

# BATTLEARMS®

INSTRUCTIONS ★ SAFETY ★ MAINTENANCE



# MANUAL

# **WARNING!**

**PLEASE READ THESE INSTRUCTIONS  
AND ALL OF THE WARNINGS CAREFULLY!**

**Make sure you completely understand all  
the contents of this document before you  
use this firearm. Failure to do so may result  
in serious injury or death to you and those  
around you.**

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This manual is based upon the U.S. ARMY Technical Manual 9-1005-319-23 for the M16A2/M4A1 Carbine Family of Firearms, and includes maintenance procedures for all Battle Arms Development semi-automatic firearms.

Battle Arms Development is committed in its goal to produce the finest firearms possible, and we encourage our customers to follow development of future products on our website:

**[www.BattleArmsDevelopment.com](http://www.BattleArmsDevelopment.com)**

The Battle Arms Team thanks you for your purchase of this firearm, and we hope you will enjoy it safely for many years. If you need parts, service or advice concerning your firearm, we are never more than a phone call away and will be pleased to help you.

In the meantime, we encourage you to shoot safely, to enjoy the great outdoors, and to provide us feedback in our quest to produce the finest firearms in the world.

Thank you,

Battle Arms Development

## ★ THE FUNDAMENTAL RULES FOR SAFE GUN HANDLING

1. **ALWAYS** keep the muzzle of the firearm pointed in a safe direction. Consider every firearm loaded. Never point the muzzle of the firearm at any thing you do not intend to shoot.
2. **ALWAYS** keep your finger off the trigger until ready to shoot.
3. **ALWAYS** keep the firearm unloaded until ready to use.
4. **ALWAYS** know your target and what is beyond it.
5. **ALWAYS** know how to operate the firearm safely.
6. **ALWAYS** be sure the firearm is safe to operate and the barrel is clear of obstructions.
7. **ALWAYS** use only the correct ammunition for your firearm.
8. **ALWAYS** Wear eye and ear protection.
9. **NEVER** use alcohol or over-the-counter, prescription or other drugs before or while shooting.
10. **ALWAYS** store firearms so they are not accessible to unauthorized persons or children.
11. **ALWAYS** be aware that certain types of firearms and many shooting activities require additional safety precautions.
12. **NEVER** rely on your firearm's "**SAFETY**". Treat every firearm as though it can fire at any time.
13. **LEARN** the mechanical and handling characteristics of the firearm you are using.

# **WARNING!**

**Firearms are not toys.** They are dangerous and potentially lethal weapons subject to restrictions. Possession of this or any firearm indicates your acceptance of responsibility to comply with all federal, state, and local laws in your area pertaining to the storage, transport, and use of firearms and prevent irreversible consequences which can result from improper handling.

## **BEWARE OF DANGEROUS CONDITIONS:**

- Inspect your bolt carrier group before operating your firearm, and be sure the cam pin is properly installed. The firearm can still fire without the cam pin installed, but will result in a catastrophic malfunction causing serious injury or death. If you are unsure of what the cam pin is please **See Section: DISASSEMBLY OF FIREARM.**
- If your firearm malfunctions with a live round in the chamber of a hot barrel (misfire) and you are unable to immediately clear the round from the chamber (See page 9) keep the muzzle pointed in a safe direction, remove the magazine, lay the firearm down, and allow it to rest for up to five minutes before attempting to clear the round from the chamber again. Use only ammunition that is manufactured to SAAMI or NATO specifications.
- If your bolt fails to unlock, you may try to free it by firmly grasping the hand guard with one hand and unlock the charging handle with your other hand, and forcefully slam (**mortar**) the stock on the ground while keeping yourself clear of the muzzle.
- Operation of the firearm while there is water or other obstruction in the barrel **WILL** result in a catastrophic malfunction of the firearm causing severe injury or death.
- If a noticeable difference in sound or recoil is experienced, **STOP FIRING.** Either condition could indicate an incomplete powder burn and/or a bullet stuck in the bore known as a squib. Continued use of the firearm in this condition could result in a catastrophic malfunction causing severe injury or death.
- If your firearm fails to fire when the trigger is pulled, handle with care! Keep the muzzle pointed in a safe direction. Keep your face away from the breech. Then, carefully open the action and unload the firearm and dispose of the cartridge in a safe way.

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## ★ ABOUT YOUR BATTLE ARMS DEVELOPMENT FIREARM

- This operating manual covers Battle Arms Development firearm models chambered for a wide variety of ammunition calibers. Be sure that you only use the ammunition of the caliber marked on the barrel of your firearm. These are gas operated, air cooled, external magazine fed firearms that operate in semi-automatic mode (meaning that each time the trigger is pulled, a single round will fire until the magazine is empty).
- On all firearm models, the upper and lower receivers are easily opened for cleaning and inspection.
- All models feature a MIL-STD 1913 Picatinny style accessory rail and/or M-LOK accessory rail, and are designed to allow the user to add their choice of front & rear sights, optics or other accessories.
- Battle Arms Development firearm models are supplied with either a 6-position telescoping stock, 6-position pistol brace, VERT<sup>®</sup> PDW stock, VERT<sup>®</sup> PDW pistol brace, fixed SABERTUBE buttstock or buffer tube.
- All firearm models feature pistol grips and detachable magazines. All aluminum, steel, stainless steel, and polymer USGI STANAG pattern M16/M4 magazines should fit and function in all Battle Arms Development .223rem/5.56mm/.300BLK firearm models. Firearm models that are designed to use GLOCK 9mm style magazines should accept all GLOCK style 9mm magazines. Firearm models chambered in 7.62x51mm/.308win or 6.5mm Creedmoor should accept SR-25 pattern magazines.

# ★ WORKHORSE™ PARTS ILLUSTRATION



## Legend:

- |                        |                     |                     |                        |
|------------------------|---------------------|---------------------|------------------------|
| 1. Adjustable Stock    | 7. Muzzle Device    | 13. Bolt Catch      | 19. Gas Tube           |
| 2. Carbine Buffer Tube | 8. Pistol Grip      | 14. Safety Selector | 20. Bolt Carrier Group |
| 3. Charging Handle     | 9. Magazine Release | 15. Magazine Catch  | 21. End Plate          |
| 4. Upper Receiver      | 10. Trigger         | 16. Pivot Pin       | 22. Castle Nut         |
| 5. Ejection Port Cover | 11. Trigger Guard   | 17. Takedown Pin    |                        |
| 6. Rail Handguard      | 12. Magazine        | 18. Gas Block       |                        |

# ★ AUTHORITY™ PARTS ILLUSTRATION



## Legend:

- |                        |                     |                     |                        |
|------------------------|---------------------|---------------------|------------------------|
| 1. Adjustable Stock    | 7. Muzzle Device    | 13. Bolt Catch      | 19. Gas Tube           |
| 2. Carbine Buffer Tube | 8. Pistol Grip      | 14. Safety Selector | 20. Bolt Carrier Group |
| 3. Charging Handle     | 9. Magazine Release | 15. Magazine Catch  | 21. End Plate          |
| 4. Upper Receiver      | 10. Trigger         | 16. Pivot Pin       | 22. Castle Nut         |
| 5. Ejection Port Cover | 11. Trigger Guard   | 17. Takedown Pin    | 23. Ambi Mag Release   |
| 6. Rail Handguard      | 12. Magazine        | 18. Gas Block       | 24. Ambi Bolt Release  |



# ★ XIPHOS™ PARTS ILLUSTRATION



## Legend:

- |                        |                     |                     |
|------------------------|---------------------|---------------------|
| 1. Adjustable Stock    | 7. Muzzle Device    | 13. Bolt Catch      |
| 2. Carbine Buffer Tube | 8. Pistol Grip      | 14. Safety Selector |
| 3. Charging Handle     | 9. Magazine Release | 15. Pivot Pin       |
| 4. Upper Receiver      | 10. Trigger         | 16. Takedown Pin    |
| 5. Bolt Assembly       | 11. Trigger Guard   | 17. End Plate       |
| 6. Rail Handguard      | 12. Magazine        | 18. Castle Nut      |

# ★ XYSTON™ PARTS ILLUSTRATION



## Legend:

- |                        |                     |                     |                        |
|------------------------|---------------------|---------------------|------------------------|
| 1. Adjustable Stock    | 7. Muzzle Device    | 13. Bolt Catch      | 19. Gas Tube           |
| 2. Carbine Buffer Tube | 8. Pistol Grip      | 14. Safety Selector | 20. Bolt Carrier Group |
| 3. Charging Handle     | 9. Magazine Release | 15. Magazine Catch  | 21. End Plate          |
| 4. Upper Receiver      | 10. Trigger         | 16. Pivot Pin       | 22. Castle Nut         |
| 5. Ejection Port Cover | 11. Trigger Guard   | 17. Takedown Pin    | 23. Ambi Mag Release   |
| 6. Rail Handguard      | 12. Magazine        | 18. Gas Block       | 24. Ambi Bolt Release  |

# ★ OIP® PARTS ILLUSTRATION



## Legend:

- |                       |                     |                     |                          |
|-----------------------|---------------------|---------------------|--------------------------|
| 1. Fixed Butt Stock   | 7. Muzzle Device    | 13. Bolt Catch      | 19. Gas Tube             |
| 2. OIP Buffer Tube    | 8. Pistol Grip      | 14. Safety Selector | 20. Barrel               |
| 3. Charging Handle    | 9. Magazine Release | 15. Magazine Catch  | 21. Picatinny Style Rail |
| 4. Upper Receiver     | 10. Trigger         | 16. Pivot Pin       |                          |
| 5. Bolt Carrier Group | 11. Trigger Guard   | 17. Takedown Pin    |                          |
| 6. Handguard          | 12. Magazine        | 18. Gas Block       |                          |

# ★ THE SILENT PROFESSIONAL™ PARTS ILLUSTRATION



## Legend:

- |                        |                     |                         |                            |
|------------------------|---------------------|-------------------------|----------------------------|
| 1. Adj. PDW Stock      | 8. Pistol Grip      | 15. Magazine Catch      | 22. Guide Rod              |
| 2. Buffer Tube         | 9. Magazine Release | 16. Pivot Pin           | 23. Cheek Rest             |
| 3. Charging Handle     | 10. Trigger         | 17. Takedown Pin        | 24. Butt Plate             |
| 4. Upper Receiver      | 11. Trigger Guard   | 18. Gas Block           | 25. Ambi Mag Release       |
| 5. Ejection Port Cover | 12. Magazine        | 19. Gas Tube            | 26. Ambi Bolt Release      |
| 6. Rail Handguard      | 13. Bolt Catch      | 20. Bolt Carrier Group  | 27. Integrated PDW Housing |
| 7. Muzzle Device       | 14. Safety Selector | 21. Stock Latch Release |                            |

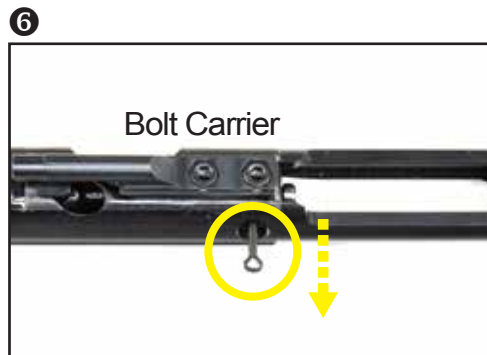
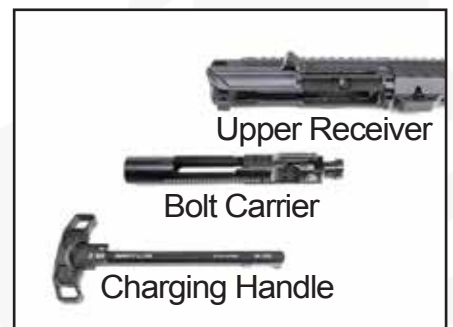
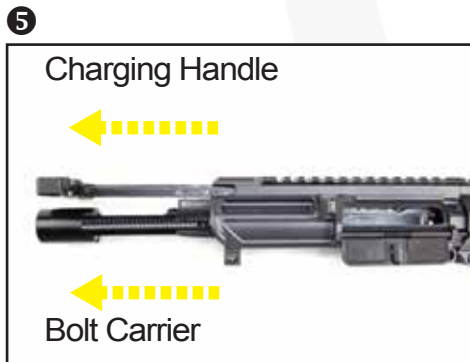
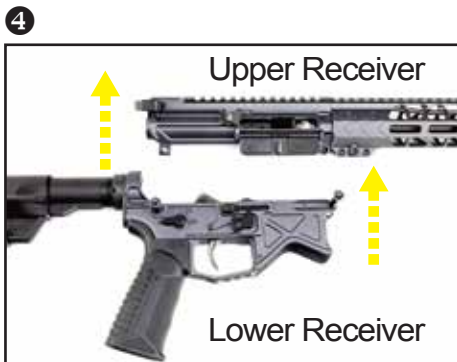
## ★ CLEARING THE FIREARM

- 1 Point the firearm in a **SAFE DIRECTION!** Place the safety selector on **SAFE**. If the hammer is not cocked, the safety selector cannot be switched to the **SAFE** position.
- 2 Point the magazine is present in the mag well, press the magazine release button and remove the magazine.
- 3 To lock the bolt open, pull the charging handle, from either side, rearward. Depress the bottom (heel) of the bolt catch and then allow the bolt to move forward until it engages the bolt catch. Then return the charging handle to its forward position.
- 4 Inspect the chamber through the ejection port opening in the upper receiver to ensure the chamber is free and clear of ammunition and other objects.



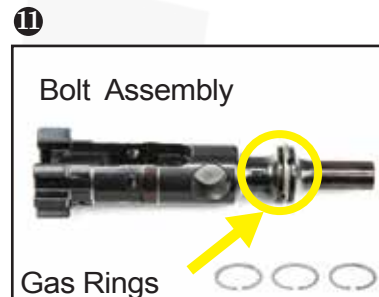
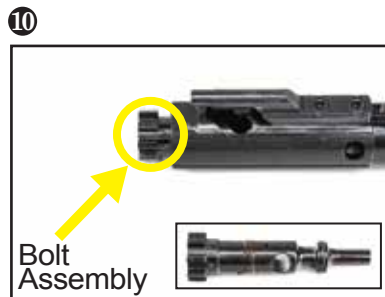
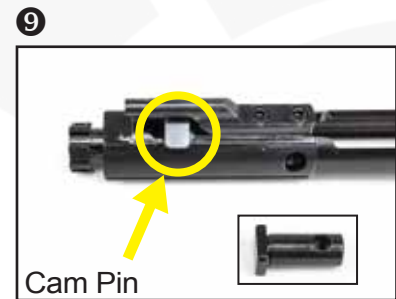
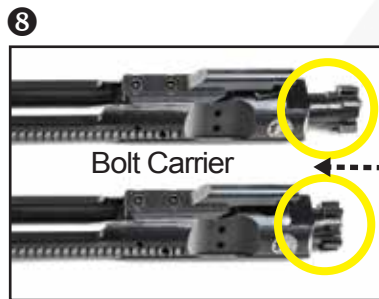
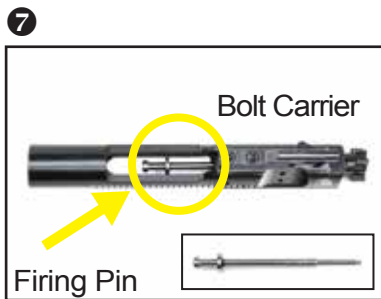
## ★ DISASSEMBLY OF FIREARM

- 1 Cycle the action, once again verifying that it is clear of ammunition and other objects.
- 2 Push out the rear takedown pin from the left side of the receiver and pull it out from the right side of the lower receiver.
- 3 Push out the front pivot pin from the left side of the receiver and pull it out from the right side of the lower receiver.
- 4 Separate the upper and lower receiver assemblies.
- 5 Pull back on the charging handle, from either the left or right side of the handle, and remove the bolt carrier group and charging handle from the rear of the upper receiver.
- 6 Remove firing pin retaining pin by pulling it out using a small punch or pick



## ★ DISASSEMBLY OF FIREARM (CONTINUED)

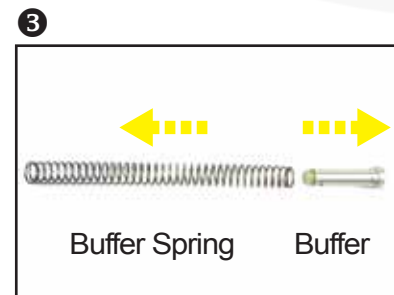
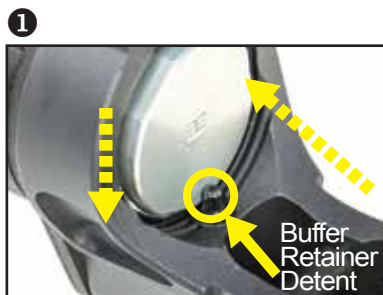
- 7 Drop firing pin out the rear of the bolt carrier.
- 8 Push bolt assembly into the fully closed position inside the bolt carrier.
- 9 Rotate the bolt cam pin so it can clear the gas key and remove bolt cam pin.
- 10 Remove bolt assembly from the carrier by pulling it forward and out of the bolt carrier.
- 11 Inspect gas rings for unusual wear.



### REMOVAL OF BUFFER SYSTEM:

All buffers (Mil-Spec Carbine Buffer, VERT<sup>®</sup> 9mm Buffer, VERT<sup>®</sup> 5.56MM/300BLK Buffer, .308 Buffer, etc.) are removed in the same manner\*.

- 1 Press in the buffer, push down and hold buffer retainer detent.
- 2 While holding down buffer retaining detent, remove the buffer and buffer spring.
- 3 Separate the buffer from the buffer spring and inspect both.



## ★ CLEANING OF FIREARM

Before cleaning the firearm make sure the firearm is safe and clear of all ammunition (**See section: CLEARING FIREARM**).

Even though our firearms are designed for hard use in battlefield environments, and can function adequately for thousands of rounds between cleaning, it is recommended that users field-strip, clean and lubricate the firearm after every live-fire session for optimal accuracy and performance.

A clean chamber is critical for optimum reliability. We recommend that a chamber brush and solvent is used to break-up carbon and foreign matter, followed up with a clean patch after every live-fire session.

With the firearm disassembled, thoroughly clean and inspect all components, then lubricate all moving components with a light coat of CLP. Wipe dry according to your selected lubricant's instructions.

## ★ BOLT CARRIER GROUP INSPECTION

### *Inspect before lubricating*

**DO NOT** interchange bolts between firearms. Doing so may cause interference with the proper lock up of the bolt and chamber with a live cartridge and may result in a catastrophic malfunction causing severe injury or death.

**Firing Pin:** Replace if it is bent, cracked or blunted.

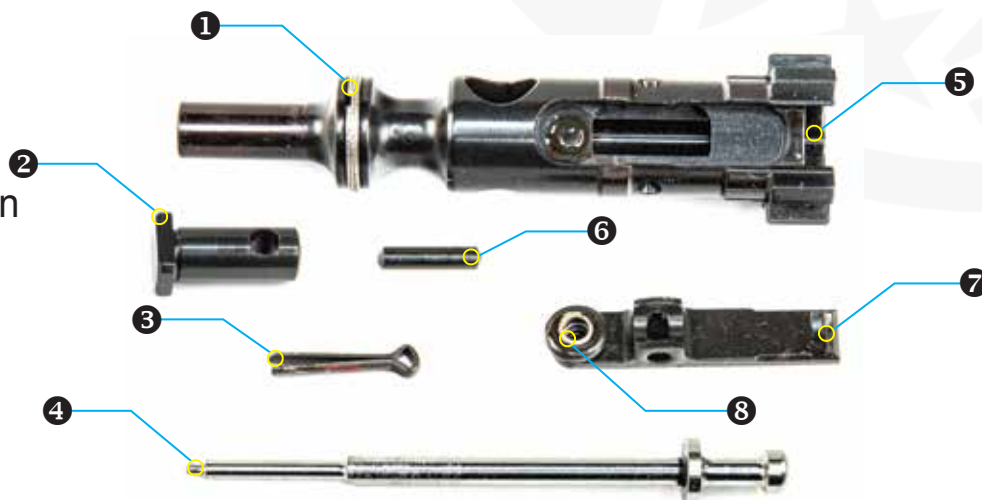
**Firing Pin Retaining Pin:** Replace if bent or worn, or shows signs of cracks.

**Bolt:** Replace if there are cracks or fractures, especially in the cam pin hole area or on the locking lugs. Bolts that contain pits extending into the firing pin hole need replacing.

**Extractor:** Check for chipped or broken edges in the area that engages the case head. Replace if there are any chips or broken edges.

### Legend:

- ① Gas Rings
- ② Cam Pin
- ③ Firing Pin Retaining Pin
- ④ Firing Pin
- ⑤ Bolt
- ⑥ Extractor Pin
- ⑦ Extractor
- ⑧ Extractor Spring





## ★ ROUTINE LUBRICATION

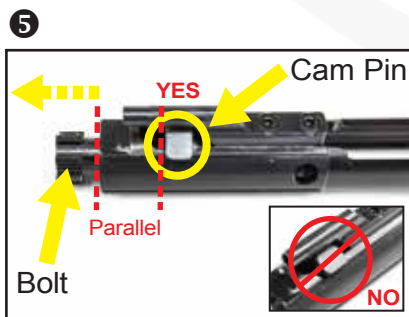
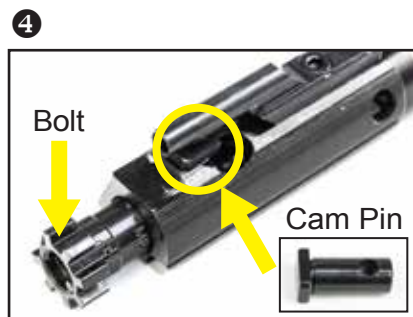
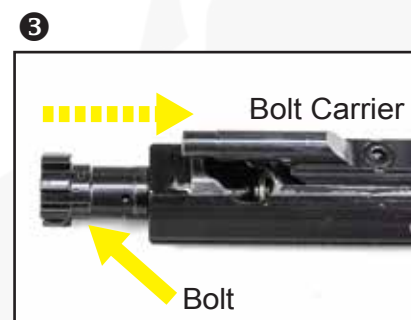
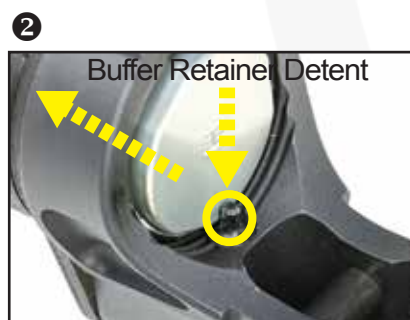
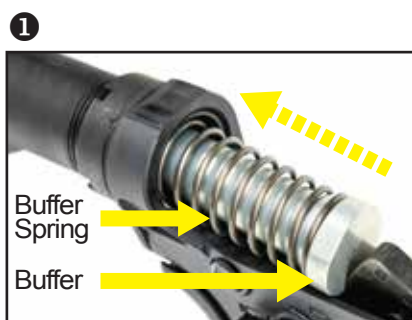
**Bolt:** Lightly lubricate all bolt and bolt carrier surfaces.

**Upper Receiver:** Lightly lube inside of upper receiver bore, chamber, charging handle, and inner surfaces.

**Lower Receiver:** Lightly lube the trigger group, buffer, and buffer spring.

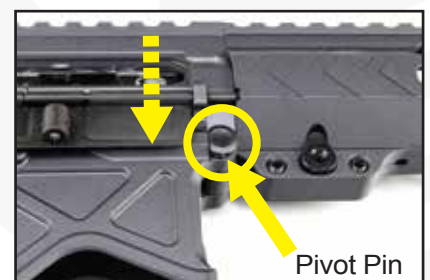
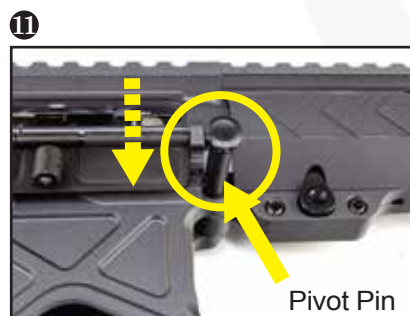
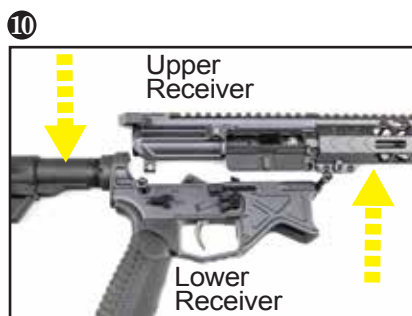
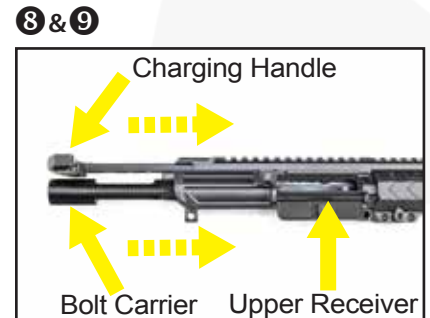
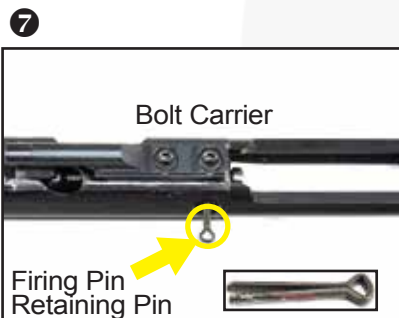
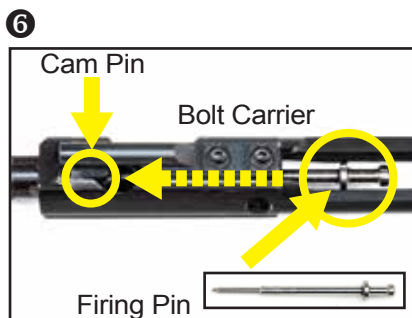
## ★ REASSEMBLY

- 1 Insert buffer spring and buffer into buffer tube.
- 2 Compress the buffer and buffer spring into the buffer tube until the face of the buffer is captured by buffer retainer detent.
- 3 Slide bolt assembly into the front of the bolt carrier.
- 4 Replace bolt cam pin and rotate to align the firing pin channel. If the cam pin will not drop in, rotate the bolt in the carrier until it does. The cam pin can only be installed into the bolt one way. **DO NOT FORCE IT.**
- 5 Pull the bolt out to its fully extended position and ensure that the long side of the cam pin



## ★ REASSEMBLY (CONTINUED)

- ⑥ Replace the firing pin. Make sure it passes through the cam pin hole.
- ⑦ Replace the firing pin retaining pin.
- ⑧ Insert charging handle into the upper receiver by aligning the two humps on the sides of the charging handle shaft with the corresponding notch cutouts in the upper receiver. Leave about 2-3 inches of the charging handle shaft exposed from the upper receiver to allow clearance to insert the bolt carrier group. Then insert the bolt carrier group by aligning the gas key to the underside of the charging handle.
- ⑨ Slide bolt carrier group into the receiver until fully seated.
- ⑩ Join upper and lower receiver assemblies and align the front pivot pin and rear take down pin holes.
- ⑪ Push-in the front pivot pin.
- ⑫ Push-in rear takedown pin.



## ★ FUNCTION CHECK

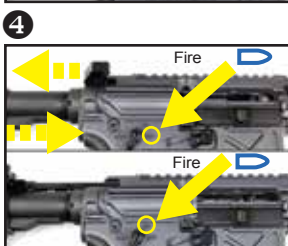
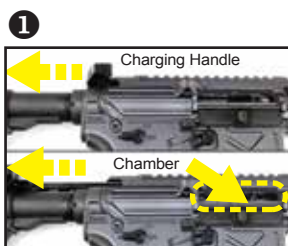
### BE SURE TO REMOVE MAGAZINE AND CLEAR WEAPON (See Section: CLEARING THE FIREARM)

#### PROPER FUNCTION OF THE SAFETY:

- 1 Pull the charging handle to rear and conduct then, a visual and physical inspection of the chamber
- 2 Then release the charging handle to close the bolt.
- 3 Place the safety selector on **SAFE**. Make sure the firearm is pointed in a safe direction, pull the trigger, the hammer should not fall.

#### PROPER FUNCTION ON FIRE/SEMI-AUTO:

- 1 Pull charging handle to rear and conduct a visual and physical inspection of the chamber then release charging handle.
- 2 Then release the charging handle to close the bolt.
- 4 Place safety selector on **FIRE**.
- 5 Make sure the firearm is pointed in a safe direction, pull the trigger, the hammer should fall.
- 6 Pull the charging handle to rear and release to allow the bolt carrier group to return home in the closed position.
- 6 Make sure the firearm is pointed in a safe direction, pull the trigger and hold to rear, the hammer should fall.
- 6 Continue to hold the trigger to the rear, do not release. Pull the charging handle to rear and release to allow the bolt carrier group to return home in the closed position. (Picture 6)
- 6 Slowly release the trigger. An audible and tactile click will indicate the trigger has reset. Pull the trigger again and the hammer should fall.



## ★ LOADING

Make sure the firearm is unloaded and pointed in a safe direction, start with the weapon on **SAFE**.

- ➊ Push a loaded magazine upward into the magwell until the magazine catch engages and holds the magazine. Tap the base of the magazine upward firmly to ensure it is seated correctly.
- ➋ If the bolt is locked open, depress the upper portion of the bolt catch, allowing the bolt to go forward.
- ➌ Inspect to ensure the bolt is fully forward and locked.

OR

- ➊ Pull charging handle fully rearward and let it snap forward. Never “ride” the charging handle. Let it go forward on its own under spring pressure.
- ➋ Visually inspect to ensure the bolt is fully forward and locked.

➊



➋



➌

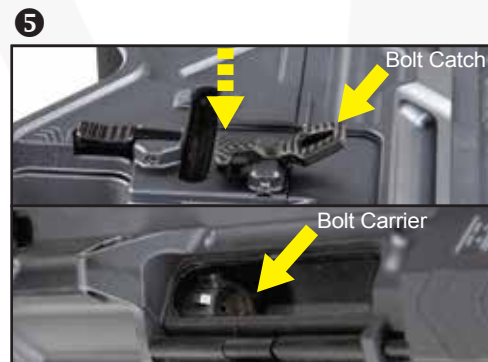


## ★ FIRING

- 1 Load and make sure firearm selector switch is on **SAFE**.
- 2 Grip your firearm by the pistol grip with one hand and the handguard with the other. Keep your trigger finger outside of the trigger guard, and off of the trigger. Seat the stock firmly into your shoulder pocket and position your cheek on the stock comfort
- 3 With your thumb, rotate the safety selector switch from **SAFE** to **FIRE**.
- 4 With the firearm aimed at the intended target, place your index finger on the trigger and gently squeeze until the firearm fires. Another cartridge will automatically load into the chamber after firing until the magazine is empty.

When you stop firing, place the selector switch on **SAFE**.

- 5 If you have fired all the ammunition in the magazine, the bolt will automatically be held to the rear by the bolt catch.



## ★ UNLOADING

- 1 Make sure the firearm safety selector is on **SAFE**.
- 2 Press magazine release button and magazine will drop from magwell.
- 3 Pull charging handle fully rearward and eject the chambered cartridge.
- 4 Inspect chamber, to ensure chamber is empty.
- 5 Remove remaining live ammunition from the magazine by sliding them forward by hand, and removing them from the magazine.

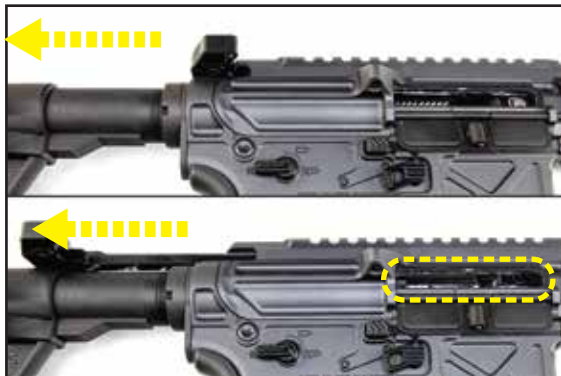
1



2



3



4



5



## ★ IMMEDIATE ACTION DRILL

# **WARNING!**

IF YOUR FIREARM STOPS WORKING PROPERLY, OR IS SHOWING UNUSUAL MALFUNCTIONS...STOP FIRING, **MAKE SURE IT IS IN A SAFE DIRECTION**, CLEAR THE WEAPON TO MAKE IT SAFE AND CONTACT A BATTLE ARMS DEVELOPMENT REPRESENTATIVE ASAP.

If your rifle is operating properly, yet a cartridge fails to fire, perform the following immediate actions:

1. **FIRE** the firearm. If the firearm will not fire, inspect action for other trouble.
2. **SLAP** upward on the bottom of the magazine to make sure it's properly seated.
3. **PULL** the charging handle all the way back.
4. **OBSERVE** the ejection of the cartridge. Check the chamber for obstruction. If cartridge or case is ejected or chamber is clear: **RELEASE** charging handle to feed new round. Don't ride the charging handle forward.





## ★ LIMITED LIFETIME WARRANTY

All Battle Arms Development, Inc. (BAD INC) products have a limited lifetime warranty against any manufacturer's defects and workmanship to the buyer/customer. Normal maintenance is not covered by the warranty.

Warranty claims may be generated by filling out the online support form for a Return Merchandise Authorization (RMA). Once the support form is received and approved, the customer will be assigned an RMA # and may ship the warranty product to BAD INC per the RMA instructions. **Shipping to and from BAD INC's facilities, government fees, damages caused by lack of maintenance, international sales, are not covered by this warranty.** Once the warranty product is received, BAD INC will inspect and evaluate for warranty eligibility. If the product is determined by BAD INC to be covered by the warranty, BAD INC will either repair or replace it at BAD INC's discretion. Warranty product/s received without an RMA form will not be accepted and will be returned to the sender. Firearms and ammunition must be shipped separately. No COD shipments will be accepted.

This warranty does not apply to abuse, negligence or normal wear and tear of any parts or protective finishes. Warranty does not cover product compatibility issues with after-market accessories. **Any modification to the product from the factory shipped condition will render the warranty null and void. Proof of purchase must be provided at the time of the warranty service.**

The following are specifically excluded from coverage under this warranty and/or will cause said warranty to become null and void:

- Rust or corrosion.
- Barrel obstruction.
- Damage or malfunction resulting from accident, negligence, misuse or unauthorized repair or alteration.
- Use of ammunition other than NATO and/or SAAMI specification new factory production ammunition.
- Use of any hand loaded, reloaded or factory re-manufactured ammunition.
- Failure to provide reasonable and necessary maintenance as described in the Operator's Manual/documentation accompanying the product.
- Use of replacement parts other than parts authorized by BAD INC for use in BAD INC products.
- Any unauthorized repair or any alteration, including of a cosmetic nature, performed on the product by an individual, organization, company or entity other than BAD INC
- Unreasonable or excessive use of the product.
- Any finished products that are not assembled at BAD INC's facilities or are assembled using imported or used parts. This includes complete firearm kits, upper receivers, lower receivers, barrel assemblies, etc. No implied warranties of any kind are made herein.



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