WARNING: BEFORE USING THIS FIREARM
READ AND FOLLOW THESE INSTRUCTIONS.
Please Practice Safe Firearms Handling

This Operations Manual should always accompany this firearm. When you lend, give, or sell this firearm, be sure this manual goes with it.

To obtain a replacement manual, write to:

Bushmaster Firearms, LLC
P.O. Box 556, Madison, NC 27025
Or call 1-800-998-7928 and include the serial number
Or have it available when making a phone request.

Model:

Serial Number:

Purchased From:

Date Purchased:
Before disassembling, loading, or using this firearm, please Read, Understand, and Following all the instructions in this manual regarding proper handling and safe use!

**Caution:** If unfamiliar with firearms, seek further advice through Firearm Safety Organizations, Local Gun Clubs, NRA Approved Instructors, or similar qualified organizations.

**Warning:** If this firearm is carelessly or improperly handled, unintentional discharge could result and could cause injury, death, or damage to property.

**Warning:** This Firearm could chamber and fire a round if it is dropped or jarred without a loaded magazine in place and with the bolt carrier assembly locked to the rear, or in its forward position.

**Caution:** Use only clean, dry, high quality commercially manufactured ammunition. Use only ammunition that is appropriate for the .22 LR caliber of this Bushmaster firearm.
Our mission is to manufacture quality firearms, made with Pride in the USA, and using the best American made parts. We value our customers, and do our best to assure quality and friendly service. Bushmaster Firearms, LLC is always striving to make great firearms even better.

Thank You for Buying Bushmaster!

The safety warnings in this booklet are very important. By understanding the dangers inherent in the use of your Carbon .22 LR Firearm. Failure to do so may result in serious injury to you or others, as well as severe damage to the firearm and/or property.

Note: For information or details not covered in this Operating Manual, contact our Tech Support Staff at:
Email: techsupport@bushmaster.com
Or 1-800-998-7928
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Fundamental Rules and Procedures for Safe Firearms

- **Always** treat every gun firearm as if it were loaded!
- **Always** keep the firearm pointed in a safe direction!
- **Always** be sure the barrel is clear of any obstruction.
- **Always** be sure of what lies beyond your target and the safety of bystanders before you shoot.
- **Always** wear ear and eye protection when shooting.
- **Always** carry your firearm so that you can control the direction of the muzzle if you fall or stumble.
- **Always** keep your finger off the trigger and leave the safety on until you are ready to shoot.
- **Never** load the firearm until you are ready to shoot.
- **Never** leave a firearm unattended. Firearms and ammunition should always be secured and stored separately, and beyond the reach of children and adults.
- **Never** allow your firearm to be used by anyone who has not read this instruction and safety manual.
- **Never** point any firearm, loaded or unloaded, at anything you do not intend to shoot.
• If you firearm stops firing with a live round still in the chamber (a misfire), quickly remove the round, keeping your face away from the ejection port. If you cannot remove it within 10 seconds, remove the magazine, and wait 15 minutes with the firearm pointed in a safe direction. At this point, the firearm could still fire the live round.

• If your bolt fails to unlock, and you try to free it by tapping the butt stock on the ground, while pulling on the charging handle, keeping the muzzle pointed in a safe direction.

• If there is water in the barrel, do not fire the firearm, it could explode.

• If a noticeable difference in sound or recoil is experienced, Stop Firing! This condition could indicate an incomplete powder burn and/or a bullet stuck in the bore.
Facts About Your New Bushmaster Carbon 22LR Firearm

The Bushmaster Carbon 22LR rifle system consists of a upper receiver assembly that is compatible with your .223/5.56 lower receiver assembly, 10 round magazine, and instruction manual. It is a very light weight firearm with blow back operated, magazine fed, and operates in a semi-automatic mode (i.e., a single shot fired each time the trigger is pulled). Retracting the charging handle cocks the internal hammer and compresses the recoil spring. When the charging handle is released, it moves the bolt forward (driven by the recoil spring), strips a cartridge from the magazine, chambers the cartridge. The bolt 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 case and ignites the priming compound inside the rim and a great volume of gas is instantly generated which acts on the cartridge case in all directions. The bullet moves out of the cartridge case, and exits the muzzle. The bolt then moves rearward automatically, extracting the fired cartridge case, and at the same time cocking the hammer and compressing the recoil spring, as described above. Once the trigger is released the firearm is ready to fire again. The firearm will fire if there is a cartridge in the chamber whether or not there is a magazine in place. The rifling is a right hand twist 1 turn in 16” with 6 lands and grooves.
Getting Ready to Shoot

- With magazine well empty, pull back the charging handle and release to cock the hammer so the safety can be engaged.
- Put the safety lever on SAFE.
- Insert the loaded magazine into the magazine well, always make sure the muzzle is pointed in a safe direction!
- Pull the charging handle to the rear and release. Move the safety lever from SAFE to FIRE.

**Note:** If the firearm is not going to be fired immediately, make sure the selector lever is still on safe.
Immediate Action in Case of Trouble

If your firearm stops firing perform the following immediate actions!

1. Remove the magazine.
2. Pull the charging handle all the way back.
3. Put the safety lever on SAFE.
4. Check the chamber for any obstruction or unfired cartridge.
5. Insert the magazine and make sure it is seated properly.
6. Pull the charging handle all the way back. Release charging handle to feed a new round. Do not ride the charging handle forward.
7. Move the safety lever from SAFE to FIRE.
8. Now fire. If the firearm will not fire, look for trouble and apply remedial action.

Remedial Action

If your firearm stops firing with a live round in the chamber of a hot barrel, remove the round fast. However, if you can not remove it within 10 seconds, remove the magazine and wait 15 minutes with the firearm pointed in a safe direction with the safety on during this time. This will help prevent injury if a round fires as a result of a hot barrel. Keep your face away from the ejection port while clearing a hot chamber.

1. If your firearm still fails to fire after performing Steps 1 through 5 above, and check again for a jammed cartridge case.
2. If a cartridge case is in the chamber, open the receivers (see steps 8 & 9 on page 10), remove the bolt carrier assembly, and try to tap out the case with a cleaning rod.
3. If your firearm fails to fire, check the troubleshooting section in this manual or take the firearm to a qualified gunsmith.
Bullet Stuck in the Bore

WARNING!
If an audible "POP" or reduced recoil is experienced during firing,
IMMEDIATELY CEASE FIRE:
Then:

- Remove the magazine
- Lock the bolt to the rear
- Place the selector lever on SAFE
- Keep the firearm pointed in a safe direction.
- Check for a bullet in the bore

Do not apply the "Immediate Actions" previously described.
If a bullet is stuck in the barrel of the weapon, do not try to remove it. Take the firearm to a qualified gunsmith.
Disassembly of Firearms

1. Make sure firearm is not loaded and is pointed in a safe direction.
2. Remove magazine and clear the chamber.
3. Open the bolt by pulling the charging handle completely to the rear. While holding the charging handle in this position, use the other hand to lock the bolt in the rearward position by pushing the lower end of the bolt catch lever.
4. The bolt carrier should lock in the rearward position. Push the charging handle forward until it latches.
5. If there is a round in the chamber it should have been ejected, make sure there is not a round in the chamber by LOOKING INTO THE CHAMBER from THE EJECTION PORT AND VISUALLY CONFIRMING THAT THERE IS NOT A ROUND IN THE CHAMBER!
6. Now that you are sure the firearm is not loaded, proceed in the disassembly.
7. Send the bolt “HOME” by releasing the bolt catch.
8. Use a small diameter drive tool, push both takedown pins from left to right until the stop.
9. Separate the receivers by holding the grip with one hand and pulling the upper receiver up and forward. Note: The charging handle must be in the closed position; there will be some resistance due to the close tolerance fit between the upper and lower receivers.
10. You may now pull back on the charging handle to remove the bolt carrier assembly.
11. Using thumb hold buffer in place.
12. Depress detent retaining buffer and spring with a screwdriver or similar device.
13. Allow buffer to come out of the buffer tube at a controlled rate.
14. Pull buffer and spring from the buffer tube.
Clean your firearm as soon as possible after firing, to make the job easier, and to avoid the development of any corrosion. When your firearm has not been fired, you should clean it at least once or twice a year if you live in a temperate climate, or as often as once a week in a tropical climate. If you get your firearm wet, clean it as soon as possible. Use only high quality products which include a cleaning rod, swab holder, cotton flannel bore patches, pipe cleaners, a small toothbrush, brass wire bristle bore and chamber brushes, and CLP (Cleaner-Lubricant-Preservative). After dissembling the firearm, thoroughly clean, inspect and lubricate all parts according to the techniques described in this manual.
Cleaning and Lubrication

Warning: Before cleaning, make sure the firearm is not loaded and pointed in a safe direction.

The cleanliness and lubrication of the C22 is very important for the proper function of the firearm and components. Generally less lubrication is better than too much. Over lubrication can contribute to failure due to attracting particles of dirt and grime. No lubrication in wear areas can cause function issues and excessive wear. Lubricating specific areas of the firearm will ensure function also reduce wear.

Cleaning and lubrication of each area and component will be explained further in the following pages, however as a rule all metal surfaces should have a light coat of oil to prevent corrosion.

Cleaning Equipment

The following equipment will be needed to efficiently clean and lubricate the C22.

- Cleaning rod assembly - sectional rod, one piece or pull through.
- Patch holder - eyelet, wrap around.
- Bore brush - nylon or brass. Do not use stainless steel.
- Chamber brush.
- Action cleaner - Rem ® Action or similar product.
- Carbon solvent - Remington® Brite Bore™ or similar product.
- Lubricant - Rem™ Oil or similar product.
- Cleaning cloth or rags - Any relatively lint free cloth will suffice.

**Bore Cleaning**

1. Insure the firearm is pointed in a safe direction and unloaded.
2. Separate upper and lower receiver or hinge the upper forward.
3. Remove the bolt carrier assembly from the receiver.
4. Insert a bore guide if you have one.
5. Attached a bore brush to your cleaning rod, put some carbon solvent on the brush and insert the brush into the bore from the receiver end.
Cleaning Bore Continued

6. Keeping the rod straight, begin to stroke the bore of the firearm. The brush should exit the muzzle on each pass. If the firearm has been shot heavily more strokes will be necessary. Make about 10 passes stopping only to apply more carbon solvent at about midway point. Insure that any optic lenses are protected from solvent.

7. Remove the rod from the firearm; wipe down the rod to remove any excess solvent.

8. Attach the patch holder to the rod, install a clean patch around it and patch the bore. Repeat this many times as necessary until a clean patch come out.

9. Spray a patch with preservative and patch the bore. The preservative will remove any trace of carbon solvent. Then patch the bore with another clean patch to dry it out.

10. Use a short rod or pistol rod, and chamber brush to clean the chamber. Insert the brush into the chamber and rotate the handle. It is not necessary to attempt to scrub by pushing and pulling, rotating the handle will accomplish the task.

11. Using the patch holder and a large section of patch, clean the chamber.

12. Remove the large patch and replace it with applicable sized patch. Patch the bore one last time.
Cleaning the Upper Receiver

1. Using action cleaner, spray inside of upper receiver, cleaning all small spaces. For easily accessible areas, a cloth can be used.
2. Using a chamber brush soaked in carbon solvent clean chamber area.
3. Wrap chamber brush in cloth or a patch and clean oil and residue from chamber and bore.
4. Leave a light film of oil on the inside of the receiver.
5. Before sliding the bolt carrier in place, put a drop of oil on each side of the charging handle slot. (See Picture)
Bolt Carrier Assembly Cleaning

1. Field strip the bolt carrier assembly. (See page 23)
2. Using carbon solvent and a brush clean the extractor recess, bolt face, and bolt body, bolt lug, bolt lug retaining pin, recoil spring, guide rod, guide rod bushing, extractor, extractor plunger, extractor spring, firing pin, firing pin spring, firing pin retaining pin and backer, removing dirt and carbon deposits. Clean and wipe dry.
3. Check the bolt for cracks or fractures. Inspect the bolt face, bolts with any pitting extending into the firing pin hole should be replaced.
4. Check the firing pin if it is bent, cracked or too sharp, it should be replaced.
5. Check the firing pin retaining pin if it is bent or badly worn it should be replaced.
6. Check the extractor, extractor plunger and extractor spring. If the extractor is chipped or has broken edges in the area of the lip that engages the cartridge rim, it should be replaced.
7. Lightly coat all parts with oil.
8. Re-assemble bolt carrier assembly. (See diagram on page 23).
Inspection Before Lubricating

- Check the bolt for cracks or fractures. Bolts with any pitting extending into the firing pin hole should be replaced.
- Check the firing pin: if it is bent, cracked, too sharp, it should be replaced.
- Check the extractor, extractor plunger and extractor spring. If the extractor is chipped, or has broken edges in the area of the lip that engages the cartridge rim, it should be replaced.

Lubrication

Upper and Lower Receivers:

Lightly Lubricate

- The inside of the upper receiver, bore and chamber (using cleaning rod and patch).
- The firing pin with CLP.
- The charging handle and the inner and outer surfaces of the bolt assembly.

Generously Lubricate:

- All moving parts inside the lower receiver (trigger, hammer, safety, etc) and all its various pins and detents. Don’t forget the takedown, pivot pins and their detents.
- Wipe off fingerprints (they can start the corrosion process and any metal parts) from the exterior surfaces with a soft oiled rag (black rag prevents visible lint).
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Item No.</th>
<th>Description</th>
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<th>Description</th>
<th>Item No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Bolt Body</td>
<td>4</td>
<td>Firing Pin</td>
<td>7</td>
<td>Recoil Spring Guide Rod</td>
<td>10</td>
<td>Bolt Lug Retaining Pin</td>
</tr>
<tr>
<td>2</td>
<td>Backer</td>
<td>5</td>
<td>Firing Pin</td>
<td>8</td>
<td>Recoil Spring</td>
<td>11</td>
<td>Extractor</td>
</tr>
<tr>
<td>3</td>
<td>Firing Pin</td>
<td>6</td>
<td>Bolt Lug</td>
<td>9</td>
<td>Recoil Guide Rod Bushing</td>
<td>12</td>
<td>Extractor Plunger</td>
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## Trouble Shooting

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<tr>
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<th>What To Do</th>
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<tr>
<td>Won’t Fire</td>
<td>Selector lever on Safe</td>
<td>Put it on Fire</td>
</tr>
<tr>
<td></td>
<td>Too much oil in fire pin recess</td>
<td>Wipe out with pipe cleaner</td>
</tr>
<tr>
<td></td>
<td>Defective ammunition</td>
<td>Remove and discard</td>
</tr>
<tr>
<td></td>
<td>Too much carbon on firing pin or in firing pin recess</td>
<td>Clean</td>
</tr>
<tr>
<td>Won’t Extract</td>
<td>Dirty or corroded ammo</td>
<td>Remove stuck round, push out with cleaning rod</td>
</tr>
<tr>
<td></td>
<td>Carbon in chamber</td>
<td>Clean chamber</td>
</tr>
<tr>
<td></td>
<td>Fouling or carbon in extractor recess or lip</td>
<td>Clean extractor</td>
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<th>Problem:</th>
<th>Check For:</th>
<th>What To Do:</th>
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</thead>
<tbody>
<tr>
<td>Won't Feed</td>
<td>Dirty or corroded ammo</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Dirty magazine</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Defective magazine</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Too many rounds in magazine</td>
<td>Take out excess</td>
</tr>
<tr>
<td></td>
<td>Action buffer assembly is restricted</td>
<td>Take out buffer and spring. Clean them</td>
</tr>
<tr>
<td></td>
<td>Magazine not fully seated</td>
<td>Adjust magazine catch: turn catch clockwise to tighten and counter clockwise to loosen</td>
</tr>
<tr>
<td>Double feed</td>
<td>Defective magazine</td>
<td>Replace</td>
</tr>
<tr>
<td>Problem</td>
<td>Check For</td>
<td>What To Do</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Won’t Chamber</td>
<td>Dirty or corroded ammo</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Damaged ammo</td>
<td>Dispose</td>
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<tr>
<td></td>
<td>Carbon in chamber</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Dirt, corrosion or carbon buildup in barrel or bolt</td>
<td>Clean</td>
</tr>
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<td></td>
<td>face</td>
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<tr>
<td>Won’t Lock</td>
<td>Frozen extractor</td>
<td>Remove and clean</td>
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<tr>
<td></td>
<td>Restricted buffer assembly</td>
<td>Remove and clean</td>
</tr>
<tr>
<td>Won’t Extract</td>
<td>Restricted movement of bolt carrier assembly</td>
<td>Remove, clean and lube</td>
</tr>
<tr>
<td>Selector lever Binds</td>
<td>Needs oil</td>
<td>Clean</td>
</tr>
<tr>
<td>Problem</td>
<td>Check For</td>
<td>What To Do</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bolt Carrier “Hung Up”</td>
<td>Round jammed between bolt &amp; charging handle or is double feeding</td>
<td>Remove magazine. Push in on the bottom of the bolt latch. While pulling down on the charging handle, tap the rifle butt on the ground.</td>
</tr>
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LIMITED ONE YEAR WARRANTY

Bushmaster Firearms are warranted to be free from defects in materials and workmanship. Any such defect of which Bushmaster Firearms International, LLC is given written notice, as provided below, within one year and ten days from the date of first purchase by customer will be remedied by Bushmaster Firearms International, LLC.

This warranty is granted by Bushmaster Firearms International, LLC, P.O. Box 556, Madison, North Carolina 27025.

To initiate warranty claim, call Bushmaster Customer Service (toll free: 8:30 AM to 6:00 PM E.S.T. Monday thru Friday—1-800-883-6229) to get a “Return Merchandise Authorization” (RMA) number. Warranty claims should state (in writing) the model and serial number of the firearm concerned, a description of the difficulty experienced, and the date of purchase. The firearm concerned should be shipped (transportation charges prepaid) to the Warranty Service Department, Bushmaster Firearms International, LLC, 14 Hoefler Ave., Ilion, NY 13357. Firearm shipment should be insured by the owner, as Bushmaster Firearms International, LLC will not accept no responsibility for loss or damage in transit.

Shipment and insurance charges for the return of the firearm to its owner will be paid by Bushmaster Firearms International, LLC, if the related claim is a proper claim for warranty work.

Under no circumstances shall Bushmaster Firearms International, LLC, be responsible for incidental or consequential damages with respect to economic loss or injury to property, whether as a result of express or implied warranty, negligence or otherwise. Some states do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you. Bushmaster Firearms International LLC, will not be responsible for the result of careless handling, unauthorized adjustments, defective, low quality, reloaded, or improper ammunition, corrosion, neglect, ordinary wear and tear, or unreasonable use. Furthermore, the liability of Bushmaster Firearms International, LLC under this warranty shall be limited solely to the obligation to repair or replace the firearm, and to pay transportation and insurance charges for the return of the firearm to owner.

Note: Handguns and long guns are classified as FIREARMS or DANGEROUS WEAPONS. Firearms surrendered by Bushmaster Firearms International, LLC with the express understanding that it assumes no responsibility for resale handling under local laws and regulations.
PLEASE PRACTICE SAFE FIREARMS HANDLING!

WARNING: IF THIS FIREARM IS CARELESSLY OR IMPROPERLY HANDLED, UNINTENTIONAL DISCHARGE COULD RESULT AND COULD CAUSE INJURY, DEATH, OR DAMAGE TO PROPERTY.

CAUTION: CAREFULLY READ THIS INSTRUCTION MANUAL PRIOR TO LOADING AND FIRING THIS FIREARM. FOLLOW ALL INSTRUCTIONS ON THE PROPER HANDLING AND SAFE USE OF THIS FIREARM—LIVES MAY DEPEND ON IT!

CAUTION: USE ONLY CLEAN, DRY, HIGH QUALITY COMMERCIALLY MANUFACTURED AMMUNITION IN GOOD CONDITION which is appropriate caliber for your firearm. Bushmaster does not recommend the use of remanufactured or hand loaded ammunition because it may damage your firearm.

WARNING: THIS FIREARM COULD CHAMBER A ROUND if it is dropped or jarred with a loaded magazine in place, with its Bolt Carrier Assembly in its forward position.

A SAFETY NOTE REGARDING LEAD. Discharging firearms in a poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all time. Wash hands thoroughly after exposure.
This Manual Should Always Accompany
Your Bushmaster Carbon 22 Firearm

Bushmaster Firearms International, LLC,
P.O. Box 556, Madison, North Carolina 27025.
Website: www.bushmaster.com, email: info@bushmaster.com

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