



## INSTRUCTION MANUAL

DEADLINE

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MADE IN CANADA



## **ABOUT**

The Deadline action is specifically designed for long range, precision shooting. Its components are made using the cutting edge of technology and subject to stringent manufacturing requirements. Available in short and long actions sizes, it features a floating and replaceable bolt head delivering ultimate accuracy and versatility.

**CAUTION:** Read this manual carefully before using your Ultimum Action.



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**WARNING!** Firearms can cause serious injury, death, or damage to property if handled improperly. Be sure to follow all safety precautions. Firearm safety is your responsibility. Be sure all safety precautions are fully understood before use.

**WARNING!** Ensure that the safety is engaged until ready to fire.

**CAUTION:** It is your responsibility to determine and follow applicable laws and regulations in your country and region regarding the use, transportation, and sale of firearms.

**CAUTION:** Ultimum Precision and/or its Official Distributors assume no liability for product malfunction or for physical injury or property damage resulting in whole or in part from criminal or negligent use of the product, improper or careless handling, unauthorized modifications, use of defective, improper, reloaded, or remanufactured ammunition, customer misuse or neglect of the product, or other factors beyond the manufacturer's direct and immediate control.

**CAUTION:** Ultimum Precision assumes no liability for any injury or damage to property resulting from improper or careless handling, or intentional or accidental firing of a firearm.

## **SAFETY RULES**

### **1. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. NEVER POINT A FIREARM AT SOMETHING THAT IS NOT SAFE TO SHOOT AT.**

Never let the muzzle of a firearm point at any part of your body or at another person. This is especially important when loading or unloading the firearm. When you are shooting at a target, know what is behind it. Some bullets can travel over 5 kilometers. If you miss your target or if the bullet goes through the target, it is your responsibility to ensure that the shot does not cause unintended injury or damage.

### **2. ALWAYS TREAT A FIREARM AS IF IT WERE LOADED.**

Never assume that a firearm is unloaded. The only certain way to ensure there are no cartridges in a firearm is to open the chamber and visually and/or physically examine the inside to see if a round is present. Removing or unloading the magazine will not guarantee that a firearm is unloaded or cannot fire.

### **3. DON'T RELY ON YOUR GUN'S SAFETY. SAFETY DEVICES ARE NOT A SUBSTITUTE FOR SAFE HANDLING PROCEDURES.**

Never rely solely on a safety device to prevent an accident. It is imperative that you know and use the safety features of the firearm you are handling, but accidents can best be prevented by following the safe handling procedures described in these safety rules and elsewhere in the product manual.

### **4. NEVER SHOOT AT WATER OR AT A HARD SURFACE.**

Shooting at the surface of water or at a rock or other hard surface increases the chance of ricochets or fragmentation of the bullet or shot,

which can result in the projectile striking an unintended or peripheral target.

**5. USE PROPER AMMUNITION. BE CERTAIN THAT EACH ROUND YOU USE IS IN THE PROPER CALIBER OR GAUGE AND TYPE FOR THE PARTICULAR FIREARM.**

Every firearm is designed to use a certain caliber or gauge of ammunition. Using the wrong ammunition, mixing ammunition or using improperly reloaded ammunition can cause serious personal injury or death. Always read and heed the instructions on ammunition boxes. Check all ammunition before you load it to make sure it matches your gun's requirements. Every cartridge and shell is head-stamped with its caliber or gauge for easy identification.

**RELOADING PRECAUTIONS.**

If you reload your own ammunition, you are responsible for personally assuring that the loads and components of your reloaded ammunition will not cause hazardous conditions. Never mix any two powders regardless of type, brand, or source. Never substitute any smokeless powder for Black Powder or any Black Powder substitute. Never use ammunition that has been reloaded by someone else! Start loading with the minimum powder charge in the loads shown. Never exceed manufacturers' reloading data. Excess pressures caused by excessive loads could severely damage a firearm and cause serious injury or death.

**6. IN CASE OF MISFIRES, HANGFIRES OR PRIMER POPS.**

If the trigger is pulled and there is no noticeable discharge, wait 60 seconds while pointing the muzzle in a safe direction. If there is no hangfire within 60 seconds, open the action and unload the firearm. In case of a primer pop a bullet could be partly down the barrel. Ensure

there is no bullet lodged in the barrel before resuming fire. Do not reuse misfired cartridges and safely dispose of them.

## **7. ALWAYS WEAR EYE AND EAR PROTECTION WHEN SHOOTING.**

The chance that gas, gunpowder or metal fragments will blow back and injure a shooter who is firing a gun is rare, but the injury that can be sustained in such circumstances can be severe, including the possible loss of eyesight. A shooter must always wear impact resistant shooting glasses when firing any firearm. Noise-reducing earplugs or headphones will reduce the risk of damage to hearing caused by prolonged shooting activity

## **8. PROPER MAINTENANCE AND SERVICE OF YOUR FIREARM.**

Like any mechanical device, a firearm is subject to wear. It must be maintained and periodically serviced to assure optimum safety and performance. Only a qualified service facility should service, repair or modify your firearm.

Store and carry your firearm so that dirt or debris does not accumulate in the working parts. Clean and oil your firearm regularly to prevent corrosion, damage to the barrel or fouling. Before cleaning, always make sure that your gun is completely unloaded. Be sure to clean your entire gun before and after long-term storage and no less than once a year. It's also important to clean your gun whenever it's been exposed to adverse conditions such as rain, dirt, mud, snow, sleet or saltwater.

Always check the bore and chamber prior to loading to ensure that they are clean and free from obstructions. Firing with an obstruction in the barrel can cause rupture and injure you or others nearby.

## **9. NEVER ALTER OR MODIFY YOUR GUN.**

Your firearm has been designed to operate according to certain factory specifications. You'll jeopardize your safety and that of others around you by attempting to alter its trigger, mechanical safety or other mechanisms. Never alter or modify your firearm in any way.

## **10. LEARN THE MECHANICAL AND HANDLING CHARACTERISTICS OF THE FIREARM YOU ARE USING.**

Not all guns are alike. You should first become familiar with the type of firearm and the safe handling procedures for loading, unloading, carrying, shooting and storing the firearm.

**WARNING!** Failure to follow any of these safety rules may cause personal injury or death to the shooter or bystander and damage to property. Do not use a firearm until you fully understand the above rules. If you have any questions about the safe use of your Ultimatum Action, contact us at [sales@ultimatumprecision.com](mailto:sales@ultimatumprecision.com), or call us at (778) 786-3582.

## **ACTION COMPATIBILITY**

The Deadline will accept all Remington 700 compatible triggers. Due to the larger bolt design, the trigger sits slightly lower than on a Remington 700. Some stocks/chassis may require that the trigger well be expanded.

Due to the larger bolt design, the magazine will also sit slightly lower. To compensate, the magazine release lever may need to be shortened slightly.

The cheek rest of stocks/chassis with deeper inlets may interfere with the opening of the bolt. If so, relieving the stock/chassis to match the bolt projection will be required.

The Deadline recoil lug is thicker. The stock/chassis recoil lug recess may have to be enlarged towards the front to allow assembly.

The scope rail included with your Ultimum Action is specifically designed for stability. The 20 MOA rail is secured with six 8-40 screws and located with 2 dowel pins. Alternate cant angles are available from Ultimum Precision.

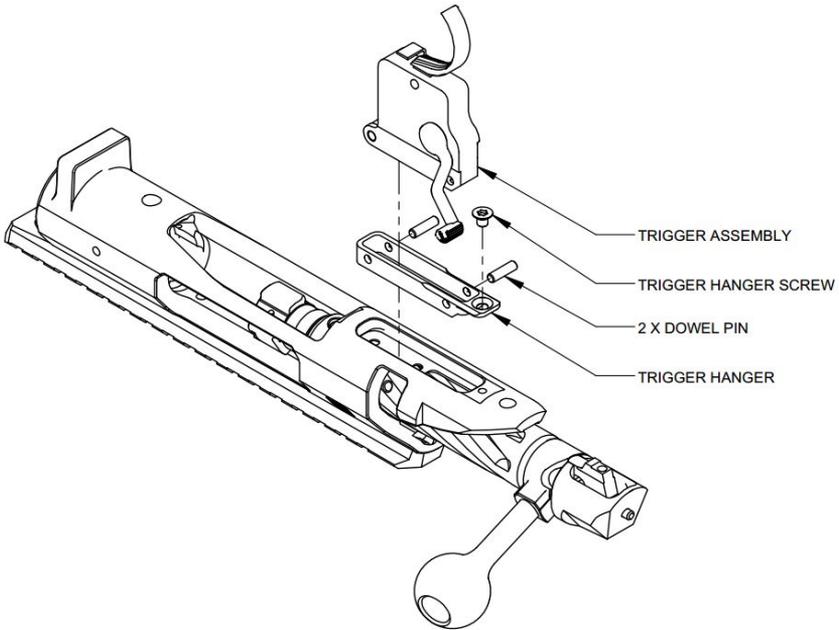
If you have any questions regarding the compatibility of an Ultimum Action with a third-party accessory, contact us at (778) 786-3582.

## **OTHER PARTS USED IN YOUR RIFLE**

When procuring parts to complete your rifle, look for Remington 700 compatible triggers and bottom metals. Barrels will require 1 1/16 – 20 TPI threads to match Deadline threads.

**WARNING!** Ensure that you refer to and follow manuals from other components when assembling and using your rifle. Failure to do so could result in injury or death to the shooter or bystander and damage to property.

## Installing the Trigger



To install a Remington 700-compatible trigger:

1. Remove the trigger hanger screw on the bottom of the action retaining the trigger hanger using a T10 torx driver.
2. Remove the trigger hanger from the action and align your Remington 700 compatible trigger assembly with the 2 dowel pin holes in the trigger hanger.
3. Assemble the trigger and the trigger hanger using the two dowel pins.
4. Insert the trigger and hanger into the trigger pocket of the action.
5. Reinstall the screw holding the trigger hanger in place. Torque 18-20 in-lbs.

Note that your trigger assembly may be equipped with a lower bolt release mechanism. This is not required on the Ultimatum Action and should be removed prior to installing the trigger assembly.

## Installing the Barrel

### Short Action

The short action barrel thread is **1-1/16" x 20 TPI (small shank prefit)**.

### Long Action

The short action barrel thread is **1-1/8" x 20 TPI (large shank prefit)**. For shouldered barrels consider using a barrel blanks with a shank of 1.25" or larger to maximize shoulder contact.

### Prefit barrels

The Deadline action was designed to accept a barrel nut style prefit barrels to provide control of headspace.

To install a barrel with a locking nut:

- Screw the barrel nut onto the barrel until it reaches the end of the thread.
- Thread the barrel into the action.
- Use a headspace go-gauge to adjust the headspace. Rotate the barrel to increase or decrease the head space.
- Screw the barrel nut tight to the front face of the action. Lock the barrel in place by applying 60-70 ft-lb of torque.
- Double check the headspace with your headspace gauges after final torquing.

Ultimatum Deadline barrel nuts, barrel nut tool and action wrenches designed specifically to work with your action may be purchased at [ultimatumprecision.com](http://ultimatumprecision.com).

## Shouldered barrels

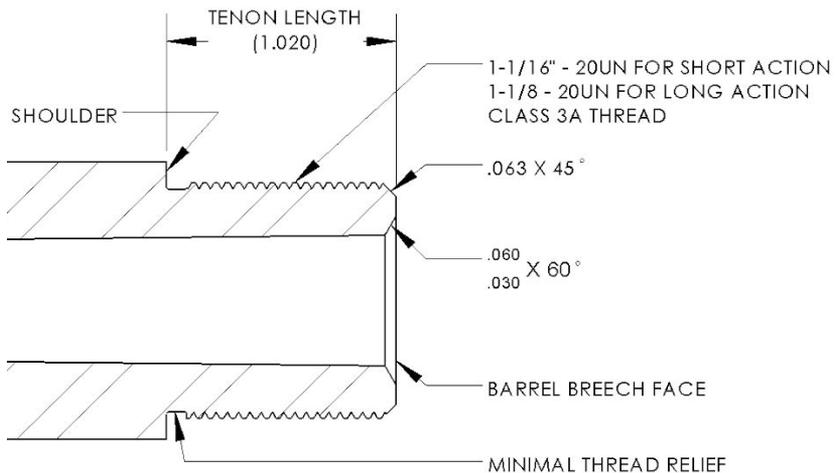
Shouldered barrels require to be fitted by a qualified gunsmith.

### Note to gunsmiths:

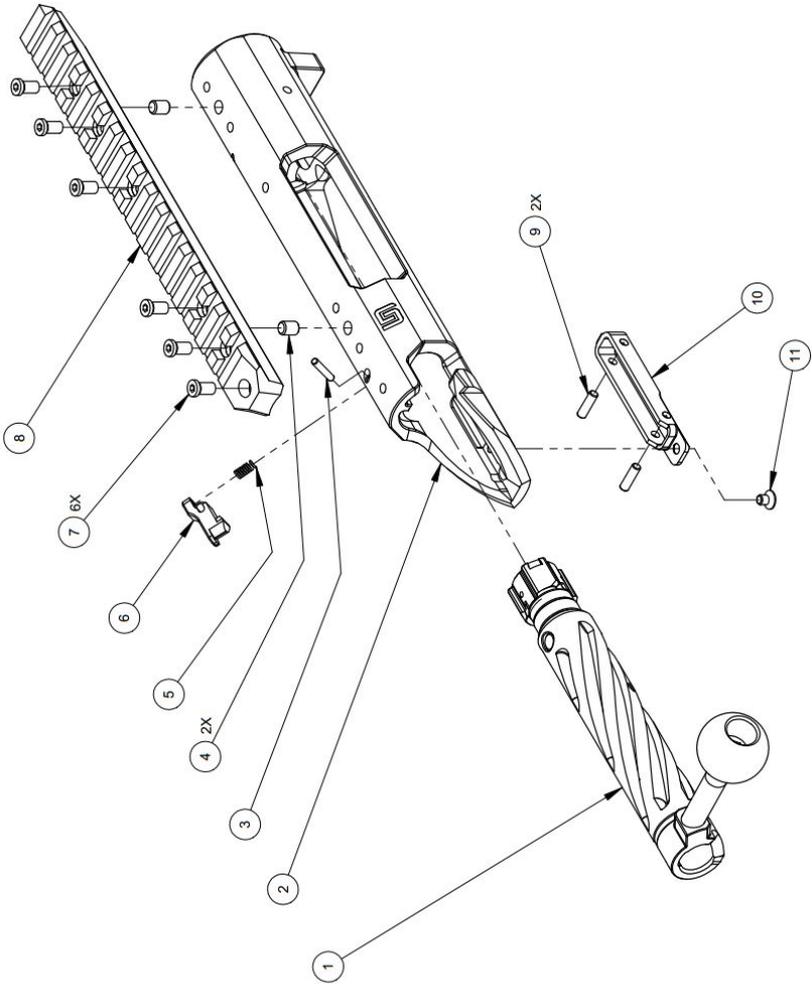
**WARNING: Always set barrel headspace using the action and a go-gauge within spec. DO NOT polish the chamber.**

On the drawing below:

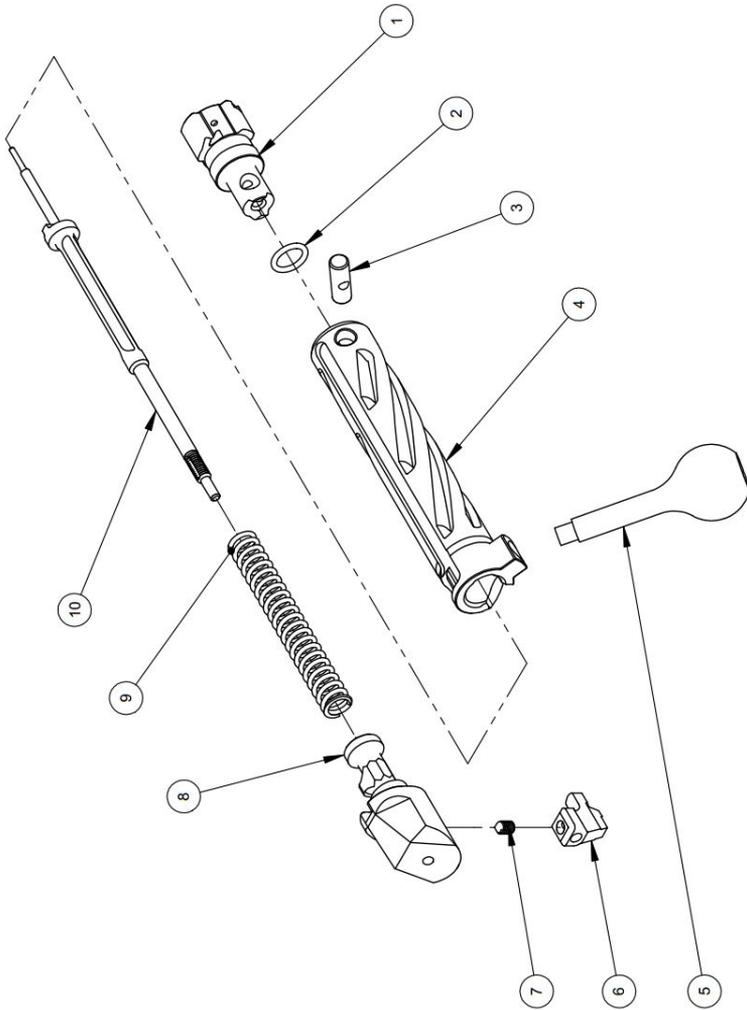
1. All dimensions are basic.
2. All dimensions are in inches.
3. To achieve proper breech gap, measure the bolt-nose-face-to-action-face distance. The tenon length dimension is calculated as follows:  
Tenon length = bolt-nose-to-action-face measurement - .008
4. Design breech gap is .008.
5. Actual breech gap to be between .008 and .010.
6. Chamfer finish to be 32Ra or better. Chamfer dimension depending on caliber and feed angle.



**PARTS LIST AND DIAGRAM**



- |   |                       |    |                                |
|---|-----------------------|----|--------------------------------|
| 1 | BOLT ASSEMBLY         | 7  | SCREW, 8-40, RAIL              |
| 2 | ACTION HOUSING        | 8  | RAIL, 20 MOA, PICATINNY        |
| 3 | PIN, CROSS BOLT STOP  | 9  | DOWEL PIN, 1/8, TRIGGER HAGNER |
| 4 | DOWEL PIN, 3/16, RAIL | 10 | TRIGGER HANGER                 |
| 5 | SPRING, BOLT STOP     | 11 | SCREW, TRIGGER HANGER          |
| 6 | BOLT STOP             |    |                                |



- 1 BOLT HEAD ASSEMBLY
- 2 O-RING
- 3 PIN, CROSS BOLT
- 4 BOLT BODY
- 5 BOLT KNOB, SPHERE

- 6 SEAR
- 7 SET SCREW, SEAR
- 8 SHROUD
- 9 SPRING, FIRING PIN
- 10 FIRING PIN

**WARNING!** Always check that the rifle is unloaded (empty cartridge chamber, empty receiver, empty magazine). Inspect the firearm by looking through the ejection port and the chamber. If it is not empty, unload it as instructed in the relevant section. Check that the firing pin is decocked.

Never point the firearm at someone or at hard, flat surfaces. Always treat the rifle as if it were loaded.

## **CLEANING**

Routine cleaning should always take place right after use of the rifle. Use only high-quality gun oil that cleans, lubricates and preserves (CLP).

Routine cleaning procedure is done as follows:

1. Ensure that the rifle is unloaded and remove the bolt and magazine
2. In case the rifle has been used in wet conditions dry it using compressed air or let it dry in a warm / dry place without any protective cover i.e. drag bag.
3. Using a straight, sturdy and smooth cleaning rod, push a cleaning patch soaked in copper solvent through the bore and let sit to allow the solvent to react.
4. Push clean patches through the bore, one after another, until the bore is clean. It is recommended to use a cleaning rod guide to prevent the rod from dragging on the inner surfaces of the bore and receiver. Clean only in the direction of bullet movement and replace dirty patches before every cleaning sequence.
5. Clean the inner surfaces of the receiver from all the firing residue with cleaning solvent.
6. Use a small solvent-wetted brush to clean the bolt face from firing residue.
7. Use larger diameter nylon brush or a chamber mop moistened with bore solvent to clean the chamber.

8. Pass a regular bore patch moistened with rust preventive oil through the bore to leave a thin coat of oil. When firearm is to be reused, all excess lubrication must be removed. The chamber and bore must be thoroughly wiped dry.
9. Wipe all touching surfaces of the receiver and bolt with a light coat of rust preventive oil.
10. Do not remove the trigger assembly from the action. Service your trigger assembly as specified by the manufacturer.

**WARNING!** If the trigger does not return to the same forward position each time it is released, your rifle is not in a safe operating condition and must not be used until it is inspected by a qualified gunsmith. Use of a firearm in an unsafe operating condition may result in injury or death to the shooter or a bystander and severe damage to the firearm.

11. Check receiver screws are torqued properly.  
Consult your stock/chassis manufacturer's instruction manual for proper torque values.

## Cleaning Frequency

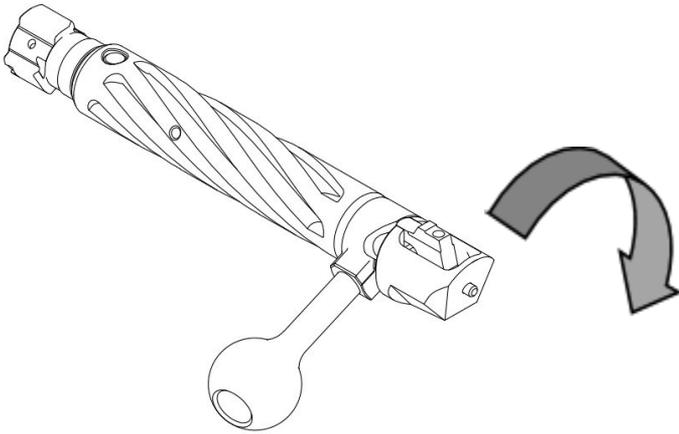
Your action should be cleaned:

- If the rifle is to be stored for a prolonged period.
- When the rifle has been subjected to adverse conditions like shooting in the rain, snow, sleet, or saltwater areas.
- When the rifle has been exposed to dirty conditions such as dust, sand.

**WARNING!** After each use, follow the lubrication and maintenance instructions included in this manual. If the firearm is immersed in water, it must be thoroughly cleaned, dried and lubricated as soon as possible. In case of salt water immersion, first flush all parts with fresh water, then dry, clean, and lubricate the firearm. If the firearm does not function properly, have it corrected by a qualified gunsmith before further use.

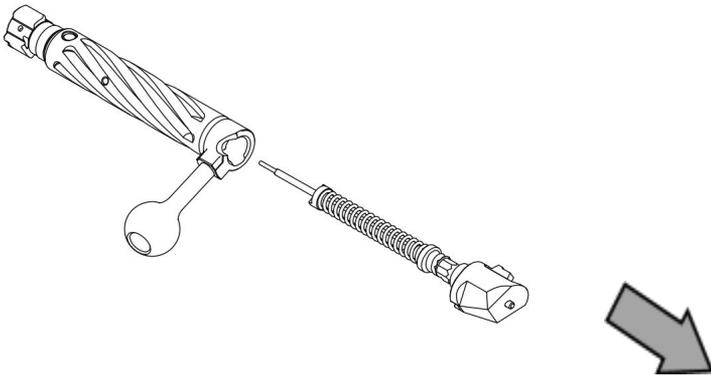
## Cleaning the Bolt Assembly

Disassembling and cleaning the bolt assembly

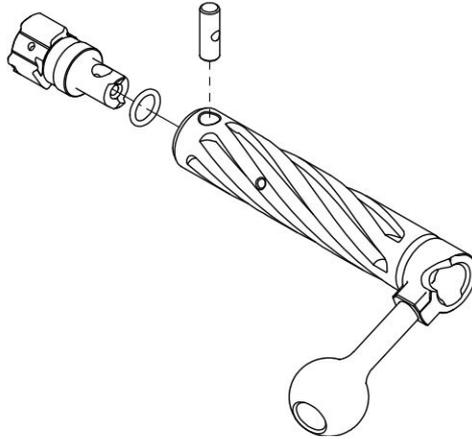


To disassemble the bolt assembly:

- Remove the bolt from the action.
- Turn the bolt shroud clockwise while applying pressure on the action shroud with the palm of your hand.



- Remove the firing pin assembly from the bolt.



- Remove the bolt cross pin and bolt head from the bolt body.
- Clean parts with gun cleaning solvent and wipe dry.
- Apply a thin coat of gun lubrication oil, removing any excess with a clean cloth. A small amount of gun grease should be applied to the bolt ramp and sear cocking surfaces.

#### Assembling the bolt

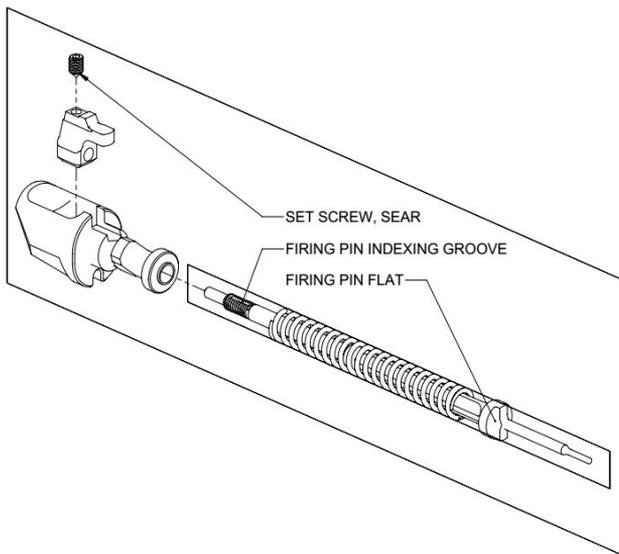
- The bolt head must be indexed so that the extractor is in the same direction as the bolt knob. Insert the bolt cross pin, orienting the firing pin hole along the axis of the bolt.
- Insert the firing pin assembly into the bolt body. Push the bolt shroud into the bolt body, being careful to align the bolt shroud lug with the slot in the bolt body. Turn the bolt shroud counter-clockwise until the sear falls into the shallow notch on the rim of the bolt body. The bolt is now cocked.

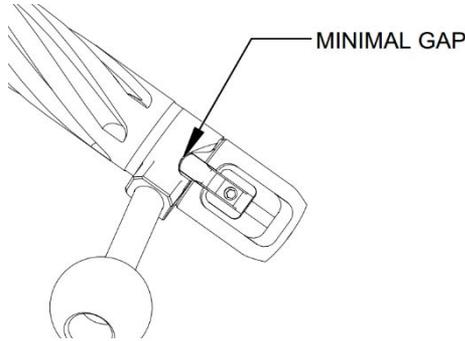
NOTE: The bolt must be cocked to be assembled into the action.

## Firing Pin Assembly

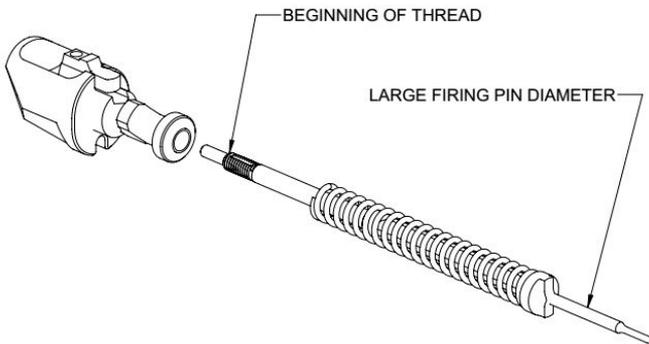
**CAUTION:** Clean the firing pin assembly as one unit. The firing pin spring is under load and further disassembly could release parts with significant speed and cause injury.

In the unlikely event where the firing pin assembly requires to be taken apart and reassembled, the sear-to-firing pin relative position must be unchanged. There must be a gap between the bolt body cocking ramp and the surface of the sear. The gap must be as small as possible, and the firing pin must be indexed to align with the sear set screw. The firing pin flats and both indexing grooves are aligned on the same plane to help indexing the firing pin. (See image below)





For reassembly, ensure that the set screw is backed out as far as possible to allow the firing pin to thread in freely. The sear set screw uses a 5/64 hex key. Locate the sear in the shroud pocket. Hand-tighten the chuck of an electric drill on the large firing pin diameter. Ensure that the chuck jaws are clean and smooth to avoid scoring the firing pin. Insert the firing pin into the shroud and compress the spring while threading-in at low speed. Return to the pre-set minimal gap between the bolt body cocking ramp and the surface the sear as mentioned previously.



**CAUTION!** Carefully guide the firing pin into the shroud bore while compressing the spring. There is a precise fit inner diameter in the shroud that may catch on the beginning of the firing pin thread (shown below). Avoid applying excessive axial or bending force on the firing pin while compressing the spring.

## **MAINTENANCE**

While doing maintenance on your action:

- When loosening or tightening screws, ensure that the screwdriver is of appropriate size and shape. Poor tool condition will damage the screw heads.
- If it is necessary to replace any parts, use only original factory spare parts.

## **BOLT HEAD REPLACEMENT**

The Ultimatum action allows you to remove and replace the bolt head to change calibers in your rifle as well as to facilitate cleaning.

**WARNING!** Ensure that when changing calibers, the bolt head matches the barrel chambering and that the barrel is headspaced properly using caliber-matching gauges. Failure to do so may result in personal injury or death to the shooter or bystander and damage to property, including irreversible damage to the firearm.

Bolt heads are replaceable within the appropriate action sizes. Short action calibers are replaceable with other short action calibers. Long action calibers are replaceable with other long action calibers.

Replacement bolt heads are available for nearly any caliber and can be ordered through [sales@ultimatumprecision.com](mailto:sales@ultimatumprecision.com) or by phoning us at (778) 786-3582.

## **OBTAINING PARTS AND SERVICE**

To order parts, visit [ultimatumprecision.com](http://ultimatumprecision.com) or email [sales@ultimatumprecision.com](mailto:sales@ultimatumprecision.com). You may also reach us at (778) 786-3582

For repairs and other services, please see a qualified gunsmith. If there are any questions regarding servicing the firearm, email [support.ultimatumprecision.com](mailto:support.ultimatumprecision.com) or reach us at (778) 786-3582.

**OWNERS RECORD**

Serial Number:

Date Purchased:

Purchased From:

**MAINTENANCE RECORD**

Date	Service Performed	Performed By

**NOTES**

**Ultimum Precision**

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Chilliwack, BC, Canada  
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