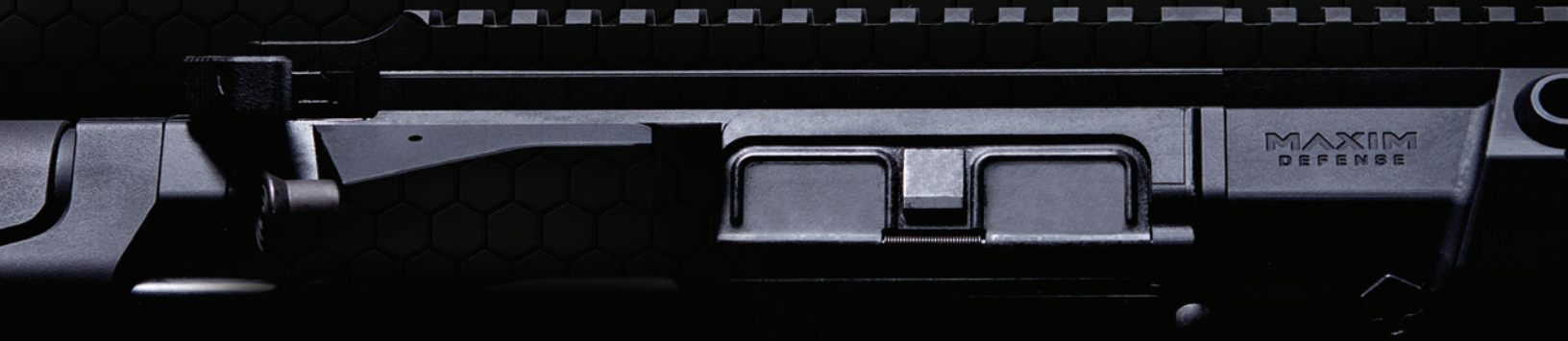
OWNER'S MANUAL

MDX

WEAPON SYSTEMS



PDX MDX 508 MDX 510 MD 15

MAXIM DEFENSE

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INTRO

Maxim Defense Industries, LLC was born with the mission of being a 21st century defense development company striving to give the military and law enforcement the next generation of tools and equipment that exceed in today's extreme environments.

Our mission is focused on the Special Operation Forces community and developing products that are purpose designed and duty built to meet or exceed demanding challenges they face in this dangerous world.

Our development efforts are focused on servicing this community, but we are also committed to our commercial clients and customers, for without their support we could not achieve our mission of helping those that are down range and in harm's way.

At Maxim Defense we are dedicated to the design and production of only the highest grade in performance firearms and to protect you, who protect us and our liberties selflessly every day.

_____

Michael G. Windfeldt
President & CEO
Maxim Defense Industries LLC

SAFETY INFORMATION

4 Firearm Safety Rules:

1. Treat every weapon as if it were loaded.

2. Never point a weapon at anything you do not intend to shoot.

3. Keep your finger straight and off the trigger until you intend to fire.

4. Keep the safety on until you are ready to fire.

Additional Safety Considerations:

The Safety Selector should remain on “Safe” until you are ready to “Fire”, then placed back on “Safe”.

WARNING: It is your responsibility to reference and obey all Federal, State and Local laws and regulations on the possession, carriage and discharge of firearms. Law Enforcement and Military consumers, you are responsible for referencing and obeying the policies of your respective agencies that apply to the carry and use of this firearm.

WARNING: Ensure that the Forward Hand Stop is securely mounted prior to use of this firearm.

Disclaimer: Maxim Defense assumes no liability or, responsibility for the misuse, criminal use, nefarious activity with or, negligent use of this firearm. Maxim Defense encourages the user to seek further professional firearms training.

DESCRIPTION OF FIREARM, DEFINITIONS AND NOMENCLATURE

1. Stock or Pistol Brace
2. Forward Assist
3. Ambi-Charging Handle
4. Optic/Accessory Rail
5. Ejection Port Door
6. Upper Receiver
7. Handguard
8. QD Sling Mount
9. HATEBRAKE™
10. QD Sling Mount
11. Stock/Pistol Brace Release Button
12. Rear Take Down Pin
13. Ambi-Safety Selector
14. Grip
15. Trigger
16. Magazine Release Button
17. Magazine Well
18. Front Pivot Pin
19. Handguard Retention Bolt
20. Forward Hand Stop



WARNING: Maxim Defense Firearms come standard with a Forward Hand Stop. The Forward Hand Stop, as pictured, **SHALL NOT** be used as a vertical foregrip in any capacity. Doing so may result in serious injury.

DESCRIPTION OF FIREARM, DEFINITIONS AND NOMENCLATURE

21 M-SLOT Mounting System
22 QD Mount
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24 Charging Handle
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27 Receiver Extension Tube
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30 Bolt Catch/Release
31 Safety Selector
32 Pistol Brace Hook/Loop Strap



WARNING: The installation of a vertical foregrip may require the payment of tax and filling of registration paperwork in accordance with the National Firearms Act. The consumer bears the responsibility to ensure that all Local, State and Federal Laws are complied with prior to vertical foregrip installation.

PDX AND MDX SERIES FEATURES

- 7075-T6 Billet Upper and Lower Receiver 6061 Extruded Free Floated Handguard Maxim Defense Stock/Pistol Brace System.
- M-Slot Accessory Attachment Points Nitride Coated Military Grade Barrels.
- Barrel Lengths of 5.5” (13.97cm), 8.5” (21.59cm), 10.3” (26.16 cm) HATEBRAKE™ Muzzle Booster Device.
- Forward Hand Stop with M-RAX™ Spring Loaded Screws.
- Geissele®/ALG® Combat Enhanced Trigger System.
- Radian Ambidextrous Selector Switch.
- Radian Ambidextrous Changing Handle.
- Bilateral Magazine Release.
- Offset QD Sling Mounts.
- Non-Proprietary Common Armorer Tools.
- Available as a Pistol or SBR.



PDX™ 5.5” Barrel
(Shown as a Pistol)



MDX:508 8.5” Barrel
(Shown as a SBR)



MDX:510 10.3” Barrel
(Shown as a Pistol)

Capabilities:

Maxim Defense Industries Firearms are designed to dominate close quarter encounters with maximum energy on target and handle the fierce demands of the Tier 1 Community. Our unprecedented concealability allows for the maneuverability needed in offensive/ defensive direct-action engagements.

MD SERIES FEATURES

- 7075-T6 Forged Upper and Lower Receives 6061 Extruded Slimline Free Floated Handguard Maxim Defense Stock/Pistol Brace System.
- M-Slot Accessory Attachment Points Nitride Coated Military Grade Barrels.
- Barrel Lengths of 8.5” (21.59cm), 10.3” (26.16 cm) HATEBRAKE™ Muzzle Booster Device.
- Forward Hand Stop with M-RAX™ Spring Loaded Screws.
- Mil-Standard Trigger System with Enhanced Hammer Spring.
- Radian Ambidextrous Changing Handle.
- QD Sling Mounts.
- Non-Proprietary Common Armorer Tools.
- Available as a Pistol or SBR.



MD-15 8.5” Barrel
(Shown as a SBR)



MD-15 10.3” Barrel
(Shown as a Pistol)

Characteristics:

- Semi-Automatic and Automatic Fire Configurations (NFA Rules Apply) Gas Operated Direct Impingement System.
- Air Cooled, Lightweight, Magazine Fed.
- Chambered in 5.56 NATO/.300 Blackout/7.62x39.

UNLOADING/CLEARING

Functions of The Firearm

OBEY THE 4 FIREARM SAFETY RULES AT ALL TIMES (Refer to Page 3 where this is explained in detail)

WARNING: Always stay clear from the ejection port when clearing the firearm.



1. With the Internal hammer cocked, ensure that the manual Safety Selector is rotated to the “SAFE” position. If the manual Safety Selector switch will not rotate, the internal Hammer is in the De-Cocked position, continue to the next step.



2. **REMOVE THE SOURCE OF AMMUNITION:** Remove the Magazine from the Magazine Well by depressing the Magazine Release Button. The Magazine should fall freely from the Magazine Well. If no Magazine is present in the Magazine Well, continue to the next step.

3. Pull back on the Charging Handle from the Upper Receiver. This will pull the Bolt back and expose the Chamber.

While holding the Charging Handle fully to the rear, depress the bottom of the Bolt Catch, then slowly release the Charging Handle until the Bolt Catch retains the Bolt to the rear.

Push the Charging Handle back into the Upper Receiver until the Charging Handle Latch clicks into place on the Upper Receiver.



4. Visually and Physically inspect the Chamber, Magazine Well, and Bolt Face to ensure that **NO** Ammunition is present in the firearm.



LOADING

OBEY THE 4 FIREARM SAFETY RULES AT ALL TIMES (Refer to Page 3 where this is explained in detail)

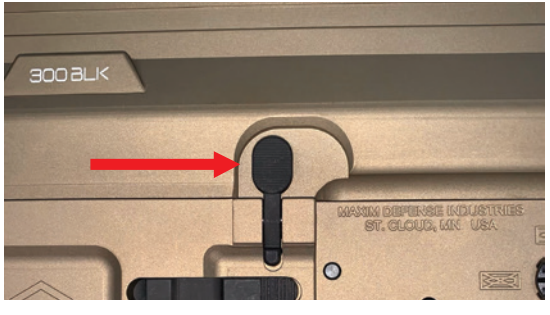
NOTE: The Firearm can be loaded with the Bolt Assembly either closed or open.

WARNING: Ensure that the Ammunition is Caliber Compliant with the Firearm. Failure to do so could cause physical harm to the shooter and damage to the firearm.

Loading the Firearm with the Bolt Assembly to the Rear



1. With the Safety Selector Switch in the "SAFE" position, insert a Loaded Magazine into the Magazine Well. Push inward until the Magazine Catch engages and holds the Magazine.
2. Give a slight pull to the Magazine to ensure that the Magazine is fully seated. If the Magazine pulls out, tap the bottom of the Magazine to ensure Magazines retention.



3. Depress the upper portion of the Bolt Catch/ Release allowing the Bolt Assembly to go forward and Chamber a round of Ammunition. **Your firearm is now loaded.**

Best Practices: Tap the Forward Assist to ensure that the Bolt is fully seated forward and close the Dust Cover.

OBEY THE 4 FIREARM SAFETY RULES AT ALL TIMES (Refer to Page 3 where this is explained in detail)

WARNING: Ensure that the Ammunition is Caliber Compliant with the Firearm. Failure to do so could cause physical farm to the shooter and damage to the firearm.

Loading the Firearm with the Bolt Assembly Closed



1. With the Safety Selector Switch in the "SAFE" position, insert a Loaded Magazine into the magazine well and push inward until the Magazine Catch engages and holds the magazine.

2. Give a slight pull to the magazine to ensure that the magazine well is fully seated. If the magazine pulls out slightly, tap the bottom of the magazine to ensure magazine retention.



3. Pull back Charging Handle completely to the rear and release, allowing the Bolt Assembly to go forward and chamber a round of ammunition. **Your firearm is now loaded.**

Best Practices: Tap the Forward Assist to ensure that the bolt is fully seated forward and close the dust cover

AIMING

NOTE: This firearm is not equipped from the manufacture with any sight system. It is the end user's responsibility to select and attach an adequate sight system to the firearm PRIOR to use. Follow the sight manufactures instructions accompanying the selected sight system for instructions on mounting and use.

FIRING

OBEY THE 4 FIREARMS SAFETY RULES AT ALL TIMES (Refer to Page 3 where this is in detail)

1. Align the Sight System with the Target.
2. Rotate the Selector Switch from "SAFE" to "FIRE".
3. Place your finger on the Trigger and apply steady pressure on the Trigger to the rear until the firearm discharges a round of ammunition.



SEMI-AUTOMATIC The firearm will discharge only one round, cycle on its own and reload a new round of Ammunition into the Chamber completing a Cycle of Operation. Once the cycle is complete, release the pressure from the Trigger allowing the Trigger to travel forward on its own until the Trigger Resets. The firearm is ready to fire again.

SELECT-FIRE* The firearm will discharge rounds of Ammunition while the Trigger is held. The Firearm will stop shooting when the Trigger is released or the firearm runs out of ammunition, whichever occurs first.

***All NFA Rules apply. Maxim Defense only manufactures and sells Select Fire firearms according to BATFE Rules.**

4. When done firing, remove your finger from the Trigger and move the Selector Switch from “FIRE” to “SAFE”.
5. When Firing and the Ammunition from the Magazine is depleted, the Follower from the magazine should engage the Bolt Catch thus causing the Bolt Assembly to be held to the rear exposing an empty Chamber.



RELOADING

OBEY THE 4 FIREARM SAFETY RULES AT ALL TIMES (Refer to Page 8 where this is in detail)

1. Place the firearm on Safe by rotating the Safety Selector Switch to “SAFE” from “Fire”.
2. Remove the Magazine by depressing the Magazine Release Button and removing the empty Magazine from the Magazine Well. The Magazine should fall freely on its own.
3. Insert a loaded Magazine of Caliber Specific Ammunition into the Magazine Well and push inward until the Magazine Catch engages and holds the Magazine.
4. Give a slight pull to the Magazine to ensure that the Magazine Well is fully seated. If the Magazine pulls out slightly, tap the bottom of the Magazine to ensure Magazine retention.
5. Depress the upper portion of the Bolt Catch/ Release allowing the Bolt Assembly to go forward and chamber a round of Ammunition. **Your firearm is now loaded.**

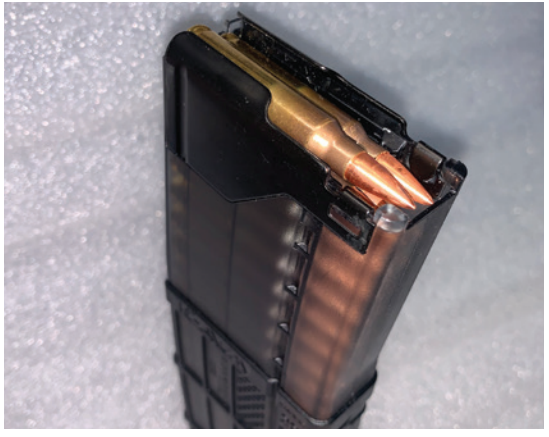
Best Practices: Tap the Forward Assist to ensure that the bolt is fully seated forward and close the dust cover

SPECIFIC PARTS DETAILED DESCRIPTION

Magazine

A semi-automatic firearm can only run as well as the Magazine used. Maxim Defense only utilizes the best Magazines available from the top manufactures in the industry and has provided one with this rifle. Load Ammunition into the Magazine by pressing down on the cartridge and sliding the round of Ammunition to the rear of the Magazine ensuring that the round is held by the Feed Lips of the Magazine.

WARNING: DO NOT overload the Magazine more than what the maximum capacity of individual rounds of Ammunition calls for. Your Firearm may malfunction. **DO NOT** apply lubrication to the Magazine or Ammunition.



Charging Handle

To manually cycle the action of the firearm, grasp the Charging Handle and pull it fully to the rear of the firearm. When performing Unloading or Clearing procedures to the firearm, the Charging Handle may be slowly eased or “Rode” forward on an empty chamber. This is done by slowly easing the Charging Handle to the forward position and re-latching the Charging Handle to the Upper Receiver. However, when loading a round of Ammunition into the Chamber, the Charging Handle should never be “Rode” forward. Instead the Charging Handle should be pulled completely to the rear and released allowing the Recoil Spring to thrust the Bolt Carrier Group forward chambering a round of Ammunition.



Bolt Catch

The Bolt Catch is engaged by the Magazine Follower on an empty fully inserted Magazine. When the Magazine Follower is positioned at the top of the Magazine, a tab on the rear of the Magazine Follower pushes up on the Bolt Catch causing the Bolt Assembly to be “Caught” by the Bolt Catch.

To lock the Bolt Assembly to the rear and expose the Chamber without the use of a Magazine:

Pull back on the Charging Handle from the Upper Receiver. This will pull the Bolt back and expose the Chamber. While holding the Charging Handle fully to the rear, depress the bottom of the Bolt Catch, then slowly release the Charging Handle until the Bolt Catch retains the Bolt to the rear. Push Charging Handle back into the Upper Receiver until the Charging Handle Latch clicks into place on the Upper Receiver.



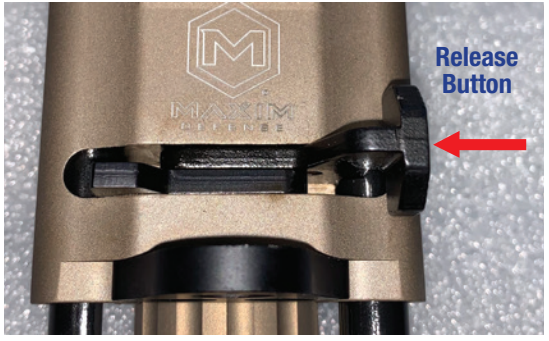
To Release the Bolt using the Bolt Catch/Release:

With the Bolt Assembly held to the rear by the Bolt Catch, to release the Bolt Carrier Assembly simply press the top of the Bolt Catch. The Bolt Catch will then release the Bolt Carrier Assembly from the spring pressure of the Action/ Recoil Spring allowing the Bolt to lock into Battery of the Chamber.



Collapsable CQB Pistol Brace or Stock

Maxim Defense Stock and Pistol Braces are designed for rapidly deployment by simply grasping the Stock or Pistol Brace and pulling back towards the rear of the firearm. The Stock or Pistol Brace will fully extend to the furthest extension and lock into place. The Stock or Pistol Brace may be shortened to a desired length of pull. To adjust the length or collapse the Stock or Pistol Brace push in the Stock/Pistol Brace Release Button located behind the pistol grip on the left side of the firearm.



To Remove Stock/Pistol Brace from the Firearm:

Simultaneously press in both the Stock/Pistol Brace Release Button and the Stock/Pistol Brace Clamp Lock. Both of which are located behind the Pistol Grip and need to be pressed inward and held together, then slide the Pistol Brace/Stock out of the Pistol Brace Housing.



To Install Stock/Pistol Brace to the Firearm:

While simultaneously pressing together the Stock/Pistol Brace Release Button and the Stock/Pistol Brace Clamp Lock, Insert the Stock Rods into the Stock/Pistol Brace Housing. Set at desired length of pull.





WARNING: The installation of a Stock on a Pistol will require the payment of a tax and filling of registration paperwork in accordance with the National Firearms Act. The consumer bears the responsibility to ensure that all local, municipal, state, and federal laws are complied with prior to the installation of a Stock on a Pistol.

Vertical Foregrip or Handstop Installation

Maxim Defense firearms include an installed Hand Stop as an indexing device for finger placement. In order to prevent the possibility of injury, **NO** part of your hand should be placed in front of the Hand Stop.

Maxim Defense Hand Stops utilize our revolutionary M-RAX™ attachment system. Unlike traditional M-SLOT mounting systems, M-RAX™ utilizes the full slot or your rail, maximizing space. This makes the M-RAX™ system end to end stackable giving you the option to create seamless monolithic rail sections where needed.



WARNING: The installation of a vertical foregrip may require the payment of a tax and filling of registration paperwork in accordance with the National Firearms Act. The consumer bears the responsibility to ensure that all local, municipal, state, and federal laws are complied with prior to the installation of a vertical foregrip.

M-RAX™

M-RAX™ is easy to install and remove. The Patent pending spring loaded universal interface system eliminates the need to adjust the gap between the T-Nut and accessory to match the thickness of the mounting surface.

Simply use the supplied hex key to push the spring-loaded hardware through the M-Slot, twist 90 degrees to engage, release tension and then tighten normally. MRAX creates a secure mounting point for any picatinny rail-mounted accessories such as grips, illumination devices, IR/ Visible Targeting devices, etc. The locking lugs engage that easily.

No more fighting or timing screws. Just push, turn and tighten.

M-RAX™ is compatible with all M-Slot handguards and forends and M-RAX™ Rails meet M1913 specifications.



DISSASEMBLY

NOTE: The Firearms must be clear of all ammunition before inspecting, cleaning, disassembly, transporting or, storing to be considered safe. Refer to Clearing Procedures on pages 8-9.

1. Verify that the firearm is clear of any ammunition in the chamber and magazine well.

2. Ensure that the Stock/Pistol Brace is fully extended to the rear, so the Stock/Pistol Brace Rods are not covering up the rear Takedown Pin.

A. NOTE: The following procedure is for the **FOLLOWING MODELS ONLY:**
PDX SERIES, MDX508-SP, MDX508-S, MDX510-SP, MDX510-S, MD-15 with SCW Stocks and Braces

A1. Push both the Takedown and Pivot Pin from the Left to the Right until you feel a positive stop.

A2. The Upper and Lower Receiver Assemblies may now be simultaneously pulled apart while slightly lifting. The Buffer Assembly should remain with the lower and the Recoil Spring will extend out from the buffer tube. It should be noted that there is not a Buffer Retainer Detent or underlying Buffer Retainer Spring in.



FIELD STRIPPING

NOTE: The Firearms must be clear of all ammunition before inspecting, cleaning, disassembly, transporting or, storing to be considered safe. Refer to Clearing Procedures on page 3.

1. Verify that the firearm is clear of any Ammunition in the Chamber and Magazine Well.

2. Ensure that the Stock/Pistol Brace is fully extended to the rear, so the Stock/Pistol Brace Rods are not covering up the rear Takedown Pin.

B. NOTE: The Following procedure is for the **FOLLOWING MODELS ONLY:** MDX508-CP, MDX508-C, MDX510-CP, MDX510-C, MD-15 with CQB Gen 6 Stock and PDW Pistol Braces.

B1. Push the Rear Takedown Pin from the Left to the Right until you feel a positive stop.

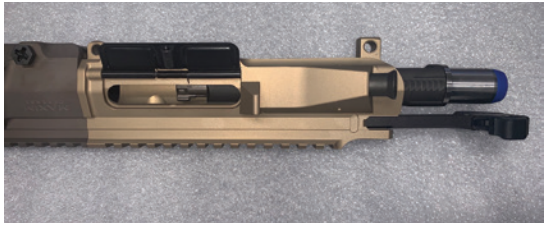
B2. The Upper and Lower Receiver Assemblies will now pivot away from each other while still joined by the front Pivot Pin. The front Pivot Pin may also be pushed from the left to the right until you feel a positive stop. This will allow the Upper and Lower Receiver Assemblies to be separated from one another.





3. **A. NOTE:** The following procedure is for the **FOLLOWING MODELS ONLY:**
PDX SERIES, MDX508-SP, MDX508-S, MDX510-SP, MDX510-S, MD-15 with SCW Stocks and Pistol Braces

3A. Slightly pull back on the Charging Handle to expose the Bolt Carrier from the Upper Receiver Assembly. Remove the Bolt Carrier and Buffer System.

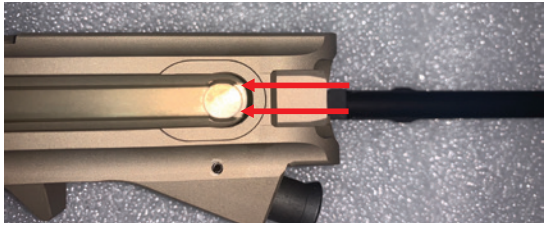


B. NOTE: The Following procedure is for the **FOLLOWING MODELS ONLY**:
MDX508-CP, MDX508-C, MDX510-CP, MDX510-C, MD-15 with CQB Gen 6 Stock and PDW Pistol Braces

3B. Slightly pull back on the Charging Handle to expose the Bolt Carrier from the Upper Receiver Assembly. Remove the Bolt Carrier only.



Gently pull back on the Charging Handle until you feel slight resistance. Remove the Charging Handle from the upper receiver by maneuvering the charging handle ears through the channel slot grooves in the upper receiver.



4. Remove the Buffer Spring

Your Maxim Defense Firearm is now disassembled into the Three Main Assemblies.

Lower Receiver Assembly



Upper Receiver Assembly

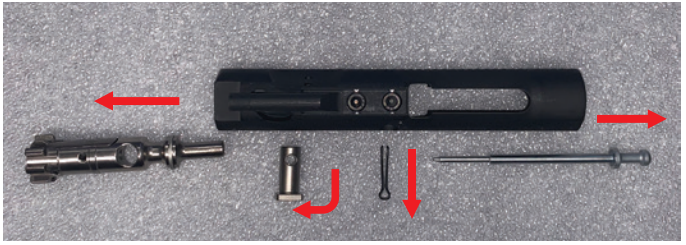


Bolt Carrier Group

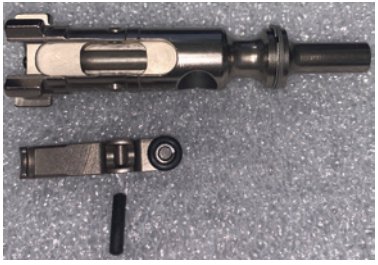


Bolt Carrier Disassembly

1. Remove the Firing Pin Retaining Pin.
2. Remove the Firing Pin.
3. Ensure that the Bolt is fully inserted into the Bolt Carrier.
4. Rotate the Cam Pin ¼ turn in either direction and pull out of the Bolt Carrier.
5. Remove the Bolt from the Bolt Carrier by pulling on the Bolt while twisting.



Your Bolt Carrier Group is now “Field Stripped”.

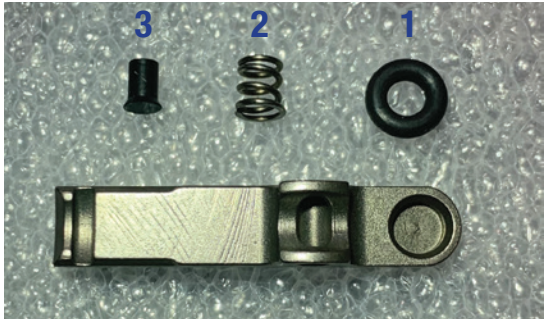


To Remove the Extractor for Replacement or Repair from the Bolt:

1. Apply pressure with your fingers to compress the Extractor.
2. Push out the Extractor Pin from either side.
3. Lift the Extractor from the bolt.

The Extractor should be sharp under the lip where it contacts the shell casing rim with no cracks, chipping, fracturing and clean of carbon buildup under the lip.

The Extractor Spring Assembly consists of a Rubber Extractor Ring (1) surrounding a Tapered Coiled Spring (2) with Rubber Insert (3).



Bolt and Bolt Carrier Assembly

Extractor Reassembly to Bolt.

1. Press the Extractor onto the Bolt where the cut out is for it.
2. Apply finger pressure by pressing down to index the Extractor Pin Hole on the side of the Bolt. Insert the Extractor Pin from either side of the Bolt. Ensure that the Extractor Pin is set equally sub-flush into place.

Bolt Carrier Assembly

1. Press the tail end of the Bolt into the Bolt Carrier. When you feel slight resistance, rotate either direction and apply slight pressure to seat the Bolt into the Bolt Carrier.
2. Ensure the Bolt is fully seated into the Bolt Carrier and index the Cam Pin Hole. The correct orientation will have the Extractor portion of the Bolt in the upper right corner of the Bolt face. Insert the Cam Pin so it passes the Bolt Carrier Gas Key.
3. Rotate the Cam Pin ¼ turn either direction.
4. Insert the Firing Pin so it sits flush into the back of the Bolt Carrier.
5. Insert the Firing Pin Retaining Pin from the left so it sits flush into the Bolt Carrier.

Assembly of the Upper Receiver Assembly

A. NOTE: The following procedure is for the **FOLLOWING MODELS ONLY:** PDX SERIES, MDX508-SP, MDX508-S, MDX510-SP, MDX510-S MD-15 with SCW Stocks and Pistol Braces. There are no Buffer Retainer Detents on this series.

1. Insert the Charging Handle into the rear of the Upper Receive maneuvering the Charging Handle Ears into the groove track so the handle sits in its position in the top of the inside of the upper receiver. Leave the Charging Handle protrude from the back of the upper receiver by approximately three inches (3”).



2. Ensure that the Bolt is fully extended from the Bolt Carrier, then insert the Bolt Carrier Group into the Upper Receiver so the Bolt Carrier Key rests into the Charging Handle.



3. Insert the Buffer behind the Bolt Carrier Group and press forward until the Bolt sets into battery of the Chamber and the Charging Handle Latch locks to the Upper Receive the Maxim Defense Shortened Buffer.



4. Once the receivers are matched together, press the Front Pivot Pin and the Rear Take Down Pin flush into the firearm locking the receivers together.



5. Preform a Function Check. (Page 28)



B. NOTE: The Following procedure is for the **FOLLOWING MODELS ONLY**:
MDX508-CP, MDX508-C, MDX510-CP, MDX510-C, MD-15 with CQB Gen 6 Stock and PDW Pistol Braces

1. Insert the Charging Handle into the rear of the Upper Receive maneuvering the Charging Handle Ears into the groove track so the handle sits in its position in the top of the inside of the upper receiver. Leave the Charging Handle protrude from the back of the upper receiver by approximately three inches (3”).



2. Ensure that the Bolt is fully extended from the Bolt Carrier, then insert the Bolt Carrier Group into the Upper Receiver. Slide the Bolt Carrier Group and Charging Handle all the way forward until it is flush in the Upper Receiver Assembly and the Charging Handle Latch locks into place.



3. Ensure that the Buffer is inserted into the Extension Tube and being Retained by the Buffer Retainer Detent.

4. Align the Upper Receiver Assembly over the Lower Receiver Assembly.

5. Align the Upper Receiver Assembly over the Lower Receiver Assembly.

Once the receivers are matched together, press the Front Pivot Pin and the Rear Take Down Pin flush into the firearm locking the receivers together.



6. Preform a Function Check (Page 28)

FUNCTIONS CHECK

A proper Function Check should be performed every time your firearm has been taken apart and reassembled. The purpose of the Functions Check it to ensure that all of the components are correctly installed, and the Firearm will function correctly.

****WARNING:** A Propper Functions Check includes the Insertion of an empty Magazine and also Dry Firing the Firearm. You **MUST ENSURE** that the Firearm and Magazine are clear of **ALL AMMUNITION** **

1. Check and Verify that the Firearm is unloaded by locking the Bolt Carrier Group back with the Bolt Catch as described on page 8. Check and Verify that you have an unloaded Magazine with **NO** Ammunition.
2. Start with your Cleared Firearm, the Firearm Selector Switch rotated to the Safe position, the Bolt forward in the Closed position and the Dust Cover Closed.
3. Insert the **EMPTY** Magazine into the Magazine Well until the Magazine is retained by the Magazine Catch. Tap the bottom of the Magazine then Tug the Magazine to ensure that it is properly seated.
4. Pull back on the Charging Handle. The Bolt Catch Will engage the Empty Magazine Follower and retain the Bolt Carrier Group and, the Dust Cover will spring open. Push the Charging Handle Forward and Lock into the forward position.
5. While Keep the Firearm pointed in a safe direction forward, push the Magazine Release Button and let the Magazine fall freely into your hand. Do not pull or assist the Magazine.
6. Pull back on the Charging Handle, watch the Bolt Catch Drop back into the rest position.
7. Release the Charging Handle allowing the Recoil Spring to freely push the Bolt Carrier Group forward and lock into battery with the Chamber. Do not release the Bolt Carrier Forward by depressing the Bolt Catch. Do not “Ride” the Charging Handle forward for this will not allow the Bolt Carrier Group to fully seat into Battery.
8. With the Unloaded Firearm pointed in a Safe Direction and the Selector Switch on Safe, press the Trigger. The Trigger should not move or release the Hammer.
9. With the Unloaded Firearm pointed in a Safe Direction rotate the Selector Switch to Fire, Press the Trigger. You should hear the Hammer fall.
10. While still Holding the Trigger to the rear and not letting go, pull back on the Charging Handle to cock the Hammer. Release the Charging Handle allowing the Recoil Spring to freely push the Bolt Carrier Group forward and lock into Battery.
11. Slowly release the Trigger until you feel and hear an audible Click. Do not release the Trigger. This sound came from the internal Hammer that was held by the Disconnector being released and engaging the front of the Trigger causing the Sear to engage.
12. Slowly press the Trigger a second time allowing the Hammer to again fall forward.
13. Release the Trigger and Attempt to rotate the Selector Switch to Safe - it should not move.
14. You may now either Store the Firearm or Load as shown on page 10.

CLEANING, PREVENTATIVE MAINTENANCE AND LUBRICATION

With a variety of operational conditions and the varied pressures of ammunition, your firearm should be cleaned and inspected after each use. And to maintain optimal performance, a Preventative Maintenance Program must be established and followed.

Maxim Defense Industries only recommend Lubrication and Cleaning Solvents that are designed for firearms to be used.

WARNING: Always Unload and **CLEAR** your firearm before maintenance and cleaning as shown on page 8. **DO NOT** mix parts from one firearm with parts from another firearm. Parts are not interchangeable unless specifically designated as such. **DO NOT** mix lubricants on the same firearm. The User is responsible for following all instruction for the safe use of Lubricants and Solvents.

NOTE: The term "CLP", "Cleaning Solvents" and Lubricant" in this manual are used interchangeably and are to be interpreted to mean that CLP, LSA LAW can be utilized as applicable. The Firearm must be thoroughly cleaned during the change from one lubricant to another using a dry cleaning Solvent (SD). **DO NOT** mix lubricants on the same firearm.

Recommended Tools:

- Cleaning Solvent
- Grease, Molly based
- Bore Cleaner
- Cleaning Rod Caliber Specific to your Firearm (.22/5.56 - .30/7.62)
- Cleaning Rod Jag for Patches
- Bore Brush Caliber Specific to your Firearm (.22/5.56 - .30/7.62)
- Chamber Bush/ Mop Caliber Specific to your Firearm (.22/5.56 - .30/7.62)
- Nylon Bristle Brush
- Small Arms Wiping Rags/Pipe Cleaner

Cleaning the Firearm

1. Ensure that your firearm is clear of any ammunition as shown on page 8. **DO NOT** allow any ammunition in the cleaning area.
2. Separate your Upper and Lower Receiver Assemblies as shown on page 20.
3. Remove the Bolt Carrier Group and Charging handles as shown on page 22.
4. Disassemble the Bolt Carrier Group as shown on page 23.

Cleaning the Bolt Carrier Group

1. Using a Carbon Solvent and the Nylon Bristle Brush, clean all carbon fouling from the Bolt Locking Lugs and the Bolt Face.
2. Remove the carbon fouling from the rear of Bolt behind the Gas Rings.
3. Clean the Extractor paying particular attention to the Extractor Claw. Clean the Extractor Slot in the Bolt.
4. Using a pipe cleaner, clean the Firing Pin Channel in the Bolt.
5. Remove any carbon from the Bolt Carrier and wipe down.
6. Wipe away the carbon build up on the Firing Pin paying close attention under the collar.

Cleaning the Barrel

Either utilizing a Free Rotating Cleaning Rod or a Pull Through System will allow the bore brush and swabs to follow the lands and groves of your bore. Ensure that you start from the Breach and end at the front of the barrel. Never change directions mid bore, your Jig, Brush or Swab will get stuck.

1. Coat a patch with bore cleaner. Run a wet patch, replace with another wet patch. Do this at least 5 times and then let sit allowing the cleaner to work for at least 5 minutes.
2. Run one more wet patch to remove fouling.
3. Using a Bronze Brush make ten (10) strokes. Reapply Solvent as needed. Do not dip the brush into the solvent bottle but use a small container to as not contaminate supply.
4. Run Dry patches through Barrel to remove fouling and solvent until the patches come out clean.
5. Wet a patch with a Copper Solvent, run through the bore and let set for a few minutes. Follow with another Copper Solvent wet patch, wait, repeat until the patches have no blue stains on the patches. A cleaning jag may be used for this process. This is important for the copper fouls the groves in the bore.
6. Before introducing a new solvent, ensure that the bore is dry of the solvent that was previously used.
7. Finish with a wet patch of CLP.

Ejector Cleaning Procedures

1. Place a few drops of CLP on the Ejector.
2. Press the ejector in using a spent shell casing or inert dummy round. **DO NOT USE A LIVE ROUND TO PERFORM THIS PROCESS**. Hook the casing under the Extractor and rock back and forth against the

ejector. Repeat this process a few times adding CLP until the action of the Ejector is smooth and strong.

3. Dry off excess CLP when process is completed.

Cleaning the Chamber

1. Elevate the Barrel so solvent will not run down the clean Bore.
2. Use a Chamber Brush coated in boar cleaner to clean the chamber.
3. Rotate while plunging the Chamber brush at a minimum five time to remove carbon fouling inside the chamber locking lugs.
4. Clean any residual Carbon with cotton patches, swabs or chamber mop.

Recoil Spring and Extension Tube

1. Wipe down the Recoil Spring with a dry cloth. Then wipe again with a wet patch of CLP, wipe with a dry cloth one last time. Do not pull the Recoil Spring to extend it.
2. Clean the inside of the extension tube of carbon with a dry cloth patch.

Lower Receiver Assembly

1. On the Inside of the Lower Receiver Magazine Well, using a dry cloth, wipe areas where carbon fouling is observed. Wipe the Hammer with a cloth patch that has a light amount of CLP, then follow with a dry patch to remove residue. Avoid the inside of the fire control group where the springs are.

The Fire Control Group which consists of the Hammer, Hammer Spring, Hammer Pin, Trigger, Trigger Spring, Trigger Pin, Disconnector and Disconnector Spring should only be done by those with an Armorer Certification or Gunsmith.

Cleaning the Magazine

1. The Magazine is paramount to the function of the firearm. Magazines should be cleaned when the rifle is cleaned and maintained. Remove the Floor Plate, Spring and Follower. Wipe with a dry cloth any residue from the inside and outside of the magazine body.

Inspection of Common Parts

- Charging Handle - This is a one-piece replaceable unit. Inspect the Latch and Spring for damage, inspect the handle body for breaks, bends or excessive wear.
- Upper Receiver Body: Check for cracks or deformities. Depress the Forward Assist and release for proper function.
- Dust Cover Door: should latch shut and spring open.
- Upper Receiver: Check for cracks on bottom lugs that attach to the Lower Receiver.
- Bolt: Check the Bolt face for excessive pitting, look for any cracking or fracturing at the Cam Pin Hole and around Lugs.
- Firing Pin: Check for cracking, fracturing or a sharpened point.
- Bolt Carrier: Check for loosened Screws on the Gas Key.
- Gas Rings: if they are worn the need to be replaced.

Gas Regulator

The Maxim Defense PDX is unique as it is equipped with our Patented Gas Block system that utilizes a threaded Gas Regulator to control the amount of gas pressure needed to cycle the firearm with unprecedented reliability. This gas system is set for each caliber and barrel length however, it can be fine tuned to one specific ammunition if so required. Only a professional Armorer or certified Gunsmith can do this modification as making the change requires specialized training. We recommend that you have the Gas Regulator changed every Four Thousand Rounds (4000) for Semi-Automatic use and Three Thousand (3000) when used in Select Fire Systems. Attempting to change the Gas Regulator without proper training may cause damage to components which would not be covered by the factory warranty. At any time, with a return authorization, you can send your upper receiver in to Maxim Defense Industries to have it full serviced. This includes complete armor level detailed disassembly, inspection and the installation of a new Gas Regulator. Please reference our website for more information.

Professional Armorers and Certified Gunsmiths: please E-mail us at info@maximdefense.com for additional information and training.

Preventative Maintenance / Parts Replacement Schedule

Maxim Defense Industries have developed innovative designs to maximize reliability with our firearms. However, as with any machine, preventative maintenance is required to maintain the reliability that you depend on. With proper lubrication of your firearm, the use of quality ammunition as recommended and the replacement of common parts that wear down with use such, your Maxim Defense Firearm will always be there for you. At Maxim Defense Industries we are very conservative when it comes to our part replacement schedule for the end user. We recommend on a user level to replace at Three Thousand Rounds (3000) the Gas Rings, Buffer Spring, Extractor and, Extractor Springs. Correct Preventative Maintenance solves issues before they occur.

Lubrication

Maxim Defense Industries only recommends the use of Firearm Lubrication that has been designed specifically for the use on Firearms to be used on our firearms. The Type of lubricant used is generally dictated by the environmental conditions that the user find themselves in. The terms CLP, LCA, LSW, Grease and Lubricant are used interchangeable in this manual and are to be interpreted to mean a lubricant to be used as applicable to the conditions and situations that the firearm may be used in.

Lubrication should be applied to moving parts and where two parts contact one another.

- CLP: Cleaner, Lubricant, Protect/ Preserve- Best choice for taking care of firearms for it Cleans, Lubricates and Preserves/ Protects in one step.
- LSA- Lubricant, Semi-Fluid, Automatic Weapons- Strictly a Lubricant.
- LSA-T- Lubricant, Semi-Fluid, Automatic Weapons with Teflon- Strictly a Lubricant.
- LAW- Lubricating Oil, Arctic, Weapons- Environmental conditions that are sustained below -0°F.

- Grease: Preferably Molybdenum Disulfide compound of Grease, to be used for extreme conditions.
- Light Lube: A film barely visible to the eye.
- Heavy Lube: A film thick enough to spread with your finger.

ONLY USE ENOUGH LUBRICANTSO THAT YOU CAN SEE THE SHEEN ON THE PART BUT NOT SO MUCH THAT IT WILL "RUN" UNDER GRAVITY. THE USE OF GREASE NEEDS TO BE RUBBED INTO THE PART SO THAT IT ONLY LEAVES A SHEEN

Key Lubricating Points:

- Bolt Carrier Assembly: Inside Bolt at rear, Gas Rings, Cam Pin, Locking Lugs, Bearing Surfaces of the Bolt Carrier, Ejector area on the Bolt Face, Extractor and Extractor Pin, Charging Handle body.
- Lower Receiver Assembly: Fire Control Springs, Take Down and Pivot Pins along with their Detents, Trigger Sear Surface and Disconnector Surface.

Lubrication Special Circumstances and Conditions:

Extreme Cold Weather Climates:

NOTE: Small amounts of CLP on moving parts can freeze and prevent the firearm from firing in extreme cold conditions. Thoroughly remove CLP from the firearm and apply LAW for use in extreme cold weather.

1. Clean and Lubricate the firearm in a warm room with the firearm at room temperature.
2. Apply a light coat of Lubricating Oil for Arctic Weapons (LAW) to Key Lubricating Points.
3. Keep the firearm covered when moving from warm to cold areas in order reduce condensation and/or freeing. Allow firearms to cool gradually if feasible.
4. Keep firearm dry whenever possible. **DO NOT** lay warm firearm directly on ice or in snow.
5. Condensation will form on firearm when moved from a cold area to a warm area. Firearm should be disassembled and wiped dry several times as it warms to room temperature.
6. Keep ammunition and the insides of magazines wiped dry. Moisture will freeze and possibly cause malfunctions
7. **DO NOT** lubricate ammunition.

Humid Climates:

1. Perform regular maintenance prior to and after use.
2. Clean and lubricate with CLP more frequently than normal.
3. Inspect all parts of the firearm for corrosion more frequently and more completely than normal maintenance procedures.
4. Remove handprints from the firearm with a dry rag and lubricate the outside surfaces with CLP.
5. Unload and check inside of magazines for corrosion and moisture frequently. Endure ammunition is dry before reloading magazines.

Desert / Arid Climates

The dry conditions of desert/ arid environment will evaporate light coatings of CLP however, a generous amount of CLP will collect dust and gunk up the rifle. It is imperative that the user perform daily maintenance on their rifle for proper function.

1. Clean inside and functional areas of the firearm every day and after firing in desert conditions. Dust and sand will get into the firearm and magazines and cause malfunctions.
2. In a desert/ arid environment, generous amounts of lubrication should be applied to the internal working surfaces and functional parts of the firearm. Unload and dry ammunition and the inside of magazines daily. **DO NOT** lubricate magazines.
3. Keep the bolt and ejection door closed, magazine in the magazine well and if possible, a muzzle cap on to keep the sand and dust out of the firearm.

Heavy Rain and Waterborne Operations

1. Ensure that the dust cover is closed.
2. Preform regular maintenance prior to and after use.
3. **ALWAYS** attempt to keep the firearm dry.
4. **ALWAYS** drain water from the barrel before firing by pointing downward and shaking as necessary. In a controlled and safe environment, field strip the firearm and dry the bore with a swab and cleaning rod if wet.
5. If water is retained in the barrel from a vacuum, pull the charging handle back just enough the release the pressure seal of the vacuum to drain the water from the barrel. When releasing the Charging Handle there may not be sufficient spring pressure to put the Bolt fully into Battery in the Chamber. Push on the Forward Assist to ensure the Bolt is properly seated, then close the dust cover.

Salt Water Operations

1. Clean sights and optics as soon as possible of saltwater.
2. Wash sights and optics with fresh water source if not able to immediately apply a CLP.
3. Follow the Heavy Rain and Waterborne Operations as previously described.

WARRANTY, SERVICE AND TECHNICAL REFERENCE INFORMATION

For current warranty information, please refer to our website www.maximmdefense.com

Warranty

Before this firearm left the factory, it was carefully inspected, and test fired for safety and functionality. Maxim Defense Industries, LLC warranties the enclosed firearm to be manufactured free of defects in material. All firearms are assembled with the highest regard. Maxim Defense Industries agrees to correct any defect in the firearm for the original purchaser by repair, replacement or adjustment, at the option of Maxim Defense Industries, LLC. This is a limited lifetime warranty for the original purchaser provided, with the proof of purchase receipt to original purchase date when making a claim.

The firearm was designed to function in its factory configuration. Maxim Defense Industries, LLC maintains the right to void all warranty coverage for this firearm if any part is added, substituted, or modified in any way. Maxim Defense Industries, LLC further maintains the right to void all warranty coverage where firearms that have been disassembled beyond the scope of what is described within the User Manual. This does not apply to normal wear and tear of any parts, and it is the user's responsibility to follow the Preventative Maintenance as described on page 29. No implied warranties of any kind are made herein, and this warranty does not apply to any accessories including optics, illumination, or aiming devices that are added or attached to the firearm.

The HATEBRAKE shall only be removed by a competent gunsmith, or by Maxim Defense's trained technicians at the factory. A significant amount of torque is applied to the HATEBRAKE which engages a taper that can be difficult to remove after high round counts and should only be done by trained and experienced technicians, and only with the proper tools. Failure to follow this guideline may result in damage that will not be covered by warranty.

Please contact our Customer Service Department to make a claim.

Storage

Never leave any firearm in a manner that will allow visual or physical access to children, minors, or other inexperienced person or, any person who is unauthorized to be in possession of a firearm. Maxim Defense Industries, LLC provides a new mechanical gun lock device with each firearm as a redundancy for safe firearm storage. More than one aspect of responsible storage should be utilized to include storing your firearm unloaded and locked with the provided mechanical device, separate from any ammunition and inside of a lockable storage device.

Silencers

Maxim Defense Industries, LLC does not warranty, assume any liability or responsibility for damages incurred, or injury or property damage received from firing a Maxim Defense Industries firearm with a silencer not manufactured by Maxim Defense Industries, LLC. Maxim Defense Industries, LLC retains the right to void all warranty coverage of the

firearm if technicians suspect that a silencer was not mounted correctly, to include but not limited to: following the silencer's manufacturer's recommended torque specification for instillation, using the proper amount of and proper specific thread locker, checking alignment properly and with the proper tools, installing the silencer with the proper tools, etc. Maxim Defense Industries, LLC firearms should not be fired with silencers that are not manufactured by Maxim Defense Industries, LLC that are further not on the Maxim Defense firearm approved silencer list. This list specifically identifies silencers that are compatible, and whose manufacturers have done the proper engineering to approve their silencers with Maxim Defense firearms (see www.maximdefense.com). Please contact the manufacturer of your suppressor and inquire for compatibility inquiries with any of your firearms.

Ammunition

The use of hand loaded, reloaded, remanufactured, imported, low-quality steel cased ammunition or, incorrect caliber will void any warranty in our Firearms. The high pressures that are involved with incorrect ammunition not produced to SAAMI, NATO or CIP specifications can cause death or serious bodily injury. Damage can result from the wrong ammunition, bore obstructions, power overloads or incorrect cartridge components. Maxim Defense Industries only recommends the use of High Quality, Commercially Manufactured, Domestically Produced, new ammunition that meets Sporting Arms and Ammunition Manufactures Institute (SAAM) or CIP ammunition specifications.

Ensure that the ammunition is in good condition, clean, dry and undamaged prior to use.

To ensure our firearms pass the most rugged and demanding firing schedules and provide the highest quality shooting experience, Maxim Defense Industries, LLC researches and tests many of the most commonly available munitions on the market today. The Maxim Defense Industries LLC, line of firearms available in 7.62x39 mm are assembled with an Enhanced Firing Pin. The Enhanced Firing Pin is extended to compensate for known tolerance issues found within some imported steel cased ammunition.

Personal Protection Equipment and Lead Exposure

Discharging Firearms in poorly ventilated areas, cleaning firearms or handling ammunition may result in the exposure to lead and other substances. The use of Personal Protection Equipment such as gloves and eye protection is recommended to mitigate lead exposure. Wash your hands with soap and cold water after the use of firearms and before the consumption of any food or beverage.

Always use Eye and Hearing Protection when shooting or near others who are shooting. Failure to use proper hearing protection will cause permanent hearing damage to include permanent loss of hearing. Failure to use proper eye protection can result in damage to the eyes including the permanent loss of vision from high velocity flying particles, propellent gasses, ricocheting fragments and other debris.

General Liability

This is a firearm. Failure to heed any of these warning provided may result in death or serious injury to you or others, as well as severe damage to the firearm and other property. It is the responsibility of the user of this firearm to ensure that they are in compliance with all local Municipal, County, State and, Federal Laws in the region that they are using this firearm. Failure to comply with local ordinances and or State or Federal laws may result in Fines and or Imprisonment. It is the responsibility of the end user to use this firearm in a safe and legal manner.

Maxim Defense Industries is not liable for any misuse, illegal use, unauthorized use of, criminal or negligent discharge, improper or careless handing, corrosion, unauthorized modifications, or other influences beyond Maxim Defense Industries, LLC's direct and immediate control. This limitation of liability applies regardless of whether liability is asserted on the basis of contract, negligence, or strict liability including any failure to warn. Under no circumstances shall Maxim Defense Industries LLC, be liable for incidental or consequential damages, such as but not limited to loss of earnings or profits, commercial loss and loss of use of property.

Shooting Precautions

Follow the four Firearm Safety Rules at all times.

Never consume alcohol or take drugs when handling firearms. Consult with a Physician if you are taking any medication to ensure that you are fit to handle and discharge a firearm safely.

Always be aware of the location of others around you while using your firearm. Spent cartridge shell casings are very hot and are ejected with enough force where they could cause injury by impact or burn.

When using of a sling, maintain positive control of your firearm and ensure that the safety selector is on safe at all times.

If you experience a failure to fire, always keep the firearm pointed in a safe direction for at least 30 seconds. If a hang fire or a slow ignition were to have occurred, the round will fire within those 30 seconds. If the cartridge still does not fire after 30 seconds, manual cycle the bolt with the charging handle while maintaining safe muzzle management, move the selector switch to SAFE. Examine the primer of the cartridge to see if there is a firing pin indent that is similar to other discharged cases. Separate that cartridge for proper disposal.

Contact Information:

Customer Service:239-580-7800 | Email: info@maximdefense.

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