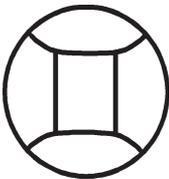


TM-MK-9K

OPERATION AND MAINTENANCE OF SOUND SUPPRESSOR MODEL MK-9K

**Before using this suppressor,
be certain you have read and
understand this manual.**

Manufactured by



GEMTECH
Div. of Gemini Technologies, Inc.
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Boise, Idaho 83714

ISSUED: April 22, 2005

★ ★ ★ ★ ★ WARNING ★ ★ ★ ★ ★

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

TM-MK-9K

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TM-MK-9K

OPERATIONAL MANUAL FOR
SOUND SUPPRESSOR MODEL
MK-9K™ (9mm)

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☆☆☆☆☆ **WARNING** ☆☆☆☆☆

☞ **Failure to follow installation and maintenance instructions detailed in this manual can result in potential for 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.

Congratulations! You have just obtained the original, classic 9mm muzzle suppressor designed for the Heckler & Koch MP5 submachine gun. While an older design, the MK-9K remains one of the most efficient 9mm submachine gun suppressors available anywhere. Before use, please take a few moments to read this instruction manual. **It is not designed for and should never be used on a center fire rifle.**

GENERAL DESCRIPTION

The MK-9K suppressor is a coaxial design exhibiting increased efficiency as compared to other suppressors of similar external size and appearance. It is designed to mount on the H&K MP5 submachine gun utilizing the HK 3-lug barrel. On special order it can be provided to mount on a 1/2x28 threaded barrel. Suppression efficiency is gained through proper design of the suppressor rather than by using "wipes" or other obstacles touching the bullet in free flight. For this reason, weapon accuracy is not impaired, and accuracy may be actually slightly enhanced by tightening of the group size.

☆☆☆☆☆ **WARNING** ☆☆☆☆☆

☞ **Failure to follow mounting instructions detailed in this manual can result in potential for serious injury to the user and damage to the weapon.**

MOUNTING ON WEAPONS

Although some versions of the HK MP5 submachine gun have muzzle threads, we suggest utilizing the 3-lug mount whenever possible, as it is a superior and more stable mount. For mounting on other weapons, the suppressor can be special ordered to mount on a 1/2-28 threaded barrel.

The MK-9K using the Tri-Lock 3-lug coupler must never be mounted on a 3-lug threaded barrel without a thread protector in place. Failure to observe this caution may result in misalignment. If there is any question, we can provide a suitable thread protector.

When mounting on a threaded barrel, the suppressor should be screwed on hand tight only. It is important to periodically ascertain that the suppressor has not unscrewed, which can cause misalignment.

We guarantee alignment of the MK-9K suppressor only on original German 3-lug H&K MP5 barrels, those converted by S&H Arms Co., or on non-3-lug barrels converted by us. Damage caused by misalignment is not covered under the warranty.

☆☆☆☆☆ DANGER ☆☆☆☆☆



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

GEMTECH TRI-LOCK MOUNTING INSTRUCTIONS

1. Be certain the weapon is unloaded, the magazine removed, the safety on, and the bolt locked in the open position.
2. Align the grooves in the silencer mount with the lugs on the barrel.
3. Pull the silencer onto the barrel against spring tension until the silencer can be rotated counter clockwise while holding the weapon in the firing position.
4. Rotate the silencer 60° until it stops and release pressure on the silencer. Rock the silencer to be certain that the lugs have engaged the pocket recesses in the mount.
5. Removal is the reverse of installation. It will be necessary to pull the silencer rearward in order to rotate it 60° clockwise.

SINGLE POINT (THREAD) MOUNTING INSTRUCTIONS

1. Be certain that the weapon is unloaded, the magazine removed, the safety on, and the bolt locked in the open position.
2. Screw the suppressor onto the barrel threads, being careful to not cross-thread the suppressor.
3. Tighten firmly hand tight. We advocate the use of Blue Loctite to inhibit unscrewing during firing.
4. Because silencers using single point thread mounting will unscrew during use, **it is the shooter's responsibility to frequently check to be certain that the suppressor remains tightly screwed on the barrel at intervals not to exceed 1 magazine.**
5. We cannot guarantee alignment on barrels not threaded or gauged by us. We deny liability for injury or damage caused by misalignment or unscrewing of the suppressor.

BASIC SUPPRESSION PRINCIPLES

The sound of a firearm discharging is due to the sudden release of high pressure propelling gases. The purpose of a suppressor is to reduce the gas pressure by a combination of increasing the volume for gas expansion, decreasing gas temperatures, and delaying gas exit from the suppressor.

The MK-9K suppressor is a coaxial design unit, consisting of three suppression chambers: the inner rear entrance chamber, the inner front chamber, and the outer coaxial chamber. The inner rear chamber diverts pressure into the outer chamber, offering an exceptionally large volume for initial gas pressure reduction, trapping, cooling, and exit delay. The baffle stack (central core) consists of a steep cone (with a notch in the apex) and a series of precision formed stainless steel baffles. Stainless steel was used for durability and resistance to gas erosion and corrosion. The baffles are optimally spaced for maximum gas trapping, cooling and delayed gas release into the atmosphere.

CONSTRUCTION

The entire suppressor is constructed from hard anodized aircraft grade aluminum alloys with the exception of the baffles in the central core, which are precision formed from type 18-8 stainless steel for wear resistance and durability. No packing materials or consumable parts are utilized.

The suppressor can be partially disassembled for cleaning and routine maintenance. No tools are necessary for this procedure.

AMMUNITION NOTES

☆☆☆☆☆ **WARNING** ☆☆☆☆☆
Never use ammunition that does not meet SAAMI specifications.

All commercial American made SAAMI specification ammunition is safe, but the origins, storage history, and reason for being surplus of foreign made ammunition is not available for evaluation. Although foreign made ammunition is usually safe, this is not always the case. Damage from non-American ammunition cannot be covered under warranty.

The majority of 9mm ammunition is supersonic, and the projectile traveling at velocities above 1,100 fps will produce a ballistic “crack” or “sonic boom”. There are several commercial sources of specially loaded subsonic 9mm ammunition, and for maximum effectiveness, we suggest the use of this type ammunition. Although special 9mm subsonic ammunition has a bullet muzzle velocity below 1,100 fps, the higher bullet weight results in a significantly higher bullet kinetic energy.

The majority of subsonic 9mm ammunition is loaded utilizing bullet weights of 147 grain or heavier. Subsonic ammunition utilizing bullet weights of 155 grain or more is apt to be significantly overpressured in some weapons, especially the HK MP5. 147 grain FMJ and JHP bullets for 9mm reloading are available from a variety of suppliers, including Hornady and Speer. **Do not use cast lead bullets.** Loading data for 9mm subsonic ammunition is available from a number of sources, including the Speer Supplement (available from Speer for their 147 grain TMC bullets), and from Accurate Arms for use with their powders. *However, we caution against any attempt to hand load beyond recommended SAAMI specifications.*

Commercial subsonic ammunition is available in 158 grain FMJ from Israeli Military Industries and in 147 grain bullet weight from Winchester, Remington, Federal, CCI, and others in both full metal jacket and hollow point styles. We have found that although this ammunition remains subsonic in pistols, it may not remain subsonic in the longer barrel of the Heckler & Koch MP5 submachine gun. The user will need to experiment with different brands. Ammunition with bullet weights over 154 grains is discouraged by H&K. Although some have suggested that the 9mm subsonic cartridge is “downloaded,” we believe users should be aware that this ammunition is anything but an anemic load with kinetic energies and pressures significantly greater than standard 9mm ball ammunition.

Use of corrosive ammunition, and evidence of its use, will void the warranty.

ROUTINE CLEANING

Our experience suggests that total disassembly for cleaning is not necessary, and for this reason the inner core is sealed to maintain optimum positioning of the parts. Field stripping and cleaning should be performed every 2,000 rounds. Because of molten lead splattering from the heat generated by friction with cast bullets and bullet lubricants, ammunition loaded with cast lead bullets should never be used.

After field stripping, some cleaning can be performed by immersing the central core of the suppressor in a suitable solvent.

Cleaning of the central core is optional and consists primarily of flushing out unburned or partially burned powder residues. There are no perfect solvents for the carbon deposited on the internal parts by the burning of the powder. We have found, however, that Varsol automotive parts cleaner or a mixture of 3 parts mineral spirits and 1 part Type A Automatic Transmission Fluid are among the better solvents for suppressor cleaning. We suggest against the use of water-based solvents. **Never** use solvents containing ammonia, which can damage aluminum parts. This includes Hoppe's, Sweets, and "GI" bore cleaner. **Never use water or water-based solvents, which can damage aluminum.** Ultrasonic cleaners have limited value, because they require water-based solvents.

★★★★★ **CAUTION** ★★★★★

☞ 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 organic solvents.

FIELD STRIPPING (Partial Disassembly)

Unscrew the front end cap, which is threaded into the central core of the suppressor. This will release the outer tube, which is held in compression by the front end cap and rear mount. A small neoprene "O" ring in a groove in the rear mount provides a gas seal. Remove the outer tube.

Unscrew the rear mount from the central core. Do not attempt to disassemble the central core. At this point the suppressor can be cleaned by immersion.

Although complete disassembly of the central core is theoretically possible, we feel that so doing is not necessary and is without merit.

We recommend against the use of any water based solvent or cleaning materials.

SERVICING THE 3-LUG MOUNT

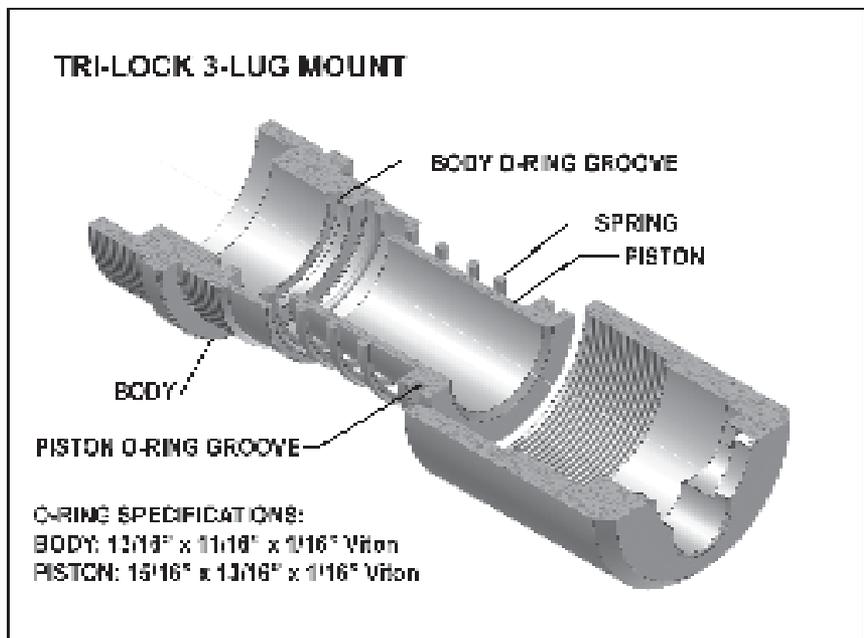
The Raptor™ 3-lug mount can be easily disassembled for servicing.

1. Unscrew the knurled cap from the body.
2. Remove the spring-loaded piston from the mount body. Remove the spring.

Service consists of:

1. Replace the O-rings if necessary. The O-ring in the body can be removed with a dental pick. O-rings are Viton (neoprene must not be used).
2. Thoroughly clean the spring-loaded piston inside and out. Made of stainless steel, it can be cleaned with red Scotchbrite or fine steel wool moistened with WD-40.
3. Coat the outside of the piston with grease as well as the inside of the knurled cap. Lightly coat the inside of the mount body. Suitable greases include marine bearing grease, available at stores that sell boat trailers.
4. Insert the spring in the mount body followed by the piston (small end first). Replace the cap and screw hand tight. Do not use thread adhesives.

It is not unusual for a small amount of grease to be forced through the



REASSEMBLY

Reassembly is the reverse of disassembly. When reassembling the suppressor, we suggest use of a thread lubricant and anti-seize compound, such as a Teflon compound or one of the many quality commercial anti-seize materials.

The holes in the wall of central core are in the rear section. After coating the threads with anti-seize compound, screw the rear mount hand tight into the rear of the central core.

Be certain that the Viton "O" ring in the rear mount is intact, and replace if worn or broken. Replacements are available at most well stocked hardware stores or stores selling hydraulic tools and are 1-3/4" x 1/16".

Coat the inside of the end of the outer tube with either a lithium based grease or Vaseline in order to facilitate disassembly and reduce binding of the "O" ring. Replace the outer tube and screw in the front end cap to secure all parts in place. This completes the reassembly.

NOTES ON USE

Use of this suppressor on a centerfire rifle will exceed the design parameters, leading to structural failure of the suppressor and possible injury to the user.

Because of the design of this suppressor, heating of the outer tube during fully automatic fire is minimized. If firing the weapon causes the outer tube to heat to the point of being too hot to touch, then the suppressor should be allowed to cool until it can be handled without discomfort before resuming fire. Because of this indication of overheating, we suggest against the use of a protective Nomex cover.

PHYSICAL SPECIFICATIONS

Caliber	9mm Parabellum (only)
Length	7.5 inch (191 mm)
Diameter	2 inch (51 mm)
Weight	20 ounce (570 gm)

REPAIR PROCESS

While BATFE has encouraged the use of the ATF Form 3 or 5 for return for repair, they have publicly stated on their web site that NFA weapons (which include suppressors) may be sent directly to a licensed manufacturer or licensed gunsmith for repair or modification without filing the forms 3 or 5.

Due to restrictions imposed by Public Law 99-308, replacement parts are no longer available for field installation. It is now necessary to return the suppressor to the manufacturer if repair parts should be necessary.

If repairs are necessary, contact Gemtech for shipping instructions.

WARRANTY STATEMENT

Our "warranty" has been practiced since our personnel started in the suppressor business in 1976, in a time before legalese and when a handshake and this simple statement sufficed: "If a Gemtech product breaks and it's your fault, we'll fix it for a fair price in a timely manner. If it's our fault, we'll fix it quickly at no charge." This policy born of pride in craftsmanship and honor has served us and our clients well for over two decades and will continue in Gemtech's future.

The small print follows:

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 "full" or as "limited" and sets minimum standards for a "full" warranty.

As do all major firearms manufacturers, Gemtech 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.

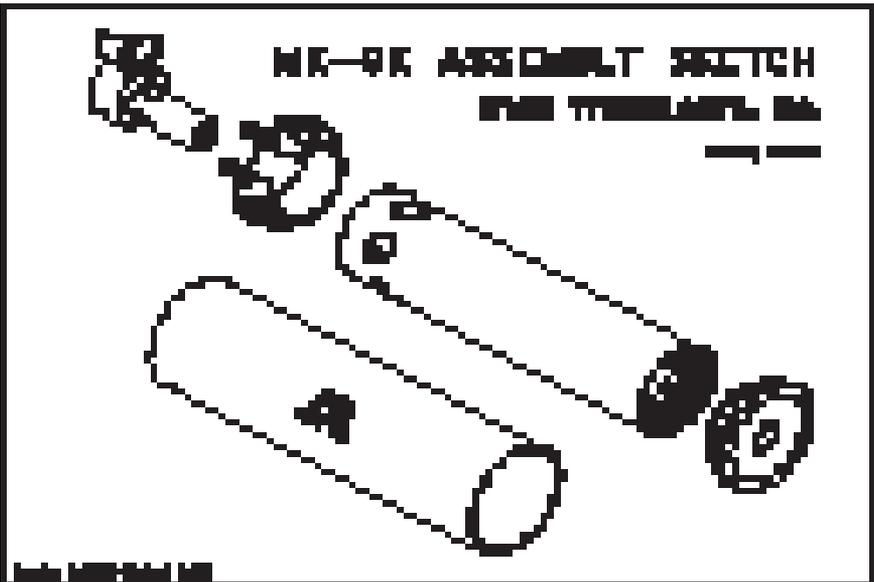
There are certain implied warranties under state law with respect to sales of consumer goods. As the extent and interpretation of these implied warranties varies from state to state, you should refer to your state statutes.

Gemtech certifies that all sound suppressors manufactured by them are free of defects in materials or workmanship, and that they meet manufacturing specifications at the time of manufacture.

It is our intent that the customer be completely satisfied with the product. Certain Gemtech products may be classified as ordnance and/or implements of war and are sold by us with the specific understanding that Gemtech has taken every reasonable precaution in providing our customers with inherently safe merchandise, and that we assume no liability whatsoever for unsafe handling by the purchaser or his agents. Gemtech assumes no responsibility whatsoever and we will honor no claims for damages, regardless of nature, for physical injury or property damage resulting from careless and/or irresponsible handling, adjustments to equipment, neglect or abuse.

Gemtech reserves the right to make changes at any time and without notice, in prices, to change specification or design, to add or remove accessory materials, and to add or delete items without incurring any obligation.

Use of ammunition that does not meet SAAMI specifications will void all warranties.



All Gemtech products are
100% manufactured in the
United States of America.

