

TM-AVIATOR 2™

TECHNICAL MANUAL FOR
OPERATION AND MAINTENANCE
OF SILENCER MODEL
AVIATOR 2



1816 Remington Circle SW
Huntsville, AL 35824
ISSUED: January 1, 2016

SILENCER LIFETIME LIMITED WARRANTY

AAC will repair or replace free of charge any silencer manufactured by AAC for the duration of this lifetime warranty. This warranty is of unlimited duration, and covers, at Advanced Armament Corp., LLC and its affiliates' discretion, service, repair, and/or replacement of damaged products caused by normal use.

LIMITATIONS This warranty does not cover damage to the silencer and/or host firearm resulting in whole or in part from criminal, abusive or negligent use, improper or careless handling, unauthorized modifications, defective, improper handloaded or reloaded ammunition, or neglect. Any repairs to the unit made necessary by these factors will be invoiced to the owner. Further, baffle strikes which are not due to a defect in workmanship are not covered by this warranty.

DEFINED Negligent or abusive use is defined as utilizing the silencer in a way that is likely to result in premature wear or damage to either the silencer or the host firearm. Further, the warranty does not cover prohibited usage as described in our various owners' manuals. This expressed limited lifetime warranty is the only warranty on this product. This product is sold "as is" and has no implied warranties or merchantability or fitness for a particular purpose. There are not warranties which exceed beyond the description put forth hereto. If your silencer is not covered under this warranty, you may have the silencer replaced for half the most current retail price-subject to any and all transfer fees required by the BATFE.

REPAIR POLICY

Should the silencer require repair or modification, the owner should contact AAC Customer Service to secure a Return Merchandise Authorization (RMA). Once the customer has the RMA, they may then ship the silencer insured to AAC for evaluation and repair, along with a xerox of the approved form proving ownership and a brief letter detailing the customer's concerns and contact information.

MANUFACTURERS DISCLAIMER

ADVANCED ARMAMENT CORP., LLC shall not be responsible in any manner whatsoever for physical injury or property damage stemming from criminal or negligent misuse, improper or careless handling, unauthorized modifications, defective, improper handloaded or reloaded ammunition, neglect, or other influences beyond our direct and immediate control. If you do not understand the instructions and recommendations in this manual, contact ADVANCED ARMAMENT CORP., LLC at 770-925-9988 for clarification.

Nothing contained in this manual should be construed as granting, by implication or otherwise, any license to trademarks displayed herein.

THIS MANUAL

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This manual contains operating, care, and maintenance instructions. To assure safe operation, any user of this silencer must use and understand this manual before using the silencer. Failure to follow the instructions and heed the warnings in this manual can cause property damage, personal injury, and/or death. This manual should always accompany this silencer, and be transferred with it upon change of ownership.

WARNING Keep this silencer out of the reach of children, unauthorized and/or prohibited individuals, and others unfamiliar with the safe handling of firearms and silencers.

 Alert Symbols and Definitions:	
WARNING!	Indicates a hazardous situation which, if not avoided, will result in property damage, personal injury, or death.
CAUTION!	Indicates a hazardous situation which, if not avoided, will result in minor to moderate personal injury.
NOTE:	Addresses practices not relating to personal injury.

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OPERATIONAL MANUAL FOR SILENCER MODEL AVIATOR 2

Distributed by

ADVANCED ARMAMENT CORP., LLC

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www.advanced-armament.com

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THE TEN COMMANDMENTS OF FIREARMS SAFETY

1. Always keep the muzzle pointed in a safe direction.
2. Firearms should be unloaded when not in use.
3. Do not rely on your firearm's safety.
4. Be sure of your target and what is beyond it.
5. Only use ammunition that exactly matches the markings on your firearm.
6. If your firearm fails to fire when the trigger is pulled, handle with care.
7. Always wear eye and ear protection when shooting.
8. Be sure the barrel is clear of obstructions before shooting.
9. Do not alter or modify your firearm and have it serviced regularly.
10. Learn the mechanics and handling characteristics of your firearm. Read your firearm's instruction manual.

WARNING! Failure to follow the instructions and recommendations set forth in this manual can create a potentially dangerous situation for the user and surrounding personnel, and possibly leading to property damage, personal injury and/or death.

WARNING! Never install or remove a silencer on or from a host firearm that you have not verified to be completely empty and rendered safe. Installing or removing a silencer on or from a loaded firearm may lead to property damage, personal injury and/or death.

WARNING! Always wear eye protection when discharging a firearm equipped with a silencer. Discharging a firearm without wearing eye protection may lead to property damage, personal injury and/or death.

WARNING! The barrel threads must be properly machined to allow proper attachment of an AVIATOR 2. The use of an improperly threaded barrel with a silencer may lead to property damage, personal injury and/or death. Barrel threading guides are available on the AAC website at www.advanced-armament.com. For further clarification on muzzle threads, contact ADVANCED ARMAMENT CORP., LLC at 770-925-9988.

WARNING! The bore through your AVIATOR 2 must align concentrically with the bore of the barrel to which it is mounted. A mismatch of the silencer and barrel bore may lead to property damage, personal

injury and/or death.

WARNING! Only fire 22 Long Rifle ammunition through your AVIATOR 2. The use of ammunition other than 22 Long rifle may lead to property damage, personal injury and/or death.

CAUTION! Silencers can become extremely hot while the host firearm is being discharged. After shooting, allow the silencer to reach ambient temperature before attempting to remove the silencer from the firearm. If removal is necessary prior to the silencer cooling to ambient and/or the tightness of the silencer on the host firearm barrel must be verified, the use of heat-resistant gloves is mandatory. Handling a hot silencer without heat resistant gloves may lead to skin burns and/or personal injury.

WARNING! Discharging silenced firearms can make airborne and/or deposit lead and other substances around, on and in the silencer. Using, handling and/or cleaning a silencer may result in exposure to lead and other substances known to cause birth defects, reproductive harm, cancer and other serious physical injury. Have adequate ventilation at all times and wash hands thoroughly after exposure.

GENERAL DESCRIPTION

Congratulations! You are now the proud owner of a light-weight, high performance silencer for 22 LR pistols, rifles, and machineguns. The AVIATOR 2 offers performance on par with silencers costing considerably more, making the AVIATOR 2 an exceptional value. The light weight of the AVIATOR 2 (4 oz) practically disappears on a host firearm, with minimal effect on the host firearm's handling dynamics. Please take a few minutes to read through this technical manual to familiarize yourself with the details regarding the proper use and maintenance of your new AVIATOR 2 22 LR silencer.

INSTALLING YOUR AVIATOR 2 ON A HOST FIREARM

1. Always keep the firearm pointed in a safe direction.
2. Render the firearm safe by removing the magazine, completely unloading the firearm and engaging the safety to the "SAFE" position. See the firearm's owner's manual for detailed instructions.

3. Remove the thread protector from the muzzle.
4. Inspect the muzzle threads to verify they are clean and undamaged.

WARNING! Never attempt to attach an AVIATOR 2 to muzzle threads that are dirty or damaged, as this may lead to property damage, personal injury and/or death.

5. Inspect the threads in the rear of the A.S.A.P.™ piston to verify they are clean and undamaged.

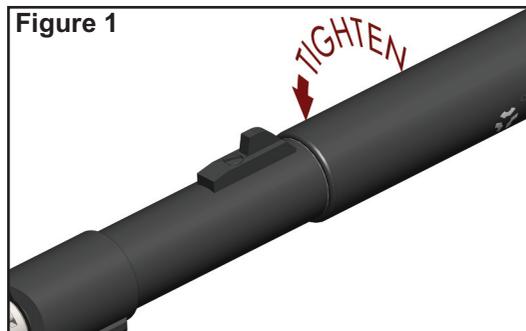
WARNING! Never attempt to attach an AVIATOR 2 with dirty or damaged threads to a firearm, as this may lead to property damage, personal injury and/or death.

6. Look through the silencer from the rear to insure the bullet path through the silencer is unobstructed.

WARNING! Never use a silencer with an obstructed bore, as this may lead to property damage, personal injury and/or death.

7. Examine the silencer for any signs of damage.

8. Carefully screw the silencer onto the host firearm's muzzle threads in the direction indicated in Figure 1.



9. Tighten the silencer by hand in the direction indicated on the piston with sufficient torque to keep the silencer securely threaded onto the barrel during operation.

WARNING! It is the responsibility of the user to insure the silencer stays securely threaded to the barrel of the host firearm during use. Failure to insure the silencer stays securely threaded to the host firearm may lead to property damage, personal injury and/or death.

VERIFYING SECURE INSTALLATION OF YOUR AVIATOR 2

1. Always keep the firearm pointed in a safe direction.
2. Render the firearm safe by removing the magazine, completely unloading the firearm and engaging the safety to the "SAFE" position. See the firearm's owner's manual for detailed instructions.

CAUTION! Silencers can become extremely hot while the host firearm is being shot. Heat-resistant gloves must be worn when verifying the security of the installation of an AVIATOR 2 on the host firearm. Handling a hot silencer without heat-resistant gloves may lead to skin burns and/or personal injury.

3. Carefully tighten the silencer onto the host firearm's muzzle threads in the direction indicated in Figure 1.

REMOVING YOUR AVIATOR 2 FROM A HOST FIREARM

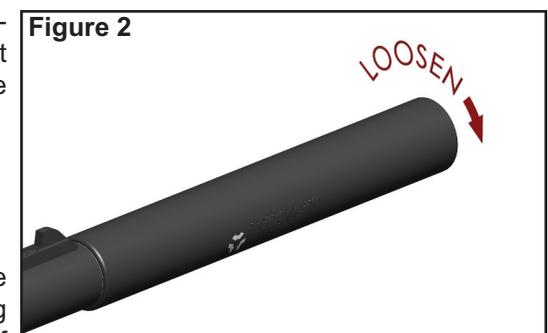
1. Always keep the host firearm pointed in a safe direction.
2. Render the firearm safe by removing the magazine, completely unloading the firearm and engaging the safety to the "SAFE" position. See the firearm's owner's manual for detailed instructions.
3. Verify the silencer is at ambient temperature. If the silencer is hot, allow it to cool.

CAUTION! Never handle a hot silencer without heat-resistant gloves, as this may lead to skin burns and/or personal injury.

4. Carefully unscrew the silencer from the host firearm's muzzle threads. See Figure 2.

DISASSEMBLING YOUR AVIATOR 2

The AVIATOR 2 should be disassembled for cleaning after every 500 rounds of



use if the optional baffle removal tool is not used to aid in disassembly. If the baffle removal tool is used, the cleaning interval can be extended to every 1,000 rounds. One brand of ammunition may leave a different quantity and quality of unburned powder, lead, and other debris in your silencer than another. Over time you will become the best judge of how many rounds of your chosen ammunition you can fire through your AVIATOR 2 before disassembly for maintenance and cleaning to remove accumulated fouling.

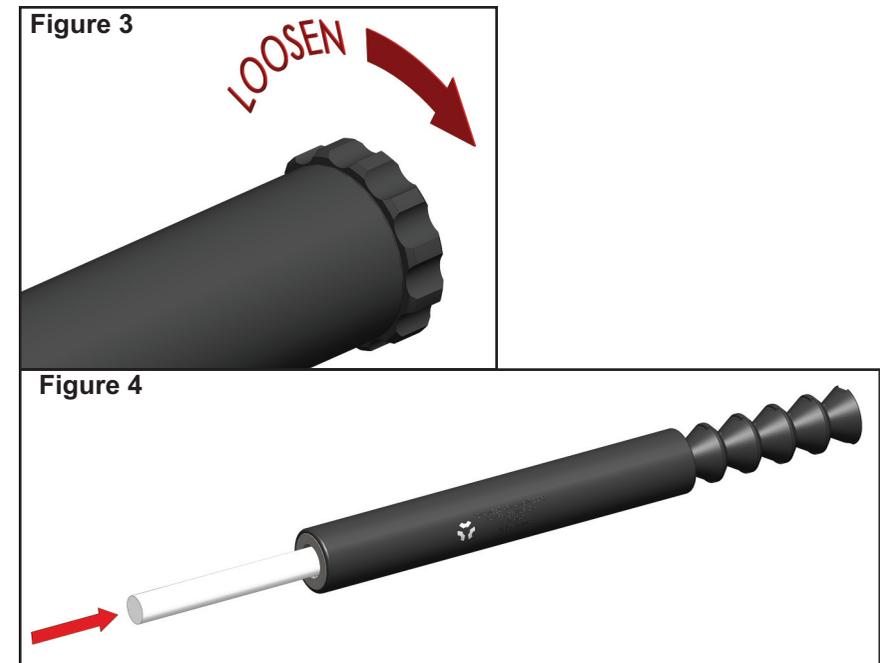
WARNING! Only perform disassembly, cleaning, and maintenance procedures on silencers that are not mounted to a firearm. Attempting to clean or perform maintenance on a mounted silencer could lead to property damage, personal injury and/or death.

DISASSEMBLY *WITHOUT* THE OPTIONAL BAFFLE TOOL

1. Always keep the firearm pointed in a safe direction.
2. Render the firearm safe by removing the magazine, completely unloading the firearm and engaging the safety to the "SAFE" position. See the firearm's owner's manual for detailed instructions.
3. Verify the silencer is at ambient temperature. If the silencer is hot, allow it to cool.

CAUTION! Silencers can become extremely hot during firing. After firing, allow the silencer to reach ambient temperature before attempting to handle the silencer. If handling is necessary prior to the silencer cooling to ambient, it will be mandatory to use heat-resistant gloves. Handling a hot silencer without heat-resistant gloves may lead to skin burns and/or personal injury.

4. Grasp the silencer around its circumference and carefully unscrew it from the host firearm's muzzle threads. See Figure 2.
5. Use the included end cap spanner to unscrew and remove the front end cap. See Figure 3.
6. Use a 7/16" diameter rod (wood, steel, plastic) that is at least 7 inches long to push the baffle stack from the tube. If the baffles are difficult to push out by hand, gently tap the end of the rod with a hammer. See Figure 4.



DISASSEMBLY WITH THE INCREDIBLY AWESOME BAFFLE TOOL

1. Always keep the firearm pointed in a safe direction.
2. Render the firearm safe by removing the magazine, completely unloading the firearm and engaging the safety to the "SAFE" position. See the firearm's owner's manual for detailed instructions.
3. Verify the silencer is at ambient temperature. If the silencer is hot, allow it to cool.

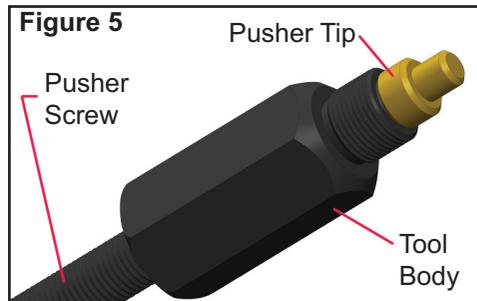
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4. Grasp the silencer around its circumference and carefully unscrew it from the host firearm's muzzle threads. See Figure 2.

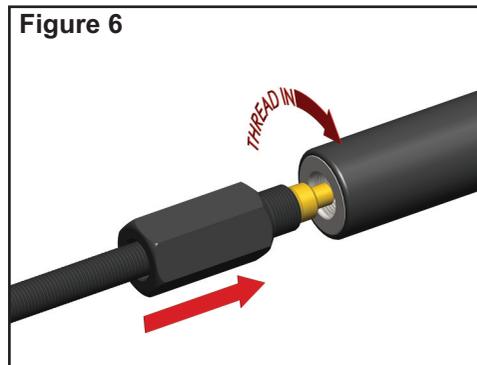
WARNING! Only perform disassembly, cleaning, and maintenance procedures on silencers that are not mounted to a firearm. Attempting to clean or perform maintenance on a mounted silencer could lead to property damage, personal injury and/or death.

5. Use the included end cap spanner to unscrew and remove the front end cap. See Figure 3.

6. If the baffle removal tool is in a disassembled state, assemble it by first threading the pusher screw through the hex-shaped tool body so that the end of the screw with the shallow counterbore is flush with the end of the tool body that has 1/2-28 threads. Insert the long end of the brass pusher tip into the counterbore in the pusher screw. See Figure 5.



7. While holding the baffle removal tool assembly upright so the pusher tip does not become dislodged, thread the tool body into the rear of the silencer. Slight resistance may be felt when the piloted end of the brass tip enters the central hole in the blast baffle. See Figure 6.



8. Turn the hex-shaped end of the pusher screw by hand in a clockwise motion to push the baffles from the silencer body. If additional force is required, use an adjustable wrench or a 3/4" socket and ratchet to turn the pusher screw. See Figure 7.

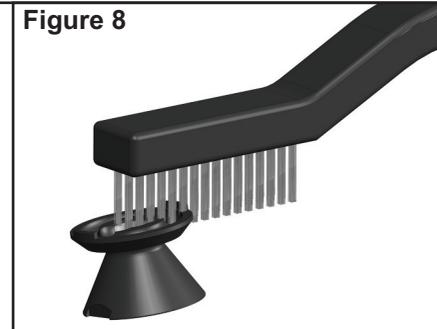
CLEANING YOUR AVIATOR 2

WARNING! Always wear protective gear, such as eye protection and solvent-resistant gloves when working with any solvent. Unprotected exposure to solvents may lead to property damage, personal injury



and/or death.

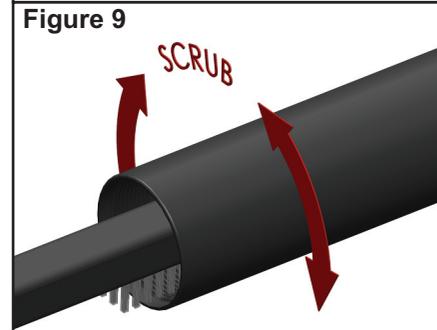
WARNING! Do not clean any part of an AVIATOR 2 silencer using an ultrasonic cleaner. Ultrasonic cleaners can damage aluminum components. Using an AVIATOR 2 silencer with damaged components may lead to property damage, personal injury and/or death.



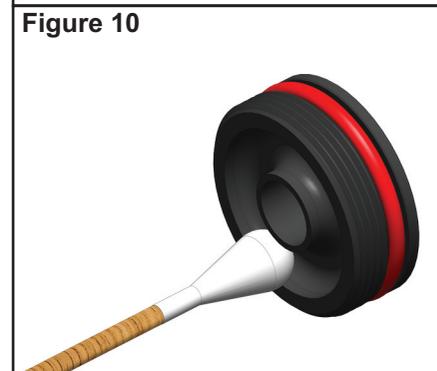
1. Clean the nine baffles of all loose particulate matter using a plastic brush and solvent. See Figure 8.

2. Clean the inside of the tube and tube threads using a plastic brush and solvent. See Figure 9.

3. Clean the external threads on the front end cap. Clean the recessed area on the back side of the front end cap using a cotton swab and solvent. Check the O-ring (shown in red) on the front end cap and replace it if it becomes worn or frayed. Replacement O-rings can be purchased from McMaster-Carr (PN: 9464K73). See Figure 10.



4. Once the solvent has evaporated



and the tube and end cap are dry, liberally apply a coating of anti-seize compound or white lithium grease to the threads in the front of the tube and the mating threads on the front end cap. See Figure 11.

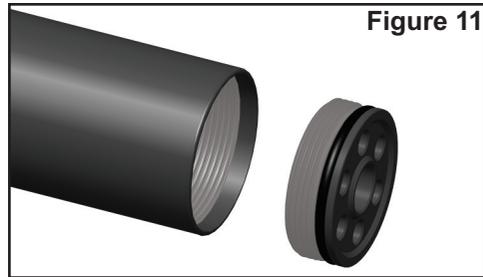


Figure 11

WARNING! Do not apply anti-seize compound or grease to the 1/2-28 threads in the rear of the silencer. Lubricating the 1/2-28 firearm interface threads can cause the silencer to loosen and inadvertently unscrew during firing. Firing with a loose silencer may lead to property damage, personal injury, and/or death.

REASSEMBLING YOUR AVIATOR 2

1. The baffle stack of the AVIATOR 2 is comprised of nine baffles; the ni-tride-coated stainless steel blast baffle with pressure relief hole and notches in the front cone, and eight identical anodized aluminum baffles with tabs on the rear face and notches in the front cone. Begin assembling the baffle stack by placing one of the aluminum baffles cone-side down on a table or flat work surface. Place another aluminum baffle on the first, so that the tabs protruding from the rear face of the baffle engage the notches on the cone of the adjacent baffle, and the output port at the junction of the cone and disk feature is 180° (opposite) from the output port of the first baffle. See Figure 12. Construct the rest of the baffle stack in this manner, alternating the output ports. The last baffle to be added to the stack will be the stainless steel blast baffle with pressure relief port. The completed stack should look like Figure 13.

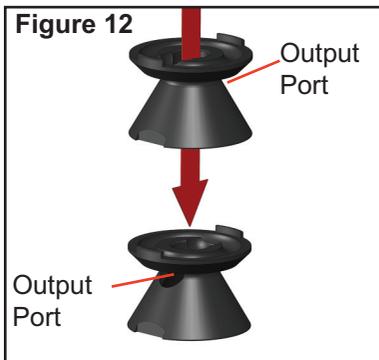


Figure 12

2. Slide the tube completely over the upright baffle stack. See Figure 14.

3. Carefully turn the baffle-filled tube upright, taking care that none of the baffles come un-tabbed from adjacent baffles. Reinstall the front end cap and tighten it using the end cap spanner tool. See Figure 15.

NOTE: The face of the end cap should sit close-to-flush with the front rim of the tube. It should neither protrude from the front of the tube nor recess below it more than 1/64". If the front end cap protrudes from the tube, one or more baffles have most likely become un-tabbed, causing baffles to be misaligned. If this is the case, repeat Steps 1 through 4.

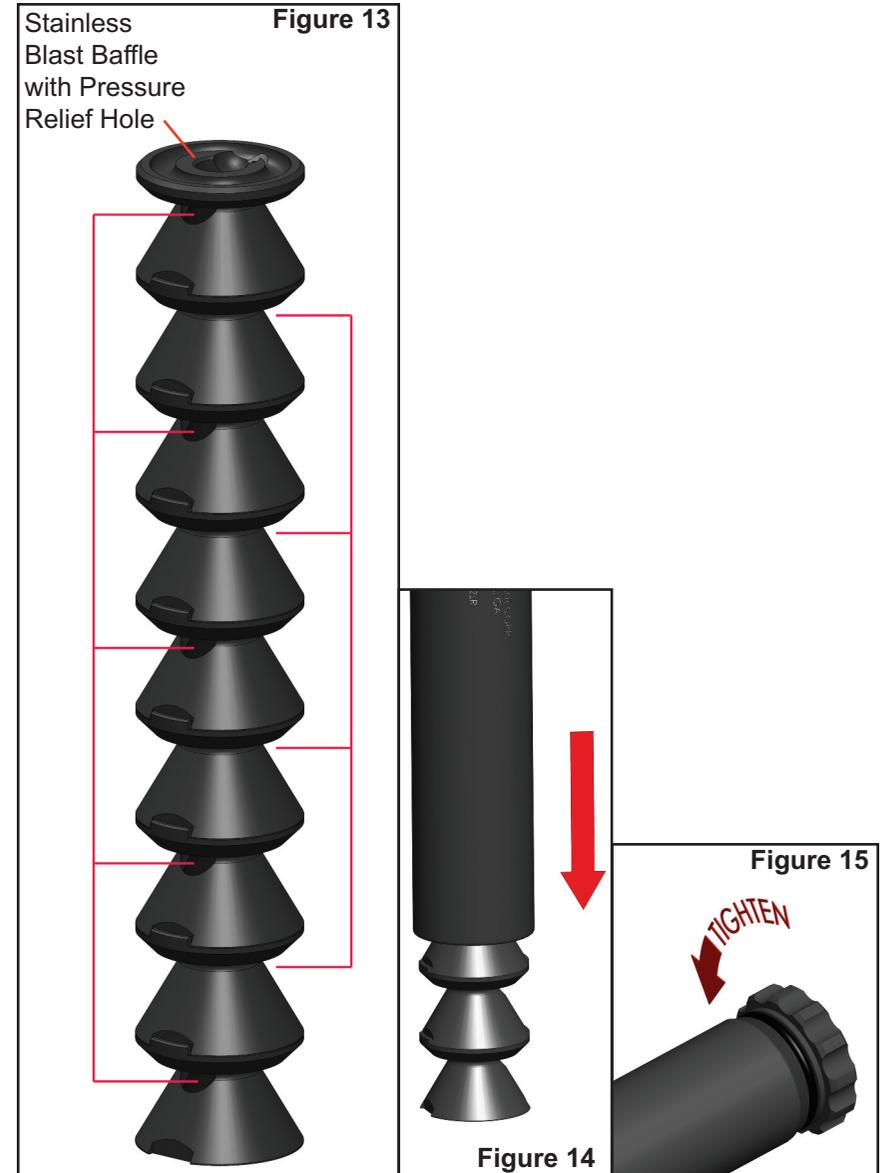


Figure 13

Figure 14

Figure 15