



STERLING ARMS
INTERNATIONAL

SAI R18 MK2

Owner's Manual

This manual must be read in its entirety BEFORE using the firearm.

Failure to use this firearm in its prescribed manner may result in injury or death to user or bystanders.

KEEP THIS MANUAL WITH YOUR RIFLE. IF YOU SELL THE RIFLE, GIVE THIS MANUAL TO THE NEW OWNER.

WARNING: IT IS YOUR RESPONSIBILITY TO ASSURE THAT YOUR FIREARM IS HANDLED, FIRED, AND STORED SAFELY AND RESPONSIBLY AT ALL TIMES.

This manual provides instructions on the operation and maintenance of your Sterling Arms International Inc. (SAI) **R18 MK2** rifle system.

Read and understand it carefully before you try to use your firearm.

Your safety, and that of those around you, depends on your knowledge of your firearm and on your knowledge of safety rules common to all firearms. Please study the common-sense safety rules noted in this manual.

Your first responsibility as a gun owner is always safety!

This manual may serve several models of SAI firearms. Ensure you identify which specific model you possess and follow those instructions and guidelines.

NOTICE

SAI and affiliates has no control over the use of your firearm, and shall not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm. In addition, SAI shall not be responsible for proper function of the firearm when it is used for purposes or subjected to treatment for which it was not intended. SAI will not honour claims which may result from careless or improper handling, unauthorized adjustments or parts replacement, corrosion, neglect, use of the wrong type or caliber of ammunition, or the use of ammunition other than original, high quality commercially new manufactured ammunition in good condition or any combination thereof.

THE VITAL FOUR ACTS OF FIREARMS SAFETY

- **Assume** every firearm is loaded.
- **Control** the muzzle direction at all times.
- Trigger finger must be kept **off the trigger** and out of the trigger guard.
- See that the firearm is unloaded - **PROVE** it safe.

PROVE

- **Point** the firearm in the safest available direction.
- **Remove** all cartridges.
- **Observe** the chamber.
- **Verify** the feeding path.
- **Examine** the bore.

ALWAYS WEAR EYE AND EAR PROTECTION. MAKE SURE THAT NEARBY BYSTANDERS ALSO WEAR EYE AND EAR PROTECTION.

HANDLING OF CARTRIDGES AND FIRING FIREARMS MAY EXPOSE YOU TO LEAD. ALWAYS ASSURE THAT THERE IS ADEQUATE VENTILATION. ALWAYS WASH YOUR HANDS AFTER HANDLING AMMUNITION OR FIRING YOUR FIREARM.

WARNING: GRIPPING THE FIREARM LOOSELY WHEN FIRING CAN CAUSE THE SHOOTER TO FIRE TWO SHOTS (THE SECOND AS THE TRIGGER STRIKES THE SHOOTER'S TRIGGER FINGER DURING COUNTER-RECOIL.) THIS IS A SHOOTER ERROR, NOT A FIREARM MALFUNCTION.

THE FIRED CARTRIDGE CASE IS HOT WHEN IT IS EJECTED FROM THE FIREARM. DO NOT ALLOW IT TO BURN YOU OR TO DISTRACT YOU FROM SAFE HANDLING OF THE FIREARM.

ALWAYS ENSURE THAT THE CHAMBER IS EMPTY. THE FIREARM SHOULD NOT BE CONSIDERED TO BE SAFE UNLESS THE MAGAZINE IS REMOVED, THE SAFETY IS ON, AND THE BOLT / SLIDE IS OPEN, AND THE CHAMBER IS EMPTY.

WARNING: ALWAYS ASSUME ALL FIREARMS ARE LOADED. ANYTIME YOU HANDLE A FIREARM, YOU SHOULD IMMEDIATELY INSPECT IT TO ENSURE THAT IT IS COMPLETELY UNLOADED.

WARNING: DO NOT APPLY LUBRICANT OR PRESERVATIVE TO YOUR AMMUNITION. DOING SO MAY CAUSE THE CARTRIDGE TO PARTIALLY MALFUNCTION, LEAVING THE BULLET LODGED IN THE BORE, CREATING A BORE OBSTRUCTION.

WARNING: LEAD MAY BE PRESENT IN THE FOULING OF A DIRTY FIREARM. AVOID CONTACT WITH IT, AND CLEAN HANDS AFTERWARD TO AVOID INGESTING LEAD.

CAUTION: NEVER MIX TWO OR MORE BORE CLEANING SOLVENTS. SOME COMBINATIONS OF SOLVENTS PRODUCE ACIDS THAT MAY DAMAGE THE FIREARM OR HARMFUL VAPOUR THAT CAN CAUSE INJURY TO THE USER.

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1. SAFE STORAGE

Always ensure that before storing your SAI **R18 MK2**, it is UNLOADED.

When you retrieve your **R18 MK2** from storage, assume it is LOADED and PROVE the firearm “SAFE” for the safety of yourself and bystanders.

2. GENERAL INFORMATION

Your SAI **R18 MK2** is a lightweight, gas operated, air cooled, magazine fed semiautomatic rifle.

The rifle is readily opened by pressing the guide rod assembly forward, providing ready access for removal of the bolt carrier group. It also provides access to all other working parts for convenient cleaning and inspection.

The bolt incorporates six locking lugs and one safety lug. Upon closing, the bolt rotates to engage similar locking lugs in the barrel extension. The full force of the combustion of the powder charge is absorbed by the barrel extension and bolt, and no pressure is exerted upon the receiver. The design contributes to the high degree of safety, durability, and performance of the rifle. Due to the light weight, portability and convenience for carrying is greatly enhanced.

3. SPECIFICATIONS

Weight

Rifle without Magazine:	3.54 Kg	7.8 Lbs
Rifle with Loaded Magazine (5 rounds of 55gr ammunition)	3.76 Kg	8.3 Lbs

Length

With fully collapsed stock	939.8 mm	37 Inches
With fully extended stock	1023.6 mm	40.3 Inches

Barrel

Barrel material is CrMoV Mil-B-11595 Material , 18.6 in. length, 6 groove with a 1 to 8 twist rate with a threaded (1/2 X 28) muzzle for the installation of a muzzle brake.

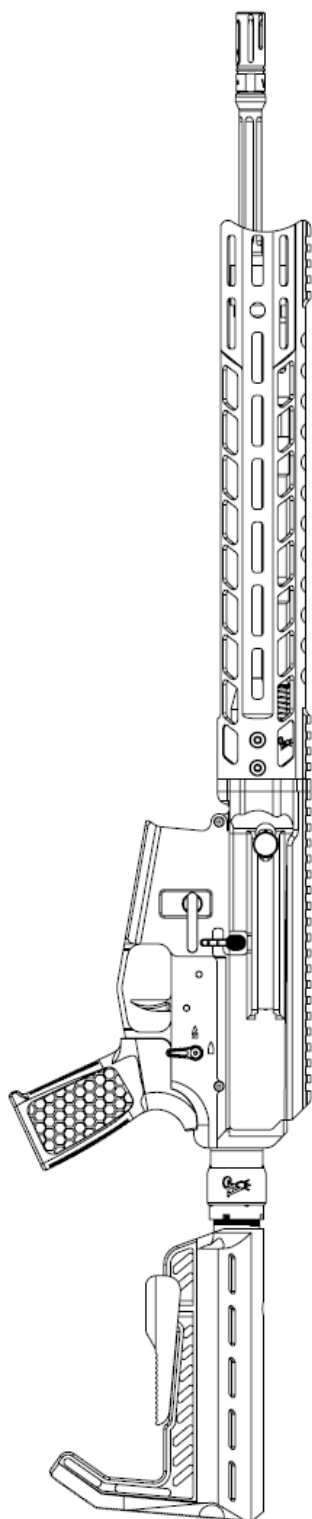
Calibre

.223 Wylde

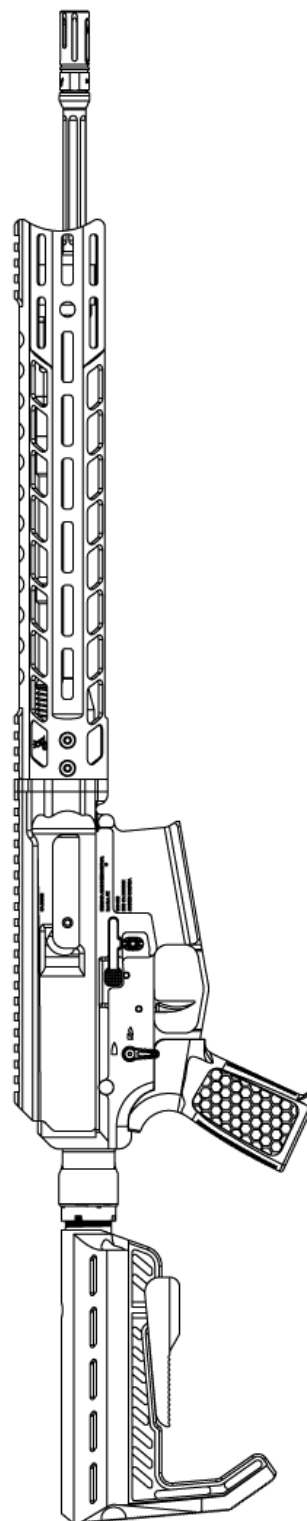
Warning: This SAI rifle system was designed to function properly with the original components as supplied. Alterations, repairs or replacing with non-SAI parts without written authorization in advance may render the firearm to operate unsafely. For the safety of the user and bystanders; do not alter or substitute parts and components.

SAI R18 MK2

Left hand View



Right Hand View



4. EXPLODED PHOTOS AND PARTS LISTS

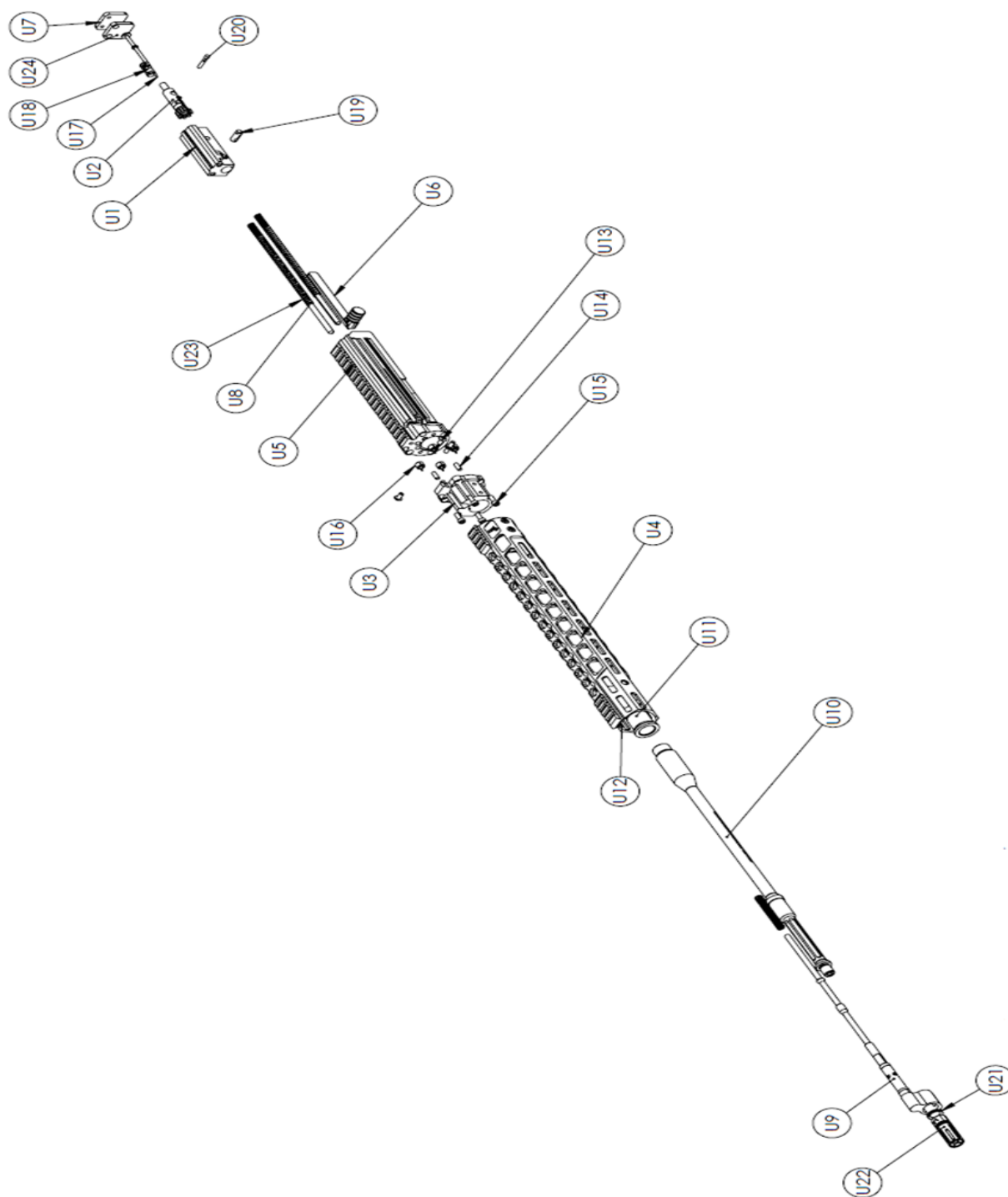
The photos and associated parts lists in this section will give you visual references to parts discussed in the text. In the text, you will note part numbers in parentheses behind some part names. Those part numbers are the same as part numbers shown in the exploded photos and part lists. For example, a part numbered “U-7” in the text would refer to the part numbered “7” in the Upper Receiver Group exploded photo and in its associated parts list.

4.A SAI 180C UPPER RECEIVER GROUP

Part #	Quantity	Description	
U1	1	Bolt Carrier	
U2	1	Bolt Assembly	
U2A	1	Bolt	
U2B	1	Ejector	
U2C	1	Ejector Spring	
U2D	1	Extractor	
U2E	1	Extractor Spring	
U2F	1	Ejector Roll Pin	
U2G	1	Extractor Dowel pin	
U2H	1	Extractor Spring insert	
U3	1	Barrel Nut	
U4	1	Quad Rail (various lengths)	
U5	1	Upper Receiver body	
U6	1	Charging Handle Assembly	
U6A	1	Charging Handle Slide Plate	
U6B	1	Charging Handle	
U6B	1	Detent Pin	
U6D	1	Plunger Set Screw	
U6E	1	Handle Set Screw	
U6F		Plunger Spring	
U7	1	Back Plate	
U8	2	Recoil Spring Guide Rods	
U9	1	Piston System assembly	
U9A	1	Operating Rod Cylinder	
U9B	1	Operating Rod Link	
U9C	1	Operating Rod	
U9D	1	Piston	
U9E	1	Gas Block	
U9F	1	OP Rod Spring	
U10	1	SAI 18.6" Barrel .223 Wylde	
U11	1	Barrel Extension	
U12	1	Barrel Extension Pin	
U13	4	Quad Rail Screws	
U14	3	Barrel Nut Dowel Pin	
U15	4	Barrel Nut Bolt	
U16	4	Upper Threaded insert	
U17	1	Firing Pin	

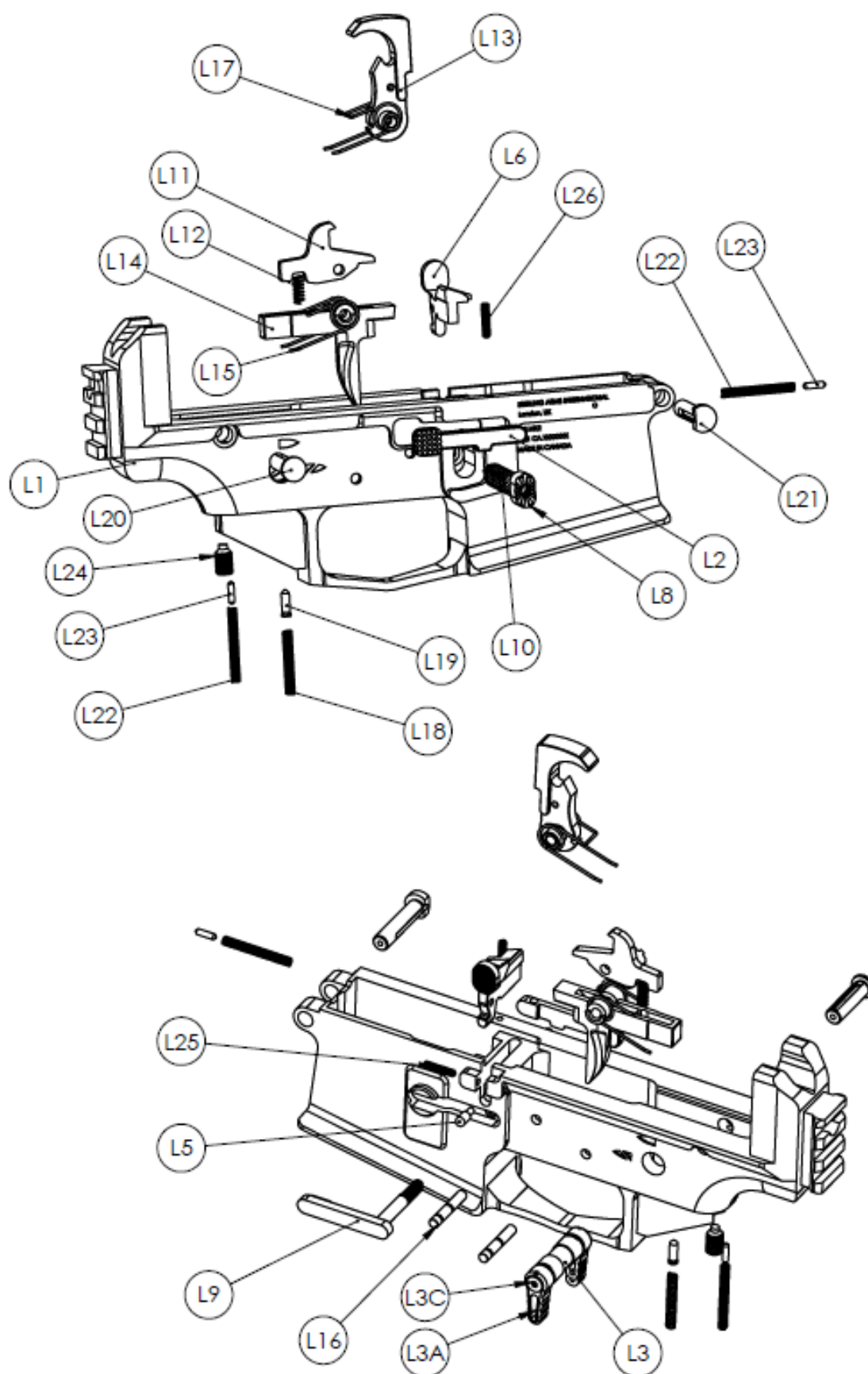
U18	1	Firing Pin Spring	
U19	1	Cam Pin	
U20	1	Firing Pin retaining pin	
U21	1	Crush washer	
U22	1	SAI Muzzle brake	
U23	2	Guide Springs	
U24	1	Recoil Pad	

***If the bolt body is replaced, headspace needs to be checked by a qualified gunsmith.



4.B SAI 180C LOWER RECEIVER GROUP

Part	Quantity	Description	
L1	1	Lower Receiver	
L2	1	Ambidextrous Bolt Catch Paddle	
L3	1	Selector body	
L3A	1	Right Selector Lever	
L3B	1	Left Selector Lever	
L3C	2	Selector Paddle Screw	
L4	1	Ambidextrous Bolt Catch Pin	
L5	1	Bolt Catch Pin	
L6	1	Bolt Catch	
L7	1	Bolt Catch Spring	
L8	1	Magazine release button	
L9	1	Magazine Catch	
L10	1	Mag Catch Spring	
L11	1	Disconnecter	
L12	1	Disconnecter Spring	
L13	1	Hammer Semi Auto	
L14	1	Trigger	
L15	1	Trigger Torsion Spring	
L16	2	Trigger Pin	
L17	1	Hammer Torsion Spring	
L18	1	Selector Spring	
L19	1	Detent Selector	
L20	1	Takedown Pin	
L21	1	Pivot Pin	
L22	2	Pivot and Takedown Detent Spring	
L23	2	Pivot and Takedown Detent	
L24	1	Upper Adjustment Set Screw	
L25	1	Bolt Catch Set Screw	
L26	1	Ambi Bolt Catch Paddle Set Screw	
L27	1	Grip lock washer	
L28	1	Pistol Grip screw	
L29	1	Pistol Grip	



5. AMMUNITION

Ensure the data stamp of the ammunition matched the recommended ammunition for your SAI 180 rifle system. Using the wrong ammunition can cause injury or death to both the user and bystanders.

Firing any of the ammunition described in the below warnings/cautions will void your warranty.

WARNING: USE OF INCORRECT AMMUNITION CAN CAUSE FIREARM DAMAGE, PERSONAL INJURY, OR DEATH. MAKE ABSOLUTELY CERTAIN THAT YOU ARE USING CARTRIDGES DESIGNED FOR YOUR FIREARM. DO NOT FIRE OLD, CORRODED, DEFORMED, OR HANDLOADED AMMUNITION.

The SAI Rifle is chambered for .223 Wylde: It will also safely fire all standardized factory NATO military 5.56mm cartridges and all factory loaded cartridges in the .223 Remington calibers.

6. INITIAL ASSEMBLY, INSPECTION, AND CLEANING

6.A INITIAL ASSEMBLY

The **SAI R18 MK2** is shipped to you completely assembled and test fired to ensure functionality.

INITIAL INSPECTION

Using this manual; physically check your **SAI R18 MK2** to ensure all of the parts listed in each group is present and in the correct place. This manual will also assist you in familiarizing the user with the knowledge needed to safely and responsibly operate this firearm. Any time you disassemble and reassemble a firearm, you should conduct a functional check of it as described in the REASSEMBLY section of this manual.

6.B INITIAL CLEANING

The **SAI R18 MK2** has been test fired before shipping. It is normal for there to be a small amount of carbon materials in the bore / barrel during initial inspection.

To limit corrosion, the firearm has also been lightly coated with a preservative; including the bore. This must be cleaned and dried before firing as oil left in the bore may increase pressures when fired.

The initial pre-firing cleaning includes:

Clean the bore of your firearm and lubricate the firearm as described in the maintenance section below.

Before the firearm “settles”, a short break in period of up to 100 rounds is encouraged, which allows machined or phosphate-coated surfaces to deburr and self-polish.

7. BREAKING IN BARRELS

SAI barrels are made of a very strong CrMoV material but they are NOT chrome lined. Do not use an abrasive to break in the barrel.

For optimum performance:

Before firing the first time, wet clean the bore and barrel. Ensure to pull 2 dry patches through before firing.

Fire one five round group and then clean the barrel with a wet patch followed by 2 dry patches. Repeat this process 4 times.

Your barrel is now sufficiently broken in and will allow the user to see the performance of the barrel.

As detailed in the maintenance section; it is recommended that the user clean the barrel and bore after every use, before storage.

8. LOADING AND FIRING

WARNING: THIS FIREARM WILL FIRE WITHOUT A MAGAZINE IN IT.

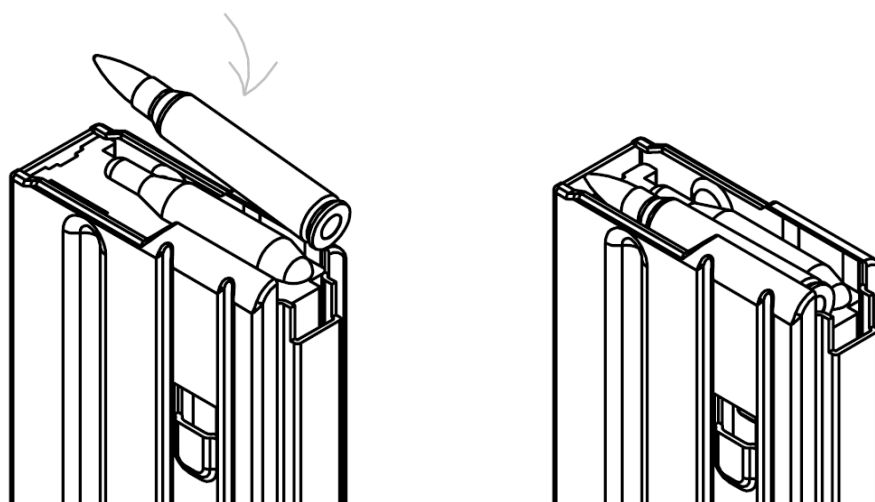
Before attempting to load the **SAI R18 MK2**, the user must ensure visually that the bore and barrel are free from any obstructions. Any obstruction can cause injury and/or death to the user and bystanders.

WARNING: ALWAYS KEEP THE SAFETY IN THE "SAFE" POSITION UNTIL YOU ARE READY TO FIRE THE FIREARM.

8.A LOADING THE MAGAZINE WITH AMMUNITION

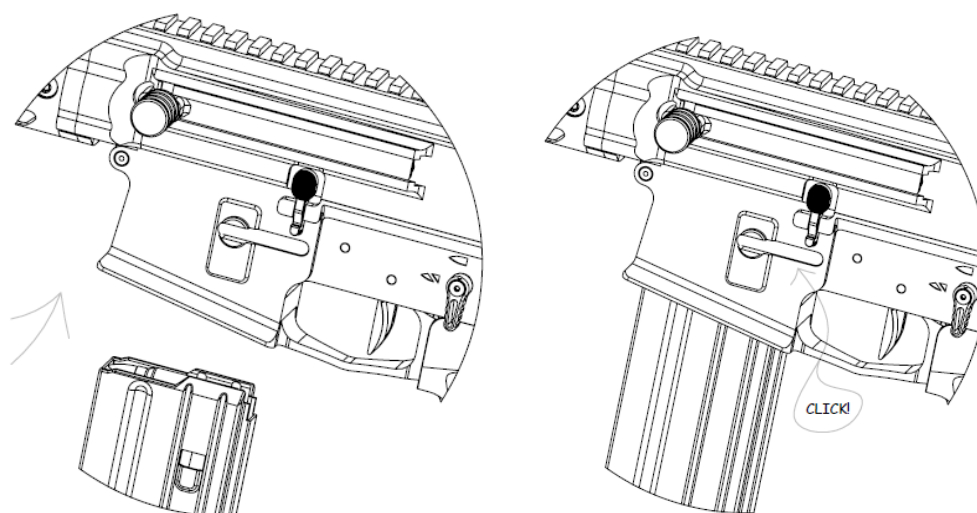
The magazine follower has a raised portion generally resembling the outline of a cartridge. Cartridges are loaded into the magazine so that the tips of the bullets point in the same direction as the raised portion of the follower.

Set the cartridge on the follower, between the feed lips, pointing the same direction as the bullet shape on the follower, and press it straight down until it's held by the lips of the magazine.



8.B LOADING THE MAGAZINE INTO THE FIREARM

With a firm grasp on the magazine, fully insert the top of the magazine into the magazine well, with the bullet tips facing forward towards the muzzle of the firearm. The magazine catch should fully lock the magazine in place.



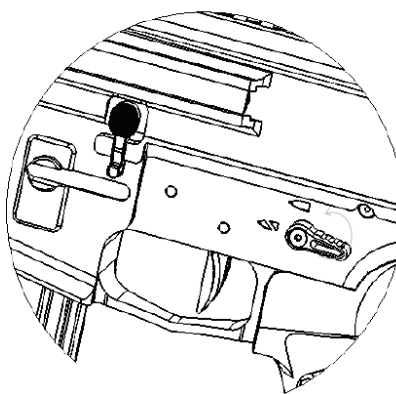
To ensure the magazine is properly seated, gently tug down on the magazine. If it stays in place, it is properly seated. If too much force is used to insert the magazine, the user may damage the feed lips and render the magazine useless for future use.

NOTE: The magazine may be inserted with the bolt carrier assembly open or closed.

8.C CHAMBERING A ROUND

The user must ensure safe firearms handling

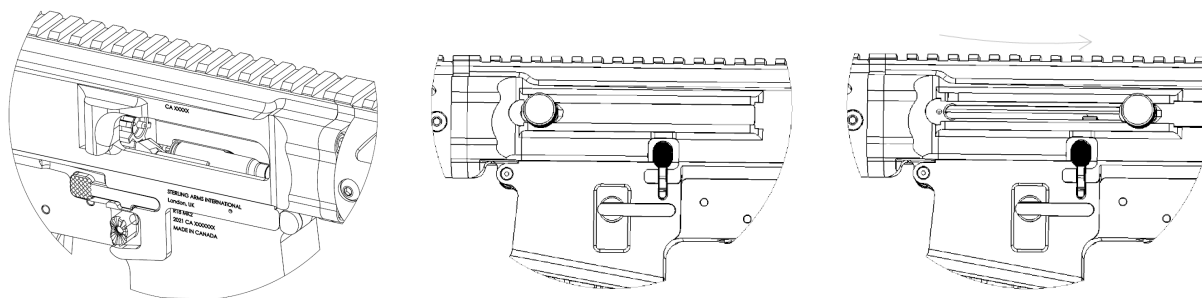
1. Set the safety (L-3) to "SAFE"



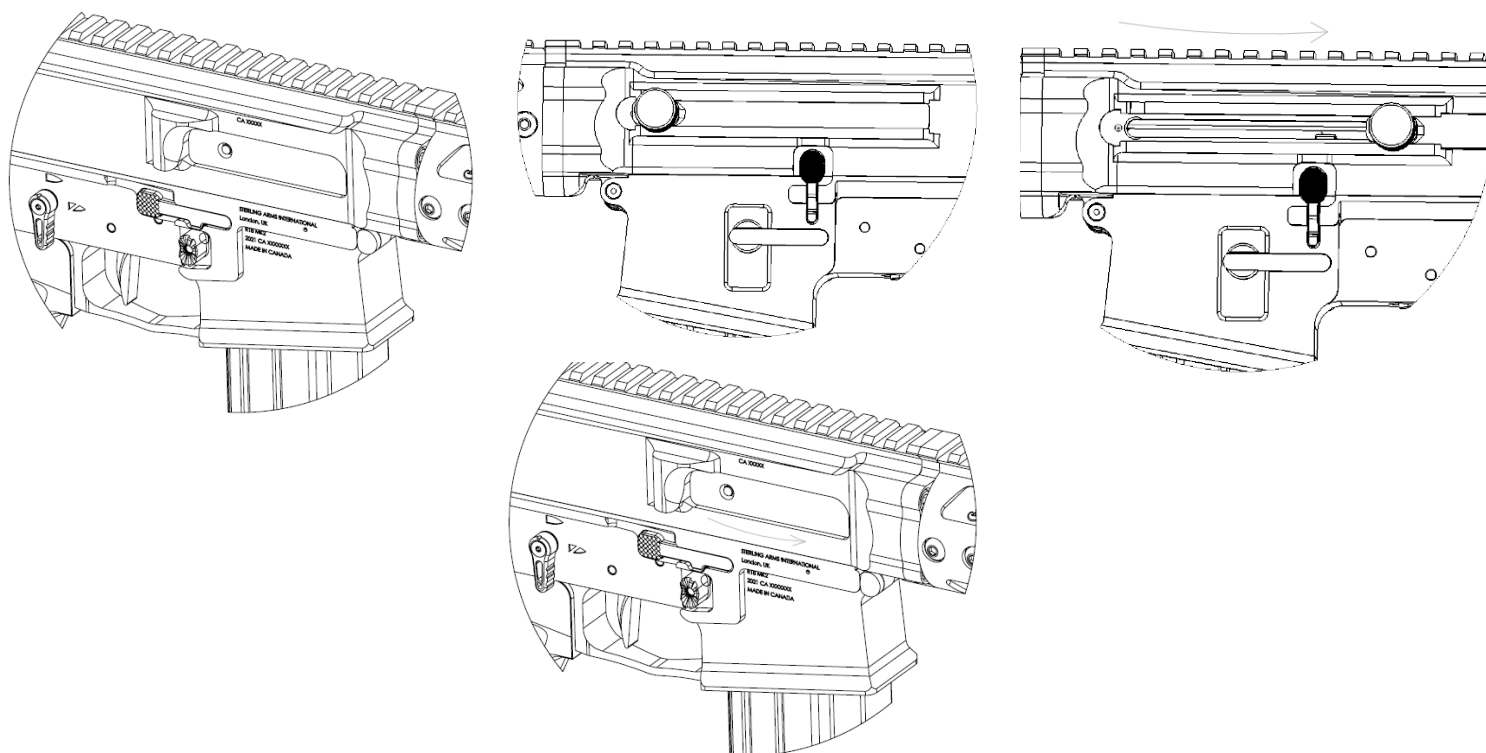
2. Hold the Quadrail handguard (U-04) of the rifle with one hand, pointing the muzzle in a safe direction. With the other hand, insert a loaded magazine into the magazine well.

3. Push upward until the magazine catch (L-09) engages and holds the magazine. Pull downward on the magazine slightly to make sure that the magazine catch holds.

4. If the bolt is open, grasp the charging handle (U-6B) with the right hand. Pull it to the rear thus disengaging the bolt catch. Then release the charging handle. A round will be stripped from the magazine and loaded into the chamber.



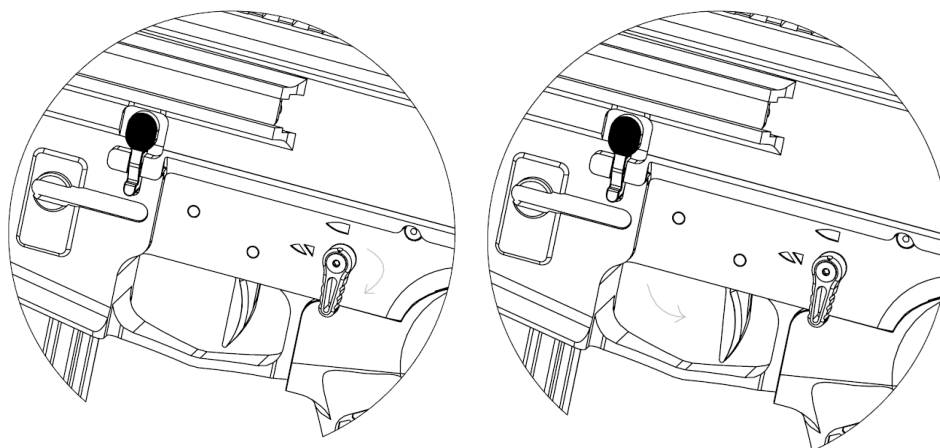
If the bolt is closed when the magazine is inserted, pull the charging handle (U-6B) fully to the rear and release it. Do not assist in its forward movement. The **SAI R18 MK2** needs the full power of the return springs to force the bolt into the fully closed position. If for some reason the bolt fails to go all the way forward; pull the charging handle in a rearward motion approximately 3 inches and release.



8.D FIRING A ROUND

The rifle is now loaded and ready to fire.

1. Aim the firearm, safely, at a target using the sights the user has affixed to the firearm.
2. Set the safety (L-3) to “FIRE.”
3. In a fluid motion, depress the trigger to the rear until the trigger group is activated and the firearm discharges.



WARNING: IF THE FIREARM FAILS TO FIRE WHEN THE TRIGGER IS PULLED:

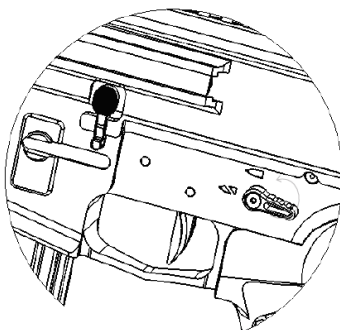
1. KEEP THE FIREARM POINTED AT THE TARGET!!!
2. WAIT 60 SECONDS TO ALLOW A POSSIBLE “HANGFIRE” TO GO OFF. THEN,
3. CHECK TO SEE IF THE SAFETY IS ENGAGED BY MISTAKE. IF SO, PUSH THE SAFETY TO THE “FIRE” POSITION AND FIRE.
4. IF THE FIREARM STILL DOES NOT FIRE, BE CAUTIOUS AND ASSUME THAT THE CARTRIDGE WILL DISCHARGE WHEN THE BOLT/SLIDE IS OPENED.
5. OPEN THE BOLT/SLIDE QUICKLY, FULLY TO THE REAR TO UNLOAD THE ROUND THAT WAS LOADED IN THE CHAMBER FROM THE FIREARM. ENGAGE THE BOLT CATCH TO HOLD THE BOLT TO THE REAR.
6. EXAMINE THE FIREARM AND CARTRIDGE CAREFULLY TO IDENTIFY THE CAUSE OF THE MALFUNCTION.

NOTE: The **SAI R18 MK2** is designed to use commercial style generically available magazines. Variations in both magazines and rifles may cause the bolt carrier to rub on the magazines feed lips. If the contact causes sluggish operation, remove a small amount of metal from the rubbed (shiny) area of the feed lips.

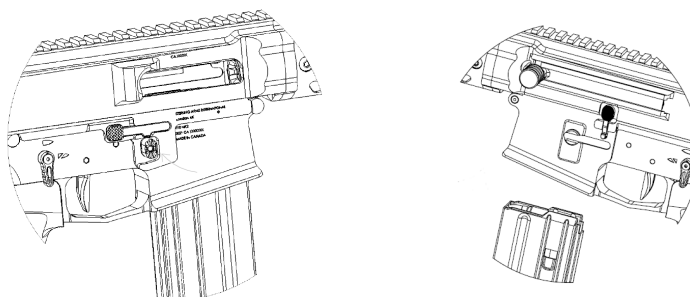
CAUTION: DO NOT REST THE RIFLE ON ITS MAGAZINE WHEN YOU ARE LOADING OR FIRING IT. DOING SO CAN FORCE THE MAGAZINE UP INTO THE RIFLE, REDUCING THE RELIABILITY OF FEEDING CARTRIDGES.

9. CLEARING / UNLOADING THE FIREARM

1. Place the safety (L-3A or L-3B) on "SAFE".

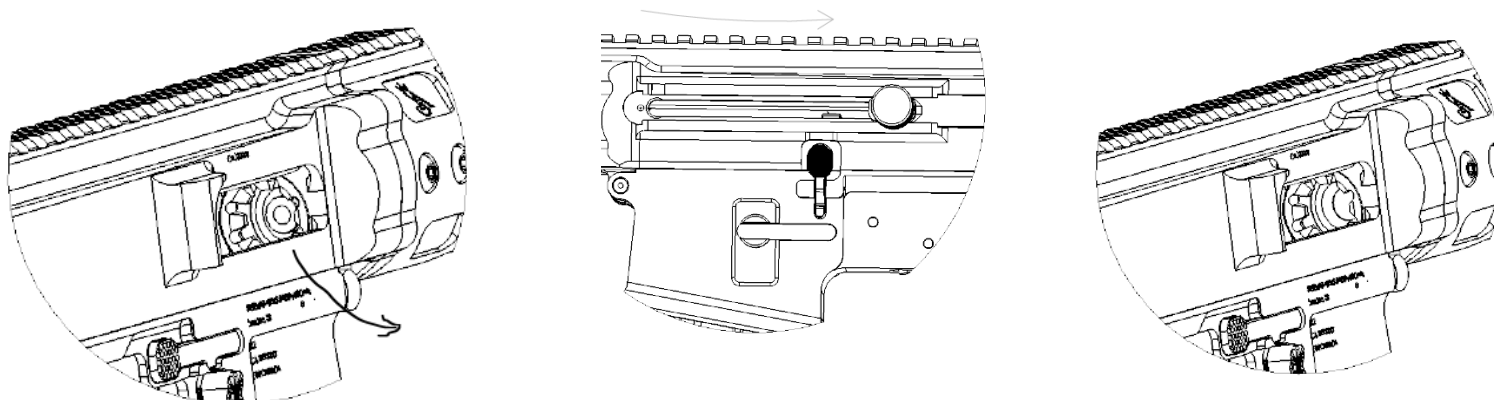


2. Remove the magazine by pressing the magazine catch button (L-09) and pulling the magazine down out of the receiver.

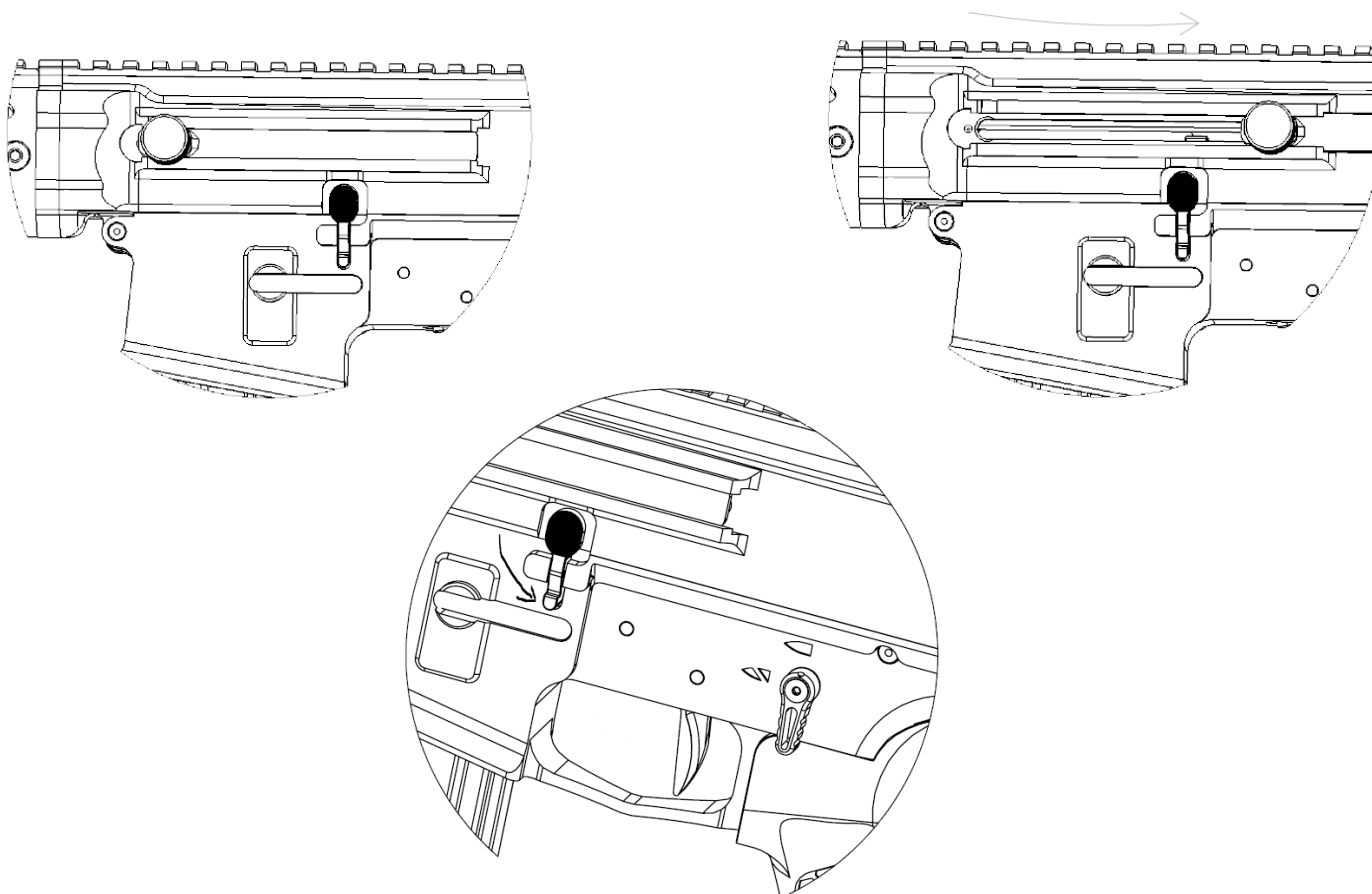


NOTE: If the firearm is not cocked, the safety cannot be set on "SAFE".

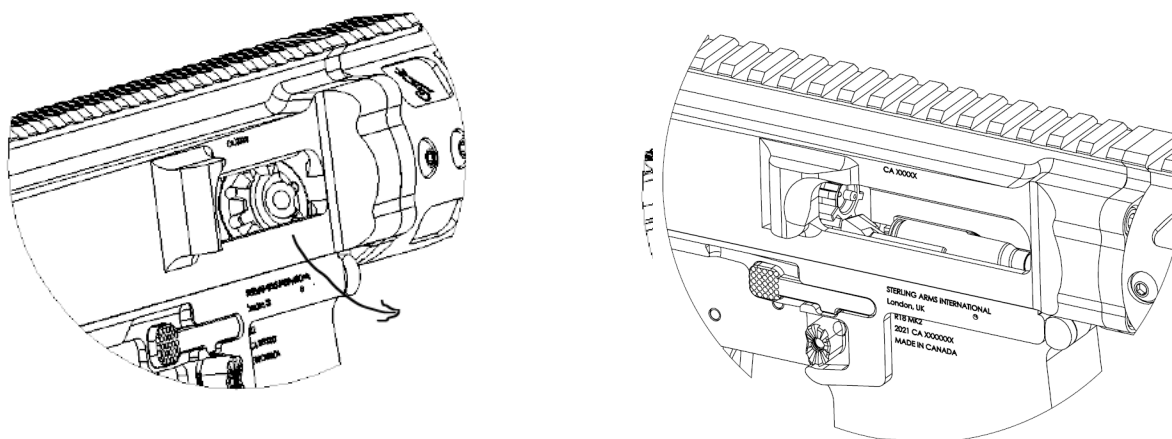
3. Extract the cartridge (if any) from the chamber. To extract a cartridge, pull the bolt fully to the rear. If there is a cartridge in the chamber, it should be extracted and ejected from the firearm.



4. To lock the bolt open, pull the charging handle rearward, reach into the LEFT side of the magazine well, and press the bottom tab of the bolt catch (L-6) with a finger. Then ease the bolt forward until the bolt catch stops it.



5. Look into the chamber to assure that it does not contain a cartridge. NEVER ASSUME THAT THE CHAMBER IS EMPTY UNTIL YOU HAVE VISUALLY EXAMINED IT AND SEE THAT IT IS EMPTY



CAUTION: THE MAGAZINE MAY FALL FREE WHEN THE MAGAZINE CATCH IS PRESSED. DON'T ALLOW THE MAGAZINE TO FALL ONTO A HARD SURFACE. DOING SO MAY DAMAGE THE MAGAZINE.

10. DISASSEMBLY

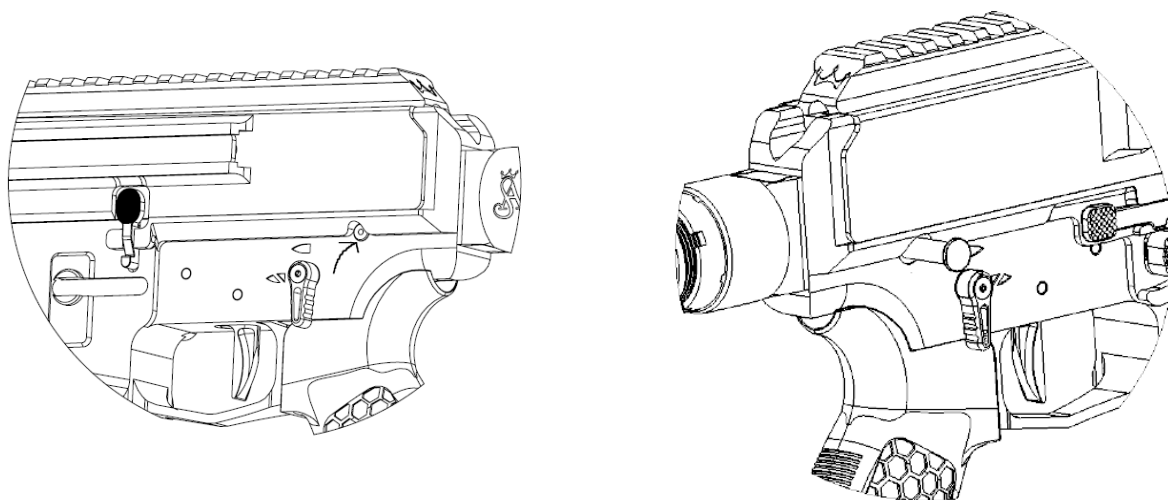
WARNING: ALWAYS UNLOAD YOUR FIREARM BEFORE CLEANING, LUBRICATION, DISASSEMBLY, OR REASSEMBLY.

WARNING: ALWAYS WEAR SAFETY GLASSES WHEN DISASSEMBLING, MAINTAINING, OR ASSEMBLING YOUR FIREARM. IN PARTICULAR, THE OPERATING SPRING IS UNDER HIGH COMPRESSION. IF IT SLIPS FROM YOUR GRASP, IT COULD CAUSE INJURY.

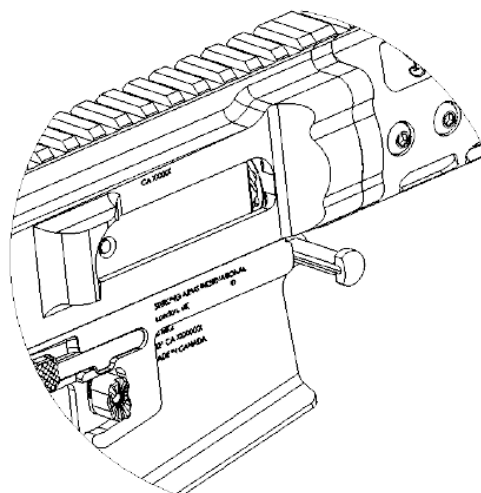
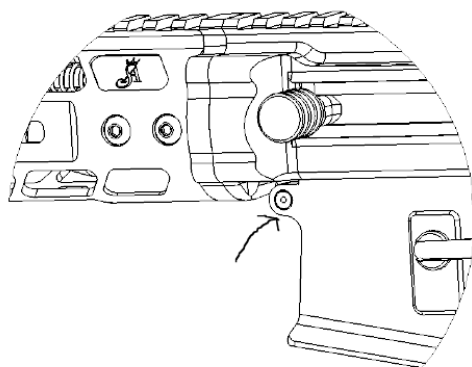
WARNING: USE CARE OPENING THE ACTION: SWING THE UPPER RECEIVER AND BARREL GROUP DOWN TO DISASSEMBLE AND CLEAN THE RIFLE. KEEP YOUR FINGERS AWAY FROM THE FRONT OF THE RECEIVER WHEN LOWERING THE BARREL TO PREVENT PINCHING IT BETWEEN THE RECEIVER AND HANDGUARD.

10.A OPENING THE ACTION

1. Unload and PROVE the firearm safe.
2. Using a cleaning rod or cartridge tip, push from the left side on the Takedown Pin (L-20) until it extends fully to the right side of the rifle.

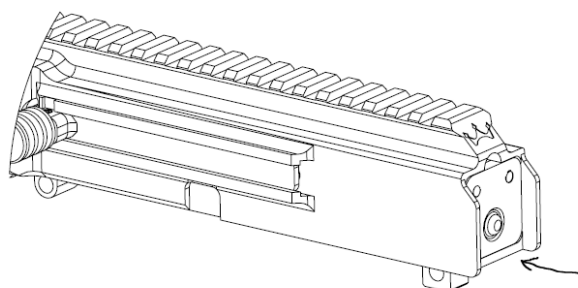


3. Using a cleaning rod or cartridge tip, push from the left side on the Pivot Pin (L-21) until it extends fully to the right side of the rifle. The upper receiver can now move towards the front and then lift off the lower receiver. Do so under control.

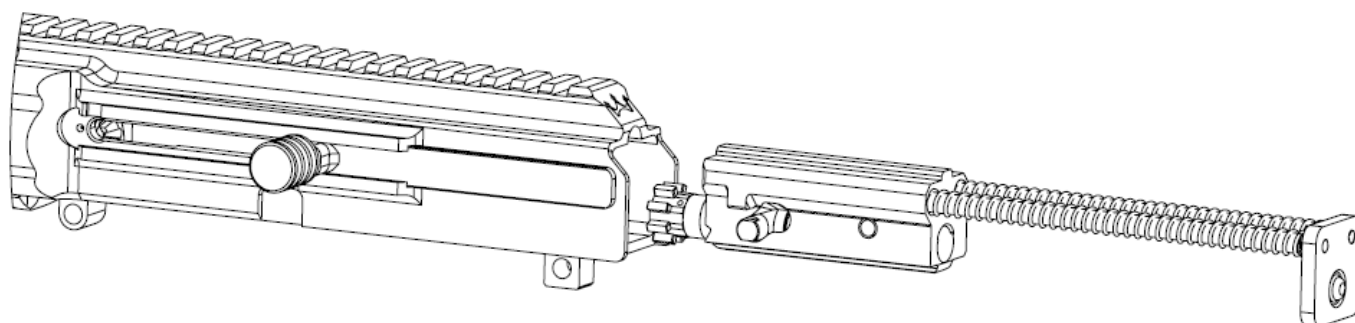


CAUTION: DO NOT ALLOW THE RIFLE TO DROP OPEN. THE PIVOT PIN AREA MIGHT BE DAMAGED IF THE HANDGUARD STRIKES THE RECEIVER WITH TOO MUCH FORCE.

4. Release pressure gradually on the Back plate (U-7) to prevent the recoil springs from propelling the guide rod assembly out of the receiver.

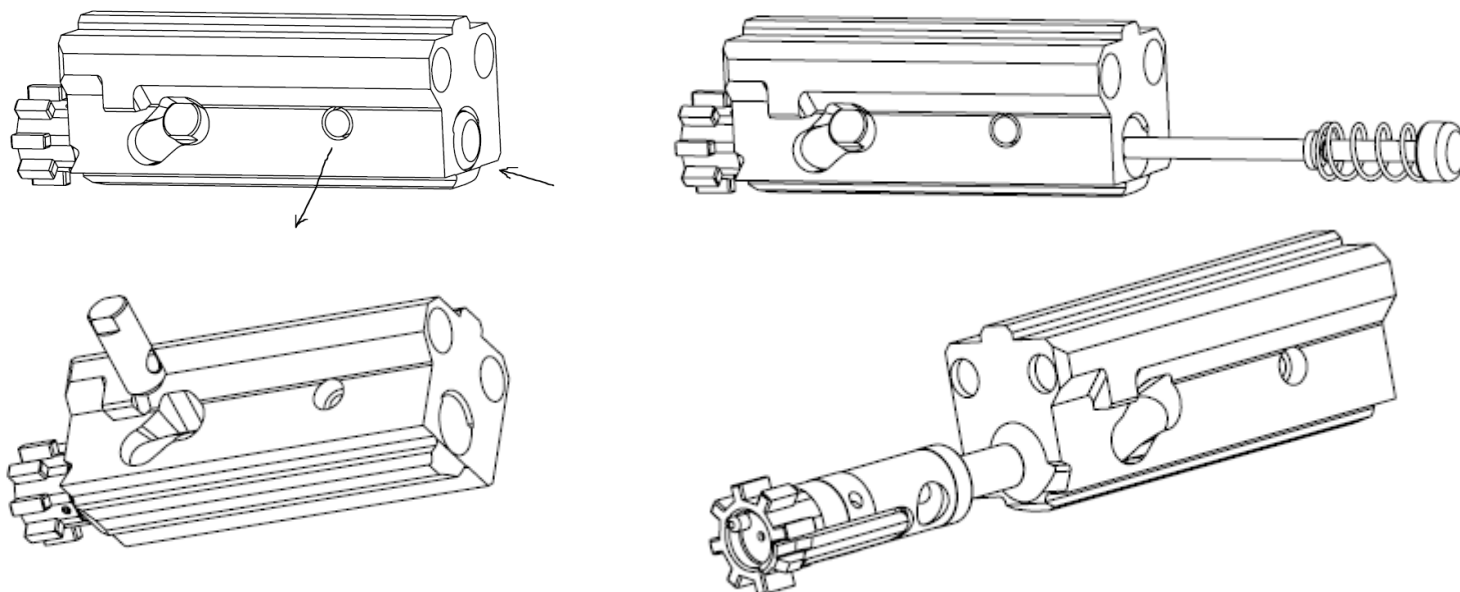


5. Pull the charging handle (U-6A) to the rear. This will move; the guide rod assembly, guide rod springs and bolt carrier assembly rearward allowing them to slide out of the upper receiver. It should not be necessary to separate the upper and lower receivers during normal cleaning.

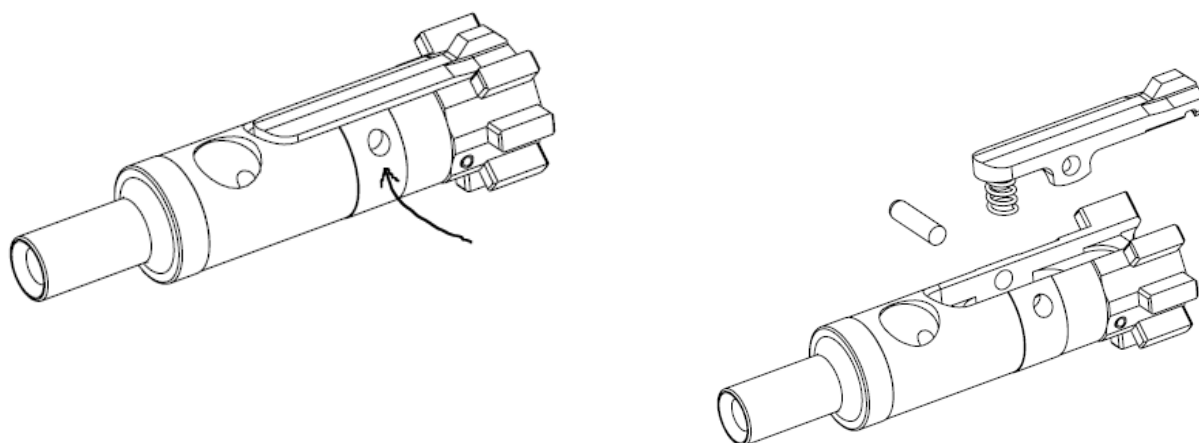


10.B BOLT CARRIER GROUP

1. Press the firing pin (U-17) forward to allow the firing pin retaining pin (U-20) to be pushed out of the bolt carrier (B-01). Remove the firing pin. Remove the bolt cam pin (B-19). Pull the bolt (U-2) forward to remove it from the bolt carrier.

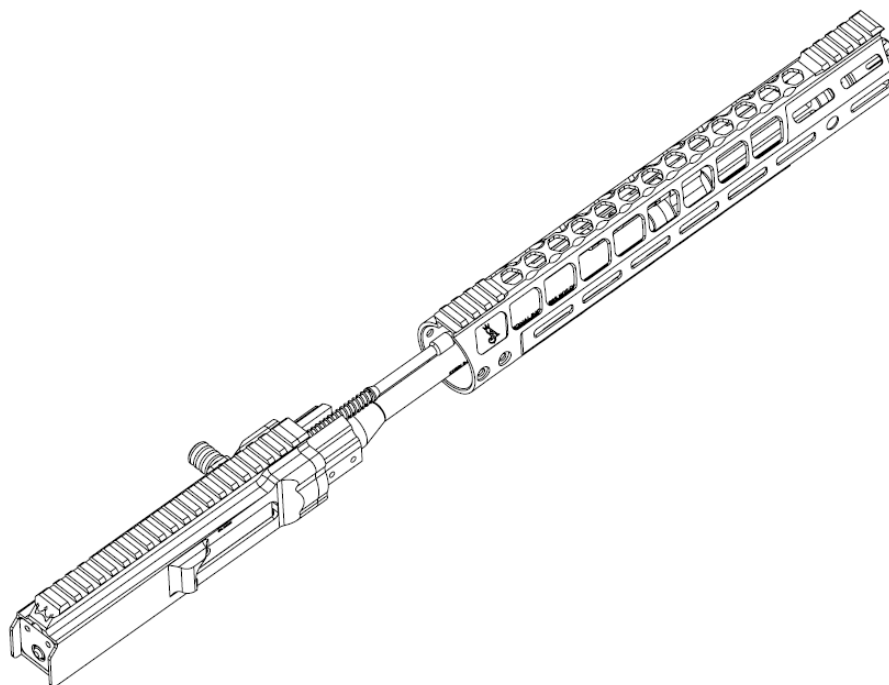
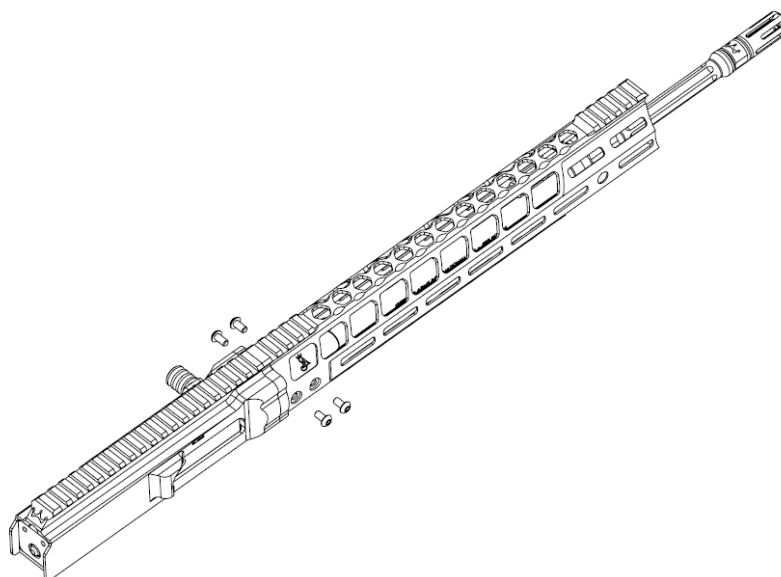


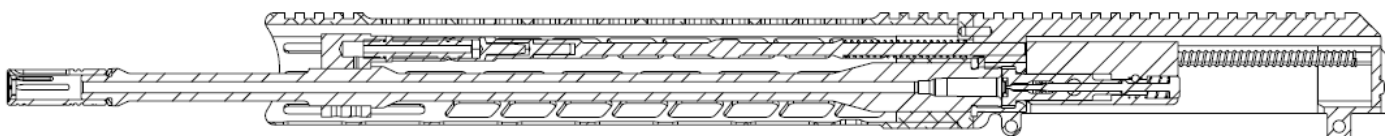
2. Remove the extractor (U-2D) by pushing out the extractor pin (U-2D). Do not remove the spring assembly, its insert, or the O-ring from the extractor.



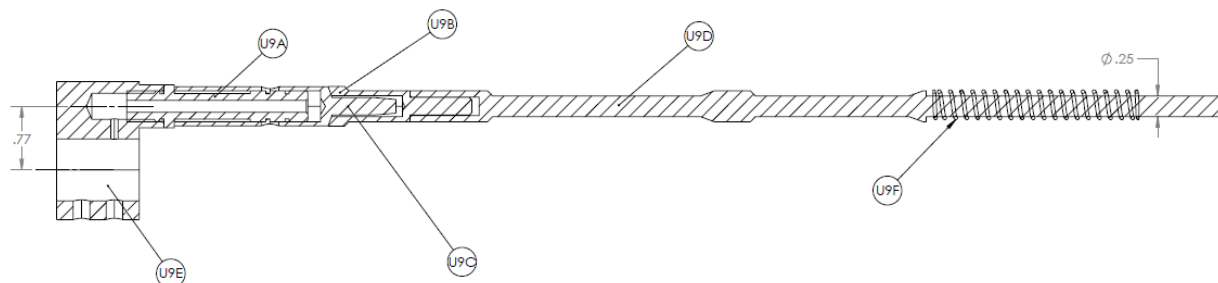
10.B UPPER RECEIVER

1. Removal of the Quadrail handguard (U-04) is necessary for removing the piston system. To remove the handguard (U-04), unscrew the button head cap screws (U-13) at the barrel nut and slide handguard forward until free of barrel.





3. Remove the piston cup (U9B) by tilting the rifle forward slightly and catching it as it slides out of the gas block. Note: excessive fouling may cause the cup to stick in the block, requiring forward pressure on the piston rod to remove it.



4. Remove the piston rod (U9D) through the front of the gas block. The piston spring (U9F) may or may not follow the rod through the gas block, depending on the amount of fouling in the gas block.

**NO FURTHER DISASSEMBLY OF THE FIREARM IS REQUIRED
OR ENCOURAGED.**

11. MAINTENANCE

WARNING: ALWAYS UNLOAD YOUR FIREARM BEFORE CLEANING

11.A LUBRICATION, DISASSEMBLY, OR REASSEMBLY.

To clean and maintain your **SAI R18 MK2** rifle system, you will require:

Appropriate cleaners, solvents and protective oils.

A coated cleaning rod, a brass bore brush, a brass patch holder, a chamber / bore brush, lint free patches, small nylon and brass brushes and a lint free rag.

If the user is not already knowledgeable, seek assistance from a qualified source; such as your local firearms retailer.

11.B CLEANING LUBRICANTS AND LUBRICATION

The rifle should be cleaned and lubricated at the beginning and end of each day's use, or when exposed to an excessive amount of dirt, grit or other foreign matter and/or water. For most reliable continued operation, all surfaces should be protected by a very light film of oil.

In low temperatures, use small amounts of a light oil or a powder graphite.

Use OIL/LUBRICANTS very sparingly on the gas system but generously on the bolt and bolt carrier, paying particular attention to the cam pin and guide rods. **PROPER LUBRICATION WILL ENHANCE THE LONGEVITY OF YOUR RIFLE.**

Your SAI R18 MK2 ships with a sample of oil that is used in the factory.

12. REASSEMBLY

The reassembly of the **SAI R18 MK2** is a reversal of the disassembly procedure.

Note: During reassembly, while reinserting the Bolt and Bolt Carrier back into the Upper Receiver, the bolt MUST be fully extended forward, otherwise the alignment of the cam pin and bolt will not allow the Carrier to move forward along the guides inside the Bolt Carrier.

Note: The Hammer (L-13) MUST be in the cocked position to close the rifle.

Note: Be careful to ensure ALL parts removed during disassembly are also reinstalled during assembly.

CAUTION: DURING ASSEMBLY; ASSURE THAT THE FIRING PIN RETAINING SPRING IS INSTALLED (U-18). This spring ensures the FIRING PIN is not able to travel during the closing of the bolt and potentially cause an accidental discharge of a cartridge.

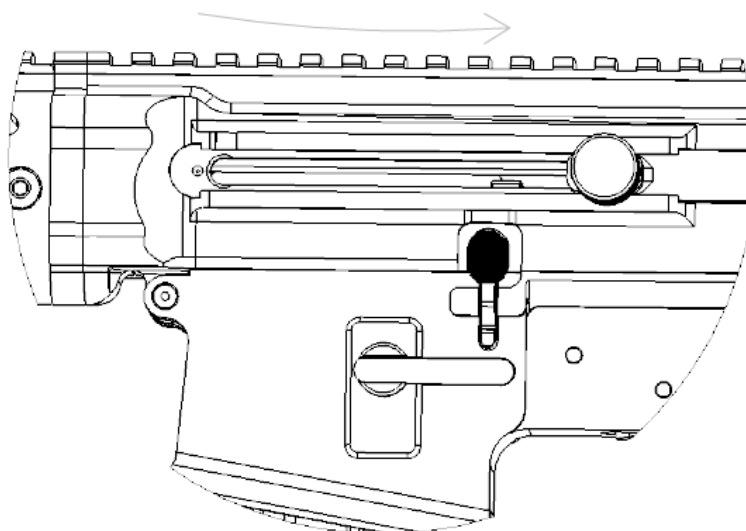
WARNING: ALWAYS UNLOAD YOUR FIREARM BEFORE CLEANING.

13. FUNCTION TEST / CHECK

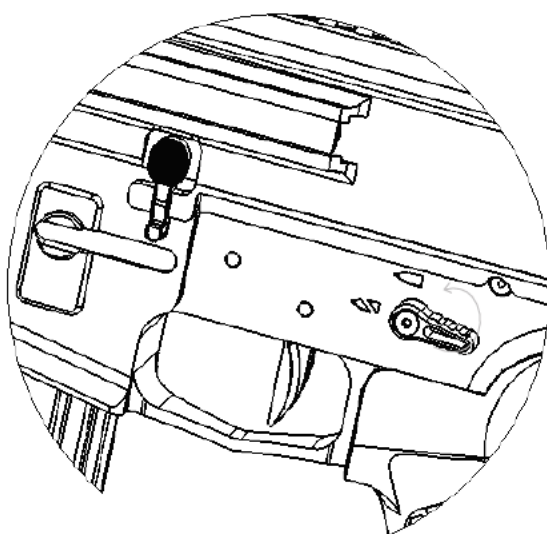
After reassembling the firearm, it is very important to conduct a basic FUNCTION CHECK to ensure that assembly was done properly. This test is done **WITHOUT** a magazine attached to the firearm.

To conduct the FUNCTION TEST / CHECK:

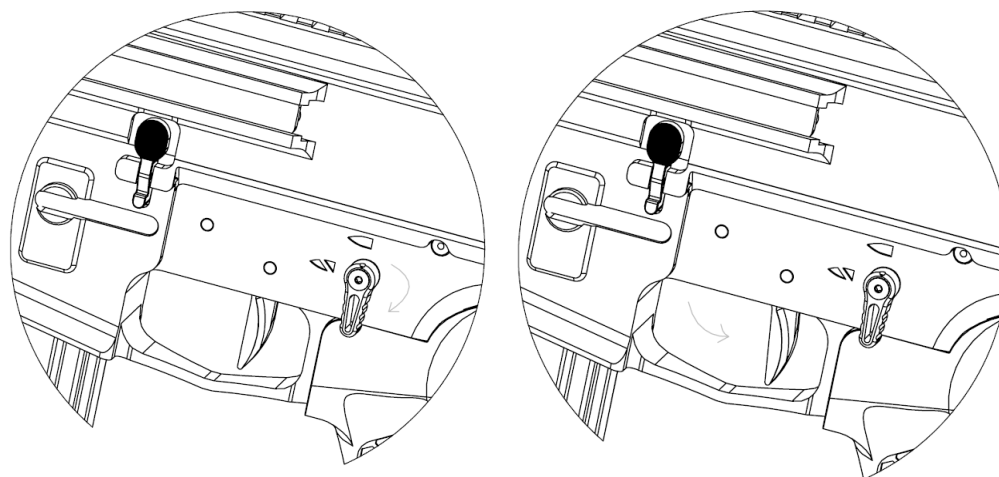
1. Pull the charging handle (U-6B) to the rear and release it. DO NOT assist the bolt forward. It must travel on its own power.



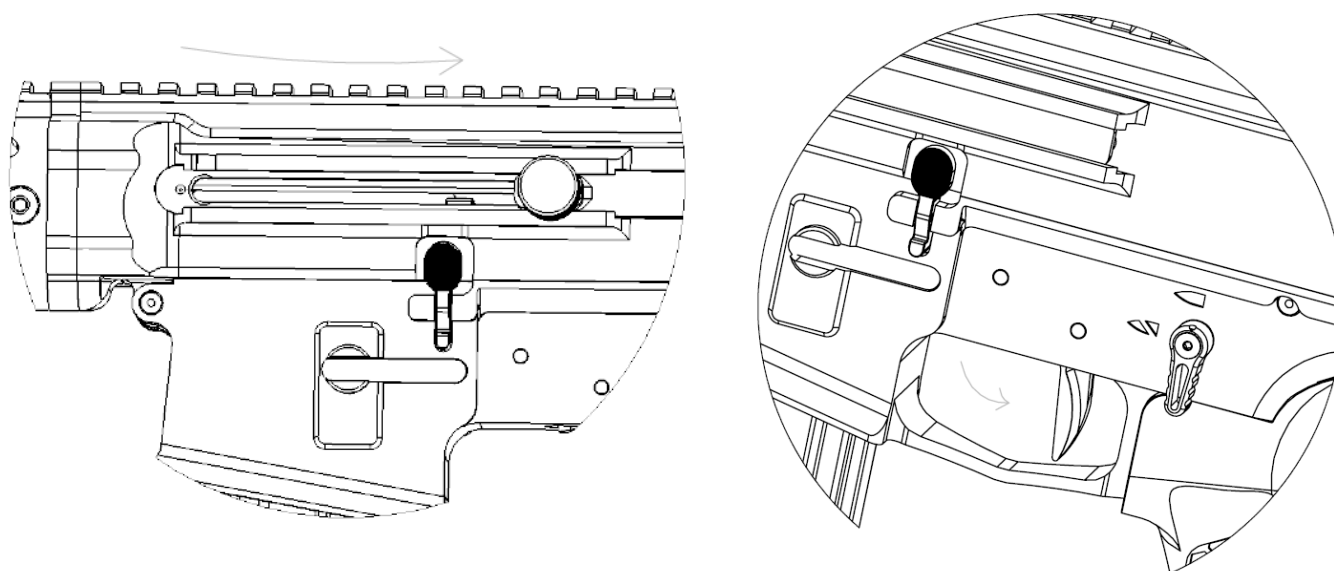
2. Place the safety (L-3A or L-3B) on "SAFE". Squeeze the trigger (L-14). The hammer (L-13) should **NOT** fall.



3. Place the safety (L-3A or L-3B) on "FIRE". Squeeze the trigger (L-14) and hold it there. The hammer (L-13) **SHOULD** fall. Keep holding the trigger to the rear.



4. With a single motion, pull the charging handle (B-16B) fully to the rear and release it; keeping the trigger depressed.



5. Release the trigger. You should hear a click as you release the trigger.
6. Squeeze the trigger again and the hammer **SHOULD** fall.

If there is a failure at any step in this test: Disassemble the firearm and reassemble, paying close attention to ensure all of the parts and pieces are present and assembled correctly.

After a second reassembly, if there is still a failure in the function test; the firearm should be inspected by a qualified gunsmith or returned to the manufacturer for evaluation and repair if necessary.

DO NOT ATTEMPT TO FIRE THE SAI R18 MK2 IF IT HAS FAILED THE FUNCTION TEST.

14. TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WILL NOT FIRE	Safety on "SAFE"	Put it on "FIRE".
	Improper assembly of firing pin	Assemble correctly NOTE: the retaining pin goes behind large shoulder of firing pin.
	Too much oil around firing pin	Clean with pipe cleaner.
	Defective ammunition	Remove and discard.
	Too much carbon on firing pin or firing pin recess	Clean.
	Bolt not fully locked.	Extract cartridge, clean area.
BOLT WILL NOT LOCK	Dirty bolt	Clean.
	Burred or broken bolt	Contact SAI warranty centre
	Ejector stuck	Contact SAI warranty centre
	Dirt, corrosion, or carbon buildup in barrel locking lugs	Clean lugs
WILL NOT EXTRACT	Broken extractor spring	Replace.
	Inner spring or reinforcement ring missing from extractor spring	Replace.
	Dirty, corroded, or reloaded ammunition	Remove and discard.
	Carbon in chamber	Clean chamber.
	Frozen or worn extractor	Remove and clean.
	Restricted movement of bolt carrier assembly	Remove, clean and lubricate.
WILL NOT FEED	Dirty, corroded, or reloaded ammunition	Remove and discard.
	Dirty or defective magazine	Clean and lubricate or replace.

WILL NOT FEED CONTINUED	Too many rounds in magazine	Remove excess rounds.
	Magazine not fully seated	Push magazine fully home.
DOUBLE FEED	Defective magazine	Replace
WILL NOT CHAMBER	Dirty corroded or defective ammunition	Remove and discard.
	Ejector stuck	Clean and oil.
	Carbon in chamber	Clean.
SHORT RECOIL / STROKE	Carbon or dirt in gas system.	Clean.
	Weak or reloaded ammunition	Replace with factory fresh ammunition.
	Dirty rifle	Clean.
	Improper lubrication	Lubricate generously
BOLT FAILS TO LOCK OPEN AFTER LAST ROUND	Defective magazine	Replace.
	Dirty or corroded bolt catch	Clean or replace.
	Weak or reloaded ammunition	Replace with factory fresh ammunition.
SAFETY BINDS	Needs oil	Lubricate.
	Dirt or sand under trigger.	Clean.
BOLT CARRIER “HUNG UP” (HARD EXTRACTION)	Round jammed between bolt and charging handle and/or double	<ol style="list-style-type: none"> 1. Remove magazine. 2. Push in on bottom of bolt catch. 3. Bang rifle butt on ground, bolt should shift to rear. 4. While bolt is held to rear, round should fall out through magazine well. <p>NOTE: If this procedure fails, use a cleaning rod to push bolt fully to the rear through the ejection port.</p>

15. WARRANTY, SERVICE, AND SUGGESTIONS

Be sure to keep your sales receipt. If no original dated receipt is available, the warranty date starts on the date that the firearm was sold to the first person or business from Sterling Arms International, Inc. or and is valid for 365 days from that point. SAI's records will be the basis for all warranty disputes.

The Standard warrant for a SAI rifle is ONE YEAR from the date of original purchase.

If a rifle is received outside of this timeframe, all work will be billed as per posted and established SAI rates.

Customer is responsible for shipping the firearm and the firearm remains the customer's responsibly until SAI acknowledges receipt of delivery.

If a repair is found to be under warranty, shipping and insurance to return the rifle back to the customer will be prepaid by SAI or a representative.

Returns for any reason will NOT be accepted without a Return Merchandise Authorization (RMA) number issued by SAI or its representative agency.

After you receive your RMA number, print it on the outside of the box and include a short note in the box. The note should include the RMA number, your name, address, email, phone number, the model and serial number of the firearm you're returning, and a detailed explanation of the problems that you're having with the firearm. Remove any accessories (scope, scope mount, sling, bipod, cleaning equipment, etc.) that don't pertain to your problems before you send the firearm in. If you have any functional problem with the firearm, do send the magazines with it.

Before seeking warranty service: use the troubleshooting guide in this Operator's Manual to attempt to solve the problem, perform all instructed maintenance, and assure that ammunition and magazines are correct and in good condition. Shop rates plus the cost of return shipping will be applied if no covered defect is found.

WARNING: BEFORE SHIPPING ENSURE THE FIREARM IS UNLOADED.

WARNING: NEVER SHIP LIVE AMMUNITION WITH ANY FIREARM THAT YOU ARE RETURNING FOR SERVICE.

WARNING: IT IS THE OWNER'S RESPONSIBILITY TO ASSURE THAT ANY PARTS THAT ARE PURCHASED FROM SAI IS CORRECTLY FITTED AND INSTALLED. IMPROPER FITTING OR INSTALLATION MAY RESULT IN INJURY, DEATH, OR DAMAGE/MALFUNCTION OF THE FIREARM.

A copy of the owner's manual for any SAI firearm is available free in the Library on the SAI website or may be obtained free in hard copy by contacting SAI directly. Additional technical information can be found in Technical Notes in the Library section of the SAI website.