.A. http://www.ruger-firearms.com

"Arms Makers For Responsible Citizens"

A COPY OF THE INSTRUCTION MANUAL FOR ANY RUGER FIREARM IS AVAILABLE FROM THE FACTORY FREE ON REQUEST. THESE INSTRUCTION MANUALS CONTAIN IMPORTANT WARNINGS WHICH MUST BE UNDERSTOOD BEFORE USING THESE FIREARMS.