

Table of Contents

Safety Rules	. 1
Safety Selector	. 1
Loading the Magazine	. 2
Loading Magazine into Rifle	. 2
Chambering a Round	. 3
Chambering a Round (with Carrier in Battery)	. 3
Unloading the Rifle	. 4
Use of Bolt Catch	. 4
Locking Bolt Carrier to Rear	. 5
Forward Assist	. 5
Disassembly of Rifle	6
Removing Bolt and Carrier	6
Removing the Charging Handle	. 7
Gas Settings	. 7
Disassembly and Adjustment of Piston 7	'-8
Schematics 9-	10
Cleaning Instructions10-	11
Common Issue Resolutions	15
Warranty and Registration	16



Disclaimers:

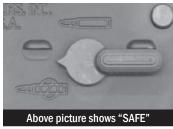
WARNING: CORE Rifle Systems will not be responsible or liable, directly or indirectly, in any way for any loss, damage, injury or death incurred by its firearms. User assumes full responsibility when using any CORE Rifle System Rifle.

WARNING: Misuse or carelessness may result in serious injury and/or death to the user or bystanders. CORE Rifle Systems, can and will in no way be responsible for misuse or careless use by the user of its firearms.

WARNING: Chambering, firing, or attempting to chamber or fire a round not intended for use in this firearm is extremely dangerous and can result in serious injury and/or death to the user or bystanders. Use only new ammunition, marked with the same markings as the firearm that it is intended to be used in.

Safety Rules:

- 1. ALWAYS keep the gun pointed in a safe direction.
- 2. ALWAYS keep your finger off the trigger until ready to shoot.
- 3. ALWAYS keep the gun unloaded until ready to use.
- 4. ALWAYS assume every firearm is loaded.
- 5. ALWAYS know your target and what is behind it.
- 6. ALWAYS keep firearms and ammunition out of the reach of children.





Safety Selector:

Proper use of the safety selector is crucial to the safe use of the firearm. The safety selector is located on the left side of the gun, just above the pistol grip. To ensure the firearm is on "SAFE" the pointer on the safety selector will be pointed at the insignia showing a bullet with a circle and a line through it. To disengage the safety selector to allow the gun to fire, rotate the safety selector lever to the insignia with a bullet without a line through it. This will allow the gun to fire.

WARNING:

NEVER take the firearm off "SAFE" until you are ready to shoot.

Loading the Magazine

To load the magazine, insert ammunition one cartridge at a time vertically into the magazine. Ensure that each cartridge seats to the rear of the magazine, as cartridges that are not correctly seated may cause cartridges thereafter not to be depressed into the magazine. Once the magazine has been fully loaded, it will not readily allow more rounds to be inserted. Do not attempt to over load the magazine as this may bend/dent cartridges and pose a hazard to the user when attempting to fire the damaged cartridge.



Loading the Rifle

To load the rifle, firmly insert a loaded magazine, with the bullets pointed towards the front of the firearm, into the magazine well located directly in front of the trigger. Make sure the magazine is completely seated by striking the bottom of the magazine with an upward motion with the palm of the hand.



Load magazine firmly into magazine well.

Chambering a Round:

(With the Bolt Carrier Locked in the Rear Position)

Once a loaded magazine has been inserted into the magazine well, depress the bolt catch located on the left side of the firearm. This will allow the bolt carrier to move forward into battery thereby loading the firearm.



Chambering a Round:

(With the Bolt Carrier in Battery)

Once a loaded magazine has been inserted into the magazine well, use the charging handle located on the upper receiver to charge the firearm. To do this, grasp the charging handle with two fingers, one on each side of the upper, and pull charging handle to the rear. Once the handle has reached its full rearward travel, release, allowing the charging handle and bolt carrier to move back forward into battery, and thereby load the firearm.



Unloading the Rifle:

Place the firearm on "SAFE". Use the magazine release button located on the right side of the firearm to release the magazine. Once the magazine as been removed, pull the charging handle to the rear of the firearm, bringing the charging handle to its full distance back. This will allow the cartridge chambered in the firearm to be extracted and ejected safely from the firearm.





Use of Bolt Catch:

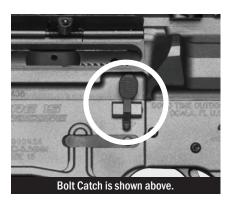
When the magazine has been emptied, the bolt will lock in the rearward position. This will be done automatically by the bolt catch to visually show the user that the firearm is out of ammunition. To reload the firearm, ensure the firearm is on "SAFE". Then remove the empty magazine by utilizing the magazine release button on the right side of the gun in front of the



trigger. Once the empty magazine has been removed, a loaded magazine can be inserted into the magazine well. With the full magazine firmly seated in the magazine well, push the bolt catch lever to release the bolt carrier, thereby chambering a round.

Locking Bolt Carrier to Rear:

The bolt carrier will lock to the rear position once the magazine is empty. This allows the user to visually verify that the rifle is indeed out of ammunition. In order to lock the bolt back without a magazine inserted, it is necessary to manipulate the bolt catch lever away from the upper while holding the bolt in the rearward position with the charging handle. At that point gently ease the charging handle forward ensuring the bolt caught on the catch.





Forward Assist:

If the bolt carrier fails to travel all the way forward, the Forward Assist can be used to seat the bolt completely. To use this feature, ensure that the rifle is on "SAFE", and remains pointed in a safe direction. Then swiftly strike the Forward Assist in a forward motion with the palm of the hand to push the carrier forward and completely into battery.



Disassembly of the Rifle:

To disassemble the rifle ensure that it is on "SAFE" and visually check to make sure the firearm is unloaded by pulling the charging handle to the rear of the firearm and visually inspecting the chamber to make sure the



rifle is cleared of any cartridges. Allow the bolt carrier and charging handle to return to the forward position.

Push the takedown pin to the right allowing the upper receiver to pivot down exposing the trigger group and the back of the bolt carrier. To separate the upper receiver from the lower receiver, push the pivot pin, located in the front of the lower receiver, to the right. This will allow the upper receiver to be removed from the lower receiver.





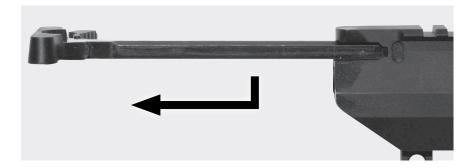
Removing Bolt and Carrier:

With the gun disassembled, pull the charging handle towards the rear just enough to unlock the charging handle lock. Grasp the rear of the bolt carrier and pull it towards the rear of the receiver. The bolt carrier should slide easily out the rear of the receiver.



Removing the Charging Handle:

Once the bolt and bolt carrier has been removed from the firearm, pull the charging handle to the rear of the receiver, once rear motion has stopped, allow the charging handle to drop down into the receiver, then remove it from the receiver.



Piston Assembly Gas Settings:

(Applies to Gas Piston Rifles Only)

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 9 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 9 o'clock, or "Removal", positions unlocks the gas plug from the gas block. This position will allow you to remove the gas plug and drive

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. A suppressor increases the amount of back pressure from the round exiting the barrel. This increased pressure causes an increase in the rate of fire. By turning the gas plug to the 1 o'clock position, the increased amount of back pressure 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 the gases are vented out 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 by 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 .22LR conversion kit by removing the drive rod and turning the gas plug to the off position.

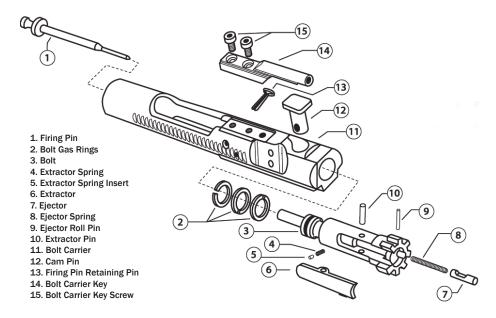
Disassembly of Piston:

To disassemble the piston system for cleaning, ensure the gun is on "SAFE" and visually inspect to make sure the chamber is empty. Rotate the detent knob to the 9 o'clock position, and pull the piston and rod towards the end of the muzzle. This will remove the piston and rod from the gun.

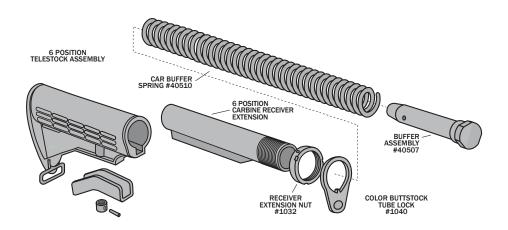
WARNING: DO NOT remove the gas block from the barrel as the gas block is spaced, lined up, and torqued to precise tolerances. Removing and incorrectly reinstalling the gas block can cause serious damage to the rifle, and/or injury and in serious circumstances, death, to the user and/or bystanders.



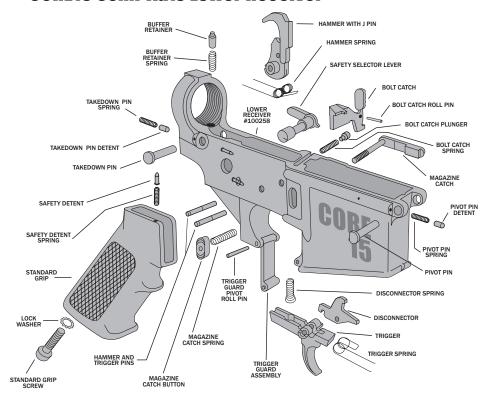
Upper Receiver, Bolt & Bolt Assembly:



Buttstock Assembly



CORE15 Semi-Auto Lower Receiver



PRIOR TO CLEANING BE SURE THE FIREARM IS UNLOADED!

Cleaning Instructions:

It is recommended to use Breach-to-Muzzle® gun cleaning products by Otis Technology for proper care and maintenance of CORE Rifles.

1. Run a patch with solvent: Using a patch, create the appropriate sized swab. Add a couple of drops of solvent and pull the patch from the breech to the muzzle.





- 2. Run the Brush: Run the appropriate sized brush from the breech to the muzzle to loosen and remove copper and lead deposits or other fouling.
- 3. Run a dry patch: Use a clean, dry patch and pull through from the breech to the muzzle to remove any fouling loosened by the brush.
- 4. Repeat as often as is necessary until clean.

For more information on Breech-to-Muzzle® cleaning with Otis Technology visit ww.otistec.com





Cleaning Upper Receiver, Bolt Carrier, & Charging Handle:

Wipe all areas that come in contact with the bolt carrier or charging handle down with a rag moistened with oil. This will clean and lubricate the receiver at one time. Use a small brush to brush away any powder residue that may be built up around the feed ramps of the barrel to ensure smooth feeding of ammunition from the magazine into the chamber. Wipe the bolt carrier down with an oil moistened rag to remove powder residue that has built up on it. Drip a drop of oil onto the back side of the firing pin to lubricate the movement of the firing pin and cam pin in the bolt carrier.

Cleaning the Lower Receiver:

Use a small brush or gun cleaning rag to remove residue from inside the lower receiver. Apply a small drop of oil to trigger and hammer springs for smooth operation of both. Wipe out magazine well with an oil moistened rag to remove powder deposits

Common Issue Resolutions:

Typical Wear

It is perfectly normal for you rifle to have wear in certain places. The most frequently asked about places are the cam pin wearing on the upper receiver, the charging handle wearing on itself and the charging handle wearing the lower receiver. All of these are perfectly normal and would not require you to send the firearm in for service.





Steel Case Ammo

Steel case ammo is not necessarily good for any gas impingement rifle. Tula and Wolf (the two foremost manufacturers of steel case ammo) are produced in countries with rifle industries predominantly made up of gas piston systems such as the AK-47. These don't cycle the gas all the way back through the rifle thereby keeping the dirty gas that is associated with steel case ammo out of the chamber. The dirty powder will eventually erode the gas rings causing the bolt to lose the seal and permanently taking your rifle out of action until new rings are purchased and installed. This is why our rifles don't function as flawlessly as usual with steel ammo.

There is also a lacquer coating on steel cases that will gum up in hot chamber that will cause even more issues. Yes, you can cycle steel ammo through our rifles but you must keep in mind that this ammo is very untrustworthy and dirty. This can cause you some cycling issues because we do hold tighter tolerances for our systems. It may require more frequent and thorough cleaning of the chamber, gas system, and BCG. I would recommend, not just with our rifles, but any firearm, to use a higher quality ammo.

If you are looking for high quality ammunition for a reasonable price, we recommend our Core Ordnance Ammunition.

Safety Won't Engage

While there is the possibility of a burr (a rough edge or ridge) on the safety detent keeping your safety from engaging, most of the time the issue is that the hammer isn't engaged. If the rifle has been dry fired and the hammer is disengaged, that will cause the firearm not to go back on safe. Simply pull the charging handle and that should reset the hammer to be able to move the safety selector.

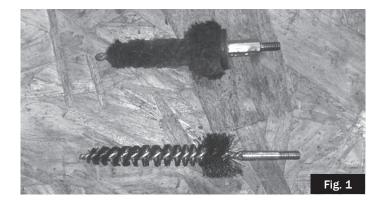
Case Stuck in Chamber

Contrary to popular belief, your chamber needs to be cleaned before use. Our rifle chambers are match-grade which means they are tighter and are less forgiving with debris and dirt.

When rifles are shipped out of our factory we have a protective coating in the chamber that protects against the possible long-term storage and debris from shipping. This needs to be scrubbed and cleaned out or it will act as a suction/wedge that will prevent the rounds from extracting.

The recommended tools for this job are a chamber brush and chamber mop (Fig.1). We recommend the Otis Cleaning Kits, they come with everything you need for cleaning and maintaining your firearm. The chamber should be flushed after the brushing and coated with a quality gun oil.

If you have attempted to fire the rifle and an empty case is stuck in the chamber there are two ways to resolve this depending on the situation.



Case stuck in chamber (cont)

- If the bolt has ripped the lip of the casing off (Fig.2) you will first need
 to get the bolt locked to the rear. This is done by putting your thumb
 on left side of receiver on the bottom of the bolt catch, then pull the
 charging handle while maintaining pressure on the bolt catch. Once the
 bolt is locked back insert a cleaning rod down the bore to remove the
 casing.
- 2. If the bolt is still latched onto the round then what's known as "mortaring" will need to be done. ALL REGULAR SAFETY PRECAUTIONS SHOULD BE FOLLOWED!
 - 1. Close the butt-stock fully
 - 2. Point the muzzle to the sky
 - 3. While holding the handguard/forearm and pull down on the charging handle and pop the butt-stock on the ground with increasing force to dislodge the round.

If you are confident the chamber has been thoroughly cleaned and you are still experiencing this malfunction then you may have a rough chamber that needs to be repaired.

Please visit www.coreriflesystems.com and fill out a Warranty Claim Form for repair. A Core Rifle Systems representative will provide assistance.



Not picking up the next round (short-stroking)

If your rifle is ejecting the spent round that was just fired (or not ejecting and can be pulled out) but is failing to pick up the next round, crushing your round halfway up the feed ramps, also known as stove-piping, there are a few possible at home fixes.

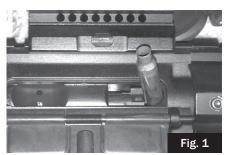
The first thing to check would be your gas block which would be the two pictures below labelled gas block (fig. 2 and 3) for reference.

To resolve this issue, simply push the gas block back up to the shoulder cut into the barrel, keeping the gas block as straight up as possible, and tighten down the two set screws underneath. We recommend some Blue LocTite to help keep the screws from vibrating back out again.

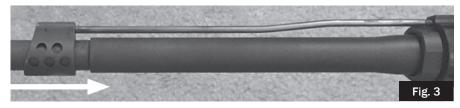
If your gas block seems to be in the right place and your rifle only experiences this malfunction every few rounds then it may be that the gas rings have aligned (Fig. 4).

Normally the manifestation of this malfunction would be a stovepipe or the round getting crushed on the feed ramps (Fig. 1).

This is something that should be checked with every rifle maintenance session and is easy to fix by un-aligning the rings.









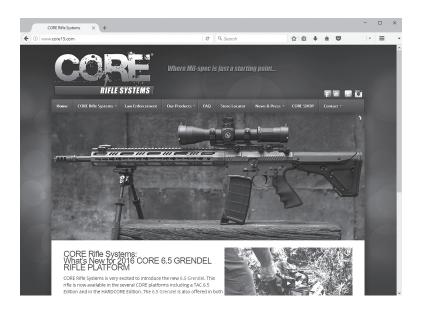
CORE Rifle Systems Warranty:

The Product you have just purchased has the simplest, most plainly written warranty you will ever read. There is no fine print. This CORE Rifle Systems product has been manufactured and assembled with painstaking care and precision by proud U.S. Veterans and Craftsman, trained by the best there is. If anything is not as it should be, accuracy included, if anything malfunctions, simply contact one of our professionals and we will work to make it right. If you're the 5th owner and the rifle has seen 40k+ rounds, it simply...doesn't...matter. We stand behind our rifles and we take care of our customers. We will cover anything other than normal wear & tear, abuse or neglect.

We stand behind our products and we take care of our customers. That is our promise and your assurance."

Warranty Service and Product Registration:

To take part in our amazing warranty and to register your product, please visit CORERIFLESYSTEMS.COM. Should you need to file a claim <u>PLEASE</u> <u>DO NOT CALL</u>, simply visit our website, create a ticket and we will work to resolve your issue with as much expediency as possible.



Notes:



CORE RIFLE SYSTEMS

4600 W. Highway 326 • Ocala, Florida 34482 Telephone: (352) 401-9070 www.coreriflesystems.com



For more information about the CORE Rifle Systems family of products, visit your local gun dealer, or visit our website at www.coreriflesystems.com