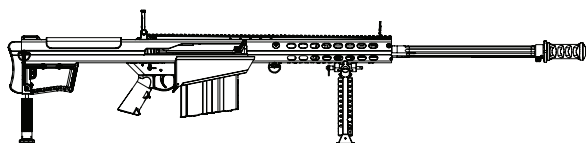


MANUAL



# **M107A1**

## **OPERATOR'S MANUAL**

READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL CAREFULLY BEFORE OPERATING THIS FIREARM; DO NOT DISCARD THIS MANUAL.



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## MANUFACTURER'S DISCLAIMER

Barrett Firearms Manufacturing Inc. (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.

## WARRANTY AND SERVICE

For one year from date of purchase, or per contract requirements, Barrett Firearms Manufacturing Inc. (BFMI), warrants to the original owner, that this product was manufactured free of defects in materials and workmanship. BFMI will correct any defect covered under the warranty 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 product 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. Please visit **barrett.net** for any additional information.

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

**Barrett Firearms Manufacturing Inc.**  
**P.O. Box 1077**  
**Murfreesboro, TN 37133-1077**  
**615-896-2938**

## USE OF THIS MANUAL

Read this manual before you handle your Barrett product. It is important that you understand the principles of safe firearm handling in general and the 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, **barrett.net**. Technical specifications are subject to change without notice. Please ensure you have the most updated revision of this manual by checking **barrett.net**.

## SAFETY GUIDELINES

### WARNING

**FAILURE TO FOLLOW SAFETY GUIDELINES MAY CAUSE  
INJURY OR DEATH**

### 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. Upon firing the muzzle brake (if applicable) releases high-pressure gas from its side ports that can damage objects or cause injuries, keep everything away from the vicinity of the muzzle brake.

### 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.

### ASSUME EVERY FIREARM IS LOADED

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

### SAFETY DISTANCE

Bullets fired from this rifle may travel as far as 4 miles. Make certain that you have an adequate backstop.

### KEEP YOUR SAFETY ON

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

## **HEARING PROTECTION**

Always wear adequate hearing protection when the rifle is firing; wear both earplugs and shooting muffs together for maximum protection. This includes observers. Observers should always be behind the shooter.

## **EYE PROTECTION**

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

## **AMMUNITION**

Do not use hand loaded, re-manufactured, or surplus ammunition. Always use new, clean, dry, properly stored, and correct caliber ammunition from reputable manufacturers.

## **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.

## **FAILURE TO FIRE**

If your rifle fails to fire when you pull the trigger, do not open the action. Keep the rifle pointed toward a safe area and wait 2 minutes. If a hang-fire (slow ignition) has occurred, the round will probably fire within two minutes. If the round does not fire, remove and inspect the cartridge. If the primer is indented properly, discard it in a safe manner.

## **MAINTAIN YOUR RIFLE PROPERLY**

Performing proper maintenance, as outlined in this manual, insures 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 will void warranty claims.

## **STORE YOUR RIFLE SAFELY**

It is your responsibility to take reasonable precaution to secure your rifle, keep it properly secured and prevent unauthorized use.

## **ALCOHOL, MEDICATIONS AND DRUGS**

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

## LEAD EXPOSURE

Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result to exposure to lead and other substances. Maintain adequate ventilation at all times. Thoroughly wash hands after exposure.

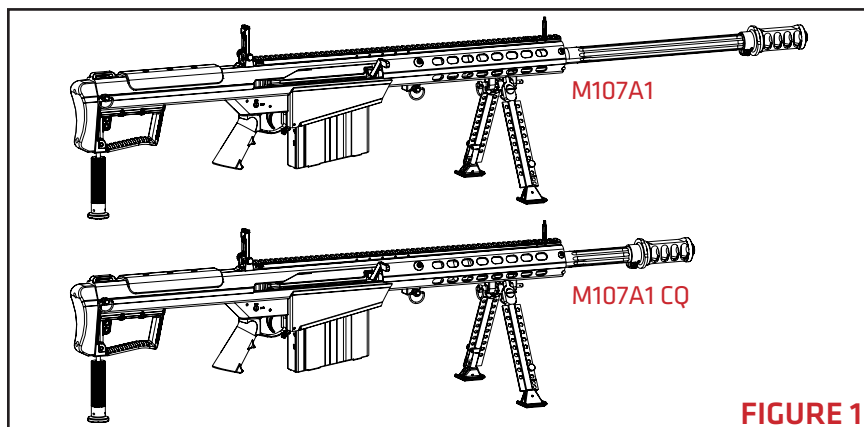
### **⚠ WARNING**

**THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS, INCLUDING LEAD, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION GO TO [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**

## DESCRIPTION OF THE FIREARM

The M107A1 is a semi-automatic, recoil operated rifle chambered in .50 BMG (**FIGURE 1**). The rifle is fed from a 10 round detachable magazine. With its low felt recoil and self-loading action, the M107A1 offers rapid, accurate fire power. The muzzle brake, dual barrel springs and long mainspring design make the rifle comfortable to shoot.

The M107A1 has been upgraded with cutting-edge materials and technology to further increase performance. An upgraded bolt, bolt carrier, and hydraulic buffer allow the rifle to operate more reliably while suppressed or in extreme conditions. Other upgrades, such as the barrel extension, rear hand grip and ejector improve the operation, durability and overall function of the rifle system.



**FIGURE 1**

SPECIFICATIONS

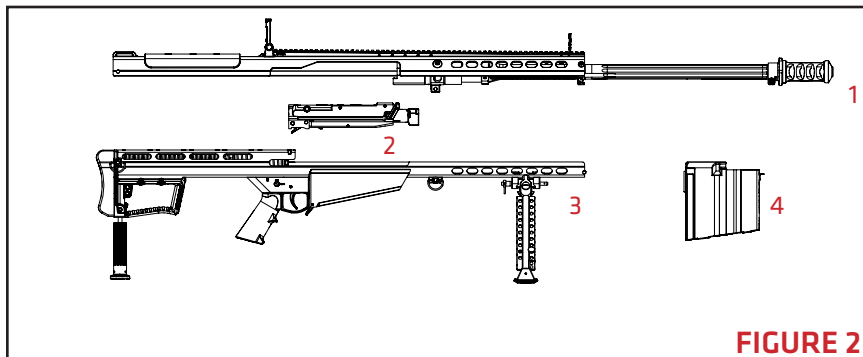
MODEL	M107A1/M107A1-S	M107A1 CQ/M107A1 CQ-S
Caliber	.50 BMG (12.7 x 99 mm)	.50 BMG (12.7 x 99 mm)
Operation	Semi-Automatic	Semi-Automatic
Weight	27.55 lbs (12.50 kg) / 29.84 lbs (13.54 kg)	26.26 lbs (11.91 kg) / 28.55 lbs (12.95 kg)
Overall Length (Assembled)	56.8 in (1443 mm)	48.4" (1229 mm)
Length (Takedown Mode)	37.75 in (959 mm) Lower 41.38 in (1051 mm) Upper	37.75 in (959 mm) Lower 41.38 in (1051 mm) Upper
Barrel Length	29 in (737 mm)	20.6 in (523 mm)
Barrel Twist	1:15 in (381 mm)	1:15 in (381 mm)
Magazine Capacity	10 rounds	10 rounds
Stock	Integral with lower receiver - steel	Integral with lower receiver - steel
Safety	Manual thumb-lever	Manual thumb-lever
Sights	Fixed front, Adjustable rear sights	Fixed front, Adjustable rear sights
Muzzle Velocity (Standard 660 grains (42.8 g) Projectile)	2750 f/s (853 m/s)	2500 f/s (762 m/s)

**NOTE: INDIVIDUAL RIFLE SPECIFICATIONS AND WEIGHT  
MAY VARY PER ORDER AND CONFIGURATION.**

Barrett reserves the right to change specifications without notification.

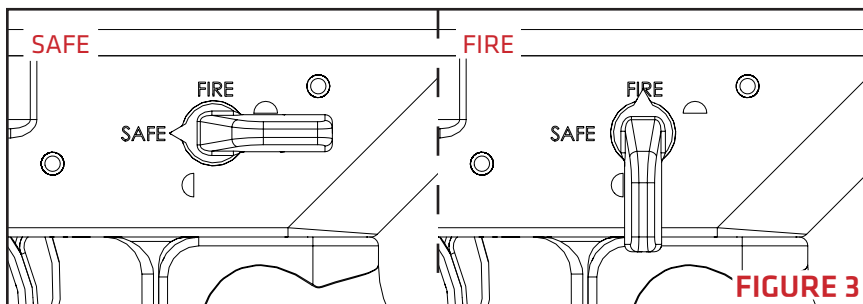
## MAJOR COMPONENTS - FIGURE 2

1. Upper receiver
2. Bolt carrier group
3. Lower receiver
4. Magazine



## SAFETY MECHANISM

The safety mechanism is located above the grip on the left side of the lower receiver. To place the rifle in the safe mode, push the safety lever selector to the **SAFE** position. To place it in the fire mode, push the safety lever to the **FIRE** position. (**FIGURE 3**)

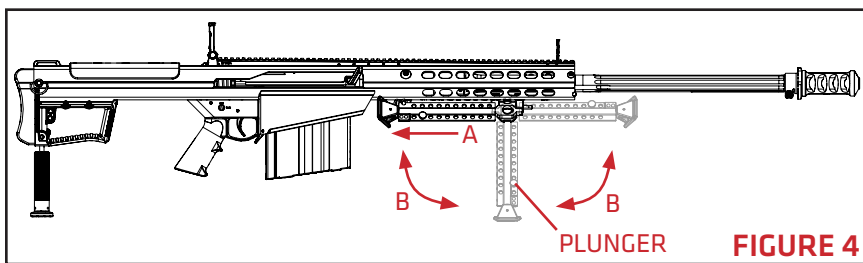


## BIPOD OPERATION

The bipod assembly is used to fire from the prone position and assist in operator manipulation of the firearm.

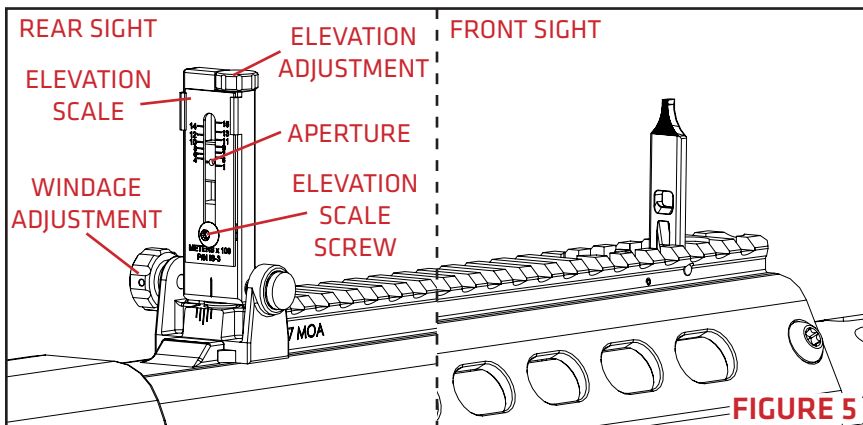
To reposition the bipod legs, pull each bipod leg away from the yoke (**FIGURE 4-A**) and rotate to the desired position (**FIGURE 4-B**). The bipod leg will lock into place (forward, rearward, and 90 degrees from the receiver). The bipod legs of the M107A1 extend to increase height.

Pulling on the feet of the bipod causes the legs to extend. To retract a leg, depress the plunger located on the bipod leg and push on the foot (**FIGURE 4**).



## SIGHTS

This section provides information on how to make sight corrections to zero the M107A1 iron sights and make elevation/windage adjustments. Only the rear sight is adjustable for elevation and windage (**FIGURE 5**).



## ZEROING PROCEDURE

Using a bore collimator or laser bore sight, project to a 100 meter distance. Rotate the elevation adjustment knob on the rear sight to vertically adjust the aperture to be aligned with the collimator/laser. Loosen the elevation scale screw (**FIGURE 5**) and adjust the scale to align the 100 meter mark with the aperture. Tighten the elevation scale screw then fire a test group to confirm zero. If needed, make small additional adjustments to the elevation knob until zeroed at 100 meters.

### WARNING

**ENSURE COLLIMATOR OR LASER BORE SIGHT IS REMOVED BEFORE FIRING RIFLE.**

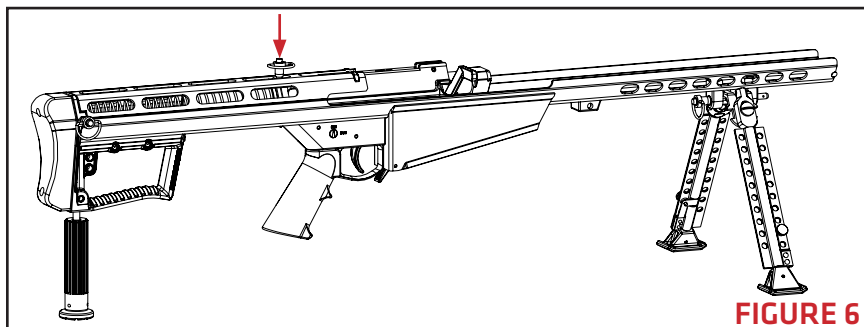
## ELEVATION/WINDAGE CORRECTION

With the M107A1 iron sights zeroed, the rear sight can be used for quick elevation and windage adjustments. Elevation adjustments are performed made by rotating the elevation screw on the top of the rear sight body. Windage adjustments are performed by rotating the windage knob on the left side of the rear sight (**FIGURE 5**). When rotating the adjustment knobs clicks can be heard and felt. The table displays the POI shift at specific distances for each windage adjustment click.

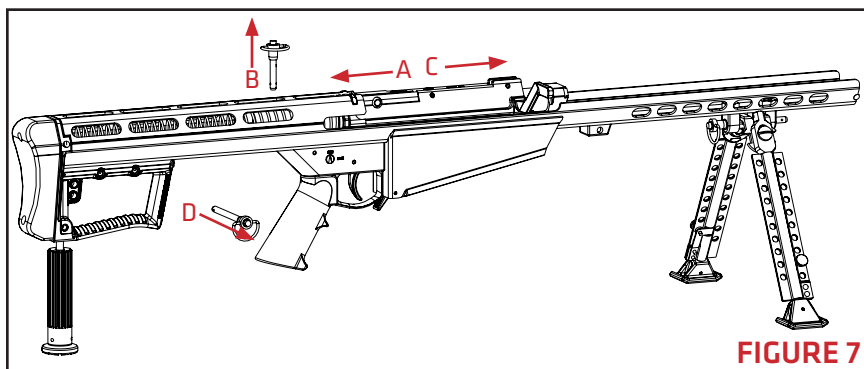
ONE <u>CLICK</u> MOVES POINT OF IMPACT LEFT OR RIGHT		
Range	Centimeters	Inches
100 meters	1.47	0.58
200 meters	2.97	1.17
300 meters	4.44	1.75
400 meters	5.92	2.33
500 meters	7.39	2.91
600 meters	8.89	3.5
700 meters	10.36	4.08
800 meters	11.84	4.66
900 meters	13.31	5.24
1000 meters	14.8	5.83

## ASSEMBLY OF MAJOR COMPONENTS

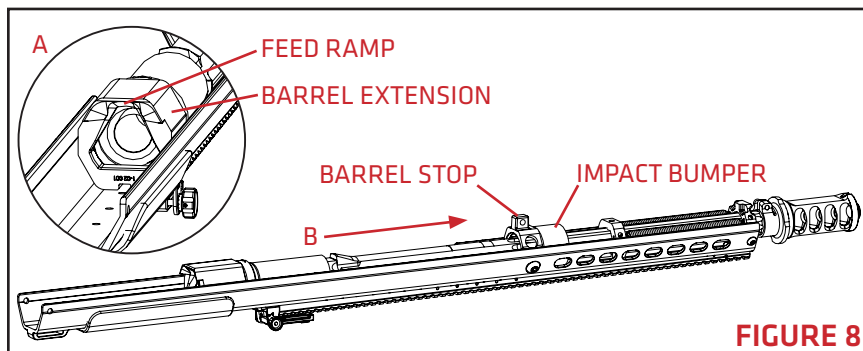
1. Extend the bipod legs on the lower receiver and place the lower receiver on a level surface (**FIGURE 4**).
2. The bolt carrier group is held in place under tension in the lower receiver by the midlock pin, which extends through a vent hole in the lower receiver and into the bolt carrier (**FIGURE 6**). (Both the midlock pin and the rear lock pin, located in a retaining hole in the end of the lower receiver, have finger rings to aid in removal.)

**FIGURE 6**

3. Standing above and to the rear of the lower receiver, grasp the charging handle with the right hand, and carefully pull back (**FIGURE 7-A**), against tension, while withdrawing the midlock pin from its retaining hole (**FIGURE 7-B**). The button on the midlock pin must be pressed for it to be removed. Allow the bolt carrier to come forward SLOWLY until there is no more spring tension and it rests in the lower receiver (**FIGURE 7-C**). Remove the rear lock pin from the receiver (**FIGURE 7-D**).

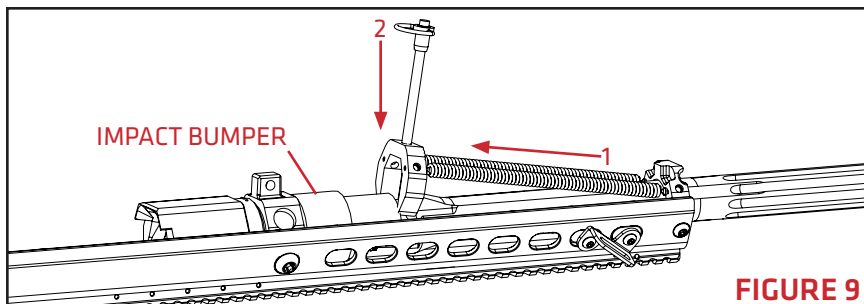
**FIGURE 7**

- Carefully pick up the upper receiver. The barrel will be nested inside for compact storage. Ensure the barrel is rotated so that the barrel extension and feed-ramp is correctly aligned (**FIGURE 8-A**). Slide the barrel forward until it is fully seated against the barrel stop (**FIGURE 8-B**). Slide the impact bumper into position on the large diameter of the barrel and against the barrel stop.

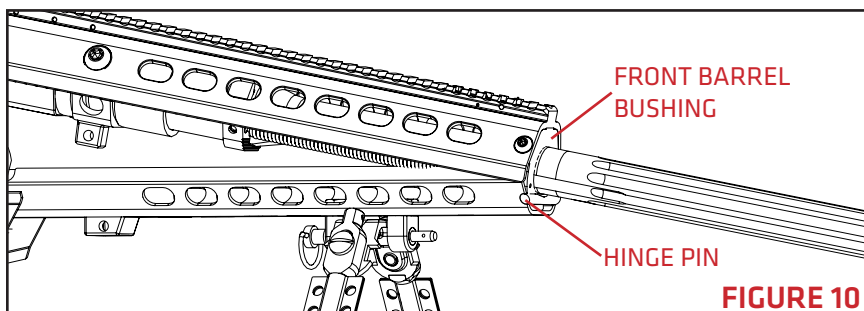
**FIGURE 8****⚠ WARNING**

**THE TENSION ON THE BARREL SPRINGS IS APPROXIMATELY 70 lbs (32 kg). SERIOUS INJURY COULD RESULT IF SPRINGS ARE SUDDENLY RELEASED**

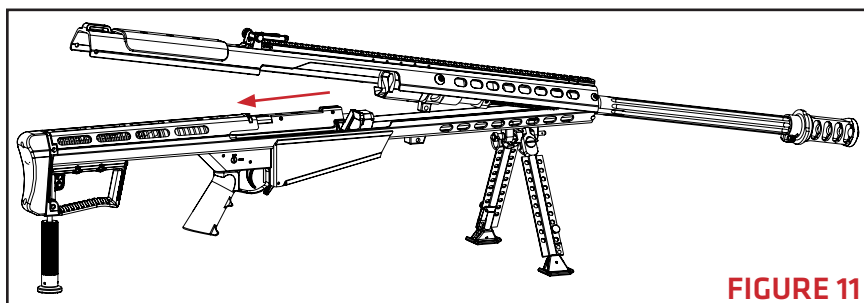
- The barrel springs at the front of the upper receiver are held in by the barrel key and the front barrel bushing. The rear lock pin can be locked into the barrel key to help provide additional leverage and create a handhold. While maintaining the downward tilt of the upper receiver (to keep the barrel in place), firmly grasp the rear lock pin locked into the barrel key—not the springs—and pull it into place on the forward slot of the barrel (**FIGURE 9**). Work the barrel key until it is firmly seated in the barrel slot. Remove the rear lock pin from the barrel key. The upper receiver is now fully assembled.



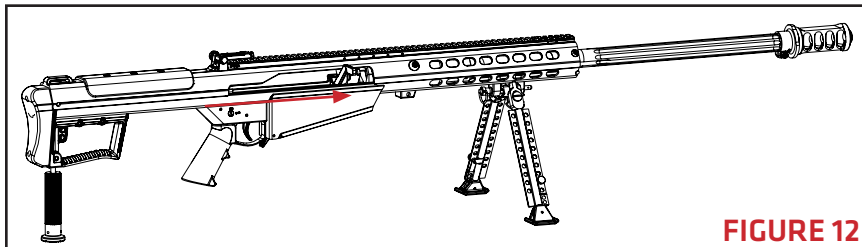
6. Rotate the upper receiver top rail to the 12 o'clock position then place the upper receiver over the lower receiver.
7. Engage the notch in the front barrel bushing of the upper receiver with the front hinge pin of the lower receiver. To help couple the notch in the front barrel bushing and the front hinge pin of the lower receiver, tilt the upper receiver upwards to a 45-degree angle (**FIGURE 10**).



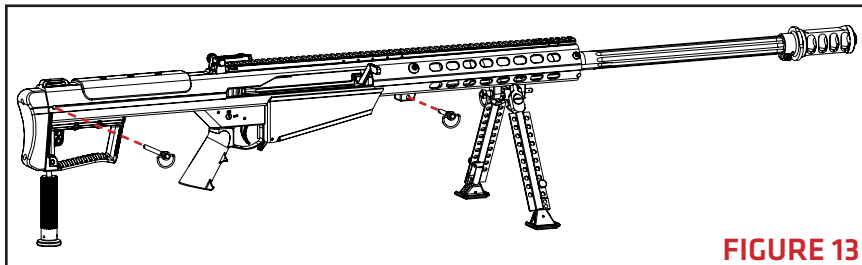
8. While positioned directly behind the rifle, grasp the charging handle and pull rearward against mainspring tension so the bolt will clear the barrel extension when the upper receiver is lowered (**FIGURE 11**).



9. Close the upper receiver onto the lower receiver. With the bolt retracted, the upper receiver should fit into the lower receiver easily without being forced. If the upper does not fit on the lower, check front barrel bushing/hinge pin alignment. Release the charging handle SLOWLY until the bolt is fully closed (**FIGURE 12**).

**FIGURE 12**

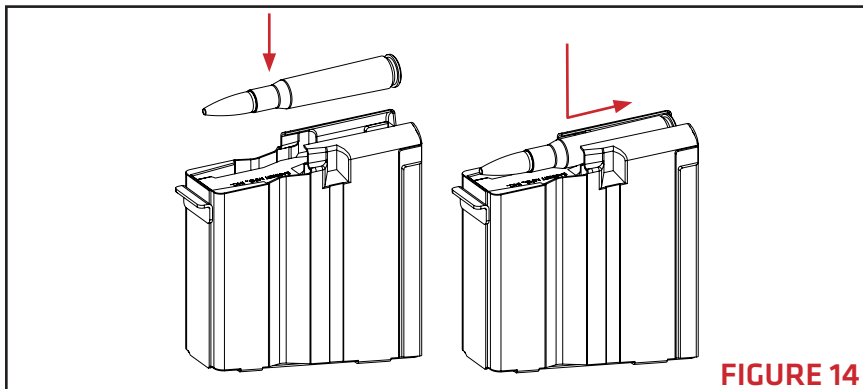
10. Place the midlock pin (shorter pin) through the midlock hole in front of the magazine well on bottom of the rifle until it is fully seated, locking the upper and lower receivers together. Insert the rear lock pin through the rear lock hole of the upper receiver to complete the mating of the receivers (**FIGURE 13**). (Both the midlock pin and the rear lock pin have a detent button that will need to be depressed and finger rings to aid in removal and installation.)

**FIGURE 13****⚠ WARNING**

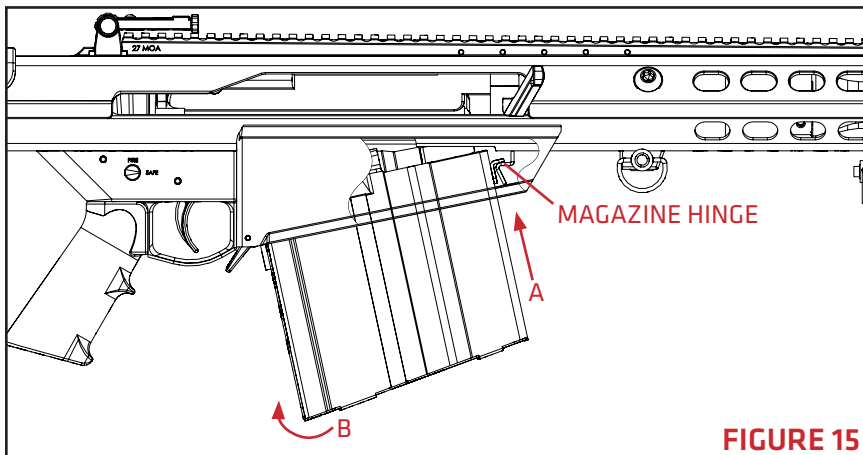
**THE RIFLE MUST NOT BE FIRED WITHOUT BOTH THE MIDLOCK AND REAR LOCK PINS FIRMLY IN PLACE. SERIOUS INJURY OR DEATH COULD RESULT.**

## LOADING AND FIRING

1. Ensure the safety lever is in the SAFE position.
2. Using appropriate ammunition, load the magazine (**FIGURE 14**). Ensure that cartridges are pushed all the way to the rear of the magazine. Load no more than 10 rounds.



3. Insert the magazine into the magazine well in the lower receiver, with magazine tilted at approximately a 45° angle (bullet tips upward). Insert the front of the magazine hook to its hinge, located in the front of the magazine well (**FIGURE 15-A**). Swing the rear of the magazine up until it locks into place by means of the magazine catch (**FIGURE 15-B**). It should lock in with an audible click. Tug down on the magazine to ensure it is properly seated.



4. With the muzzle pointed in safe direction pull the charging handle to the rear until it stops, then release it (do not keep your hand on the charging handle).

** WARNING**

**DO NOT ATTEMPT TO FORCE A CARTRIDGE INTO THE CHAMBER BY FORCING THE BOLT CLOSED. IF THE BOLT DOES NOT CLOSE EASILY, REMOVE THE CARTRIDGE AND EXAMINE IT FOR DAMAGE OR DEFECTS. CHECK THE CHAMBER FOR OBSTRUCTIONS.**

** WARNING**

**THE SHOOTER MUST BE POSITIONED DIRECTLY BEHIND THE RIFLE WITH THE RECOIL PAD HELD FIRMLY AGAINST THE SHOULDER. FIRING THE RIFLE IN ANY OTHER POSITION COULD RESULT IN INJURY, DISCOMFORT, OR FAILURE OF THE ACTION TO CYCLE CORRECTLY.**

5. Rotate the safety to the FIRE position.

** WARNING**

**DOUBLE HEARING PROTECTION SHOULD BE WORN WHEN FIRING SINCE HARMFUL LEVELS OF NOISE ARE GENERATED.**

6. The rifle may now be fired. The rifle will fire one round for each pull of the trigger, until the magazine and chamber are empty.

** WARNING**

**THE BOLT DOES NOT AUTOMATICALLY REMAIN TO THE REAR WHEN THE RIFLE OR MAGAZINE IS EMPTY. ALWAYS PULL THE CHARGING HANDLE TO THE REAR TO INSPECT CHAMBER FOR AMMUNITION.**

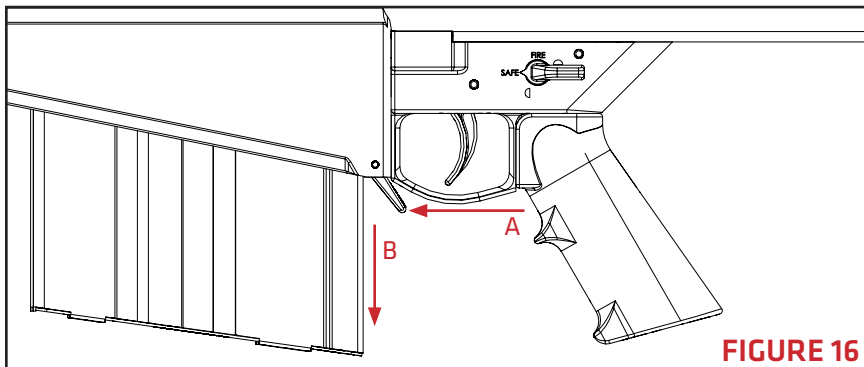
7. After the magazine is emptied, or you are done firing, place the safety lever in the safe position with the muzzle pointed in a safe direction.

** WARNING**

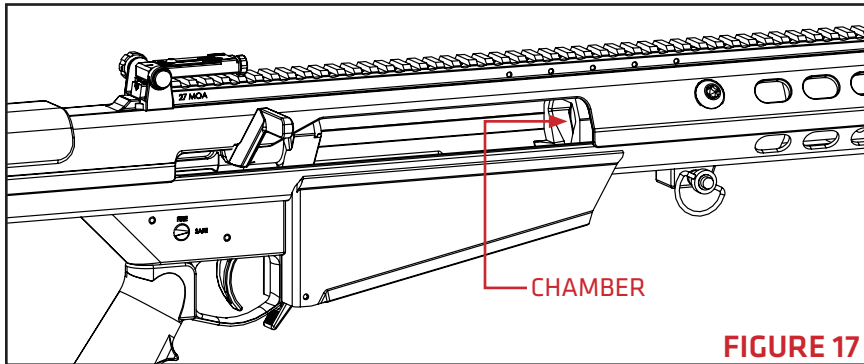
**RECENTLY FIRED BRASS MAY BE VERY HOT**

## UNLOADING THE RIFLE

1. Place the safety lever in the SAFE position.
2. Press the magazine catch forward, towards the magazine (**FIGURE 16-A**) and remove the magazine (**FIGURE 16-B**).

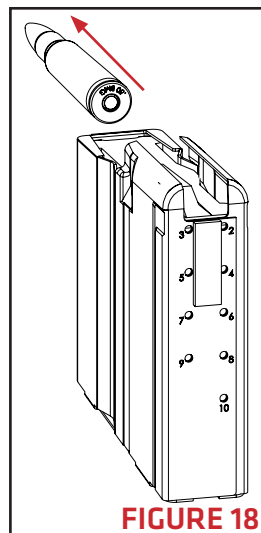


3. Pull the charging handle to the rear, and visually and physically check the chamber for ammunition (**FIGURE 17**). Insert a chamber flag into the ejection port to indicate the rifle is clear.



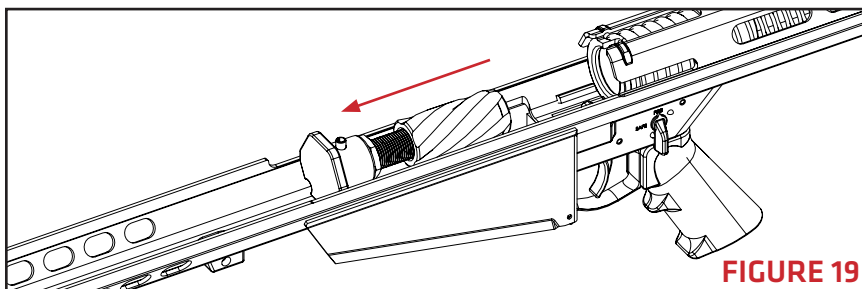
## UNLOADING THE MAGAZINE - FIGURE 18

1. Hold the magazine in either the right or left hand, cartridges facing away from you.
2. Using the thumb of the other hand, push the cartridges forward and out one after another, until all are ejected.



## REMOVING THE MAINSPRING AND BUFFER

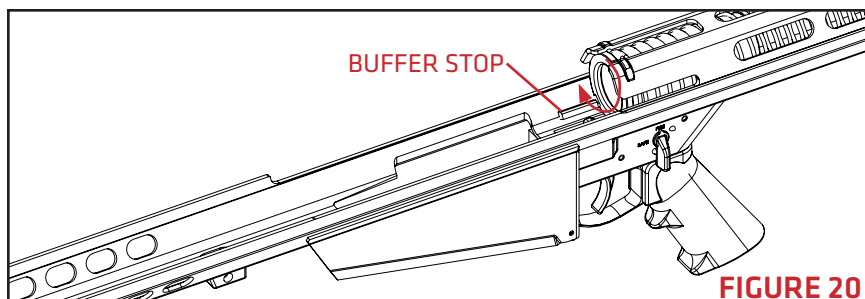
1. Remove hydraulic buffer to expose buffer sleeve (FIGURE 19).



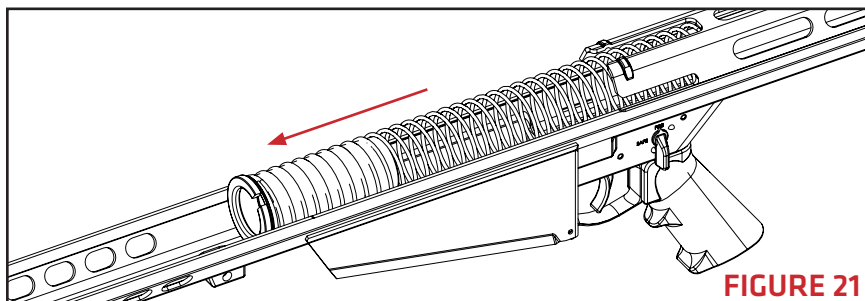
### **⚠ WARNING**

**THE MAINSPRING AND BUFFER ARE RETAINED UNDER TENSION BY THE BUFFER STOP. KEEP THE LOWER RECEIVER POINTED IN A SAFE DIRECTION TO AVOID INJURY WHEN REMOVING OR INSTALLING THE MAINSPRING OR BUFFER.**

2. While maintaining constant control and pressure, rotate the buffer and spring to align the buffer notch with buffer stop on lower receiver (FIGURE 20).

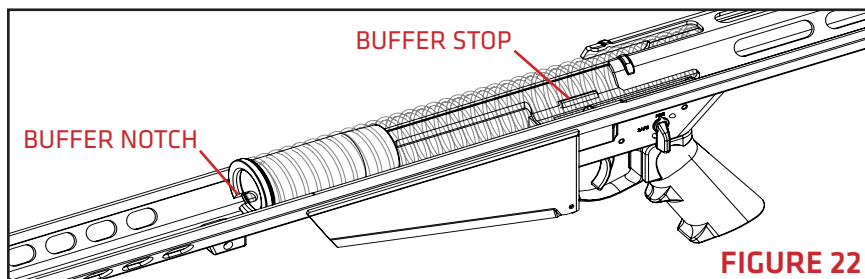
**FIGURE 20**

3. Allow buffer sleeve and mainspring to fully extend then remove (**FIGURE 21**).

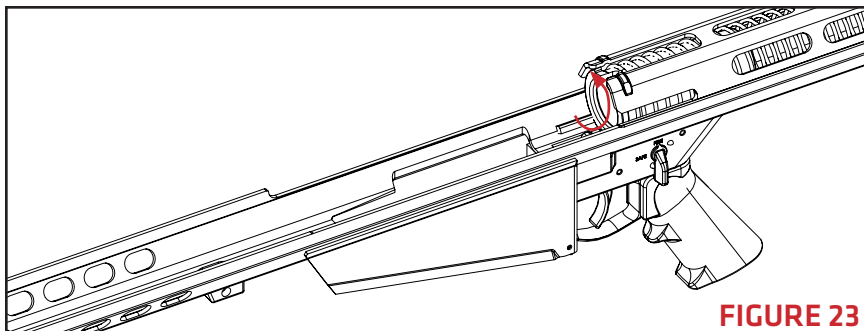
**FIGURE 21**

## **INSTALLING THE MAINSPRING AND BUFFER**

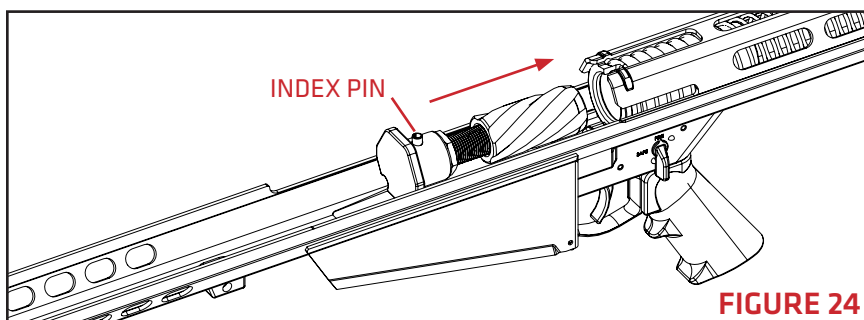
1. Place buffer sleeve and mainspring into the lower receiver and align the buffer sleeve notch with the welded buffer stop of the lower receiver (**FIGURE 22**).

**FIGURE 22**

2. Push the buffer sleeve and mainspring into the lower receiver in one continuous, fluid motion. Once pushed past the buffer stop, rotate the buffer sleeve to the 12 o'clock position (**FIGURE 23**).

**FIGURE 23**

3. Insert the hydraulic buffer and ensure the index pin on the buffer nests inside the notch in the buffer sleeve (**FIGURE 24**).

**FIGURE 24**

## **CLEANING AND LUBRICATION**

### **⚠ WARNING**

**THE RIFLE MUST BE UNLOADED AND ALL AMMUNITION REMOVED FROM AREA BEFORE CLEANING.**

1. The rifle should be cleaned and lubricated after each shooting session.
2. Disassemble the rifle into its main components. With the upper receiver/barrel, perform the following tasks:
  - Wet a cleaning patch with rifle bore cleaner and push the patch through the bore from breech to muzzle using a cleaning rod. Several patches may be used if bore is especially dirty.
  - While the bore is wet from the patches, scrub the bore with a bore cleaning brush attached to the cleaning rod.
  - Apply a small amount of rifle bore cleaner to a chamber

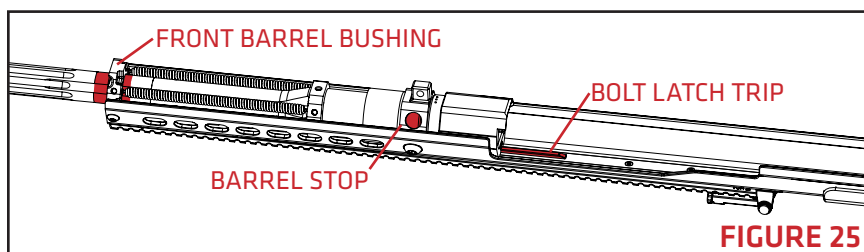
brush and clean the chamber

- Push dry cleaning patches through the bore from breech to muzzle until the patches come out of the bore clean.
- Wipe down all surfaces of the muzzle brake with a rifle bore cleaner and a rag. Remove any carbon build-up from the exterior diameter and internal port areas with a brush or rag.

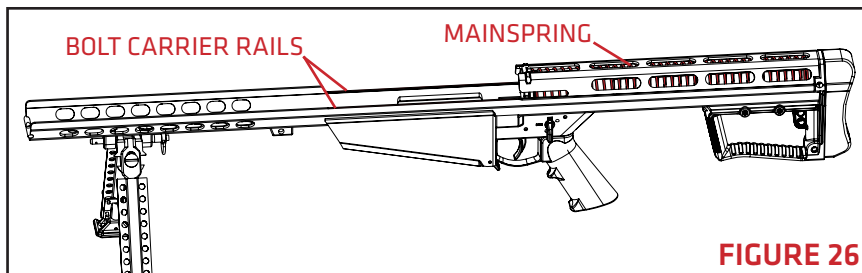
**⚠ CAUTION**

**DO NOT INSERT CLEANING RODS THROUGH THE MUZZLE. THE BARREL CROWN COULD BE DAMAGED WHICH WOULD SEVERELY DEGRADE THE ACCURACY OF THE RIFLE.**

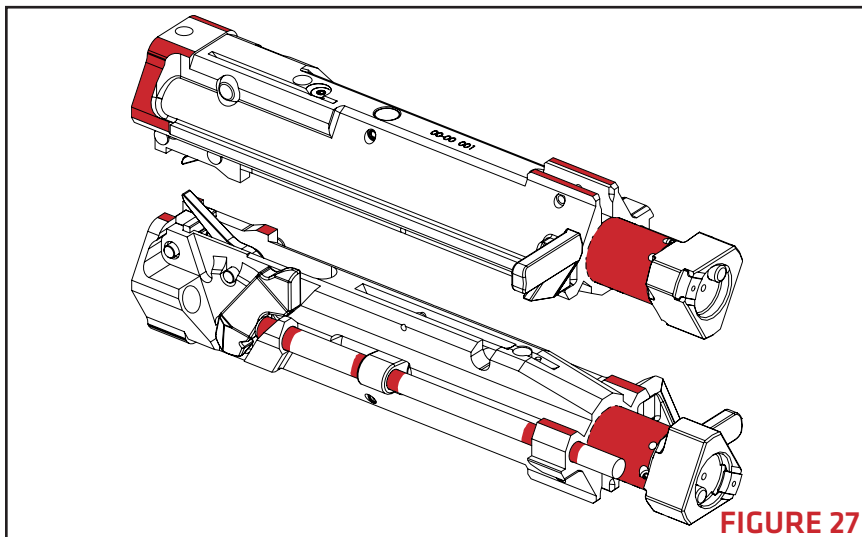
3. Use a stiff plastic brush to remove carbon from both the extractor and the ejector. Depress the ejector and extractor by hand to ensure their smooth function.
4. Clean the remainder of the rifle with cotton-tipped swabs, general purpose brushes and rags. Make sure all mechanical metal surfaces are coated with preservative oil. Do not lubricate the bolt face, chamber/bore, firing pin channel, or magazine.
5. Lubricate the upper receiver along the bolt latch trip and the barrel at the barrel stop and front barrel bushing (**FIGURE 25**).



6. Lubricate the lower receiver along the bolt carrier rails, mainspring, and mainspring housing (**FIGURE 26**).

**FIGURE 26**

7. Lubricate the exterior surfaces of the bolt carrier and the neck of the bolt (**FIGURE 27**).

**FIGURE 27**

## INSPECTION OF MAJOR COMPONENTS

The rifle's major assemblies are packaged as shown in **FIGURE 2**. Ensure all components are present and inspect for damage. Detailed inspection should be conducted as follows:

### **⚠ WARNING**

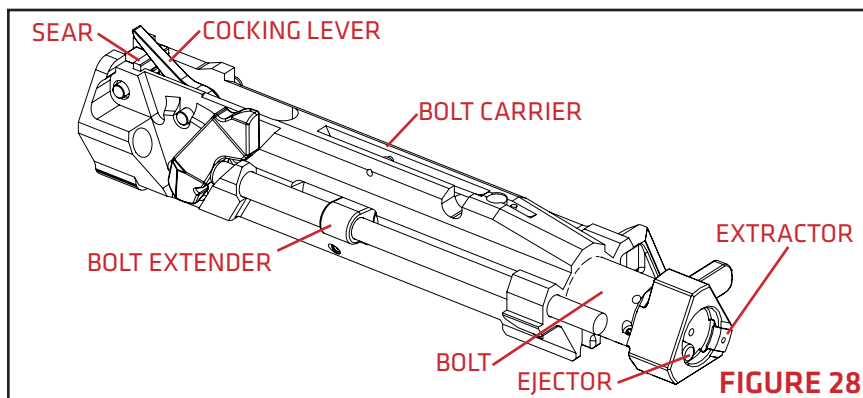
**UNLOAD AND CLEAR THE RIFLE BEFORE INSPECTION. ENSURE NO LIVE AMMUNITION IS PRESENT DURING THE INSPECTION AND TROUBLESHOOTING PROCESS.**

### INSPECTION: THE UPPER RECEIVER

1. The barrel springs must not be overstretched, and each coil should be tight, with no spaces between coils when the barrel key is not engaged into the barrel.

2. The battery and impact bumpers should be in good condition (not frayed, cracked, or twisted).
3. The muzzle brake should be tight and fully screwed on.
4. The upper receiver should not be cracked, bent, or burred.
5. Check the front hinge pin slot in the front of the upper receiver to ensure that it is not deformed in any way.
6. The barrel should be clean and free of obstruction and oil.
7. All scope mountings should be tight, in good condition, and free of oil (iron sights, front and rear, may be lightly oiled at pivot points to prevent corrosion).

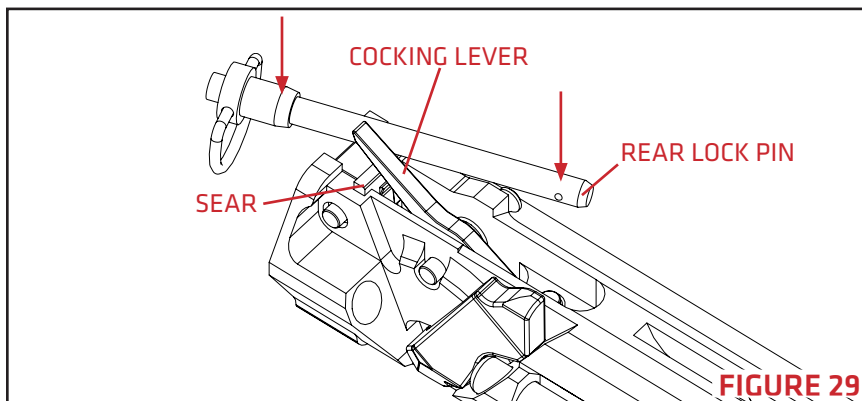
#### INSPECTION: THE BOLT CARRIER GROUP - **FIGURE 28**



1. Ejector and extractor must be checked to ensure they are under spring tension, and neither chipped nor worn and does not stick in one position.
2. De-cock the firing mechanism by using the rear lock pin to depress the sear (**FIGURE 29**). Avoid the cocking lever to reduce chance of being pinched during de-cocking. Manually work the bolt in and out, feeling for any roughness, which may indicate wear, corrosion, or dirt/grit in the bolt carrier.

**⚠ WARNING**

**USE REAR LOCK PIN TO DE-COCK THE FIRING MECHANISM.  
AVOID THE COCKING LEVER TO REDUCE CHANCE OF BEING  
PINCHED.**



3. Push the bolt into the carrier and inspect for firing-pin protrusion. Check firing-pin hole (on bolt face) to ensure it is not eroded or elongated. Bolt face should not be pitted.
4. Swing the cocking lever forward. The sear should capture the firing-pin extension before the cocking lever is fully depressed.
5. Bolt Extender slot should be free and clear of debris.

**INSPECTION: THE LOWER RECEIVER**

1. With bolt carrier in place, pull it rearward and check to see that the mainspring moves freely (full travel) and is not deformed.
2. Hold bolt carrier back and down approximately  $\frac{1}{4}$  inch (6 mm) under mainspring housing (sheet metal closure). With the thumb safety on fire, pull the trigger. Firing mechanism should function (a slight rise in bolt carrier is normal). If the housing is bent, the bolt carrier will rise excessively as the trigger is pulled, preventing proper functioning.
3. Lower receiver should not be cracked, bent, or burred.
4. Check the hinge pin at the front of the lower receiver to ensure

that it is not cracked, bent, or deformed in any way.

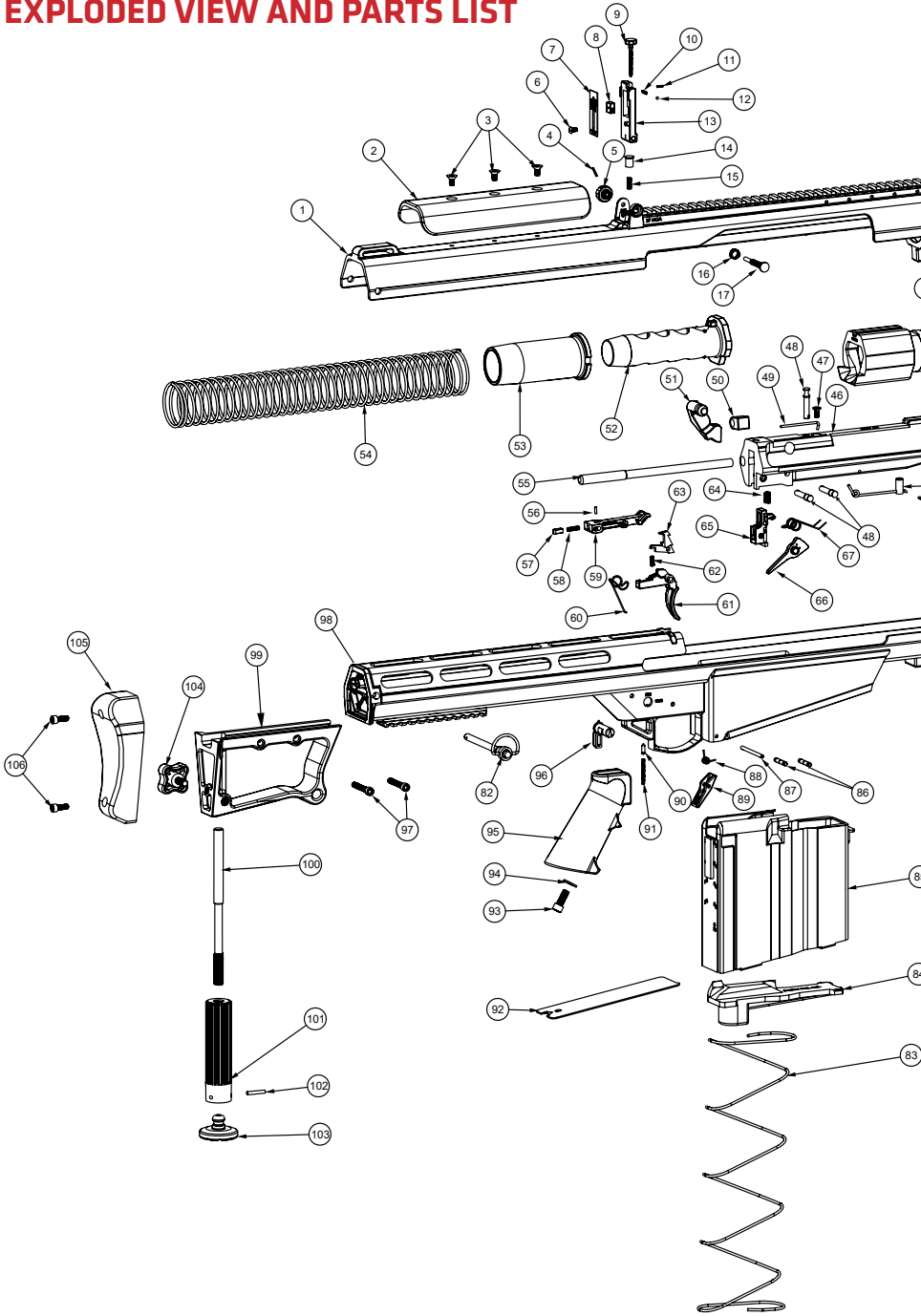
- 5. Check bipod assembly for function and the mounting hardware is tight.

TROUBLESHOOTING

MALFUNCTION	CAUSE	CORRECTIVE ACTION
FAILURE TO FEED	Sluggish action	Clean and lubricate or if cold check for over lubrication
	Check Magazine: a. Proper Installation b. Dirt/Debris c. Damage	a. Reinstall magazine into the receiver b. Clean magazine c. Replace magazine
	Rifle short cycles	Hold rifle more firmly in the shoulder
	Bolt carrier assembly binds	Please contact Tech Support
	Weak/broken mainspring	Replace mainspring
FAILURE TO CHAMBER	Check cartridge for damage	Remove damaged round
	Check for dirty chamber	Clear and clean chamber
	Check for faulty mainspring	Replace mainspring
	Check for bent receiver	Please contact Tech Support
FAILURE TO LOCK OR UNLOCK	Check for obstruction between firing pin and bolt	Disassemble and clean
	Check for excessive dirt or debris in locking area	Clean chamber and barrel extension

MALFUNCTION	CAUSE	CORRECTIVE ACTION
<b>FAILURE TO FIRE</b>	Faulty ammunition	Replace ammunition
	Verify bolt carrier is fully in battery	Manually cycle carrier (do not force closed)
	Check for improper installation of firing pin	Assemble properly
	Check for broken or improper installation of trigger components	Replace or reinstall trigger components
	Check for obstruction of the firing pin or trigger	Remove obstruction or debris
<b>FAILURE TO EXTRACT</b>	Check for broken or missing extractor	Replace extractor
	Ensure extractor is moving freely in slot	Remove, clean and lubricate extractor, plunger and spring
	Check for dirty chamber	Clean chamber
<b>FAILURE TO EJECT</b>	Check for proper movement of ejector	Remove, clean, lubricate or replace ejector and/or spring as needed
<b>VERY HARD RECOIL</b>	Check for faulty/hot ammunition	Replace or cool ammunition
	Check for damaged or missing mainspring/buffer	Replace/install mainspring or buffer as needed
	Check for loose, missing, damaged/ clogged muzzle brake	Please contact Tech Support

EXPLODED VIEW AND PARTS LIST





ITEM NO.	DESCRIPTION	QTY.
1	Upper Receiver Complete	1
2	Cheek piece	1
3	Cheek piece Screw	3
4	Windage Knob Pin	1
5	Windage Knob	1
6	Rear Sight Scale Screw	1
7	Rear Sight Scale	1
8	Rear Sight Aperture	1
9	Elevation Screw	1
10	Elevation Screw Spring	1
11	Elevation Screw Pin	1
12	Elevation Screw Ball	1
13	Rear Sight Body	1
14	Rear Sight Base Detent	1
15	Rear Sight Spring	1
16	Windage Screw Spring	1
17	Windage Screw	1
18	Barrel Key	1
19	Barrel Spring Screw	4
20	Barrel Spring	2
21	Center Nut Plate	2
22	Front Sling Loop	1
23	10-32 x.50 BHCS	2

ITEM NO.	DESCRIPTION	QTY.
45	.50 BMC Barrel Complete	1
46	Bolt Carrier Complete	1
47	Bolt Index Pin	1
48	Bolt Index Pin Pin	1
49	Accelerator Spring Screw	1
50	Bolt Carrier Pin	3
51	Accelerator Spring	1
52	Bolt Extender	1
53	Accelerator	1
54	Hydraulic Recoil Buffer Assy.	1
55	Buffer Sleeve	1
56	Main Spring	1
57	Accelerator Rod	1
58	Transfer Bar Pin	1
59	Transfer Bar Detent	1
60	Transfer Bar Spring	1
61	Transfer Bar	1
62	Trigger Spring	1
63	Trigger	1
64	Disconnector Spring	1
65	Disconnector	1
66	Sear Spring	1
67	Sear Assembly	1

ITEM NO.	DESCRIPTION	QTY.
89	Magazine Catch Pin	1
90	Magazine Catch Spring	1
91	Mag. Catch	1
92	Mag. Floor Plate	1
93	Pistol Grip Screw	1
94	Pistol Grip Stock Washer	1
95	Pistol Grip	1
96	Safety Spring	1
97	Safety Detent	1
98	Safety	1
99	10-32 X 1.25 SHCS TORX	2
100	Monopod Rotating Foot Lower	1
101	1/8 X 3/4 Split Pin Stainless	1
102	Monopod Rotating Foot Upper	1
103	Monopod Elevation Screw	1
104	Lower Receiver Complete	1
105	Rear Grip	1
106	Monopod Lock Knob	1
107	Recoil Pad	1
108	Recoil Pad Screw	2



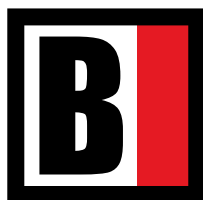
## NOTES

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## NOTES

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