CVA PARAMOUNT™ INSTRUCTION MANUAL

1. THE PARAMOUNT™ CONCEPT
2. GENERAL WARNINGS
3. GENERAL FIREARMS SAFETY RULES
4. MUZZLELOADING SPECIFIC SAFETY RULES
5. BEFORE LOADING AND FIRING THE PARAMOUNT™
6. FEATURES OF THE PARAMOUNT™
7. ITEMS NEEDED TO LOAD AND FIRE THE PARAMOUNT™
8. MOUNTING A SCOPE ON THE PARAMOUNT™
9. ACCESSORIES INCLUDED WITH THE PARAMOUNT™
10. VARIFLAME™ ADAPTERS AND HOW TO PRIME THEM
11. ADJUSTING THE TRIGGER WEIGHT-OF-PULL OF THE PARAMOUNT™
12. ADJUSTING THE STOCK OF THE PARAMOUNT™
13. RECOMMENDED LOADS FOR THE PARAMOUNT™
14. PARAMOUNT™ BALLISTICS
15. TIPS FOR OPTIMAL PERFORMANCE WITH THE PARAMOUNT™
16. LOADING AND FIRING THE PARAMOUNT™
17. UNLOADING THE PARAMOUNT™
18. CLEANING AND MAINTAINING THE PARAMOUNT™
19. REPAIR AND SERVICE
20. LIMITED LIFETIME WARRANTY
21. VOLUNTARY RECALL INFORMATION
1. THE PARAMOUNT™ CONCEPT
In designing the CVA Paramount™, our goal was to create a muzzleloader with reliable game taking performance capability out to 300 yards and beyond. To develop such a gun, several essential requirements had to be met – exceptional accuracy potential, increased and reliably consistent muzzle velocities, minimal drop at longer ranges, and increased down range energy delivery.

Accomplishing all of this required the development of not just a rifle, but rather an entire “shooting system” composed of various innovative parts. The essential components of this system proved to be a.) a patent-pending, sealing bolt mechanism that completely seals the breech plug to avoid pressure loss, b.) an internal chassis stock that adequately supports and free-floats c.) the premium quality Bergara™ .45 caliber barrel with d.) a rifling twist of 1:22, and specifically calibrated to match the capabilities of e.) an elongated, high BC, 280 grain, .45 caliber, PowerBelt ELR bullet driven by f.) 140 grains by-volume (98 grains by-weight) or 150 grains by-volume (105 grains by-weight) of Blackhorn™ propellant, and ignited by g.) the Variflame™ large rifle primer ignition, which sends the bullet down the barrel at dependably consistent velocities in excess of 2250 FPS. Once all of these individual innovations were perfected and synergized with each other, we had the ground-breaking muzzleloader that we'd set out to build.

Thank you for purchasing the CVA Paramount™ muzzleloader. If you read and precisely follow the instructions in this booklet, we are confident that you will be able to achieve the same exceptional long-range performance that we have in our testing.

2. GENERAL WARNINGS
This manual is furnished to assist you in learning to properly load, fire, and maintain your CVA Paramount™ rifle. Before handling and loading this rifle, please be sure to read this booklet in its entirety. No amount of engineering, precision manufacturing, or safety inspections can replace the common sense and safe gun handling practices for which you, as a gun owner, are solely responsible. Pay special attention to the warnings and cautions presented herein. Please be a responsible shooter and help to promote firearm safety by making yourself a safe example to others. If necessary, seek safety training from your local firearms dealer, hunter education instructor, or an experienced friend.

If, after reading the instructions, warnings, and risks detailed in this manual, you are still not ready or willing to accept the responsibility involved in handling and shooting a firearm safely, please return the unused gun to the place of purchase.

⚠️ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For other information go to www.P65Warnings.ca.gov
3. GENERAL FIREARMS SAFETY RULES

1. Read the Owner’s Manual thoroughly and carefully. Become familiar with all of the features and functions of the firearm. Heed the safety warnings and follow the directions concerning the safe loading, unloading, and care of the gun.
2. Always keep the muzzle pointed in a safe direction, even when the gun is believed to be unloaded.
3. Keep fingers away from the trigger, and the safety in the “safe” position, until ready to fire the gun.
4. Be sure of the target and what is beyond it before aiming or firing.
5. Never trust the mechanical safety of any firearm. Mechanical devices can and do fail.
6. All firearms should remain unloaded until ready to be fired. Unload the gun whenever crossing difficult terrain, climbing fences, climbing into tree stands, etc.
7. ALWAYS use eye protection when loading, shooting, or cleaning a firearm.
8. Check that the barrel is free from any obstruction before loading and firing.
9. Handle all firearms as if they are loaded.
10. Store all firearms fully cleaned and unloaded in a secure, locked area separate from all ammunition and/or components of ammunition.
11. Do not consume alcohol or drugs before or while loading, shooting, or hunting with a firearm.
12. Do not alter the firearm. Have the gun serviced regularly by a qualified gunsmith or factory service center. Check all vital functions before each use.
13. Do not lean a firearm against a wall, a tree, a vehicle, or any other surface. A firearm that slides and falls may accidentally fire, potentially causing damage, injury, or death.
14. Do not transport a loaded firearm in a vehicle.
15. Do not load a firearm inside a house, tent, camper, vehicle, etc., or take a loaded firearm into such structures.
16. Do not allow children, or any inexperienced persons, unattended access to a firearm.
17. Do not attempt to modify any parts of the gun. Doing so may cause an accidental discharge and/or potential damage to the gun and/or injury or death to the shooter and/or by-standers. Also, unauthorized alterations may void the manufacturers’ warranty.

4. MUZZLELOADING SPECIFIC SAFETY RULES

CAREFULLY READ THIS SECTION, AS THESE SAFETY CONCERNS ARE APPLICABLE SPECIFICALLY TO MUZZLELOADERS. If you have questions, doubts, or concerns, please call CVA Customer Service at 770-449-4687.

1. Never smoke when shooting or handling a muzzleloader or related equipment. Ashes and/or loose sparks may cause powder or caps/primers to ignite, resulting in personal injury or death.
2. Always wear eye protection. Flying debris from the breech area and muzzle
may occur.

3. Never pour powder into a muzzleloader directly from a powder can, flask, horn, or any other large volume, enclosed container, as hot embers or sparks in the barrel can cause a flash that, in turn, may cause the container to explode.

4. All powder storage containers and primers/caps should be kept well away from the shooting area. Sparks from shooting could cause accidental ignition of these materials. Follow manufacturer’s instructions regarding long-term storage of these products.

5. Use only black powder or an approved black powder substitute of the appropriate granulation in your muzzleloading firearms. If you have any questions regarding approved black powder substitutes call, write, or e-mail CVA Customer Service.

6. NEVER USE MODERN SMOKELESS POWDER IN ANY MUZZLELOADER. The use of any amount of smokeless powder in a muzzleloader, by itself, or in mixture with blackpowder or approved substitutes, can create dangerously high pressures which may result in severe injury or death to the shooter and/or bystanders.

7. Always check to make sure the muzzleloader is in good working order before use. Test the hammer (if applicable), trigger, and breech carefully prior to loading.

8. Use only the recommended loading data published specifically for the specific muzzleloader in use. Other models of muzzleloaders may have different powder charge and/or bullet requirements and limitations. Improper loading or overloading of a muzzleloader can result in severe injury or death.

9. Never prime or cap a muzzleloader until ready to fire. The primer/cap should always be removed when walking, climbing trees or fences, transferring the gun from one person to another, leaving the gun unattended, etc.

10. Never give, or accept from anyone else, a loaded muzzleloader. Only persons who loaded or witnessed the loading of the muzzleloader should fire it. This practice will help avoid dangerous mistake of double-loading, which may result in severe injury or death upon firing.

11. Never store a loaded muzzleloader. The projectile, propellant, and primer/cap should be always be removed and the gun cleaned prior to storage.

12. Never load a muzzleloader without first making sure the barrel is unloaded and unobstructed.

13. Use extreme caution when hunting from a tree stand. The accidental dropping of a muzzleloader may cause a discharge, which could result in severe injury or death. Be sure the primer is removed from the muzzleloader before raising or lowering to or from a tree stand.

14. Always use proper cleaning procedures. Firing of an improperly maintained or corroded muzzleloader may lead to unsafe pressure conditions which could cause the barrel to rupture, causing severe injury or death to the shooter and/or bystanders.

15. Always keep the barrel pointed in a safe direction when loading. Never allow the barrel to point at any part of your body while loading.

16. Never attempt to shoot an obstruction from the barrel of a muzzleloader. ANY obstruction (mud, snow, cleaning patch, another bullet, ramrod, ramrod
attachment, etc.), no matter how light in weight, will cause the barrel to explode and may cause severe injury or death to the shooter and/or bystanders.

5. BEFORE LOADING AND FIRING THE PARAMOUNT™
Familiarize yourself with the rifle and its functions. Learn how it works and handles before you attempt to load it. Below are the steps you should follow:

1. Read this entire manual carefully and completely paying close attention to the warnings and safety information.
2. The rifle comes coated in a heavy oil and with the bolt detached. Before installing the bolt, clean the outside of the rifle and the interior of the bore as described in the maintenance section of this manual. Be sure that there is nothing loaded into or obstructing the bore and that there is no primer in the breech plug.
3. Insert the bolt into the action as described in the maintenance section of this manual.
4. Check the trigger and safety for proper function. Dry fire the rifle several times, checking the function of the firing pin and safety each time.
5. After familiarizing yourself with the rifle, you may load and fire the rifle in a safe place.
6. If you have any questions or concerns, contact CVA Customer Service before proceeding.

6. FEATURES OF THE PARAMOUNT™

7. ITEMS NEEDED TO LOAD THE PARAMOUNT™ FOR OPTIMAL PERFORMANCE

1. **Variflame™ Primer Adapters**—These adapters, and their associated priming tools, are included with your rifle. The Variflame™ is a stainless-steel adapter...
that closely resembles the common 209 shotshell primer. The adapter, however, is made to carry a replaceable large rifle primer. There is another section later in this manual that describes how to insert and replace the large rifle primers. In this manual the Variflame™ Adapter is often referred to as the “primer.”

2. **Blackhorn 209® Propellant** – All of the common muzzleloader propellants have been tested in the Paramount™ rifle. Although several performed well, it was determined that the Blackhorn 209® by Western Powders gave the highest muzzle velocities for comparable charge volumes, as well as the most consistent long-range accuracy.

3. **PowerBelt® ELR™ Bullets** – A sample pack of these bullets is included with the rifle. The .45 caliber projectile is designed specifically for the Paramount™ rifle. At 280 grains, this elongated bullet has a very high ballistic coefficient as compared to most other muzzleloading projectiles, and thus, minimizes long-range drop and maximizes long-range energy.

8. **MOUNTING A SCOPE ON THE PARAMOUNT™**

The Paramount™ is precision drilled and tapped for scope mounting and will accept any one or two-piece base made for the Remington 700 Short Action rifle. This common base set is available almost anywhere that quality firearms are sold. For the best long-range performance, we recommend using a one piece rail made to Picatinny specs with a 20MOA slant. If such a rail mount is not available in your area, they can be ordered at a reasonable price through CVA Customer Service or at CVA.com.

Equally important is a set of quality rings. Make sure the rings selected are heavy duty and fit the chosen base properly. There are many manufacturers of scope bases and rings. Each manufacturer has its own specifications for installing the parts. Follow the manufacturer’s instructions when installing, including the recommended torque settings for the screws (if provided).

9. **ACCESSORIES INCLUDED WITH THE PARAMOUNT™**

1. **Collapsible Field Loading Ramrod** – This ramrod is for field reloading only. Deploy by holding onto the Palmsaver™ handle and letting the rest of the ramrod drop. The shock cord will pull the sections together into a rod that is stiff and strong enough to seat a bullet. To return the ramrod to the pouch, simply pull the sections apart and fold it.

2. **Ramrod Holster** – For carrying the collapsible ramrod in the field, the holster can be attached to a belt, pack frame, shoulder straps, etc.

3. **Solid Aluminum Cleaning and Range Loading Rod** – For cleaning and range loading.

4. **Accessories Pouch** – For storing the various Paramount™ accessories.

5. **Breech Plug Wrench** – For breech plug removal and installation. Follow the instructions in Section 11.

6. **10 Variflame™ Adapters**

7. **Variflame™ Priming Tools** – See Section 14 for instructions regarding priming the adapters.
8. **Rifle Priming Tool** – For inserting the Variflame™ Adapter into the primer well of the breech plug.

9. **Brass Cleaning Jag for Range Rod** – Holds patches on end of rod for cleaning.

10. **Brass Loading Tip for Range Rod** – Prevents damage to bullet tip while loading.

11. **15 PowerBelt® ELR Bullets**

12. **Quake® CLAW® Sling**

13. **Blackhorn® Loading Tubes**

**10. VARIFLAME™ ADAPTERS AND HOW TO PRIME THEM**

Early testing of the Paramount™ revealed that the standard 209 shotshell primer could not withstand the increased pressures generated by the “super-magnum” Blackhorn® propellant loads being used. This resulting swelling of the 209 primers made them very difficult to remove after firing. The Variflame™ Adapters eliminated this problem. Also, the large rifle primers apparently provide a more complete and consistent burn of the powder column, and thus provide more consistent velocities -- a must for accurate long-range shooting. For these reasons, the Variflame™ system is an integral component of the Paramount™ and, therefore, we do not recommend that shooters use a 209 ignition system in the Paramount™.

An adapter priming tool is included with your rifle. This tool provides a very simple way to install the large rifle primers into the Variflame™ Adapters. Each Adapter can be used over and over again. If you are a reloader of standard rifle or pistol cartridges, you can also use your reloading press for this process. A shell holder made for the .22 Hornet will work just fine.

1. **ALWAYS WEAR EYE PROTECTION DURING THIS STEP**.

2. If the Variflame™ Adapter has been previously primed and fired, stand it up in the base tool and use the provided punch to remove the used primer.

⚠️ **WARNING:** Attempting to remove an unfired primer in this manner could result in the primer detonating. This could cause injury to eyes from debris and ears from noise.
3. Turn the Variflame™ adapter over in the base tool and cover with the priming guide. Drop a large rifle primer into the hole, open side down, and insert the priming punch tool.

![Image of Variflame adapter and primer](image1)

4. GENTLY tap the priming punch tool with a plastic mallet until the punch contacts the sleeve. The Variflame™ Adapter is now primed and ready for use.

5. There are several brands of standard and magnum large rifle primers and all should work acceptably well, but standard primers seem to have a slight performance edge over magnum primers. The important thing is to consistently use the same brand and type of primer each time. During final testing we used Federal® brand large rifle primers.

11. **ADJUSTING THE TRIGGER WEIGHT-OF-PULL OF THE PARAMOUNT™**

The Paramount™ trigger is adjustable for the weight-of-pull. At the factory the pull weight is pre-set to approximately 3 pounds. The total range of adjustment is approximately 2- 4 pounds. To adjust the trigger, use a 5/32 inch or 4mm hex wrench to remove the 2 stock retaining screws from the trigger guard assembly. Remove the barrel and receiver from the stock and follow these steps:

1. Using a properly fitting hex wrench, turn the adjustment screw clockwise to raise the trigger pull weight or counter clockwise to reduce the trigger pull weight. Make small adjustments and test frequently, preferably with a trigger pull gage.

2. When satisfied with the trigger pull weight, operate the bolt vigorously and check for any failures. The cocking indicator should always be visible when the bolt handle is lowered. If the firing pin falls when the bolt handle is lowered contact CVA Customer Service immediately.

3. Place the barrel and receiver back into the stock and tighten the retaining screws to 50 to 55 inch pounds.

![Image of Paramount trigger](image2)
12. ADJUSTING THE STOCK OF THE PARAMOUNT™
Most models of the Paramount™ feature a stock that is fully adjustable to fit the shooter.

1. To adjust the cheek piece, loosen the screw on the right side of the buttstock. Raise or lower the cheek piece for a proper and comfortable cheek weld, then retighten the screw firmly by hand.

2. To adjust the length of pull, lightly lubricate a #2 Phillips screwdriver and insert it into the holes in the recoil pad to loosen the retaining screws about 3 or 4 turns. The butt spacers interlock with each other. Manipulate the spacers to unlock them. Pivot the top of a spacer outward to the right side of the top retention screw then pull upward from the bottom retention screw to remove. Add or remove spacers as needed for a comfortable fit. Tighten the retention screws hand tight. Do not over-tighten the retention screws.

13. RECOMMENDED LOADS FOR THE PARAMOUNT™
During the development of the Paramount™ numerous projectiles, projectile weights, propellants, volumes of propellants, ignition systems, etc. were tested. The PowerBelt ELR bullet was developed specifically for the Paramount™ after the testing of existing .45 caliber projectiles did not produce acceptable results. In regard to Blackhorn™ 209 powder, by-volume it produced higher and more consistent velocities than all other tested propellants in the same volumes.

Regarding the specific 140 by-volume (98 grains by-weight) or 150 by-volume (105 grains by-weight) recommend charges of Blackhorn™ 209, testing showed these loads would provide the best combination of accuracy, trajectory and manageable recoil. 140 grains by volume will achieve the required 2250 FPS muzzle velocity. Increasing the powder charge to 150 grains by-volume will increase the velocity and flatten the trajectory slightly, but at the cost of increased recoil. We do not recommend charges less than 140 grains by-volume or more than 150 grains by volume, as overall performance will be compromised with such loads.

Certainly, other projectiles and propellants may be developed in the future that will work as well as these recommended loads. And, there may possibly be combinations that were not tested during the development of the Paramount™ that could provide similarly impressive results. However, for now, employing
the recommended loads is the best way to immediately realize the full performance capability of the Paramount™ muzzleloader.

14. PARAMOUNT™ BALLISTICS

While ballistic performance will vary with temperature, elevation, humidity, etc., the chart below will illustrate the approximate ballistic performance of the Paramount™ rifle when using the recommended loads.

<table>
<thead>
<tr>
<th>140gr BLACKHORN 209</th>
<th>150gr BLACKHORN 209</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 yds</td>
<td>100 yds</td>
</tr>
<tr>
<td>150 yds</td>
<td>150 yds</td>
</tr>
<tr>
<td>200 yds</td>
<td>200 yds</td>
</tr>
<tr>
<td>250 yds</td>
<td>250 yds</td>
</tr>
<tr>
<td>300 yds</td>
<td>300 yds</td>
</tr>
<tr>
<td>350 yds</td>
<td>350 yds</td>
</tr>
<tr>
<td>400 yds</td>
<td>400 yds</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>-5</td>
<td>-5</td>
</tr>
<tr>
<td>-16</td>
<td>-14</td>
</tr>
<tr>
<td>-29</td>
<td>-26</td>
</tr>
<tr>
<td>-48</td>
<td>-44</td>
</tr>
</tbody>
</table>

15. TIPS FOR OPTIMAL PERFORMANCE WITH THE PARAMOUNT™

Remember that shot-to-shot consistency in every loading step is the key to shooting tight long-range groups with the Paramount™

- Use one of the recommend loads
- Use standard large rifle primers rather than magnum large rifle primers in the Variflame™
- Use a powder scale to measure the propellant by-weight – this provides a more precise measurement than does measuring by-volume
- As best as possible, seat the bullet onto the powder with the same force each time – usually one or two “clicks” or “pops” can be felt as the propellant charge fully compresses
- Use the included Loading Tip for the Range Rod when seating bullets when shooting on the range to avoid deformation of the bullet tip
- Run one dry patch between each shot when range shooting for groups (not necessary for follow-up shots in the field)
- Purchase a top-quality Picatinny-style rail mount (with 20 MOA) and rings for your scope
- Purchase a high-quality scope, preferably with a max power of at least 18X, and with easily repeatable elevation adjustment
- Always use a range finder when attempting longer range shots in the field, as precise knowledge of the distance to the target is essential for proper setting of scope elevation or manual hold over
- Fine tune the zero of the scope at 200 yards (3 inches high at 100), as this will produce approximately 15 inches of drop at 300 yards and 46 inches of drop at 400 yards (see ballistics chart below), while still allowing for a normal hold at 100 yards
16. LOADING AND FIRING THE PARAMOUNT™

**WARNING:** Do not load the rifle until you have read and understood this manual. Do not load until you are ready to begin shooting. Unload the rifle when you are finished shooting. ALWAYS make sure that the barrel is clean and unobstructed before loading. A muzzleloading projectile that is not fully seated on the powder charge is an obstruction. Firing an obstructed barrel can lead to a barrel rupture and possible injury or death to the shooter and/or bystanders.

**WARNING:** NEVER use modern smokeless powder in any muzzleloader! Use only blackpowder and approved blackpowder substitutes. Modern smokeless powders can cause your barrel to rupture, resulting in serious injury or death.

1. Rotate the safety lever rearward to the safe position. Open the bolt and pull it to the rear.
2. Be sure that the breech plug does not contain a primer. The breech plug can be viewed through the priming port when the bolt is in the unlocked and reward position.

3. Insert the Field Loading Ramrod into the barrel to be sure that the barrel is not loaded or obstructed. The Palmsaver™ handle on the loading rod should be approximately ½ inch from the muzzle in an empty barrel. If using the Range Ramrod with the Cleaning Jag attached, the rod should extend approximately 4 1/2 inches from the muzzle of an empty barrel.

4. Carefully measure the proper amount of approved muzzleloading propellant and pour it into the barrel. Propellant may be measured by volume or by weight. Measuring by weight is recommended for maximum precision. Be sure to consult volume/weight tables for correct weight to volume equivalents.
5. Press the bullet into the Bullet Guiding Muzzle. Using the Field Loading Rod, or the Range Rod with the provided loading tip attached, push the bullet into the bore until it seats firmly on the powder charge. Correct seating will usually be indicated by one to three “pops” or “clicks” that can be felt as the propellant compresses. Once no more are felt, the bullet is firmly seated. Note: It is important to apply, as closely as possible, the same amount of bullet to propellant seating pressure with each loading. Applying enough pressure to fully compress the powder charge (meaning: until the “clicks” or “pops” stop) is essential for maximum performance.

6. With the barrel pointing downrange or in an otherwise safe direction, and using the included priming tool, insert the primer into the breech plug and close the bolt. Be sure that the bolt handle is fully seated in the stock notch that accommodates it.

7. Being certain of the target and the safety of what potentially lies beyond, aim the rifle, rotate the safety lever forward to the fire position, and gently pull the trigger to fire.

8. To reload, repeat the steps above. For maximum shot-to-shot consistency on the range, it is recommended to run one patch through the barrel between shots (a dry patch with Blackhorn 209®, a slightly damp patch with other propellants). Use the solid aluminum range rod and the brass jag to do this step. This between shot cleaning is not necessary for follow up shots in the field.

17. UNLOADING THE PARAMOUNT
To unload the loaded muzzleloader, follow these steps:

1. Rotate the safety lever rearward to the safe position.
2. Open the bolt and remove the primer from the breech plug.
3. Press the bolt release on the left side of the receiver and pull the bolt to the rear, removing it from the receiver.
4. Use the provided breech plug wrench to unscrew the breech plug from the barrel.
5. Insert the range rod into the muzzle of the barrel and push the bullet and powder out the breech of the barrel.
6. Clean the rifle before storage.

18. CLEANING AND MAINTAINING THE PARAMOUNT™

WARNING: ALWAYS make sure that your Paramount™ is unloaded before leaving the range or the field. NEVER transport a loaded rifle in your vehicle or take a loaded rifle into the home. Before beginning your cleaning process, check again to be certain that the primer is out of the breech plug and there is no load in the barrel.

The Paramount™ has a stainless-steel barrel with a nitride treatment that makes it highly corrosion resistant. However, long term neglect can allow corrosion to form. Therefore, proper maintenance is needed to assure that the Paramount™ muzzleloader remains in top condition and accurate for years to come. The CVA
Barrel Blaster line of cleaning products is recommended. The solid aluminum range rod provided with your rifle should be used in the following steps. Please follow these steps to successfully maintain the rifle:

1. Rotate the safety lever rearward to the safe position.
2. Open the bolt and move it to the rear. Press the bolt stop, located on the left side of the receiver, and pull the bolt out of the receiver. Set aside.
3. Visually examine the breech plug to be sure that there is no primer installed.
4. Make sure that the barrel is empty by inserting the Range Rod with the jag installed into the muzzle and down the bore. There should be a metallic “clink” as the jag makes direct contact with the face of the breech plug. The Range Rod (with the supplied Cleaning Jag installed) should extend from the muzzle about 4 ½ inches. If the Range Rod extends more than 4 ½ inches beyond the muzzle there is a load or some kind of obstruction in the bore. If so, it should be carefully removed before proceeding.
5. Insert the Breech Plug Wrench through the rear of the receiver and engage the hex shaped end of the breech plug. The wrench is supplied with a short metal handle. Insert the handle through the cross-hole at the rear of the wrench and turn counter-clockwise to remove the breech plug. Note: A 7/16ths socket wrench with extension can be used instead of the supplied Breech Plug Wrench.
6. Thoroughly wet the breech plug with cleaning solvent and set aside.
7. Wet a patch with cleaning solvent and place it over the end of the cleaning jag. Push the patch through the bore using short scrubbing strokes until it exits the other end. Repeat this several times.
8. Place a dry patch over the end of the cleaning jag and push it through the bore. Repeat several times until the patches come out relatively clean.
9. If the patches are not showing a clean barrel, or if they are not pushing smoothly through the bore, run a bronze cleaning brush through the bore and repeat steps 5 & 6.
10. When clean, run a patch with a small amount of oil through the barrel.
11. Using a paper towel or rag and some cotton swabs, thoroughly clean the breech plug paying special attention to the primer pocket and the recess in the front of the plug. Hold the breech plug towards a light and be certain that the flash hole in the center of the plug is clear. If necessary, pass a small wire to clear any debris.
12. Coat the breech plug threads with breech plug grease or anti-seize and re-install into the rear of the barrel. Tighten with light pressure only.
13. Usually the bolt only requires light cleaning in the bolt face with an oily swab. Occasionally you may want to disassemble the bolt for a thorough cleaning. To do so,

   o Grasp the bolt shroud in one hand, the bolt body in the other and twist the shroud clockwise approximately ¼ turn. The bolt shroud, with the attached firing pin assembly, will “pop” out of the bolt body.
Using a 9/16 inch or a 14mm wrench, or a crescent wrench, unscrew the breech face from the bolt body.

Reassemble in reverse order. When installing the bolt shroud and firing pin back into the bolt body, align the small tab on the shroud with the corresponding groove in the bolt body. Press the bolt shroud, compressing the firing pin spring, until it can be rotated back into position. When the firing pin clicks into a small detent, just before the angled cut in the bolt, it is correct.

14. Wipe the exterior parts of the rifle with an oily rag until clean. Lubricate points indicated below.

15. If you have removed the stock while cleaning your rifle, tighten the retaining screws to 50 to 55 inch pounds of torque during reassembly.
16. Insert the bolt into the receiver, close the bolt, and check the function of the trigger and safety. If you detect anything that is not as it should be, contact CVA customer Service immediately.

19. REPAIR AND SERVICE
In the case that your CVA Paramount™ rifle needs repair or service we recommend that you return it postage paid to our facility. This will assure that your rifle is worked on by trained, qualified gunsmiths who are familiar with all CVA firearms. We do not have approved gunsmiths outside our facilities and will not warrant the work of others. You should first contact CVA Customer Service by phone or through our web site to initiate the repair process. The Return Number and Return Authorization will be sent to you by email. Pack your rifle carefully with a copy of the Return Authorization and send postage-paid to the repair facility in your country.

USA CUSTOMERS:
BPI OUTDOORS
ATTN: REPAIR DEPARTMENT
1270 PROGRESS CENTER AVE, STE 100
LAWRENCEVILLE, GA 30043
770-449-4687
https://cva.com/help-center/

CANADA CUSTOMERS:
GRECH OUTDOORS, INC
115 FERGUS ST SOUTH
MOUNT FOREST, ON N0G 2L2
519-509-4867
www.grechoutdoors.com/warranty

If you do not have email or cannot contact CVA prior to returning your rifle, be sure to include your name, address, best daytime phone number, and a detailed note regarding your repair. The Return Authorization will be generated when the rifle arrives, and we will contact you if needed. A slight delay in processing can be expected.

Many times small issues and concerns can be addressed with CVA Customer Service and taken care of without sending your rifle in. Use the contact information above.

20. LIMITED LIFETIME WARRANTY
CVA warrants all factory-finished firearms to be free of defects in workmanship or materials for the lifetime of the firearm. This Limited Lifetime Warranty only applies to the original owner. This warranty is put into effect by the return of the authorized Warranty Registration Card within 15 days of purchase and is not transferable. To save time and postage, the warranty information may also be transmitted electronically via our web site at https://cva.com/warranty/

Any covered CVA firearm that is returned postage paid to the Repair Department will be repaired or replaced to our commercial standard, free of charge, and returned to the consumer postage prepaid. This warranty does not cover damage to structures, buildings, vehicles, persons or animals, or any other damage resulting from careless handling, improper loading, rust or corrosion, neglect, improper maintenance, or unauthorized repairs and modifications.
CVA reserves the right to refuse to repair or replace any firearm or parts damaged by any of the above. The warranty does not cover normal wear of any part, metal or stock finish, cost of inconvenience due to product failure, or transportation to the Repair Department.

State and Federal regulations and laws regarding the transportation and transfer of firearms will be strictly adhered to.

**BE SURE THAT THE GUN IS UNLOADED BEFORE SHIPPING! SHIPPING A LOADED FIREARM IS A CRIME.**

If your gun is loaded and you don’t know what to do please contact CVA Customer Service for instructions. It is not only unsafe and irresponsible to ship a loaded gun, it is a violation of Federal Law that must be reported.

This warranty gives you certain specific rights. You may also have other rights which vary from state to state. This warranty is void if:

- Any propellant other than the correct type of black powder or black powder substitute is used.
- Firearm is returned in an abused or neglected condition (rusted, corroded, etc.)
- Any failures concerning any non-CVA OEM parts such as (but not limited to) a non-CVA breech plug, a modified CVA breech plug, and non-CVA repair part or barrel.
- Gun is damaged by a non-warranted condition such as a drop or fall or damage from some other source not related to failure of a factory part.

**21. VOLUNTARY RECALL**

In August of 1997, CVA implemented a Voluntary Recall of all in-line rifle models with serial numbers ending in -95 or -96.

Example of a recalled serial number: 61-13-XXXXXX-95

If you, or someone you know, have a CVA in-line with such a serial number, do not use or allow anyone else to use the rifle under any circumstances. Call CVA immediately at 770-449-4687 or contact CVA Customer Service through the web site at https://cva.com/help-center/. You will receive complete instructions on how to receive a replacement gun at no charge.

In May of 1999, Blackpowder Products, Inc. purchased the assets of Connecticut Valley Arms, Inc. and now operates under the trade name of Connecticut Valley Arms and/or CVA. Any claims related to the above-described Voluntary Recall should be addressed to Connecticut Valley Arms, Inc., not to Blackpowder Products, Inc. Blackpowder Products, Inc assumes no responsibility for any products manufactured or sold prior to January 1, 1998.