

# MAVERICK RIFLE

OWNERS MANUAL



**MRA**

**MAPLE RIDGE  
ARMOURY**

PERFORMANCE AND STYLE

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# MAPLE RIDGE ARMOURY MAVERICK RIFLE

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Congratulations on being the proud owner of an MRA Maverick Rifle. We want to sincerely thank you for choosing Maple Ridge Armoury, and we hope that this firearm exceeds your expectations and serves you well.

The Maverick was designed and manufactured to be a lightweight, reliable, and accurate bolt action rifle, which makes it equally capable of serving the needs of hunters, farmers, and sport shooters alike. The modularity of the Maverick allows for simplified caliber changes and customization to suit the specific needs of each owner. The large variety of compatible parts and accessories produced by Maple Ridge Armoury and a vast number of domestic and foreign producers allows for a high level of individual customization, which also leads to longevity of the platform.

**Please review the information within this owner's manual thoroughly prior to using your new firearm. We have provided a detailed list of features that the user must be familiar with in order to ensure the safest use of this firearm.**

## INTRODUCTION

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Maple Ridge Armoury recommends the assembly, function, and safety testing of the Maverick rifle and Maverick receiver kit to be performed by a Licensed Gunsmith. Maple Ridge Armoury is not liable for any damage(s) or injury sustained through improper installation and use of the Maverick, its accessories or compatible third-party parts. If you are unsure of the proper installation or use of this firearm or any of its related parts and accessories, please seek the assistance of a Licensed Gunsmith.

Maple Ridge Armoury offers lifetime service and support for all Maple Ridge Armoury products. Our Canadian Service Centre located in Barrie, Ontario, supports domestic customers. Foreign Maple Ridge Armoury customers are supported by our international network of dealers as found on our website, [www.mapleridgearmoury.com](http://www.mapleridgearmoury.com).

# SAFETY

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As taught in the Canadian Firearms Safety Course and Canadian Restricted Firearms Safety Course, we strongly recommend performing the ACTS & PROVE whenever you are handling a firearm.

## ACTS

1. **A**ssume every firearm is loaded.
2. **C**ontrol the muzzle direction at all times.
3. **T**rigger finger must be kept off the trigger and out of the trigger guard.
4. **S**ee that the firearm is unloaded - Prove it safe.

## PROVE

1. **P**oint the firearm in the safest available direction.
2. **R**emove all cartridges.
3. **O**bserve the chamber.
4. **V**erify the feed path.
5. **E**xamine the bore.

### **We recommend following the following safe use guidelines when operating a firearm.**

1. Be aware of your target and what is surrounding it prior to aiming your firearm.
2. Never trust the mechanical safety catch of the firearm.
3. The firearm must be unloaded until the time of use.
4. Always ensure that eye and ear protection is worn during use.
5. The barrel of your firearm must be free from any obstructions prior to loading, aiming and firing.
6. Avoid the consumption of alcohol and drugs before and during use of a firearm.
7. Do not alter or modify your firearm in any way.
8. Make sure all parts and accessories are fully operational prior to using your firearm.
9. Make sure to perform regular maintenance and cleaning of your firearm for optimal performance and utmost safety.

# MAVERICK RIFLE COMPONENT LIST

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## Your MRA Maverick rifle includes the following accessories:

- a. Maverick Receiver
- b. Maverick Bottom Metal
- c. Maverick Barrel
- d. Maverick M-LOK Hand guard
- e. Thread Protector
- f. Maverick Bolt Carrier Group
  - a. Bolt Carrier and alignment block with (2) grade 8 fasteners
  - b. Bolt Assembly
  - c. Firing Pin
  - d. Cam Pin
  - e. Firing Pin Retaining Pin
- g. Maverick Cylinder Cocking Handle with (1) SHCS bolt and (2) dowel pins
- h. Maverick Carbine Buffer Assembly
  - a. Castle Nut
  - b. End Plate
  - c. Carbine Buffer Tube
  - d. Maverick Buffer Spring
  - e. Buffer
- i. Maverick Bottom Metal Parts Kit
  - a. Fire Control Group
  - b. Bolt Catch with plunger, spring, and threaded pin
  - c. Takedown and Pivot Pins with (2) detents and (2) springs
  - d. Safety with detent and spring
  - e. Magazine catch, button, and spring
- j. Butt Stock
- k. Pistol Grip
- l. Magazine

# MAVERICK RECEIVER KIT COMPONENT LIST

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## **Your MRA Maverick Receiver kit includes the following accessories:**

- a. Maverick Receiver
- b. Maverick Bottom Metal
- c. Maverick Bolt Carrier Group
- d. Maverick Carrier and Alignment Block with (2) grade 8 fasteners
- e. Maverick Extraction Assist Spring
- f. Maverick Cylinder Cocking Handle with (1) SHCS bolt and (2) dowel pins
- g. Maverick Receiver End Plate
- h. Maverick Pivot Pin, Takedown Pin, Detents, and Detent Springs
- i. Maverick Bolt Catch Assembly
- j. Maverick Buffer Spring

## **REQUIRED PARTS TO ASSEMBLE RECEIVER KIT**

In addition to the included parts, the following parts or similar parts are also required to assemble a safe and fully functioning firearm.

- a. Maverick Barrel
- b. Maverick M-LOK Handguard
- c. Muzzle Device
- d. Bottom Metal Parts Kit
- e. Carbine Buffer Tube
- f. Buffer
- g. Castle Nut
- h. Pistol Grip
- i. Butt Stock
- j. Magazine matching the Bottom Metal

## **MAVERICK RECEIVER KIT ASSEMBLY**

Maple Ridge Armoury recommends the assembly, function, and safety testing of the Maverick rifle and Maverick Receiver Kit be performed by a qualified gunsmith or experienced firearm professional. Maple Ridge Armoury is not liable for any damage(s) or injury sustained through improper installation and use of the Maverick, its accessories or compatible third-party parts. If you are unsure of the proper installation or use of this firearm or any of its related accessories, please seek the assistance of a Licensed Gunsmith.

Please note that if you are assembling this firearm yourself, you may not assemble the firearm with the intention of returning the assembled firearm to a third party. Only a licensed gunsmith can perform this task.

Do not file, scrape, drill, use sandpaper, or a machine on your rifle whatsoever. If a screw or part is difficult to install, do not force it. Check for alignment, and then proceed to try and install again. All screws and accessories should be smooth to install and can be inserted with ease if correctly aligned.

After assembly of your firearm, you must complete the assembly checklist found in Appendix "A", followed by a function and safety test. Upon completion of a function and safety test, you are to perform the standard cleaning procedure of the bolt and bore as if it had been used with live cartridges. The next step is to reassemble your firearm and check that it is functioning properly.

Ensure that you always have a clean work surface when performing these tasks and always place parts in containers according to their function and order of installation.

We highly recommend that you take your time when performing the assembly, installation, maintenance and safety testing of your firearm, read all instructions thoroughly (TWICE!). Double-check your work, and have all the necessary tools and equipment prepped and ready to use.

When assembling or modifying your MRA Maverick rifle or receiver kit, ensure you only use the supplied Maverick bolt carrier group including the bolt, firing pin, cam pin, and firing pin retaining pin as well as the supplied MRA Maverick buffer spring. These components are propriety and vital to the safe and reliable function of the firearm.

The MRA Maverick is designed to use a mil-spec carbine buffer tube. Do not use buffer tubes of other lengths or dimensions.

# #1 TOOLS AND EQUIPMENT

- a. Maverick Bottom Metal Block or similar vise block to hold the Bottom Metal.
- b. Torque Driver with variable setting for in/lbs.
- c. Armourers Wrench.
- d. Maverick Barrel Torque Rod for working on the Receiver.
- e. Brass or Steel Punches.
- f. Brass Hammer
- g. Torque Rod with 1/2" Drive
- h. Eye protection to protect your eyes from flying detent and springs should they slip free during the installation.
- i. Long Hex Key or screwdriver for the grip (different grips come with different bolts so find the appropriate, long necked tool to install the grip).
- j. Premium GO and NO-GO Head Space Gauges.
- k. Snap Caps or Dummy Cartridges for the caliber matching your barrel and bolt.
- l. High quality moly, lithium, or firearm rated grease.
- m. Bench vise or other method to securely hold the Receiver and Bottom Metal.



## #2 MRA MAVERICK BOTTOM METAL ASSEMBLY

a. **Secure the Bottom Metal so the top portion is facing upwards.**

b. **Bolt Catch**

- i. Collect the bolt catch, bolt catch plunger, bolt catch spring, and threaded bolt catch pin.
- ii. Insert the bolt catch spring and bolt catch plunger into the left side of the bottom metal.
- iii. Insert the bolt catch into the bolt catch recess, depressing the bolt catch plunger.



- iv. Insert the threaded bolt catch pin, smooth side first from the front of the bottom metal, through the receiver and bolt catch. Screw the threaded bolt catch spring using a 1/16 size hex key.



c. **Nylon Tipped Tension Screw Option**

- i. Install the Nylon tipped tension screw in the rearward hole under where the pistol grip will be installed.



- ii. Dry fit the receiver onto the bottom metal and put the rear takedown pin through the receiver and bottom metal.
- iii. Using a hex key, drive the nylon tipped set screw into the bottom metal until it makes firm contact with the receiver and there is no more movement between the receiver and bottom metal.

d. **Magazine Catch**

- i. Collect the magazine catch, magazine catch spring, and magazine catch button.



- ii. Insert the magazine catch in the left side of the bottom metal.
- iii. Place the magazine release spring into the magazine release buttonhole on the right side of the bottom metal.
- iv. Screw the magazine release button onto the magazine catch, serrated side out, until it bottoms out then align it with the magazine catch buttonhole.



- v. Press the magazine release button into the buttonhole and spin the magazine catch on the left hand side to thread it further into the magazine button until the end of the catch rod sits flush with the face of the button.
- vi. Make sure the catch does not scrape against the raised portions of the bottom metal.
- vii. Test with empty magazines to make sure the release catches and releases magazines.

e. **Trigger Assembly**

- i. Collect the trigger, trigger spring, hammer, hammer spring, disconnecter, disconnecter spring, and the trigger and hammer pins.
- ii. Assemble trigger, hammer, and disconnecter sub assemblies.



- iii. Place the trigger assembly into the bottom metal so the trigger goes into the oval hole in the bottom and place the disconnecter assembly into the groove of the trigger assembly with the disconnecter spring to the rear. The hole in the disconnecter will line up with the holes in the trigger assembly and the bottom metal.
- iv. Insert trigger pin through the corresponding holes in the bottom metal, trigger, and disconnecter.
- v. Double-check the placement of the hammer and hammer spring. Ensure the hammer spring is oriented as in the image in this manual. Insert the hammer assembly into the bottom metal with the the hammer springs on top of the trigger pin. Insert the hammer pin through the bottom metal and hammer. Use decent pressure to align the hammer assembly with the bottom metal pinhole.
- vi. Test the function of the trigger while controlling the fall of the hammer to prevent it from striking and damaging the bottom metal.



f. **Safety, Takedown Pin, Pivot Pin and Grip**

- i. Collect the safety, safety detent, safety spring, pivot pin, pivot pin detent, pivot pin spring, take down pin, take down pin detent, take down pin spring, grip, grip screw, and grip screw washer.



Cock  
the

hammer back so rear of the trigger drops down to give through clearance of the bottom metal safety hole.

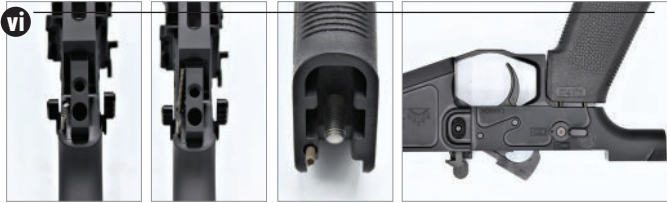
- iii. Flip the bottom metal over so the bottom is facing upwards and insert the safety selector and set the position to "FIRE" mode. Flip the bottom metal over so the bottom is facing upwards and
- iv. Insert the safety detent pin pointy tip first and insert the takedown pin detent in the corresponding holes on the bottom metals mating surface for the grip.



- v. Insert the safety detent spring into the corresponding hole in your grip of choice.  
NOTE: It is the thinner one that is slightly shorter than the additional identical thin, takedown pin springs.



- vi. Insert the takedown detent spring in the corresponding hole in the bottom metal.
- NOTE: It is the shorter of the 2 remaining springs. Screw in the grip to the bottom metal matching up the spring with the safety selector hole and double-check that the safety selector is still in the "Fire" position on the opposite side.



- vii. Place the pivot pin detent spring in the hole at the front of the receiver followed by the pivot pin detent.



- viii. Compress the detent so it is flush with the face of the receiver's pivot pin detent and spring housing. You can use a 1/4" punch or any firm, thin, straight tool to achieve this. Be mindful that you do not let the detent slip and spring free. We suggest setting up a cardboard box to catch the detent and spring should they spring loose.
- ix. Slide the front Pivot Pin over the flat tool that is holding the detent and spring compressed so the channel for the Pivot Pin is facing the detent. Slide the flat tool away allowing the detent to spring into the channel of the Pivot Pin. Slide the Pivot Pin into the closed position and then into the open position and check for functionality.



## #3 MRA MAVERICK RECEIVER ASSEMBLY

### a. **Barrel, Hand guard, Muzzle Device, and Gas Port Block**

- i. The bolt and the barrel must be compatible for safe operation. This is tested by the use of accurate headspace gauges for the caliber of the barrel. To test this, use only accurate headspace gauges, do not use live cartridges or empty cartridges.
  1. Strip the bolt assembly of the extractor and ejector assemblies and set them aside for reinstallation.



2. Insert the GO gauge in the barrel chamber and insert the stripped bolt assembly. The bolt face should sit flush against the exposed bottom of the head space gauge and the bolt should spin freely with the bolt lugs passing inside the barrel extension lugs.
3. Insert the NO-GO gauge in the barrel chamber and insert the stripped bolt assembly. The bolt face should sit flush against the exposed bottom of the head space gauge and the bolt should not spin freely.



4. If the barrel passes the Head Space check, continue with assembly. If the barrel does not pass the head space check or if you are unsure of the test results, stop assembly immediately and contact Maple Ridge Armoury customer support or a Licensed Gunsmith to assist you. Do not attempt to alter the bolt or the barrel for fit. This is a highly specialized fitting that requires the expertise of a licensed Gunsmith.
- ii. Secure the Maverick Receiver using only an MRA Barrel Torque Rod.



- iii. Apply a very light film of grease to the barrel extension and insert the barrel into the receiver so that the index pin keys into the corresponding notch on the receiver.



- iv. Apply a light film of grease to the barrel nut of a handguard that has been checked by you by pre-fitting to ensure compatibility with the receiver. Slide the nut over the barrel, and screw onto the receiver locking the barrel in place. Torque the barrel nut to the required torque setting as indicated on the hand guard installation instructions. The MRA X series hand guard barrel nut requires 35 ft/lbs.



- v. A gas ducted barrel is not required. There is no “gas system” in the Maverick. If you use a barrel with a gas duct direct, slide and secure the appropriate size of Maple Ridge Armoury Maverick barrel gas port block over the barrel's gas journal and secure in place to block the barrel's gas port. Never operate the Maple Ridge Armoury Maverick with an open gas port.
- vi. Finish installing the hand guard as per the instruction for that hand guard.



- vii. If using a muzzle device at the muzzle of the barrel, make sure the internal bore and the fastening dimensions, by thread size of an internal size, are exactly compatible with the bore of the barrel and the muzzle of the barrel. If special fitting is needed have this one by a licensed Gunsmith. Perform all future “live fire” tests with no muzzle device on the barrel. Install muzzle devices as specified by the muzzle device vendor or manufacturer only after live firing safety checks are successfully completed.

## #4 MAVERICK BOLT CARRIER ASSEMBLY

### a. Assemble Carrier

- i. Affix the Bolt Carrier Alignment Block to the Bolt Carrier using the 2 Grade 8 Fasteners. Use only Maple Ridge Armoury Maverick bolt carrier, do not adapt or modify other bolt carriers. Do not adapt or modify the Maple Ridge Armoury Maverick bolt carrier for any reason. These should be torqued to 50 in/lbs. Since there is no pressure being applied to this alignment block, there is no need for thread locker or staking of the bolts.
- ii. Place the Maverick Extraction Assist spring over the back-tail stock of the bolt.
  1. NOTE: If using a bolt assembly for a gas driven carbine, remove the gas rings before inserting the bolt into the Maverick carrier. The gas rings must be removed for reliable and safe operation. An AR-15 bolt assembly with gas rings will not work in the Maverick.



- iii. Insert the bolt assembly into the Maverick Bolt Carrier with the bolt extractor facing the right-hand side of the Bolt Carrier and insert the Cam Pin through the Bolt Carrier Cam Pin slot and through the Bolt Assembly Cam Pin hole.
- iv. Insert the firing pin through the rear of the Bolt Carrier into the rear of the bolt assembly.



- v. Secure the firing pin by installing the firing pin retaining pin into the corresponding hole on the right-hand side of the carrier.

b. Install Carrier into Receiver

- i. Secure the Maverick receiver in a vice using the Maverick receiver jig or another compatible device. Be careful to not damage the finish of the receiver if using a 3rd party device.
- ii. Apply grease to the Bolt Carrier outside rails and insert the Bolt Carrier Assembly into the Receiver.



- iii. Insert 2 dowel pins in the charging handle and install onto the left- or right-hand side of the carrier using the socket head cap screw.



## #5 CARBINE BUFFER ASSEMBLY AND FINAL RECEIVER ASSEMBLY

### a. Install Carbine Buffer Tube

#### i. Layout all Carbine Buffer Assembly Parts



- ii. Screw the Castle Nut onto the Buffer Tube so that the corresponding Armourer Wrench flats are facing the end of the tube and away from the receiver and slide the MRA Maverick Receiver End Plate over the threaded part of the Buffer Tube ensuring the tab on the bottom of the end plate slides into the corresponding notch on the buffer tube.
- iii. Apply grease to the Buffer Spring, insert the Buffer into the spring and insert this assembly into the Buffer Tube open end first.



- iv. Compressing the spring into the Buffer Tube by pressing the exposed Buffer against the rear of the Bolt Carrier, screw the Buffer Tube assembly securely onto the back of the Maverick Receiver for 6 revolutions.
- v. Screw the castle nut down so that it pins the end plate to the receiver and torque to 40 ft/lbs.

### b. Complete the Rifle

- i. Slide the butt stock onto the Buffer Tube.
- ii. Attach the Receiver to the Bottom Metal.
- iii. The assembled Maple Ridge Armoury Maverick rifle is now ready for review of the check list for all steps and parts, then commence fully assembled function and safety checks. Your Maple Ridge Armoury Maverick is not ready for live fire of ammunition until all check list function tests and safety tests have been met.

## #6 SAFETY CHECK, FUNCTION TEST AND TEST FIRE

- a. Check that all included and required parts are being used. If there are parts and accessories left unassembled, you may not have assembled your firearm correctly.

**TREAT EVERY UNLOADED MAPLE RIDGE ARMOURY RENEGADE AS A LOADED FIREARM. POINT THE MUZZLE IN A SAFE DIRECTION DURING THE FUNCTION AND SAFETY TESTS. THIS WILL REMIND YOU TO MAINTAIN FIREARM SAFETY AT ALL TIMES.**

Check for loose parts after assembly and function test as detailed below. Check the head space using a quality set of head space gauges for the caliber of the barrel.

- b. The barrel and bolt headspace safety test is now to be repeated with accurate GO and NO-G gauges. This is of critical importance. Use only accurate GO and NO-GO gauges. Do not use live cartridge ammunition or empty cases. If the now complete firearm fails this critical test, contact Maple Ridge Armoury for assistance or employ a licensed Gunsmith.

**NEVER FIRE A FIREARM THAT DOES NOT PASS THE HEAD-SPACE CHECK.**

- c. Assemble the Barreled Receiver to the Bottom Metal  
Perform the Function and Safety Test.

**DO NOT USE LIVE AMMUNITION TO FUNCTION TEST, USE ONLY SNAP CAPS OR DUMMY CARTRIDGES OF THE CORRECT CALIBER, AND ABSOLUTELY NO PRIMER, NO POWDER AND ONLY THE CORRECT OAL.**

- i. Perform a dry test WITHOUT snap caps or dummy cartridges.
- ii. Cock the action by pulling the charging handle fully to the rear and releasing. The carrier should smoothly release forward and go fully into battery. You will see the leading edge of the carrier in contact with the barrel extension by looking through the ejection port. If the carrier is not fully seated against the barrel extension, contact Maple Ridge Armoury or a licensed Gunsmith to trouble shoot the issue. If the carrier is fully seated, then cycle the action several times to ensure smooth operation.
- iii. Set the Safety in the SAFE position and try to depress the trigger. The trigger should not depress.
- iv. Set the Safety to the FIRE position and depress the trigger holding the trigger down. The trigger should depress, dropping the hammer. Listen and hear the hammer drop and hit the snap cap or dummy cartridge.

- v. While holding the trigger down, cock the action, then slowly release pressure on the trigger. The trigger should reset, and you should hear and feel the disconnecter engage the trigger sear as you let off pressure on the trigger, so when you pull the trigger keep it depressed as you again cock the hammer.
- vi. Depress the trigger, when you perform this action, the hammer should drop.
- vii. If the Function test fails at any point, please contact Maple Ride Armoury for assistance.
- viii. Perform a dry test with snap caps or dummy cartridges.
- ix. Charge a magazine WITH 2 snap caps and insert the magazine in the rifle's magazine well until it engages the magazine catch.
- x. Cock the action to chamber the snap caps.
- xi. Set the Safety in the SAFE position and try to depress the trigger. The trigger should not depress.
- xii. Set the Safety to the FIRE position and depress the trigger holding the trigger down. The trigger should depress, dropping the hammer.
- xiii. While holding the trigger down, cock the action extracting and ejecting the chambered snap cap and loading a new snap cap from the magazine.
- xiv. Slowly release the trigger until you feel and hear the reset then depress the trigger to drop the hammer. Listen and hear the hammer drop and hit the snap cap or dummy cartridge.
- xv. REPEAT THE TEST WITH 3 DIFFERENT MAGAZINES LOADED WITH 2 SNAP CAPS EACH.
- xvi. **NEVER FIRE A FIREARM THAT DOES NOT PASS A COMPLETE FUNCTION TEST. NEVER LOAD LIVE AMMUNITION, NOT EVEN A PRIMED CARTRIDGE, INTO A FIREARM THAT DOES NOT PASS A COMPLETE FUNCTION TEST.**

e. Live Test Fire

**WHEN PERFORMING THE LIVE FIRE TEST, WE STRONGLY ADVISE USING A FIREARM TEST AREA OF AN AUTHORIZED GUN RANGE. HAVE A SECOND PERSON WITH YOU. HAVE CELL PHONE ACCESS FOR SAFETY. IF DURING THE LIVE FIRE TEST ANY BLOCKAGE, STIFFNESS OF ACTION OR MALFUNCTION OCCURS, STOP IMMEDIATELY. UNLOAD THE FIREARM. REMOVE THE CARTRIDGE MAGAZINE, REMOVE LIVE CARTRIDGES FROM THE FIREARM. SAFELY TRANSPORT THE FIREARM TO A LICENSED GUNSMITH FOR INSPECTION. CONTACT MAPLE RIDGE ARMOURY IMMEDIATELY FOR FURTHER ADVICE.**

- i. Use over the counter, factory ammunition. Do not use reloads or re-manufactured ammunition. Use only brass case ammunition.
  - ii. When using ammunition do not exceed factory ammunition pressure.
  - iii. Cycle and Test Fire 5 live cartridges from a magazine matching your bottom metal. The action should cycle smoothly through the entire firing cycle.
  - iv. After test firing check the ejected brass for abnormal marks. The primer should be struck in centre. Check barrel for obstructions.
  - v. Check for loose parts once again. Reminder, there should be no loose parts.
- f. Rifle Break In
- i. The Maverick rifle requires a break-in period of approximately 50 rounds to reach optimal performance and reliability. When performing the break in, allow the firearm to cool between magazines. Firing long strings of consecutive rounds in quick succession during the break in period may result in hard extractions.

# CLEANING & MAINTENANCE

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As taught in the Canadian Firearms Safety Course and Canadian Restricted Firearms Safety Course, we strongly recommend performing the ACTS & PROVE whenever handling any firearm.

Once the firearm has been proven safe, proceed with cleaning and/or maintenance.

1. Detail Strip
  - a. Separate the Receiver from the Bottom Metal and set the Bottom Metal aside.
  - b. Secure receiver in Maverick receiver vice jig.
  - c. Back off the castle nut and remove the buffer system.
  - d. Remove the charging handle from the bolt carrier.
  - e. Remove the bolt carrier group from the receiver.
  - f. Remove the firing pin retaining pin, followed by the firing pin, and the cam pin, and then finally the bolt assembly and extraction assist spring.
2. Cleaning
  - a. Clean the bore using a single piece, silicone covered cleaning rod. We strongly advise against using a Bore-Snake or 2-piece steel cleaning rod.
  - b. Use a bore solvent to dissolve fouling caused by the bullets jacket.
  - c. Use a bore cleaner to clean the carbon and other fouling from the bore.
  - d. Clean the bolt assembly and sub-components with a high quality cleaner.
  - e. Clean the interior of the receiver and bottom metal with a high quality cleaner.
  - f. Clean the buffer component and tube with a high quality cleaner.
3. Lubrication
  - a. Apply a thin film of high quality gun oil to the bolt assembly and cam pin. Ensure that you do not get any oil on the bolt face or lugs.
  - b. Apply a thin film of high quality gun grease to the bolt carrier rails and alignment block, the alignment block channel in the receiver, and to the buffer spring.
4. Reassembly
  - a. Reassemble the firearm according to the assembly instructions detailed in this manual.
5. Maintenance
  - a. Ensure the firearm is in good working order by performing a dry function test prior to firing. If the function test fails, please contact Maple Ridge Armoury. Do not fire a firearm that cannot pass a dry function test.

b. Ensure the firearm is clean and lubricated as per the instructions in this manual.

## 6. Troubleshooting

### a. Light Primer Strike

- i. Bolt is not fully in battery causing the firing pin to stop short and not detonate the primer. If this happens, the firearm is likely tight and requires more break-in to smooth out the action. In the case of using a gas driven bolt assembly, ensure the gas rings have been completely removed.

### b. Hard Extraction

- i. Cartridge cases made from steel and/or covered in lacquer may be difficult to extract. We recommend the use of brass cased ammunition for best results.
- ii. Inspect the barrel chamber. A rough chamber can cause hard extractions.
- iii. Ensure the extraction assist spring is installed on the bolt assembly tail stock. The Maverick will not run reliably without the extraction assist spring installed.
- iv. Firing long strings of fire in quick succession will heat the firearm to the point where it may have hard extracts. If the firearm is excessively hot and you are experiencing hard extractions, allow some time to cool and the issue should resolve itself. Provided you are firing the Maverik with deliberate, aimed shots at a steady rate of fire, you should not experience overheating.

# APPENDIX “A”

## MRA MAVERICK ASSEMBLY CHECKLIST

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- All parts accounted for;
- Correctly sized screwdrivers and wrenches;
- All parts used, no left over parts or accessories;
- Torqued to specifications;
- Function test;
- Go and NO-GO head space chamber gauge test;
- Trigger function test;
- Bolt function test;
- Magazine function test;
- Blot catch function test;
- Barrel gas block test;
- Cartridge load from magazine, trigger, bolt and eject test;
- Field stripping and cleaning test before live fire;
- Single cartridge live fire test;
- Charged magazine feed and fire test;
- Loose parts test after live fire;
- Field strip and clean after live fire test;
- Factory specification live ammunition confirmation test;
- Do not attempt to assemble without the safety components;
- Do not modify the receiver or bolt carrier group;
- Use only approved compatible parts and accessories;
- Use only parts and accessories that are legal to possess;
- Assemble only while your firearms license is valid;
- After assembly transport safely to a designated firearm range or safe area;

You cannot assemble in whole or in part, a Maverick kit for another person. Only a licensed Gunsmith can do this. You can assemble your own Maverick kit for personal use only.

# WARRANTY

All Maple Ridge Armoury products are backed by our transferable, limited lifetime repair or replace warranty with proof of original purchase. The warranty covers all workmanship and material defects for the life of the firearm.

This warranty does not cover normal wear and tear, surface finish, abuse or misuse, damage to property, cost of inconvenience or loss of use. The warranty does not cover any 3rd party parts used in the assembly of the Maverick, it only applies to the parts of the Maverick receiver kit.

This warranty gives you certain legal rights and you may have other rights which vary depending on your local and national government regulations. Apart from the assumptions of cancellation of warranty mentioned in the different sections of this manual, below will also void the warranty:

- Unauthorized modifications and/or repairs.
- Rifle returned in neglected condition (dirty, corroded, etc.)
- Use of improper ammunition (e.g. reloaded ammunition, ammunition not made to SAAMI or CIP specifications)
- Damages which result from not following the instructions given in this manual.

This firearm is identified by the serial number on the side of the Receiver.

**CAUTION:** in case of return of the rifle for any reason, ensure the firearm is unloaded and the bolt is removed.

In the event you require support and/or your Maple Ridge Armoury product requires warranty service, please contact us via email, telephone, or mail using the information on the back of this booklet to initiate a warranty claim.

To initiate a warranty claim, please have proof of purchase, contact information, product information, and details of your warranty issue prepared to help expedite the process.

Please check the Maple Ridge Armoury website for a PDF download of this owners manual and for regular updates to the owner's manual.



# DISCLAIMER

Maple Ridge Armoury is not responsible for errors in assembly of the Maple Ridge Armoury Maverick rifle.

Substitution of parts supplied by Maple Ridge Armoury and modification in any way to parts supplied by Maple Ridge Armoury voids all warranties. Maple Ridge Armoury is not responsible for malfunctions or injuries caused by errors in assembly or the use of substituted or modified Maple Ridge Armoury parts.

This Maple Ridge Armoury Maverick is precisely designed and machined for use as a target and hunting firearm. All other uses are prohibited and unauthorized by Maple Ridge Armoury.

Maple Ridge Armoury to the fullest extent of the law disclaims all warranties expressed or implied as to suitability for use, merchantability, fitness for a particular purpose, safe operation, unlawful use, harm to owner, operator, or other persons or things.

The Maple Ridge Armoury Maverick assembled or parts kit is to be used by licensed firearms owners, assembled by the original purchaser who is a licensed firearms owner or a licensed Gunsmith, used in accordance with all applicable Federal, Provincial, and Municipal laws without exception for sporting and hunting use.

Any and all changes to the original manufactured parts as designed and machined by Maple Ridge Armoury is strictly forbidden and unauthorized.

The Maple Ridge Armoury Maverick assembled or parts kits is a non-restricted firearm under the Criminal Code of Canada. Any alteration whatsoever that alters that designation is forbidden and unauthorized by Maple Ridge Armoury.

If by legislation or regulation the designation of the Maple Ridge Armoury Maverick is changed from non-restricted to restricted or prohibited or any other designation by Federal, Provincial, or Municipal legislation or regulation, the person in possession is directed to strictly adhere to such designation.

# **MRA**

# **MAPLE RIDGE ARMOURY**

**PERFORMANCE AND STYLE**

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