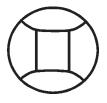
Technical Manual STORMFRONT

OPERATION AND MAINTENANCE OF SOUND SUPPRESSOR MODEL STORMFRONT

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



GEMTECH

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

ISSUED: 2004

** * * * 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-STORMFRONT

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TM-STORMFRONT

OPERATIONAL MANUAL FOR SOUND SUPPRESSOR MODEL STORMFRONT (50BMG)

GEMTECH

Division of Gemini Technologies, Inc. P.O. Box 140618 Boise, Idaho 83714-0618 www.gem-tech.com Phone: (208) 939-7222

FAX: (208) 939-7804

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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 ** * * *

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 in this manual are followed.

GENERAL DESCRIPTION

Caliber: 50BMG Length: 11.75" overall

Diameter: 2"
Weight: 4.25 lb

Materials: Stainless Steels and Titanium
Finish: Non-Reflective Matte Grey (May be

painted to match environment)

The model STORMFRONT sound suppressor is designed for use with the Barrett 50BMG rifles (M107, M82). 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 also providing shooter hearing protection.

The characteristic sound spectrum of a non-suppressed firearm is in the low frequency range of human hearing. The STORMFRONT suppressor utilizes advanced suppression techniques which result in a low-observable event in the higher frequency ranges. As a result, the primary sound energy is a relatively high frequency indistinguishable from the ballistic crack and bullet flight noise. Higher frequencies cannot be perceived from as far away as lower frequencies, and confuse an observer as to their origin. Besides sound suppression, the STORMFRONT sound suppressor is an exceptionally effective flash suppressor. It's use provides a dramatic reduction in flash and dust signature when used at night or over dirt or in sandy environments.

The added weight of the suppressor on the barrel changes barrel vibrations, which usually improves grouping. However, the extra weight may alter the point of impact slightly as compared to the non-suppressed weapon, so it is advised to mount the suppressor, zero the rifle, and leave the suppressor in place if possible.

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.

Important: This suppressor is intended to operate completely dry. Introduction of liquids prior to use can cause increased pressure with damage to the weapons system.

AMMUNITION NOTES

The STORMFRONT suppressor is made for use only with USGI (or NATO equivalent) M33, M17, M8, or M20 ammunition. Use of Frangible, Saboted, or "SLAP" type rounds can seriously damage the internal baffles and lead to suppressor failure. Because of this, use of any bullet other than the above WILL VOID THE WARRANTY if damage is caused from improper ammunition.

HOST FIREARM NOTES

The STORMFRONT suppressor is made for use with both bolt-action as well as semi-automatic host firearms. When in use with the Barrett M107/ M82, the host firearm's manufacturer advises it may be necessary for proper cycling to remove the accelerator rod and accelerator from the bolt carrier before firing. If it is found that the extractor is ejected from the bolt during firing, or if cycling is excessively harsh, this step should be taken consult the manual for the host firearm for steps to remove the accelerator and accelerator rod correctly.

* * * * * 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.
- Goverating Temperatures: During use, the suppressor absorbs large quantities of heat from the burning propellant gases. The heat buildup is particularly noticeable during rapid fire. The elevated temperatures can pose a hazard to personnel and materials that may contact the suppressor when hot, and the suppressor must be allowed to cool to ambient temperature before handling. If cooling time is not available, heat-resistant gloves should be used.

** * * * 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

SUPPRESSOR MOUNTING

NOTES ON THE COLLET SECURING SYSTEM

The STORMFRONT suppressor uses a two-point mounting system consisting of a thread mount to the barrel, and a collet which grips the outside of the barrel. While the primary alignment and mechanical connection come from the muzzle threads and the suppressor mounting squarely to the barrel's thread shoulder, the collet system enhances safety and accuracy by providing additional friction to keep the suppressor from unscrewing and maintaining alignment if the suppressor should start to loosen.

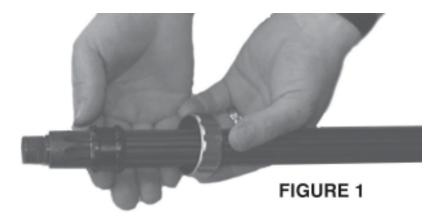
For the collet to work as designed, it should be kept clean. While a light coat of lubricant on the outside of the collet will aid function and retard corrosion (it is made of the same material as the barrel of the weapon), in dusty environments, it may be desirable to keep it free of lubricant to minimize contaminant attraction.

CAUTION:

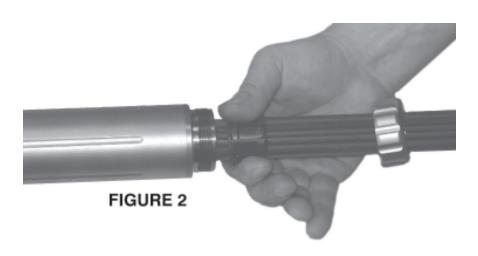
Some individual weapons muzzle threads may be worn, out of spec, or otherwise too loose. If suppressor shows signs of loosening, remounting may be necessary with the additional use of three to four drops of Locktite 242 "Blue" or similar adhesive on the muzzle threads while mounting suppressor. Before shooting, the operator should always insure that the suppressor remains securely attached by attempting to tighten the suppressor to it's correct position.

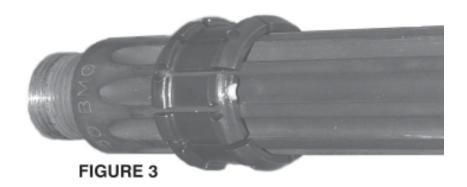
SUPPRESSOR MOUNTING

Insure that the weapon is unloaded and pointed in a safe direction. Remove the muzzle brake and any additional shim washers. Verify that the threads and shoulder at the muzzle of the weapon are free of dirt, dried adhesives, or other contaminants. Verify that the threads and internal shoulder of the suppressor are clean as well.



- 1. Remove the collet closer and collet from the suppressor. Slide the closer followed by the collet on the rifle as shown in Figure 1.
- 2. Screw the suppressor onto the rifle as shown in Figure 2. Tighten until finger tight.





3. Align the colored notch in the collet with one of the flutes in the barrel (see Figure 3). Slide the collet into the rear of the suppressor until snug (Figure 4).





4. Screw the collet closer onto the suppressor as tight as possible by hand (Figures 5 and 6). Do not use a strap wrench.



ADDITIONAL MOUNTING NOTES--

The collet and lockring are designed to be removed quickly so that they may be dusted or wiped off if contaminants are present. The operator then reassembles and mounts the suppressor normally.

If there is an emergency situation which requires placing the unmounted suppressor into service immediately and the collet has been lost or contaminated (dropped in the sand, etc), the suppressor may be mounted for limited use without the collet or lockring. If this is attempted, the operator must tighten securely, and check the suppressor after each shot to insure a firm connection to the barrel. If the suppressor is fired after it has loosened, and the collet is not being used to maintain alignment, the suppressor may droop and internal bullet strikes and possible injury may result.

If a semi-permanent mounting is desired, an appropriate adhesive (Locktite 272 or Rocksett) may be used on the muzzle threads, and tools (strap wrench or similar) may be used on the collet lockring to increase the clamping friction.

SUPPRESSOR CLEANING

The STORMFRONT suppressor is constructed of Stainless Steels and Titanium. Therefore, it is very resistant to corrosion, but simple steps should be followed to prevent corrosion from occuring.

As a general rule, we suggest against any actual cleaning of the suppressor itself other than the mount and mount threads. These parts (including the collett) may be cleaned with a tooth brush dipped in a micture of equal parts mineral spirits and automatic transmission fluid. Suitable substitutes include Kroil, lacquer thinner, BreakFree (CLP), Diesel fuel, and WD-40.

DO NOT ATTEMPT FURTHER DISASSEMBLY OF THE SUPPRESSOR OTHER THAN REMOVING THE LOCKRING AND COLLET!

The suppressor itself needs to be kept dry and blown out with compressed air. Fluid left in the suppressor can cause abnormal pressures. It is for this reason that we strongly suggest against immersion cleaning.

Drain and blow dry so no solvent is left in the suppressor. This is best done with use of compressed air, blown rearward from front end cap toward the collet. Residual fluid within the suppressor will result in excessive pressure generation.

Never run patches through the suppressor. It is unnecessary, has no value, and they may fall off into the baffles and be difficult to remove. Use of a "bore snake" or long fabric cleaning strip is acceptable.

WARRANTY STATEMENT

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.

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. Gemtech disavows responsibility for damages resulting from neglect, abuse, misuse, or acts of war.

GEMTECH maintains a complete service facility and can repair any product that they have produced.

GEMTECH denies any liability resulting from the use, abuse, or criminal misuse of this product.