



REC7[®] GEN II



Operator's Manual

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USE OF THIS MANUAL

Before you handle the REC7 GEN II rifle, read this manual in its entirety. It is important that you understand the principles of safe gun handling in general and the unique features of this rifle. This manual is not a substitute for training from a qualified instructor. Important safety topics are discussed in this chapter and throughout this manual. This manual should remain with the rifle and it should be transferred with the rifle to subsequent owners. Additional manuals can be ordered from Barrett Firearms Manufacturing or can be downloaded from the company website.

This manual covers all variants of the REC7 GEN II. Technical specifications are subject to change without notice.

SAFETY GUIDELINES

WARNING

Failure to follow safety guidelines may cause injury or result in death.

Ammunition

The use of faulty, hand loaded, remanufactured, or surplus ammunition may void your warranty.

Be sure to use the correct ammunition and accessories for your particular caliber rifle. For example, do not mistake the 6.8 SPC cartridge for the .223/5.56mm cartridge.

WARNING

Mixing components can result in rifle damage and personal injury.

Headspace

Your rifle was properly headspaced at the factory. Be sure to keep the bolt that came installed in your rifle and do not interchange bolts between rifles.

Safety Distance

Bullets fired from this rifle may travel several miles. Make certain that you have an adequate backstop.

Hearing protection

Hearing loss is permanent. Hearing loss from gunfire is cumulative, but the noise from even one shot may cause permanent loss. Wear both ear plugs and ear muffs. It is also your responsibility to protect the hearing of those around you.

Eye Protection

Eye protection should be worn when both shooting and maintaining your rifle. It is normal for firing to generate air-borne dust and debris. Protect your eyes from solvents and uncaptured parts under spring pressure while performing maintenance on your rifle.

Assume every gun is loaded

Treat every gun as if it were loaded. Look and feel for an empty chamber. Do not trust the extractor to provide an empty chamber.

Beware of barrel obstructions

Ensure the barrel's bore is free of obstructions before you fire your rifle. Even the smallest obstruction such as a stuck patch or even grease will cause increased pressures that can rupture the barrel.

Muzzle control

Always keep the muzzle pointed in a safe direction. Never allow your muzzle to point at anything that you do not intend to shoot.

Keep your finger off the trigger

Keep your finger off the trigger and out of the trigger guard until your sights are aligned on your target and you intend to fire.

Keep your safety on

Keep your safety on until your sights are aligned on your target and you intend to fire.

Identify your target and backstop

Before you pull the trigger, make certain of your target and what is beyond it, around it, and between it and your muzzle. The rifle should never be fired at surfaces where bullets are likely to ricochet in unpredictable directions.

Failure to fire

If your rifle fails to fire when you pull the trigger, do not retract the charging handle to open the action. Keep the rifle pointed toward a safe area and wait. If a hang fire (slow ignition) has occurred, the round may still fire. If the round does not fire, remove and inspect the cartridge. If the primer is indented properly, discard the round in a safe manner.

Maintain your rifle properly

Performing proper maintenance, as outlined in this manual, ensures that your rifle will be safe to shoot and will perform to design specification for many years. Alterations, modifications or adjustments may damage your rifle, make it unsafe to fire and may void warranty claims.

Store your rifle safely

Even though your rifle represents a significant financial investment, the greatest value in keeping it secured is preventing it from falling into the hands of a child, a careless adult, or a thief. It is your responsibility to take every reasonable precaution to secure your rifle.

Alcohol, medications and drugs

Do not handle or operate your rifle under the influence of alcohol, medication or drugs.

WARRANTY AND SERVICE

Barrett Firearms Manufacturing Inc. (BFMI), warrants that this firearm was manufactured free of defects in materials and workmanship. For one year from the date of purchase by the original owner, BFMI agrees to correct any defect in this firearm for the original purchaser by repair or replacement with the same or comparable model.

BFMI will not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm or from its function when used for purposes or subjected to treatment for which it was not designed. BFMI will not honor claims involving this firearm which result from careless or improper handling, unauthorized adjustment or parts replacement, corrosion, neglect, the use of the wrong caliber ammunition, or the use of other than commercially manufactured ammunition in good condition, or any combination thereof.

If you need factory service, whether made under warranty or not, please contact BFMI for instructions on how to have your firearm repaired.

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Your Responsibility

Your Barrett firearm is engineered and manufactured to the highest standards. It was carefully inspected before it was packaged and shipped from our factory. Its safe use depends on you alone. You are the ultimate safety device. Much like other mechanical devices, such as a power tools, gas-powered lawn equipment, and automobiles, your firearm is safe unless handled in an irresponsible or uneducated manner.

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SPECIFICATIONS

MODEL	BARRETT REC7
CALIBER	6.8mm x 43mm SPC or 5.56mm x 45mm NATO
BARREL LENGTH	9.25 (SBR) or 16 inches (Standard)
OVERALL LENGTH (STOCK COLLAPSED)	33.25 inches (Standard) 25.875 inches (SBR)
OVERALL LENGTH (STOCK EXTENDED)	36.7 inches (Standard) 29.2 inches (SBR)
WEIGHT (WITHOUT MAGAZINE)	7.2 pounds (Standard) 5.95 pounds (SBR)
TWIST RATE	6.8mm 1/10, RH 5.56mm 1/7, RH
NOMINAL MUZZLE VELOCITY	2550 ft/sec w/ 6.8mm 3050 ft/sec w/ 5.56mm
SAFETY	Manual, thumb lever
ACCESSORY RAIL	Parallel with bore, Mil-Std 1913
GAS PLUG	2-Position, Unsuppressed & Suppressed



Figure 1, REC7 Rifle fully assembled with magazine inserted.

CONTENTS

Your REC7 rifle system includes the following:

1. REC7 Rifle
2. Two magazines – Barrett 30rd 6.8mm steel magazines *or* Magpul 30rd 5.56mm polymer magazines
3. Operator's Manual
4. Barrett soft case
5. One accessory KeyMod 5-slot polymer rail section

The rifle is shipped from the factory fully assembled.

FUNCTIONS AND FEATURES

- The REC7 is a lightweight, magazine-fed, air cooled rifle with a rotating bolt actuated by a short-stroke gas-piston.
- User-selected accessories may be mounted on Mil-Std 1913 top rail.
- Side and bottom areas of the Barrett handguard offers several positions for mounting KeyMod rail sections.
- The chamber and bore of the barrel are chrome plated, as is the bore of the gas block.
- The gas block houses the gas plug and offers additional mounting space for the front sight.
- The gas plug offers 2 positions - U = Unsuppressed (Figure 2-1), S = Suppressed (Figure 2-2) (for when a suppressor is mounted). Operating the REC7 without a suppressor with the gas plug in the suppressed position may adversely affect reliability. Conversely, operating the REC7 with a suppressor with the gas plug in the unsuppressed position may cause unnecessary wear from over speeding the action.

- Standard suppressor mounts attach via the muzzle threads (1/2-28" on 5.56mm and 5/8-24" on 6.8mm) under the muzzle device.



Figure 2-1, Unsuppressed



Figure 2-2, Suppressed

BREAK-IN PROCEDURE

Due to the qualities of chrome-lined barrels, Barrett does not offer a specific procedure for barrel break-in other than checking for obstructions and using your new rifle.

Barrett does recognize that a clean barrel shoots better. Barrett also recommends that you do not overheat your barrel, especially your new barrel.

Experience has shown that the bore becomes less prone to fouling over time and that accuracy may improve with use.

Simply ensure that the rifle is adequately lubricated and follow the loading/unloading and safety procedures when operating your rifle.

LOADING

WARNING

Point muzzle in a safe direction.

1. Insert a loaded magazine fully into the magazine well. Insert the magazine until the magazine catch engages and holds the magazine. Tap the magazine upward to ensure the magazine is fully seated. (Figure 3).



Figure 3

2. Before pulling the charging handle, disengage the charging handle lever with index finger on left side of handle. Pull charging handle back with index and middle fingers. Once the charging handle is in the rear most position, release handle with both fingers and let the handle pull forward without any assist. This will ensure the full force of the buffer spring is utilized to chamber the first round. (Figure 4).



Figure 4

3. Place safety selector switch to SAFE position until ready to operate. (Figure 5).



Figure 5

Note

The hammer must be cocked in order for the selector to be placed on "SAFE".

FIRING

Move the selector switch to FIRE to enable trigger movement to fire. (Figure 6).



Figure 6

UNLOADING AND CLEARING

1. Place the selector switch on SAFE. (Figure 7).



Figure 7

2. Remove the magazine by depressing the magazine catch button and allowing it to fall free. (Figure 8).



Figure 8

Note

The magazine should drop from the magazine well under its own weight, but do not rely on that. Always use caution.

3. To lock the bolt open, pull the charging handle rearward to hold the bolt carrier to the rear. (Figure 9). While holding the charging handle rearward, depress the bottom of the bolt catch. (Figure 10). Release tension on the charging handle and ensure the bolt is held open. Push the charging handle forward until it latches. (Figure 11).



Figure 9



Figure 10



Figure 11

4. Use caution and visually and physically inspect the chamber to ensure that it is empty (Figure 12).

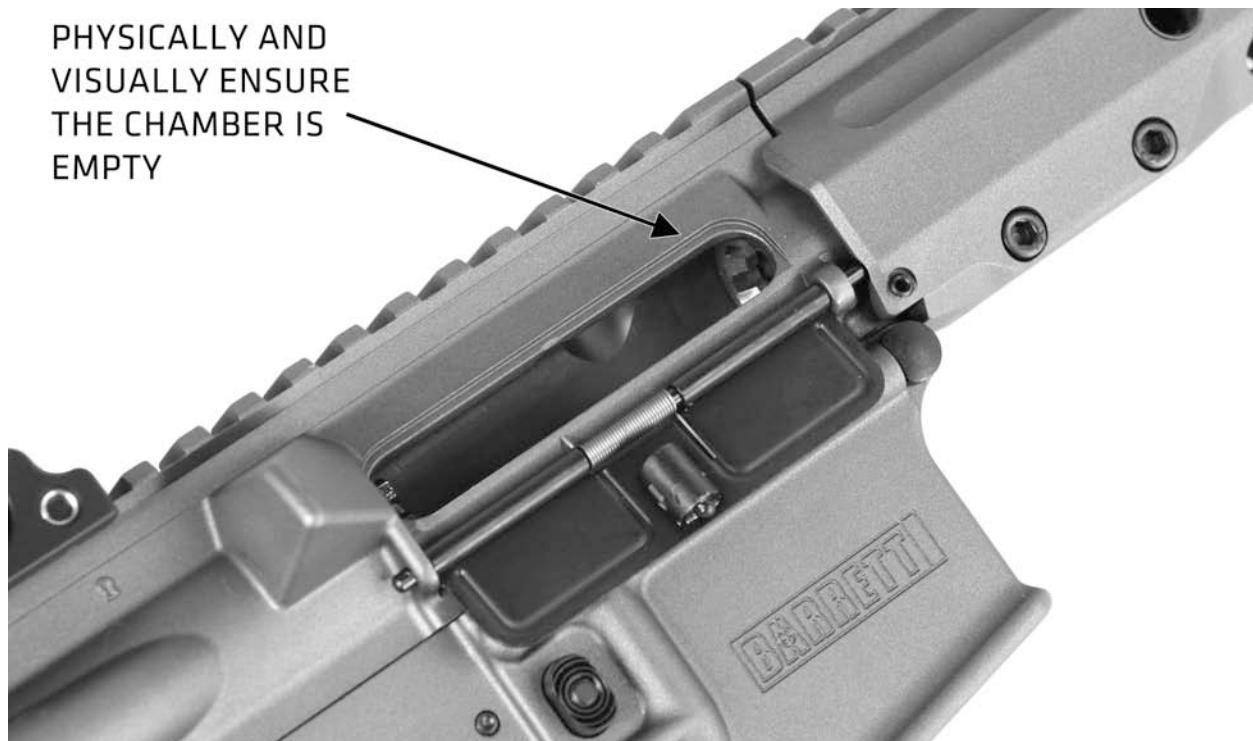


Figure 12

5. Place the selector switch on SAFE (Figure 13). Press the upper portion of the bolt catch to allow the bolt assembly to close. Repeat steps 3-5 to ensure rifle is unloaded and cleared.



Figure 13

DISASSEMBLY AND ASSEMBLY

This rifle detaches into two primary assemblies:

1. The upper assembly (Figure 14-1).



Figure 14-1

2. The lower assembly (Figure 14-2).



Figure 14-2

SEPARATING THE UPPER AND LOWER ASSEMBLIES

1. Ensure rifle is unloaded and clear by following the steps in the previous section. With the safety on and bolt closed (Figure 15), push the takedown pin (rearward most pin) until it clears its detent then pull it until it stops. Push the pivot pin (forward most pin) until it clears its detent then pull it until it stops. Separate the upper and lower receivers.



Figure 15

DISASSEMBLY OF UPPER RECEIVER COMPONENTS

1. On a work surface, turn the upper receiver upside down. Pull back the charging handle and withdraw the bolt carrier assembly. (Figure 16-1).



Figure 16-1

2. Next, lift the charging handle out of its track and remove it. (Figure 16-2).

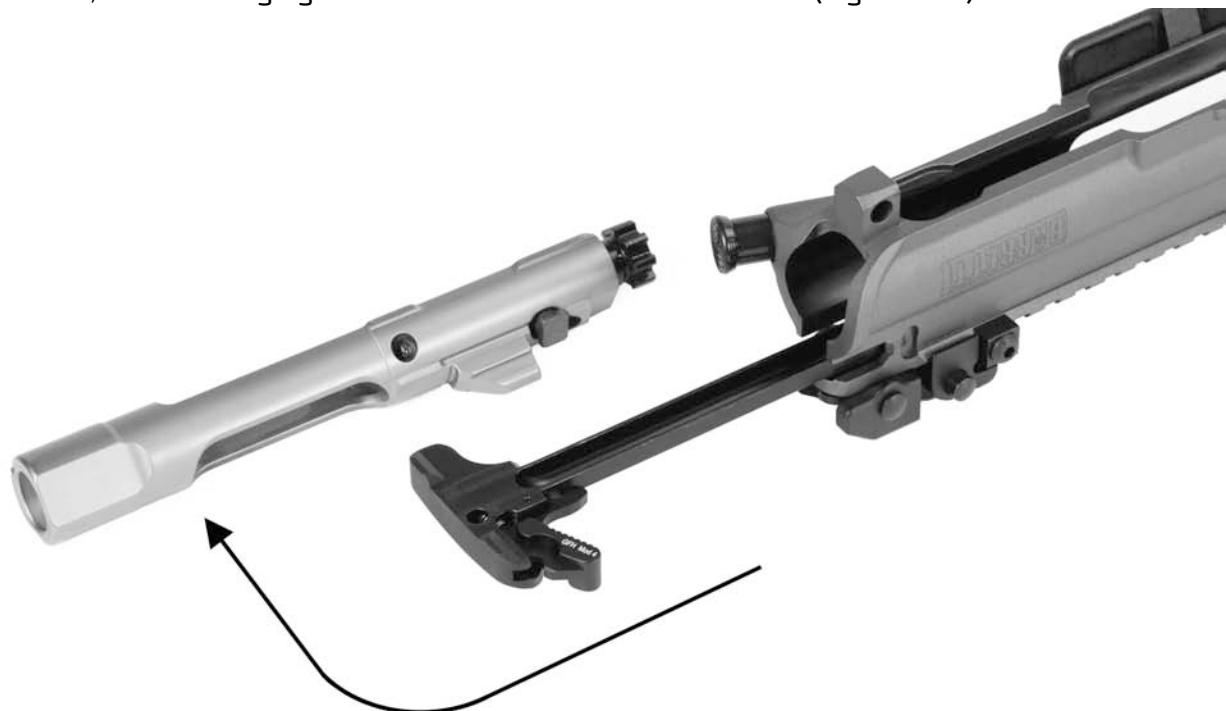


Figure 16-2

DISASSEMBLY OF THE BOLT CARRIER

1. Remove the firing pin retaining pin by pushing it through until it can be gripped and pulled out. Remove the firing pin by sliding it out of the rear of the bolt assembly. Remove the cam pin by lifting up. Pull the bolt assembly from the bolt carrier. (Figure 17-1).

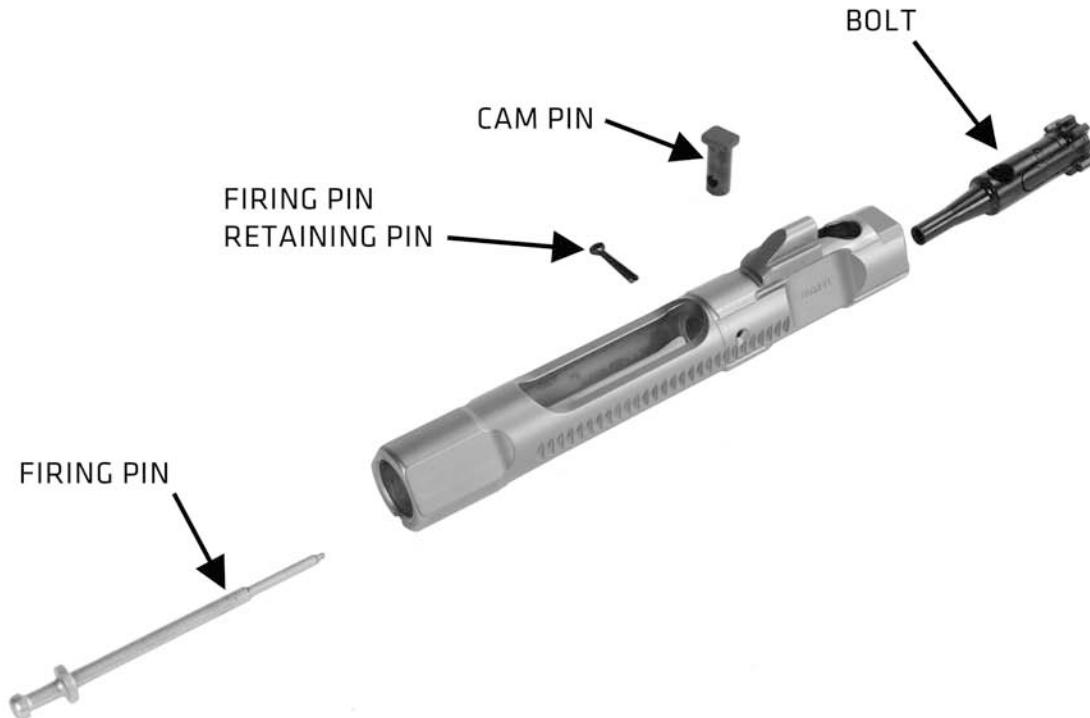


Figure 17-1 Bolt Carrier Assembly

BOLT DISASSEMBLY

Note

Disassembly of the extractor spring and insert from the extractor assembly is not required for regular cleaning and is not recommended. Disassemble only when excessively dirt prevents normal operation or parts are damaged.

1. Use a pin punch (or firing pin) to remove the extractor pin. Applying pressure to extractor will aid in removal of extractor pin. Be aware that the extractor spring and extractor are under compression.
2. Carefully remove the extractor assembly. (Figure 17-2).
3. Further disassembly of the bolt is not necessary for field maintenance.

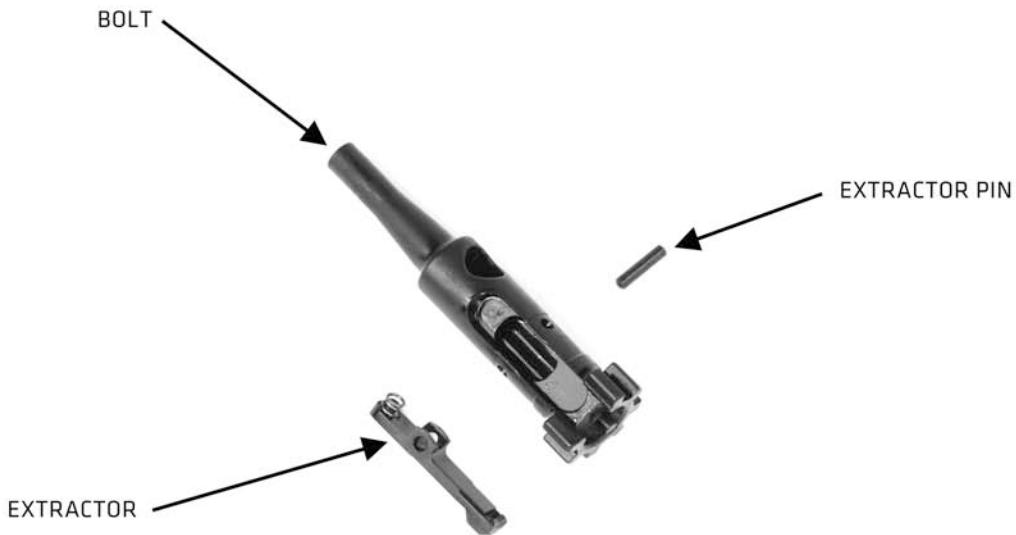


Figure 17-2

DISASSEMBLY OF PISTON SYSTEM

Note

Disassemble the spring from the gas piston only when excessively dirty or damaged.

4. Note the orientation of the gas plug before disassembly. Reinstallation of the gas plug for Unsuppressed operation requires that the gas plug be rotated to the second detent position.
5. Depress gas plug detent pin against spring pressure and rotate the gas plug until the plug notch aligns with gas block shoulder. (Figure 18-1) Note that carbon buildup may cause sticking of the gas plug. Working the gas plug back and forth with the detent pin depressed against spring pressure will allow the gas plug to be removed.

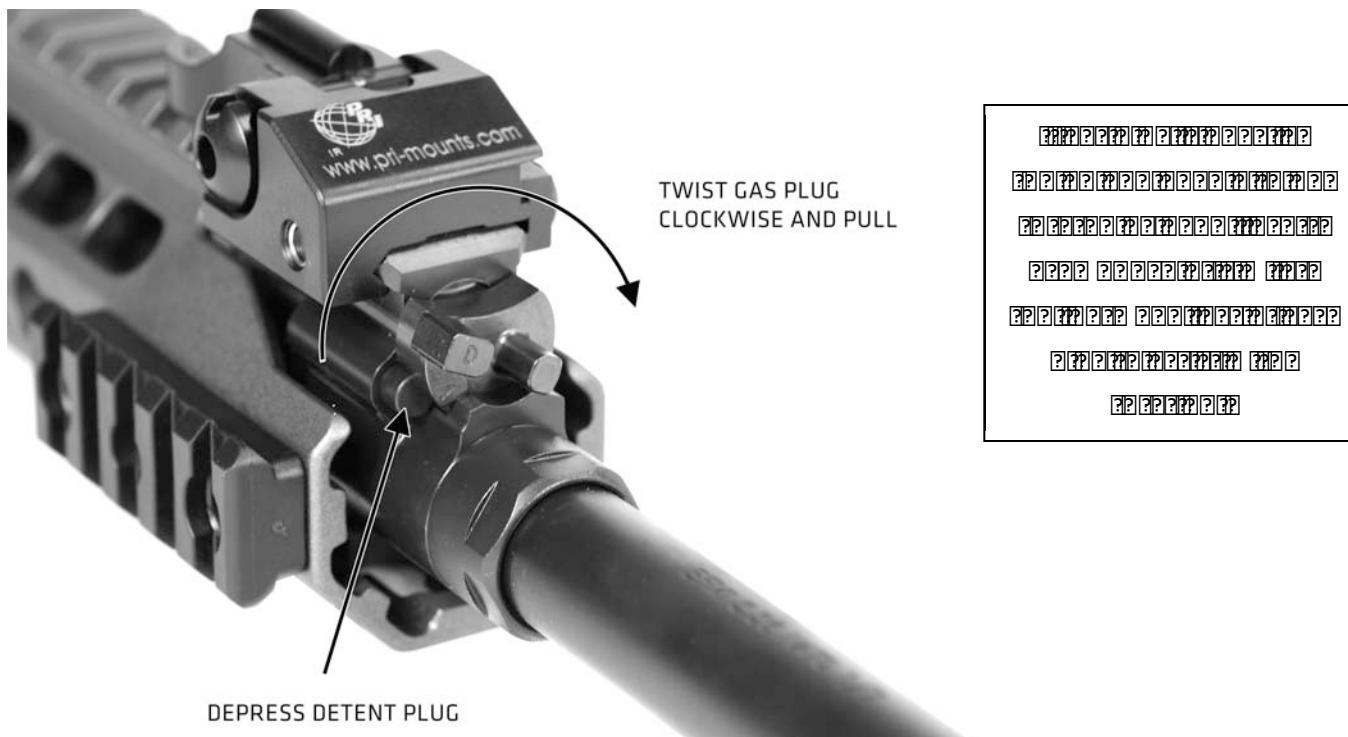


Figure 18-1

- The gas plug and piston are now free to be removed. Remove gas plug from gas block and tilt gun muzzle down. (Figure 18-2). Gas piston should fall free through front of the gas block. (Figure 18-3).

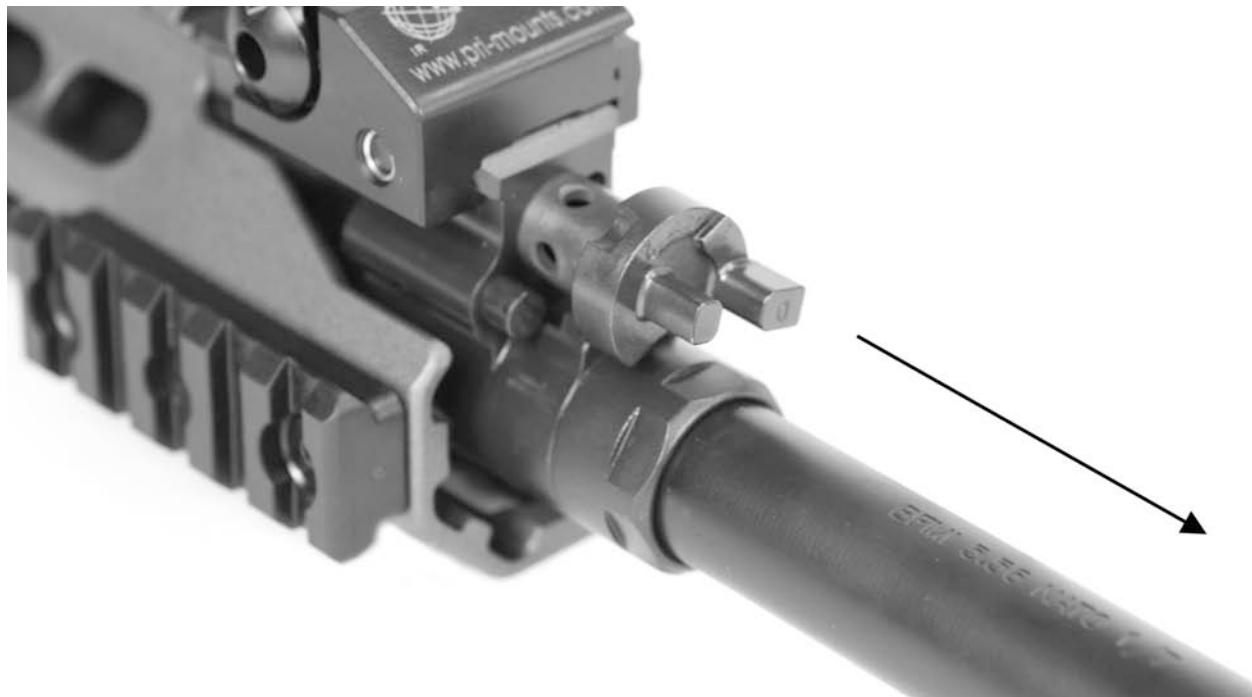


Figure 18-2



Figure 18-3

DISASSEMBLY OF LOWER RECEIVER

Caution

The disassembly of trigger components should be accomplished by a qualified armorer.

Caution

The buffer retainer is under strong spring pressure. If not properly retained, it can be launched from its tube and cause injury.

Note

Do not pull trigger while lower is disassembled from the upper. The hammer will strike the receiver and may damage or break the receiver and/or bolt catch.

1. The buffer retainer and the buffer must be held simultaneously in order to remove the buffer and spring assembly safely. (Figure 19-1). Push on the buffer face with finger pressure while holding the retainer down with a suitable tool. Carefully remove the buffer and spring assembly. (Figure 19-2).

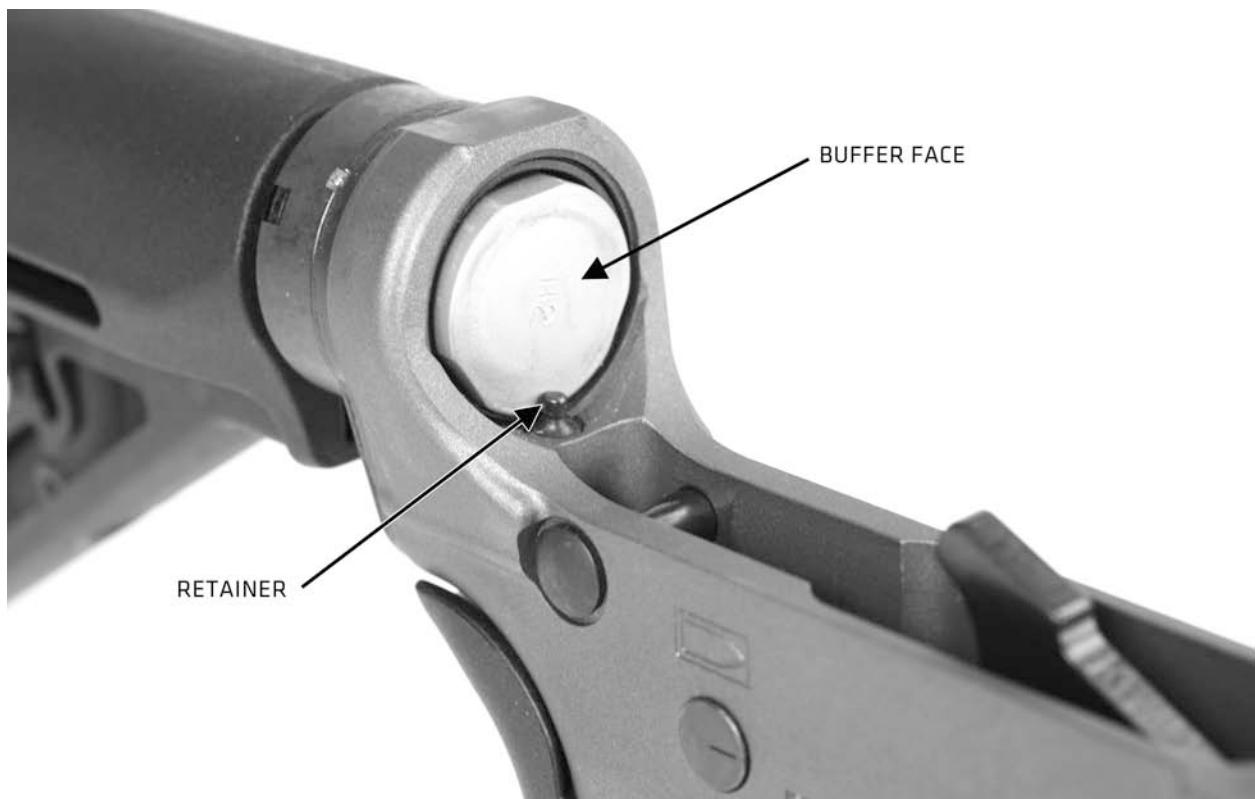


Figure 19-1



Figure 19-2

CLEANING AND LUBRICATION

WARNING

Unload and clear the rifle before cleaning.

Caution

Do not insert cleaning rods through muzzle. The barrel crown could be damaged which would severely degrade the accuracy of the rifle.

Caution

Eye protection is recommended while cleaning.

Cleaning procedure

1. The rifle should be cleaned and lubricated after each shooting session. Regular cleaning prevents the corrosive effects of moisture.
2. Apply cleaning solvent to a chamber brush and clean the chamber. Barrett Heavy Bore Cleaner is recommended.
3. Apply cleaning solvent to a bore brush and clean the bore. Barrett Heavy Bore Cleaner is recommended. Clean bore from the chamber end of barrel to prevent damage to the muzzle.
4. Clean the muzzle device with a stiff plastic brush and bore solvent. It is best to clean the flash hider at the same time the barrel is being cleaned as the bore solvent will help loosen carbon build-up on its interior walls.
5. Clean the bolt face with bore solvent. Use a stiff plastic brush to remove carbon from both the extractor and the ejector. Depress the ejector and extractor by hand to test their smooth function.
6. Use dry patches as necessary to remove cleaner from the bore and chamber.
7. Clean the remainder of the rifle with cotton-tipped swabs, general purpose brushes and cleaning cloths.
8. Do not add lubricant to the inside of the gas cylinder or piston head, or to the interior of the magazine.
9. A light coating of anti-seize to the gas plug will allow easier removal under adverse conditions or extreme usage, but is not necessary under normal operating conditions.

ADVERSE OPERATING CONDITIONS

Unusual conditions are defined as any condition requiring special maintenance. Perform maintenance outlined for the climate similar to your operational area.

Extreme Cold: When operating rifle in extremely cold temperatures, clean and lubricate the rifle at room temperature if possible. Apply a light coat of temperature appropriate lubricant to all functional parts. To prevent freezing, keep rifle covered when moving from a warm to cold area. This will allow gradual cooling. Keep rifle dry. Keep ammunition dry as frozen ammo can cause malfunctions. Do not lubricate ammunition. Always keep bore free of snow and other obstructions. If snow gets into the bore, clean the bore before firing using a clean patch and cleaning rod.

Dust or Sand: Dust and sand can cause malfunctions and excessive wear. Keep rifle covered when possible. Clean dust and sand before using.

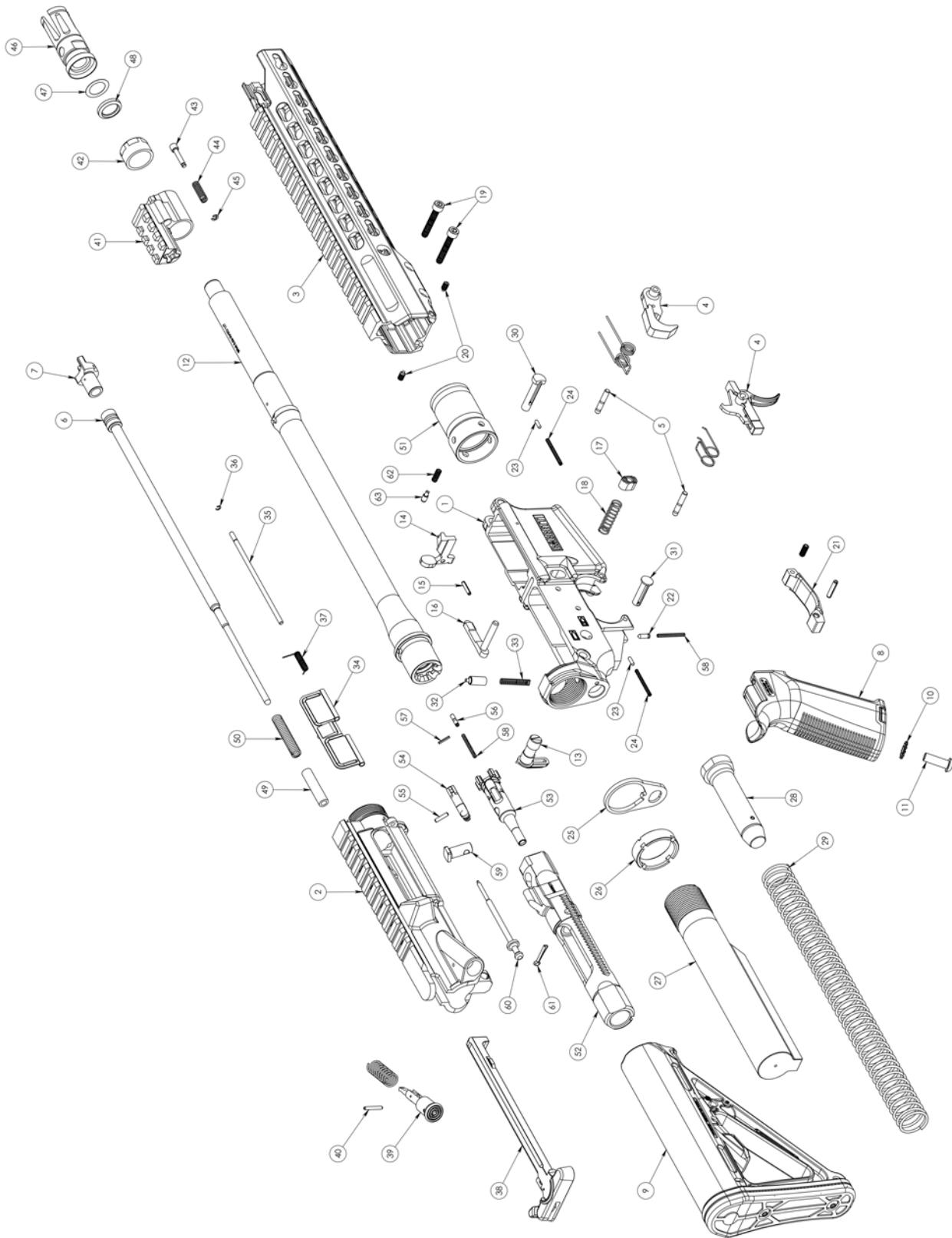
Heavy Rain and Fording Operations: Perform maintenance in accordance with normal cleaning procedures and apply thin coat of lubricant. Do not lubricate ammunition. Always drain any water from barrel prior to firing. Dry the bore with clean patch and cleaning rod.

Hot, Wet Climate: Perform maintenance more frequently. Inspect hidden surfaces for corrosion. Clean and lubricate if corrosion is found. To prevent external corrosion, remove handprints with oily cloth. Dry completely then lubricate rifle. Never store rifle in a wet carrying case.

TROUBLESHOOTING

MALFUNCTION	CAUSE	CORRECTIVE ACTION
1. Failure to feed	1. Did not draw bolt carrier fully to rear 2. Magazine not seated 3. Damaged magazine 4. Improper shooter position	1. Retract bolt carrier fully to the rear. 2. Seat magazine 3. Replace or repair magazine 4. Firmly shoulder the butt stock. 5. Clean and lubricate
2. Failure to chamber	1. Damaged cartridge 2. Dirty or obstructed chamber	1. Remove and replace cartridge 2. Clean chamber
3. Failure to lock or unlock	1. Obstruction between firing pin and bolt.	1. Disassemble and clear obstruction.
4. Failure to fire	1. Faulty ammunition. Primers dented in center of sufficient depth to fire 2. Obstructed firing pin 3. Hammer 4. Bolt not fully in battery 5. Gas plug in wrong position.	1. Replace ammunition 2. Disassemble and clear obstruction 3. Replace hammer or hammer spring 4. Push charge handle fully forward and/or forward assist. 5. Place gas plug in correct position.
5. Failure to extract	1. Broken or worn extractor 2. Broken or worn extractor spring 3. Extractor not moving freely 4. Dirty ammunition or chamber 5. Broken case rim	1. Replace extractor 2. Replace extractor spring 3. Clean extractor, extractor spring, and recess 4. Clean chamber and insure ammunition is clean 5. Clear chamber
6. Failure to eject	1. Broken or worn ejector 2. Broken or worn ejector spring 3. Ejector not moving freely	1. Replace ejector 2. Replace ejector spring 3. Clean ejector, ejector spring, and recess
7. Very hard recoil	1. Faulty or hot ammunition 2. Improper shooter position	1. Replace faulty ammunition; cool if hot 2. Firmly shoulder the buttstock

EXPLODED VIEW



PARTS LIST

ITEM NO.	DESCRIPTION
1	LOWER RECEIVER
2	REC7 UPPER RECEIVER
3	HANDGUARD, GEN2
4	TRIGGER W/ SPRING
4	HAMMER W/ SPRING
5	PINS, HAMMER & TRIGGER
6	PISTON, REC7
7	GAS PLUG, 2 POSITION
8	PISTOL GRIP
9	BUTTSTOCK
10	LOCK WASHER, PISTOL GRIP SCREW
11	PISTOL GRIP SCREW, HEX DRIVE
12	BARREL, REC7 GEN2
13	SAFETY SELECTOR
14	BOLT CATCH
15	PIN, BOLT CATCH
16	MAGAZINE CATCH
17	BUTTON, MAGAZINE RELEASE
18	SPRING, MAGAZINE CATCH
19	CROSS BOLTS, HANDGUARD
20	SET SCREW, #8-32, BRASS TIP
21	TRIGGER GUARD
22	SAFETY DETENT
23	TAKEDOWN DETENT
24	SPRING, TAKEDOWN DETENT
25	END PLATE, RECEIVER EXTENSION
26	NUT, RECEIVER EXTENSION
27	RECEIVER EXTENSION
28	BUFFER ASSY
29	SPRING, BUFFER
30	PIN, FRONT PIVOT/TAKEDOWN
31	PIN, REAR TAKEDOWN
32	BUFFER RETAINER
33	SPRING, BUFFER RETAINER
34	EJECTION PORT COVER
35	PIN, HINGE, EJECTION PORT COVER
36	CLIP, HINGE PIN
37	SPRING, EJECTION PORT COVER
38	CHARGING HANDLE
39	FORWARD ASSIST ASSY. W/ SPRING
40	PIN, FORWARD ASSIST RETENTION

ITEM NO.	DESCRIPTION
40	PIN, FORWARD ASSIST RETENTION
41	REC7 GEN2 GAS BLOCK
42	REC7 GEN2 GAS BLOCK NUT
43	PIN, GAS PLUG DETENT
44	SPRING, DETENT PIN
45	CLIP, GAS PLUG DETENT
46	MUZZLE DEVICE
47	SHIM (IF REQUIRED)
48	CRUSH WASHER
49	PISTON BUSHING
50	SPRING, GAS PISTON RETURN
51	BARREL NUT
52	REC7 BOLT CARRIER
53	BOLT, REC7 EXTREME
54	EXTRACTOR W/ SPRING, DAMPER
55	PIN, EXTRACTOR
56	EJECTOR
57	PIN, EJECTOR
58	SPRING, EJECTOR & SAFETY DETENT
59	CAM PIN
60	FIRING PIN
61	PIN, FIRING PIN RETAINING
62	SPRING, BOLT CATCH
63	BOLT CATCH PLUNGER