

#### **OWNER'S MANUAL:**

OPERATION, HANDLING, DISASSEMBLY / REASSEMBLY & SAFETY INSTRUCTIONS

- DO NOT DISCARD THIS MANUAL - READ THIS MANUAL CAREFULLY, PAYING CLOSE ATTENTION TO THE INSTRUCTIONS AND WARNINGS BEFORE USING THIS FIREARM.

This manual should stay with this firearm at all times. If the firearm is given, transferred or sold to another person, this manual should go with it.

Before loading, using or disassembling this firearm, please Read, Understand, and Follow all of the instructions and warnings in this manual.



Caution: If you are unfamiliar with firearms, seek further advice through a NRA Approved Instructor, Gun Safety Training Organization, or similar qualified organizations prior to using this firearm.



Warning: Like any firearm, if this firearm is carelessly or improperly handled, unintentional discharge can result and can cause damage to property, severe injury or even death.



Warning: If this firearm is jarred or dropped with the bolt carrier assembly locked to the rear, or in its forward position with a loaded magazine in place a round could be chambered.



Caution: Only clean, dry, high quality commercially manufactured ammunition should be used in this firearm. Only use ammunition that is appropriate for the caliber and design of your firearm.



IMPORTANT NOTICE: Any modifications of any kind, including any addition or removal of components or disassembly beyond what is detailed in the owners manual could completely VOID YOUR WARRANTY!

#### Thank You for Your Purchase

The instructions and safety warnings in this manual are very important. By taking precautions and understanding the dangers associated with the use of any firearm you can enjoy the use of your New Frontier Armory firearm for years to come. Failure to take precautions and follow instructions may result in severe damage to property and/or the firearm as well as serious injury or even death to you or others.

Note: For information or details not covered in this manual, contact tech support at: www.newfrontierarmory.com/warranty

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# Fundamental Rules and Procedures for Safe Firearms Handling

- Always treat every firearm as if it were loaded.
- Always keep every firearm pointed in a safe direction.
- Always be sure of your target and what's beyond it.
- Always wear eye & ear protection when you or others are shooting.
- Always be sure the barrel is clear of obstructions before shooting.
- Always carry your gun so that you can control the direction of the muzzle even if you stumble or fall.
- Never load a firearm until you are ready to shoot.
- Never leave a firearm unattended.
- Never store your guns and ammunition together, they should always be stored and secured separately, out of reach of children and anyone unfamiliar with firearms.
- Never allow your firearm to be used by anyone who has not read the safe handling and operating instructions.
- Never point any gun at anything you do not intend to shoot, whether it is loaded or unloaded.
- Never touch the barrel after firing, more than likely it will be very hot.

- Keep your finger off the trigger and leave the safety on until you are ready to shoot!
- If your firearm fails to fire with a live round still in the chamber (a misfire), remove the round quickly, keeping your face clear of the ejection port. If you are unable to remove the round within 10 seconds, remove the magazine, point the firearm in a safe direction and wait 15 minutes. With the live round still in the chamber, the firearm may still fire the round.
- Do not fire the firearm if there is water in the barrel.
- If there is a noticeable difference in sound or recoil; stop firing immediately! This could indicate there was an incomplete powder burn and/or there is a bullet stuck in the bore.
- If you firearm fires more than one round with the single pull of the trigger, please contact the warranty department immediately.

#### **Getting Ready to Shoot**

- With the muzzle pointed in a safe direction, insert a loaded magazine into the magazine well.
- Move the safety lever to the safe position.



- Pull the charging handle fully to the rear.
- Release the charging handle. Do not ride or push the charging handle.
- Move the safety lever to the fire position.



Note: If the firearm is not going to be fired immediately, make sure the selector lever is set to safe.

#### **Immediate Action in Case of Trouble**

If your firearm stops firing perform the following immediate actions...

- 1. Remove the magazine from the magazine well.
- 2. Pull charging handle all the way back.
- 3. Inspect the chamber and look for any obstruction or unfired round. If the chamber is clear and there is not an un-fired round present, proceed to step 4. If the chamber is not clear or if there is an un-fired round in the chamber, stop now and proceed to the "Remedial Action Section".
- 4. Re-insert the magazine and make sure it seats properly.
- Pull the charging handle all the way back and RELEASE to feed a new round. Don't ride the charging handle forward.
- Pull trigger to fire. If the firearm still will not fire, look for trouble, repeat steps 1-5 and then move to the "Remedial Action" section.

#### **Remedial Action**

If your firearm stops firing with a live round in the chamber of a hot barrel, remove the round within one second. If it is not possible to remove the round within 10 seconds, remove the magazine, place the selector to SAFE and wait 16 minutes with firearm pointing in a safe direction. This will help prevent injury if a round fires as a result of "Cooking Off" (in a hot barrel). Always remember to keep your face clear of the ejection port while clearing a hot chamber:

- If your firearm still fails to fire after performing Steps I through 5 on the previous page, check the chamber again for a jammed cartridge case.
- If a cartridge case is jammed in the chamber, remove the magazine, pointing the firearm in a safe direction, open the receivers, remove the bolt carrier and try to tap out the case with a cleaning rod from the muzzle end of the barrel.
- If your firearm fails to fire, check the "Troubleshooting" section of this manual, or take the firearm to a qualified gunsmith.

#### **Bullet Stuck In The Bore**

#### **WARNING:**

If you hear an audible "POP" or experience reduced recoil during firing, IMMEDIATELY CEASE FIRE, then:

- Remove the magazine from the firearm.
- Lock the bolt to the rear.
- Place the selector lever on SAFE
- Check for a bullet stuck in the bore.

If there is a bullet stuck in the bore DO NOT APPLY the "Immediate Actions" previously described.

If a bullet is stuck in the barrel of the firearm, **do not try to remove it**. Take the firearm to a qualified gunsmith for repair.

#### **Disassembly Of Your Firearm**

- Make sure the firearm is not loaded and that it is pointed in a safe direction.
- Remove magazine and verify the chamber is clear.
- Open the bolt by pulling the charging handle completely to the rear, hold the charging handle in this position, lock the bolt in the rearward position by pushing the lower end of the bolt catch lever with your other hand.

**ATTENTION:** Look into the chamber from the ejection port and visually confirm that there is NOT a round in the chamber.

- Now that you are sure the firearm does not have a round in the chamber, you may proceed with the assembly.
- Release the catch and send the bolt forward.
- Push the rear takedown pin from the left side to release, now pull the pin to its stop detent from the right.
- Grasp the mag well, and with your thumb press forward on the back surface of the hand guard to release the front retainer hook on the upper assembly from the front retaining pin. There will be some resistance due to the close fit of the assemblies.

#### **Disassembly Of Your Firearm**

- The upper can now be lifted upward off of the lower.
- With the charging handle pulled to the rear limit of travel, it now can be pulled out from the bolt carrier assembly and the carrier assembly removed.

**ATTENTION:** Do not dry fire the firearm (cock hammer and pull trigger) without the upper receiver assembly installed. Doing so could seriously damage the fire control group.

#### **Cleaning Procedures**

#### Clean the Bore

- Always clean from chamber to muzzle in the direction the bullet travels.
- Attach a bore brush to an appropriate length cleaning rod leaving it slightly loose to allow the brush to turn in the bore.
- Never dip the brush in solvent or run a brush down the barrel first.
- Swab out the bore with a patch moistened with high quality bore cleaning solvent.
- Pointing the muzzle down, and the handle removed from your cleaning rod. Hold the upper receiver in one hand while inserting the end of the rod without the brush into the chamber. Be careful not to scratch the bore.
- Attach the handle on your cleaning rod end sticking out of the muzzle.
- Pull the brush through the bore and out the muzzle. The rod should be twisting as you pull it out, this is the brush "tracking" in the rifling. Do not reverse the brush in the chamber.

#### **Cleaning Procedures**

#### Clean the Bore

- After one pull, take the handle off, and repeat the process.
- If the bore brush begins to tighten after a few pulls, loosen it up and repeat the process.
- Send a cleaning patch dampened with bore cleaning solvent through the bore occasionally to help clean out the debris the brush has loosened up.

NOTE: Always have the bore wet with cleaner before trying to pull a brush through.

#### **Disassembly of Bolt Carrier Assembly**

- To disassemble the bolt carrier assembly, first remove the firing pin retaining pin from the side of the carrier.
   Next, allow firing pin to fall out of bolt and carrier. Now you can remove the cam pin (1/4 turn then lift) and then the bolt will pull straight out.
- Clean the bolt carrier assembly and components with a suitable cleaning solvent and remove any built-up carbon on the bolt.
- Re-assembly is the reverse of disassembly. Install the
  bolt into the carrier and install the cam pin. Note: The
  cam pin will only go into the bolt one way, if the pin will
  not go in, rotate the bolt 180 degrees and it should slide
  in freely.
- Install the firing pin followed by the firing pin retaining pin. CAUTION: Failure to install the firing pin correctly may cause the gun to fire with the bolt open and could cause serious injury or death.
- The cam pin and gas rings can be lightly lubricated with a lightweight gun oil.
- When assembling the bolt, to reduce gas loss, stagger the three gas ring gaps 120 degrees apart around the bolt.

#### **Inspection Before Lubricating**

- Check the bolt: Look for fractures or cracks. Pay close attention to the cam pin hole area. Bolts with any pitting that extends into the firing pin hole should be replaced.
- Check the firing pin: If the firing pin is bent, cracked or too sharp, it should be replaced.
- Check the firing pin retaining pin: If it is bent or badly worn, it should be replaced. CAUTION:
   NEVER use a "Cotter Pin" as a replacement for a real firing pin retaining pin. Cotter pins are not made of suitable materials, and the round head shape will cause damage.
- Check the cam pin: If cam pin is chipped or cracked it should be replaced.
- Check the extractor and the extractor spring: If the extractor is chipped, or has broken edges in the area of the lip that engages the cartridge rim, it should be replaced.

#### Lubrication

#### **Upper and Lower Receivers:**

NOTE: The components in the lower assembly (fire Control) operate the best and will have the best longevity if kept clean but dry. Lubrication is neither necessary or helpful. The lower assembly can be washed /rinsed in soap and water, or sprayed clean with a reasonably fast drying oil free solvent type cleaner. Your EXP's polymer components are impervious to damage from all commercially available solvents, cleaners and lubricants.

#### Lightly Lubricate

- Lightly lubricate the inside of the upper receiver, bore and chamber using a cleaning rod and patch.
- · Lightly lubricate the firing pin.
- Lightly lubricate the charging handle and the inner and outer surfaces of the bolt carrier.

#### **Generously Lubricate**

- The bolt, cam pin area, and bolt gas rings.
- The carrier key should be dried with a pipe cleaner, then add one drop of lubricant.

Problem:	Check For:	What To Do:
Won't Fire	Selector lever on Safe	Put it on FIRE
	Improper assembly of firing pin retaining pin	Assemble correctly; goes in back of large shoulder on firing pin
	Too much oil in firing pin recess	Wipe out excess with pipe cleaner
	Defective ammunition	Remove and discard
	Too much carbon on firing pin or in firing pin recess	Clean
Won't Extract	Broken extractor spring	See a qualified gunsmith
	Dirty or corroded ammo	Remove stuck round - push out with cleaning rod
	Carbon in chamber	Clean chamber

**Troubleshooting** 

Troubleshooting		
Won't Extract	Fouling or carbon in extractor recess or lip	Clean extractor
	Frozen extractor	Remove & clean

Restricted movement

Won't Chamber Damaged amn on gas tube ammo

Won't Lock

of bolt carrier group	(before putting bolt back in, make sure gas tube fits into carrier key and that the carrier moves freely).
Damaged ammo	Replace
Carbon in chamber or on gas tube	Clean
Dirty or corroded ammo	Clean or replace
Dirt, corrosion, or carbon buildup in barrel locking lugs	Clean lugs
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Remove, clean, & lube.

ammo
Dirty magazine

Won't feed

**Double Feed** 

Bolt won't

unlock

Defective magazine

Too many rounds in magazine

seated

Magazine not fully

Defective magazine

Dirty or burred bolt

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**Troubleshooting** 

Dirty or corroded

Clean
Replace
Remove excess
Adjust magazine catch: turn catch clockwise to tighten and counter clockwise to loosen
Replace

Clean or see a qualified

gunsmith

Clean or replace

Troubleshooting

stuck inside

Cleaning materials

Carbon or dirt in

Bolt Fails to Lock After Last Round	Dirty or corrod bolt catch
	Faulty magazine
	Short recoil

**Short Recoil** 

stuck inside carrier key	have firearms checked by a qualified gunsmith
Worn gas rings	Replace gas rings
Underpressured ammunition	Use 5.56NATO spec. ammunition

Clean out if possible or

Clean carrier key or key area of gas tube

# carrier key or on outside of gas tube roded

See Above

## Please Practice Safe Firearms Handling

This Owner's Manual should always accompany this firearm. When you lend, give, or sell this firearm, be sure this manual goes with it.



**IMPORTANT NOTICE:** Any modifications of any kind, including any addition or removal of components or disassembly beyond what is detailed in the owner's manual could completely **VOID YOUR WARRANTY!** 

#### **IMPORTANT NOTICES**

To avoid possible function issues, please confirm that you are using 5.56NATO Spec ammunition as opposed to .223Rem. The two are quite different in load pressures, and the EXP is designed and tuned to operate at the 5.56NATO Spec pressure levels. Many EXP owners find after well broken in (200-300 rounds) that many types of .223Rem will function with occasional failures to lock open upon reaching empty magazine, but we offer no assurance of this. If an EXP owner is experiencing function issues, the very first thing to confirm is that the ammunition being used is of sufficient pressure. Some affordable priced examples are Federal XM193, Independence 5.56NATO, PMC X-Tac 5.56.

The Compensator on the EXP is not intended to be end user serviceable, requiring special tools and procedures for mounting and removal. The factory compensator is part of the overall tuning that allows the unique EXP system to operate correctly. Attempts to replace the compensator with alternate components can result in serious damage to your EXP, incorrect function, and such attempts of disassembly beyond that described in the Owner's Manual can void the Factory Warranty.

The EXP is not designed to be suitable for use with a suppressor. It does not contain an adjustable gas system, and possesses a lightweight bolt carrier group. As such, attempting to use a suppressor will result in extreme bolt carrier group velocities that can catastrophically damage the firearm. Attempting to mount and use a suppressor on the EXP is strictly prohibited.

# **Limited One Year Warranty**

New Frontier Armory products are warranted to be free from defects in materials and workmanship for one year and ten days from the date of purchase.

To initiate a warranty request, contact New Frontier Armory at www.newfrontierarmory.com/warranty

All warranty claims should state the model and serial number of the gun, a description of the difficulty experienced, and the date of purchase. It is recommended that shipment be insured by the owner, since New Frontier Armory will not accept responsibility for loss or damage in transit. Shipping and insurance costs for return of firearm or components to owner will be paid by New Frontier Armory if the work being completed is covered under this warranty.