



**ARMALITE®, INC  
OWNER'S MANUAL  
FOR  
M-15/22 RIFLES AND CARBINES**



**⚠ READ THIS MANUAL THOROUGHLY, PARTICULARLY THE WARNINGS, BEFORE USING THIS FIREARM! IT'S IMPORTANT!**

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February 2011 Rev 22  
P/N: MANUAL M15/22**

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## 1. READ THIS FIRST!

Throughout this manual you will find WARNINGS and/or CAUTIONS printed in bold print. All WARNINGS and CAUTIONS should be read carefully and followed completely. WARNINGS discuss issues that could result in damage to your firearm, or injury or death to you or a bystander. CAUTIONS discuss issues that could result in damage or malfunction of your firearm.



**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 ArmaLite® firearm. 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!

Your second responsibility as a gun owner is security. Make sure that your firearm remains in responsible hands...YOURS! Don't become an unwitting partner in a crime or tragedy: make sure your firearm is properly secured. Lock it in a secure storage container or, if none is available, remove the bolt group and store it separately. If you have more than one similar firearm, make sure that you specifically identify the removed assembly with its original firearm because the assemblies may not be interchangeable.

It is also your responsibility to assure that you comply with all federal, state, and local laws with regard to the purchase, ownership, use, and storage of your firearm.

**NOTICE: THIS MANUAL MAY COVER NUMEROUS MODELS AND/OR CALIBERS OF OUR FIREARMS. THE TEXT, PICTURES, AND EXPLODED VIEWS DO NOT NECESSARILY DEPICT ALL MODEL VARIATIONS. YOU MAY NEED TO CONTACT US FOR INFORMATION ON PARTS THAT ARE UNIQUE TO YOUR MODEL.**

### NOTICE

ArmaLite® 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, ArmaLite® 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. ArmaLite® will not honor 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 manufactured ammunition in good condition or any combination thereof.

## **2. SAFETY FIRST! IT'S YOUR RESPONSIBILITY!**

- \* Treat every gun as if it is loaded ...AT ALL TIMES!**
- \* Always keep the muzzle pointed in a safe direction.**
- \* Never point your firearm at anything that you do not intend to shoot.**
- \* Keep your finger off the trigger and out of the trigger guard until you are aiming at your target and ready to shoot.**
- \* Always keep the safety in the "SAFE" position, especially when the firearm is loaded and cocked, until you are ready to fire.**
- \* Always keep and carry your firearm with an empty chamber until you intend to shoot, so that your firearm cannot be fired unintentionally. Firearms should be unloaded when not actually in use.**
- \* Be sure of your target and backstop before you shoot. Ask yourself what your bullet will hit if it misses or goes through the target.**
- \* Never shoot at hard, flat surfaces or water...bullets can ricochet.**
- \* Always wear hearing and eye protection when shooting.**
- \* Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to be associated with birth defects, reproductive harm, and other serious injury. Have adequate ventilation at all times and wash hands after handling.**
- \* Be sure that your barrel is clear of obstructions, including excessive oil, grease, cleaning patches, etc before shooting.**
- \* Use only clean, high quality factory loaded ammunition in good condition. ArmaLite® cannot condone the use of handloaded ammunition. Any such use voids the ArmaLite® warranty.**
- \* Do not alter or modify your firearm.**
- \* Do not try to change your firearm's trigger pull, because alterations of trigger pull can affect sear engagement and might cause accidental firing.**
- \* Store firearms and ammunition separately, and beyond children's reach.**

**IN CASE OF MALFUNCTION, STOP! REVIEW THIS MANUAL TO IDENTIFY AND RESOLVE THE PROBLEM. IF YOU CANNOT RESOLVE IT, CONTACT ARMALITE®.**

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

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## 4. SAFE STORAGE



**WARNING: ALWAYS ASSURE THAT YOUR FIREARM IS COMPLETELY UNLOADED BEFORE STORING IT. ALWAYS TREAT YOUR FIREARM AS IF IT WERE LOADED. ALWAYS STORE YOUR FIREARM IN A SAFE LOCATION, SEPARATE FROM THE AMMUNITION.**

Make certain that both the chamber and magazine of your rifle are unloaded before you store it. Store your rifle in a securely locked gun safe. If you do not have a safe, remove the bolt group from your rifle, and store it separately from the rifle in a secure location. Store your ammunition separately from the rifle and from the bolt group.

## 5. GENERAL INFORMATION

Your firearm is a lightweight, semiautomatic, blowback operated, air cooled, magazine fed firearm produced for a high degree of accuracy, reliability, and durability. The firearm's construction features extensive use of aircraft-grade forgings, with no die-cast or extruded parts employed in the receivers.



**WARNING: YOUR ARMALITE® FIREARM WAS DESIGNED TO FUNCTION PROPERLY WITH ITS ORIGINAL COMPONENTS. ALTERATIONS TO ITS ORIGINAL COMPONENTS OR REPLACEMENT OF THEM WITH AFTERMARKET (NON-ARMALITE®) COMPONENTS CAN CAUSE MALFUNCTIONS OR EVEN MAKE THE FIREARM UNSAFE. DO NOT ALTER ANY PART OR ADD / SUBSTITUTE PARTS NOT MANUFACTURED BY ARMALITE® INC.**

### 5.1 THE NATIONAL MATCH TRIGGER

ArmaLite®'s National Match trigger is designed to aid accuracy by reducing the distraction of the long, heavy, irregular trigger pull of the standard trigger mechanism.

The National Match trigger is a two-stage trigger with distinct characteristics: a first stage, which is relatively light, and a second stage of heavier resistance. Microscopic variations in the surface of the parts may cause a feeling of grittiness in the first stage. This is normal on factory-made parts, and will not affect the release of the shot. A properly adjusted second stage will not be creepy, and is the key to a successful mechanism.

The ArmaLite® two stage match trigger is based on that of M1/M14 rifle, and is not user adjustable. It is intentionally built with a barely detectable creep in the second stage. As the trigger breaks in with use (200 to 500 rounds) the creep tends to disappear. It is not possible to exactly predict the amount of break-in of a new trigger, so it is impossible to produce a fixed device that will always break in to produce a perfect trigger pull. If creep remains, a trained gunsmith using the same techniques used with the M1/M14 trigger system may adjust the trigger. ArmaLite® technicians will adjust the triggers for a nominal fee. Instructions will be provided to licensed gunsmiths upon request. Match triggers require more attention and tuning than standard triggers.

ArmaLite® absolutely cannot condone modification of the ArmaLite® trigger mechanism by anyone other than a trained gunsmith. Any such modification may render the device unsafe and will void the factory warranty.

### 5.2 RECEIVER FIT

The M-15/22 is not a custom firearm. ArmaLite® requires a close fit between the receivers, but normal forging and machining variations may result in play or slight side to side receiver mismatch. This is not a manufacturing defect and has no adverse effect on accuracy.

### **5.3 APPEARANCE**

Almost all complaints concerning appearance come from customers who forget that the M-15/22 is intended to simulate a Military Specification rifle, not a polished commercial or collectors-grade rifle. It is an industrial product, not a custom rifle, and bears finishes appropriate for its intended purposes.

ArmaLite® rifles are all thoroughly test fired before shipping. New rifles will normally show evidence of this firing. If the receiver looks light or uneven in color, it's probably just dry. A light coat of oil on the metallic surfaces will improve its appearance.

The receivers and front sights are made of forgings because forgings provide exceptional strength. By its very nature, the forging process may leave small dents and dings on the outside of the forging. ArmaLite® inspects all forgings for excessive marks, but no forging is free of them. This is not a defect.

### **5.4. CONVERSION TO CENTERFIRE**

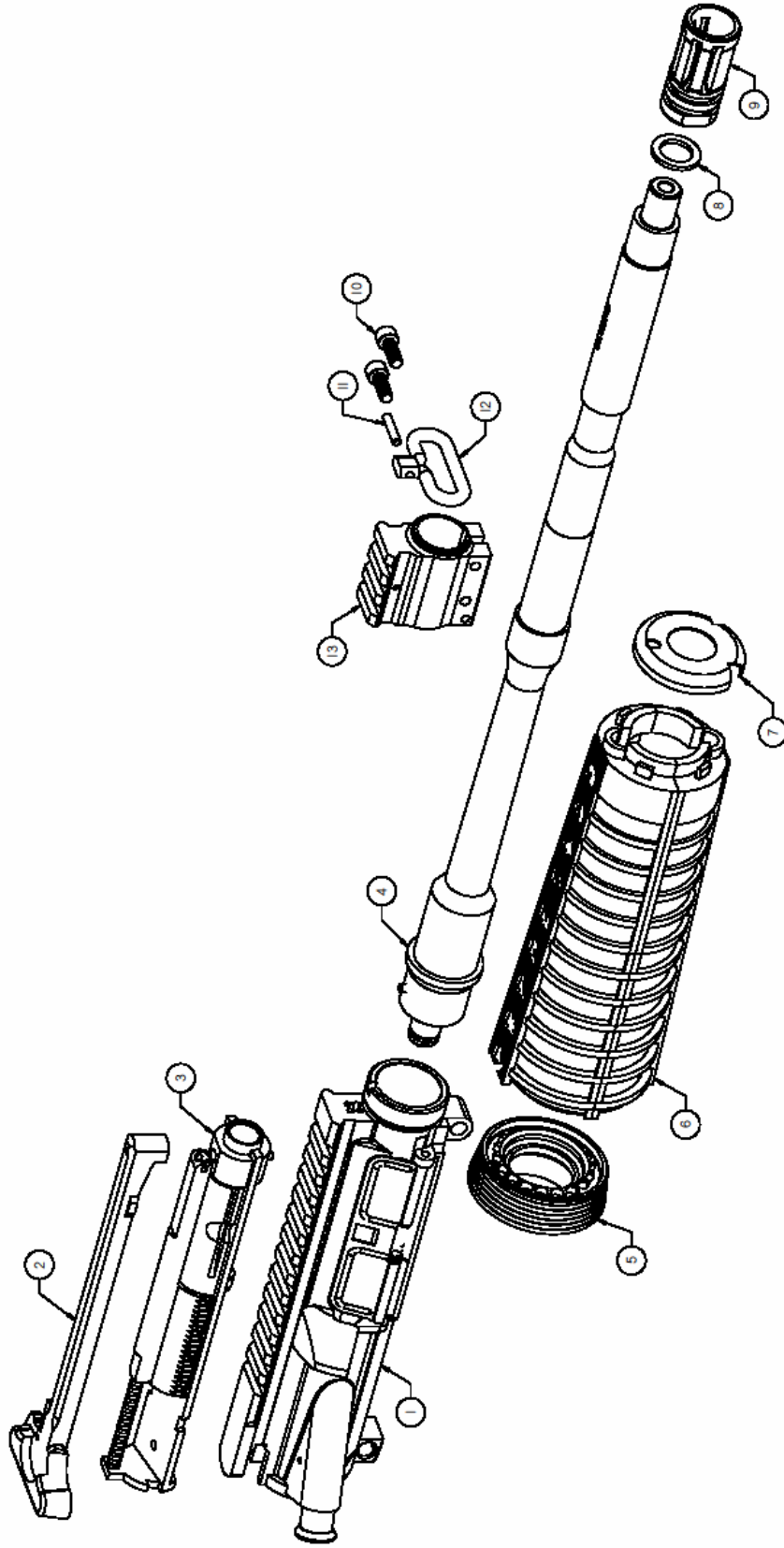
The lower receiver of your M-15/22 is identical to, and fully interchangeable with, the lower receivers on our centerfire M-15™s. So, you can easily convert your M-15/22 to centerfire by simply purchasing and installing one of our M-15™ Upper Halfs, and magazine. You'll have two guns in one without the federal paperwork hassle associated with purchasing a second firearm. And you'll have exactly the same trigger pull with both firearms.



## **6. EXPLODED DRAWINGS AND PARTS LISTS**

The drawings 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 drawings and part lists. For example, a part numbered “U-7” in the text would refer to the part numbered “7” in the Upper Half Assembly exploded view.

# M15 .22LR Upper Half Assembly

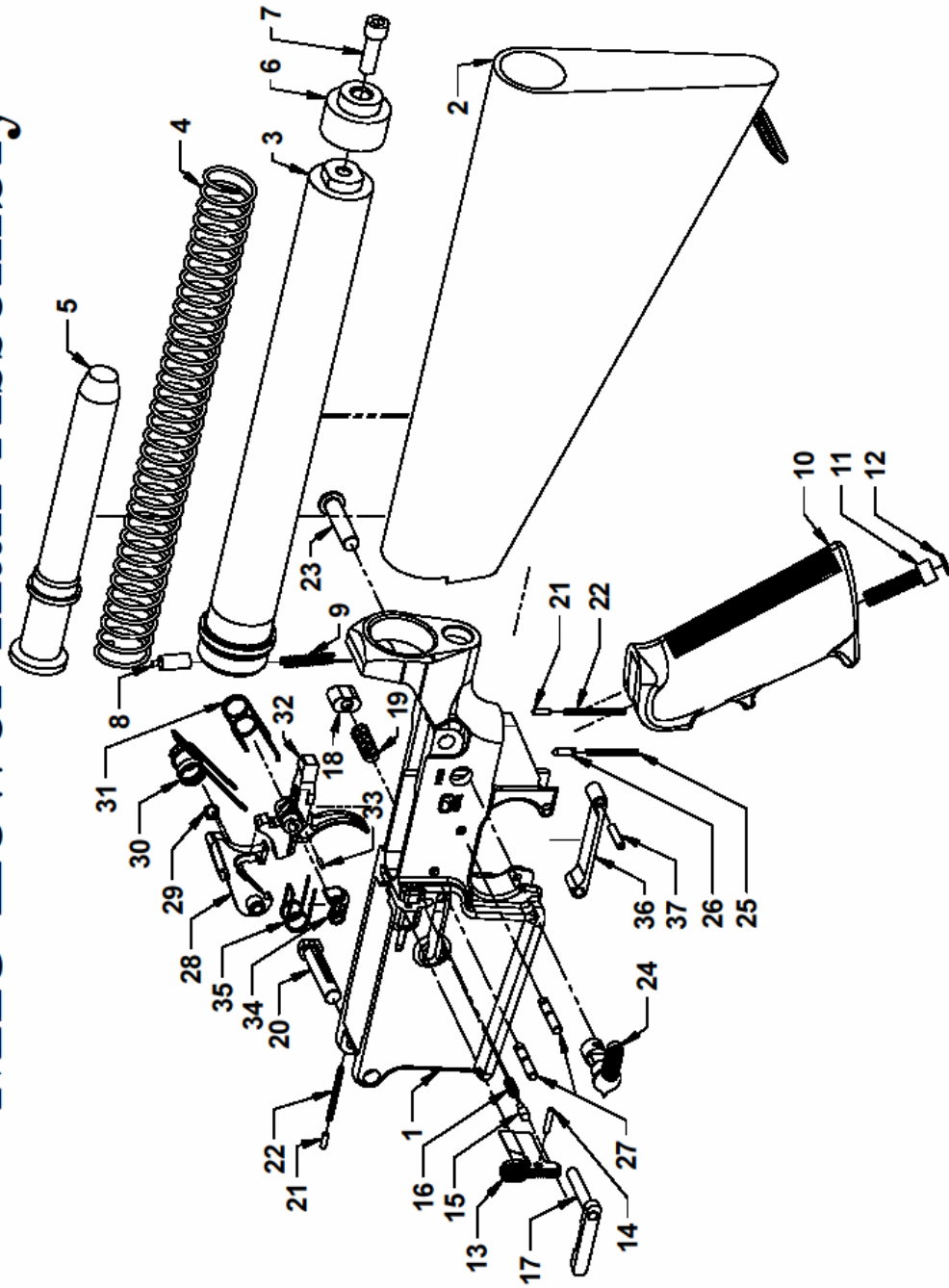


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# M15 .22LR Upper Half Assembly

1	M15 A4 Upper Receiver Assembly	EK0130A
2	Anti-Jam Charging Handle	CH-22-D
3	.22LR Bolt Group with Forward Assist Adapter	15501022
4	.22LR 16" Carbine Barrel	LB-N422-1604
5	M15 Barrel Nut/Slip Ring Assembly	15105250
6	Carbine Handguards, 6" Length	EC0070
7	Carbine Handguard Cap, Round	EC0081
8	.223 Peel Washer	EU0120
9	.223 A2 Flash Suppressor	EU0100
10	Picatinny Housing Clamp Screw	EA1152
11	Sling Swivel/Gas Block Pin	EU0180
12	Front Sling Swivel	EU0190
13	Picatinny Gas Block	EA1151

# M15 Lower Half Assembly



# M15 Lower Half Assembly Parts List

1	M15 Lower Receiver	EA900G	17	Magazine Catch	EL0260
2	M15 Buttstock Assembly (Black)	EL0110	18	Magazine Catch Button	EL0270
*	M15 Buttstock Assembly (Green)	EG0020	19	Magazine Catch Spring	EL0280
*	M15 Collapsible Buttstock Assembly (Black)	15702301	20	M15 Pivot Pin	EL0170
*	M15 Collapsible Buttstock Assembly (Green)	15702306	21	Detent, Pivot/Takedown Pin	EL0150
3	Receiver Extension Tube	EL0370	22	Detent Spring, Pivot/Takedown Pin	EL0140
*	Receiver Extension Tube (Carbine)	15207020	23	M15 Takedown Pin	EL0160
4	M15 Operating Spring	EL0210	24	Safety Selector	EL0290
*	M15 Carbine Operating Spring	EC0040	25	Ejector/Safety Spring	EB0110
5	M15 Buffer	EL0180	26	Safety Detent	EL0060
*	M15 Carbine Buffer	EC0030R	27	Hammer/Trigger Pin	EL0300
6	Buttstock Spacer	EL0130	28	Two Stage Hammer	10308025
7	A2 Buttstock Screw	EL0090	29	Clip, Hammer Pin Retaining, "D-Ring"	10308020
8	Buffer Detent	EL0190	30	Hammer Spring	EL0320
9	Buffer Detent Spring	EL0200	31	Trigger Spring	15303055
10	Pistol Grip (Black)	EL0030	32	Two Stage Trigger	10303050
*	Pistol Grip (Green)	EG0050	33	Coiled Spring Pin, Two Stage Disconnecter	10306000
11	Pistol Grip Screw	EL0010	34	Two Stage Disconnecter	10307000
12	Pistol Grip Washer	EL0020	35	Disconnecter Spring, Two Stage	10806100
13	M15 Bolt Stop	EL0230	36	Trigger Guard Assembly	EL0380
14	Bolt Stop Pin, 3/32" x 1/2"	EL0220	37	Trigger Guard Pin, 1/8" x 5/8"	EL0430
15	Bolt Stop Plunger	EL0240	*	Lockring, Collapsible Buttstock	EC0053
16	Bolt Stop Spring	EL0250	*	Extension Plate, Collapsible Buttstock	EC0054

-PARTS MARKED WITH AN "\*" ARE NOT SHOWN

-PARTS 28, 32, AND 34 ARE SOLD AS MATED ASSEMBLY ONLY

## 7. AMMUNITION

Nomenclature of cartridges can be confusing. It is vital that you understand cartridge nomenclature and only fire cartridges for which this firearm was designed. To assist you, the name of the appropriate cartridge will be etched on the receiver and/or barrel of each ArmaLite. (More information regarding cartridge nomenclature can be found in the Tech Notes on our website.)



**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. IF YOU HAVE ANY QUESTIONS, CONTACT ARMALITE® BEFORE FIRING.**

ArmaLite® recommends that you use premium grade .22 Long Rifle round nose high velocity ammunition in your M15/22. ArmaLite has had excellent results with Federal Game Shok High Velocity Hollow Points. Use of standard velocity ammunition, low quality ammunition, or ammunition with insufficient bullet retention force in the cartridge case may lead to excessive malfunctions. (Hint: If you can freely twist the bullet in the case, it probably doesn't have enough bullet retention force.) Remington ammunition is not recommended.

**NOTE: Some types/brands of ammunition have unique characteristics (e.g. extremely light or heavy projectiles, particularly soft cartridge cases, propellant that burns unusually slowly or rapidly) that reduce its reliability in any semiautomatic firearm. ArmaLite® recommends that you purchase and test a small quantity of any type of ammo in your firearm before you buy large quantities.**

If you have any questions regarding ammunition compatibility, CONTACT ARMALITE® BEFORE FIRING THE RIFLE!!!!!!

## 8. INITIAL ASSEMBLY, INSPECTION, AND CLEANING

### 8.1 INITIAL ASSEMBLY

Your M-15/22 firearm is shipped to you completely assembled.

#### ADJUSTING THE COLLAPSIBLE BUTTSTOCK

If your firearm has a collapsible buttstock, the buttstock may require adjustment in length to fit you.

To extend the collapsible buttstock, Depress the lever and pull the stock out until it locks into position. To collapse the buttstock depress the lever again and push forward until it locks into position.



**⚠ WARNING: IF YOU MOUNT A SCOPE TO YOUR RIFLE, MAKE CERTAIN THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD SO THAT IT WILL NOT IMPACT YOUR FACE DURING RECOIL. CHECK THE DISTANCE BETWEEN THE SCOPE AND YOUR FACE WHEN YOU ARE IN THE FIRING POSITION. BEAR IN MIND THAT YOUR EYE WILL BE CLOSER TO THE SCOPE WHEN SHOOTING FROM PRONE OR FROM THE BENCH THAN WHEN SHOOTING OFF-HAND. WHEN IN DOUBT, INCREASE THE EYE RELIEF.**


### 8.2 INITIAL INSPECTION

**⚠ WARNING: READ THIS MANUAL COMPLETELY AS YOU INSPECT YOUR NEW ARMALITE® FIREARM. MAKE CERTAIN THAT YOU UNDERSTAND HOW TO ASSEMBLE, OPERATE, DISASSEMBLE, MAINTAIN, AND STORE YOUR FIREARM SAFELY BEFORE YOU USE IT.**


Any time you disassemble and reassemble a firearm, you should conduct a functional check of it. Check your firearm's function as described in the Reassembly section of this manual.


### 8.3 INITIAL CLEANING

Merely clean the bore of your firearm and lubricate the firearm as described in the Maintenance section below. ArmaLite® firearms are made more tightly than other rifles of similar design. A break-in period of 200 rounds allows machined or phosphate-coated surfaces to smooth out the rifle's action. Lubricate the rifle well before firing.

 **WARNING: TO ASSURE ITS PROTECTION FROM CORROSION, YOUR ARMALITE® FIREARM HAS BEEN SHIPPED WITH PRESERVATIVE OIL IN THE BORE. FIRING THE FIREARM WITH PRESERVATIVE IN THE BORE CAN INCREASE PRESSURES, WITH POSSIBLE FIREARM DAMAGE OR PERSONAL INJURY OR DEATH. CLEAN AND DRY THE BORE BEFORE FIRING YOUR ARMALITE® FIREARM.**

### 8.4 DRY FIRING YOUR M-15/22


 **CAUTION: DO NOT DRY FIRE THE FIREARM WITHOUT A SNAP CAP IN THE CHAMBER. DOING SO MAY DAMAGE THE FIRING PIN, FIRING PIN RETAINING PIN, AND/OR CHAMBER. DOING SO WILL VOID YOUR WARRANTY. WE RECOMMEND THAT YOU KEEP A SNAP CAP IN THE CHAMBER WHENEVER YOU ARE NOT USING THE FIREARM.**


 **CAUTION: NEVER DRY FIRE YOUR RIFLE WITHOUT THE UPPER RECEIVER, ITS BOLT GROUP, AND A SNAP CAP INSTALLED. THE FIRING PIN STOPS THE FALL OF THE HAMMER. WITHOUT THE BOLT GROUP INSTALLED, THE HAMMER CAN IMPACT ON THE LOWER RECEIVER, DAMAGING IT.**

 **WARNING: FOLLOW ALL OF THE RULES OF SAFE GUN HANDLING ANYTIME YOU DRY FIRE YOUR FIREARM.**





## 9. LOADING AND FIRING

 **WARNING: ALWAYS KEEP THE SAFETY IN THE “SAFE” POSITION UNTIL YOU ARE READY TO FIRE THE FIREARM. REMEMBER THAT THE SAFETY IS SIMPLY A MECHANICAL DEVICE, AND AS SUCH, COULD POSSIBLY FAIL. NEVER DEPEND ON ANY SAFETY TO JUSTIFY UNSAFE GUN HANDLING. ALWAYS KEEP THE CHAMBER EMPTY AND THE FIREARM POINTED IN A SAFE DIRECTION EVEN WHEN THE SAFETY IS ON.**


 **WARNING: INJURY, DEATH, OR FIREARM DAMAGE CAN RESULT FROM FIRING A FIREARM WITH AN OBSTRUCTION IN THE BORE. BEFORE YOU FIRE, MAKE SURE THAT THE BORE IS NOT OBSTRUCTED. NEVER ATTEMPT TO SHOOT OUT A BORE OBSTRUCTION.**

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

 **WARNING: 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: THIS FIREARM WILL FIRE WITHOUT A MAGAZINE IN IT. ALWAYS ASSURE 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 CHAMBER IS EMPTY.**

 **WARNING: 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.**

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

- 1. KEEP THE FIREARM POINTED AT THE TARGET!!!**
- 2. WAIT 15 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 DOESN’T FIRE, BE CAUTIOUS AND ASSUME THAT THE CARTRIDGE WILL DISCHARGE WHEN THE BOLT IS OPENED.**
- 5. OPEN THE BOLT QUICKLY AND UNLOAD THE FIREARM.**

## 6. EXAMINE THE FIREARM AND CARTRIDGE CAREFULLY TO IDENTIFY THE CAUSE OF THE MALFUNCTION.

### 9.1 LOADING THE MAGAZINE

Looking at the magazine from the side, you will see a notch about halfway back on the feed lips. Holding a cartridge horizontally, push its rim down into the notch. Then slide the cartridge rearward under the feed lips of the magazine.

**Hint: You may find that loading the magazine is tiring on the fingers. If so, we recommend that you purchase ArmaLite's optional Magazine Loader (P/N 22-ML). It will make loading magazines much less tiring. The optional Magazine Loader and spare magazines may be found on our website, [www.armalite.com](http://www.armalite.com).**



**CAUTION: CURRENTLY ARMALITE® SELLS M-15/22 MAGAZINES THAT ARE DESIGNED FOR CAPACITIES OF 10 AND 25 ROUNDS. DO NOT EXCEED THESE CAPACITIES. DUE TO VARIATIONS IN DIAMETERS OF VARIOUS BRANDS OF CARTRIDGES, IT MAY BE POSSIBLE TO FORCE ADDITIONAL CARTRIDGES INTO A MAGAZINE. DOING SO WILL DAMAGE YOUR MAGAZINE AND LEAD TO ELEVATED MALFUNCTION RATES.**

**NOTICE: TYPICALLY, IF AN M-15/22 HAS PROBLEMS, IT WILL BE DURING THE FIRST HUNDRED ROUNDS OR SO. THIS IS THE BREAK-IN PERIOD. DURING THE BREAK-IN PERIOD, IT IS SUGGESTED THAT MAGAZINES BE LOADED TO LESS THAN FULL CAPACITY (LESS THAN 15 ROUND FOR THE 25 ROUND MAGS AND LESS THAN 7 ROUNDS FOR THE 10 ROUND MAGS). LOADING MAGS TO LESS THAN FULL CAPACITY DURING THEIR BREAK-IN PERIOD WILL IMPROVE RELIABILITY OF THE FIREARM.**

Take it easy with your magazines. Keep them clean, dry, and don't pound them into the rifle. It looks great in the movies but is wrong. Insert them smoothly then check to assure they're locked in the rifle by tugging downward.



1. Pull the charging handle (U-2) rearward, visually inspect the chamber to assure that it is empty, and release the charging handle. Place the safety (L-24) on SAFE.

2. Push upward on the magazine until the magazine catch (L-17) engages and holds the magazine. Pull down on the magazine slightly to make sure that it is locked in place.



## **9.2 CHAMBERING AND FIRING A ROUND, STARTING WITH THE BOLT CLOSED AND MAGAZINE INSERTED**

**NOTICE: THE BOLT WILL NOT AUTOMATICALLY BE HELD TO THE REAR AFTER THE LAST SHOT IN A MAGAZINE IS FIRED. THE BOLT STOP ON YOUR M-15/22 IS NOT FUNCTIONAL. THE BOLT CANNOT BE HELD TO THE REAR BY THE BOLT STOP. HOWEVER, IF YOU CONVERT YOUR M-15/22 TO CENTERFIRE BY INSTALLING AN M-15™ UPPER HALF, THE BOLT STOP WILL FUNCTION NORMALLY.**



1. Pull the charging handle (U-2) all the way back and release it.



2. Never “ride” the charging handle forward. Let it slide forward at full speed.



4. Set the safety (L-24) to “FIRE”, grip the rifle firmly, and squeeze the trigger.

**⚠ WARNING: GRIPPING THE RIFLE 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 RIFLE MALFUNCTION.**

**⚠ 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.**

## 10. CLEARING / UNLOADING THE FIREARM

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

**⚠ WARNING: IF YOU KNOW NOTHING ELSE ABOUT YOUR ARMALITE® FIREARM, YOU MUST KNOW HOW TO UNLOAD IT AND CLEAR IT TO MAKE IT SAFE.**

**Keep your rifle cleared when not in use.**

1. Place safety (L-24) on “SAFE”.

NOTE: If the rifle is not cocked, the lever cannot be pointed toward SAFE.



2. Remove the magazine by depressing the magazine catch button (L-18) and pulling the magazine down.

**⚠ CAUTION: THE MAGAZINE WILL 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.**

3. Extract the cartridge (if any) from the chamber.



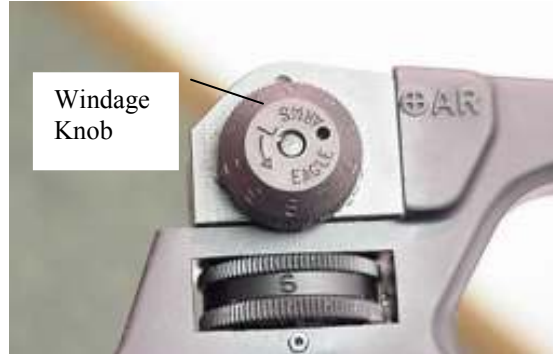
4. Holding the charging handle back, look into the receiver and chamber to ensure that these areas contain no ammunition.

**⚠ WARNING: NEVER ASSUME THAT THE CHAMBER IS EMPTY UNTIL YOU HAVE VISUALLY EXAMINED IT AND SEE THAT IT IS EMPTY.**

5. Empty all remaining cartridges out of your magazines.

**⚠ WARNING: THE STEPS IN UNLOADING YOUR FIREARM MUST BE FOLLOWED IN THE EXACT ORDER GIVEN. THE MAGAZINE MUST BE REMOVED BEFORE THE CHAMBER IS INSPECTED. IF YOU CLEAR THE CHAMBER BEFORE REMOVING THE MAGAZINE, YOU MAY REMOVE ONE CARTRIDGE FROM THE CHAMBER AND THEN, UPON CLOSING THE BOLT, CHAMBER ANOTHER CARTRIDGE FROM THE MAGAZINE. THE FIREARM WILL STILL BE LOADED. REMEMBER THAT A CARTRIDGE IN THE CHAMBER CAN STILL BE FIRED EVEN AFTER THE MAGAZINE IS REMOVED.**

## 11. ZEROING THE SIGHTS



Because every shooter sees the sights differently, two shooters may have a different zero on the same rifle.

1. Rotate the elevation knob down (counter clockwise) until the lowest digit on the elevation knob is aligned with index line above the knob. Sight in at the shortest range to be fired (0 to 20 marked match rifle scale).
2. Carefully aim and fire at the center of the target. Fire at least a three shot group, and locate the center of the group.
3. If your shot group is not in the center of the target, adjust the sights to move the next group. Turning the windage knob clockwise moves the impact RIGHT. Turning the windage knob counter-clockwise moves the impact LEFT. Turning the front sight clockwise (viewed from above) RAISES the impact. Turning the front sight counter-clockwise (viewed from above) LOWERS the impact. ArmaLite® recommends that you use a front sight adjustment tool to zero our front sight blades.
4. Repeat steps 2 and 3 until the group is centered on the target.
5. ArmaLite® places numbers on both the windage and the elevation knob so that you can record your zero for future reference.

## 12. 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.**

### 12.1 CLEAR THE RIFLE

**IMPORTANT: Put the safety on “SAFE”. Remove the magazine, THEN pull back the charging handle and check the chamber.**



**SLING**  
Remove the sling.

### 12.2 UPPER AND LOWER RECEIVERS

1. Push the takedown pin (L-23) as far as it will go.



 **CAUTION: EXCESS FORCE CAN SEVERELY DAMAGE THE RECEIVER. TAKE IT EASY!**

2. Pivot the upper receiver (U-1) from the lower receiver (L-1).



3. Push the receiver pivot pin (L-20) as far as it will go. Take it easy!



4. Separate the upper and lower receivers.

### 12.3 CHARGING HANDLE AND BOLT GROUP



1. Pull back the charging handle (U-2) and bolt group (U-3).



2. Remove the bolt group and its forward assist adapter.



3. Pull the charging handle back and down to remove it.

4. The forward assist adapter is a separate piece that sits behind the bolt. You may remove it for ease of cleaning the bolt group.



**⚠ CAUTION: FURTHER DISASSEMBLY OF THE BOLT GROUP IS NOT RECOMMENDED. DISASSEMBLY MAY DAMAGE THE PRECISE ALIGNMENT OF THE RECEIVER RAILS AND THE CHAMBER ADAPTER.**

## 12.4 LOWER RECEIVER ASSEMBLY

**NOTICE: THE BUFFER AND OPERATING SPRING IN THE LOWER RECEIVER EXTENSION ARE NOT FUNCTIONAL IN YOUR M-15/22. THEY ARE ONLY INCLUDED WITH YOUR M-15/22 FOR EASE IN CONVERTING YOUR M-15/22 TO CENTERFIRE. TO DO SUCH A CONVERSION, YOU NEED ONLY PURCHASE AN M-15™ UPPER HALF AND MAGAZINE.**



1. Cock the hammer (L-28) with your thumb. Push in the buffer (L-5) and depress the buffer detent (L-8) to release the buffer.



2. Remove the buffer (L-5) and the operating spring (L-4).

## 12.5 DISASSEMBLING THE MAGAZINE

**⚠ CAUTION: THE MAGAZINE RETENTION BUTTON AND SPRING ARE UNDER TENSION, AND MUST BE CAREFULLY RESTRAINED DURING REMOVAL OF THE FLOORPLATE TO GAIN ACCESS THE INSIDE OF THE MAGAZINE BOX.**


If you need to clean the inside of the magazine, use the tip of a bent paper clip or other suitable tool to push down on the floorplate retention button that sticks out of the bottom of the green floorplate. Then slide the floorplate out of the back of the magazine box. As you do so, be careful to restrain the magazine retention button and the magazine spring so that they do not injure your eyes or become lost. Remove the floorplate retention button, the magazine spring, and the follower from the magazine box. Clean out the inside of the magazine box carefully with a rag. Reassemble in reverse order.



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

## 13. MAINTENANCE

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

 **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.**

### 13.1 CLEANING SOLVENTS AND LUBRICANTS

For maximum reliability and service life, lubricate your firearm with high quality firearms lubricants.

Under NO conditions should any lubricant containing graphite be used with your firearm. Graphite can encourage rapid corrosion to the aircraft-grade aluminum used in your rifle.

In addition to cleaning solvents and lubricants, the basic cleaning equipment you will need includes a cleaning rod, brass bore brush, chamber brush, toothbrush, patches, pipe cleaners, and the most important item: a lint-free cloth.

### 13.2 UPPER RECEIVER AND BARREL ASSEMBLY

NOTE: Don't reverse the direction of the bore brush while it's in the bore.

1. Use cleaning solvent on the bore and chamber, the upper receiver and barrel assembly, and all areas of powder fouling, corrosion, dirt or dust.



Use a cleaning rod, bore brush and cleaning solvent. Run the rod through the chamber and flash suppressor several times.

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

 **CAUTION: DON'T REVERSE THE DIRECTION OF THE BORE BRUSH WHILE IT'S IN THE BORE.**



2. Take the bore brush off the rod and install a swab holder and a swab. Apply cleaning solvent to the swab; then run it through the chamber and out the flash suppressor (if applicable). To remove carbon build up, let the solvent sit, then wipe clean. A bore brush may be used with care to remove heavy carbon buildup. Wipe the bore dry by running clean swabs all the way through from the chamber to the flash suppressor. **REMEMBER**, do not change directions in the bore.
3. Lightly lubricate the bore and chamber, outer surface of the barrel and front sight,
4. With a lubricated swab, run the rod from the receiver to the flash suppressor (if applicable). Do not over lubricate.



5. Drip lubricant on the front sight detent. Then depress the detent to work the lubricant in.

### **13.3 CHARGING HANDLE AND BOLT GROUP**



1. Clean all parts and outer surfaces of the bolt group with a swab saturated with cleaning solvent.

2. Press the extractor in repeatedly to assure that it moves freely. Lubricate it generously.
3. Inspect the charging handle for cracks, bends or breaks.
4. Lightly lubricate the firing pin and firing pin recess in the bolt assembly.
5. Lubricate the bolt rails.

### 13.4 LOWER RECEIVER ASSEMBLY

**⚠ CAUTION: DO NOT USE A WIRE BRUSH OR ANY TYPE OF ABRASIVE MATERIAL TO CLEAN ALUMINUM SURFACES**



1. Wipe dirt from the trigger with a swab.
2. Use a swab and cleaning brush to clean powder fouling, corrosion, and dirt from the lower receiver.



3. Use a pipe cleaner to clean the buttstock screw vent hole.



4. Clean the buffer, recoil spring, and inside lower receiver with a swab dipped in solvent.
5. Lightly lubricate the buffer and operating spring.

6. Examine the lower receiver assembly for a broken or bent trigger, buttstock, corroded or deformed lower receiver, cracked or damaged grip, and bent or damaged safety. Look at the inside parts for cracks, dents, or breaks.



7. Generously lubricate the takedown and pivot pins and the inside parts of the lower receiver assembly.



**WARNING: ARMALITE'S NATIONAL MATCH TRIGGER ASSEMBLY ISN'T USER ADJUSTABLE. FOR SAFETY REASONS, IT IS INTENTIONALLY BUILT WITH A SMALL AMOUNT OF CREEP IN THE SECOND STAGE. AS IT BREAKS IN WITH USE (200 TO 500 ROUNDS), THE CREEP TENDS TO DECREASE TO AN ACCEPTABLE LEVEL. IF EXCESS CREEP REMAINS, THE TRIGGER CAN BE TUNED BY A GUNSMITH USING TECHNIQUES SIMILAR TO THOSE USED WITH THE M1 / M14 TRIGGER SYSTEM. ARMALITE TECHNICIANS WILL FINE-TUNE THE TRIGGERS FOR A NOMINAL SHOP FEE, PLUS SHIPPING.**

### **13.5 LONG TERM STORAGE**

Clean your firearm well and apply a good quality preservative.

It is at least theoretically possible for some springs to take a set during prolonged storage. To preclude this possibility, ArmaLite offers the following recommendations regarding long term storage of your firearm.

Clear all cartridges from your firearm. Remove the magazine. Then pull back the charging handle and visually confirm that the chamber is empty and that there is no cartridge held to the bolt face by the extractor. Then check it again.

It is always best to store your magazines empty. However if you need to store them loaded, we recommend that you store them with 5 rounds less than their stated capacity.

When you're taking your firearm out of long term storage, remove the preservative and lubricate as stated elsewhere in this manual.

## 14. REASSEMBLY

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

### 14.1 LOWER RECEIVER ASSEMBLY



Insert operating spring and buffer.

### 14.2 CHARGING HANDLE AND BOLT GROUP

1. Place the charging handle into the upper receiver and engage the handle's lugs with the track in the receiver, then push the charging handle part way into the upper receiver.



2. Slide the bolt group into the upper receiver.

3. Push the charging handle assembly and bolt group together into the upper receiver.





## 14.3 UPPER AND LOWER RECEIVERS

NOTE: The hammer must be in cocked position to join the receivers.



1. Close the ejection port cover. Then, join the upper and lower receivers.
2. Align the pivot pin holes with the pivot pin and push the pivot pin in.

 **CAUTION: TO AVOID DAMAGE TO THE EJECTION PORT COVER, CLOSE THE EJECTION PORT COVER BEFORE THE RECEIVERS ARE JOINED.**



3. Close the upper and lower receivers. Push in the takedown pin.

### **NOTE**

Normal forging and manufacturing variations may result in slight overhang or play. This will not affect function or accuracy.

## 14.5 FUNCTIONAL CHECK

1. Remove the magazine and visually inspect the chamber to assure that it is empty. Install an empty magazine. Assure that it is caught solidly by the magazine catch.

2. Pull the charging handle to the rear and then manually return it forward. The bolt should slide smoothly rearward and forward with the charging handle.



**CAUTION: DO NOT DRY FIRE THE FIREARM WITHOUT A SNAP CAP IN THE CHAMBER. DOING SO MAY DAMAGE THE FIRING PIN, FIRING PIN RETAINING PIN, AND/OR CHAMBER. DOING SO WILL VOID YOUR WARRANTY. WE RECOMMEND THAT YOU KEEP A SNAP CAP IN THE CHAMBER WHENEVER YOU ARE NOT USING THE FIREARM.**

3. Pull the charging handle to the rear again. Insert a Snap Cap into the chamber and then manually return the bolt forward.

4. Place the safety on “SAFE”. Squeeze the trigger. *The trigger should not fall.*



5. Place the safety on “FIRE”. Squeeze the trigger and hold the trigger to the rear; *the hammer should fall*. Pull the charging handle to the rear and release it. Release the trigger. *You should hear a click as you release the trigger.*

**CALL ARMALITE® AT (309) 944-6939 IF YOUR RIFLE FAILS THIS TEST.**

## 15. TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T FIRE	Selector lever on "SAFE"	Put it on "FIRE".
	Fouling in bolt group	Clean.
	Defective ammunition	Remove and discard.
WON'T EXTRACT	Dirty extractor spring	Clean.
	Dirty, corroded, or reloaded ammunition	Remove and discard.
	Carbon in chamber	Clean chamber.
	Frozen or worn extractor	Clean.
WON'T FEED	Dirty, corroded, or reloaded ammunition	Remove and discard.
	Dirty or defective magazine	Clean and lubricate or replace.
	Too many rounds in magazine	Remove excess rounds.
	Short recoil	See below.
SHORT RECOIL	Weak or poor quality ammo	Replace ammunition.
	Dirty rifle	Clean.
	Improper lubrication	Lubricate appropriately.
BOLT FAILS TO LOCK OPEN AFTER LAST ROUND	Not a malfunction.	Bolt stop is not operational.
BOLT "HUNG UP"	Round jammed between bolt and charging handle and/or double feed	<ol style="list-style-type: none"> <li>1. Remove magazine.</li> <li>2. Pull bolt rearward</li> <li>3. While bolt is held to rear, round should fall out through magazine well.</li> </ol>

## 16. WARRANTY, SERVICE, AND SUGGESTIONS

Specific warranty provisions for your ArmaLite® firearm are shown on the warranty card shipped with your new firearm. Be sure to complete your warranty card and return it to ArmaLite® immediately.

**THE WARRANTY WILL ONLY BE HONORED UPON COMPLETION OF THE WARRANTY FORM AND ITS RETURN TO ARMALITE® WITHIN 30 DAYS OF THE ORIGINAL CUSTOMER'S PURCHASE DATE ALONG WITH A COPY OF THE DATED SALES RECEIPT.**

If no warranty card and sales receipt are on file, all work will be billed at shop rates. Custom work will be billed at ArmaLite®'s shop rates, as will work on firearms submitted with no warranty problem existing. Shipping to and from ArmaLite® is the owner's responsibility, except that ARMALITE® will return the firearm to the customer shipping prepaid if the return was covered under warranty.


Firearms that you wish to return for warranty or out-of-warranty repair may be returned directly to ArmaLite. 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.**

Returns for any reason will NOT be accepted without a Return Merchandise Authorization (RMA) number issued by ArmaLite. Please call 1-800-336-0184, Ext. 125 to receive your RMA number. 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. If you wish to put your note on our RMA form, you can print out our RMA form by clicking on the link in the Policies or Contact Us sections of our website. Keep your shipping receipt and the serial number of the firearm for your records in case of loss in shipment.

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.

 **WARNING: MAKE ABSOLUTELY SURE THAT THE FIREARM IS UNLOADED!!! BELIEVE IT OR NOT, WE SOMETIMES GET FIREARMS BACK THAT ARE LOADED!!!**

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

 **WARNING: IT IS THE OWNER'S RESPONSIBILITY TO ASSURE THAT ANY PARTS THAT ARE PURCHASED FROM ARMALITE® ARE 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 ArmaLite® firearm is available free in the Library on ArmaLite®'s website or may be obtained in hard copy by contacting ArmaLite®.

Additional technical information can be found in Technical Notes in the Library section of ArmaLite®'s website.

To answer any questions you may have about the firearm, or to offer suggestions for improvements, please contact us at:

**ArmaLite, Inc**  
**P.O. Box 299**  
**Geneseo, Illinois, 61254**

**Phone: 1-800-336-0184 or 309-944-6939**

**Fax: 309-944-6949**

**Email: [info@ArmaLite.com](mailto:info@ArmaLite.com)**

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## **PATENTS & TRADEMARKS**

“ArmaLite®”, “AR-10®”, and “SPR®”, are registered trademarks of ArmaLite, Inc.

“M-15™”, “AR-30™”, “AR-50™”, and other model variants are trademarks of ArmaLite, Inc.

The AR-10® Series Rifles and Carbines (including the SuperSASS™) are protected by U.S. Patents 5,638, 626 and 5,911,173 and 6,044,748.

The M-15™ Series Rifles and Carbines are protected by U.S. Patents 5,911, 173 and 6,044,748.

The AR-30™ and AR-50™ Series Rifles are protected by U.S. Patents 6,487,805 and 6,637,142.

The AR-23 Subcaliber Device for the Mk-19 Grenade Machine Gun is protected by U.S. Patents 5,983,772 and 6,202,533.

The Blank Firing Adapter for the Mk-19 Grenade Machine Gun is protected by U.S. Patent 5,438,907.

Other patents granted or assigned to ArmaLite include:

Weapons Operating System, U.S. Patent 6,591,535

Cartridge for a Firearm, U.S. Patents 6,367,389 and 6,959,647 and 6,976,431 and 7,458,332

Light Weight Weapon Operating System and Cartridge Feed, U.S. Patent 6,591,535