

ALLEYCAT 22LR

CAT/ALLEYCAT_22LR/MANUAL

WARNING - MATERIAL SPECIFIC FACTS

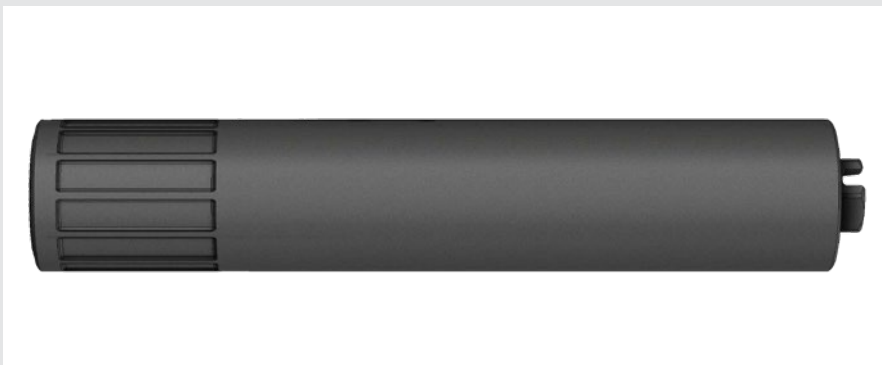
TITANIUM Ti6Al4V

ALLEYCAT 22LR is C.A.T's Titanium 22LR Rimfire suppressor, optimized for bolt action and semi-auto firearms, with no barrel length restrictions for C.A.T's ALLEYCAT 22LR, as long as the projectile is properly stabilized. C.A.T's ALLEYCAT 22LR is capable of shooting 5.7x28mm ammunition but users must be aware that although effective, this ammunition type is not optimized. Full Auto or High Rates of Fire (HRF) (greater than 20 rounds per minute for 5.7x28) are expressly discouraged, unless in life threatening self-defense situations, as the ALLEYCAT 22LR is a lightweight, high performance suppressor dedicated to Low Rates of Fire (LRF), and the user should not exceed a maximum service temperature of approximately **650°F (343°C)** for any extended period. Once this temperature threshold is reached, the suppressor should be allowed to cool down. Titanium Ti6Al4V has inherent material properties which give the material a lower heat conductivity rating, and the suppressor is susceptible to particle erosion and melting past this temperature limit. If the user notices discoloration on the exterior discontinue use immediately and allow it to cool down. While the ALLEYCAT 22LR may be used "wet" with a cap full of water for increased suppression performance, **do not dip the suppressor in water in an attempt to cool it down when it's over-heated.**

C.A.T recommends ALLEYCAT 22LR users invest in an infrared thermometer and create their own platform specific firing schedule, based on ammunition and barrel length. It is recommended to create this firing schedule by shooting five round groups, with one second intervals between rounds, then testing the temperature of the suppressor up to **650°F (343°C)**, with an IR emissivity setting of between .87 and .89. At this operating temperature, the user should record the amount of time until the suppressor returns to **150°F (65°C)**. This would become the baseline firing schedule based on the user's platform and ammunition type.

Excessive white sparking may be noticed upon first use, this is due to microscopic Titanium dust from the Additive Manufacturing process. Over the course of use this white sparking will subside but will never fully disappear, particularly on short barrel platforms. Titanium white sparking is separate from flash and cannot be controlled by a flash hider or other methods, as it is a byproduct of Titanium being classed as a reactive metal.

CAT/ALLEYCAT_22LR



1/2x28 DT

MODEL: CAT/ALLEYCAT

CALIBER: .22 CAL

WEIGHT TITANIUM: 3.3 OZ *

OVERALL LENGTH: 5.65"

DIAMETER: 1.05"

MIN BARREL LENGTH (TITANIUM):

NO RESTRICTIONS

RECOMMENDATION: UP TO 5.7X28

FINISH: DLC

MOUNTING: 1/2x28 DIRECT THREAD

INSTALLATION

STEP 1

Remove the magazine from the firearm, then visually and manually check and clear the action and chamber of the firearm. Ensure the host firearm is unloaded at all times.

STEP 2

Always ensure the barrel threads and shouldering surfaces are clean and free of debris. (PINK surfaces)



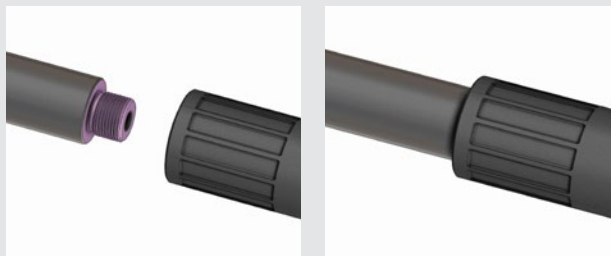
STEPS 3 & 4

Prior to installing the ALLEYCAT 22LR onto the barrel, inspect the ALLEYCAT 22LR threads and the shouldering surfaces and ensure those critical surfaces are clean and free of debris (RED surfaces - pay special attention to making sure the BLUE shouldering surfaces are clean and free of debris).



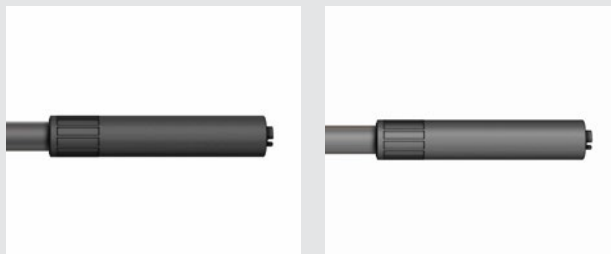
STEP 5

To install the ALLEYCAT 22LR, slide it over the barrel threads and screw it on CLOCKWISE (right hand to tighten) and tighten the ALLEYCAT 22LR strongly by hand to the barrel like you don't want it to come off, tightening the ALLEYCAT 22LR fully against its shouldering surface.



STEPS 6 & 7

Visually inspect that the ALLEYCAT 22LR is properly installed on the barrel and that it's mounted straight to the centerline of the bore. Ensure the silencer isn't canted in any way and that the ALLEYCAT 22LR is fully shouldered against the barrel shouldering surface.

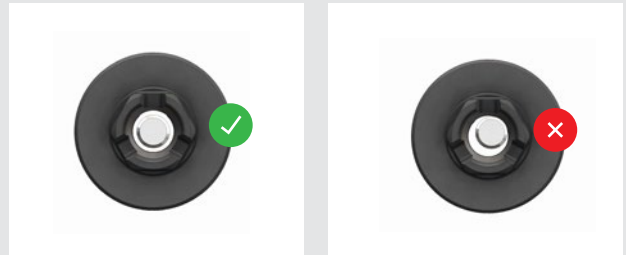


***NOTE - Barrel threads longer than .630" will utilize the internal shouldering surface, shouldering against the muzzle face, which will create a visible gap externally. While rare, it should be kept in mind.**

INSTALLATION

STEP 8

When the host firearm allows for it, use a properly made, purpose built silencer alignment rod to ensure the silencer is properly mounted and concentric to the bore line.



STEP 9

To remove the ALLEYCAT 22LR from the host firearm, wait for the silencer to cool after use, ensure the firearm is completely unloaded and safe, then unscrew the silencer COUNTER-clockwise (left hand to loosen) until removed from the barrel.



***NOTE - NEVER use CAT 206 cleaning solution to clean the FRONT CAP. Because the front cap is aluminum, CAT 206 will destroy the front cap. Only use CAT 206 on the ALLEYCAT 22LR core and ensure all CAT 206 is removed from the ALLEYCAT 22LR core PRIOR to re-installing the front cap.**