

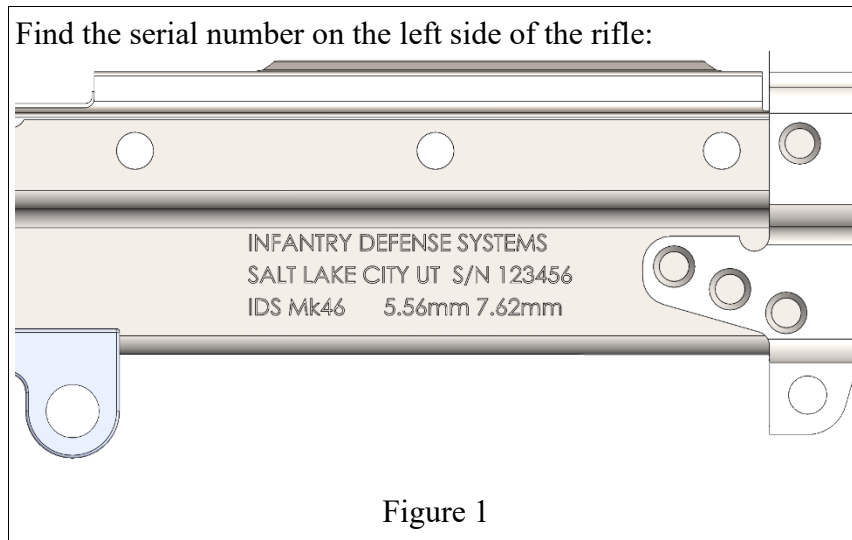


MultiMax SAW Operator's Manual

Infantry Defense Systems

New Gun Owner's Record

Model: _____
Serial Number: _____
Date of Purchase: _____
Purchase Price: _____



Caution:

This manual was written exclusively for the Infantry Defense Systems belt-fed, closed-bolt, hammer-operated, self-loading rifles. Do not use for any other firearm.

Copies of the owner's manual can be sent to you if you write us at:

Infantry Defense Systems
1754 W 500 S
Salt Lake City, UT 84104

We suggest keeping this manual with the rifle and regularly reviewing the contents. Please contact us if you have any questions or concerns regarding the operation or performance of your rifle.

Safety and Warranty

As with any firearm, MultiMax SAW rifles can be very dangerous if handled in a careless, reckless, or improper manner.

For this reason, this rifle has been sold with the express understanding that Infantry Defense Systems declines any and all responsibility for and invalidates any guarantee and/or liability claims of incidental or consequential damages (including, but not limited to, injuries, loss of use of property, commercial loss, or loss of earnings and profits) resulting in whole or in part from:

- unauthorized servicing or alteration of the rifle
- the modification or the alteration of the basic rifle design
- the use of non-original parts
- the manipulation of the “safety” mechanisms
- a disregard of malfunctions
- a discharge with criminal intent or through negligence
- improper or careless handling
- the use of reloaded ammunition
- the use of incorrect “arms and ammunition” combinations
- the use of defective or unsafe ammunition
- an inadequate care of the rifle (e.g. corrosion, damage.)
- any other circumstances beyond the direct and immediate control of IDS

Note: IDS reserves the right to refuse servicing a rifle which has been modified in any way from its original configuration, shape, or form and will, in such a case, require restoring the rifle to its original specifications. Parts and labor required for such a restoration are payable by the owner of the rifle.

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1. State-By-State Warnings

Certain states require, by law, that their own specified warning notices, in larger-than-normal type be conspicuously included by the manufacturer, distributor, or retail dealer with firearms sold in that state.

California:

Warning	Advertencia
“Children are attracted to and can operate firearms that can cause severe injuries or death. Prevent child access by always keeping guns locked away and unloaded when not in use. if you keep a loaded firearm where a child obtains and improperly uses it, you may be fined or sent to prison.”	“A los niños atraen las armas de fuego y las pueden hacer funcionar. Ellos pueden causarse lesiones graves y la muerte. evite que los niños tengan acceso a las armas de fuego guardándolas siempre con llave y descargadas cuando no las esté utilizando. Si usted tiene una arma de fuego cargada en un lugar en que un niño tiene acceso a ella y la usa indebidamente, le pueden dar una multa o enviarlo a la cárcel.”

Connecticut:

“UNLAWFUL STORAGE OF A LOADED FIREARM MAY RESULT IN IMPRISONMENT OR FINE.”

Florida:

“IT IS UNLAWFUL, AND PUNISHABLE BY IMPRISONMENT AND FINE, FOR ANY ADULT TO STORE OR LEAVE A FIREARM IN ANY PLACE WITHIN THE REACH OR EASY ACCESS OF A MINOR UNDER 18 YEARS OF AGE OR TO KNOWINGLY SELL OR OTHERWISE TRANSFER OWNERSHIP OR POSSESSION OF A FIREARM TO A MINOR OR A PERSON OF UNSOUND MIND.”

Maine:

“ENDANGERING THE WELFARE OF A CHILD IS A CRIME. IF YOU LEAVE A FIREARM AND AMMUNITION WITHIN EASY ACCESS OF A CHILD, YOU MAY BE SUBJECT TO FINE, IMPRISONMENT OR BOTH. KEEP FIREARMS AND AMMUNITION SEPARATE. KEEP FIREARMS AND AMMUNITION LOCKED UP. USE TRIGGER LOCKS.”

Maryland:

“Warning: children can operate firearms which may cause death or serious injury. it is a crime to store or leave a loaded firearm in any location where an individual knew or should have known that an unsupervised minor would gain access to the firearm. Store your firearm responsibly!”

Massachusetts:

“WARNING FROM THE MASSACHUSETTS ATTORNEY GENERAL: This firearm is not equipped with a device that fully blocks use by unauthorized users. More than 200,000 firearms like this one are stolen from their owners every year in the United States. in addition, there are more than a thousand suicides each year by younger children and teenagers who get access to firearms. Hundreds more die from accidental discharge. it is likely that many more children sustain serious wounds, or inflict such wounds accidentally on others. In order to limit the chance of such misuse, it is imperative that you keep this weapon locked in a secure place and take other steps necessary to limit the possibility of theft or accident. failure to take reasonable preventative steps may result in innocent lives being lost, and in some circumstances may result in your liability for these deaths.”

“IT IS UNLAWFUL TO STORE OR KEEP A FIREARM, RIFLE, SHOTGUN OR MACHINE GUN IN ANY PLACE UNLESS THAT WEAPON IS EQUIPPED WITH A TAMPER RESISTANT SAFETY DEVICE OR IS STORED OR KEPT IN A SECURELY LOCKED CONTAINER.”

New Jersey:

“IT IS A CRIMINAL OFFENSE TO LEAVE A LOADED FIREARM WITHIN EASY ACCESS OF A MINOR.”

New York City:

“THE USE OF A LOCKING DEVICE OR SAFETY LOCK IS ONLY ONE ASPECT OF RESPONSIBLE FIREARMS STORAGE. FOR INCREASED SAFETY, FIREARMS SHOULD BE STORED UNLOADED AND LOCKED IN A LOCATION THAT IS BOTH SEPARATE FROM THEIR AMMUNITION AND INACCESSIBLE TO CHILDREN AND OTHER UNAUTHORIZED PERSONS.”

North Carolina:

Any person who resides in the same premises as a minor, owns or possesses a firearm, and leaves the firearm out of the person's immediate possession or control without having first securely locked the firearm in an appropriate safe storage

depository or rendered it incapable of being fired by the use of a safety locking device appropriate to that firearm is guilty of a Class 1 misdemeanor if a minor gains access to the firearm without the lawful permission of the minor's parents or a person having charge of the minor and the minor: (1) Possesses it in violation of G.S. 14-269.2(b); (2) Exhibits it in a public place in a careless, angry, or threatening manner; (3) Causes personal injury or death with it not in self-defense; or (4) Uses it in the commission of a crime.

Texas:

“IT IS UNLAWFUL TO STORE, TRANSPORT, OR ABANDON AN UNSECURED FIREARM IN A PLACE WHERE CHILDREN ARE LIKELY TO BE AND CAN OBTAIN ACCESS TO THE FIREARM.”

Wisconsin:

“IF YOU LEAVE A LOADED FIREARM WITHIN THE REACH OR EASY ACCESS OF A CHILD YOU MAY BE FINED OR IMPRISONED OR BOTH IF THE CHILD IMPROPERLY DISCHARGES, POSSESSES, OR EXHIBITS THE FIREARM.”

Please check with your licensed retailer, state police, or local police for additional warnings, which may be required by local law or regulation.

2. General Rifle Safety Procedures

Always follow the safety instructions for your own safety and the safety of others.

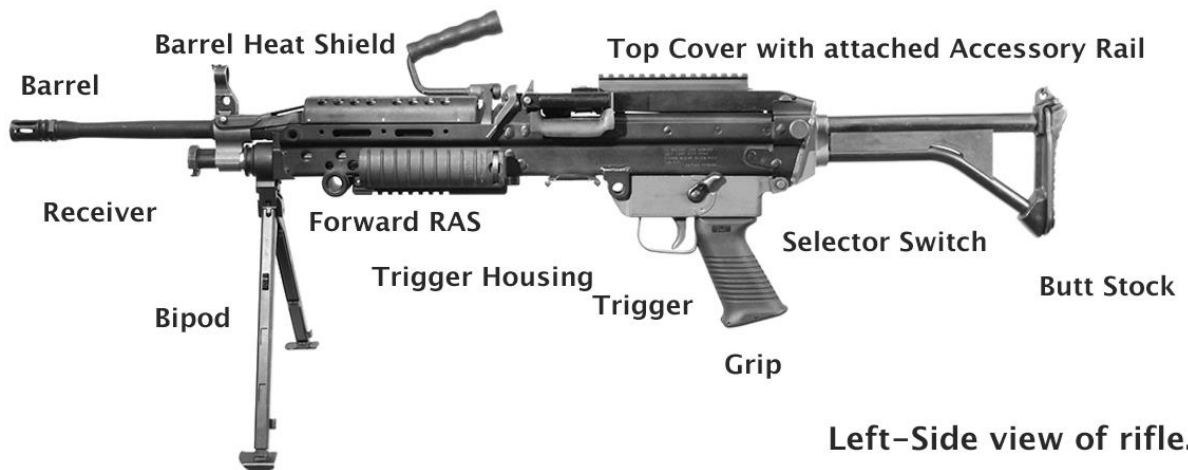
1. Always handle all firearms as if they are loaded.
2. Never point your firearm at anything you do not intend to shoot.
3. Never take anyone's word that a firearm is unloaded; check for yourself.
4. Always make sure that your firearm is unloaded and the action open before laying it down or handing it to another person.
5. When accepting a firearm keep the firearm pointed in a safe direction and determine if that firearm is loaded.
6. Never abuse your firearm by using it for any purpose other than shooting.
7. Prior to loading the firearm, make sure that the barrel and bore is clean and clear of obstructions.
8. Keep fingers out of the trigger guard until you are ready to shoot.
9. Always make sure your firearm is unloaded before storing or cleaning the firearm.

10. Always transport firearms unloaded. Never walk, climb, or follow a companion with a loaded firearm.
11. When storing a firearm, verify the firearm's chamber is empty and store in a proper container.
12. Always carry your firearm unloaded, with the action open, until you are prepared to fire.
13. Never leave a firearm unattended.
14. Never shoot at a hard surface, such as a rock or water, for a bullet may ricochet and travel in any direction, possibly striking you or an unseen object or person.
15. Always be sure your backstop is adequate to stop and contain the bullets that you will be firing.
16. Always ensure that ejected cartridge cases cannot cause injury either to yourself or others during the ejection process.
17. Be absolutely sure of your target and the area behind it before you shoot. A bullet can travel thousands of meters.
18. Never fire a firearm near an animal unless it is trained to accept the noise. A startled animal can hurt itself or someone.
19. Use only clean, original, high-quality commercially-manufactured ammunition, which is appropriate to the caliber of your firearm.
20. If a firearm fails to fire when pointed down-range and after the trigger is pulled, continue to point the firearm down-range for at least 30 seconds before lowering it to the resting position. If a hang fire (slow ignition) has occurred, the cartridge should fire within 30-60 seconds. If the cartridge does not fire within 120 seconds, eject the cartridge and examine it. If the firing pin indent on the cartridge is light, or nonexistent, have the firearm examined by a qualified gunsmith.
21. Never use drugs or alcohol before using a firearm. If taking prescription medication, make sure it does not inhibit your coordination and judgment.
22. Never indulge in "horseplay" while holding your firearm.
23. Always wear eye and ear protection when firing your weapon.
24. Always store your firearm and ammunition in separate locked containers or safes, out of the reach and sight of children and untrained people.
25. Never alter any parts of your rifle as the safety and proper functioning of your firearm could be seriously compromised.
26. Never put your finger in the trigger while cocking.
27. Always be aware that corrosion, use of damaged ammunition, dropping of the firearm onto hard surfaces or other "coarse treatment" could cause damage that might not be visible. If something like this happens, have the firearm examined and tested by a qualified gunsmith.
28. Never use your firearm if it fails to function properly, and never force a jammed action, as a round may ignite causing serious injury, possible death, or severe damage to your rifle.

3. TECHNICAL INFORMATION

(a) *Nomenclature*

The following photos depict the position and name of the important parts of the rifle. The photo shows the rifle in the normal firing position, with the muzzle of the barrel considered to be “forward” or “front” of the gun, and the stock is considered to be the “rear”. The pistol grip and trigger are considered to be on the “downward” or “bottom” side. “Right” and “left” refer to sides as when holding the rifle for shooting.



(b) *Functioning of the Rifle*

The MultiMax SAW is a gas-operated, semi-automatic rifle that fires from a closed bolt. The cartridge is ignited by a hammer driving the firing pin into the case primer.

With the chamber loaded (as described in SECTION 4e) and the selector in a “FIRE” (lower) position, the rifle will fire a single shot with each successive pull of the trigger until the belt (or magazine) has been depleted of cartridges.

Selector and Safety

The MultiMax SAW is equipped with a manual safety located on the LEFT side of the rifle just above the trigger and grip.

The safety can be set to one of the following positions:



Selector Switch is SAFE position

1. Selector in upper position – safe. When the selector is in the upper position the trigger and hammer mechanisms are physically prohibited from moving.



Selector Switch is FIRE position

2. Selector in horizontal position – fire. When the selector is in the horizontal position, the trigger can be moved and, if there is a round loaded into the chamber (see section 4e), a single round will be fired if the trigger is fully pulled.
3. Selector in lower position – fire. This position is also “fire”, like the horizontal position. In semi-automatic rifles, this position is identical to the horizontal position, above. With full-automatic trigger packs & operating groups, this position is for full-automatic operation.

Operation of the hammer

MultiMax SAW rifles have a hammer that is hidden from view whether in the cocked or de-cocked position.



Cocked Hammer



Decocked Hammer

Since the hammer of a MultiMax SAW is not visible, its condition is not readily determined from a visual inspection, thus the rifle should ALWAYS be considered to be READY-TO-FIRE and handled accordingly.

- **Cocked Hammer**
The hammer is in its rearmost position. In the cocked position, and the selector switch off “safe”, the rifle is ready to fire by pulling the trigger.
- **Decocked Hammer**
This is the recommended position for the hammer when the gun is being transported, stored or otherwise not imminently being fired.

NEVER attempt to decock the hammer of a loaded rifle. There is no safe way to decock the hammer in the rifle!

ALWAYS consider the rifle ready to fire when the selector switch is in the middle or lower position.

(c) Ammunition

Your rifle requires the use of new, commercially-manufactured ammunition. Ammunition can be fed into the firearm in two ways: belted ammunition in an ammo can, or loose rounds in a magazine. Only rifles equipped with a magazine well can use magazines.

Ammo Can

Belted ammunition, created from new, clean, commercially-manufactured ammunition and new, clean metal disintegrating links, is the recommended way to feed ammunition into the rifle. Belted ammunition should be stored in ammo cans to protect the belt from contamination or damage.

Ammo cans come in a number of styles, such as the 200-round plastic can shown to the right, or the 100- and 200-round soft pouches available. All ammo cans designed for use on the FN Minimi®, M249, or Mk46 machine guns will work on all MultiMax SAW rifles.



Magazine

Some rifles provide a "magazine well", which is a receptacle for accepting STANAG magazines, also used on AR15 and M16 rifles. Magazines are not the recommended feeding system for MultiMax SAW rifles, but can be used for compatibility with M16, M4, and similar pattern rifles.

The magazine well option must be installed at the time the rifle is built. If no magazine well is to be used in a rifle equipped with the well, the well covering should be covered with a cover plate to protect internals from contamination.



4. OPERATING INSTRUCTIONS

(a) Initial Cleaning

It is mandatory that you clean and lubricate your rifle before using it for the first time and after every subsequent use.

See the Section 5d, Cleaning and Lubrication for instructions.

(b) Bolt Hold-Open Feature

Your rifle is equipped with a bolt hold-open feature built into the charging handle. The hold-open feature retains the operating group to the rear of the rifle against recoil spring tension, to allow loading and unloading the rifle.

- To use, pull back on the charging handle to pull the operating group to the rear until the stud at the rear of the charging handle grip can be pushed into the rail. The operating group will be 1-2" forward of the rearmost position.

Once the stud depresses into the rail, release the handle grip while pushing the stud; this will use the recoil spring tension to keep the hold-open stud depressed, and the operating group to the rear.

- To release, pull back on the charging handle grip; do not push on the hold-open stud. The captured spring will push out the hold-open stud and allow the operating group to move

forward.

(c) Bolt Hold-Open Feature Warning

The bolt hold-open feature retains the operating group to the rear of the rifle to allow loading and unloading the rifle. However, the hold-open feature does leave the operating group under spring tension from the recoil spring! Dropping, hammering, or otherwise mis-handling the firearm may cause the hold-open feature to release, allowing the operating group to close.

Do not place fingers or hands in the way of the operating group at any time!

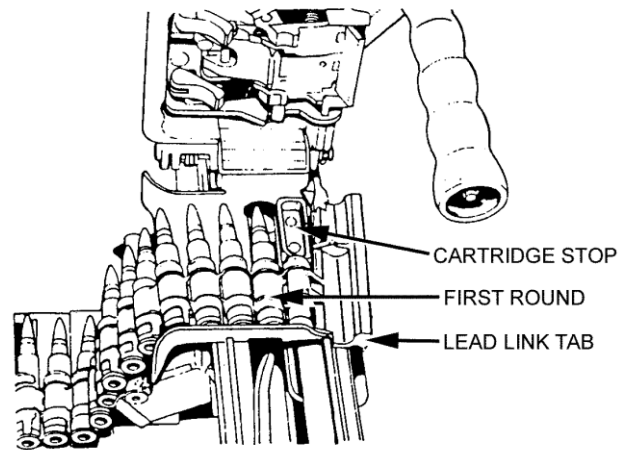
(d) Unloading and Checking the Rifle

- Place the trigger group to “Safe” (see section 3b – Selector & Safety).
- Pull the charging handle to the rear and retain the operating group to the rear using the bolt hold-open feature (see section 4a). This will eject the round in the chamber, if present.
- Open the top cover by pressing the two opposed buttons at the rear of the cover and lifting up. Lift the top cover to vertical, where it is retained by the barrel locking lever. Ensure the feed tray remains down on the rails.
- Remove ammunition and links from the feed tray.
- Remove ammunition feed box, if attached to the rifle. Remove magazine from magazine well, if inserted, by pushing down on the release latch and pulling the magazine out of the well.
- Visually inspect chamber to verify it is empty.
- Insert empty chamber indicator, if available, and release operating group forward to trap indicator.

(e) Loading of the Rifle – Belted ammunition

- Place the trigger group on “Safe”; see section 3b – Selector & Safety for detailed instructions.
- Pull back the charging handle and engage the hold-open feature; see section 4a.
- Open the top cover by pressing the two opposed buttons at the rear of the top cover and lifting up. Raise the top cover to vertical, where it is retained by the barrel locking lever. Raise the feed tray to the top cover.
- Verify the chamber and receiver are empty of ammunition, spent brass, and debris.
- Push the feed tray down to the bolt rails.
- Attach a feed box, with ammunition belt inside, to the feed box support under the center of the rifle. Slide the box into the support until the steel tab clicks.
- Lay the belted ammunition across the feed tray, with the right-most round against the stop block on the tray (on top of the slot in the tray). If the belt has a lead link tab attached, place the tab on the right side of the stop block. **LINKS MUST BE UP!**

- Retaining the belt in position (using feeder tab, MOD1 feed tray, or dexterity), press down on the barrel locking lever to release the top cover, and push the top cover down to the rear.
- Press down on the top cover until it clicks into the rear notches at the back of the rifle.
- Pull the charging handle fully to the rear, to release the hold-open feature, and fully compress the recoil spring.
- Release the charging handle, allowing the operating group to run forward unhindered. The charging handle will stop on the retaining block at the forward end of the charging handle rail.
- The rifle is now loaded and ready to shoot.



(f) Loading of the Rifle – Magazine

- Place the trigger group on “Safe”; see section 3b –Selector & Safety for detailed instructions.
- Pull back the charging handle and engage the hold-open feature; see section 4a.
- Open the top cover by pressing the two opposed buttons at the rear of the top cover and lifting up. Raise the top cover to vertical, where it is retained by the barrel locking lever. Raise the feed tray to the top cover.
- Verify the chamber and receiver are empty of ammunition, spent brass, and debris.
- Close the top cover by pushing down on the barrel locking lever to release the top cover, and closing the top cover to the rear until the buttons click in the notches at the rear of the rifle.
- Press down on the top cover to ensure it is fully closed.
- Insert a loaded magazine into the magazine well until the door clicks into the magazine retaining notch.
- Pull the charging handle fully to the rear, to release the hold-open feature, and fully compress the recoil spring.
- Release the charging handle, allowing the operating group to run forward unhindered. The charging handle will stop on the retaining block at the forward end of the charging handle rail.
- The rifle is now loaded and ready to shoot.

(g) Reloading During Shooting – Belted ammunition

- Put the trigger group to “Safe” (see section 3b –Selector & Safety).
- Pull charging handle to the rear, and engage the hold-open feature (see section 4a).
- Open the top cover by pressing the opposed buttons at the rear of the top cover and lifting up. Lift top cover to vertical to be retained by the barrel locking lever. Ensure the feed tray remains

down on the rails.

- Clear any ammunition or links from the feed tray and receiver.
- Verify the chamber and receiver are empty of ammunition or brass by visual inspection.
- Remove feed box from the rifle.
- Attach loaded feed box (see section 4e).
- Lay belt across feed tray, right-most round against the stop block, and retain with lead link tab, MOD1 feed tray pawls, or holding the belt. LINKS MUST BE UP!
- Release the top cover by pressing down on the barrel locking lever.
- Close the top cover to the rear, ensuring the rear buttons click into the notches at the back of the rifle.
- Pull the charging handle fully to the rear, and release, allowing the operating group to run forward unhindered.
- The rifle is now loaded and ready to shoot.

(h) Reloading During Shooting – Magazine

- Put the trigger group to “Safe” (see section 3b –Selector & Safety).
- Pull charging handle to the rear, and engage the hold-open feature (see section 4a).
- Open the top cover by pressing the opposed buttons at the rear of the top cover and lifting up. Lift top cover to vertical to be retained by the barrel locking lever.
- Clear any ammunition and links from the receiver.
- Verify the chamber is empty by visual inspection.
- Remove magazine from the rifle, by pushing the release lever down and pulling the magazine out.
- Insert new magazine into the magazine well, pushing until the magazine catch clicks.
- Release the top cover by pressing down on the barrel locking lever.
- Close the top cover to the rear, ensuring the rear buttons click into the notches at the back of the rifle.
- Pull the charging handle fully to the rear, and release, allowing the operating group to run forward unhindered.
- The rifle is now loaded and ready to shoot.

5. MAINTENANCE INSTRUCTIONS - DISASSEMBLING

(a) *Disassembly for Cleaning/Field Strip*

- **Remove the barrel**
 - Unload the rifle (see section 4d). Keep the operating group retained to the rear of the rifle.
 - Close the top cover by pressing down the barrel-locking lever and pushing the top cover to the rear. The top cover does not need to be latched for barrel removal, but should not be locked upright for easiest removal.
 - Depress the barrel-locking lever and pull up on the barrel handle, or push down on the muzzle of the barrel. In some cases, such as a warm barrel, you may need to tap the muzzle of the barrel down to release the rear of the barrel extension from the trunnion.
 - Use only rubber, plastic, or other soft objects to tap the barrel! Do NOT use metal hammers or damage to the muzzle brake/flash hider may result! Alternatively, use your hand or shoe to tap the barrel loose.
 - While lifting the rear of the barrel up, pull forward to slide the barrel out of the trunnion and off the rifle. Set aside.
 - Beware of hot barrels after firing; they can burn you or melt plastics!
 - Pull the charging handle all the way to the rear to release the operating group, and **slowly** let the operating group all the way forward. Do not allow the operating group to slam forward!
- **Remove the top cover and feed tray assembly.**
 - Release the top cover from the receiver and raise to vertical.
 - Ensure the feed tray is empty, with no links or rounds caught.
 - Raise the feed tray to meet the top cover.
 - Release the top-cover retaining spring on the right-hand side; this is a half-circle clipped over the top-cover axis pin.
 - Gently rotate the spring off the top-cover axis pin so the spring is underneath the axis pin.
 - Push the top-cover axis pin into the top cover (to the left) using your thumb, a sight tool, or another suitable tool. The axis pin retaining spring will require significant force to start the pin moving.
 - Do NOT hammer on the axis pin!
 - Grasp the left side of the axis pin and pull through the top cover until it catches on the axis pin retaining spring detent in the far-left position. Rocking the top cover and feed tray together may help this.
 - Remove the feed tray by pulling straight back on the tray to clear the top cover and trunnion. Set aside.
 - Remove the top cover by rotating to the left off the trunnion; this allows the hold-open spring to release from the lower hole on the left side of the trunnion.
- **Remove the gas tube**
 - Remove the barrel before attempting to remove the gas tube.
 - Turn the gas tube using the knurled end until the vent ports at the front are pointing straight up out of the receiver.
 - Pull forward on the gas tube to remove it from the trunnion. Set aside.
- **Remove the bipod**
 - Remove the gas tube.

- Release the tripod legs to point straight down.
- Pull forward on the bipod to remove it from around the gas tube support. Set aside.
- **Remove the rear stock**
 - Push the top stock-retaining pin out towards the large head; this is typically to the left.
 - There is an internal retaining spring that will take significant force to start the pin moving.
 - The sight tool can help get the pin moving by being used as a handle to push. Gentle tapping with a plastic or rubber mallet may also help.
 - Push the pin through the receiver until it stops on the retaining spring; the pin will be extended out from the receiver.
 - Push the bottom stock-retaining pin out towards the side with a knurled head.
 - There is an internal retaining spring that will take significant force to start the pin moving.
 - The sight tool can help get the pin moving by being used as a handle to push. Gentle tapping with a plastic or rubber mallet may also help.
 - Push the pin through the receiver until it stops on the retaining spring; the pin will be extended out from the receiver.
 - Pull the stock straight out to the rear and set aside.
- **Remove the trigger group assembly**
 - Remove the rear stock.
 - With the bottom stock-retaining pin fully extended out from the receiver, pull down on the pistol grip to release the rear of the trigger group from the rear of the receiver.
 - Pull the trigger group assembly out to the rear to release the front of the trigger group.
 - Set aside.

The rifle is now disassembled for standard cleaning. Further disassembly is only recommended to clean the operating group in detail.

(b) Disassembling the Operating System

Operating system disassembly is most easily accomplished if the following are removed from the rifle first:

- barrel assembly
- top cover and feed tray assemblies
- gas tube
- bipod
- trigger group assembly
- rear stock

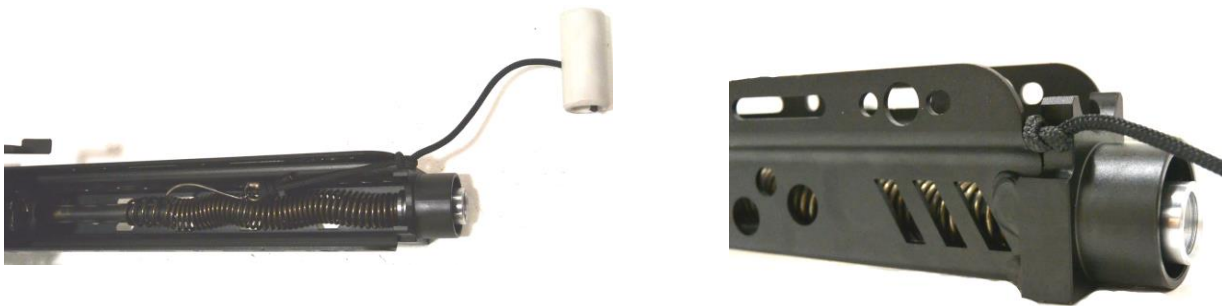
See the section 5(a) – Disassembly for Cleaning/Field Strip for instructions. There are 2 options for removing the operating group from the rifle; option 1 is preferred, but may not work if the recoil spring bushing is stuck due to heavy carbon fouling from shooting. In those cases, use option 2 to force the recoil spring bushing out and allow the operating group to be removed. If option 2 is necessary, be sure to pay particular attention to cleaning the front of the trunnion where the recoil spring bushing goes, to remove all fouling before reassembly.

(b.1) Preferred Procedure

Place the hook of spring compression tool (P/N IDS7002) into the recoil spring as close as possible to the trunnion (barrel support); see photo below.



Pull back on the handle of tool, and latch the plastic ball & knot between the gas tube support and the channel top; see photos.



Tip the receiver forward to drop the brass bushing out of the trunnion. Remove from the receiver.

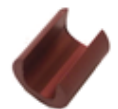
Pull back on the handle of tool to release the ball & knot, and slowly release the spring to the rear. Remove the hook & tool from the receiver.

Pull the entire operating group out of the receiver to the rear.

(b.2) Alternate Procedure

N.B. - Use this procedure if the brass bushing will not fall out of the trunnion with the preferred procedure.

Use the charging handle and hold-open feature to retain the operating group to the rear; see section 4b.



IDS7003

Insert the bushing extractor (P/N IDS7003) into the receiver behind the trunnion, in front of the bolt & carrier, around the operating rod.

Use the charging handle to allow the operating group to slowly move forward, pushing the bushing extractor into the rear of the trunnion; the operating group will stop early, with the bushing extractor on the brass bushing.

Use a plastic mallet, stick, or wrench to tap on the back of the operating group; this will allow the bushing extractor to tap the brass bushing to the front of the trunnion.



Remove the brass bushing.

Remove the operating group from the receiver to the rear.

Remove the bushing extractor from the operating group before reinstalling.

(c) Parts and Accessories Inspection

Before reassembling the rifle, inspect all parts for unusual or excessive wear or damage.

Pay particular attention to the bolt, bolt face, extractor, barrel extension, gas block and ports, chamber, bore, gas tube, piston, hammer, feed pawls in the top cover, and the feed tray.

If in doubt as to the safety or reliability of any part, contact Infantry Defense Systems before using the rifle.

(d) Cleaning and Lubrication

Once disassembled as described in section 5a, the rifle is ready for cleaning. Each removed assembly should be cleaned and inspected separately.

- **Barrel Assembly**
 - Clean the chamber, bore, barrel extension with high-quality powder and copper solvents until clean.
 - Typical cleaning will not require copper solvents.
 - A bore snake or rod with patches is recommended to care for the bore.
 - Do not leave copper solvents in the bore for extended periods; remove promptly and follow up with clean patches to protect the barrel lining.
 - Clean the gas block vents using powder solvents and, if available, a scraper tool. Fouled vents can impact reliability of the rifle.
- **Top Cover & Feed Tray Assemblies**
 - Wipe fouling off the top cover and feed tray assemblies with a high-quality powder solvent.
 - Once clean, remove excess solvent and apply light coat of CLP or other gun lubricant to the

- parts and pivots.
- Inspect the assembly for potential problems or excessive wear.
 - Pay particular attention to the springs – worn-out or mis-located springs account for the majority of top cover problems.
- **Gas Tube & Bipod Assemblies**
 - Wipe fouling off the assemblies using a high-quality powder solvent.
 - Clean the inside of the gas tube using solvent-soaked patches or an ultrasonic cleaner.
 - Check the gas tube for damage or burn through.
 - After cleaning, remove excess solvent and apply a light coat of CLP or other lubricant to the assemblies to protect from rust.
- **Rear Stock Assembly**
 - Wipe fouling off the stock using a high-quality powder solvent.
 - Inspect the stock for excessive wear or damage.
 - Remove excess solvent and apply a light coat of CLP or other lubricant to protect from rust.
- **Trigger Group Assembly**
 - Wipe fouling off the hammer and other surfaces using a high-quality powder solvent.
 - Inspect the trigger group for proper function (safe, fire) and correct hammer spring tension.
 - Weak hammer spring tension can impact rifle reliability.
 - Inspect the trigger group for damage, loose bolts, or excessive wear.
 - Remove excess solvent and apply a light coat of CLP or other lubricant to protect from rust.
- **Receiver Assembly**
 - Wipe fouling off surfaces using a high-quality powder solvent.
 - Retain the operating group to the rear to allow cleaning the front of the rails and front lower receiver behind the trunnion; carbon fouling builds up on the receiver surfaces inside the ejection port.
 - Clean and inspect the operating group, and check motion by releasing the operating group to slowly travel fully forward.
 - Inspect the operating rod bushing for excessive wear or damage.
 - Inspect the firing block for damage.
 - Inspect the feed ramp bushing on top of the carrier for damage.
 - Clean the interior of the receiver, particularly the trunnion barrel hole, the surfaces inside the ejection port and around the operating rod, and the surfaces at the front of the receiver where gas vents out the gas tube into the receiver.
 - Inspect the trunnion for damage
 - Remove excess solvent and apply a light coat of CLP to the receiver and operating group to protect from rust. Additional gun lube along the rails and for the feed ramp bearing may help reliability in normal use.

(e) Additional Care

When cleaning the rifle, also clean and inspect accessories such as feed boxes or ammunition pouches, magazines, optics, or illuminators.

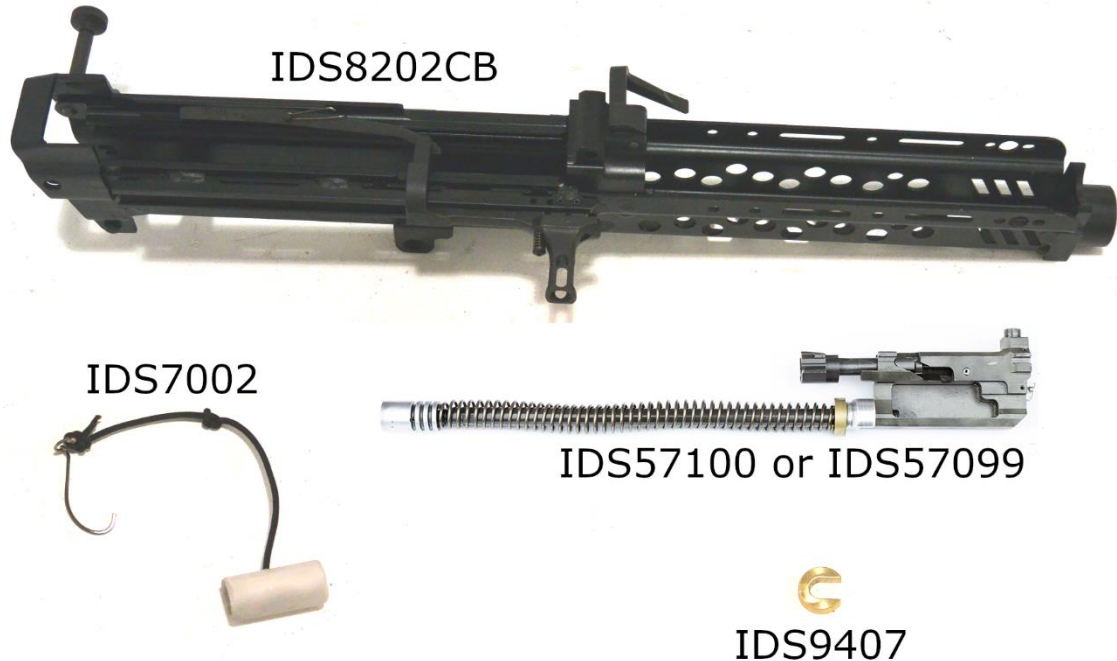
See the manuals for the particular accessory for maintenance procedures.

6. MAINTENANCE INSTRUCTIONS – REASSEMBLY

Re-assembling the rifle depends on how far the rifle has been disassembled. For a rifle disassembled only for cleaning, see section 6b. If the operating group has been removed for some reason, see section 6a to install the operating group before reassembling the rest of the rifle, as described in 6b.

(a) *Installing the Operating Group into the Receiver*

Start with a receiver without top cover, feed tray, barrel, trigger group, gas tube, bipod, or stock.



(a.1) Assemble the operating group, if disassembled for removal.

If the operating group is already assembled, skip to (a.2).

Collect the pieces of the operating group to be installed:

- Bolt for correct caliber
- Slide for correct caliber
- Operating rod assembly-
 - Carrier, with an
 - Operating Rod bushing (aluminum) installed on the
 - Operating Rod with a
 - Recoil Spring around the rod, and a
 - Piston at the end
- Recoil spring bushing (IDS9407)
- Carrier-Slide Retaining Clip
- Spring Compressor Tool (IDS7002)

Check all parts for excessive wear or breakage. Replace any worn or broken pieces. Contact Infantry Defense Systems for wear schedules for operating group parts.

Install bolt into slide from the front – insert the bolt into the slide until the back of the bolt hits the bounce detent. Push down on the detent with a punch, screwdriver, cartridge, or similar tool. Push the bolt onto the detent while pushing the detent down; remove the tool. Continue inserting the bolt until the cam will turn down into the side notch. Allow firing pin spring to push bolt into latched position aligned with slide. Do not push the bolt into the cammed position, 45° from parallel with the slide; if you do, pull the bolt back to aligned – this will take significant force.

Connect slide & bolt assembly to operating rod assembly at the carrier. Push the carrier stud through the lower tab on the slide, and clip the Carrier-Slide Retaining Clip over the stud in the provided groove. Pliers may make this easier. Check for rotation and wiggle in the carrier to the slide.

(b.2) Install Operating Group

Insert assembled operating group into receiver from the rear. Push forward until operating group is fully forward in the receiver. The operating rod bushing should be fully seated in the rear of the trunnion (barrel support).

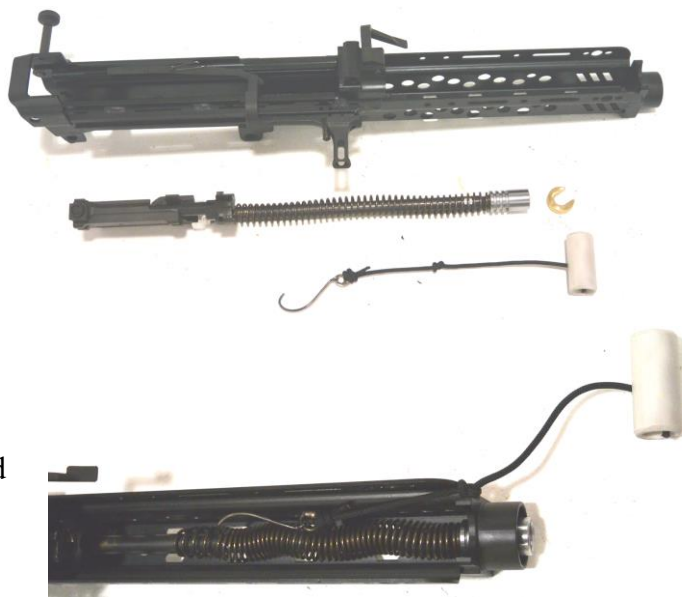
Using the spring compressor tool, compress the recoil spring to the front.

- Insert the hook into the recoil spring as close as possible to the trunnion (barrel support).
- Pull back on the handle and latch the plastic ball & knot between the gas tube support and channel steel. See photo.

Insert recoil spring bushing into receiver around operating rod behind the compressed recoil spring. Slide along the operating rod into the front of the trunnion. Align the notch in the recoil spring bushing to the gas-tube retaining spring to push the recoil-spring bushing into the trunnion. Seat at the rear of the trunnion.

Pull back on the handle to release the knot and allow the recoil spring to come to rest against the recoil-spring bushing in the trunnion. Remove spring compressor tool.

The operating group is installed; see photo below for comparison.



(b) Assembling the Rifle from Field Strip/Cleaning

Starting with a receiver disassembled for cleaning (see section 5a), reassemble the rifle as follows:

- Attach the bipod by sliding over the gas tube mount, with the legs pointing straight down.
- Insert the gas tube into the gas tube support, around the operating rod & recoil spring, and push down the receiver until just short of the gas tube retaining spring.
- Use a small, long screwdriver or 1/8" pin punch to push the gas tube spring outwards while sliding the gas tube onto the spring and down to the trunnion. Remove the screwdriver or punch.
- Push down on the gas tube to center the tube into the trunnion lower hole, and push the gas tube fully into place. The gas tube must have the vent holes at the front vertical to get through the gas tube support!
- Rotate the gas tube until the retaining spring clicks into the notch at the rear of the gas tube.
- Insert the trigger group housing, with trigger group and cocked hammer, into the receiver. Insertion is generally easiest front-first and then rotate the rear holes into position at the rear of the receiver.
- Partially insert the lower stock retaining pin into the trigger group housing; stop the pin before it enters the central gap for the stock.
- Insert the stock into the trigger group support and push the retaining pin all the way through until the stock retaining pin spring clicks into the notch at the end.
- Rotate the stock into the receiver, and push the top stock retaining pin through the stock and all the way through the receiver.
- Insert the top cover spring into the trunnion hole below the top cover axis pin hole.
- Twist the top cover over the trunnion while vertical to slip the top cover hold-open tab under the barrel locking lever; do not move the axis pin.
- Insert the feed tray between the top cover and the trunnion, aligning the axis pin holes.
- Push (do not hammer) the top cover axis pin through the feed tray, trunnion, and other side of the feed tray and top cover. The axis pin will stop on the retaining spring.
- Push the P-shaped retaining clip on the front right side of the top cover over the axis pin end.
- Pull back the charging handle to the rear and active the hold-open feature (see section 4a) to retain the operating group to the rear.
- Verify the barrel is clear, empty, and matches the caliber of the operating group, bolt, and ejector.
- Push down on the barrel locking lever, and insert the barrel through the trunnion until fully to the rear. Ensure the barrel is seated correctly in the trunnion, and then release the barrel locking lever.
- Verify the barrel locking lever is fully forward, locking the barrel into place. Verify the gas block on the barrel is inserted into the front of the gas tube.
- Close the top cover by pushing down on the barrel locking lever to release the top cover, and closing the top cover to the rear.

- Push down on the top cover until the retaining buttons click into the slots at the rear of the receiver.
- Release the operating group and **slowly** lower to fully forward.
- The rifle is assembled and ready to load.

7. TROUBLE SHOOTING - CAUSES AND REMEDIES

FAILURE TO FIRE – Possible causes:

- Faulty ammunition – hang fire; wait 120 sec with the muzzle pointed safely down range, then unload the rifle and check for ammunition ejected.
- No ammunition in chamber; check for ammunition in belt, placement of belt on feed tray, tension of top cover feed pawls, and condition of front top of bolt.
- Operating group didn't fully close; check operating group forward travel for obstructions like brass in the receiver, ammunition belt for damaged links or obstructions, ammunition belt path is not excessively twisted or stiff.
- Firing block broken; check for damage to rear of the firing block.
- Firing pin damaged; check firing pin for damage.
- Hammer spring weak or broken; check hammer spring for tension and damage.
- Hammer damaged; check front of hammer for damage or excessive wear.

FAILURE TO EJECT – Possible causes:

- Brass didn't clear the receiver, and is trapped by the operating group; check gas port for blockage or fouling, top cover for excessive friction, ejector for damage, and extractor spring for tension.
- Brass still in bolt; check ejector.
- Brass still in chamber; check extractor.

8. TECHNICAL SPECIFICATIONS

Your MultiMax SAW semi-auto, belt-fed, closed-bolt rifle can be configured with a variety of external accessories. These firearms do **not** accept open-bolt operating groups (internals), but the receiver does accept external accessories such as stocks, barrels, top covers, and the large variety of forward rail systems used by the military.

Action Type: Closed-bolt, gas-piston with rotating bolt

Calibers: 5.56 NATO, 300 AAC BLK, 7.62 NATO

Weight (empty, fixed stock & 16.1" barrel): 16.5 lbs.

Overall Length: 30.75 in. (Collapsible stock) – 36.2 in. (Fixed stock)

Standard Barrel: 5.56 NATO 16.1" chrome-lined

Feeding: Belt-fed; 100 & 200 round packs standard.

Rate of fire: Semi-automatic

Trigger Group: Heckler & Koch® G3 semi-auto trigger pack

Operating Group: Closed bolt, with captured front recoil spring; no rear buffer.

9. SERVICE POLICY

Infantry Defense Systems provides service on its firearms. Any IDS rifle needing service or repair should be returned to Infantry Defense Systems for service.

Please contact Infantry Defense Systems prior to shipment to discuss the problem and ensure that IDS is expecting the rifle. Email, phone number, and other contact information can be found on our website (www.infantrydefense.com) or by calling 1-877-437-6249 (1-877-IDS-M249).

Repairs or service not performed by Infantry Defense Systems will void any and all warranties.

10. WARRANTY POLICIES

The Magnuson-Moss Act (Public Law 93-637) does not require any seller or manufacturer of a consumer product to give a written warranty. It does provide that if a written warranty is given, it must be designated as "limited" or as "full" and sets minimum standards for a full warranty.

Infantry Defense Systems has elected not to provide any written warranty, either "limited" or "full", rather than to attempt to comply with the provisions of the Magnuson-Moss Act and the regulations issued thereunder. There are certain implied warranties under state law with respect to sales of consumer goods. As the extent and interpretation of these implied warranties varies from state to state, you should refer to your state statutes.

However, the following two points apply in any case:

1. No wear parts are covered such as firing pins, recoil springs, barrels, etc.
2. The warranty of this gun is null and void if the gun is modified functionally in any way. Infantry Defense Systems wishes to assure its customers of its continued interest in providing service to owners of the firearms it manufactures.

Visit our website for more details at: **www.InfantryDefense.com**

WARNING – ALTERATIONS

This product was designed to function properly in its original condition. Alterations can make is unsafe. Do not alter any part or add or substitute parts or accessories not made by Infantry Defense Systems.