



**RADICAL
FIREARMS**

INSTRUCTION MANUAL
RF-22LR

FAILURE TO FOLLOW THE GUIDELINES IN THIS MANUAL MAY RESULT IN SEVERE INJURY OR DEATH.

This manual is designed to provide information on how to properly assemble, disassemble, load and unload your RF-22LR rifle. For instruction on the safe handling of firearms, including the safe handling and use of this rifle, locate a qualified firearms instructor.

READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING YOUR RIFLE. FOLLOW ALL PROPER HANDLING AND SAFE USE INSTRUCTIONS.

Please retain this manual for future reference. It is important that you understand all warnings, recommendations, operation instructions and safety procedures before attempting to use your rifle.

FIREARMS ARE DANGEROUS AND POTENTIALLY LETHAL, ESPECIALLY WHEN USED IMPROPERLY OR UNSAFELY.



BEFORE YOU BEGIN DISASSEMBLY OF YOUR RF22LR RIFLE OR BEGIN ASSEMBLING A RIFLE USING RADICAL FIREARMS COMPONENTS, THE FOLLOWING RULES MUST BE OBSERVED AND STRICTLY APPLIED AT ALL TIMES TO INSURE YOUR SAFETY AND THE SAFETY OF THOSE AROUND YOU. FOLLOW ALL PROPER HANDLING AND SAFE USE INSTRUCTIONS. LEARN HOW TO SAFELY OPERATE YOUR FIREARM BEFORE USE.

- ALWAYS MAKE SURE YOUR FIREARM IS UNLOADED WHEN NOT IN USE, INCLUDING PRIOR TO ANY ASSEMBLY OR DISASSEMBLY WORK.
- NEVER ATTEMPT TO FIRE A PARTIALLY ASSEMBLED FIREARM.
- VISIBLY CHECK THE CHAMBER AFTER UNLOADING YOUR GUN; THEN CHECK IT AGAIN.
- NEVER LOAD YOUR FIREARM UNTIL YOU ARE IMMEDIATELY READY TO FIRE THE WEAPON.
- NEVER ASSUME A FIREARM IS COMPLETELY UNLOADED AND IS SAFE. THIS IS ESPECIALLY TRUE OF RIMFIRE RIFLES.
- NEVER RELY ON YOUR FIREARM'S SAFETY AND ALWAYS ASSUME YOUR RIFLE CAN FIRE AT ALL TIMES.
- ALWAYS POINT THE FIREARM IN A SAFE DIRECTION. DO NOT POINT THE MUZZLE AT ANYTHING YOU DO NOT INTEND TO SHOOT.
- WEAR SHOOTING GLASSES AND HEARING PROTECTION AT ALL TIMES WHEN FIRING YOUR FIREARM.
- NEVER TRANSPORT A LOADED FIREARM.
- ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION WHETHER LOADING, UNLOADING AND WHEN ACTIVELY SHOOTING.
- ALWAYS BE SURE OF YOUR TARGET, AND WHAT IS BEHIND AND BEYOND YOUR TARGET AT ALL TIMES.
- ALWAYS USE ONLY THE PROPER CALIBER AMMUNITION FOR YOUR FIREARM AS SPECIFIED BY ENGRAVING ON ITS BARREL.
- ALWAYS USE FACTORY AMMUNITION MANUFACTURED TO SAAMI OR EU SPECIFICATIONS THAT IS FROM A REPUTABLE MANUFACTURER.
- STORE YOUR FIREARM WHERE NOT ACCESSIBLE TO CHILDREN OR UNAUTHORIZED PERSONS.
- DO NOT CONSUME ALCOHOL WHEN SHOOTING.
- ALWAYS PRACTICE SAFE AND RESPONSIBLE FIREARM HANDLING.

TABLE OF CONTENTS

| | |
|--|----------------|
| GENERAL INFORMATION, CARE AND MAINTENANCE OF YOUR RF22LR COMPONENTS | PAGE 4 |
| INSTALLING YOUR RF22LR BARREL ASSEMBLY ON RADICAL FIREARMS PRECISION 10/22® TYPE RECEIVER | PAGE 5 |
| INSTALLING YOUR RF22LR BARREL ASSEMBLY ON A 10/22® TYPE FIREARM RECEIVER | PAGE 6 |
| RADICAL FIREARMS RF22LR ENHANCED BOLT | PAGE 7 |
| ASSEMBLE THE RF22LR ENHANCED BOLT ASSEMBLY INTO THE RECEIVER | PAGE 8 |
| LIMITED WARRANTY | PAGE 9 |
| PARTS | PAGE 10 |

GENERAL INFORMATION, CARE AND MAINTENANCE OF YOUR RADICAL FIREARMS RF22LR

Your Radical Firearms RF22LR is precision manufactured to higher tolerances and the highest quality components that exceed OEM and other 10/22® type rifle specifications.

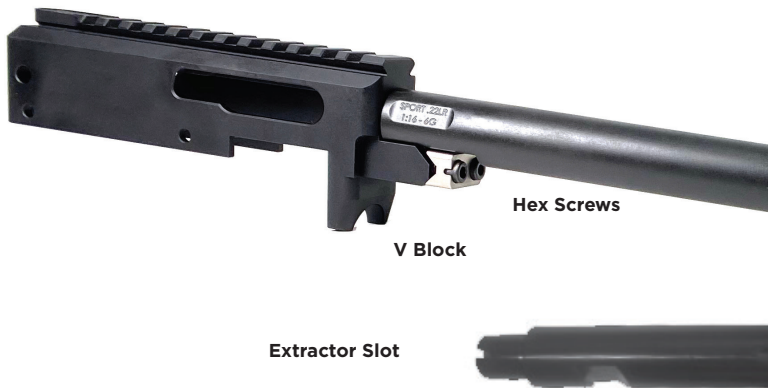
Higher tolerances mean greater attention must be paid to regular lubrication and routine cleaning of your rifle after each use. This is particularly important due to the use of a wide varying quality of rimfire ammunition that are known for heavy deposits, unburned powder accumulation and residue, bullet lube residue and lead buildup.

Use only top-quality factory ammunition manufactured to SAAMI or EU specifications from a reputable manufacturer. There is a great difference in the quality of components, performance and accuracy across brands and loadings. Changing loads and brands frequently solves many fire function and accuracy issues common in 22 rimfire designs.





INSTALLING YOUR RF22LR BARREL ASSEMBLY ON RF22LR TYPE RECEIVER

- 1) Remove the barrel assembly from the box.
- 2) Insert RF22LR barrel by lining up the extractor slot and V notch on the bottom, and inserting it into the receiver
- 3) Assemble your V-block to the receiver, tighten the hex screws using the hex key equally on each side. Then further tighten evenly to 15 to 20 INCH Pounds, or a secure tight fit.
- 4) Reassemble the barreled action with your trigger, pins, and buffer pin to your stock assembly.



It is highly advisable that upon completion of the assembly of any or all components, that a certified gunsmith inspect the firearm for safety and functionality.

INSTALLING YOUR RF22LR BARREL ON A 10/22® TYPE FIREARM ACTION

- 1)  **WARNING:** Point the rifle in a safe direction, remove the magazine, open the bolt and visually check that the rifle is unloaded. Then check it again.
- 2) Remove the barrel band (if attached) screw.
- 3) Remove the takedown screw.
- 4) Set the cross bolt safety in a middle position and lift the barreled receiver assembly from the stock.
- 5) Remove the V-block hex screws and pull the OEM barrel from the receiver.
- 6) Replace the barrel with the RF22LR barrel by lining up the extractor slot and V notch on the bottom, and inserting it into the receiver.
- 7) Assemble the V-block to the receiver, tighten the hex screws using the hex key equally on each side. Then further tighten evenly to 15 to 20 INCH Pounds, or a secure tight fit. No need to over tighten.
- 8)  **Never attempt to fire a partially assembled firearm.**
- 9) Reassemble the barreled action to the stock assembly.




*Typical barreled action with trigger assembly shown



It is highly advisable that upon completion of the assembly of any or all components, that a certified gunsmith inspect the firearm for safety and functionality.

RF22LR ENHANCED BOLT

Disassembly from the Receiver

- 1)  **WARNING:** Point the rifle in a safe direction, remove the magazine, open the bolt and visually check that the rifle is unloaded. Then check it again.
- 2) Remove the barrel band (if attached) screw.
- 3) Remove the takedown screw.
- 4) Set the cross bolt safety in a middle position. This prevents damage to the stock assembly. Lift the barreled receiver assembly from the stock.
- 5) Drift out the two side pins holding the trigger assembly and push the safety to ON.
- 6) Turn the rifle upside down.
- 7) Remove the buffer pin at the rear of the receiver.
- 8) Push the bolt all the way to the rear of the receiver, at the same time lift the front and release the bolt handle.
- 9) Guide the bolt handle out of the ejection window.
- 10) Guide the bolt while lifting it out of the receiver.
- 11) At this point it is a good idea to thoroughly clean the receiver and barrel if needed.
- 12) Proceed to page 8.



ASSEMBLE THE RF22LR ENHANCED BOLT ASSEMBLY INTO THE RECEIVER

- 1) Turn receiver upside down, then clean and oil the recoil spring guide channel
- 2) Insert the bolt handle and recoil spring guide assembly through the ejection port so that it nestles in the groove machined into the receiver.
- 3) Pull the bolt handle rearward, and maintain rear pressure on the recoil spring, and rest the groove on top of the bolt into the slot of the bolt handle.
- 4) Push down on the front of the bolt carefully until the bolt seats onto the handle, and release slowly.
- 5) The bolt and bolt handle assembly should now function smoothly.



LIMITED WARRANTY

The Radical Firearms RF22LR components have a Limited Warranty to cover manufacturer's defects in material or workmanship, as originally manufactured, under normal use during the Warranty Period of twelve (12) months from the date of original purchase by you ("Warranty Period"). This Limited Warranty does not include defects, problems, compatibility issues, or functionality issues with any parts or components other than the Radical Firearms RF22LR components, even if installed together in a single functioning firearm.

This Limited Warranty does not cover problems that are caused by conditions, malfunctions or damage not resulting from defects in material or workmanship of the Radical Firearms RF22LR components. The Limited Warranty is void if any modification or alteration is made to any of the Radical Firearms RF22LR components or if the Radical Firearms RF22LR components are damaged through abnormal, improper or unexpected use. Radical Firearms alone shall determine whether any Radical Firearms RF22LR components are covered by this Limited Warranty. All such determinations are final and binding. Radical Firearms shall have the right either to replace or repair the Radical Firearms RF22LR components, or any parts therein, that are deemed non-conforming or defective or to refund the purchase price. Radical Firearms liability, and the exclusive remedy, for any Radical Firearms RF22LR components deemed by Radical Firearms to be non-conforming or defective product is limited to replacement, repair or refund as Radical Firearms may elect.

To initiate a Limited Warranty claim, you must contact us at www.RadicalFirearms.com and click on the Warranty tab. All warranty claims require proof of purchase within the Warranty Period. It is your sole responsibility to retain and provide sufficient proof of purchase.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ANY OTHER EXPRESS WARRANTIES, AND ALL IMPLIED WARRANTIES. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, RADICAL FIREARMS HEREBY DISCLAIMS ALL WARRANTIES, OTHER THAN THOSE EXPRESSLY PROVIDED HEREIN, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. TO THE EXTENT THAT APPLICABLE LAW DOES NOT PERMIT FOR SUCH A DISCLAIMER, AZIMUTH HEREBY LIMITS ALL EXPRESS AND IMPLIED WARRANTIES TO TWELVE (12) MONTHS FROM THE DATE OF YOUR PURCHASE.

PARTS



Complete Bolt Handle and Guide Rod Assembly
(Bolt Handle not sold separately)



SS Firing Pin



Firing Pin Spring



Firing Pin Stop Pin



Recoil Spring Guide Rod
(Includes C-Clip)



Recoil Spring

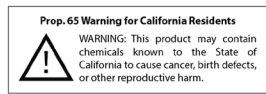


V-Block and Hex Screws

STATE BY STATE FIREARM WARNINGS

CALIFORNIA:

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



CONNECTICUT:

"Unlawful storage of a loaded firearm may result in imprisonment or fine."

FLORIDA:

"It is unlawful, and punishable by imprisonment and fine, for any adult to store or leave a firearm in any place within the reach or easy access of a minor under 18 years of age or to knowingly sell or otherwise transfer ownership or possession of a firearm to a minor or a person of unsound mind."

MAINE:

"Endangering the welfare of a child is a crime. If you leave a firearm and ammunition within easy access of a child, you may be subject to a fine, imprisonment or both. Keep firearms and ammunition separate. Keep firearms and ammunition locked up. Use trigger locks."

MARYLAND:

"WARNING: Children can operate firearms which can cause death or serious injury. It is a CRIME to store or leave a loaded firearm in any location where an individual knew or should have known that an unsupervised minor would gain access to the firearm. Store your firearms responsibly!"

MASSACHUSETTS:

"WARNING FROM THE MASSACHUSETTS ATTORNEY GENERAL: This Handgun is not equipped with a device that fully blocks use by unauthorized users. More than 200,000 firearms like this one are stolen from their owners every year in the United States. In addition, there are more than a thousand suicides each year by younger children and teenagers who get access

to firearms. Hundreds more die from accidental discharge. It is likely that many more children sustain serious wounds, or inflict such wounds accidentally on others. In order to limit the chance of such misuse, it is imperative that you keep this weapon locked in a secure place and take other steps necessary to limit the possibility of theft or accident. Failure to take reasonable preventive steps may result in innocent lives being lost, and in some circumstances may result in your liability for these deaths."

"It is unlawful to store or keep a firearm, rifle, shotgun or machine gun in any place unless that weapon is equipped with a tamper-resistant safety device or is stored or kept in a securely locked container."

NEW JERSEY:

"It is a criminal offense to leave a loaded firearm within easy access of a minor."

NEW YORK CITY:

The use of a locking device or safety lock is only one aspect of responsible weapons storage. All weapons should be stored unloaded and locked in a location that is both separate from their ammunition and inaccessible to children and any other unauthorized persons.

NORTH CAROLINA:

"It is unlawful to store or leave a firearm that can be discharged in a manner that a reasonable person should know is accessible to a minor."

TEXAS:

"It is unlawful to store, transport, or abandon an unsecured firearm in a place where children are likely to be and can obtain access to the firearm."

WISCONSIN:

"If you leave a loaded firearm within the reach or easy access of a child you may be fined or imprisoned or both if the child improperly discharges, possesses, or exhibits the firearm."

Please check with your licensed retailer or state police for additional warnings which may be required by local law or regulation. Such regulations change constantly, and local authorities are in the best position to advise you on such legal matters.



R A D I C A L
F I R E A R M S

www.RadicalFirearms.com