

MSX *SUPPRESSORS*
BY MAXIM DEFENSE



MS:45 OPERATOR'S MANUAL

 **MAXIM**
DEFENSE®

MSX[®] SUPPRESSORS

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



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Before using this suppressor, be certain you have read and understand this manual in its entirety.

Warning: Because sound suppressed weapons make less noise than non-suppressed weapons, it is easy to forget they are still firearms. It is vital importance to remember that a sound suppressed firearm is just as dangerous as a non-suppressed firearm, and the same safe handling requirements apply.

WARRANTY STATEMENT

Warning: Failure to follow installation and maintenance instructions detailed in this manual can result in potentially serious injury to the user and damage to the weapon. Firearm sound suppressors are user attached firearm muzzle devices, and as such are subject to improper attachment unless the proper procedures outlined in this manual are followed.

MANUFACTURER'S DISCLAIMER

The manufacturer is not responsible for improper usage of this product. This product is potentially dangerous, and as such it is the user's responsibility to understand and implement its proper use. If you do not understand the instructions in this manual, please contact the manufacturer for further clarification.

CAUTION: Before performing any maintenance operation, always remove the magazine from the firearm, open the action, and visually ascertain that the chamber is empty, and the weapon is unloaded. Failure to do so can result in potential for serious injury to the user and others.

Always read the warning label on any cleaner or solvent and remember that virtually all solvents are inherently dangerous and potentially toxic. Always use adequate ventilation and both skin and eye protection when using solvents.

Never use a patch to clean the barrel with the suppressor in place, as the patch may become lodged in the baffle system.

For suppressor installation, torque should not be above 40 ft*lb, but not below 25 ft*lb (firmly hand tight). This suppressor seats on the muzzle of the barrel, use an appropriate alignment rod to guarantee suppressor alignment prior to shooting.

It is recommended that the user periodically ensure that the suppressor is tight. To do so: cease fire, unload and visually and physically inspect the firearm to be clear and safe, then allow the suppressor to cool to ambient temperature and only then try and tighten the suppressor by hand (turning clockwise).

WARNING: suppressors are **VERY HOT** under fire. Never attempt to see if the suppressor is tight soon after it has been fired, as there is nothing that can protect your hand while grabbing a metal object that is as hot as a suppressor can get. It is always safest to allow the suppressor to cool all the way to room temperature to check that it is still torqued in place.

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.

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.

CAPABILITIES

Maxim Defense Industries Firearm Silencers 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.

MS-45 FEATURES

Standing for Maxim Silencer, Caliber: 45 ACP, is constructed of a stainless-steel Piston, 17-4 stainless steel baffles, and 7075 Aluminum (mount body, tubes, baffles, and end caps).

SPECIFICATIONS WITH BOOSTER (ASSEMBLED)

Length..... 8.64 inches (full configuration), 6.53" (short configuration)
Diameter..... 1.38 inches
Weight..... 12 oz (full configuration), 10.3 oz (short configuration)

COATINGS

Tube Type 3 hard coat anodizing
Baffles Type 3 hard coat anodizing
Mount..... Diamond Like Coating (DLC)

RATING

FIRING TABLE

BARREL LENGTH

.45 ACP

Full auto

3.0 inches

The Maxim Defense MS-45 Pistol Suppressor contains no packing materials within the suppressor, i.e. liquid ablative agents, rubber or leather wipes, etc.

The suppressor was designed to be used with ablative agents or artificial atmosphere, and the presence of fluids within the suppressor is not detrimental to its operation. Water is a very good ablative agent to use.

MOUNTING THE SUPPRESSOR

Ensure the suppressor is correctly oriented for installation and removal, with only one proper alignment. Prior to usage, it is essential to securely affix the suppressor onto the firearm. Failing to do so may lead to potential damage to both your firearm and the suppressor. Conduct a visual inspection of the suppressor post-installation to verify that it is perfectly aligned with the centerline of the bore and not tilted in any way. Should you observe any misalignment between the suppressor and the bore, immediately halt the installation process and contact our Customer Service Department. Utilizing the suppressor when it is improperly mounted could result in irreversible damage to your suppressor, resulting in suboptimal performance and diminished accuracy.

DISASSEMBLY

Inventory all parts to ensure they are all present:



The tools required to assemble, disassemble, and maintain the MS-45 are a 3/4 socket wrench.



Began by first Placing the MS45 in a soft jaw vice, then taking a 3/4 socket wrench unscrew the end cap from the suppressor.



By hand unscrew the front module from suppressor.



Remove baffle stacks from the front module.



Flip the Suppressor in the soft jaw vice and unscrew by hand the booster system from the suppressor tube.



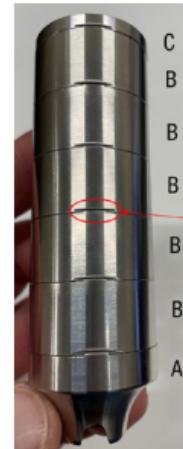
Remove baffle stacks from the main body module.

REASSEMBLY

Inventory all parts to ensure they are all present:



Insert the STEEL baffles into the main tube, in the pictured orientation. DO NOT USE THE ALUMINUM BAFFLES FROM THE EXPANSION MODULE. THIS COULD CAUSE DAMAGE TO THE SUPPRESSOR OR SERIOUS INJURY.



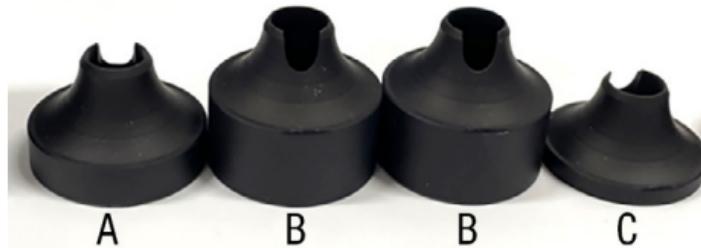
MAKE SURE ALL THE BAFFLES ARE SEATED DOWN FULLY ON THE INDEXING TABS



Thread on the expansion module, snug firmly by hand.



Insert the ALUMINUM baffles into the expansion module, in the pictured orientation.





MAKE SURE ALL
THE BAFFLES ARE
SEATED DOWN
FULLY ON THE
INDEXING TABS



Thread the endcap on, snug firmly by hand.



Thread the booster on, snug firmly by hand.



CLEANING AND PREVENTATIVE MAINTENANCE

With a variety of operational conditions and the varied pressures of ammunition, your firearm should be cleaned and inspected after each use. 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 with auto-loading pistols as shipped, and with special adapters, they may be used with pistol caliber carbines if they are chambered in rated calibers for this silencer.

WARNING: Always Unload and CLEAR your firearm before maintenance and cleaning. DO NOT mix parts from one firearm silencer with parts from another firearm silencer. Parts are not interchangeable unless specifically designated as such. DO NOT mix lubricants on the same firearm or firearm silencer. 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, universal, non-petroleum based (non-toxic recommended)
- Nylon Bristle Brush
- Small Arms Wiping Rags

CLEANING THE FIREARM SILENCER

WARNING: USE PROPER PPE, COVERING THE HANDS AND TAKING PRECAUTIONS NOT TO CROSS CONTAMINATE YOUR SURROUNDINGS WHEN CLEANING A SILENCER. LEAD IS AN INGREDIENT IN THE CARBON DEPOSITS INSIDE OF A SILENCER, WHICH ARE VERY DANGEROUS TO HUMAN EXPOSURE.

1. Ensure that your firearm is clear of any ammunition as shown at the beginning of this manual. DO NOT allow any ammunition in the cleaning area.
2. Remove the silencer from the firearm. The suppressor should be cleaned every 500 rounds fired. If any of the components do not come apart, soak the components in an approved solvent to release the carbon deposits.
3. Remove the expansion module from the main body.
4. Remove the booster cap by unthreading it.
5. Clean all exterior surfaces with a nylon or brass brush only. Ensure to remove all visible carbon deposits.
6. Using a nylon brush and cloths only in conjunction with approved cleaners, scrub and wipe the interior surfaces of the booster body (portion of the booster where the piston and piston spring are housed).
7. Remove all baffles. Some may need to be pushed out toward the endcap with a dowel. DO NOT HIT THE BAFFLES AS THE BAFFLES MAY BE DAMAGED.
8. Clean all visible surfaces and main body surfaces using a nylon brush and cloths.
9. Reassemble in the reverse order, refer to the section on method of assembly. Ensure that the piston spring and booster cap O-ring are well lubricated with an approved grease. THIS SHOULD BE GREASED EVERYTIME BEFORE USE.

NOTE: a small amount of non-toxic liquid may be used to shoot the silencer "wet". No more than 10ml should be used. Abelative agents are most effective when applied between the first and second baffles.

INSPECTION OF COMMON PARTS

- Piston - This is a one-piece replaceable unit. It should rarely need to be replaced, if ever during careful use. Pistons are available in different thread pitches. Inspect the teeth around the outside and the threads to ensure there is no visible damage.
- Baffles – baffles will wear, particularly with supersonic ammunition at very large volumes. Inspect the baffles regularly, if excessive wear is noticed please contact customer service.
- Piston spring – The piston spring is the spring that resides around the piston, inside the booster body. Unless it is damaged in some visible way, it should never go bad.
- End cap – The end cap should be inspected for bullet impacts. This will only ever happen if the silencer is misaligned during installation or loose on the barrel threads. The suppressor should be re-torqued by hand after every magazine to ensure it will not loosen under fire.
- Booster cap – there is an O-ring where the piston slides in the small of the two openings in the booster cap. This O-ring is required both for reliable function and for good alignment. If the O-ring shows signs of tearing, ripping, or damage call or E-mail Maxim Defense customer service and replace the O-ring before using the silencer again.

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 LUBRICANT SO 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 LUBRICATION POINTS

The booster cap should be greased at the O-ring before each use. This can be done by pulling on the suppressor to expose the piston to apply grease to the booster piston where it slides along the O-ring.

NOTES

Always read the warning label on any cleaner or solvent and remember that virtually all solvents are inherently dangerous and potentially toxic. Always use adequate ventilation and both skin and eye protection when using solvents.

Never use a patch to clean the barrel with the suppressor in place, as the patch may become lodged in the baffle system.

For suppressor installation, torque should not be above 40 ft*lbs, but not below 25 ft*lbs (firmly hand tight).

It is recommended that the user periodically ensure that the suppressor is tight. To do so: cease fire, unload and visually and physically inspect the firearm to be clear and safe, then allow the suppressor to cool to ambient temperature and only then try and tighten the suppressor by hand (turning clockwise). The suppressor should be checked to ensure it is tight to the barrel after every magazine.

WARNING: Suppressors are VERY HOT under fire. Never attempt to see if the suppressor is tight soon after it has been fired, as there is nothing that can protect your hand while grabbing a metal object that is as hot as a suppressor can get. It is always safest to allow the suppressors to cool all the way to room temperature to check that it is still torqued in place.

WARRANTY, SERVICE, AND TECHNICAL REFERENCE INFORMATION

For current warranty information please refer to our website: www.MaximDefense.com

WARRANTY

Before this firearm left the factory, it was carefully inspected, and test 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 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. 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.

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 persons 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 including storing your firearm unloaded and locked with the provided mechanical device, separate from any ammunition and inside of a lockable storage device.

INTEGRATED SILENCER

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 WARRANTY, SERVICE AND TECHNICAL REFERENCE INFORMATION. For current warranty information, please refer to our website www.maximdefense.com. 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 installation, 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. Please contact the manufacturer of your suppressor and inquire about compatibility with any of your firearms.

AMMUNITION

The use of hand loaded, reloaded, wildcat, frangible, fragmented ammunition, 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, powder 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 Manufacturers 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.

PERSONAL PROTECTION EQUIPMENT (PPE) 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, propellant gasses, ricocheting fragments, and other debris.

GENERAL LIABILITY

This is a firearm. Failure to follow any of these warnings 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 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

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Specifications subject to change without notice. Actual product may vary from photo. Rev 10222025CH