# TM-SFN-57

# OPERATION AND MAINTENANCE OF SOUND SUPPRESSOR MODEL SFN-57 and SAR-57

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

Manufactured by



# **GEMTECH**

Div. of Gemini Technologies, Inc. P.O. Box 140618 Boise, Idaho 83714

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#### \* \* \* \* \* \* 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-SFN57

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# TRADEMARK NOTICE:

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# TM-SFN-57

# OPERATIONAL MANUAL FOR SOUND SUPPRESSOR MODEL SFN-57 and SAR-57 (5.7mm)

# Manufactured by

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#### **IMPORTANT**

The manufacturer disclaims any liability for damages resulting from any unauthorized modification of this product. Any modification of this suppressor without prior express authorization from Gemtech's Engineering Department will void all warranties, both written and implied, and will result in the assumption of all liability by the person performing the unauthorized modification.

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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. Being user-attached muzzle devices, firearm sound suppressors 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.

\* \* \* \* \* WARNING \* \* \* \* \*

The SFN-57 suppressor has been designed to operate dry, and introduction of any so-called "artificial environment" (water, oils, greases, etc.) can cause dangerous internal pressures with possible injury to the user and damage to the suppressor.

# **GENERAL INFORMATION**

The Gemtech SFN-57 suppressor was designed specifically for the FN Five-Seven pistol manufactured by FN Herstal and distributed by FNH. The suppressor features Gemtech's high efficiency baffle stack and has been specifically optimized for this weapon only and its 5.7 x 28 mm ammunition.

The SAR-57 differs only in that the rear mount is threaded 1/2-28 for common US threaded carbines chambered for the 5.7x28mm cartridge.

All muzzle attachments, including suppressors, will change barrel harmonics and standing waves. This results in a slight change in point of impact with the device in place. The SFN-57 suppressor will have no deleterious effect on group size.

This suppressor is effective in markedly reducing the sound of the muzzle blast, making it difficult for an observer to determine the origin of the shot and eliminating the need for shooter hearing protection. There is no way of eliminating the ballistic crack (or sonic boom) of the projectile traveling downrange when using the standard SS-190 ball ammunition.

When using the SB-193 subsonic ammunition (white tip), the dominant sound becomes that of the mechanical noise of the weapon and the projectile impacting the target.

This suppressor contains no expendable parts and may be cleaned by immersion in suitable solvents and oils. This instruction manual gives the necessary instructions for maintenance of this unit.

# **OVERALL EFFECTIVENESS**

The real limiting factor on the effectiveness of centerfire rifle suppressors is related to the sound of the bullet in free flight. The free flight bullet noise is related to the general bullet shape and is also directly proportional to the bullet velocity, and all the 5.7x28mm ammunition (except the SB-193 Subsonic) is supersonic with significant bullet flight noise. The SFN-57 suppressor is capable of reducing the sound of the muzzle blast to below the level of bullet and action noise. Because of the sound level of the bullet in flight, it is not possible to truly appreciate the degree of reduction when the muzzle blast is reduced to less than the bullet flight noise unless subsonic ammunition is used.

Besides sound suppression, there are other benefits of a sound suppressor which are seldom mentioned. Sound suppressors are exceptionally effective flash suppressors. This is an important consideration when used in the flammable atmosphere often encountered in drug labs.

# **SPECIFICATIONS**

Length: 6 in.
Diameter: 1.25 in.
Weight: 5 oz.

Muzzle threads M10x1 (1/2-28 for the SAR-57)
Suppression level: varies with ammunition used
Construction Materials High tensile strength aluminum

# **AMMUNITION**

At the time of printing of this manual, four types of  $5.7 \times 28 \text{ mm}$  ammunition are produced by FN for the P90 Personal Defense Weapon and the Five-Seven pistol. The standard SS-190 ball ammunition is supersonic and is identified by a black tip. The practice ammunition has no markings on the full-metal-jacketed projectile. The SB-193 Subsonic ammunition is identified by white marking on the full-metal-jacket projectile. The Tracer ammunition, L191, is identified with a red marker. All three of these factory rounds are certified for use by FN in the P90 and all are suitable for use with the SFN-57 suppressor.

Gemtech specifically cautions against the use of non-FN approved ammunition, and use of such ammunition will void both the warranty issued by FN as well as the warranty for damage to the suppressor.

The SFN-57 suppressor has been specifically designed for use with the FN 5.7 x 28 mm cartridge. Use with any larger cartridge, such as the  $5.56\,x$ 

45 mm NATO ammunition, will result in damage to the suppressor and probable injury to the shooter.



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.

# SUPPRESSOR INSTALLATION/REMOVAL

- Remove the magazine, open the action, and visually ascertain that the weapon is unloaded and the chamber empty. Lock the slide in the open position.
- If present, remove the thread protector and thread the suppressor on the extended, threaded barrel in the Five-Seven pistol hand tight only. Excessive force is never necessary. The suppressor threads bottom on the face of the barrel.
- Removal is the reverse of installation. The suppressor may become hot with usage. If the suppressor must be dismounted when hot, a protective glove, such as Nomex, must be worn.

# \* \* \* \* \* 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 and avoid open flames.

# **CLEANING**

As a general rule (and contrary to popular opinion), suppressors have a longer life is no attempt is made at cleaning. There are no perfect solvents for the carbon deposited on the internal parts by the burning of the powder, and some carbon residues will slightly enhance performance. Field experience has shown that the suppressor will outlast a number of barrels. The design of the SFN-57 suppressor is such that any liquid introduced in a cleaning process may not drain completely, and its presence will generate more sludge and residue within the suppressor than not cleaning.

# Regardless, water or water-based solvents must never be used

What does have merit is to occasionally blow out the suppressor with

dry compressed air to blow out loose powder granules. Blowing should be done first from the rear and second from the front.

Any other attempt at cleaning may well shorten the life of the suppressor. If it becomes necessary, the suppressor can be rebuilt to factory new condition at a reasonable cost.

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

As do most 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 or operation 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, improper operation, 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.

Warranties specifically apply only to defects in materials or workmanship. They do not cover misuse by the user, damage due to failure to follow instructions in the manual, use of inappropriate ammunition, or improper mounting.

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

#### REPAIR POLICY

Gemtech maintains complete repair facilities for all suppressors manufactured by them or their antecedent companies. Return authorization and shipping instructions must be obtained prior to return. Contact Gemtech for this information.

ATF no longer requires transfer on a Form 5 to the manufacturer for repair. However, they do require a letter accompanying the weapon detailing the repairs required. We will require also a photocopy of the front of the owner's Form 3, 4, or 5.

