OPERATIONS MANUAL
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**WARNING**

Before starting an inspection, be sure to clear the weapon. Do not squeeze the trigger until the weapon has been cleared. Inspect the chamber to ensure that it is empty and no ammunition is in position to be chambered. Do not keep live ammunition near work area.

To be considered SAFE before disassembling, cleaning, inspection, transporting or storing, the weapon must be cleared.

With the bolt carrier assembly locked to the rear or in its forward position, if the weapon is dropped or jarred with a loaded magazine in place, it could chamber a round.

**DON’T OVERHEAT BARRELS.** Sustained firing of the weapon will rapidly raise the temperature of the barrel to a critical point.

Sustained rate of fire for the weapon is 12-15 rounds per minute. This is the actual rate of fire that a weapon can continue to deliver for an indefinite length of time without serious overheating.

Sustained rate of fire should never be exceeded, except under circumstances of extreme urgency.

When disassembling, turn the magazine away from face because the spring is under compression.

If an audible “POP” or reduced RECOIL is experienced during firing, immediately CEASE FIRE. Either condition could indicate an incomplete powder burn and/or a bullet is stuck in the bore.

Do not fire if water is present in the barrel.

Be sure the cam pin is installed in the bolt group. If it’s not, your weapon can still fire, and will explode.

**DO NOT FIRE:**

- Seriously corroded ammunition.
- Any cartridges with loose bullets.
- Any cartridges with the bullet pushed in (short rounds).
- Until you make sure your weapon is clear and on SAFE before moving down range.

**FUNCTION CHECK**

- **SAFE NOTE:** Remove magazine and check that there is no ammunition in the chamber. Point the weapon in a safe direction. Pull charging handle to the rear and release. Place on safe. Return bolt forward back into battery. Pull trigger, hammer should not fall.

**RULES FOR SAFE FIREARM HANDLING**

1. Always treat a weapon as if it's loaded.
2. Never point a weapon at anything you would not want to destroy.
3. Keep your finger off the trigger until you are aiming at a target and you are ready to fire.
4. Know your target, and what's behind it.
GAS SETTINGS

Our rifle's piston system comes with a gas block that has a four-position adjustable gas plug, which allows the shooter to adjust the amount of gas pressure allowed to cycle the system and access the drive rod for cleaning and maintenance. The four settings are positioned at the 8 o'clock, 12 o'clock, 1 o'clock and 3 o'clock positions while facing the front of the gas block, and are called "Removal", "High", "Low", and "Off".

The 8 o'clock, or "Removal", position unlocks the gas plug from the gas block. This position will allow you to remove the gas plug and drive rod for cleaning and maintenance. Once done, replace the gas plug and drive rod into the gas block at the 9 o'clock position. Depress the detent button and rotate to the desired gas setting for firing.

The 12 o'clock, or "High", position opens the gas plug completely, allowing the firearm to use the total amount of gas pressure. With this position, you may fire semi-automatic as the rifle was originally designed to. If the firearm is functioning correctly, you will be expelling empty casings between the 2 and 4 o'clock positions (roughly around the right shoulder) from the receiver consistently.

The 1 o'clock, or "Low", setting is recommended for use with the sound suppressor. Because a suppressor adds length to the barrel, the amount of backpressure from the round exiting the barrel is increased. This increase in pressure causes an increase in the rate of fire. By turning the gas plug to the 1 o'clock position, the increased amount of backpressure will not enter into the piston chamber, allowing the AR to function at the rate of fire it was designed to have.

The last position is the 3 o'clock, or "Off", position. This effectively stops the firearm from cycling its action. While the round in the chamber will still fire, all of the gases are vented out of the front of the piston chamber and will require the shooter to manually work the action of the AR by pulling back on the charging handle. Essentially, this turns the AR into a bolt-action gun. This position is used mostly for those with suppressors that do not want the sound of the action overpowering the sounds suppressed by the suppressor, it is also used with a .357 conversion kit by removing the drive rod and turning the gas plug to the off position.

LOADING

TO LOAD A MAGAZINE
1. Use only ammunition for which your firearm is chambered.
2. With the front of the magazine's forward, place a round between the lip of the magazine with the bullet forward. Press the round down and push back to ensure it is properly seated against the back of the magazine. Place the next round on top of the previous one and repeat steps until the quantity desired is loaded.

Make sure the rifle is pointed in a safe direction, and the safety is engaged at all times while being loaded. Never allow your fingers, or other objects to contact trigger while loading or unloading the rifle. DO NOT change the safety until you are ready to fire and have the rifle pointed safely downrange.

TO LOAD THE RIFLE
1. Press in the bottom of the bolt catch while pushing back on the charging handle, to cock the hammer and leave the bolt and carrier open to the rear.
2. Return the charging handle fully forward until it locks and remove finger from the bolt catch.
3. Set selector to "SAFE" position.
4. With the bullets pointing forward, insert the loaded magazine into the magazine well and push it in until it stops and is retained by magazine catch.
5. With the rifle pointed in a safe direction, press in the top of the bolt catch. This will release the bolt and carrier and move a round into the chamber. The rifle is now loaded with a round in the chamber and the hammer cocked.

TO UNLOAD THE RIFLE
1. Set selector to "SAFE" position.
2. Press the magazine catch button and remove the magazine.
3. Pull charging handle to rear and push in lower portion of the bolt catch. If a round had been in the chamber it should have been ejected. Visually check the chamber to ensure that it is empty. If last round in the magazine had been fired and the magazine was in place, the bolt and carrier should already be held to the rear.
FIRING

NEVER load a cartridge into the chamber until you are ready to fire the rifle. DO NOT disengage the safety until the rifle is pointed in a safe direction and you are ready to fire.

1. Always wear ear and eye protection when firing your weapon.

2. Load firearm as previously described.

3. Grasp the firearm with one hand on the handguard, and the other hand on the pistol grip with trigger finger resting along the side of the trigger guard. Raise firearm and pull buttstock firmly into shoulder.

4. Aim by aligning target with front and rear sights.

5. Move selector lever to "FIRE".

6. Keeping steady aim, place trigger finger on trigger and squeeze gently until trigger releases the hammer. Do not jerk the trigger as you will disturb your aim and ruin your accuracy. To fire the next round and subsequent rounds, release the trigger and squeeze it again after every shot until you are finished or the magazine is emptied.

7. This is a semi-automatic firearm and is immediately loaded and ready to fire after each shot until magazine is empty.

8. When finished firing, release trigger, remove finger and set selector lever to “SAFE”. If you have fired the last round from magazine, the bolt and carrier will be held to the rear so you can quickly reload by replacing the magazine or the chamber can be checked to ensure it is empty.

CLEARING YOUR RIFLE

1. Place selector on SAFE. If weapon is not cocked, lever can not be pointed toward SAFE.

2. Remove magazine by pressing magazine catch.

3. To lock bolt open, pull charging handle rearward, press bottom of bolt catch & allow bolt to move forward until it engages bolt catch. Return charging handle forward.

4. Inspect the receiver and chamber to ensure these areas contain no ammo.

5. With selector pointing toward SAFE, return the bolt forward into battery by pressing the upper portion of the bolt catch.
1. Press take down pin in from left of lower receiver (it may be necessary to use a punch as the fit between upper and lower may be very tight). Pull it out of the right side until it comes to a positive stop.

2. Pivot lower receiver down and away from upper portion of receiver.

3. Press front pivot pin in from the left side of lower receiver and pull out of the right side until it comes to a positive stop.

4. You can now separate the upper and lower receivers.

5. Pull charging handle approximately 3-4 inches to the rear and remove the bolt and carrier assembly.

6. Remove charging handle by pulling it backwards to key way and down out of receiver.

7. Push in firing pin retaining pin right-to-left of bolt carrier and remove it by pulling it out to the left.

8. Tilt bolt face up and remove firing pin.

9. Push bolt in towards the carrier until it rotates and comes to a complete stop, then turn cam pin 90.

10. Remove cam pin by lifting it out away from bolt and carrier.

11. Pull bolt forward out of carrier.

12. Depress buffer and maintain pressure, as buffer is under spring tension, to prevent it from being ejected when buffer retainer is depressed. Depress buffer retainer to permit buffer and spring to move forward. Then depress hammer to allow the buffer and spring to continue to move forward and be removed from receiver extension.

13. To remove handguard, push delta ring towards receiver while pulling up on half of the handguard. Repeat process for the other half of the handguard.

TO REASSEMBLE, REPEAT PROCEDURE IN REVERSE ORDER
CLEANING AND MAINTAINING PISTON SYSTEM

It is recommended to use CLP or another oil of similar consistency for lubrication purposes.

First, remove the upper receiver from the lower receiver by pushing the take down pins out of battery. This will allow you to further disassemble the individual parts of the AR for cleaning and maintenance.

The piston system keeps the hot burning gasses from entering the receiver. This means the normal time and energy exerted on cleaning your AR15/M16 will be drastically reduced. To clean most parts of our system you will simply wipe them off with a dry, clean towel.

The areas of the system that see the most dirt are: the back of the gas block, the back of the plug, and the drive rod sleeve. These parts may require some scrubbing with a nylon cleaning brush, or an old toothbrush and some cleaning solvent.

To access the drive rod for cleaning, simply press the detent button and turn the knob to the 9 o’clock position. Then remove the drive rod and gas plug. Wipe the outside off with a dry, clean towel and spot clean with your choice of solvent and a nylon brush as needed.

If you find an area that has a heavy build-up of carbon, which will not come off with solvent, use a knife, pick or some type of scraping tool to remove the heavy spots. Due to our milling process the parts are virtually scratch proof and shouldn’t show any wear.

Once cleaned, replace the drive rod and plug, and continue shooting. Oiling the piston system is only necessary on certain parts. Apply only a very thin coat over the moving parts (i.e. bolt carrier and drive rod). It is recommended to clean the piston system parts every 3000 rounds or sooner as desired.

The barrel, flash hider, lower and other AR parts should be cleaned like a standard AR. Break in the barrel using your preferred break-in method. Normal cleanings should be done with a brass brush and your choice of solvent. Once scrubbed with a brass brush, remove soiled solvent and dirt with either a bore mop or some dry cleaning patches. Wipe all of the soiled solvent and loose particles off with a dry, clean towel. It is recommended to clean the barrel at least once every 500 rounds and remaining parts as needed.

The remaining parts of the upper receiver should come clean with a nylon cleaning brush and your choice of solvent. Disassemble the bolt carrier group as shown in this owner’s manual. Clean with a nylon brush and solvent, wipe dry, and apply one drop of lubrication to the outside of the bolt before reassembling the bolt carrier group.

The lower receiver should also be cleaned and lubricated regularly. With the upper receiver off of the lower, clean the hammer and trigger assembly using a nylon brush and solvent. Wipe soiled solvent and loose material from the action and apply a drop of lubrication to the moving parts.

Once cleaned, reattach the complete upper to the lower, lock the action back and make sure the selector switch is in the safe position. Do this to ensure that the firearm is unloaded, then store the firearm with the action closed, the selector switch in the safe position and the dust cover closed, until you are ready to fire again.
ADAMS ARMS LIFETIME WARRANTY

Adams Arms has a Lifetime Warranty on all of its piston driven system parts and guarantees all parts of this product for life against manufacture defects. Misuse or incorrect handling is not covered. If your unit cannot be repaired, Adams Arms may replace it with new or reconditioned merchandise. Adams Arms will not pay for loss of time, inconvenience, loss of use, it's failure to work, injury or any incidental or consequential damages.

The warranty is void if the parts are used in a manner they are not intended. (Examples of this would be using Adams Arms parts in another manufacturer's piston system or making modifications to the Adams Arms piston system.)

In the rare event a customer receives a defective item; they are to contact Adams Arms for warranty information. Contact Adams Arms either by phone or the email address listed below and describe the circumstances of your problem. Should you need replacement parts or warranty work, Adams Arms will cover the cost of parts and labor, but does require shipping to be paid by the customer.

The majority of the problems associated with Adams Arms Retro-Fit Piston Systems are caused by installation or user error. Be sure to thoroughly read the installation instructions and watch the installation video before installing the system. If there are any questions concerning the instructions, contact Adams Arms and ask for clarification before proceeding with the installation.

RETURN/REFUND/CANCELLATION POLICIES

If you are not completely satisfied with your new product, you can request a RMA (Return Merchandise Authorization) Form from Adams Arms within 30 days from the shipping date of your order. We do not accept a return if a RMA is not requested from us within 30 days from the original date of the shipment.

Adams Arms Contact Information for Returns:
Mailing Address: Adams Arms
Attn: Sales
512 Florida Ave.
Palm Harbor, FL 34682
Phone: 727-853-0550
Fax: 727-853-0551
Email: sales@adamsarms.net

YOU MUST get your RMA from Adams Arms prior to returning the merchandise and receiving a refund. Include your original invoice from Adams Arms with your return letter explaining the reason for your return. Ship via UPS, FedEx, or US Mail; insured and Return Receipt Requested. Credit will be issued for the item, minus full shipping charges and a 15% restocking fee.

ALL original materials must be included in your return. The cost of any materials NOT included will be deducted from the refund.

SHIPPING COSTS ARE NON-REFUNDABLE.

Merchandise must be in new re-sellable condition, in the factory original packaging, and must include instructions, owner’s manual, and all accessories provided by the manufacturer. OUR RETURN SPECIALIST WILL INSPECT ALL RETURNS!