



**ARMALITE®, INC
OWNER'S MANUAL
FOR
ARMALITE®
AR-30™ RIFLE**



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

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There's nothing better than adding to your ArmaLite firearm with GENUINE ArmaLite parts!

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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 assembly and store it separately. **IF YOU HAVE MORE THAN ONE AR-30™, MAKE SURE YOU HAVE THE BOLTS IDENTIFIED TO THEIR SPECIFIC RIFLES! THE BOLTS ARE NOT 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. As 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.
- * Make sure that no cleaning patch or other obstruction is in the barrel or muzzle brake. Firing the rifle with such an obstruction may damage the rifle or flying debris may cause injury.

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 assembly (R-20) 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 assembly.

 **WARNING: IF YOU HAVE MORE THAN ONE AR-30™, MAKE SURE THAT YOU SPECIFICALLY IDENTIFY THE REMOVED BOLT ASSEMBLY WITH ITS ORIGINAL FIREARM BECAUSE THE BOLTS ARE NOT INTERCHANGEABLE.**

As is typical of many high precision firearms, ArmaLite® AR-30™ rifles are individually headspaced at the factory. The individual mating of each bolt, barrel, and receiver delivers the highest possible accuracy as well as assuring unmatched reliability and safety. On current production rifles, the mating of the bolt to the barreled receiver is evidenced by etching the last three digits of the rifle's serial number onto its mated bolt.

5. GENERAL INFORMATION



Figure 1
The AR-30™ Rifle with Accessories

Description:

The AR-30™ is a robust, front locked, manually operated bolt action rifle chambered for a variety of calibers and cartridges. The specific caliber/cartridge for which your AR-30™ is chambered is marked on the left rear side of the barrel. It is intended for hunting or target shooting.

The AR-30™ is a finely made rifle, a sophisticated machine built for many years of reliable use. It consists of two major elements, the receiver/barrel assembly and the stock assembly. They are joined at a unique machine-rest style V-block interface. Accurate, repeatable bedding is formed by the engagement of the octagonal receiver and the deep V channel in the aluminum forestock (S-1).

The AR-30™ uses a “single stack” magazine so that the receiver needs only a narrow opening to admit it. This leaves the receiver extremely stout which is conducive to good accuracy.

The rifle bears a manganese phosphate finish on most steel surfaces, and hard anodizing on the aluminum surfaces.



Figure 2
The ArmaLite® AR-30™ Muzzle Brake

The AR-30™ is equipped with an extremely effective muzzle brake. It reduces recoil to a relatively mild shove. It is effective enough that even a small-statured shooter can fire the rifle with the powerful .338 Lapua Magnum cartridge, and most shooters will be able to spend long days at the range without discomfort.

⚠ WARNING: THE MUZZLE BRAKE IS HELD IN PLACE BY BOTH A LOCK RING AND LOC-TITE. DON'T REMOVE IT UNLESS REPLACEMENT OR REPAIR IS NECESSARY. TRYING TO FORCE THE BRAKE OFF WITHOUT SOFTENING THE LOC-TITE MAY UNSCREW THE BARREL!

⚠ 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.

As is typical of many high precision firearms, the AR-30™ is individually headspaced at the factory. The individual mating of each bolt, barrel, and receiver delivers the highest possible accuracy as well as assuring unmatched reliability and safety. The mating of the bolt to the barreled receiver is currently evidenced by etching the last three digits of the rifle's serial number onto its mated bolt.

⚠ WARNING: IN ORDER TO MAINTAIN PROPER HEADSPACE FOR SAFETY, RELIABILITY, AND ACCURACY, BOLT ASSEMBLIES MUST NOT BE INTERCHANGED AMONG RIFLES. BOLT HEADS ARE FACTORY REPLACEABLE ONLY.

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 parts lists. For example, a part numbered “R-7” in the text would refer to the part numbered “7” in the Receiver/Barrel Assembly exploded view.

ArmaLite sells AR-30™s in several calibers. Each caliber utilizes some unique parts. Those unique parts are identified in the parts lists below. Make sure you specify the caliber when ordering any parts.

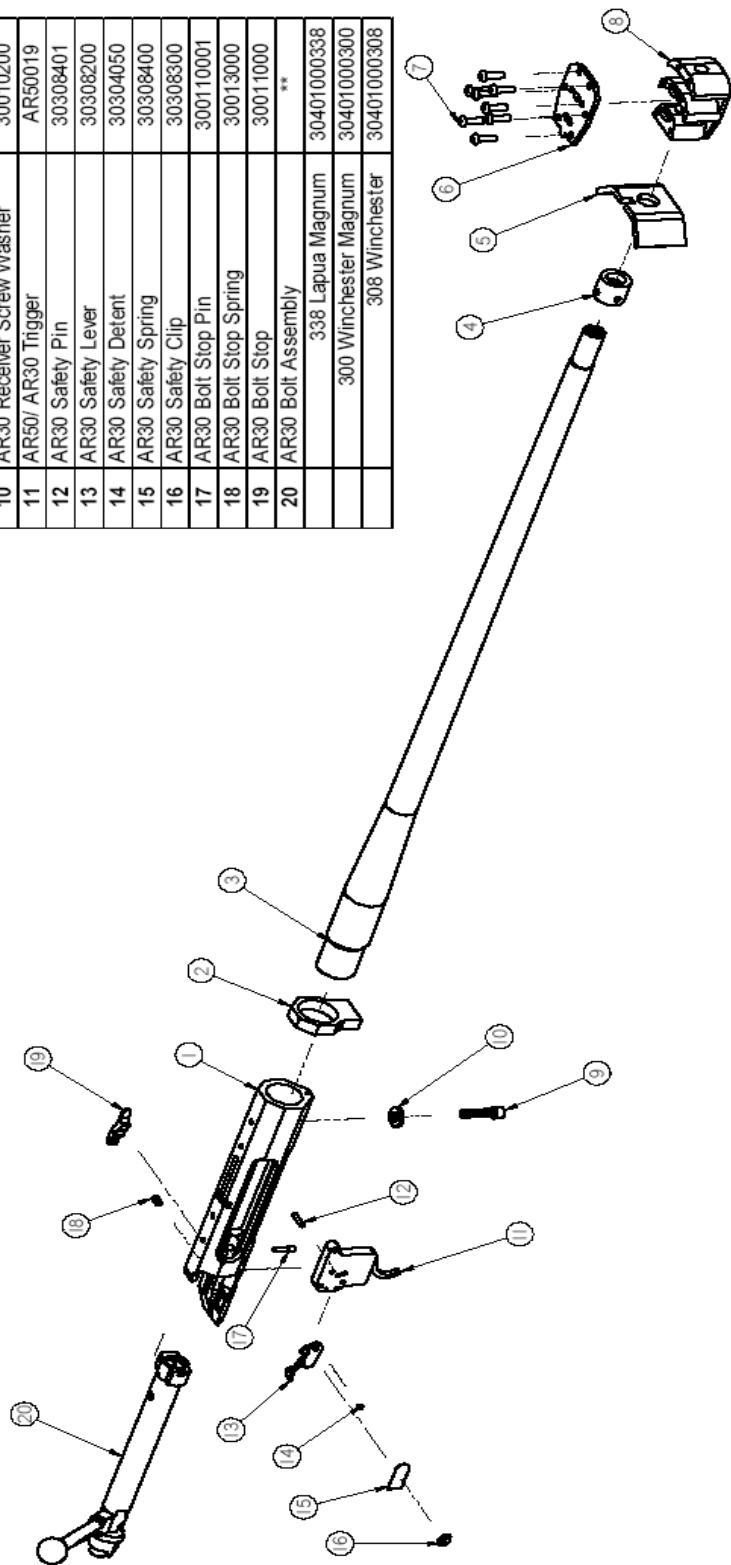
1	AR30 Receiver	30001000
2	AR30 Recoil Lug	30120000
3	AR30 Barrel (26")	*
	338 Lapua Magnum	30110000338
	308 Winchester	30110000300
4	AR30 Muzzle Brake Nut	30110000308
5	AR30 Muzzle Brake Shield	30131000
6	AR30 Muzzle Brake Top	30130015
7	AR30 Muzzle Brake Screw	30132000
8	AR30 Muzzle Brake Bottom	30130010
9	Pistol Grip (Action) Screw	EL0010
10	AR30 Receiver Screw Washer	30010200
11	AR30 / AR30 Trigger	AR50019
12	AR30 Safety Pin	30308401
13	AR30 Safety Lever	30308200
14	AR30 Safety Detent	30304050
15	AR30 Safety Spring	30308400
16	AR30 Safety Clip	30308300
17	AR30 Bolt Stop Pin	300110001
18	AR30 Bolt Stop Spring	300113000
19	AR30 Bolt Stop	300110000
20	AR30 Bolt Assembly	***
	338 Lapua Magnum	304010000338
	300 Winchester Magnum	304010000300
	308 Winchester	304010000308

30002000338

30002000300

30002000308

AR30 Receiver/ Barrel Assembly

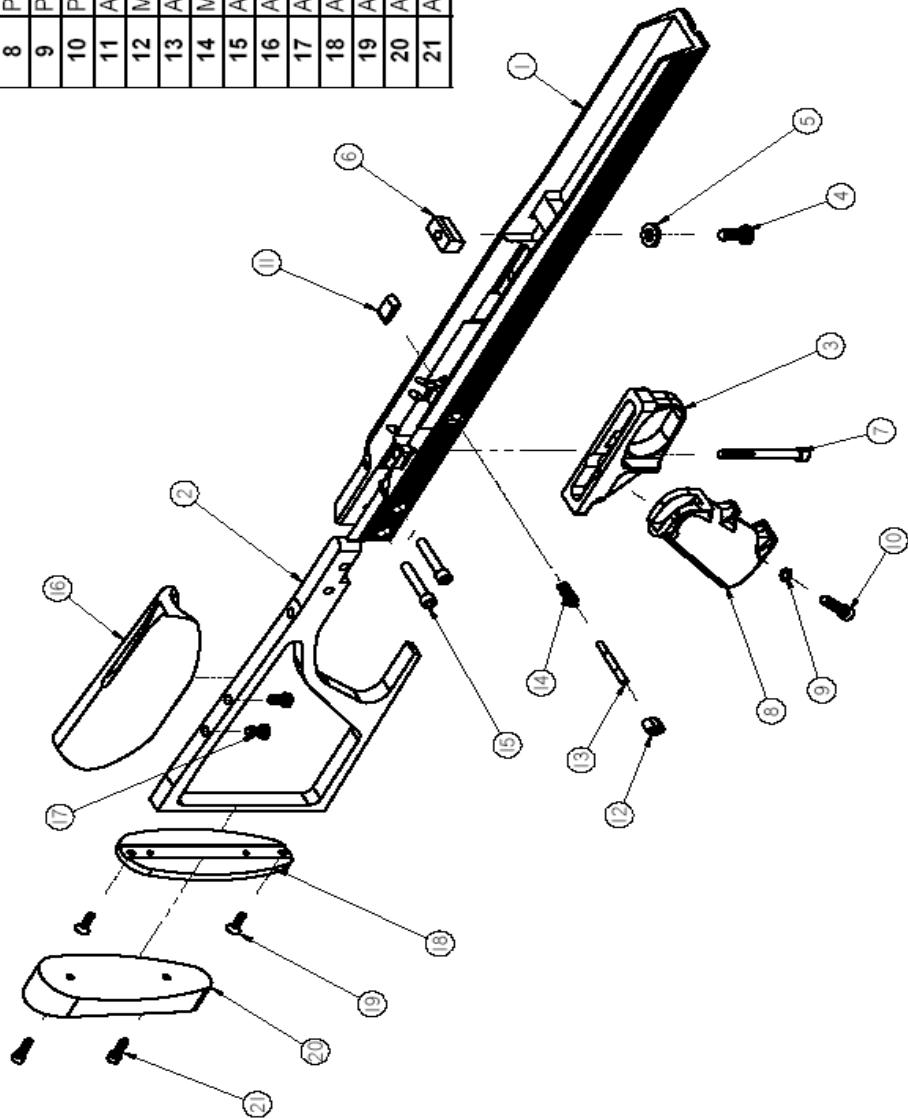


NOTE: Parts numbered 1 through 8, 11 through 16 and 20 on this page are factory replaceable only.

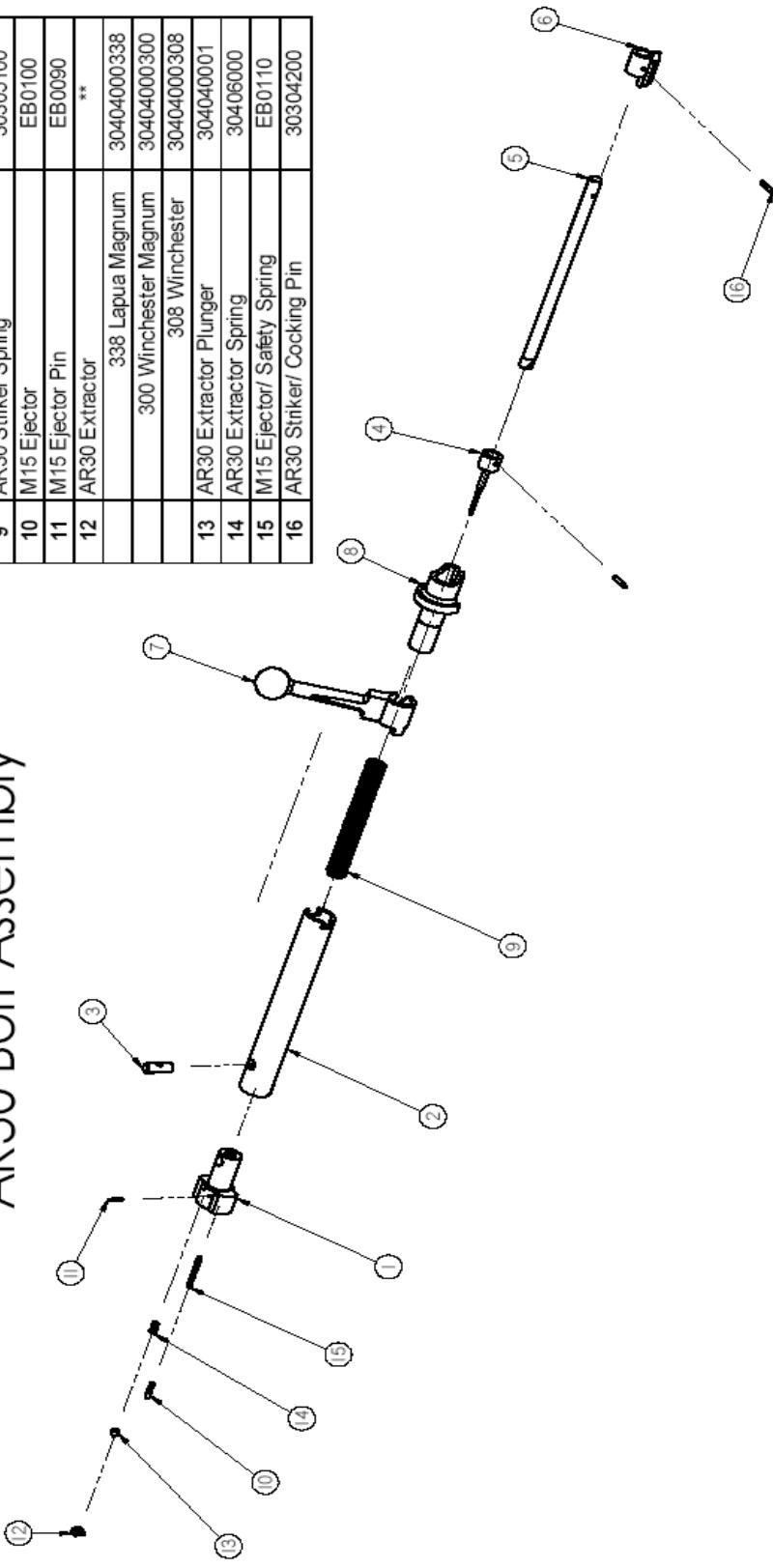
30711010

AR30 Stock Assembly

1	AR30 Forestock	30715000
2	AR30 Buttstock	30708030
3	AR30/AR50 Grip Frame	30708025
4	AR30 Bedding Wedge Screw	30719000
5	AR50/AR30 Action Screw Washer	AR50104
6	AR50/AR30 Bedding Wedge	AR50034
7	AR30 Grip Frame Screw	30731000
8	Pistol Grip (Black)	EL0030
9	Pistol Grip Washer	EL0020
10	Pistol Grip Screw	EL0010
11	AR30 Magazine Latch	30611000
12	Magazine Catch Button	EL0270
13	AR30 Magazine Latch Shaft	30611050
14	Magazine Catch Spring	EL0280
15	AR30 Buttstock Screw	30728000
16	AR30 Cheek Piece	30710000
17	AR30 Cheek Piece Screw	30713000
18	AR30 Buttplate Base	30735000
19	AR30 Buttplate Base Screw	30737000
20	AR30 Butt Pad	30736000
21	AR50 Recoil Pad Screw	AR50117



30401 000338
30401 000300
30401 000308
AR30 Bolt Assembly



NOTE: Part number 1 on this page is factory replaceable only.

7. AMMUNITION

ArmaLite sells our AR-30™s chambered for several different cartridges. 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® chambers its AR-30™ family of rifles for a number of different cartridges. In order to assure that you are using the correct cartridges for your rifle, you must look on the barrel. The caliber is marked on the left side of the barrel just in front of the receiver. If you have any questions regarding ammunition compatibility, **CONTACT ARMALITE® BEFORE FIRING THE RIFLE!!!!!!**

AR-30s marked “308 WINCHESTER” are chambered to successfully fire both 308 Winchester caliber and 7.62 NATO cartridges.

 **WARNING: DO NOT FIRE SABOTED AMMUNITION FROM YOUR RIFLE. THE SABOT COULD STRIKE OR LODGE IN YOUR MUZZLE BRAKE CAUSING FIREARM DAMAGE AND POTENTIAL INJURY OR DEATH.**

 **CAUTION: FIRING OF TRACER AND ARMOR PIERCING AMMUNITION REDUCES BARREL LIFE.**

Firing any of the ammunition described in the above warnings will void your warranty.

8. INITIAL ASSEMBLY, INSPECTION, AND CLEANING

8.1 INITIAL ASSEMBLY

Your AR-30™ Rifle is shipped to you completely assembled. The only additional assembly required by you is installation of the telescopic sight rail, bipod adapter, and scope mount (optional).

A. Telescopic Sight Rail:

This rail is specially made with special recoil lugs designed to defeat both lateral and longitudinal recoil forces and to engage the scope mounting holes on the receiver. The rail is designed to accept ArmaLite®'s scope mounts, as well as most other Weaver type rings. The rail is tapered longitudinally at an angle of 15 minutes to compensate for projectile drop at long ranges.

The rail is supplied with four socket head cap screws for attachment to the receiver. One of the screws is shorter than the other three.



Figure 3
The Scope Rail on the Receiver

⚠ CAUTION: THE SHORT SCREW GOES INTO THE FRONT HOLE IN THE RAIL.

To install the rail:

1. Remove the bolt assembly (R-20) as described in the Disassembly Section of this manual.
2. Set the scope rail on the receiver (R-1), with the recoil lugs of the rail engaging the slots of the receiver and the thick end of the rail to the rear.
3. Insert a LONG screw in the rear hole and tighten it.
4. Repeat the process with the other screws, MAKING CERTAIN TO INSTALL THE SHORT SCREW INTO THE FRONT HOLE.

5. You may apply Loctite or any other thread cement to the screw threads if you wish. It is not necessary.



Figure 4
Attaching the ArmaLite® Scope Mount

B. ArmaLite® Scope Mount or Rings:

The Scope Mount will accept ArmaLite® Mounts or Rings. They are equipped with a positioning cross-bar. Select a location on the scope rail, and attach the scope mount with the cross-rail engaging a slot in the rail. Tighten the mount until you feel a slight “stick” or “catch” in rotation of the mount knob. That catch is an elastomer ring locking the knob. The knobs need not be tightened harshly to work perfectly, and overenthusiastic tightening can damage the mount or knob.

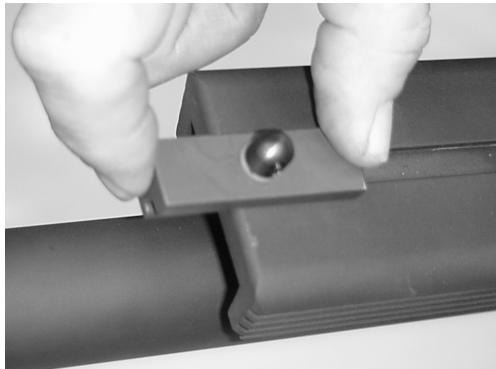


WARNING: MAKE CERTAIN THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD SO THAT IT WILL NOT IMPACT YOUR FACE DURING RECOIL. CHECK THE DISTANCE BETWEEN THE SCOPE AND YOUR FACE WHEN YOU ARE IN THE FIRING POSITION. WHEN IN DOUBT, INCREASE THE EYE RELIEF. BEAR IN MIND THAT YOUR EYE WILL BE CLOSER TO THE SCOPE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

C. Bipod Adapter and Bipod:

The AR-30™ can be fired from a rest or bipod. The bipod adapter allows mounting of a Harris or other brand of bipod. To install the bipod adapter:

1. Screw the sling swivel lug into the adapter, stopping when the hole in the lug is at right angles to the adapter.



Figures 5 and 6

2. Insert the small rail of the adapter into the front of the accessory slot running along the bottom of the forestock (S-1). Slide the adapter to the desired position. Tighten the nut using a 1/8 inch punch or similar tool until the hole is perpendicular to the barrel.
3. Follow the Harris instructions to attach the bipod to the adapter. Tightening the bipod will secure the adapter in place on the forestock. The bipod may be attached to the adapter when it is slid into the stock, as illustrated. When shooting, lean forward into the bipod slightly.

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.

⚠ CAUTION: DO NOT SLAM THE BOLT ASSEMBLY BACK TO ITS MOST REARWARD POSITION. THIS CAN DAMAGE YOUR BOLT OR THE BOLT STOP.

A. Controls and Indicators.

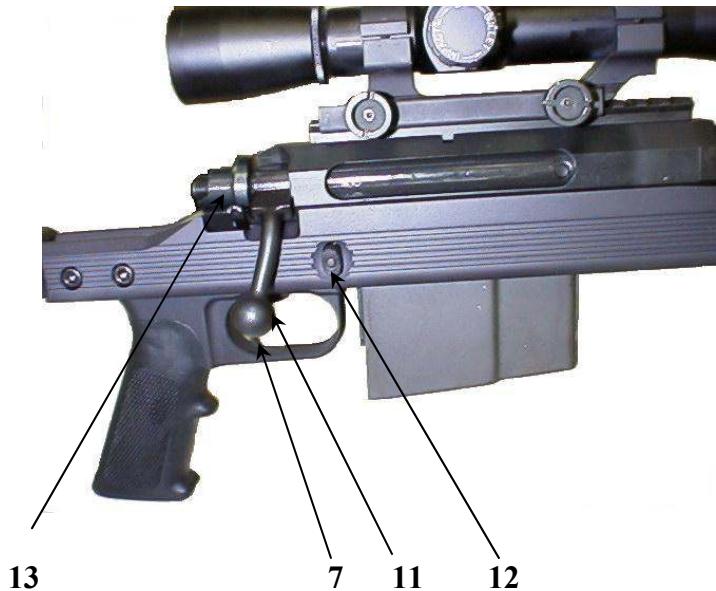


Figure 7
Operating Controls

- 1. Safety.** The safety lever (R-13) is mounted at the right rear of the receiver. To engage the safety, pull the safety lever to the rear "SAFE" position. To place the safety to "FIRE," push the safety lever to the forward position.
- 2. Trigger.** The trigger (R-11) is located within the trigger guard. It is of conventional, single stage design. Grasp the pistol grip (S-8) with the hand and pull the trigger straight to the rear.
- 3. Bolt Handle.** Lift the bolt handle (B-7) to unlock the bolt and pull the bolt to the rear. Because the bolt handle is made short for easy handling when hunting, it will require considerable force to open it if the rifle is chambered for a magnum cartridge.
- 4. Magazine Catch Button.** Push the magazine catch button (S-12) in to release the magazine from the receiver and stock assembly.
- 5. Magazine.** The magazine is inserted into the opening in the bottom side of the stock. The magazine should be securely locked into the receiver and stock assembly by the magazine latch.

B. Maintenance and Safety Checks

1. Make sure that the rifle is unloaded, and that the bolt assembly (R-20) is to the rear.
2. Inspect the bore to make sure that there are no obstructions.

3. Inspect the muzzle brake to assure that it is tight, all screws are intact, and the muzzle brake shield (R-5) is in place.
4. Make sure the screws (S-4), (S-7), (R-10) holding the receiver to the stock are tight.

8.3 INITIAL CLEANING

Clean the bore of your rifle and lubricate the rifle as described in the Maintenance section below. Lubricate well before firing. No unusual break-in procedures or abrasives are recommended. Merely clean frequently with solvent dampened patches, followed by dry patches. We recommend brass brushes for all cleaning, and recommend specifically AGAINST either stainless steel or nylon brushes.



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 BREAKING IN MATCH BARRELS

ArmaLite® has spoken with several barrel manufacturers. NONE of them recommend breaking in barrels using abrasives. For optimum accuracy and barrel life, ArmaLite® recommends the following break-in procedure:

1. Fire 9 single shots. After each shot, push a cotton patch wet with solvent through the bore. Then wet a bronze brush with solvent and stroke the barrel five to ten round trips. Follow with another wet patch and then a dry patch or two. (We do NOT recommend nylon or stainless steel brushes.) After you finish, wash the solvent off your brush so that the brush won't deteriorate.
2. From 10 to 30 shots, clean as above after each five shots. Initial break-in should now be complete.

8.5 DRY FIRING YOUR RIFLE

ArmaLite does not recommend dry firing your rifle. If you do dry fire it, make sure that you have a snap cap or empty cartridge case (with a fired primer installed) in the chamber to cushion/stop the firing pin.



CAUTION: DRY FIRING YOUR RIFLE WITH THE CHAMBER EMPTY CAN CAUSE THE STRIKER ROD TO PEEN OVER, RESULTING IN MISFIRES.



**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 LEVER 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.

1. Verify range safety. Make sure that the rifle is pointed in a safe direction, towards a known, adequate backstop. Make sure that everybody within 100 yards knows that the rifle is about to be fired and protects their vision and hearing.

⚠ WARNING: THIS FIREARM IS EXTREMELY LOUD DUE TO THE LARGE CARTRIDGE AND THE EFFICIENCY OF THE MUZZLE BRAKE. WEAR DOUBLE HEARING PROTECTION: FOAM PLUGS AND GOOD QUALITY HEARING PROTECTION MUFFS. ASSURE THAT SPECTATORS AND OTHER SHOOTERS WITHIN 100 YARDS OF THE FIRING POINT ARE ALSO WEARING HEARING PROTECTION. YOU ARE RESPONSIBLE FOR WARNING THEM THAT YOU ARE ABOUT TO FIRE, AND THAT THE SHOT WILL BE LOUD!

⚠ WARNING: AVOID MUZZLE BLAST. THE RIFLE’S MUZZLE BRAKE WORKS BY DIVERTING MUZZLE GASSES TOWARDS THE REAR. IT IS LOUD AND CAN STIR UP DEBRIS FROM THE GROUND! BOTH FIRERS AND SPECTATORS SHOULD WEAR EYE AND EAR PROTECTION. EVEN WEARING PROTECTION, SPECTATORS SHOULD NOT STAND WITHIN 25 YARDS OF THE RIFLE AND SHOULD BE ESPECIALLY CAREFUL NOT TO STAND IN THE AREA 30 TO 90 DEGREES TO EITHER SIDE OF THE RIFLE. THE BEST PLACE TO BE IS DIRECTLY TO THE REAR OF THE RIFLE, SHOOTING IT.

⚠ WARNING: NEVER FIRE THE RIFLE WITHOUT THE MUZZLE BRAKE IN PLACE. THE MUZZLE BRAKE IS AN IMPORTANT SAFETY DEVICE. IT MAKES THE RIFLE COMFORTABLE TO SHOOT AND AIDS ACCURACY. FIRING THE RIFLE WITHOUT THE MUZZLE BRAKE IN PLACE WILL EXPOSE THE SHOOTER TO VERY HARD, UNPLEASANT RECOIL. ASSURE THAT THE MUZZLE BRAKE IS FIRMLY SECURED AND UNDAMAGED.

⚠ WARNING: THIS RIFLE FIRES AN EXTREMELY POWERFUL CARTRIDGE. MAKE SURE THAT YOUR BACKSTOP IS FULLY CAPABLE OF STOPPING IT.

2. Put the safety lever (R-13) in the “SAFE” position.

3. If it's not already open, raise the bolt handle (B-7) and pull the bolt assembly (R-20) to the rear.

! CAUTION: DO NOT USE EXCESSIVE FORCE TO PULL THE BOLT ASSEMBLY TO THE REAR. THE BOLT ASSEMBLY DOES NOT NEED TO BE SLAMMED REARWARD. THE CARTRIDGE CASE WILL EXTRACT AND EJECT RELIABLY WITHOUT SUCH FORCE. PULLING THE BOLT ASSEMBLY REARWARD WITH EXCESSIVE FORCE CAN DEFORM OR BREAK THE BOLT STOP.

4. Place a magazine into the receiver through the magazine well with an upward motion until the magazine is locked in position.
5. Close the bolt assembly to strip a cartridge off the magazine, chamber and lock the cartridge. Push the bolt assembly forward so that the extractor (B-12) snaps over the case rim. You will feel some resistance as the extractor is displaced over the rim of the cartridge. Turn the bolt handle down completely.
6. Assume a good position behind the rifle. Make sure that the butt-pad (S-20) is in complete contact with your shoulder. Make sure that your cheek is well forward on the cheek piece (S-16).
7. Aim at the target and push the safety lever (R-13) forward to the "FIRE" position
8. Pull the trigger (R-11) straight to the rear. You will know when the rifle fires!!!!

Note: the AR-30™ is equipped with a very secure manual safety. However, ArmaLite® recommends only loading the rifle immediately before firing a shot instead of leaving the rifle loaded and on safe. As a practical target shooting measure, the rifle should be considered safe only when it is unloaded and the action is open.

! 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: 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: RAPID FIRING OF THE FIREARM MAY CAUSE SOME COMPONENTS TO BECOME HOT ENOUGH TO CAUSE INJURY. EXTENDED SESSIONS OF VERY RAPID FIRING MAY CAUSE A CARTRIDGE LEFT IN THE CHAMBER TO "COOKOFF", FIRING ITSELF WITHOUT YOU PULLING THE TRIGGER. ALWAYS UNLOAD THE FIREARM IMMEDIATELY AFTER YOU FINISH FIRING.

 **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 BOLT IS OPEN, AND THE CHAMBER IS EMPTY.**

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

- 1. KEEP THE RIFLE POINT AT THE TARGET! WAIT 15 SECONDS TO ALLOW A POSSIBLE “HANGFIRE” TO GO OFF THEN...**
- 2. CHECK TO SEE IF THE SAFETY IS ENGAGED BY MISTAKE. IF SO, PUSH THE SAFETY FORWARD TO THE “FIRE” POSITION, AND FIRE.**
- 3. IF THE RIFLE STILL DOESN’T FIRE, BE CAUTIOUS AND ASSUME THE CARTRIDGE WILL DISCHARGE WHEN THE BOLT IS OPENED AND MOVE FROM BEHIND THE ACTION. WAIT ANOTHER 15 SECONDS TO ALLOW A POSSIBLE HANGFIRE TO DISCHARGE, AND OPEN THE BOLT SMARTLY AND UNLOAD THE RIFLE.**
- 4. EXAMINE THE RIFLE CAREFULLY TO IDENTIFY THE CAUSE OF THE MALFUNCTION, AND CORRECT IT.**

 **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.**

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.

1. Place the safety lever (R-13) on “SAFE”.

NOTE: If the firearm is not cocked, the lever cannot be set on “SAFE”.

2. Remove the magazine by pressing the magazine catch button (S-12) and pulling the magazine down and out of the receiver.

⚠️ 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.

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

4. Look into the chamber to assure that it does not contain a cartridge.

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

5. Remove any remaining cartridges from your magazine.

⚠️ 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 MIGHT ACCIDENTLY 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

Your ArmaLite® AR-30™ is designed to employ a telescopic sight. To install and zero the scope on your AR-30™, follow the instructions in your scope owner's manual.

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.

1. Assure that the rifle is unloaded, and put the safety lever (R-13) in the “SAFE” position.



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**Figures 8 and 9
Removing the Bolt Assembly**

2. Remove the bolt assembly (R-20). Unlock the bolt and pull the bolt assembly to the rear of the receiver. Depress the bolt stop (R-19) at the left rear of the receiver and pull the bolt assembly to the rear and out of the receiver. Further disassembly of the bolt assembly should be done only for repair or lubrication by a qualified service technician or gunsmith.

⚠ CAUTION: NO FURTHER DISASSEMBLY IS NEEDED FOR ROUTINE CLEANING AND MAINTENANCE.

3. If, for some reason, it is necessary to remove the receiver/barrel assembly from the stock assembly, it should be done in the following manner.

⚠ CAUTION: REMOVE THE TELESCOPIC SIGHT FROM THE RECEIVER TO PREVENT DAMAGE DURING HANDLING.



Figure 10
Loosening the Bedding Wedge

Loosen the bedding wedge (S-6) at the front of the receiver by loosening the bedding wedge screw (S-4) under the action using a 3/16 inch Allen wrench. Do not completely remove the screw.

Tap the head of the screw lightly with a plastic hammer. This will loosen the bedding wedge so that the receiver can be removed.



Figure 11
Removing the Grip Frame

Place the rifle upside down. Remove the grip frame (S-3) by removing the grip frame screw (S-7), using a 3/16 inch Allen wrench. Pull the grip frame from the forestock (S-1).

Remove the action screw (R-9) from the bottom of the forestock using a 3/16 inch Allen wrench. Lift the stock assembly straight off the receiver.



Figure 12
Removing the Buttstock

4. Remove the buttstock (S-2) from the forestock (S-1). Remove the two buttstock screws (S-15) at the right rear of the forestock using a 3/16 inch Allen wrench. Pull the buttstock down and to the rear to remove it.



WARNING: DO NOT REMOVE THE TRIGGER OR MUZZLE BRAKE. THE TRIGGER IS NOT USER-SERVICEABLE AND A REASSEMBLY ERROR COULD INTERFERE WITH CORRECT RIFLE FUNCTION. THE MUZZLE BRAKE IS HELD IN PLACE BY ITS LOCK RING AND LOCTITE.

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

The Military Services generally use a multipurpose chemical called CLP (cleaner, lubricant, and preservative) sold commercially as “Break Free.” Although it is useful if nothing else is available, armament engineers prefer individual, specialized products. A combination of military RBC (Rifle Bore Cleaner) and LSA (Lubricant, Semifluid, Automatic firearms) is superior. High quality cleaning solvent like Hoppes No. 9 removes metal fouling from the bore excellently; and Teflon bearing lubricants are outstanding lubricants. For maximum reliability and service life, lubricate your rifle (especially the highly stressed bolt and bolt carrier assembly) generously with high quality firearms lubricants.

Under NO conditions should any lubricant containing graphite be used with your rifle. 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. A pull-through cleaning cable allows for efficient, breech-to-muzzle cleaning in the field.

Improper cleaning ruins more firearms than extensive shooting does. The AR-30™ will provide years of use with minimal cleaning and preservation.

Note: The phosphated finish of a new bolt assembly and receiver will make the movement of a new action seem rough. Movement of the bolt assembly will become very slick as these parts break in and are properly lubricated.

Use a pull-through device or a high quality cleaning rod to clean the bore. Use a proper caliber bore brush soaked with a good bore solvent. Pass it from the breech to the muzzle several times.

Note: Heat treat processes may produce dark areas of phosphate at the breech ring and bolt cam of the receiver. This is normal.

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. ArmaLite® recommends a pull-through cleaning cable for efficient, breech-to-muzzle cleaning.

13.2 RECEIVER AND BARREL ASSEMBLY



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.



WARNING: ARMALITE'S AR-30 TRIGGER ASSEMBLY ISN'T USER ADJUSTABLE. ATTEMPTING TO ADJUST THE TRIGGER MAY RESULT IN UNSAFE CONDITIONS AND VOIDS THE WARRANTY.



CAUTION: AVOID ALLOWING SOLVENTS, LUBRICANTS, OR PRESERVATIVES TO DRAIN INTO THE TRIGGER MECHANISM. THEY MAY CAUSE IT TO MALFUNCTION. SUCH CONTAMINATES CAN BE REMOVED BY SQUIRTING LIGHTER FLUID INTO THE TRIGGER MECHANISM. DO NOT DISASSEMBLE THE TRIGGER MECHANISM OR REMOVE IT FROM THE RECEIVER.

1. Use cleaning solvent to clean the bore and chamber, the receiver, locking lugs and all areas of powder fouling, corrosion, dirt or dust. First apply the solvent with a patch on your rod. Follow by brushing the bore in accordance with the instructions on the solvent bottle.
2. Install the chamber brush on the cleaning rod, dip it in cleaning solvent, and insert it into the chamber and locking lugs. Clean by pushing and twisting the cleaning rod.
3. Lightly lubricate the bore, chamber, and outer surface of the barrel. With a lubricated swab, run the rod from the receiver to the flash suppressor (if applicable). Do not over lubricate.
4. Oil or lightly grease the narrow track in the receiver behind the bolt. The sear surface of the cocking piece (B-6) runs through this track and serves as a rear bolt guide. A "Q-Tip" or other such device will suffice.

13.3 BOLT ASSEMBLY



WARNING: DO NOT INTERCHANGE BOLTS BETWEEN RIFLES.

1. Clean all parts and outer surfaces of the bolt assembly with a swab saturated with cleaning solvent.
2. Remove carbon deposits and dirt from the locking lugs with a bore brush dipped in solvent.
3. Clean the bolt face and under the lip of the extractor.
4. Press the ejector in repeatedly to remove accumulated brass shavings from the ejector hole and assure the ejector moves freely. Lubricate it generously.
5. Lightly lubricate the firing pin and firing pin recess in the bolt assembly.
6. Lightly lubricate the outside of the bolt.
7. Lightly lubricate the bolt lugs with a high pressure lube/grease.

13.4 FORESTOCK ASSEMBLY



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

1. Wipe dirt from the exterior surfaces with a clean cloth.

13.5 MAGAZINE ASSEMBLY

1. Use a cloth to clean the exterior and interior of the magazine. (An aerosol cleaner may be useful if the magazine is particularly dirty.)

13.6 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.



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

Clear all cartridges from your firearm. Remove the magazine. Then pull back the bolt handle and visually confirm that the chamber is empty and that there is no cartridge in the chamber. Then check it again. Then dry fire the firearm to allow the firing pin to fall to the fired position. Reasonable amounts of dry firing should not damage your firearm.

It is always best to store your magazines empty.

Store in a container that contains no foam. (Foam absorbs moist air. Heating the container may drive moisture from the foam. It can then condense on a cool rifle.) Use a desiccant or Vapor Phase Inhibitor in the container to help prevent rust.

When you're taking your firearm out of long term storage, completely remove the preservative (especially from the bore and chamber) and lubricate as stated elsewhere in this manual.

14. REASSEMBLY

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

Reverse the Disassembly steps above. If you have removed the barreled receiver from the stock, replace it and tighten the action screw (R-9) very LIGHTLY. Then tighten the bedding wedge screw (S-4) on the bedding wedge at the front of the receiver. Finish by tightening the action screw. This assures that the recoil lug (R-2) is seated properly.

Final torques are not particularly critical on the AR-30™. However, for those of you who desire to duplicate factory specifications, the following torque values are recommended:

Bedding Wedge Screw-----12.5 – 15 ft-lbs
Grip Frame Screw-----7.5 – 10 ft-lbs
Buttstock to Forestock Screw---7.5 – 10 ft-lbs
Action Screw-----15 – 17.5 ft-lbs

14.1 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 latch (S-11).
2. Pull the bolt assembly (R-20) to the rear. It should be stopped by the bolt stop (R-19). Then return the bolt assembly forward and lock it. Depress the magazine catch button (S-12) and remove the magazine.
3. Place the safety lever (R-13) on “SAFE”. Squeeze the trigger (R-11). The firing pin should not fall.
4. Place the safety lever (R-13) on “FIRE”. Squeeze the trigger (L-11). The firing pin should fall.

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

15. TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T FIRE	Selector lever on SAFE	Put it on FIRE
	Defective ammunition.	Remove and discard
BOLT WON'T LOCK	Dirty bolt	Clean
	Burred or broken bolt	Contact ArmaLite®
	Dirt, corrosion, or carbon buildup in locking lugs	Clean lugs
WON'T EXTRACT	Broken extractor spring	Replace
	Dirty, corroded, or reloaded ammunition.	Remove and discard.
	Carbon in chamber	Clean chamber
	Frozen or worn extractor	Remove and clean or replace
WON'T CHAMBER	Dirty corroded or defective ammunition	Remove and discard

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.

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.

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.

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.**

Include a note explaining, in as much detail as possible, the nature of the problem or service needed. The note should include the RMA number, your name, address, email, phone number, and the reason for return. If you wish to put your note on our RMA form, you can print out our RMA form found in the "Contact Us" and "Policies" sections of our website (www.ArmaLite.com). Keep your shipping receipt and the serial number of the firearm for your records in case of loss in shipment.

⚠️ 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 free 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**

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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