

# Welcome to Liberty Precision Machine LLC

Thank you for your purchase and support. Our goal is to provide shooters with the gear necessary to protect their hearing and the hearing of others while enjoying our Second Amendment rights. We put our heart and soul into the design and manufacture of every product we make and appreciate our customers who spend their hard-earned money on our products. We refuse to put out a product that we do not believe is the best value on the market. We recognize that statement of value includes unmatched customer service and that is why all Liberty Precision Machine LLC silencers have a Lifetime Warranty. If there is an issue with your silencer we will promptly fix or replace it. We also recognize the growing number of options available to silencer consumers and in an effort to provide objective data to our customers, every model of silencer produced will be tested by an independent 3<sup>rd</sup> party and that data will be made publicly available on our website.

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# PRODUCT OVERVIEW

The Spark .22 silencer is constructed with Grade 5 Titanium end caps, a Grade 9 Titanium tube, 17-4 PH Stainless Steel baffles, and is coated in C-102 Graphite Black Cerakote™. This mix of construction materials allows the silencer to be ultrasonic cleaner friendly and rated for 22LR, 22MAG, 22 HORNET, 17 HMR, 17 WSM, and 5.7X28MM. The silencer weighs 5.2 ounces, is 1.07” in diameter, and measures 5.35” long.

The front end-cap can be removed using a 15/16” wrench, the Dead Air Mask end-cap tool, or the CGS Group Master Key end-cap tool. We decided on those features to give the user more options for disassembly and minimize the number of specialized tools the customer must keep track of if they own multiple silencers from multiple manufacturers.

The Spark .22 features a proprietary high efficiency baffle design that provides industry leading suppression on .22 lr pistols and creates a mechanical seal between the baffles to minimize leakage and fouling between the baffles and the tube, which aids in disassembly. The baffle design provides an extremely low tone that is very pleasant to the ear and as shown in 3<sup>rd</sup> party independent testing, achieves industry leading suppression on .22 lr pistols. The Spark .22 silencer will show moderate amounts of “first round pop” but this will gradually lessen as the silencer is fouled. This typically requires 100-200 rounds. The silencer should be disassembled and cleaned every 1000-1500 rounds.

# INSTALLATION

The Spark .22 is designed to be threaded onto square shouldered barrels threaded 1/2-28 up to .525" in length. It is very important that the barrel threads be cut concentric to the bore or a baffle strike may occur.

1. Remove the magazine from the firearm, then visually and manually check and clear the action and chamber of the firearm.
2. Check the barrel threads to ensure they are clean and free of debris.
3. Thread the silencer clockwise onto the barrel threads, being careful not to cross thread them. If the silencer does not smoothly thread onto the firearm, please use the contact form on our website to contact customer service.
4. Thread the silencer on until hand tight and secure against the shoulder of the barrel.
5. Visually inspect that the silencer is mounted straight to the centerline of the bore. Ensure that it is not tilted or canted in any way, and that it is fully shouldered and secure on the barrel. Use of the silencer if not properly mounted will cause damage to the silencer and could cause injury to the shooter.
6. Ensure the silencer is tight periodically, especially after the first 5-10 shots as the metal in the silencer and the firearm begin to heat up. Also, wait for the silencer to cool and check to ensure the front end-cap is hand tight as the baffles will typically require a few shots to "settle in" to their final compressed positions after each disassembly.

**CAUTION:** Never attempt to touch a HOT silencer

# Disassembly

1. Firmly grab the outer tube of the silencer and use a 15/16" wrench, Dead Air Mask end-cap tool, or CGS Group Master Key, to rotate the front end-cap counterclockwise.
2. Carefully tilt the silencer so that the shielded baffles can freely slide out of the tube. Be careful not to lose any of the 7 baffles. If needed, carefully push the baffle stack out with a small wooden dowel or a similarly size object roughly 3/8" in diameter.
3. Pull the baffles apart for cleaning. Note the four different styles of baffles.
4. You are now done disassembling the silencer, the rear thread mount is not designed to be removed from the tube and is held in place with 2620 high strength high temperature Loctite.

# Cleaning

1. Clean the baffles using an ultrasonic cleaner with your choice of solvent. You may also use a mix of Hydrogen Peroxide and Vinegar known as the "DIP", take caution to not let the "DIP" touch your eyes or skin as it is highly toxic. Follow all local and state laws in the disposal of the "DIP". You may also tumble the baffles in stainless steel pins or brush them by hand with a metal wire brush. NOTE: Never use a powered wire brush or any abrasives in the cleaning of your baffles.
2. Clean the inside of the tube with a nylon brush with soapy water. There should be minimal build up due to the shielded baffle design. Never put the tube and end cap assembly in an ultrasonic cleaner or tumble it with stainless steel pins, as it may remove the Cerakote finish.
3. Allow all the baffles to air dry before reassembly. Although your Spark .22 silencer uses stainless steel baffles, corrosion from wet baffles may still occur.

# Reassembly

1. Identify the 4 different types of baffles found in your Spark .22 silencer. There is 1 blast baffle, which is identifiable by the lack of cut through the cone shaped portion at the center bore. There are 3 additional baffles that can be identified by the 240° skirt on the inside rear portion of the baffle. The next 2 baffles in the sequence may be identified by the lack of an inside skirt in the rear of the baffle, as well as the small “oval-shaped” cut out in the straight-walled portion of the baffle. The final baffle can be differentiated from the rest by the lack of the 3-lobed lip at the very rear of the baffle, as the front end cap seats against it and doesn't require the lobes to index.
2. All baffles click together in only one direction. Rotate the baffle until it clicks into the baffle in front or behind it.
3. Be sure to assemble the baffles in the following order. 1 blast baffle (no cut through bore), 3 baffles with a 240° skirt and cut through bore, 2 baffles without an inner skirt and an oval port, and 1 baffle without an inner skirt and an oval port, and no lip at the very rear of the baffle.
4. Slide the assembled baffle stack into the tube and rear end cap assembly. You may wish to align the cut through the center bore with the serial number located on the outside of the tube in order to minimize the possibility for point of impact shifts between assembly and disassembly of your Spark .22 silencer. It is recommended that a light coat of grease be put on the threads of the front end-cap and the exterior of the baffle stack.
5. Tighten the front end-cap back into the tube to compress the baffle stack. Be very careful not to over tighten the front end-cap, especially if using a wrench.

# Disclaimer

Always practice the basic rules of firearms safety when using the silencer. The manufacturer is not responsible for damages or injuries due to the misuse or unintended use of its products. This product is potentially dangerous and, as such, adequate safety precautions must be taken in order to avoid damage to your firearm, damage to third parties, bodily injuries, or death.



# Warranty

There is a limited lifetime warranty against all manufacturing defects and damages caused by the normal use of this product. The manufacturer will repair or replace free of charge any suppressor manufactured by or, at the direction of Liberty Precision Machine LLC. The product is sold “as is” with no further implied contractual rights or warranties beyond those expressly stated herein.

The warranty does not apply certain conditions or acts. It is at the sole discretion and determination of Liberty Precision Machine LLC if a particular defect or condition is covered by this Warranty. Conditions not covered include, but are not limited to: modifications, abuse, neglect, use of destruction ammunition, and criminal conduct. Liberty Precision Machine LLC assumes no liability for damages or bodily injury caused by such acts or omissions as previously described. Abuse and neglect are defined as usage outside of the reasonable scope for which the product is intended thus contributing to the accelerated and unreasonable premature wear of the silencer itself.

If a repair is necessary, please contact LPM LLC by email and a LPM LLC representative will make arrangements for the proper and legal return of the product.

**Please do not ship anything to LPM LLC without first contacting a representative.**