

# RADIAN® MODEL 1™ RIFLE



**WARNING: THIS RADIAN RIFLE IS A FIREARM. IF YOU HANDLE THIS FIREARM IMPROPERLY, IT COULD RESULT IN SERIOUS INJURY OR DEATH TO YOU OR OTHERS. YOU SHOULD ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. WHEN USING ANY FIREARM, YOU SHOULD WEAR HEARING PROTECTION TO PREVENT HEARING LOSS OR DAMAGE AND EYE PROTECTION TO PREVENT VISION LOSS OR DAMAGE.**

**NOTICE REGARDING SAFETY WARNINGS AND PROCEDURES:**

Please see the safety warnings and procedures on page 1 of this manual.

**LIABILITY DISCLAIMER:** Radian is not responsible for damage, injury, or death caused by your own intentional, accidental, or negligent discharge or misuse of the firearm.



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CAGE CODE: 8BMX3



# **RADIAN** MODEL 1 RIFLE

**MANUAL**

## A MESSAGE TO OUR CUSTOMERS

Thank you for choosing to add a Radian Model 1 to your arsenal! Whether it's your first Radian product, or just the most recent of many, we truly appreciate your business. In a market with near countless choices we understand that customer loyalty must be earned through a combination of quality, innovation, and service. As such, all Radian products come with a Lifetime Warranty against manufacturer defects, even if you're not the original owner. Shoot with confidence — we'll be here if you need us.

Thank you again.  
Sincerely,

A handwritten signature in white ink that reads "Joshua Underwood". The signature is fluid and cursive, with the first letter of each word being capitalized and prominent.

**JOSHUA UNDERWOOD**

Founder & CEO







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## SAFETY WARNINGS & PROCEDURES

### ***You are responsible for firearms safety.***

These firearm safety guidelines have been prepared by Radian, based upon currently available information. They are provided to you as a courtesy and in the interest of furthering safety. These guidelines are not comprehensive, nor do they modify or replace rules, recommendations, standards, or regulations made by legal authorities or others. ***Radian expressly disclaims any liability, obligation, or warranty related to the information set forth in these guidelines.***

Radian believes that no issue is more important than firearm safety. We urge you to learn and practice the following guidelines and to make them your habit when handling firearms. This will help ensure safe handling of your firearm(s) and help prevent accidents. We also encourage you to complete an approved firearms safety training course.

**1 | Always Handle a Firearm as if it is Loaded:** Even if you determine that a firearm is unloaded, always handle it like it IS

loaded. When you handle a firearm, the first thing you should do (with the firearm pointed in a safe direction), is open the action to identify whether the firearm is loaded. If you do not know how to open the action, do not handle the firearm.

### **2 | Always Keep a Firearm Pointed in a Safe Direction:**

A safe direction is any direction where, should the firearm discharge, no personal injury or property damage would occur. Do not point a firearm (loaded or unloaded) at yourself or another person.

### **3 | Always Keep Your Finger Out of the Trigger Guard and Off the Trigger Until You Are Ready to Shoot Your Target:**

Do not place your finger inside the trigger guard until you have placed a firearm's sights on your target and have decided to fire. The recommended place to rest your finger in the meantime is above the trigger guard along the receiver.



**4 | Always Know Your Target, Backstop, and Surroundings:**

It is always important to identify your actual target. In addition, it is just as important to know what lies in front of, around and past your target. Remember that a bullet can travel several miles.

**5 | Always Keep Children and Others Safe By Storing Firearms Away From Unauthorized Persons:**

You should always store firearms and ammunition out of the sight and reach of children as well as anyone else who is not an intended user or those physically and/or mentally capable of handling and using them properly and safely. Store firearms in a safe storage place – ideally, one you can lock.

**6 | Carefully Read the Entire Instruction Manual That Comes With Your Firearm:**

You should only use a firearm if you fully understand how to safely operate it. All firearms come with an instruction manual created by the manufacturer. If your firearm does not come with an instruction manual, contact

the manufacturer directly and request one prior to putting the firearm into operation.

**7 | Always Determine That the Firearm is Safe to Operate:**

Before shooting, make sure the firearm is in good working order, that the barrel is clear, and that the firearm is safe to operate. This is especially important when handling a firearm that is unfamiliar to you or has been stored or unused for a long period of time.

**8 | Always Use Correct Ammunition:**

Only use ammunition recommended by the firearm manufacturer for which the firearm is chambered. Most firearms have the cartridge designation for which the firearm is chambered engraved or stamped on the barrel. Your ammunition should have the exact same caliber and cartridge designation as imprinted on the barrel of the firearm. To ensure proper function and safety, we recommend using factory-loaded ammunition that complies with SAAMI, NATO, or CIP published standards. If you use

## **SAFETY WARNINGS & PROCEDURES** – *Continued*

the improper, incorrect or non-standard ammunition in your firearm, it can destroy the firearm and cause serious injury or death.

### **9 | When Cleaning a Firearm, Make Sure it is Not Loaded:**

You should keep the ammunition separate, in another area, until you have finished cleaning the firearm and are ready to load or shoot the firearm. NOTE: Firearms and ammunition should always be stored separately in secure locations.

**10 | Never Accept a Loaded Firearm:** If someone offers you a loaded firearm, ask him to unload the firearm and show you that it is clear and empty before accepting it.

### **11 | Never Use Firearms While Using Drugs or Alcohol:**

When you handle firearms, your judgment and physical ability must be unimpaired. You should not handle firearms while

using prescription medication or any other substance that can make you tired or affect your senses, reflexes, or judgment.


**12 | Use Eye and Ear Protection:** Always wear safety glasses when shooting firearms to prevent injury to the eyes, which may result in permanent vision loss. Always wear sound attenuating ear protection, to prevent injury to the ears, which may result in permanent hearing loss.

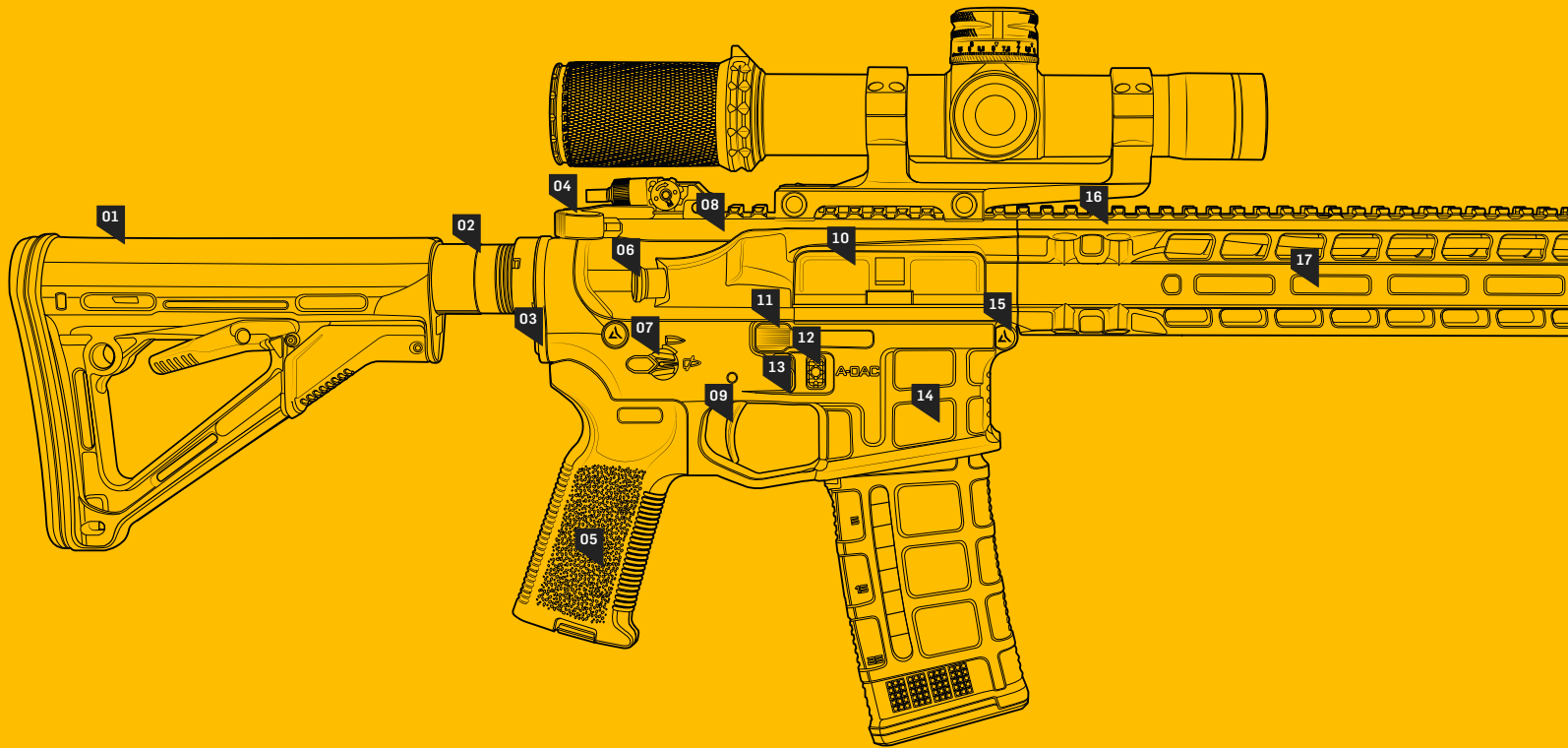
**THE FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.**

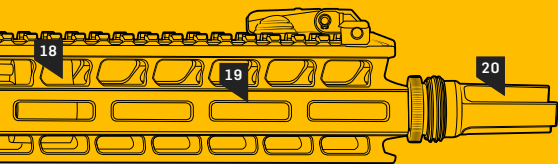
Check the firearm's bore and make certain that it is free from any obstruction before loading and firing, especially for the initial firing after a period of inactivity (storage, cleaning, etc.). In the event that the rifle is dropped or the muzzle touches the ground, clear the rifle then check for a bore obstruction.

Prior to firing, know your intended target and what lies beyond it. Be sure that there is an adequate backstop or open space free of persons and other unintended targets. Keep in mind that hard objects behind your target can cause ricochets, posing a safety hazard to property, persons in the vicinity, and the shooter.

Be aware of where your muzzle points at all times and, regardless of the status of the rifle, never point the rifles' muzzle at any person or unintended target. When not being

carried by a shooter, the rifle should be placed in a 'Range Safe' condition: magazine removed, muzzle downrange, ejection port open and facing up, bolt carrier locked to the rear, and safety selector set to SAFE .





## FEATURES

- 01 Magpul® 6-Position MIL-SPEC Collapsible Stock
- 02 H2 Carbine Buffer
- 03 Radian® Ultra-Light QD End Plate
- 04 Radian® Raptor-SD™ Ambi Charging Handle
- 05 Magpul® Pistol Grip
- 06 Lightweight Forward Assist
- 07 Radian® Talon™ Ambidextrous 45°/90° Safety Selector
- 08 Billet Machined 7075-T6 Upper Receiver
- 09 ATC® AR Gold Match Grade Trigger
- 10 Enhanced Black Nitride M16 Bolt Carrier Group
- 11 Right-Side Bolt Release
- 12 A-DAC Right-Side Mag. Release Button & Bolt Hold Open
- 13 Left-Side Mag. Release *(Other Side of Rifle)*
- 14 Billet Machined 7075-T6 Lower Receiver
- 15 Radian® Take-Down Pins
- 16 Proprietary Extended Aluminum Hand Guard
- 17 Match Grade 416R Stainless Steel Barrel
- 18 Direct Impingement Gas System
- 19 Magpul® M-LOK® Modular Mounting System
- 20 Flash Hider/Muzzle Brake Suppressor Mount





A close-up, high-angle photograph of a rifle's receiver and trigger assembly. The metal components are dark and show signs of use. A yellow horizontal line is positioned above the section header.

## **OPERATING CONTROLS**

THIS SECTION OUTLINES THE STANDARD OPERATING CONTROLS OF THE MODEL 1 WHICH INCLUDE: THE TALON SAFETY SELECTOR, TRIGGER, RAPTOR CHARGING HANDLE, AMBIDEXTROUS BOLT CATCH & RELEASE, AMBIDEXTROUS MAGAZINE RELEASE, & FORWARD ASSIST.

## TALON 45/90 AMBIDEXTROUS SAFETY SELECTOR

The Model 1 rifle comes equipped with a Talon 45/90 Ambidextrous Safety Selector. The receiver is marked with pictograms for two modes:  (safe) Prevents the trigger from releasing the hammer.  (fire) Allows for one shot per pull of the trigger. Note that the selector can only be set to SAFE when the hammer is cocked.

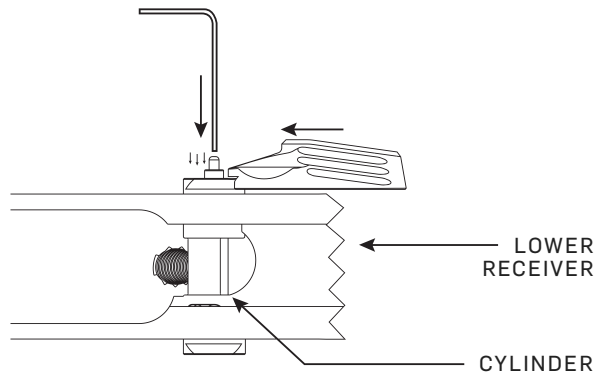
**CAUTION:** Although numerous aftermarket fire control groups are available, Radian can only warranty the use of the fire control group supplied with your rifle.

**CAUTION:** Installation of aftermarket accessories that extend into the trigger guard area of the rifle are discouraged. They could result in a negligent discharge and void the warranty.

## HOW TO SWITCH THROW CONFIGURATION

**STEP 1** | Loosen the grip just enough to rotate the entire safety unit 180°, then tighten grip.

**STEP 2** | Remove the levers by depressing the spring and detent using the supplied tool and sliding the lever rearward then reinstall the levers in the correct orientation.





## **RAPTOR AMBIDEXTROUS CHARGING HANDLE**

The Model 1 Rifle is equipped with a Raptor Ambidextrous Charging Handle. Pulling on the left or right handle of the Raptor will unlock the charging handle and allow the user to draw the bolt carrier group to the rear. The carrier group is drawn to the rear in order to either lock the carrier group back using the A-DAC or bolt catch, or more commonly to charge the rifle with a new round from the magazine.

When charging the rifle, grasp the charging handle and firmly move it to its rear-most position. Release the charging handle, allowing the bolt to move forward and chamber a round. Holding on to the charging handle as it moves forward will impede the feeding process, resulting in stoppages.

The contemporary method of charging the rifle is to use the non-firing hand to manipulate the charging handle while the strong hand remains on the grip, retaining control of the firearm.

## **AMBIDEXTROUS BOLT CATCH & RELEASE**

The Model 1 Rifle features fully ambidextrous bolt hold open and release features.

**LEFT SIDE** | The left side bolt catch is identical in function to a standard MIL-SPEC AR15/M16 rifle. To lock the bolt carrier to the rear, use the Raptor charging handle to pull the bolt carrier group rearward until it is in its fully rearward position. Press the lower section of the bolt catch and “ride” the carrier forward until it stops against the bolt catch. The carrier should now be locked back and the charging handle can be returned to the home position manually. To release the bolt carrier group from its locked back position, press the bolt catch paddle or right side bolt release paddle. The carrier will be released and return to its home position.

**RIGHT SIDE** | The right side magazine release features the patented Ambidextrous Dual-Action Catch (A-DAC) system. To lock the bolt carrier to the rear, use the Raptor charging handle to pull the bolt carrier group rearward until it is in

its fully rearward position. Press in on the magazine release button and “ride” the carrier forward until it stops against the bolt catch. The carrier should now be locked back and the charging handle can be returned to the home position manually. To release the bolt carrier group from its locked back position, press the right side bolt release lever or left side bolt catch paddle. The carrier will be released and return to its home position.

### **AMBIDEXTROUS MAGAZINE RELEASE**

Magazines that are properly inserted into the magazine well will automatically be caught and locked in place. Usually an audible click can be heard when the magazine is fully seated, but tugging on the magazine will verify that it is locked in place.

The magazine is released by depressing the right side magazine release button or left side magazine release paddle.

**CAUTION:** Remember that removing the magazine does **NOT** mean that the rifle is unloaded; there may still be a round in the chamber. The chamber can be checked by clearing the rifle (several pulls of the charging handle is standard) before visually inspecting the chamber. Devices such as chamber flags can be used to further ensure that the chamber is clear in a low-visibility scenario.

### **FORWARD ASSIST**

The forward assist is used to ensure that a cartridge is fully seated into the chamber or the bolt is fully engaged on an empty chamber. **DO NOT** force a round into the chamber. If one or two firm taps with the palm of the hand do not fully seat the round, follow the clearing procedure on page 15 and inspect the round, the magazine, the chamber, and the bore of the rifle. The forward assist is more commonly used in situations where regular cleaning is not possible.

## **EJECTION PORT COVER**

The spring-loaded ejection port cover is used to keep debris and foreign matter from entering the upper receiver through the ejection port. It opens automatically when the rifle is cycled, either by hand or by firing. The ejection port cover should always be closed when the rifle is no longer firing with the exception of the 'Range Safe' condition. To close it, simply push the cover up until it snaps into position engaging the upper receiver.





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## OPERATING PROCEDURES

THIS SECTION OUTLINES BEST PRACTICES FOR BASIC RIFLE MANIPULATION, INCLUDING CLEARING YOUR RIFLE, PRE-FIRING INSPECTION, & FUNCTION CHECKS.

## CLEARING YOUR RIFLE

Clearing your rifle is an important starting and stopping point for many rifle operations. Clear the rifle upon receiving it from someone, when you pass it along to someone, and when it is being set down on the range or for storage. The process is as follows:

**STEP 1** | Point the muzzle in a safe direction and remove the magazine by depressing the left or right side magazine release while pulling the magazine out.

**STEP 2** | Use the charging handle to pull the bolt carrier group fully to the rear. If a round was chambered, it should have been ejected as the bolt carrier moved to the rear. Repeat this cycle several times and visually inspect the chamber to verify it is clear before proceeding. *NOTE: visual chamber inspection is critical – do not depend on the fact no casing was ejected on clearing. There could still be a live round in the chamber – make sure to perform a visual and/or tactile check to verify the weapon is clear of ammunition.*

**STEP 3** | Use the charging handle to pull the bolt carrier group rearward until it is in its fully rearward position. Once the bolt face has cleared the bolt catch, press the lower section of the left side bolt catch paddle or right side magazine release/A-DAC and “ride” the carrier forward until it stops against the bolt catch. The carrier should now be locked to the rear with dust cover open.

**STEP 4** | Manually return the charging handle to the closed and latched position.

**STEP 5** | Look through the ejection port to visually make sure the chamber is clear and the bolt is properly locked to the rear. In low light conditions perform a tactile check.

## **PRE-FIRING INSPECTION**

**STEP 1** | Clear the rifle per instructions outlined on Page 15.

**STEP 2** | Break the weapon down by pulling out the rear takedown pin and pivoting the upper receiver and lower receiver apart.

**STEP 3** | Remove the bolt carrier group by pulling the charging handle back halfway and sliding the bolt carrier group free of the upper receiver. Check to make sure that the bolt is fully captive in the carrier. Make sure the cam pin is captive and that it rides in its track smoothly when the bolt is moved in or out. Check for damage on the bolt face and the bolt lugs. Ensure that the firing pin retainer is fully seated in the bolt. Ensure that the firing pin hole in the bolt face is not obstructed. Tap the rear of the bolt carrier firmly against the palm of your hand to ensure that the firing pin is fully captured. A light coating of lubricant is recommended for the body of the carrier and/or the inside of the upper receiver; ensure that the lubricant has not dissipated.

**STEP 4** | Visually inspect the bore for obstructions. In low light

conditions, physically inspect the bore by passing a cleaning rod through it. Do not check for bore obstructions using a flexible barrel cleaner. Flexible cleaners, especially worn or used ones, can snag on small obstructions and break, leading to even larger obstructions.

**STEP 5** | Reassemble the rifle by inserting the bolt carrier group into the upper receiver, close up the upper and lower receivers, and re-insert the rear takedown pin.

**STEP 6** | Inspect your magazines. Ensure that they are clean and not dented or cracked. Pay special attention to the shape of the feed lips on metal magazines. Check that the magazine follower moves freely within the magazine body and returns home under its own spring tension. Do not oil or otherwise lubricate magazines.

**STEP 7** | Inspect the ammunition. Ensure that the ammunition is the correct caliber for the rifle and is not damaged. Do not oil or otherwise lubricate ammunition. Once the inspection is completed, clear the rifle and return it to Range Safe condition.

## PRE-FIRING FUNCTION CHECK

The shooter should complete a pre-fire function test of the action and fire control group after the rifle has been disassembled and reassembled. As the pre-fire inspection involves partially breaking the rifle down, a function test should always follow an inspection. Perform the following steps, watching closely for anything that impedes the movement of the carrier group or makes the rifle hard to cycle.

**STEP 1** | Clear the rifle per instructions outlined on Page 15.


**STEP 2** | Check the function of the magazine catch. Insert an empty magazine into the magazine well, tugging on it to ensure that it is fully seated and held in place by the magazine catch.

**STEP 3** | Check the function of the charging handle and the bolt catch. Leaving the empty, unloaded magazine inserted in the magazine well, grasp the charging handle and pull it to the rear. The bolt carrier group should lock to the rear due to the empty magazine engaging the bolt catch. The charging


handle should not return forward on its own accord. Push the charging handle until it is latched back into its home position.

**STEP 4** | Check the function of the magazine release. Release the magazine using the right side magazine release and remove it from the rifle.

**STEP 5** | Check the bolt release. Press the large paddle on the left-side bolt catch or the right-side bolt release lever. The carrier group should slam forward and lock into battery.

**STEP 6** | Check the function of the safety. With the selector on SAFE , and with the muzzle pointed in a safe direction, pull the trigger. Nothing should happen; the hammer should not drop.



**STEP 7** | Check trigger function. Rotate the selector to the fire position  and, with the muzzle pointed in a safe direction, pull the trigger. The hammer should drop with a loud click. Repeat this test by charging the rifle (pull the charging handle firmly to the rear, then release) and pull the trigger again. The hammer should drop. Once the function check is completed clear the rifle and return it to range safe condition.





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## RIFLE OPERATION

THIS SECTION OUTLINES  
MANUFACTURER  
RECOMMENDATIONS  
REQUIRED TO ENSURE SAFE  
& OPTIMAL PERFORMANCE  
OF YOUR MODEL 1 RIFLE.

## AMMUNITION SELECTION

Always ensure that you are firing the correct caliber ammunition through your rifle. To ensure proper function and safety, Radian recommends using factory-loaded ammunition that complies with SAAMI, NATO, or CIP published standards. Radian does not guarantee your rifle's safety or performance when using reloaded, hand loaded, or surplus ammunition.

Radian does not recommend the use of steel-cased ammunition. 5.56/.223 bullets of less than 50gr should also be avoided.

**5.56 NATO** | The The Model 1 chambered in .223 Wylde is designed to function with a broad spectrum of 5.56 x 45mm NATO and .223 Rem ammunition. The 1:8 twist rate of the rifling (one revolution of the rifling takes place every 8") will generally give the best accuracy results with heavier bullets, such as 69-77gr Match offerings, but is fully functional with bullets as light as 50gr.


**300 BLK** | The 300 BLK Radian Rifle is designed to cycle with a broad spectrum of 300 BLK subsonic and supersonic

ammunition. The 1:7 twist rate of the rifling (one revolution of the rifling takes place every 7") will give the best accuracy results with heavier supersonic loads in the 120-130gr range, but is fully functional with bullets as light as 100gr, and as heavy as 220gr.

## CHOICE OF MAGAZINES

The Radian Rifle is designed to function with aluminum USGI-pattern magazines, as well as high quality aftermarket AR15/M16 magazines such as the Magpul® PMAG®. Note: Magazines are expendable equipment that can wear out or become damaged with use. Be sure to thoroughly test all magazines, and frequently inspect them for damage.

## LOADING THE RIFLE

**STEP 1** | Visually inspect that the safety selector is in the “safe”  position. Clear the rifle per instructions outlined on Page 15.

**STEP 2** | Insert a loaded magazine firmly into the magazine well. Ensure that it is properly seated by tugging on it.

**STEP 3** | Charge the rifle by firmly pulling the charging handle to the rear and releasing it. The bolt carrier group will slam forward, stripping the top round from the magazine and seating it into the chamber.

**STEP 4** | If you do not intend on firing immediately, close the ejection port cover. The rifle is now in Condition 1: loaded magazine, round in the chamber, rifle on safe.


## FIRING THE WEAPON

**STEP 1** | Bring the rifle to “ready” position.

**STEP 2** | Acquire and aim at the intended target.

**STEP 3** | Move the safety selector to the “fire”  position.


**STEP 4** | Place finger on the trigger and squeeze with a smooth pull.

**STEP 5** | Return the safety selector to the “safe”  position once you have finished firing.

Be sure to clear the rifle per instructions outlined on Page 15 once you are finished firing.

## RELOADING FROM BOLT-LOCK

When the magazine runs out of ammunition the bolt catch is automatically engaged, and the bolt carrier is locked to the rear. To reload from this condition:

**STEP 1** | Return the safety selector to the "safe"  position. Release the empty magazine using either the left or right-side magazine release.

**STEP 2** | Insert a loaded magazine into the magazine well. Ensure the magazine is fully seated by tugging on it.

**STEP 3** | Press the paddle on the left-side bolt catch or the right-side bolt release lever. The bolt carrier will travel forward, stripping the top round from the magazine and seating it into the chamber. The rifle is now loaded and ready to fire.

## **MAINTENANCE**

Proper maintenance of a rifle requires post-fire cleaning and inspecting of critical components for wear and breakage to ensure full reliability and performance. An accurate log of rounds fired is ideal, but a rough daily round count is immensely useful for scheduled maintenance.

## LUBRICANTS & CLEANERS

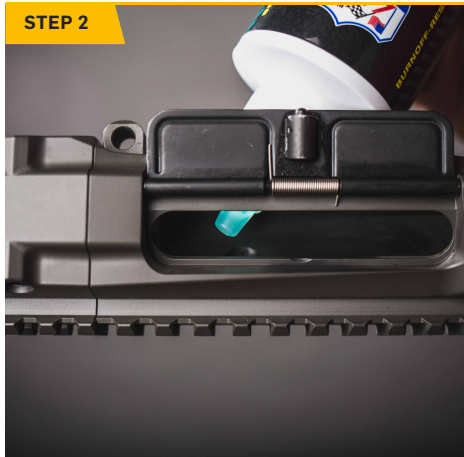
The Radian Model 1 is compatible with all standard U.S. Military and NATO specified small arms lubricants and cleaners. For lubricants, Radian uses Slip 2000 EWL and Carbon Killer in the factory, but numerous CLP-style lubricants and cleaners have been successfully tested. Note that the use of water-based lubricants is not advised, as the water content of the lubricant can actually aid corrosion.

When applying lubricant, use a moderate coat of lubricant on moving parts. A moderate coat should be just visible to the eye. Apply lubricant directly to the part and spread it with a brush, cloth, or finger. The following four steps identify zones to lubricate:

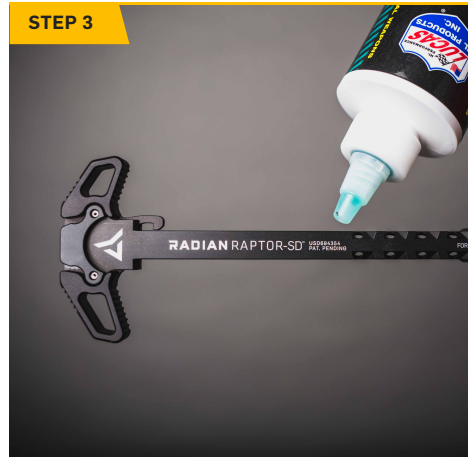


*The bolt carrier body and cam pin, especially along the runners on the bottom of the carrier and the bosses on the rear, should be lubricated. Place two drops of lubrication into the cam pin slot.*

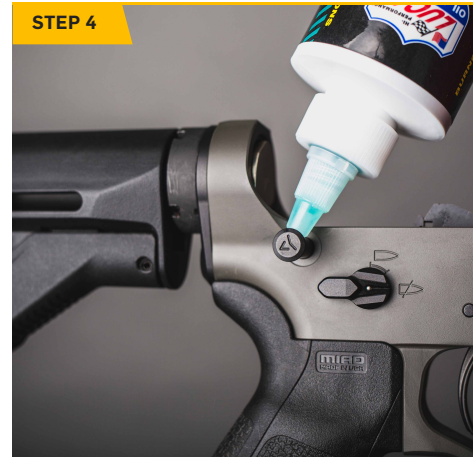




*Place lubricant inside of the upper receiver.*



*Place lubricant on the sides and top of the charging handle.*



*Lubricate the takedown pins.*

## FIELD STRIP

Field Stripping, or Basic Disassembly, is breaking the rifle down to its core components for the purpose of field-expedient maintenance (mainly cleaning and lubrication). Field Stripping can also shed light on the cause of common failures, such as a blocked bore or broken parts. The Field Stripping process requires no special tools. Caution should be taken to ensure that parts are not lost during this process. Please note that rifles should not be broken down beyond the field strip unless in a controlled environment, such as the factory or in a gunsmith's shop. To begin the field strip, clear the rifle per instructions on page 15.



*Clear the rifle per instructions on page 15.  
Most negligent discharges occur during disassembly and  
cleaning operations.*



*Make sure the bolt carrier group is in the forward seated position. From the left-hand side, press in the rear takedown pin. From the right-hand side, pull the rear takedown pin to the right until it stops.*



*Repeat Step 2 for the front pivot pin.*



*Separate the upper and lower receiver groups.*

**FIELD STRIP** – *Continued*

To complete the field strip of the upper receiver assembly, remove the bolt carrier group and charging handle from the upper:



*Pull the charging handle to the rear about half way.*



*Remove the bolt carrier group from the upper receiver.*



*Pull the charging handle fully towards the rear. Remove the charging handle by moving it so that the expanded end of the charging handle passes through the cut-out in the guide track of the upper receiver.*

## BOLT CARRIER GROUP DISASSEMBLY



*With a suitable punch or the tip of a cartridge, push the firing pin retainer in from the **right-side**, then pull it out from the **left-side**. Do not twist the retainer during removal.*

**BOLT CARRIER GROUP DISASSEMBLY** – *Continued*



*Slide the firing pin out through the rear of the carrier.*



*Rotate the cam pin to the side so that it is clear of the gas key. Lift the cam pin out of the bolt carrier group.*



*Remove the bolt from the front of the bolt carrier.*

## RE-ASSEMBLY NOTES

Reassembly of the rifle can be done by reversing the order of the previously mentioned steps. Some specific things to keep in mind during the reassembly process:

***The rifle may chamber a round and fire without the cam pin, which could lead to catastrophic failure of the rifle and serious injury or death.***

## ROUTINE MAINTENANCE

Routine maintenance should be completed after each firing session.

**STEP 1** | Clear the rifle per instructions on Page 15.

**STEP 2** | Field strip the rifle per instructions on Pages 26-30.

**STEP 3** | Clean the bore of the barrel. Using a cleaning rod, push a bore patch soaked with solvent from the chamber end of the barrel to the muzzle end. Remove the bore patch and cleaning rod, then let the barrel sit for several minutes.

**STEP 4** | Using a cleaning rod with a bore brush, take several passes through the bore to break free any buildup.

**STEP 5** | Push a dry bore patch through the bore to remove the residue and solvent. Repeat this step until the patches come through the bore clean.

**STEP 6** | Wipe the bolt carrier, charging handle, interior of upper receiver, buffer and buffer spring with a cloth slightly dampened with cleaning solvent.

**STEP 7** | Scrub the face of the bolt with a nylon brush dipped in cleaning solvent

**STEP 8** | Remove the solvent from the parts with a cloth or rag.

**STEP 9** | Apply a coat of lubricant to the interior of the upper receiver, buffer spring, charging handle, and bolt carrier. Do NOT lubricate the face of the bolt.

**STEP 10** | Apply point lubrication to the cam pin, hammer pin, trigger pin, and charging handle latch.

**STEP 11** | Reassemble the rifle and check to make sure that all moving parts are functioning correctly.



## DETAILED MAINTENANCE

Detailed maintenance should be performed every 1000 rounds.

**STEP 1** | Clear the rifle.

**STEP 2** | Complete the detailed disassembly as described on Pages 26-30.

**STEP 3** | Complete all the routine maintenance as described on the previous Page 33.

**STEP 4** | Scrub the bolt (including the extractor) with a nylon brush dipped in solvent. Wipe away any remaining solvent with a rag or cloth.

**STEP 5** | Scrub the bolt carrier, firing pin, and the interior of the upper receiver with a nylon brush dipped in cleaning solvent.

**STEP 6** | Clean the firing pin hole and firing pin cavity of the bolt with a pipe cleaner.

**STEP 7** | Wipe away any remaining solvent thoroughly with a rag.

**STEP 8** | Apply a moderate coat of lubricant to the cavity in the carrier into which the bolt is installed.

**STEP 9** | Reassemble the rifle and check to make sure that all moving parts are functioning correctly per instructions on Page 32.

**STEP 10** | Apply point lubrication to the cam pin, hammer pin, trigger pin, and charging handle latch.

For more detailed information and instructions about disassembly, reassembly, and maintenance see U.S. Army M16 Technical Manual TM9-1005-249-23P

## **PRODUCT WARRANTY**

Radian warrants that the enclosed rifle was originally manufactured free of defects in material, workmanship and mechanical function. For the lifetime of the firearm, Radian agrees to correct any defect in the firearm by repair, adjustment or replacement, at Radian's option, with the same or comparable quality components (or by replacing the firearm at Radian's option); provided, however, that the firearm is returned unloaded and freight prepaid to Radian.

This limited warranty is null and void if the firearm has been misused, damaged (by accident or otherwise), fired with hand-loaded, reloaded or improper ammunition, fired with an obstruction in the barrel, damaged through failure to provide reasonable and necessary maintenance as described in the manual accompanying the firearm, or if unauthorized repair or any alteration, including of a cosmetic nature, has been performed on the firearm. This limited warranty does not apply to normal wear and tear of any parts.

Subject to the foregoing, this limited warranty confers the right to have the covered firearm or its parts repaired, adjusted or replaced. No implied warranties of any kind are made herein and this warranty does not apply to any accessory items attached to the firearm.

In no event shall Radian be liable for any incidental or consequential damages arising from or in connection with this limited warranty.

**RADIAN**

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