



**OWNERS MANUAL  
for  
GL-15 RIFLES**



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

**MANUAL AR-15  
2018 GLFA**

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## 1. READ THIS FIRST!

 **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 GLFA 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. Your responsibility as a gun owner is always safety!

Make sure that your firearm remains in responsible hands...YOURS! Make sure your firearm is properly secured. Lock it in a secure storage container or, if none is available, remove the bolt and bolt carrier assembly 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

GLFA 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, GLFA 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. GLFA 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!**

- **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.**
- **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. GLFA cannot condone the use of handloaded ammunition. Any such use voids the GLFA 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.**
- **DO NOT EVER CHARGE THE CHAMBER OF YOUR FIREARM IN AREA WHERE YOU DO NOT INTEND TO DISCHARGE IT!!!!**
- **AR-15 STYLE RIFLES ARE DESIGNED WITH A FREE FLOAT FIRING PIN. ALWAYS MAKE CERTAIN THAT THE MUZZLE IS POINTED AT A SAFE BACKSTOP WHEN CHARGING THE CHAMBER WITH A LIVE ROUND!!!!!!**
- **SEEK GUIDANCE FROM A QUALIFIED INSTRUCTOR IF SAFE OPERATION OF YOUR RIFLE IS IN QUESTION.**


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

**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 and bolt carrier assembly 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 and bolt carrier assembly.

 **WARNING: 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.**

## 5. 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 GLFA firearms. If you have any questions regarding ammunition compatibility, CONTACT GLFA BEFORE FIRING THE RIFLE!

 **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 GLFA BEFORE FIRING.**

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. GLFA recommends that you purchase and test a small quantity of any type of ammo in your firearm before you buy large quantities

## 6. INITIAL ASSEMBLY, INSPECTION, AND CLEANING

### INITIAL ASSEMBLY

#### ADJUSTING THE COLLAPSIBLE

**BUTTSTOCK:** To extend the collapsible buttstock, depress 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.**

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




## INITIAL INSPECTION

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.

## INITIAL CLEANING

Merely clean the bore of your firearm and lubricate the firearm as described in the Maintenance section below. Lubricate the rifle well before firing.

 **WARNING: TO ASSURE ITS PROTECTION FROM CORROSION, YOUR GLFA 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 GLFA FIREARM.**

## DRY FIRING YOUR RIFLE

1. Reasonable amounts of dry firing should not damage your rifle.



**CAUTION: NEVER DRY FIRE YOUR RIFLE WITHOUT THE BOLT CARRIER ASSEMBLY INSTALLED. THE FIRING PIN STOPS THE FALL OF THE HAMMER. WITHOUT THE BOLT CARRIER ASSEMBLY 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.**

## **INSTALLING, ADJUSTING, AND USING THE RIFLE SLING**


Some rifle slings serve only as simple carrying straps. However, a tactical/competition sling has far more uses. In addition to carrying the rifle, it can serve to improve shooter accuracy by stabilizing the rifle during firing.


## 7. 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 BOLT IS OPEN, 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.**
- 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.

**⚠ 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.**

To prevent cookoffs and maximize barrel life, the rate of fire should not exceed the following:

- 2 minutes --- 40 rounds per minute
- 10 minutes --- 30 rounds per minute
- 20 minutes --- 20 rounds per minute
- 30 minutes or more --- 13 rounds per minute

## LOADING THE MAGAZINE

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

Take it easy with your magazines. Keep them clean, dry, and don’t pound them into the rifle. Insert them smoothly then check to assure they’re locked in the rifle by tugging downward.

1. Pull the charging handle rearward, lock the bolt carrier assembly, and release the charging handle. Place the safety on SAFE. Check to see that the chamber is clear and the bore is not blocked.



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



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



1. Depress the upper portion of the bolt stop to release the bolt.

2. With the rifle pointed in a safe direction, move the safety to "FIRE".
3. Squeeze the trigger and fire.



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

1. Pull the charging handle all the way back.





2. Release the charging handle. If the bolt carrier doesn't fully close, tap the forward assist to close it.

If it still won't close, clear the rifle and correct the problem.

3. Never "ride" the charging handle. Let it slide forward at full speed.



4. Set the safety 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.**

## 8. 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 GLFA 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 lever 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 and pulling the magazine down.

NOTE: Some legal jurisdictions require use of a tool to remove the magazine. GLFA firearms sold to such jurisdictions contain a magazine catch button that has been inset so that you will need to use a bullet nose or other similar tool to release the magazine.

**!** **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.**

To lock the bolt carrier assembly open, pull the charging handle rearward, press the bottom of the bolt catch, and allow the bolt to move forward until the bolt stop retains it. Return the charging handle forward.



4. Look into the receiver and chamber to ensure that these areas contain no ammunition.

5. Empty all remaining cartridges out of your magazines.

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

**⚠ 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**



## 8. 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.**

### CLEAR THE RIFLE

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

### UPPER AND LOWER RECEIVERS

1. Push the takedown pin as far as it will go.

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



2. Pivot the upper receiver from the lower receiver .
3. Push the receiver pivot pin as far as it will go. Take it easy!



4. Separate the upper and lower receivers.

## **CHARGING HANDLE AND BOLT CARRIER ASSEMBLY**



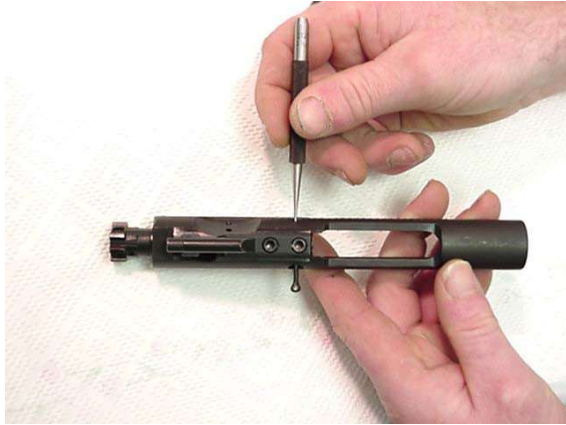
1. Pull back the charging handle and bolt carrier assembly.



2. Remove the bolt carrier assembly.



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

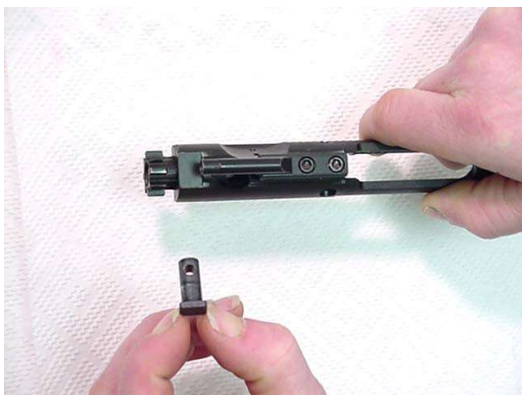


4. Move the bolt assembly forward to the unlocked position and remove the firing pin retaining pin. Do not open or close the split end of the firing pin retaining pin.



5. Push in on the bolt assembly to put it in the locked position.

6. Catch the firing pin as it drops out of the rear of the bolt carrier assembly.

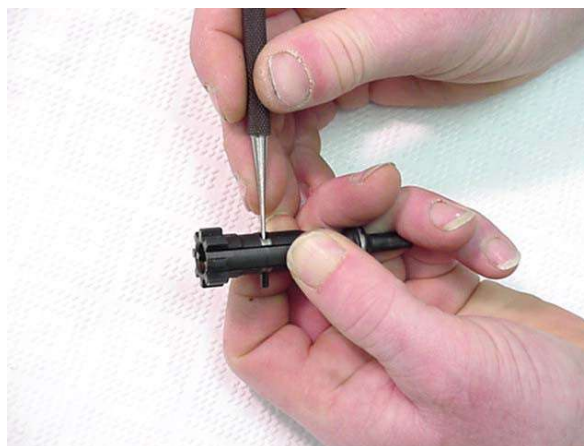


7. Give the bolt cam pin a  $\frac{1}{4}$  turn and lift it out.

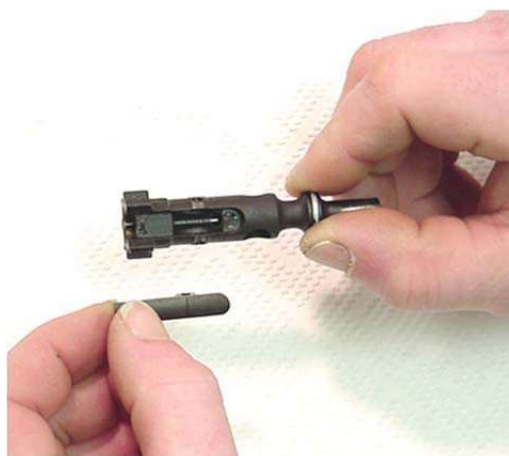
8. Remove the bolt assembly from the bolt carrier assembly.



9. Press the rear of the extractor to check that the spring works.



10. Use a punch or dummy round to remove the extractor pin.



11. Remove the extractor and spring assembly. Do not remove the spring assembly, its plunger or the O-ring from the extractor.

## LOWER RECEIVER ASSEMBLY



1. Cock the hammer with your thumb. Push in the buffer and depress the buffer detent to release the buffer.

2. Remove the buffer and the operating spring .



## DISASSEMBLING THE MAGAZINE

Use the tip of a cartridge or another suitable tool to very slightly pry the rear of the floorplate up so that it can be pulled off the magazine.




Remove the spring and attached follower from the magazine shell. The spring will exit the shell easily, but the follower must be twisted and withdrawn, rear first. Do not remove the spring from the follower.



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

## 9. 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

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

### UPPER RECEIVER AND BARREL ASSEMBLY

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

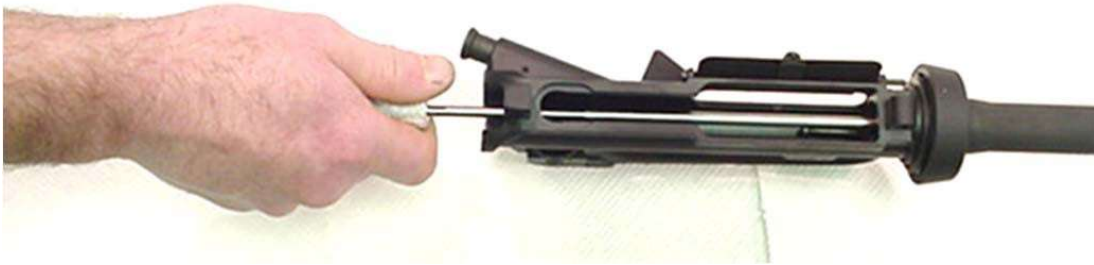
1. Use cleaning solvent on the bore and chamber, the gas tube, the upper receiver and barrel assembly, locking lugs and all areas of powder fouling, corrosion, dirt or dust.



Use a cleaning rod, bore brush and cleaning solvent. Run the rod through the chamber and muzzle brake (if applicable) 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. 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. Use a worn out bore brush to clean the outside surface of the protruding gas tube (U-9) (get the sides and bottom from the bottom of the upper receiver). This procedure ruins the brush.

NOTE: Gas tubes will discolor from heat. Do not try to remove this discoloration.

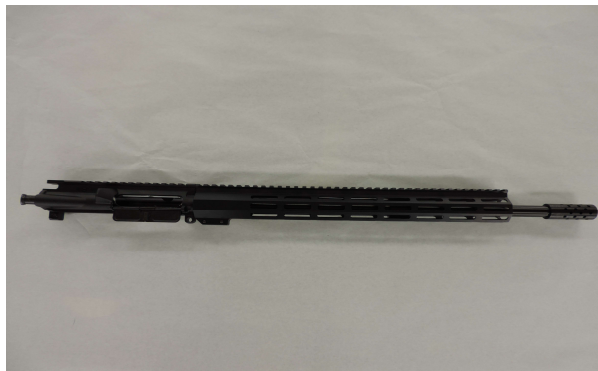
**⚠ CAUTION: DO NOT TRY TO CLEAN THE INSIDE OF THE GAS TUBE. IT IS NOT NEEDED WITH GOOD QUALITY PROPELLANT, NOR IS IT EFFECTIVE WITH BAD PROPELLANT.**



 **CAUTION: DO NOT BEND THE GAS TUBE. IF THE TUBE IS BENT, IT WILL SLOW OR BLOCK FORWARD MOVEMENT OF THE BOLT CARRIER ASSEMBLY.**

4. 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 muzzle brake (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 muzzle brake. REMEMBER, do not change directions in the bore.

5. Inspect the barrel, gas tube, and hand guards for cracks, bends, or breaks. Be sure the barrel has no obstructions.



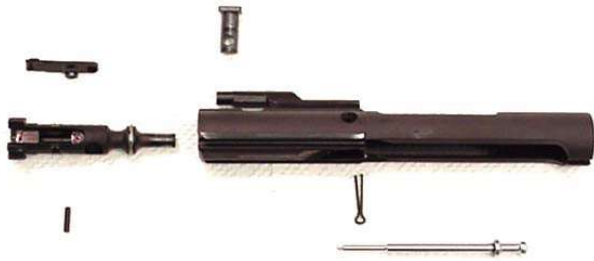
6. Lightly lubricate the bore and chamber, outer surface of the barrel and front sight, and the surfaces under the handguards.

7. With a lubricated swab, run the rod from the receiver to the flash suppressor (if applicable). Do not over lubricate.



8. Lubricate the locking lugs.

## CHARGING HANDLE AND BOLT CARRIER ASSEMBLY



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

2. Clean the bolt carrier key with a worn bore brush dipped in solvent and dry with a pipe cleaner.



3. Remove carbon deposits and dirt from the locking lugs with a bore brush dipped in solvent.

4. Clean the areas behind the bolt rings and under the lip if the extractor.



5. Press the ejector in repeatedly to remove accumulated brass shavings from the ejector hole and assure the ejector moves freely. Lubricate it generously.

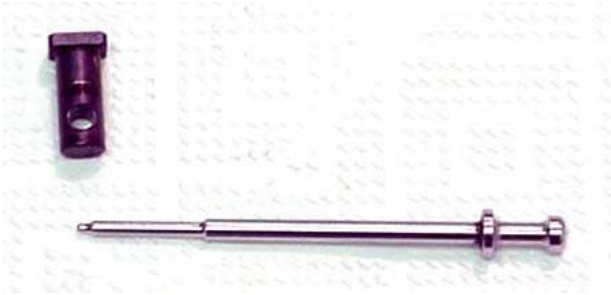


6. Inspect the charging handle for cracks, bends or breaks.

7. Inspect the bolt assembly for cracks or fractures, especially in the cam pin hole area.

 **WARNING: DO NOT INTERCHANGE BOLTS BETWEEN RIFLES.**

8. Inspect the firing pin retaining pin for bends, breaks, or dents.



9. Inspect the bolt cam pin for cracks or chips.  
10. Inspect the firing pin for bends, cracks, or a sharp, chipped, or blunted tip.

11. Lightly lubricate the firing pin and firing pin recess in the bolt assembly.

12. Generously lubricate the outside of the bolt cam pin and the firing pin retaining pin. Make certain to lubricate the bolt cam pin hole, bolt rings, and outside of the bolt.

13. Lightly lubricate the inner and outer surfaces of the bolt carrier. Generously lubricate the slide and the cam pin area of the bolt carrier.

14. Lightly lubricate the charging handle.



15. Dry the key of the bolt carrier assembly with a pipe cleaner. Place one drop of lubricant inside the key.

NOTE: Carbon in the groove at the bottom of the gas cylinder in the carrier cannot accumulate enough to become a problem. Efforts to remove it cause more damage than leaving it. Avoid the instinct to over clean your rifle.

## 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.



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.

## 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, GLFA 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.**



**CAUTION: NEVER DRY FIRE YOUR FIREARM WITHOUT THE BOLT CARRIER ASSEMBLY INSTALLED. THE FIRING PIN STOPS THE FALL OF THE HAMMER. WITHOUT THE BOLT CARRIER ASSEMBLY INSTALLED, THE HAMMER CAN IMPACT ON THE LOWER RECEIVER, DAMAGING IT.**

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. Then dry fire the firearm to allow the hammer to rotate to the fired position.

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.

## 10. REASSEMBLY

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

### LOWER RECEIVER ASSEMBLY



Insert operating spring and buffer.

### CHARGING HANDLE AND BOLT CARRIER

**NOTE:** The extractor has a silicone plunger in the spring. Don't lose it.

1. If the spring comes loose, seat the large end of the spring in the extractor. Assure the reinforcement ring is around the spring.
2. Insert the extractor with spring assembly into the bolt.
3. Push extractor until the holes on the extractor and bolt are aligned and insert the extractor pin.
4. Stagger the gaps in the gas rings to prevent gas loss.

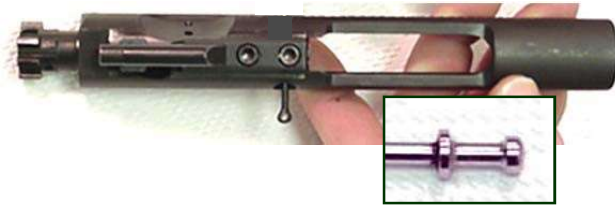


5. Slide the bolt assembly into the bolt carrier *only far enough to insert the cam pin.*



6. Insert the cam pin and give it a ¼ turn. (Firing your rifle without the cam pin installed will result in the destruction of the rifle and possible injury.)

7. Drop the firing pin into its opening.



8. Pull the bolt assembly forward and insert the firing pin retaining pin in the area behind the large flange of the firing pin.



**CAUTION: DO NOT POUND OR FORCE THE FIRING PIN RETAINING PIN INTO POSITION; IT MAY BE DAMAGED.**



9. Turn the bolt carrier assembly up and try to shake out the firing pin. The firing pin must not fall out.

10. 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.





11. Slide the bolt carrier assembly, bolt extended, into the upper receiver.

12. Push the charging handle assembly and bolt carrier assembly together into the upper receiver.

## UPPER AND LOWER RECEIVERS

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



1. 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.

## 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 catch.

2. Pull the charging handle to the rear and then manually return it forward. The bolt should remain to the rear against the bolt stop. Remove the magazine. Press in on the bolt stop. The bolt carrier assembly should be propelled forward by the operating spring.

3. Place the safety on "SAFE". Squeeze the trigger. *The trigger should not fall.*



4. 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. Squeeze again; the hammer should fall.*



**If your rifle fails this test, CALL GLFA AT (616) 887 6808**

## 11. TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T FIRE	Selector lever on "SAFE"	Put it on "FIRE".
	Improper assembly of firing pin	Assemble correctly. NOTE: the retaining pin goes in back of large shoulder of firing pin.
	Oil or fouling in bolt	Clean with pipe cleaner.
	Defective ammunition	Remove and discard.
	Too much carbon on firing pin	Clean.
	Bolt not fully locked.	Extract cartridge, clean area.
BOLT WON'T LOCK	Dirty bolt	Clean.
	Burred or broken bolt	Contact GLFA.
	Ejector stuck	Contact GLFA.
	Dirt, corrosion, or carbon buildup in barrel locking lugs	Clean lugs.
WON'T 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 buffer assembly	Remove and clean.
	Restricted movement of bolt carrier assembly.	Remove, clean and lubricate.

## **TROUBLESHOOTING (CONTINUED)**

<b>PROBLEM</b>	<b>CHECK FOR</b>	<b>WHAT TO DO</b>
WON'T EXTRACT	Clogged gas tube	Replace.
	Short recoil	See below.
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.
	Buffer assembly is restricted	Take out and clean buffer and spring.
	Magazine not fully seated	Adjust magazine catch: Press button on right side, and turn catch on left. Clockwise tightens.
	Short recoil	See below.
DOUBLE FEED	Defective magazine	Replace.
WON'T CHAMBER	Dirty corroded or defective ammunition.	Remove and discard.
	Ejector stuck	Clean and oil.
	Carbon in carrier key or chamber	Clean.
SHORT RECOIL	Rings worn or too loose.	Replace.
	Carbon or dirt in carrier key or on outside of gas tube	Clean.
	Q-tip/pipe cleaner stuck inside carrier key	Remove.

## **TROUBLESHOOTING (CONTINUED)**

<b>PROBLEM</b>	<b>CHECK FOR</b>	<b>WHAT TO DO</b>
SHORT RECOIL	Loss of gas power	Check entire gas path
	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.
SELECTOR LEVER BINDS	Needs oil	Lubricate.
	Dirt or sand under trigger.	Clean.
BOLT CARRIER "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. Push in on bottom of bolt catch.</li><li>3. Bang rifle butt on ground, bolt should shift to rear.</li><li>4. While bolt is held to rear, round should fall out through magazine well.</li></ol> <p>NOTE: If this procedure fails, use a cleaning rod to push bolt fully to the rear through the ejection port.</p>

## **16. WARRANTY, SERVICE, AND SUGGESTIONS**

### **I. DURATION OF WARRANTY:**

**This warranty applies for all GLFA firearms for the duration shown below:**

**--Lifetime for all GLFA AR-15**

### **II. LIMITATIONS OF WARRANTY AND LIABILITY:**

GLFA warrants, to the initial retail purchaser, that this firearm is free of manufacturing defects in material or workmanship for the above shown period of ownership by the original purchaser. During this period, GLFA agrees to correct your firearm by repair, or replacement (at GLFA discretion) with the same or comparable model. A service or handling charge may be made. This warranty is nontransferable. This warranty applies only to personal use by the first individual owner. All Institutions, including Law Enforcement agencies, receive a Limited One Year Warranty for all firearms.

**THIS WARRANTY AUTOMATICALLY BEGINS ON THE DAY THAT THE ORIGINAL RETAIL CUSTOMER PURCHASES HIS OR HER GLFA FIREARM. YOU ARE NOT REQUIRED TO INITIALLY REGISTER YOUR GLFA FIREARM. HOWEVER, TO MAKE**

**A WARRANTY CLAIM, YOU MUST FOLLOW THE PROCEDURE OUTLINED IN “III. INSTRUCTIONS FOR RETURNING FIREARMS FOR SERVICE/REPAIR” BELOW.**

**IN ORDER TO MAKE A WARRANTY CLAIM, YOU WILL NEED TO SUBMIT, WITH YOUR FIREARM, A COPY OF A DATED BILL OF SALE WITH YOUR NAME AND ADDRESS, OR A SALES RECEIPT. TO MAKE SURE THAT YOU ALWAYS HAVE THOSE AVAILABLE, WE RECOMMEND STAPLING THEM TO THE INSIDE BACK COVER OF YOUR OWNER’S MANUAL AS SOON AS YOU PURCHASE YOUR GLFA FIREARM.**

This warranty is void if the firearm has been abused, misused, damaged, fired with handloaded or reloaded, or improper ammunition, or with an obstruction in the barrel, or damaged by failure to perform proper maintenance. This warranty does not apply to normal wear or any parts, including their surface finish, or if unauthorized repair or alteration has been performed.

The terms of this warranty cannot be changed except in writing by GLFA. Wholesalers or Dealers, unless authorized by GLFA in advance, are not authorized to make any warranty repair or adjustment on behalf of GLFA. This warranty gives only the original retail

purchaser specific legal rights; other rights may also be available which may vary from state to state.

### **III. INSTRUCTIONS FOR RETURNING FIREARMS FOR SERVICE/REPAIR:**

1. Before seeking any service on your GLFA firearm: use the troubleshooting guide in the 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.**
2. Call GLFA and obtain a call tag. During the call, provide our Customer Service Associate with all of the information that he/she requests so that we will be able to expedite resolution of your problem. **GLFA will not accept for service any firearm received without a Return CALL TAG.** Call 616 887 6808 for call tag.
3. Include all needed documentation with your firearm when you return it. Include a letter that:
  - a. describes the problem that you're experiencing;
  - b. provides all of your contact info (name, address, email, phone, etc) so that we can contact you if necessary.
  - c. lists the call tag.
  - d. In order to receive service under warranty, you must also include a dated bill of sale with your name, or a sales receipt.

**If your letter is incomplete, or illegible, we may not be able to honor the warranty and we may not be able to complete needed repairs, so please write legibly.**

4. Remove all ammunition and accessories (scopes, slings, bipods, etc) from the firearm.



**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 OR SPENT CASES WITH ANY FIREARM THAT YOU ARE RETURNING TO GLFA FOR SERVICE. IT IS ILLEGAL TO DO SO!**

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

5. Package the firearm carefully, inclosing a copy of the letter (and, for warranty repair, a copy of a bill of sale / sales receipt). Proper packaging and prepaid shipment (including insurance) of a firearm to GLFA is the customer's sole responsibility.

6. Send firearm to

**GLFALCC**  
**Attn: Customer service**  
**424 East Division St**  
**Sparta, MI 49345**

7. Keep your shipping receipt and the serial number of the firearm for your records in case of loss in shipment. GLFA will return the firearm to the customer shipping prepaid if the problem was covered under warranty.

8. GLFA MUST return the firearm to the person or company that shipped it to us. If no cost is incurred, your rifle will be automatically shipped to the return address. (No phone call.)

If non-warranty work needs to be performed, we will contact you regarding the cost of such repairs and get your approval before beginning any work.

All firearms shipped to you after repair will require an adult signature at your address for proof of receipt.

GLFA continually improves the technical specifications and manufacturing techniques of our firearms, which may cause the latest products to look or perform differently from earlier products. The GLFA Services Division will update, at your request, earlier firearms to current factory specifications, to the degree possible, at current shop rates. These updates are not generally covered under warranty.

In the very unlikely event that GLFA should ever issue a recall of your firearm, GLFA will post a notice on our website, [www.greatlakesfirearmsandammunition.com](http://www.greatlakesfirearmsandammunition.com).



