EVOLUTION

SERIES SILENCER TECHNICAL MANUAL

IMPORTANT The EVOLUTION series of silencers are designed for use on MODERN semiautomatic pistols in serviceable condition. We guarantee flawless semiautomatic operation only with host firearms featuring mechanical configurations that are within FACTORY SPECIFICATIONS used in conjunction with FACTORY LOADED SUBSONIC AMMINITION

CONSTRUCTION EVOLUTION silencers are constructed of a combination of high-strength hard-coat anodized aluminum alloys and heat treated 17-4PH stainless steel.

NOTES ON PERFORMANCE Each Evolution Series silencer will deliver its rated sound reduction when shot dry with subsonic ammunition. Special internal features were designed to retain a charge of 5cc of water to improve sound suppression; light oil may also be used. Liquid should be poured into the rear of the silencer. The silencer may also be immersed in liquid, then lightly shaken to remove the excess.

INSTALLATION OF SILENCER

- 1) Screw the silencer onto the barrel threads hand tight. Special care should be taken to prevent cross-threading.
- 2) Since thread mounting silencers are known to unscrew during firing, IT IS OF THE UTMOST IMPORTANCE THAT USERS FREQUENTLY CHECK THAT THE SILENCER REMAINS SECURELY THREADED TO THE BARREL, Please note that the silencer will be very hot during and after firing, so the use of a heat-resistant glove to re-tighten the silencer is mandatory.



WARNING

Before initiating Installation/Removal procedures, place the host firearm on "safe", remove the magazine from the weapon, lock the bolt to the rear and visually ascertain the chamber is empty and the host weapon is unloaded.

DISASSEMBLY OF THE A.S.A.P. SYSTEM

- 1) Unscrew the rear cap of the A.S.A.P. System using the provided disassembly tool. The driving spring and piston can now be extracted from the piston bore. If the piston is difficult to extract, the threaded barrel of a host firearm may be used as a field expedient mandrel.
- 2) Disassembly is now complete.

MAINTAINING THE A.S.A.P. SYSTEM

Using a piece of solvent moistened ScotchBrite, clean carbon deposits from the bearing surfaces on the piston and piston bore.

WARNING DO NOT use sandpaper or emery cloth to clean any part of an EVOLUTION silencer. Abrasives other than ScotchBrite will damage the precision surfaces and result in increased friction between the moving parts and increase the likelihood of malfunctions.

- Using a toothbrush or similar implement, clean the surfaces of the spring with solvent.
- 3) Check the o-ring in the rear cap for wear and tear. If replacement is warranted, use only a high-temperature Viton o-ring. See o-ring chart below.

REASSEMBLING THE A.S.A.P. SYSTEM

- 1) Replace the piston in the bore of the A.S.A.P. System so that the piston alignment tab rests between the fingers on the piston.
- 2) Once the piston is situated, slide the spring over the piston.
- 3) Apply a drop of oil or grease to the exposed surface of the o-ring located in the rear cap.
- 4) Reinstall the rear cap.
- 5) Reassembly is now complete.

ADJUSTABLE ZERO FEATURE

The design of the EVOLUTION Series enables users to make small adjustments to the bullets zero-shift by varying the rotational orientation of the silencer in 36 degree increments with respect to the barrel of the host firearm.

- 1) Thread the EVOLUTION silencer to the barrel of the host firearm.
- 2) While holding the host firearm in one hand, pull the silencer body away from the host firearm approximately 1/4 inch, and rotate it 1/10 turn counterclockwise for right hand threads, clockwise for left hand threads.
- Release the silencer body. The silencer body will snap back into place, secured by the piston alignment tab; resulting in a new silencer orientation and zero-shift.

FIXED BARREL WEAPON SPACER

EVOLUTION silencers can be employed on fixed barrel semi-automatic pistols, and pistol caliber rifles IF the driving spring is replaced with the provided Fixed Barrel Weapon Spacer. Follow the steps below to install the spacer.

- 1) Unscrew the rear cap of the A.S.A.P. System using the provided disassembly tool (if necessary).
- 2) Remove the driving spring.
- 3) Place the Fixed Barrel Weapon Spacer in the area normally occupied by the spring.
- 4) Reinstall the rear cap. Installation is complete. To remove, reverse these instructions.

WARNING DO NOT use any EVOLUTION series silencer on fixed barrel firearms without first replacing the driving spring with the optional Fixed Barrel Weapon Spacer.

EVOLUTION Series silencers with pistons threaded M13.5 x 1 LH, M14.5 x 1 LH, M16 x 1 RH, M16 x 1 LH, and .578-28 contain a Viton o-ring that bears on an unthreaded section of barrel to prevent unscrewing. There is also a Viton o-ring in the rear cap. Inspect your o-rings periodically, and replace when necessary. Replacement Viton o-rings can be procured from suppliers such as McMaster Carr (www.mcmaster.com) or from AAC.

MODEL	LOCATION	O-RING SIZE	MCMASTER CARR
EV09	REAR CAP	3/4 O.D. X 1/16	1201T27
EV09	M13.5 PISTON	14mm 0.D X 1.0mm	9263K287
EV040	REAR CAP	15/16 O.D. X 1/16	1201T31
EV040	14.5mm PISTON	16mm O.D. X 1.5mm	9263K123
EV045	REAR CAP	15/16 O.D. X 1/16	1201T31
EV045	16mm PISTONS	11/16 O.D. X 1/16	1201T26
EV045	.578-28 PISTON	19mm O.D. X 2mm	9263K299