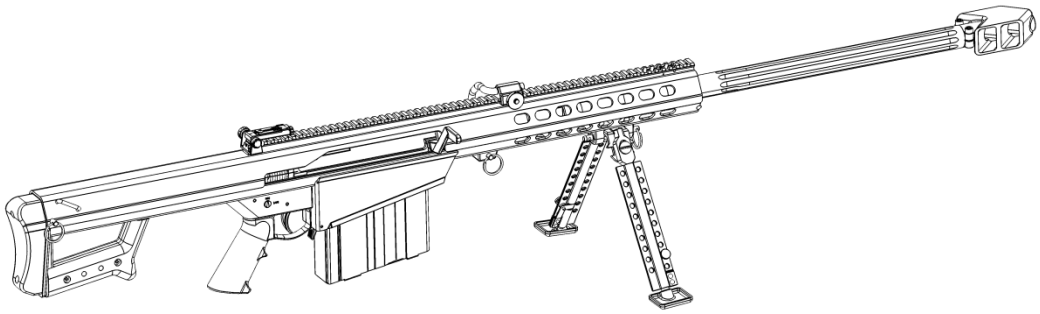
BARRETT® FIREARMS

Model 82A1
Model 82A1 CQ
Model 82A1 .416



Part Number: 82141 Rev B
December 28, 2009

USE OF THIS MANUAL

Before you handle the Model 82A1 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, Inc. or can be downloaded from the company website, barrettrifles.com.

This manual covers all variants and calibers of the Model 82A1 and 82A1CQ. Technical specifications are subject to change without notice.

SAFETY GUIDELINES

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

Ammunition

Barrett does not condone the use of hand loaded, remanufactured, or surplus ammunition. The use of clean, dry and properly stored commercially manufactured ammunition will preserve your warranty.

Safety distance

Bullets fired from this rifle may travel as far as 5 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. The muzzle brake is integral to the design of your rifle and works to divert a large portion of a shot's blast rearward and to the side of the muzzle. Your rifle must not be fired without it. People and objects should not be in the vicinity of the muzzle brake because its blast consists of high pressure and high temperature gas. All spectators should use double hearing protection. The safest place for a spectator is directly behind the shooter.

Eye protection

Eye protection should be worn when both shooting and maintaining your rifle. It is normal for firing to generate airborne dust and debris. Glasses also protect you from scopes during recoil. Protect your eyes from solvents and uncaptured parts under spring pressure while performing maintenance on your rifle.

Assume every gun is loaded

Until you personally prove otherwise, treat every gun as if it were loaded. Do not trust your memory and do not take anyone else's word for it. Visually look and physically 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 dangerously increased pressures that can rupture the barrel.

Use your muzzle brake

Your rifle was designed to be fired with the muzzle brake installed. Firing your rifle without the muzzle brake will subject your rifle and its accessories to damaging recoil. It could also cause the shooter to be injured.

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. The rifle should never be fired at surfaces where bullets are likely to glance off in unpredictable directions.

Failure to fire

If your rifle fails to fire when you pull the trigger, do not attempt to clear the action. Keep the rifle pointed toward a safe area and wait two minutes. If a hangfire (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. If the primer is lightly dented, refer to the troubleshooting chart in this manual.

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

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. BFMI will not honor claims involving this firearm when such claims are made by the second or subsequent owner.

If you need factory service, whether made under warranty or not, please contact BFMI for a Return Authorization Number and instructions on how to have your gun repaired.

Barrett Firearms Manufacturing Inc.
P.O. Box 1077
Murfreesboro, TN 37133-1077
615-896-2938
mail@barrettrifles.com

www.barrettrifles.com

LIMITATION OF LIABILITY

The liability of Barrett Firearms Manufacturing, Inc. for any and all losses and damages to the purchase shall in no event exceed the purchase price of the firearm, and then only if the firearm is proven to be defective in material or workmanship. Barrett Firearms Manufacturing, Inc. shall under no circumstances be liable for incidental or consequential damages resulting from negligence of Barrett Firearms Manufacturing Inc. or from negligence or misuse of the purchaser.

Barrett Firearms Manufacturing, Inc. makes no other warranties of any kind, expressed or implied with respect to the Model 82A1.

Your Responsibility

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

TABLE OF CONTENTS

SPECIFICATIONS

Model:	Model 82A1	Model 82A1 CQ	Model 82A1 .416 Barrett
Caliber:	.50 BMG (12.7 x 99 mm)	.50 BMG (12.7 x 99 mm)	.416 Barrett
Operation:	Semi-Automatic	Semi-Automatic	Semi-Automatic
Weight:	30 lbs (13.6 kg)	29.7 lbs (13.5 kg)	32.8 lbs (14.9 kg)
Overall Length: (Assembled)	57" (145 cm)	48" (122 cm)	56" (142.25 cm)
Length: (Takedown Mode)	38" lower, 41" upper	38" lower, 40.5 Upper	38" lower, 41" upper
Barrel Length:	29" (74 cm)	20" (50.8 cm)	29" (74 cm)
Barrel Twist:	1:15	1:15	1:12
Magazine Capacity:	10 rounds	10 rounds	10 rounds
Stock:	Integral with Lower receiver – steel	Integral with Lower receiver – steel	Integral with Lower receiver – steel
Safety:	Manual thumb-lever	Manual thumb-lever	Manual thumb-lever
Sights:	Fixed front, Adjustable rear sights	Fixed front, Adjustable rear sights	Fixed front, Adjustable rear sights

CAPABILITIES

Muzzle Velocity:	.50 BMG-Approximately 2750 f/s (853 m/s) with standard 660 grains (42.8 g) projectile .416 Barrett-Approximately 3100 f/s (838.2 m/s) with standard 395 grains (42.9 g) projectile
Maximum Range:	Approximately 6,800 meters

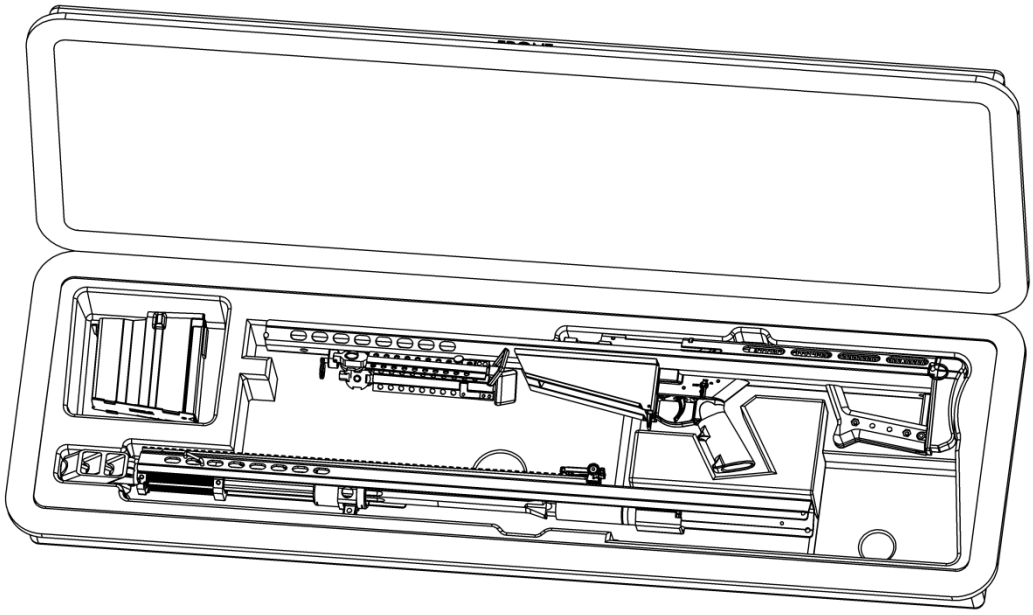
CONTENTS

Your Model 82A1 rifle includes the following:

Rifle
Watertight and airtight carrying case
Operator's manual
1 Magazine

Your rifle may have included a monopod, bipod, rifle scope, BORS, rings or other optional accessories. It may have also included cleaning fluids and a cleaning kit.

The rifle is shipped from the factory in 2 pieces; the upper receiver complete and lower receiver complete.



General Information

TYPE OF MANUAL: Operator's instruction manual for Barrett Model 82A1 rifles in .50 BMG and .416 Barrett

General Functioning

As the cartridge is fired the energy from the projectile drives the barrel rearward. The rearward moving barrel drives the bolt carrier rearward also. As the rearward motion is happening the cartridge is extracted and ejected from the rifle. The bolt is fully extended and the rifle is cocked. Toward the end of the rearward motion, the main spring buffer is compressed. As the bolt carrier starts its forward motion, it feeds a new cartridge into the chamber and locks into battery position ready to fire again.

PREPARATION FOR STORAGE OR SHIPMENT

Except in extreme situations, the Model 82A1 should always be stored and transported in its airtight, watertight carrying case.

RIFLE REPAIR

Rifle repair will be accomplished by Barrett Firearms Manufacturing, Inc. In the event the Model 82A1 requires repair, it is to be sent as a complete assembly, packaged as described above.

BREAK-IN PROCEDURE

Because individual barrels, powder, primer and bullet combinations vary widely and because shooters have strongly held personal opinions on the subject, Barrett does not offer a specific procedure for barrel break-in. Barrett 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 increase as this occurs.

EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT SPECIFICATIONS AND CAPABILITIES. The technical specifications and capabilities of the M82A1 (Figure 1-1).

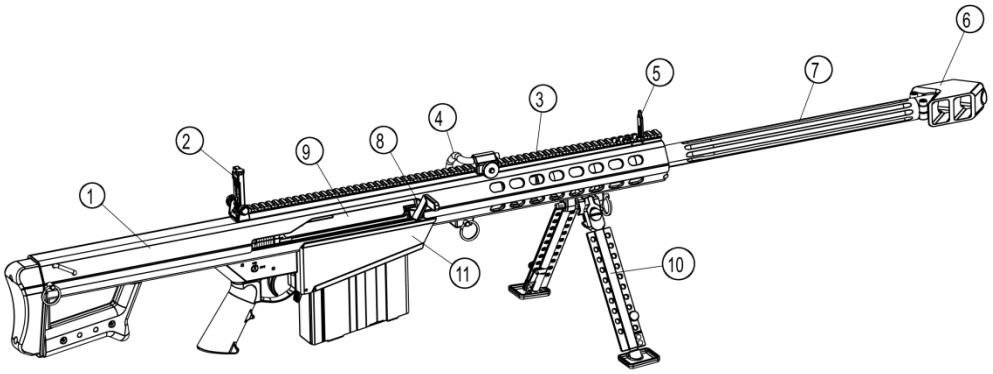


Figure 1-1. Rifle, M82A1

IDENTIFICATION AND DESCRIPTION OF MAJOR COMPONENTS.

1. **Upper Receiver.** Sheet metal cover combining and including the front and rear sights and, scope rail, carrying handle, muzzle brake and barrel.

2. **Rear Sight Leaf.** Peep style aperture with elevation markings for 100 to 1500 meters. Reversible rear sight scale for .50 BMG and .416 Barrett caliber is designed for 29” barrels.

3. **Scope Rail.** Integrated front and rear sight.

4. **Carrying Handle.** Steel stock with a hard plastic handle attaches to scope rail.

5. **Front Sight.** Flip up from inside the rail.

6. **Muzzle Brake.** Critical to the functioning of the rifle; absorbs approximately 70% of the recoil.

7. **Barrel.** Muzzle end is threaded to accept a muzzle brake; breech end has a barrel extension integral to the locking function.

8. **Bolt.** Houses the extractor and ejector.

9. **Bolt Carrier.** Consists of the bolt (8), firing pin, mechanisms, cocking lever, and sear.

10. **Bipod Assembly.** Forward support system comprised of retractable bipod legs and extending feet. Bipod assembly is quick-detachable from the receiver.

11. **Lower Receiver.** Sheet metal cover combining and including the bipod assembly, buffer, midlock pin, and trigger mechanism.

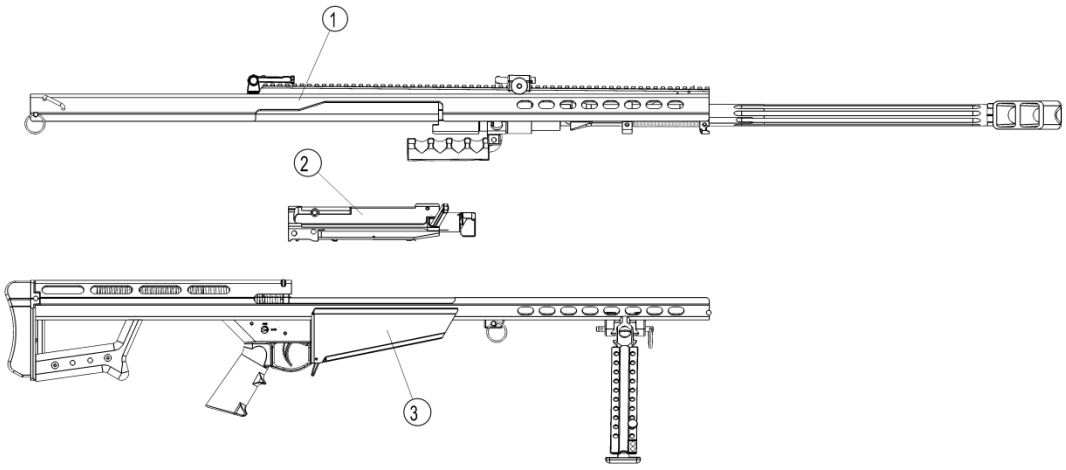
INSPECTION OF MAJOR COMPONENTS

WARNING
Unload and clear the rifle before disassembly.
Ensure no live ammunition is present during disassembly or assembly.

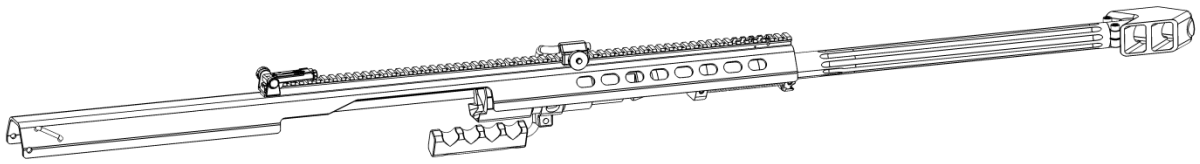
Inspection of Rifle's Major Components
The rifle's four major groups are packaged as shown in below.

1. Upper Receiver
2. Bolt Carrier Group
3. Lower Receiver

Ensure all components are present and inspect for obvious damage, reporting any discrepancies to the Barrett factory. Detailed inspection should be conducted as follows:

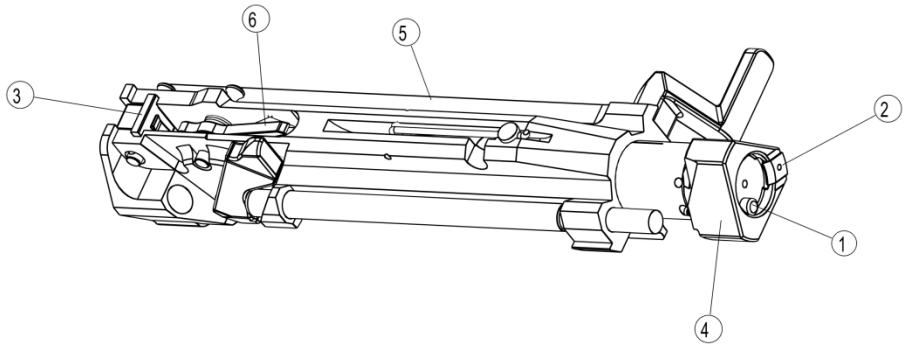


INSPECTION - THE UPPER RECEIVER



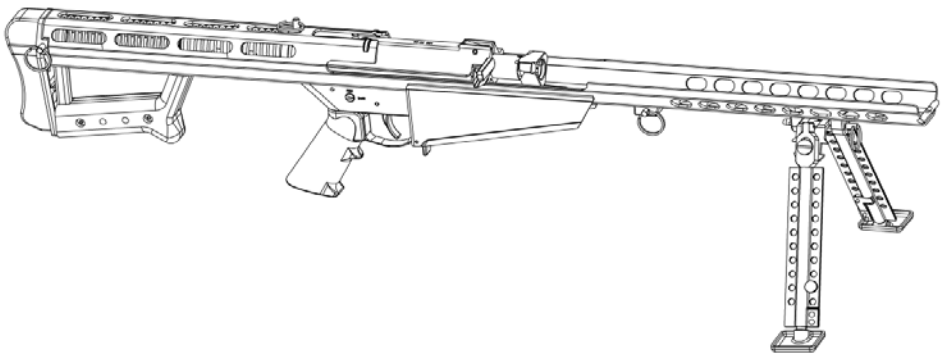
1. Barrel springs must not be overstretched, and each coil should be tight, with no spaces between coils.
2. Battery bumpers should be in good condition (not frayed, cracked, or twisted).
3. The muzzle brake should be tight and fully screwed on.
4. The upper receiver should not be cracked, bent, or burred.
5. Check the hinge lip at the front of the upper receiver to ensure that it is not cracked, bent, or deformed in any way.
6. The barrel should be clean and free of obstruction.
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



1. Ejector (1) and extractor (2) must be checked to ensure they are under spring tension, and neither chipped nor worn and does not stick in one position.
2. With firing mechanism de-cocked (use rear lock pin to depress sear), depress the bolt latch and manually work the bolt (4) in and out, feeling for any roughness, which may indicate wear, corrosion, or dirt/grit in the bolt carrier (5).
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. Inspect bolt latch, it should not show any deformation.
5. Swing the cocking lever (6) forward. The sear (3) should capture the firing-pin extension before the cocking lever is fully depressed.

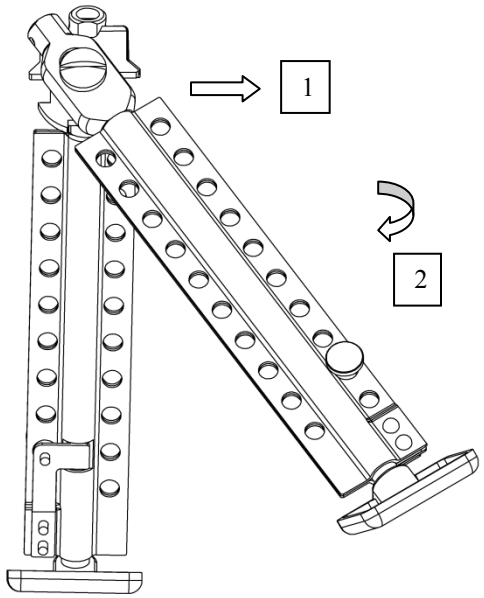
INSPECTION - THE LOWER RECEIVER



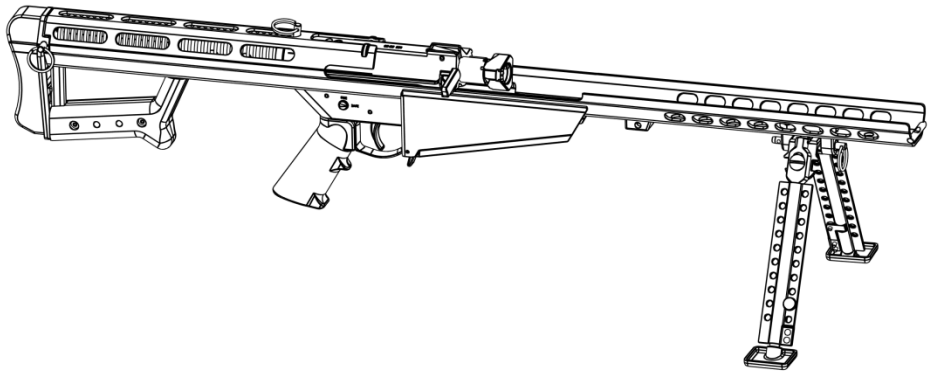
1. With bolt carrier in place, pull it rearward and check to see that the mainspring moves freely (full travel) and is not deformed.
2. Hold bolt carrier back and down approximately ¼ in (6 mm) under mainspring housing (sheet metal closure). With the thumb safety on fire, pull the trigger. Firing mechanism 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.

ASSEMBLY OF MAJOR COMPONENTS.

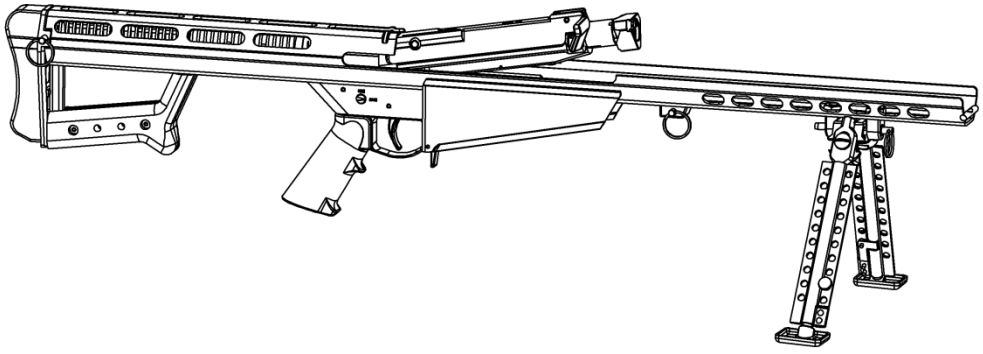
1. Grasp the Lower Receiver Group and extend the bipod legs by pulling the legs down (1) to the front, where they will lock into place. To retract, pull down on leg and swing back into position along the receiver. If firing without using the bipod, fold them forward to preclude interference with the charging handle. 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. Place receiver on level surface.



2. The Bolt Carrier Group is held in place under tension in the lower receiver by the midlock pin, which extends through a locking hole in the receiver's sheet metal. (Both the midlock pin and the rear lock pin, located in a retaining hole in the end of the buttstock, have finger rings to aid in removal.)



3. Standing above and to the rear of the lower receiver, grasp the charging handle with the right hand, and carefully pull back, against tension, while withdrawing the midlock pin from its retaining hole. Allow the bolt carrier to come forward **SLOWLY** until there is no more spring tension and it rests in the lower receiver.

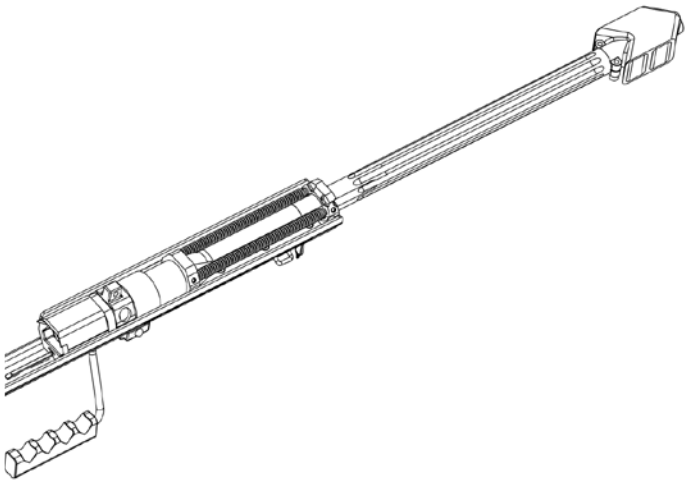


4. Carefully pick up the upper receiver. The barrel will be nested inside it for compact storage. Align the barrel so that its feed-ramp (slanted entry to firing chamber) is to the bottom. Keeping fingers away from the barrel hold the upper receiver horizontally and then tilt in the direction of the muzzle. The barrel should fall into place at its full forward extension in the receiver. Slide the impact bumper into position on the large diameter of the barrel and against the barrel stop.

WARNING

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

5. The barrel springs at the front of the upper receiver, are held together by the barrel key. Maintaining the downward tilt of the upper receiver (to keep the barrel in place) firmly grasp the barrel key—not the springs—and pull it into place on the forward slot of the barrel. Work the key from side to side until it is firmly seated in the barrel slot. The upper receiver is now fully assembled.

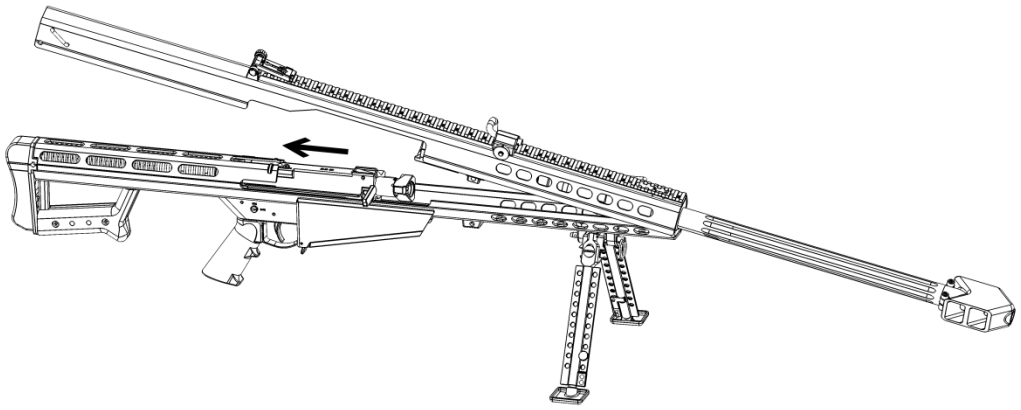


6. Making sure the bipod legs are extended high enough to allow sufficient ground clearance, position the upper receiver rear up, muzzle down, over the lower receiver.

CAUTION

BE SURE THE UPPER RECEIVER NOTCH AND LOWER RECIEVER HINGE PIN ARE PROPERLY MATED, OR THE RIFLE CAN BE DAMAGED BY FINAL ASSEMBLY MOTION.

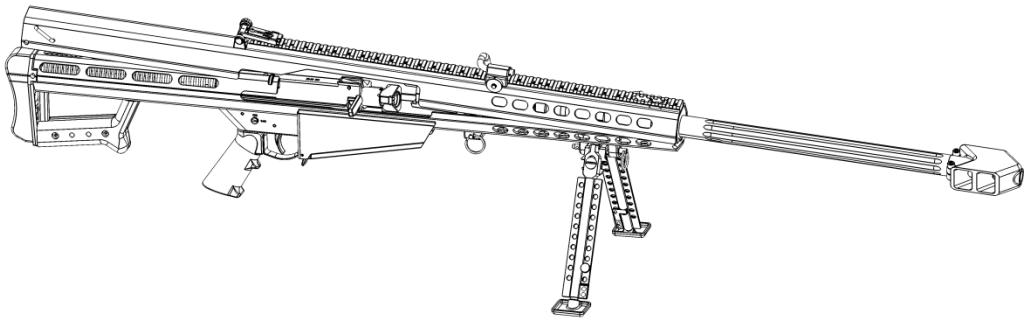
7. Engage the notch in the front barrel bushing of the upper receiver with the front hinge pin of the lower receiver. Positioned directly behind the rifle, again grasp the bolt charging handle and pull rearward the bolt carrier against mainspring tension so the bolt will clear the barrel when the upper receiver is lowered.



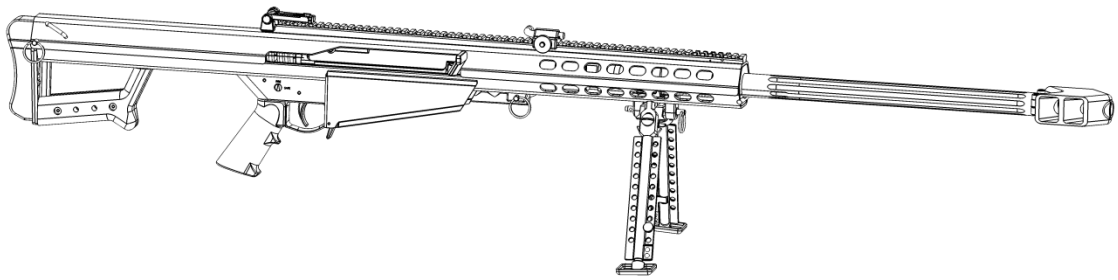
8. Lower and close the upper receiver onto the lower receiver. Release the charging handle **SLOWLY** until the bolt is fully closed.

WARNING

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



9. Place the midlock pin (shorter pin) through the hole near center bottom of the rifle, until it snaps fully to lock the upper and lower receivers together. Insert the rear lock pin through the rear hole of the upper receiver to complete the mating of the receivers.



INSECTION OF THE ACTION

WARNING

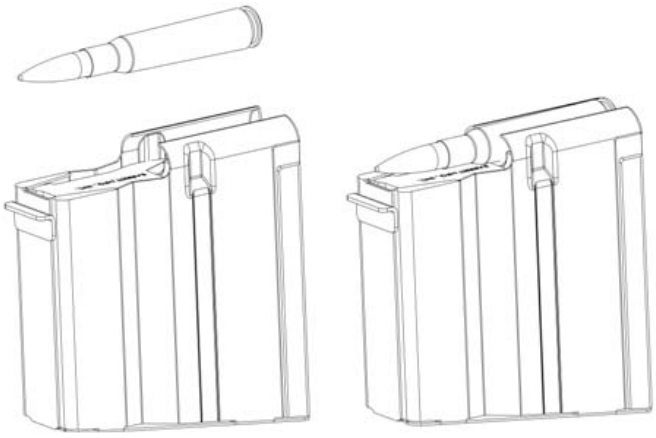
THERE SHOULD BE NO AMMUNITION PRESENT DURING THIS TEST.

1. Grasp the charging handle and dry-cycle the rifle several times (work the bolt all the way back and forth). This will serve two purposes. First, if there has been any damage to the sheet metal housing during shipping, the bolt carrier will not move freely. Second, the shooter will be able to determine if the bolt fully closes and rotates to a locked position.

OPERATING THE RIFLE

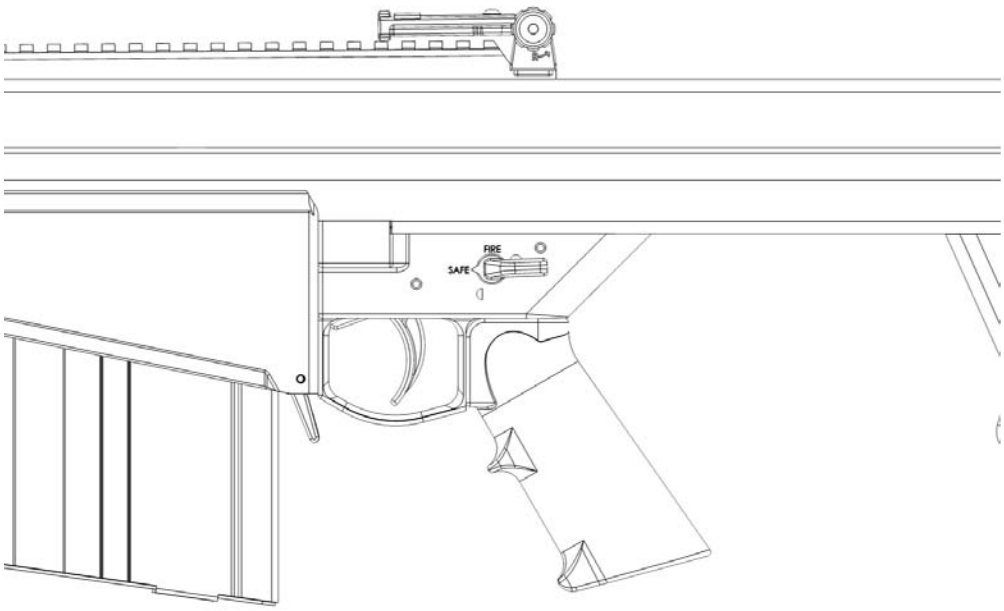
Loading the Magazine

Using appropriate ammunition, load the magazine in the normal manner. Ensure that cartridges are pushed all the way to the rear of the magazine. Load no more than 10 rounds.



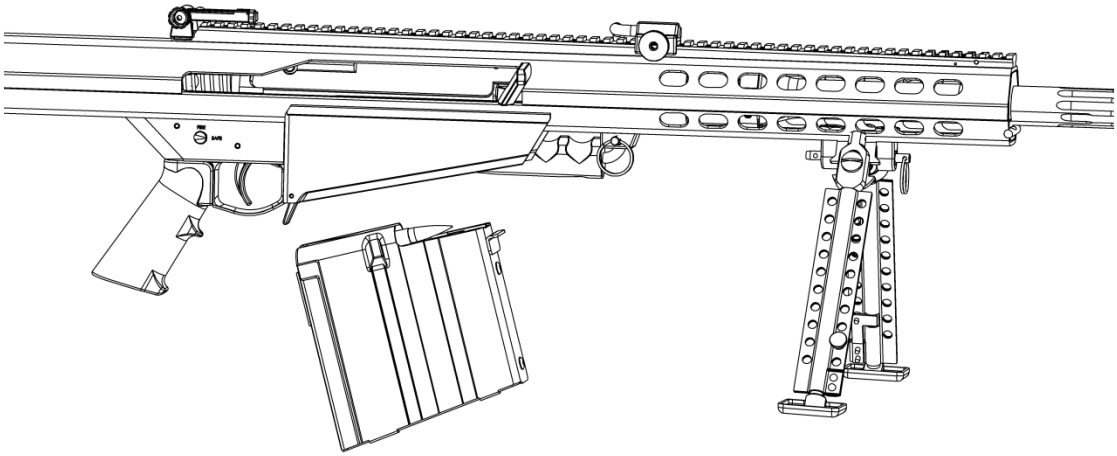
Safety

There is a single thumb-lever which prohibits the trigger from being pulled. Position the lever pointed towards SAFE.



Inserting Magazine

1. Insert the magazine into the magazine well in the lower receiver, with magazine tilted at approximately a 45° (bullet tips upward). Insert the front of the magazine hook to its hinge, located in the front of the magazine well.



2. Swing the rear of the magazine up until it locks into place by means of the magazine catch. It should lock in with an audible click. Be aware that it is possible to insert the hook on the front of the magazine in the wrong space. Tug down on the magazine to ensure it is properly seated.

CHARGING THE RIFLE

WARNING
Do not attempt to force a cartridge into the chamber by forcing the bolt closed. If the bolt will not close easily, remove the cartridge and examine it for damage or defects. Check the chamber for obstructions.

1. With the safety in the safe position (safety lever horizontal) and 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 changing handle). The rifle then loads and locks under its own spring power for all subsequent rounds.

FIRING THE RIFLE

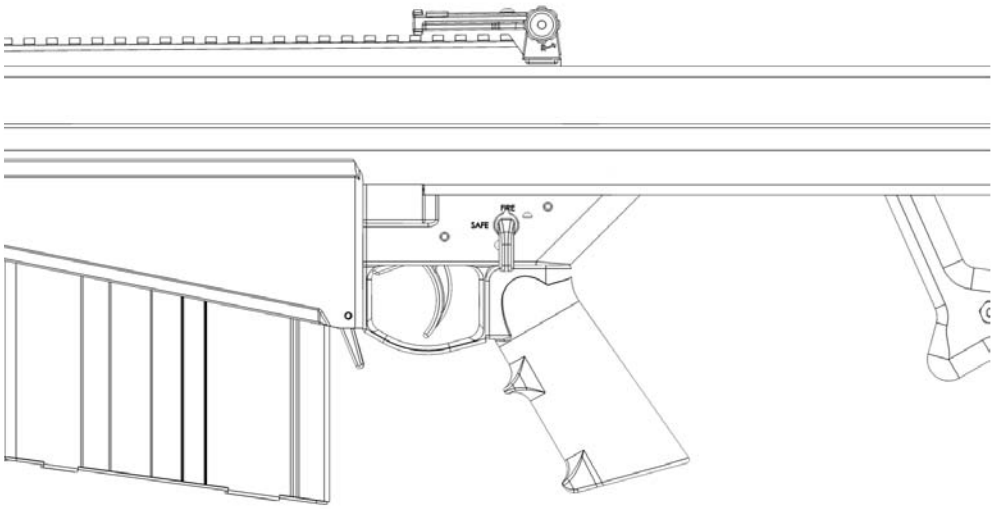
WARNING

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

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 by contact with the rifle or rifle scope.

1. Because the rifle is recoil-operated, the shooter must be positioned squarely behind the rifle, with the recoil pad firmly against the shoulder. Anything less may result in injury, discomfort, or failure of the action to cycle correctly.
2. Position the safety (lever vertical) pointed towards FIRE.



3. The rifle may now be fired. The rifle will fire one round for each squeeze 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 WHICH CAN CAUSE INJURY OR DEATH FROM AN NEGLIGENT DISCHARGE.

4. After the magazine is emptied, or you are done firing, place rifle in safe position and remove magazine. Pull the charging handle to the rear; visually and physically check the chamber for ammunition.

UNLOADING RIFLE

1. Place the rifle in the “SAFE” position (safety lever horizontal).
2. Press the magazine catch forward, towards the magazine and remove the magazine.
3. Pull the charging handle to the rear, which will eject any cartridge still chambered. (One method of indicating the rifle has been cleared is to take an empty cartridge case, insert it halfway into the ejection port so that the neck is visible, and ease the bolt forward onto it.)

CAUTION

DO NOT LEAVE ROUNDS IN THE MAGAZINE FOR EXTENDED PERIODS OF TIME SINCE THIS WILL CAUSE THE SPRING TO LOSE TENSION AND MAY CAUSE A MALFUNCTION.

UNLOADING THE MAGAZINE

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 out one after another, until all are ejected.

PREVENTIVE MAINTENANCE PROCEDURES

GENERAL MAINTENANCE.

1. Ensure that all bearing surfaces and exposed parts, particularly those listed below, are clean and properly lubricated
    a. Barrel
    b. Bolt and bolt carrier
    c. Mainspring housing
    d. Trigger assembly
    e. Transfer bar assembly
    f. Lower Receiver

2. Inspect all parts for looseness and tighten or replace, as necessary.
    a. Inspect all parts (especially along welds) for cracks or damage and replace, if necessary.
    b. Each time the rifle is assembled for firing ensure that the barrel, chamber, and locking lugs of the bolt are free of excess oil. When possible, an operational check using ten dummy rounds should be performed. Insert the dummy rounds into a magazine and load the magazine into the rifle. Manually operate the bolt carrier to the rear and forward, making sure the cartridges feed, extract, and eject properly. If the rifle is not functioning correctly, refer to the Troubleshooting section.
    c. Refer to Table 2-3 for Malfunction and Immediate Action Troubleshooting.

CLEANING AND LUBRICATION

WARNING
Unload and clear the rifle before cleaning.

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

CAUTION
To protect the rifle from corrosion, the rifle and the interior of the carrying case should be moisture free before the rifle is placed in the carrying case for storage.

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.

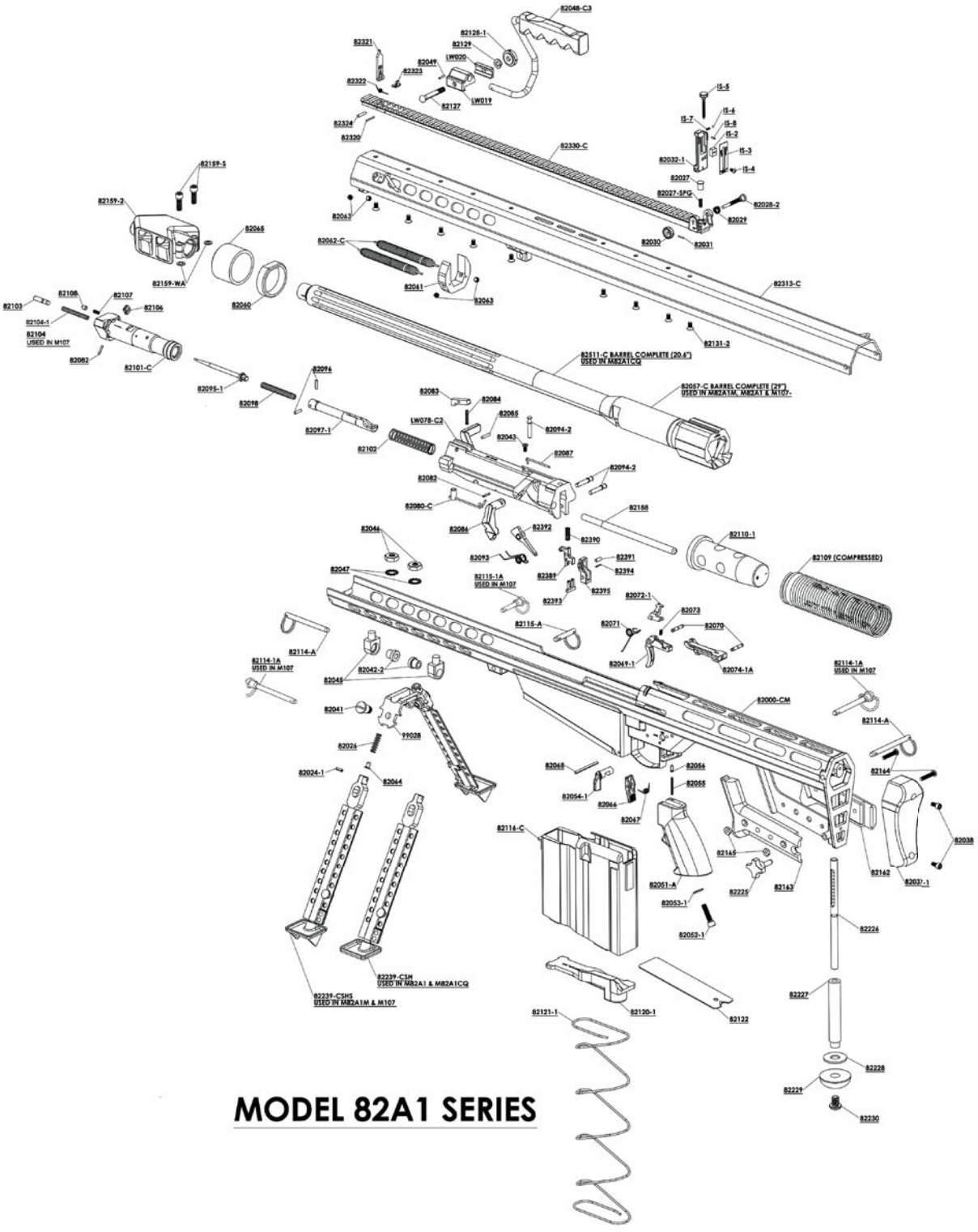
3. Apply cleaning solvent to a bore brush and clean the bore. Barrett Heavy Bore Cleaner is recommended.

4. Clean the muzzle brake with a stiff plastic brush and bore solvent. It is best to clean the muzzle brake at the same time the barrel is being cleaned as the bore solvent will help loosen the 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.

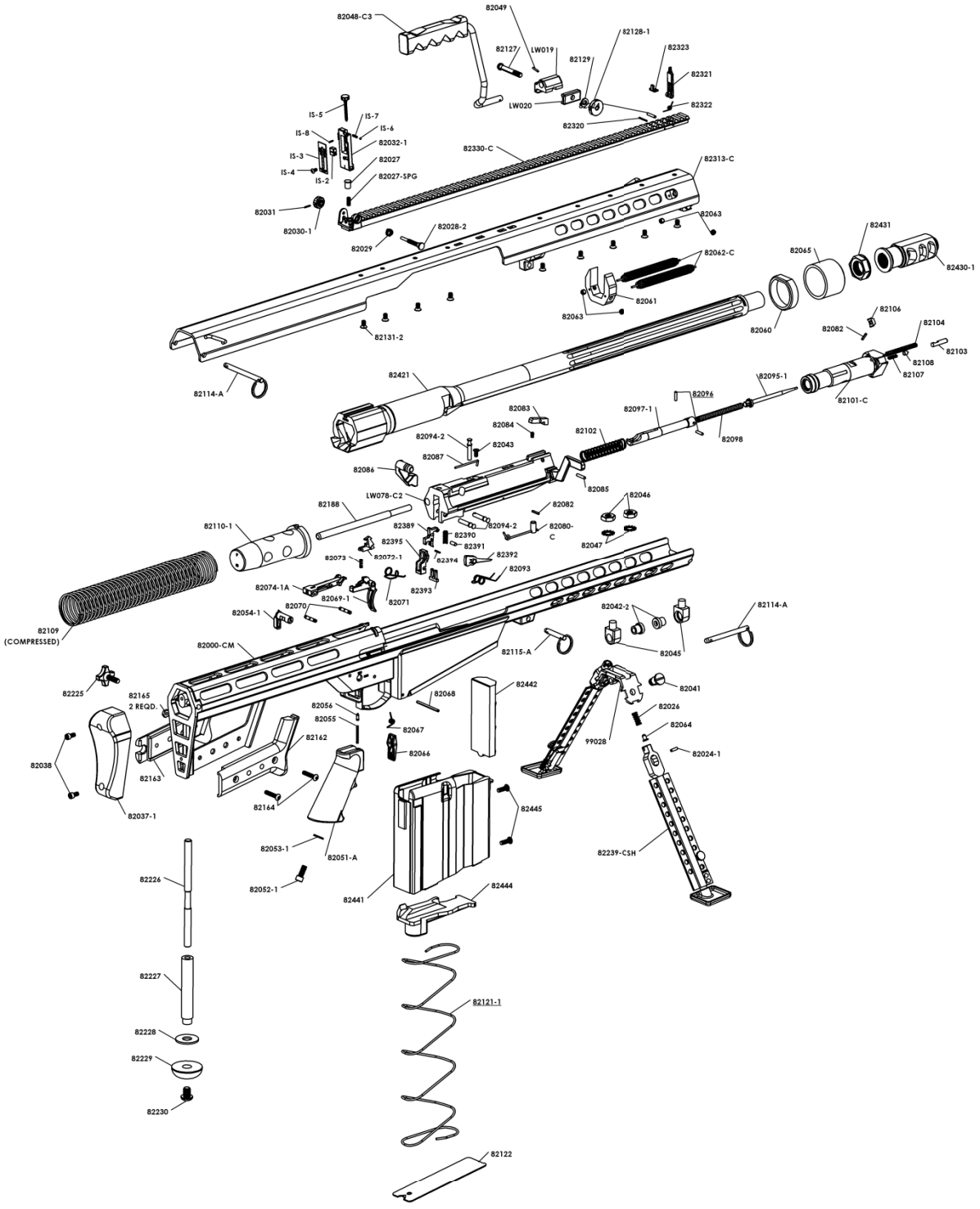
6. Use dry patches as necessary to remove cleaner from the bore and chamber.

7. Clean the remainder of the rifle with cotton-tipped swabs, general-purpose brushes and rags. Make sure all metal surfaces are coated with preservative oil.


82048-C3
82128-1
82129
82321
82049
LW020
82323
82322
82127
LW011
82324
82320
82330-C
I5-5
I5-4
I5-7
I5-6
I5-2
I5-3
I5-4
82032-1
82027
82027-SPG
82028-2
82029
82030
82031
82313-C
82131-2
82159-S
82159-2
82159-WA
82045
82060
82062-C
82061
82063
82043
82103
82108
82107
82106
82104-1
82104
USED IN M107
82082
82101-C
82096
82095-1
82098
82097-1
82102
82083
82084
82085
LW078-C2
82043
82094-2
82087
82082
82094-2
82080-C
82086
82188
82392
82390
82110-1
82109 (COMPRESSED)
82093
82391
82394
82387
82395
82393
82072-1
82073
82115-A
82071
82070
82069-1
82074-1A
82046
82047
82115-1A
USED IN M107
82114-A
82114-1A
USED IN M107
82042-2
82045
82041
99028
82026
82024-1
82064
82000-CM
82114-1A
USED IN M107
82114-A
82144
82065
82054
82055
82054-1
82066
82047
82114-C
82165
82051-A
82053-1
82052-1
82225
82163
82162
82037-1
82038
82226
82227
82228
82229
82230
82239-CSH
USED IN M82A1 & M82A1CQ
82239-CSHS
USED IN M82A1M & M107
82121-1
82120-1
82122
MODEL 82A1 SERIES

PART NO.	DESCRIPTION	QTY.
82000-CM	LOWER RECEIVER COMPLETE	1
82024-1	BIPOD PIN	2
82026	BIPOD SPRING	2
82027	REAR SIGHT BASE DETENT	1
82027-SPG	REAR SIGHT BASE SPRING	1
82028-2	WINDAGE SCREW	1
82029	WINDAGE SCREW SPRING	1
82030-1	WINDAGE KNOB	1
82031	WINDAGE KNOB PIN	1
82032-1	REAR SIGHT BODY	1
82037-1	RECOIL PAD	1
82038	RECOIL PAD SCREW	2
82041	BIPOD SCREW	2
82042-2	BIPOD SHIM BUSHING	2
82043	ACCELERATOR SPRING SCREW	1
82045	YOKE MOUNT	2
82046	YOKE MOUNT NUT	2
82047	YOKE MOUNT WASHER	2
82048-C3	CARRYING HANDLE COMPLETE	1
82049	CARRYING HANDLE PIN	1
82051-A	PISTOL GRIP STOCK ASSEMBLY	1
82052-1	PISTOL GRIP STOCK SCREW	1
82053-1	PISTOL GRIP STOCK WASHER	1
82054-1	SAFETY	1
82055	SAFETY SPRING	1
82056	SAFETY DETENT	1
82057-C	BARREL COMPLETE (29")	1
82511-C	BARREL COMPLETE (20.6")	1
82060	BATTERY BUMPER	1
82061	BARREL KEY	1
82062-C	BARREL SPRING ASSEMBLY	2
82063	BARREL SPRING SCREW	4
82064	BIPOD DETENT	2
82065	BARREL BUMPER IMPACT	1
82066	MAGAZINE CATCH	1
82067	MAGAZINE CATCH SPRING	1
82068	MAGAZINE CATCH PIN	1
82069-1	TRIGGER	1
82070	TRIGGER HOUSING PIN	2
82071	TRIGGER SPRING	1
82072-1	DISCONNECTOR	1
82073	DISCONNECTOR SPRING	1
82074-1A	TRANSFER BAR ASSEMBLY	1
82080-C	CAM PIN COMPLETE	1
82082	CAM PIN PIN	2
82083	BOLT LATCH	1
82084	BOLT LATCH SPRING	1
82085	BOLT LATCH PIN	1
82086	ACCELERATOR	1
82087	ACCELERATOR SPRING	1
82093	COCKING LEVER SPRING	1
82094-2	BOLT CARRIER PIN	3
82095-1	FIRING PIN	1
82096	FIRING PIN PIN	2
82097-1	FIRING PIN EXTENSION	1
82098	FIRING PIN EXTENSION SPRING	1
82101-C	BOLT COMPLETE	1

PART NO.	DESCRIPTION	QTY.
82103	EJECTOR	1
82104	EJECTOR SPRING	1
82106	EXTRACTOR	1
82107	EXTRACTOR SPRING	1
82108	EXTRACTOR PLUNGER	1
82109	MAIN SPRING	1
82110-1	MAIN SPRING BUFFER	1
82114-A	REAR ASSEMBLY PIN	2
82115-A	MIDLOCK ASSEMBLY PIN	1
82114-1A	REAR ASSEMBLY PIN	2
82115-1A	MIDLOCK ASSEMBLY PIN	1
82116-C	MAGAZINE COMPLETE	1
82120-1	MAGAZINE FOLLOWER	1
82121-1	MAGAZINE SPRING	1
82122	MAGAZINE FLOOR PLATE	1
82127	SCOPE RING BOLT	1
82128-1	CARRYING HANDLE NUT	1
82129	SCOPE RING WASHER	1
82131-2	SCOPE BASE SCREW	9
82159-2	MUZZLE BRAKE	1
82159-S	MUZZLE BRAKE SCREW	2
82159-WA	MUZZLE BRAKE WASHER	2
82162	REAR HAND GRIP (RIGHT)	1
82163	REAR HAND GRIP (LEFT)	1
82164	REAR HAND GRIP SCREW	2
82165	REAR HAND GRIP NUT	2
82188	ACCELERATOR ROD	1
82225	LOCK KNOB	1
82226	ELEVATION SCREW	1
82227	ELEVATION COLLAR	1
82228	MONOPOD FOOT WASHER	1
82229	MONOPOD FOOT	1
82230	MONOPOD FOOT SCREW	1
82239-CSH	BIPOD LEG COMPLETE (FLAT)	2
82239-CSHS	BIPOD LEG COMPLETE (SPIKE)	2
82313-C	UPPER RECEIVER COMPLETE	1
82320	FRONT SIGHT CATCH PIN	1
82321	FRONT SIGHT	1
82322	FRONT SIGHT SPRING	1
82323	FRONT SIGHT CATCH	1
82324	FRONT SIGHT PIN	1
82330-C	SCOPE BASE	1
82389	SEAR	1
82390	SEAR SPRING	1
82391	SEAR PIN	1
82392	COCKING LEVER	1
82393	SEAR LEVER	1
82394	SEAR LEVER PIN	1
82395	SEAR HOUSING	1
99028	BIPOD YOKE	1
IS-2	REAR SIGHT APERTURE	1
IS-3	REAR SIGHT SCALE	1
IS-4	REAR SIGHT SCALE SCREW	1
IS-5	ELEVATION SCREW	1
IS-6	ELEVATION SCREW BALL	1
IS-7	ELEVATION SCREW SPRING	1
IS-8	ELEVATION SCREW PIN	1
LW019	CARRYING HANDLE MOUNT	1
LW020	CARRYING HANDLE MOUNT CLAMP	1
LW078-C2	BOLT CARRIER COMPLETE	1


82048-C3
82049
82127
LW019
82129
82128-1
82323
82321
LW020
82322
82320
IS-5
IS-7
IS-8
IS-6
82032-1
IS-3
82027
IS-4
IS-2
82027-SPG
82330-C
82313-C
82031
82030-1
82029
82028-2
82063
82062-C
82061
82063
82131-2
82431
82065
82430-1
82060
82106
82082
82104
82103
82108
82107
82095-1
82101-C
82114-A
82421
82096
82097-1
82083
82084
82102
82098
82094-2
82043
82087
82086
82085
LW078-C2
82046
82188
82082
82110-1
82389
82094-2
82080-C
82047
82390
82391
82395
82073
82079-1
82394
82392
82093
82074-1A
82393
82069-1
82071
82070
82054-1
82042-2
82114-A
82109
(COMPRESSED)
82000-CM
82115-A
82045
82225
82165
2 REQD.
82068
82442
82041
82056
82055
82026
82064
82067
82162
99028
82038
82066
82024-1
82163
82164
82445
82037-1
82053-1
82051-A
82239-CSH
82226
82052-1
82441
82444
82227
82121-1
82228
82229
82230
82122

Model 82A1 .416 Barrett Parts List

PART NO.	DESCRIPTION	QTY.
82000-CM	LOWER RECEIVER COMPLETE	1
82024-1	BIPOD PIN	2
82026	BIPOD SPRING	2
82027	REAR SIGHT BASE DETENT	1
82027-SPG	REAR SIGHT BASE SPRING	1
82028-2	WINDAGE SCREW	1
82029	WINDAGE SCREW SPRING	1
82030-1	WINDAGE KNOB	1
82031	WINDAGE KNOB PIN	1
82032-1	REAR SIGHT BODY	1
82037-1	RECOIL PAD	1
82038	RECOIL PAD SCREW	2
82041	BIPOD SCREW	2
82042-2	BIPOD SHIM BUSHING	2
82043	ACCELERATOR SPRING SCREW	1
82045	YOKE MOUNT	2
82046	YOKE MOUNT NUT	2
82047	YOKE MOUNT WASHER	2
82048-C3	CARRYING HANDLE COMPLETE	1
82049	CARRYING HANDLE PIN	1
82051-A	PISTOL GRIP STOCK ASSEMBLY	1
82052-1	PISTOL GRIP STOCK SCREW	1
82053-1	PISTOL GRIP STOCK WASHER	1
82054-1	SAFETY	1
82055	SAFETY SPRING	1
82056	SAFETY DETENT	1
82060	BATTERY BUMPER	1
82061	BARREL KEY	1
82062-C	BARREL SPRING ASSEMBLY	2
82063	BARREL SPRING SCREW	4
82064	BIPOD DETENT	2
82065	BARREL BUMPER IMPACT	1
82066	MAGAZINE CATCH	1
82067	MAGAZINE CATCH SPRING	1
82068	MAGAZINE CATCH PIN	1
82069-1	TRIGGER	1
82070	TRIGGER HOUSING PIN	2
82071	TRIGGER SPRING	1
82072-1	DISCONNECTOR	1
82073	DISCONNECTOR SPRING	1
82074-1A	TRANSFER BAR ASSEMBLY	1
82080-C	CAM PIN COMPLETE	1
82082	CAM PIN PIN	2
82083	BOLT LATCH	1
82084	BOLT LATCH SPRING	1
82085	BOLT LATCH PIN	1
82086	ACCELERATOR	1
82087	ACCELERATOR SPRING	1
82093	COCKING LEVER SPRING	1
82094-2	BOLT CARRIER PIN	3
82095-1	FIRING PIN	1
82096	FIRING PIN PIN	2
82097-1	FIRING PIN EXTENSION	1

PART NO.	DESCRIPTION	QTY.
82106	EXTRACTOR	1
82107	EXTRACTOR SPRING	1
82108	EXTRACTOR PLUNGER	1
82109	MAIN SPRING	1
82110-1	MAIN SPRING BUFFER	1
82114-A	REAR ASSEMBLY PIN	2
82115-A	MIDLOCK ASSEMBLY PIN	1
82121-1	MAGAZINE SPRING	1
82122	MAGAZINE FLOOR PLATE	1
82127	SCOPE RING BOLT	1
82128-1	CARRYING HANDLE NUT	1
82129	SCOPE RING WASHER	1
82131-2	SCOPE BASE SCREW	9
82162	REAR HAND GRIP (RIGHT)	1
82163	REAR HAND GRIP (LEFT)	1
82164	REAR HAND GRIP SCREW	2
82165	REAR HAND GRIP NUT	2
82188	ACCELERATOR ROD	1
82225	LOCK KNOB	1
82226	ELEVATION SCREW	1
82227	ELEVATION COLLAR	1
82228	MONOPOD FOOT WASHER	1
82229	MONOPOD FOOT	1
82230	MONOPOD FOOT SCREW	1
82239-CSH	BIPOD LEG COMPLETE (FLAT)	2
82313-C	UPPER RECEIVER COMPLETE	1
82320	FRONT SIGHT CATCH PIN	1
82321	FRONT SIGHT	1
82322	FRONT SIGHT SPRING	1
82323	FRONT SIGHT CATCH	1
82324	FRONT SIGHT PIN	1
82330-C	SCOPE BASE	1
82389	SEAR	1
82390	SEAR SPRING	1
82391	SEAR PIN	1
82392	COCKING LEVER	1
82393	SEAR LEVER	1
82394	SEAR LEVER PIN	1
82395	SEAR HOUSING	1
82421	BARREL COMPLETE	1
82422	.416 BARREL	1
82430-1	MUZZLE BRAKE	1
82431	MUZZLE BRAKE NUT	1
82441	MAGAZINE COMPLETE	1
82442	MAGAZINE INSERT	1
82444	MAGAZINE FOLLOWER	1
82445	MAGAZINE INSERT SCREW	2
99028	BIPOD YOKE	1
IS-2	REAR SIGHT APERTURE	1
IS-3	REAR SIGHT SCALE	1
IS-4	REAR SIGHT SCALE SCREW	1
IS-5	ELEVATION SCREW	1
IS-6	ELEVATIONS SCREW BALL	1

Troubleshooting

Malfunction	Inspect and Test	Corrective Action
1. Failure to feed	1. Sluggish action	Clean and lubricate or if cold check for over lubrication
	2. Check to see if the mainspring buffer is dragging	Replace the buffer if the head diameter is over 1.850 in. Replace the buffer if showing excessive/uneven wear
	3. Check Magazine a. Proper installation b. Dirt/debris c. Damage	 a. Reinstall magazine into the receiver b. Clean magazine c. Replace magazine
	4. Rifle short cycles	Hold rifle more firmly in the shoulder
	5. Bolt carrier assembly binds	Please contact tech support
	6. Weak/broken mainspring	Replace mainspring
2. Failure to chamber	1. Check cartridge for damage	Remove damaged round
	2. Check for dirty chamber	Clear and clean chamber
	3. Check for faulty mainspring	Replace mainspring
	4. Check for bent receiver	Please contact Tech Support
3. Failure to cock	1. Check bolt carrier for proper assembly, worn or missing parts	a. Replace worn or damaged parts b. Reassemble correctly

Malfunction	Inspect and Test	Corrective Action
4. Failure to lock or unlock	1. Check for obstruction between firing pin and bolt	Disassemble and clean
	2. Check for excessive dirt or debris in locking area	Clean chamber and barrel extension
	4. Check bolt spring for damage and that it is present	Replace or reinstall bolt spring
	5. Check for broken or burred bolt latch or bolt latch spring	Please contact Tech Support
5. Failure to fire	1. Faulty ammunition	Replace ammunition
	2. Verify bolt carrier is fully in battery	Manually cycle carrier (do not force carrier closed)
	3. Check for improper installation of firing pin	Assemble properly
	4. Check for broken or improper installation of trigger components	Replace or reinstall trigger components
	5. Check for obstruction of the firing pin or trigger	Remove obstruction or debris
6. Failure to extract	1. Check for broken or missing extractor	Replace extractor
	2. Ensure extractor is moving freely in slot	Remove, clean and lubricate extractor, plunger, and spring
	3. Check for dirty chamber	Clean chamber

Malfunction	Inspect and Test	Corrective Action
7. Failure to eject	Check for proper movement of ejector	Remove, clean, lubricate or replace ejector and/or spring as needed
8. Very hard recoil	1. Check for faulty/hot ammunition	Replace or cool ammunition
	2. Check for damaged or missing mainspring/buffer	Replace/install mainspring or buffer as needed
	3. Check for loose, missing, damaged/clogged muzzle brake	Please contact Tech Support