

WARNING: READ THIS MANUAL BEFORE USE



OPERATORS MANUAL

RD15 FIREARM

MISSION STATEMENT

Raptor Defense is dedicated to producing firearms and components of high quality and innovative design. All of our products are designed in-house and assembled at our facility. We are able to control quality, fit, and finish at every stage to ensure that our customers are receiving top tier firearm for their needs.



The images above are for illustration purposes only. Gun models vary in appearance

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SAFE HANDLING PROCEDURES



WARNING: BEFORE OPERATING THIS FIREARM BE SURE TO READ AND UNDERSTAND THIS OWNER'S MANUAL IN ITS ENTIRETY. FOR YOUR SAFETY, AND THE SAFETY OF THOSE AROUND YOU, IT IS IMPORTANT THAT YOU PRACTICE THE BASIC FIREARMS SAFETY RULES AT ALL TIMES.



WARNING: THE IMPROPER HANDLING OF THIS FIREARM CAN LEAD TO PROPERTY DAMAGE, SERIOUS INJURY, OR DEATH. ALWAYS BE SURE THAT YOU ARE USING THE PROPER AMMUNITION TYPE TO AVOID CATASTROPHIC FAILURE. THE AMMUNITION DESIGNATED TO BE USED IN THIS FIREARM IS INDICATED ON THE BARREL. DO NOT USE REMANUFACTURED, HAND LOADED, OR AMMUNITION THAT DOES NOT CONFORM TO SAAMI SPECIFICATIONS. USE OF SUCH AMMUNITION WILL VOID ANY AND ALL WARRANTIES FOR THIS PRODUCT.

ALWAYS FOLLOW THESE UNIVERSAL RULES OF FIREARMS SAFETY:

1. Treat all guns as if they are always loaded.
2. Never let the muzzle point at anything that you are not willing to destroy.
3. Keep your finger off the trigger until your sights are on target and you've made the decision to shoot.
4. Be sure of your target and what is behind it.
5. Never leave a firearm unsecured or unattended.





IMPORTANT: BE SURE TO FOLLOW ALL OF YOUR LOCAL, STATE, AND FEDERAL LAWS WHEN OPERATING, TRANSPORTING AND STORING THIS FIREARM.



CAUTION: NEVER CONSUME ALCOHOL OR TAKE DRUGS WHICH MAY IMPAIR YOUR JUDGMENT WHEN HANDLING FIREARMS. FAILURE TO FOLLOW THIS WARNING CAN LEAD TO NEGLIGENT DISCHARGE AND ACCIDENTS CAUSING SERIOUS INJURY OR DEATH.



CAUTION: ALWAYS BE SURE TO PROPERLY STORE YOUR FIREARM. WHEN STORED IMPROPERLY, FIREARMS POSE A SIGNIFICANT DANGER TO CHILDREN. AMMUNITION SHOULD ALWAYS BE STORED IN A SEPARATE AND SECURE LOCATION WHEN NOT IN USE. YOU ARE RESPONSIBLE FOR KEEPING YOUR FIREARM LOCKED AND UNLOADED IN A SECURE PLACE FOR THE SAFETY OF OTHERS.



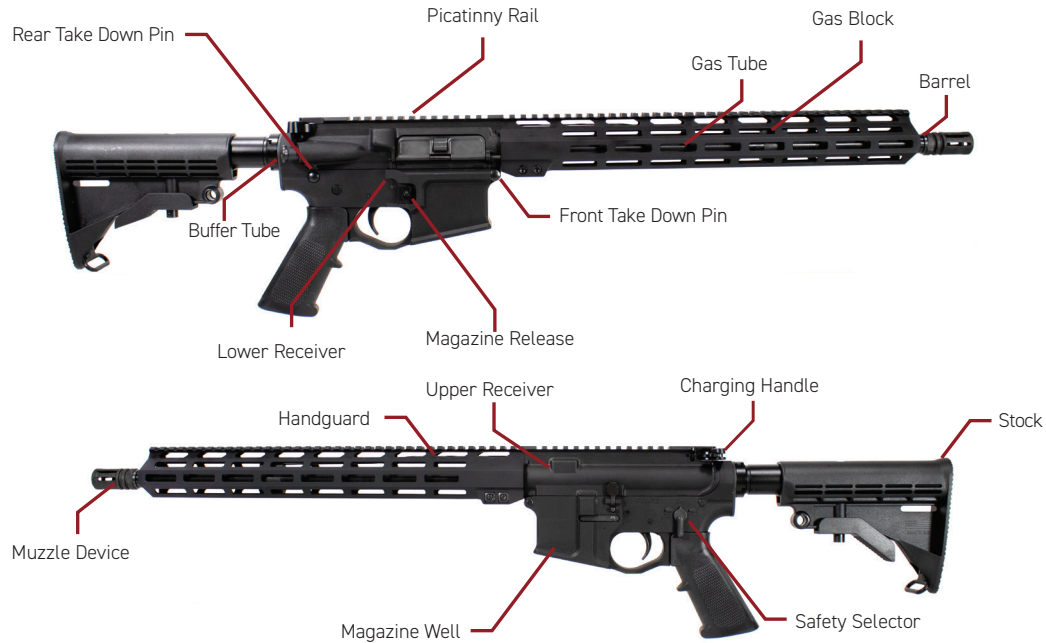
CAUTION: BE SURE THAT YOUR AMMUNITION IS CLEAN, FREE OF CORROSION, AND IS UNDAMAGED. OBSTRUCTIONS IN THE BARREL AND WORKING COMPONENTS CAN CAUSE CATASTROPHIC FAILURE.



CAUTION: ALWAYS USE EYE AND EAR PROTECTION WHEN USING THIS FIREARM. FAILURE TO DO SO MAY RESULT IN HEARING LOSS AND/OR BLINDNESS.

MAJOR COMPONENTS OF YOUR RIFLE

Below is a list of major components found on your RD15 Series Rifle



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Upper Receiver - Section where the bolt and barrel interact.

Lower Receiver - Housing for the magazine and fire control group.

Barrel - Imparts trajectory to the bullet.

Handguard - Protects the hand from barrel heat.

Buffer Tube - Contains the return spring and buffer.

Stock - Provides a stable platform for shoulder firing.

Magazine Release - Disengages magazine retention.

Safety Selector - Blocks or enables operation of the trigger.

Gas Block - Directs gas from the barrel port into the gas tube.

Muzzle Device - Mitigates flash, recoil, or sound depending on the type.

Charging Handle - Allows the user to pull the bolt carrier back.

Front Take Down Pin - Secures the upper to the lower receiver.

Rear Take Down Pin - Secures the upper to the lower receiver.

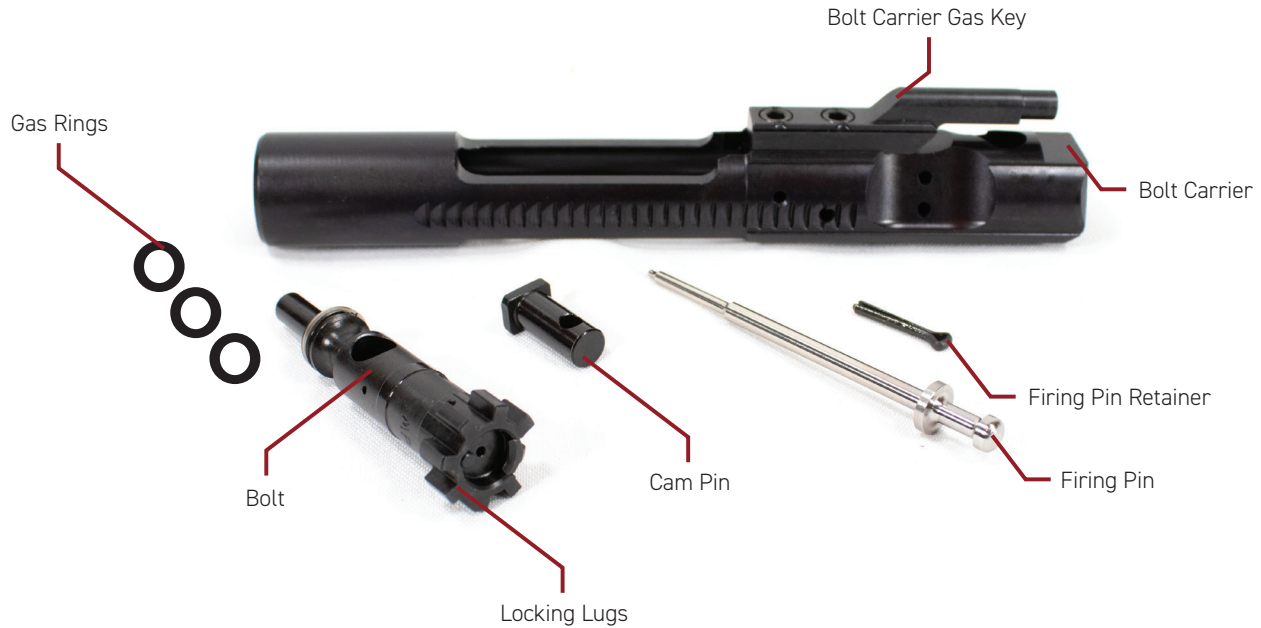
Magazine Well - Retains the magazine and ensures proper feeding orientation.

Picatinny Rail - Serves as a platform for various sighting systems.

Gas Tube - Directs gas from the barrel to the bolt carrier group.

MAJOR COMPONENTS OF YOUR RIFLE

Parts of the bolt and carrier



Bolt - Retains cartridges and locks them in the chamber for firing.

Locking Lugs - Engage with the barrel extension to keep the bolt from opening during fire.

Gas Rings - Seal gas within the carrier to assist in unlocking the bolt.

Cam Pin - Retains the bolt within the carrier and directs rotation.

Firing Pin - Strikes the primer of the cartridge to fire.

Firing Pin Retainer - Ensures that the firing pin does not fall out of the bolt.

Bolt Carrier - Houses the bolt, provides mass for safe cycling, and directs gas from the gas tube into the system.

Bolt Carrier Gas Key - Funnels gas from the gas tube to drive the bolt opening.

LOADING/UNLOADING PROCEDURE

WARNING: THIS SEMI-AUTOMATIC FIREARM IS CAPABLE OF FIRING EVEN WHEN THE MAGAZINE IS REMOVED. EXTRA CARE SHOULD BE TAKEN WHEN INTRODUCING AMMUNITION TO THE MAGAZINE AND FIREARM. ALWAYS PRACTICE SAFE FIREARM HANDLING TECHNIQUES



INSPECT THE FIREARMS CHAMBER

1. Begin by dropping the magazine from the magazine well by depressing
2. Lock the bolt carrier group to the rear by pulling back on the charging handle while simultaneously pressing and holding the bottom portion of the bolt catch.
3. Locate the safety selector switch, above the trigger guard on the left-hand side of the lower receiver. Rotate the safety selector switch into the "SAFE" position.
4. Physically inspect the chamber to be sure that it is empty and free of obstruction.
5. Press the top portion of the bolt catch to release the bolt into its closed position.



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Note: Always make certain that your rifle is unloaded with an empty chamber before engaging

LOAD THE MAGAZINE



1. Be sure to use the magazine included with this firearm, or a magazine specifically designed for this firearm.
2. Be sure that you are using clean, dry, quality commercially produced ammunition in the proper caliber designated for this firearm.
3. Place a cartridge directly on top of the magazine follower oriented in the proper direction.
4. Press down on the cartridge until the feed lips of the magazine fully capture the round.
5. Continue to load successive cartridges by following the same procedure, placing the next round over the loaded cartridge, until the desired number of cartridges have been inserted.



LOAD THE FIREARM

CAUTION: KEEP THE FIREARM POINTED IN SAFE DIRECTION WITH YOUR FINGER OFF THE TRIGGER

1. Insert the loaded magazine straight into the magazine well making sure it is oriented in the proper direction with the bullets of the cartridges facing forward towards the muzzle.
2. Press up on the magazine until you feel and hear an audible "click" to be sure that it is properly seated and retained by the magazine catch.
3. Pull the charging handle all the way to the rear until the bolt carrier group has reached its end of travel. Then, release the handle to load a round into the chamber. Do not "ride" the handle as this may prevent the cartridge fully seating and the bolt may not return to full battery.
4. The firearm is now loaded and ready to fire. Observe all firearms safety rules until you are ready to fire.



** These are Basic Operation suggestions. Should not use solely for operation. Seek professional instruction for more detail.*

Basic Operation

UNLOAD THE FIREARM

CAUTION: THIS FIREARM WILL CONTINUOUSLY LOAD SUCCESSIVE ROUNDS INTO THE CHAMBER UNTIL THE MAGAZINE HAS BEEN COMPLETELY DEPLETED OF CARTRIDGES



1. Be sure that the safety selector switch is set to the "SAFE" position.
2. Press the magazine release button and remove the magazine.
3. Lock the bolt carrier group to the rear by pulling back on the charging handle while simultaneously pressing and holding the bottom portion of the bolt catch.
4. If a round was in the chamber, it should have been extracted and ejected at this point.
5. Visually inspect the chamber to ensure that there are no cartridges or obstructions.
6. Press the top portion of the bolt catch to release the bolt into its closed position.
7. Remove any remaining rounds from the magazine by pressing downward on the cartridge and sliding it forward.
8. Be sure to secure your rifle and remaining ammunition in separate locked locations.



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Note: Always make certain that your rifle is unloaded with an empty chamber before engaging

FIRING PROCEDURE

CAUTION: ALWAYS USE EYE AND EAR PROTECTION WHEN USING THIS FIREARM. FAILURE TO DO SO MAY RESULT IN HEARING LOSS AND/OR BLINDNESS.

CAUTION: ALWAYS KEEP YOUR FIREARM POINTED IN A SAFE DIRECTION, AND KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOU ARE ABSOLUTELY READY TO FIRE



1. Proceed to load the firearm as described in the previous section.
2. Aim the firearm at your target by aligning the front and rear sights.
3. When you are ready to fire, rotate the safety selector switch to the SEMI (fire) position.
4. Place your index finger on the trigger bow and squeeze the trigger rearward.
5. At this point the hammer will fall onto the firing pin, firing a shot.
6. Once the trigger is released the firearm will reset and a new cartridge will be loaded ready to fire subsequent shots.
7. Once the magazine and chamber have been exhausted of all ammunition, the bolt will lock the rear position.
8. Remember, keep the safety selector switch in the "SAFE" position when not in the act of shooting.

CAUTION: REMEMBER THAT THIS IS AN AUTO FEEDING FIREARM, AND IT IS STILL CAPABLE OF BEING FIRED EVEN AFTER THE MAGAZINE HAS BEEN REMOVED

CLEANING YOUR FIREARM

WARNING: ALWAYS PERFORM FIREARM MAINTENANCE IN A SAFE, WELL VENTILATED AREA AS EXPOSURE TO HARSH CHEMICALS CAN LEAD TO SERIOUS PHYSICAL INJURY



Periodic cleaning of your firearm will ensure that it runs at optimal performance levels and prevent corrosion. If your firearm becomes exposed to moisture it is recommended that you clean it as soon as possible. It is also recommended that you clean your firearm before shooting it for the first time to remove any excess factory preservatives or oils.



You should only use quality, commercially produced solvents and oils designed specifically for use with firearms. Be sure to follow the manufacturers' instructions when using cleaning products for the best results, and to prevent damage to surface finishes. The use of personal of protective equipment such as chemical resistant gloves and eye protection is recommended to prevent injury caused from solvents.



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Note: Always make certain that your rifle is unloaded with an empty chamber before engaging

UPPER RECEIVER AND BARREL CLEANING

1. With your firearm field stripped and disassembled begin by wiping down the interior of the upper receiver with a clean, soft cloth to remove loose fouling.

2. Use a nylon bristle brush soaked in powder solvent and begin scrubbing all the interior surfaces.

3. Use a clean cloth once more to remove excess powder solvent and fouling.

4. Using a quality cleaning rod or cable with patch jag, soak a cotton patch in powder solvent and run the patch through the bore starting from the chamber and moving out towards the muzzle. When using a rod, the use of a bore guide is suggested to prevent damage to the chamber throat and barrel rifling.

5. Once the bore has been soaked in solvent, use a nylon or brass core bore brush to further loosen and clean fouling from the bore. Avoid using steel bore brushes to prevent damage to rifling.

6. Next, run dry patches through the bore to remove loosened fouling. Repeat these steps until your dry patches come out clean.

7. DO NOT leave any solvents or lubricants in the bore, as this can cause an obstruction when firing leading to potential catastrophic failure. Leave a thin film of oil in the bore ONLY for prolonged storage.

8. Clean the chamber using a chamber brush and powder solvent. Be sure to use nylon or bronze bristle brushes to avoid damage to the chamber and barrel extension. Wipe off all loosened fouling and residue.

9. Use a nylon brush to clean the charging handle and wipe off any fouling. Apply a light coat of oil.



BOLT CARRIER GROUP CLEANING



1. Using a multi-purpose nylon cleaning brush and solvent, scrub all the surfaces of the bolt including underneath the extractor, the bolt face, and gas rings. Use a cotton cloth to remove fouling.



2. Use the same brush and solvent to clean the exterior surfaces of the carrier and gas key. Carefully clean the interior points of the carrier removing fouling. Use a pipe cleaner to remove carbon build up within the gas key.



3. Wipe down to the firing pin, cam pin, and firing retaining pin using the above methods.



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Note: Always make certain that your rifle is unloaded with an empty chamber before engaging



4. Once all of the surfaces of the bolt carrier group are dry, use a high-quality gun oil to lubricate the parts. Use a light coat of oil on the firing pin. Generously lubricate the bolt carrier bottom railways, and lower portion of the gas key.



5. The gaps between the gas rings should be evenly spaced around the bolt (at about a 120 degrees separation) for optimum function. Lightly lubricate the gas rings (about a drop of oil)



6. Lubricate the surfaces of the bolt and cam pin paying special attention to bearing surfaces. Apply a little extra oil to these points to prevent excessive wear.

CLEANING AND MAINTAINING YOUR RIFLE

Lower Receiver

Note: Use only nylon bristle brushes for cleaning your lower receiver.



1. Using a brush or cloth, scrub and wipe down all interior surfaces, including the fire control group.



2. Pay particularly close attention to the bolt hold open assembly. Clean and remove all fouling with a nylon brush and clean cloth.



3. Place a drop of oil on the pivot point of the bolt catch.



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Note: Always make certain that your rifle is unloaded with an empty chamber before engaging



4. Wipe off the buffer and buffer spring with a clean cloth. Lightly oil both of these components.



2. Lightly oil all of the fire control group components.



3. Apply a light coat of oil to both the front and rear receiver take down pins.

CLEANING AND MAINTAINING YOUR RIFLE

Lubricating the Working Parts

Note: Use only lubricants that are formulated for firearms application.

Bolt Carrier Group

1. Lightly lubricate the firing pin and the firing pin channel inside the bolt.
2. Apply a generous amount of lubrication to the exterior of the carrier, along the sides, and lower section of the gas key.
3. Lubricate the cam pin, and area around the cam pin.
4. Lightly lubricate the gas rings.
5. Lightly lubricate the bolt lugs.
6. Apply light lubrication to the charging handle stem, the latch spring, and the latch area.

Upper Receiver

1. Apply a drop of lubricant to the forward assist, press it a few times to get it worked into the interior.



Lower Receiver

Note: Working surfaces should be lubricated generously.

1. Trigger spring, hammer spring, and the bearing surfaces between these components should receive special attention.
2. The bolt catch where it interfaces with the receiver pocket.
3. The magazine release where it interfaces with it's pocket.
4. The channels where both front and rear take down pins travel.
5. Extremely minimal coat over the spring and buffer.

REASSEMBLING YOUR FIREARM



BOLT CARRIER GROUP REASSEMBLY

1. Insert the bolt into the carrier making sure that the extractor is located on the ride side of the carrier.
2. Insert the cam pin and rotate it 90 degrees.
3. Insert the firing pin from the rear of the carrier.
4. Install the firing pin retainer from the left side of the carrier. Make sure that the firing pin is fully retained.
5. The bolt carrier group is now ready to be installed in the upper receiver.

BUFFER AND BUFFER SPRING REASSEMBLY



1. Feed the buffer spring into the receiver extension and hold it in place.
2. Depress the buffer retainer with the tip of a flat blade screwdriver or similar tool using caution not to mar the threads of the receiver extension.
3. Insert buffer into buffer spring until it clears the buffer retainer. Release the buffer retainer.
4. The buffer should now be captured within the receiver extension.

REASSEMBLING THE RIFLE

UPPER RECEIVER



1. Insert the charging handle into the rear of the upper receiver by aligning the lugs on the charging handle with the notches in the receiver keyway.
2. Prepare the bolt carrier group for installation by pulling the bolt to the outer most position.
3. Before pushing the charging handle into the closed position, feed the bolt carrier group into the bottom of the handle with the gas key riding in the handle channel.
4. Push both the bolt carrier group and charging handle into the upper receiver simultaneous until the charging handle latch engages the receiver.
5. The upper receiver assembly is ready to be joined to the lower receiver assembly.

REASSEMBLY OF THE UPPER RECEIVER TO THE LOWER RECEIVER

1. Make sure the hammer is in the cocked position, and safety selector switch is rotated to the "SAFE" position if it is not already engaged.
2. Align the hole of the upper receiver pivot lug with the recess in the lower receiver. Push the lower receiver front take down pin from the right side of the receiver until it is fully seated.
3. Pivot the upper receiver towards the lower receiver until the rear pivot lugs of the upper receiver meets the recess in the lower receiver. Push the lower receiver rear take down pin from the right side of the receiver until it is fully seated.
4. Your rifle is now fully reassembled.
5. Perform a function check by pulling the charging handle rearward making sure that the bolt carrier group rides smoothly within the receiver. Make sure the safety selector switch rotates freely from the "SAFE" position to the "FIRE" position with a positive engagement between the 2 positions.

BASIC TROUBLESHOOTING

1. My rifle will not fire.

- a. Be sure that the safety selector is set to the “fire” position.
- b. Inspect ammunition to be sure the primers or other components are not faulty.
- c. Check for blockage or excessive fouling in the firing pin channel.
- d. Check to be sure the firing pin has been properly installed in the bolt.

2. The bolt in my rifle is stuck in the chamber.

- a. There may be excessive carbon built up that needs cleaning.
- b. Check locking lugs as they may be deformed. If so, take the firearm to a certified gunsmith.

3. Spent cases will not extract.

- a. The chamber or extractor may be excessively fouled. Clean thoroughly.
- b. Verify that the ammunition case isn't corroded or dented.
- c. Inspect the extractor to be sure it has not broken.



BASIC TROUBLESHOOTING

4. My rifle will not feed/double feeds.

- a. Check that the magazine is fully seated. Check ammo is fully seated.
- b. The magazine may have dirt/fouling accumulated inside.
- c. Ammunition may be defective or the incorrect cartridge.
- d. The magazine may be defective. Try different brands/models of magazines.

5. Cartridges will not chamber or fully seat in my rifle.

- a. Check that the chamber and bolt lugs are clean and clear of carbon fouling.
- b. Verify that the ammunition case is not deformed, or covered in debris.
- c. Verify that the correct ammunition type is being used.

BASIC TROUBLESHOOTING

6. The bolt will not cycle back far enough to strip a round from the magazine (short strokes).

- a. Verify that the ammunition is loaded to proper SAAMI pressures for your gas system.
- b. Carbon fouling may be accumulated in your gas tube, gas key, or in the gas rings. Cleaning is needed.
- c. Make sure that debris has not accumulated within the gas system.
- d. Gas rings may be worn.

7. Bolt does not lock open on the last round.

- a. Check the magazine to be sure the springs and/or follower is not worn.
- b. Verify that the ammunition is loaded to proper pressures to cycle in your gas system.
- c. Make sure that the buffer and buffer spring are not obstructed. Also check whether the spring has not lost tension.



WARRANTY

Raptor Defense Inc.® Warranty Policy

The Raptor Defense Inc. Limited Lifetime Warranty covers against defects in materials and workmanship. Raptor Defense Inc.® will replace or repair defective products upon inspection by our technical staff. Defects or damage from abnormal use, improper storage, unauthorized modifications, unauthorized repair, abuse, alteration, or improper installation will void the product warranty and eligibility. Discontinued or out-of-stock items may be replaced with items of equal or lesser value and with similar features at the discretion of Raptor Defense Inc. Gun locks, cases and other accessories provided with the product are not covered under the Raptor Defense Inc. Limited Lifetime Warranty but may be replaced on a courtesy basis dependent upon availability and the discretion of the Raptor Defense Inc. Technical staff. Raptor Defense Inc. is not responsible for data or claims made by dealers that is not present on public materials originating from the Raptor Defense website or technical materials provided with the Raptor Defense Inc. trademark.

Returning the Item

Before shipping the item(s) back to Raptor Defense Inc. a Return Authorization Number (RA#) must be obtained by contacting Technical Assistance. All return items must be received with an RA# and a completed warranty form. There may be a delay in processing returns without the required information. Raptor Defense Inc. may contact the customer for additional information before processing. Shipping returned items shall be on the customer's initiative, however, Raptor Defense Inc. will cover shipping back to the customer. If no items are being returned to the client, the initial shipping is not refunded. Upon completion, remit support@raptordefenseinc.com

Contact us:

Raptor Defense Inc.
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