

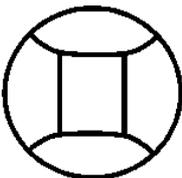
TM-G522

OPERATION AND MAINTENANCE OF SOUND SUPPRESSOR MODEL

G5-22

**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

ISSUED: June 2012

★ ★ ★ ★ ★ **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-G522

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SOUND SUPPRESSOR MODEL
G5-22 (.22LR)

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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, maintenance, and use 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.

GENERAL DESCRIPTION

The advent of semi-automatic .22LR rifles cosmetically resembling well-known military assault rifles resulted in a need for a cosmetically appealing and properly scaled sound suppressor. The Gemtech G5-22 fills this need. Slightly downsized from our well known G5 5.56mm suppressor, the G5-22 utilizes a slightly scaled version of our rugged, reliable, patented Quickmount attachment system.

The G5-22 delivers outstanding sonic performance with absolutely zero first round "pop" (the difference between the sound level of the first round as contrasted to the remaining). The G5-22 can be 100% disassembled for user cleaning, if desired.

AMMUNITION RECOMMENDATIONS

Because this is a muzzle suppressor, there is no velocity control of the projectile. On rifles, HV ammunition will be accompanied by the "ballistic crack" of the bullet in flight. For maximum suppression effect, we suggest the use of standard velocity target type .22 rimfire ammunition such as CCI Green Tag, CCI standard velocity ammunition or Remington Subsonic. Hyper velocity cartridges such as the CCI Stinger® and Remington Yellow Jacket® will cause a significant increase in sound signature. These cartridges should be avoided if possible. This suppressor is designed only for .22LR caliber rimfire ammunition. It has not been tested with .22 Magnum nor with .17 HMR. While these cartridges may or may not be suitable, their use is not covered under warranty. **It must not be used with any type of centerfire ammunition.**

The Aguilla SSS 60 gr. subsonic ammunition does not always stabilize in barrel twists readily available and can yaw badly on exit from the rifling. This will seriously damage the internal components of your suppressor, and use of this ammunition is at the user's risk and will void the warranty.

☆☆☆☆ **WARNING** ☆☆☆☆

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

INSTALLATION

Before installing (or removing) the suppressor on the weapon, be certain to remove the magazine, open the action, and visually ascertain that the weapon is unloaded.

The Quickmount (Bi-Lock) flash hider mounts on conventional 1/2x28 (Class 2A) threads. Maximum thread length on the barrel is 0.400 inch. For proper alignment, the muzzle threads must be absolutely concentric with the bore and must have a 90° rear shoulder perpendicular to the bore. We cannot guarantee alignment on improperly threaded barrels. Threading specifications are on P. 8, Figure 3.

The Quickmount should be screwed on securely, preferably utilizing a small drop of Loctite 242 (blue).

MOUNTING THE SUPPRESSOR

- 1 Place the base of the suppressor onto the G5-22 Quickmount flash hider.
- 2 Rotate the suppressor until the lugs on the G5-22 Quickmount flash hider enter the base of the suppressor. This can occur in one of two positions.
- 3 Press the suppressor onto the G5 Quickmount™ Flash hider against spring tension approximately 0.2 inch until the suppressor can be rotated on the G5 Quickmount flash hider.
- 4 Rotate the suppressor 90 degrees counter-clockwise (with reference to the operator's viewpoint) until the G5-22 Quickmount flash hider lugs engage in recesses in suppressor mount. Internal stops prevent over-rotation. The suppressor will snap forward approximately 0.1 inch when engaged. Gently attempt to twist the suppressor to be certain it is locked in position.

DISMOUNTING THE SUPPRESSOR:

Dismounting is the reverse of mounting. The suppressor should be dismounted every 100 rounds to help reduce carbon buildup from the slots in the Quikmount flash hider.

- 1 Move the suppressor rearward on the G5 Quikmount flash hider approximately 0.1 inch until it can be rotated.
- 2 Rotate the suppressor approximately 90 degrees clockwise (with respect to the operator's viewpoint).
- 3 Pull the suppressor forward clear of the weapon. Carbon buildup on the G5 Quikmount flash hider can be broken loose by twisting the suppressor during removal after the mount has cleared the G5 Quikmount flash hider lugs.

☆☆☆☆ **DANGER** ☆☆☆☆

☞ 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 unloaded. Failure to do so can result in potential for serious injury to the user and others in the vicinity

MAINTENANCE and CLEANING

As a general rule (and contrary to popular opinion), suppressors have a longer life if no attempt is made at cleaning. There are no perfect solvents for removing carbon deposited on the internal parts by the burning of the powder, and some carbon residues will slightly enhance performance.

The design of the G5-22 is such that the user can totally disassemble the suppressor. The suppressor is all aluminum, and many normal gun cleaning solvents will damage aluminum. These include Hoppe's, Sweets, GI Bore Cleaner, and all water-based agents (such as SLIP-2000, MP-7, Simple Green, etc.). Water or water-based cleaning agents should never be used.

For cleaning, use only in hydrocarbon-based solvents such as WD-40 or a mixture of 2 parts mineral spirits with 1 part automatic transmission fluid.

☆☆☆☆ **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.

The G5-22 should be disassembled and cleaned at intervals not to exceed 250 rounds.

DISASSEMBLY:

There are two drawings. One is a totally disassembled G5-22 showing each individual part (figure 1). The other is a section drawing showing the G5-22 completely assembled (figure 2)

Refer to figure 1 on this page.

1. Unscrew the front end cap. A spanner wrench is included. However, as an alternative, the suppressor outer tube may be held in one hand and unscrew the rear mount. This loosens the front end cap so it may be unscrewed.
2. Remove the outer tube from the rear mount with a slight rocking motion while pulling. There are no threads on the outer tube or its mating surfaces.
3. Unscrew the central core from the rear mount.
4. Using a coin (US 5-cent piece), unscrew the stack encapsulator from the central core.



Figure 1

5. Push out the entire baffle stack toward the front. A wood dowel under 3/4 inch may be used. Do not use excessive force.
6. Clean all parts as desired with solvent. Steel wool (#0000) or grey Scotchbrite may be used if a toothbrush is not adequate. Absolute cleanliness is not necessary, and damage from using a sand/bead blaster is not covered under warranty.
7. If desired, the mount may be disassembled. The closer plate unscrews (the Quickmount flast hider may be used as a wrench if secured on the barrel with Loctite). The tensioning plate and spring can then be removed.

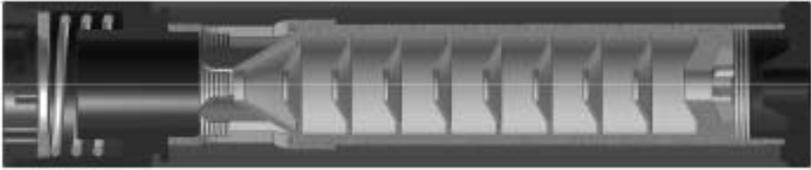
☆☆☆☆ CAUTION ☆☆☆☆

☞ **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.**

REASSEMBLY:

Re-assembly is the reverse of disassembly. All thread surfaces should be coated with a very thin coating of either grease or a colloidal copper anti-seize compound. The sequence of assembly is important and must be followed as enumerated. Do not use excessive force tightening any threaded parts.

1. If disassembled, re-assemble the mount. The spring is lightly greased and inserted first, followed by the tensioning plate. The tensioning plate can be inserted with either side out. Last, the closer plate is screwed into the mount body and snugged lightly.
2. Although the baffles can be dropped in place, it is far easier and faster to stack the baffles on a 1/4 inch rod with the apex of the cones upward and the long cone being on top. The central core is then simply slipped over the stack, and the stack is secured with the encapsulator. The encapsulator is gently tightened with a coin.
3. The stack is then screwed onto the rear mount. As shown in both Figures 1 and 2, the end of the central core with the slots is rearward and screwed into the mount housing.
4. Inspect the O-ring and replace if damaged. The O-ring is 1-1/4 inch outside diameter, 1-1/8 inch inside diameter (1/16 inch wall) and is made of



Assembled G5-22, Section view

Figure 2

Viton. Do not use neoprene O-rings from the hardware store.

5. Lightly grease the inside of both ends of the outer tube.
6. Slip the outer tube over the central core and over the O-ring in the mount.
7. Last, screw in the front end cap and gently tighten with the supplied spanner wrench.

PHYSICAL SPECIFICATIONS

Caliber	.22 Short, Long, Long Rifle
Length	6.6 in.
Diameter	1.38 in
Weight	7.3 oz.
Mounting	Quickmount flash hider
Mount threads	1/2x28 (Class 2B)
Maximum Thread Length	4/10 inch (see P. 5)
Sound Pressure Level	113 dB
First Round Pop	zero dB
Test Weapon	Ruger 77/22
Test Ammunition	CCI Green Tag

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.

Barrel Threading Specifications

Vortex-2, Outback, Outback-II, Alpine, G5-22

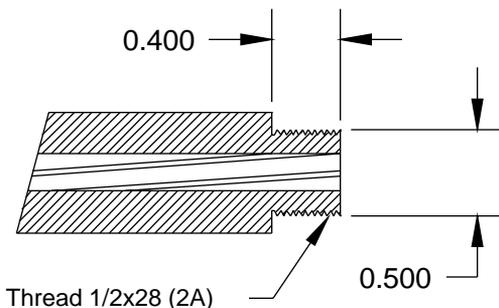


Figure 3

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 or modifications required. ATF requires proof of ownership, satisfied by a photocopy of the front of the owner's Form 3, 4, or 5.

NOTE: ATF prohibits transferring the serial number to a new outer tube in the case of damage to the tube. Tube damage will require a new suppressor.

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

