CAT/CM/MANUAL



WARNING - MATERIAL SPECIFIC FACTS

TITANIUM CAT (Ti-C)

CAT's new proprietary Ti-C or "Titanium CAT" can maintain its mechanical properties up to approximately **968°F (520°C)**, and as high as **1290°F (700°C)**, although with heavily reduced mechanical performance at its maximum. Once the operating temperature threshold exceeds **1000°F (535°C)**, C.A.T recommends an immediate cooling down to stop in metal oxidization. Ti-C still has inherent material properties which give the material a lower heat conductivity rating, and the suppressor is susceptible to particle erosion and softening past operating temperature, especially in the base where it is subject to the highest heat loads. If the user notices discoloration on the exterior discontinue use and allow it to cool down immediately, as CM was not designed for continuous HRF. **Do not dip the suppressor in water in an attempt to cool it down, this has a detrimental effect of the material properties.**

C.A.T recommends CM Ti-C 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 a firing schedule by shooting ten (10) round groups, with one second intervals between rounds, then testing the temperature of the CM base suppressor up to the operating temperature. The user should record the cool down 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.

CM Ti-C has a dedicated "waffle" style erosion interface at the end of the blast chamber. This is a sacrificial erosion wall, and users should not be concerned if they are seeing wear, this is designed to support the erosion caused by unburnt particulates (especially in short barrel platforms) and is designed to protect other internal areas inside of the suppressor.

Excessive white sparking may be noticed upon first use, this is due to microscopic Ti-C 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. Ti-C white sparking is separate from flash and cannot be controlled by a flash hider or other methods, as it is a byproduct of Ti-C being classed as a reactive metal.

CAT/CM



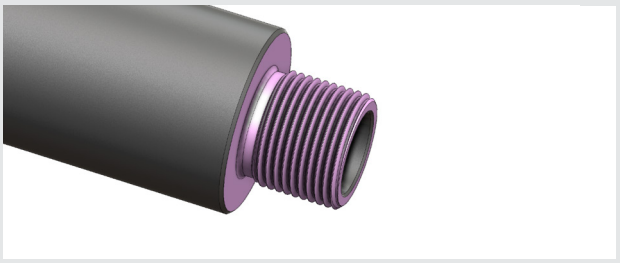
1.375x24 HUB

MODEL: CAT/CM
CALIBER: 6.5MM
MAX CALIBER: 6.5 PRC
WEIGHT (TI-C): 12.5 OZ
OVERALL LENGTH: 8.20”
DIAMETER: 1.75”
MIN BARREL LENGTH (TI-C): 14”
OPTIMIZED VELOCITY: 2500 – 3200 FT/S
OPTIMIZED PLATFORM: 6.5CM BOLT GUN
TECHNOLOGY: SNIPER 2.5
RECOMMENDATION: 6.5 GRENDEL / 6.5CM / 6.5 PRC
FINISH: PVD
MOUNTING: NO MOUNT INCLUDED

INSTALLATION

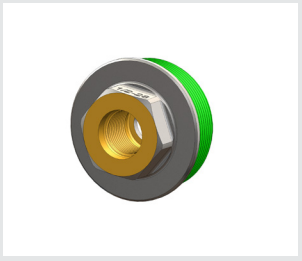
STEP 1
Remove the magazine from the firearm, then visually and manually check and clear the action and chamber of the firearm. Ensure the host firearm is unloaded at all times.

STEP 2
Always ensure the barrel thread and shoulders are clean and free of debris. To prepare to install the 1/2x28 direct thread mount, clean the barrel threads and make sure barrel shoulder is also clean (pink surfaces).

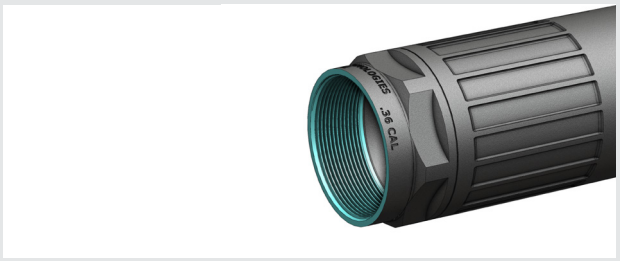


IF USING THE INCLUDED 1/2X28 DIRECT THREAD MOUNT:

STEPS 3,4 & 5
Prior to installing the 1/2x28 direct thread mount on the silencer, inspect the mounting interface surfaces of the direct thread mount and ensure the threads and shoulders are clean and free of debris (gold and green surfaces). Ensure the CAT CM silencer internal 1-3/8x24 (1.375x24) thread is clean and free of debris (blue).

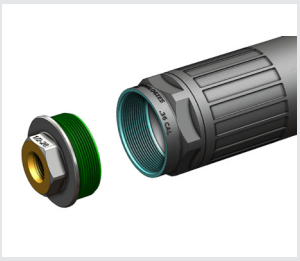




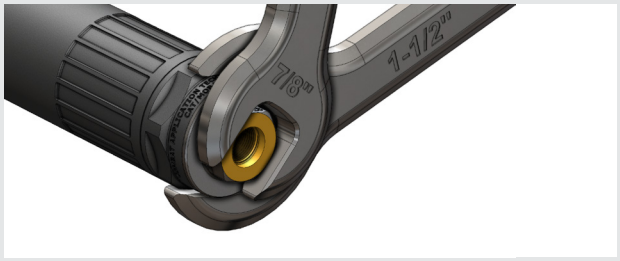


INSTALLATION

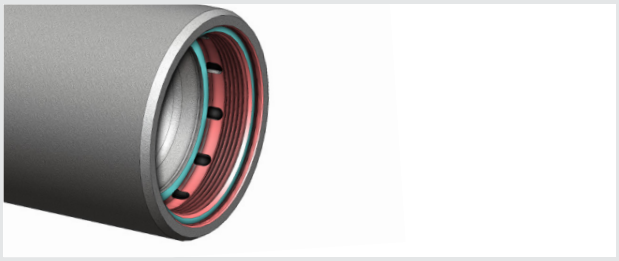
STEPS 6,7 & 8
Screw the direct thread mount into the back of the CAT CM silencer and torque it down, with a 1-1/2" (1.500") wrench on the CAT CM wrench flats and a 7/8" (.875") wrench on the direct thread mount wrench flats, to 25-30ft/lb. If you choose to use a thread locker between the direct thread mount and the CAT CM, degrease the threads and allow the thread locker to fully cure before using the firearm.



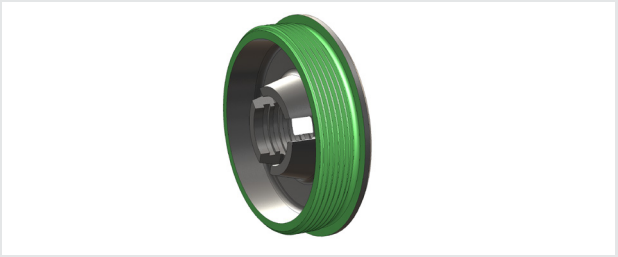




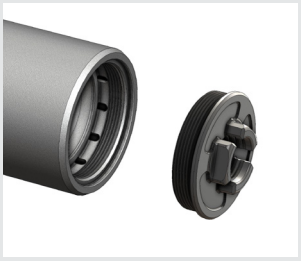
STEP 9
Prior to installing the CM front cap, inspect the internal mounting surfaces of the CAT CM front cap interface and ensure the critical mounting surfaces are clean and free of debris (red surfaces - pay special attention to making sure the blue shouldering regions are clean and free of debris).

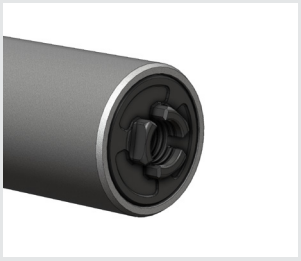


STEP 10
Inspect the CM front cap and ensure the critical surfaces are clean and free of debris (green surfaces, especially the shouldering surface).



STEPS 11 & 12
Ensure the front cap is firmly installed by using an 11/16" (.6875") wrench or socket to screw it in CLOCKWISE (right hand to tighten).

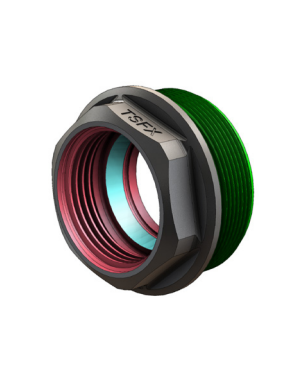


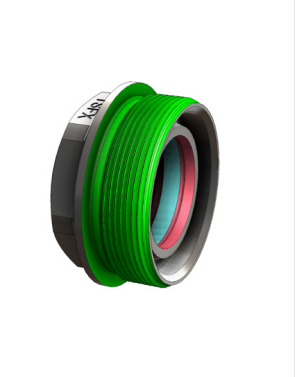


INSTALLATION

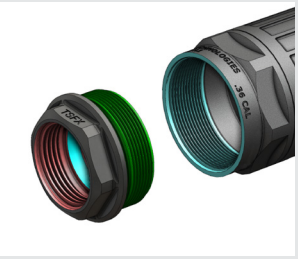
IF USING THE CAT TSFX QD MOUNT (SOLD SEPARATELY):

STEPS 1 & 2
Prior to installing the CAT TSFX QD mount in the silencer, inspect the mounting interface surfaces of the CAT TSFX QD mount and ensure the critical mounting surfaces are clean and free of debris (red/blue surfaces internal and green surfaces external - pay special attention to making sure the blue internal taper shoulder region is clean and free of debris). Ensure the CAT CM silencer internal 1-3/8x24 (1.375x24) thread is clean and free of debris (blue).





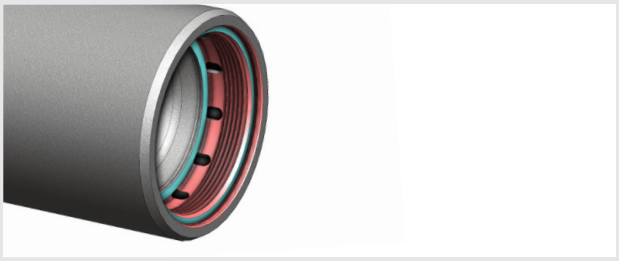
STEPS 3,4 & 5
Screw the CAT TSFX QD mount into the back of the CAT CM silencer and torque it down, with a 1-1/2" (1.500") wrench on the CAT CM wrench flats and a 1-3/16" (1.1875") wrench on the CAT TSFX QD mount wrench flats, to 25-30ft/lb. If you choose to use a thread locker between the CAT TSFX QD mount and the CAT CM, degrease the threads and allow the thread locker to fully cure before using the silencer on a firearm.



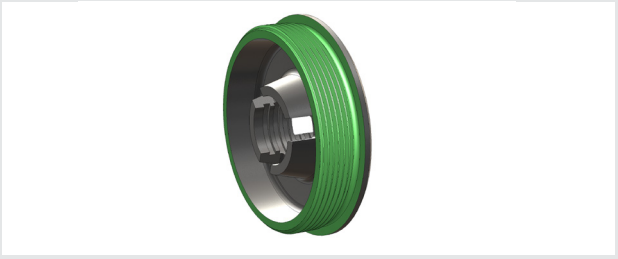




STEP 6
Prior to installing the CM front cap, inspect the internal mounting surfaces of the CAT CM front cap interface and ensure the critical mounting surfaces are clean and free of debris (red surfaces - pay special attention to making sure the blue shouldering regions are clean and free of debris).

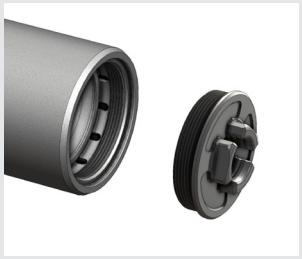


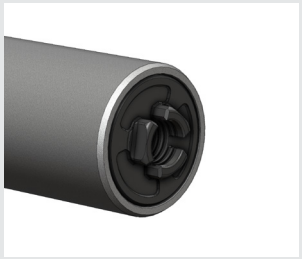
STEP 7
Inspect the MOB front cap and ensure the critical surfaces are clean and free of debris (green surfaces, especially the shouldering surface).



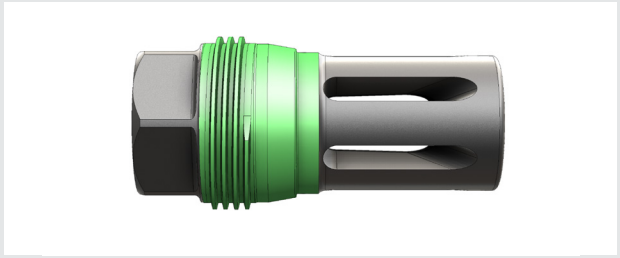
INSTALLATION

STEPS 8 & 9
Ensure the front cap is firmly installed by using an 11/16" (.6875") wrench or socket to screw it in CLOCKWISE (right hand to tighten).





STEP 10
Inspect the muzzle device and ensure the critical surfaces are clean and free of debris (green surfaces, especially the taper shoulder).



STEPS 11 & 12
To install the CAT CM with CAT TSFX QD mount assembly onto the firearm, again ensure the firearm is completely unloaded and safe, then slide the assembly over the CAT 1x16LH QD mzuzle device (sold separately) and thread it on COUNTER-clockwise (left hand to tighten) and tighten the CAT CM strongly by hand to the muzzle device like you don't want it to come off, tightening the CAT CM fully against its taper shoulder interface. When CM is properly installed this taper shoulder interface will prevent loosening during use. If you choose to use a thread locker between the CAT TSFX QD mount and the CAT CM, degrease the threads and allow the thread locker to fully cure before using the firearm.





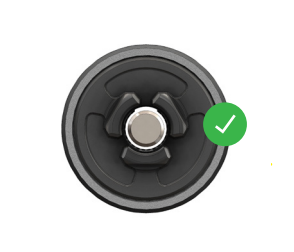
STEPS 13 & 14
Visually inspect that the CAT CM with CAT TSFX QD mount assembly is properly installed on the muzzle device and that it's mounted straight to the centerline of the bore. Ensure the silencer isn't canted in any way and that the CAT CM is fully shouldered against the taper on the muzzle device.

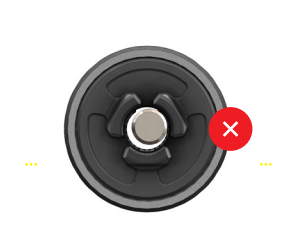




INSTALLATION

STEPS 15 & 16
Use a properly made, purpose built silencer alignment rod to ensure the silencer is properly mounted and concentric to the bore line.

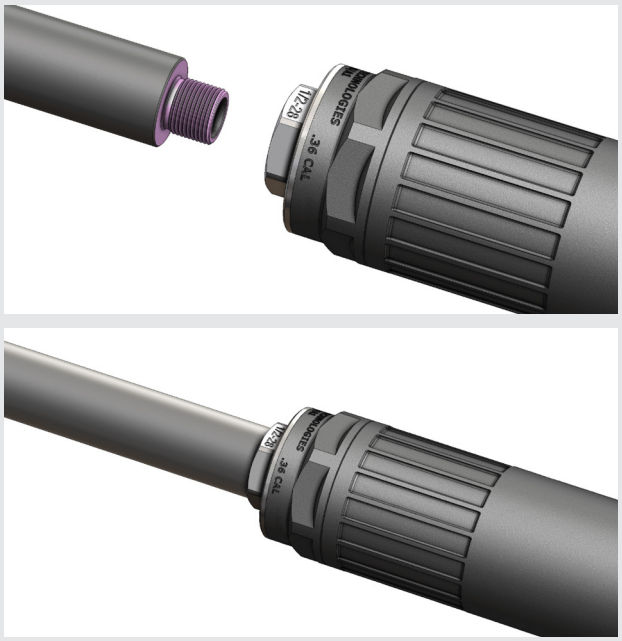




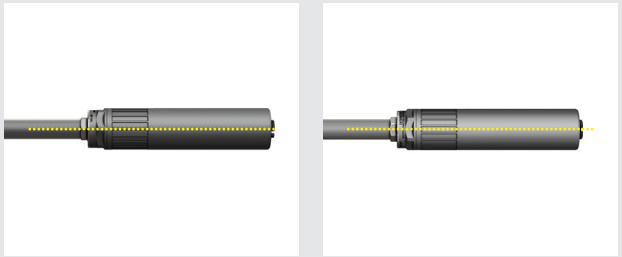
To remove the CAT CM with CAT TSFX QD mount assembly from the muzzle device, wait for the silencer to cool after use, ensure the firearm is completely unloaded and safe, then unscrew the silencer CLOCKWISE (right hand to loosen). Left hand threads are used on the CAT 1x16LH QD muzzle devices so that when uninstalling the silencer, the QD muzzle device will always stay on the host firearm rather than coming off and becoming stuck inside the silencer. If you experience the TSFX mount coming loose from the CM silencer body, you may need to use additional torque between the two parts within spec, or you may use an optional thread locker. If you choose to use a thread locker between the direct thread mount and the CAT CM, degrease the threads and allow the thread locker to fully cure before using the firearm.

INSTALLATION

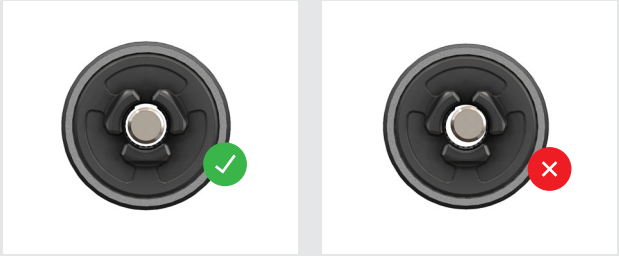
STEPS 13 & 14
To install the CAT CM with direct thread mount assembly onto the firearm, again ensure the firearm is completely unloaded and safe, then slide the assembly over the barrel and thread it on CLOCKWISE (right hand to tighten) torquing it down first by hand like you don't want it to come off, tightening the CAT CM direct thread mount assembly fully against the barrel shoulder. When installed by hand, you must check the silencer repeatedly during use to ensure it doesn't come loose. To ensure the assembly won't come loose, torque the direct thread mount down to the barrel using a 7/8" (.875") wrench to 25-30ft/lb. If you choose to use a thread locker between the direct thread mount and the CAT CM, degrease the threads and allow the thread locker to fully cure before using the firearm.



STEPS 15 & 16
Visually inspect that the CAT CM with direct thread mount assembly is properly installed on the firearm 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 CAT CM is fully shouldered against the barrel shoulder.



STEPS 17 & 18
Use a properly made, purpose built silencer alignment rod to ensure the silencer is properly mounted and concentric to the bore line.



To remove the CAT CM with direct thread mount assembly from the host firearm barrel, 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). If you experience the direct mount coming loose from the CM silencer body, you may need to use additional torque between the two parts within spec, or you may use an optional thread locker. If you choose to use a thread locker between the direct thread mount and the CAT CM, degrease the threads and allow the thread locker to fully cure before using the firearm.