

TM-HMR/WMR

OPERATION AND MAINTENANCE OF SOUND SUPPRESSOR MODELS HMR and WMR

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

Manufactured by



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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-HMR

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TM-HMR/WMR

OPERATIONAL MANUAL FOR
SOUND SUPPRESSOR MODEL
HMR™ (.17 rimfire) and WMR™ (.22 Magnum)

Manufactured by

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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.

GENERAL DESCRIPTION

The HMR and WMR are highly advanced suppressor design optimized for maximum accuracy and minimal back pressure in a compact envelope. They are 100% constructed of 300 series stainless steel. No packing material or wipes are used in these units. Designed to meet requirements for a compact, highly efficient muzzle suppressor, they have been optimized for maximum efficiency dry, maximum accuracy, and minimum first round "pop" (the amount the first round is louder than subsequent rounds). The HMR and WMR suppressors are engineered to reduce the sound level of the muzzle blast significantly below the bullet flight noise and makes the weapon hearing safe under the requirements of MIL-STD-1474D and OSHA.

The HMR is intended only for the .17HMR and .17HM2 rimfire cartridges. The WMR is intended for the popular .22 Magnum rimfire cartridge.

Due to the fragile and highly frangible nature of the ultra high velocity .17 rimfire bullet, grease, water, or other coolants in the suppressor may cause the bullet to fragment within the suppressor.

AMMUNITION DISCUSSION

Both the .17HMR and .17HM2 cartridges were introduced by Hornady. The first was the .17HMR, which was a .22 Magnum cartridge necked down to .17 caliber with a unique 17 grain Hornady V-Max projectile. It became an instant hit with small varmint hunters due to its flat trajectory and devastating effect on small targets. Although the bullet has negligible weight, the velocity of around 2,600 fps assured essentially total fragmentation of the bullet in the

target resulting in clean kills. The .17HM2 is a necked down .22LR cartridge with the same .17 caliber projectile as the .17HMR. Non-suppressed, both .17 caliber cartridges and the .22 Magnum are loud (at 155 dB) and can cause significant hearing damage.

Because this is a muzzle suppressor, there is no velocity control of the projectile. These cartridges are supersonic and will generate a ballistic crack (sonic boom) outside the weapon system. Subsonic ammunition does not exist in these calibers, nor is it practical to even consider a ported integral suppressor to reduce velocity. Considering the projectile weights, any subsonic treatment would end up with the accuracy, range, and terminal ballistics of a pellet pistol. The HMR and WMR are designed only for rimfire ammunition, and must not be used with any type of centerfire ammunition.

☆☆☆☆☆ **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.

Remove the thread protector from the end of the barrel and screw the suppressor tightly by hand onto the barrel threads.

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 will guarantee alignment only on barrels threaded by us or gauged by us if threaded elsewhere.

As a general rule, the weapon will need to be re-sighted in after each removal and replacement of the suppressor. For this reason, it is fairly normal to not remove the suppressor at any time during a hunt (or even the season). Personally owned HMR and WMR suppressors at Gemtech are not removed during the entire prairie dog season.

☆☆☆☆☆ **WARNING** ☆☆☆☆☆

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

Cleaning is optional. The design of the HMR and WMR allows for maintenance without disassembly. Nothing will dissolve the carbon buildup, but rinsing out powder residues and unburned powder particles may be done at regular intervals of 1,000 to 2,000 rounds. For this purpose, it is suggested that the suppressor be submerged in an appropriate solvent such as Kroil®, WD-40, or a 3:1 mixture of mineral spirits and automatic transmission fluid. Allow the unit to soak as long as possible and then drain threaded (rear) end down followed by blowing with compressed air. Although the suppressor will not be damaged by water based cleaning agents, we see no benefit in using them as residual water can cause rusting of the underlying firearm.

☆☆☆☆☆ **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.

We discourage any attempt at disassembly of the unit. Internal parts orientation is critical to the efficient operation of the suppressor, and reassembly requires special tooling and jigs available only at the factory. Any attempt at disassembly will void the warranty.

PHYSICAL SPECIFICATIONS (HMR)

Length	5 in. (133 mm)
Diameter	7/8 in. (22 mm)
Weight	5 oz. (150 g)
Caliber	.17HMR, .17HM2

PHYSICAL SPECIFICATIONS (WMR)

Length	5.3 in. (135 mm)
Diameter	1 in. (25 mm)
Weight	7.5 oz. (213 g)
Caliber	.22 Magnum, .22LR

LIMITED WARRANTY STATEMENT

Gemini Technologies, Inc., dba Gemtech warrants to the initial retail purchaser that Gemtech products will be free of defects in workmanship or material and that the product meets manufacturing specifications at the time of manufacture. This warranty is limited to the repair or replacement of the product. This express limited warranty is exclusive and no other express or implied warranty is otherwise provided.

GEMTECH MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. Product technical specifications and/ or designs may be changed without notice. This warranty does not cover negligence, misuse, careless or improper handling and/ or operation, abuse, unauthorized adjustments or modifications, improper mounting / installation, ordinary wear and tear, the failure to follow manufacturer instructions and/ or the use of inappropriate or defective ammunition.

Gemtech shall have no liability for incidental or consequential damages and under no circumstances will Gemtech be liable for personal injury, property damage or economic loss. This warranty and disclaimer is subject to all applicable laws some of which may limit these terms.

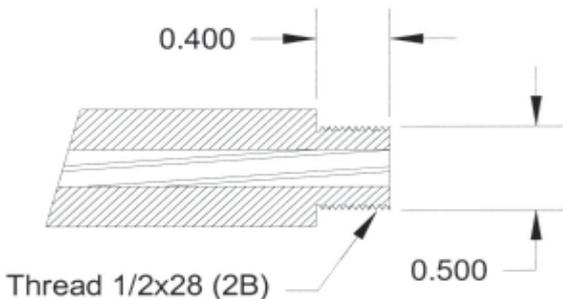
REPAIR POLICY

Gemtech maintains complete repair facilities for all suppressors manufactured by them. 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 as well as proof of ownership. This requirement is 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.

BARREL THREADING SPECIFICATIONS OUTBACK, ALPINE, HMR, WMR, VORTEX-2



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

