



ISO 9001:2015 Compliant Company
CAGE: 8RC72 DUNS: 043893696

CS5 Mod 1 Installation Manual



The following installation guide will illustrate how to mount the Radical Defense CS5 Mod 1 and KFMR Muzzle Device on the M4/M27/M38/AR-15 family of rifles and carbines. For the purposes of this manual, host weapons will have standard M4/M27/M38/AR-15 style 1/2x28 muzzle threads and a standard A2 style flash hider installed.

CS5 Mod 1 is a taper lock suppressor with a secondary, ratcheting lock system. The taper is the primary locking mechanism while the ratchet acts as a back-up to mitigate loosening due to thermal shift of metal from heat cycling.

The CS5 Mod 1 secondary, ratcheting locking system consists of two primary components: the Ratchet Latch (**Figure 1**) and the KFMR Muzzle Device (**Figure 2**). The Ratchet Latch has teeth that engage with teeth on KFMR.



Figure 1



Figure 2

Installation of the KFMR

Make your host firearm clear and safe before continuing. Once the host firearm is clear and safe, disassemble your host firearm. Starting with the upper receiver assembly only, use an armorer's wrench to turn the A2 Flash Hider counterclockwise from the front of the gun looking rearward (**Figure 3**), once loosened remove the standard A2 flash hider and crush washer.



Figure 3

Clean the threads of the muzzle and KFMR of contaminants and thoroughly degrease both the threads of the muzzle and KFMR. Apply 1 or 2 drops of Rocksett (**NSN: 8040-01-539-1158**) to a cotton swab. Using the cotton swab apply the Rocksett to the muzzle threads (**Figure 4**). From the front of the rifle looking rearwards, thread on the KFMR onto the muzzle threads by hand turning clockwise, until hand tight. Using a torque wrench, tighten flash hider to 25-30ft/lbs (**Figure 5**). According to the manufacturer, a light application of Rocksett can dry at room temperature in a 24-hour period or baked for 15-min at 170F (**CAUTION! DO NOT install Radical Defense KFMR with a crush washer**)



Figure 4

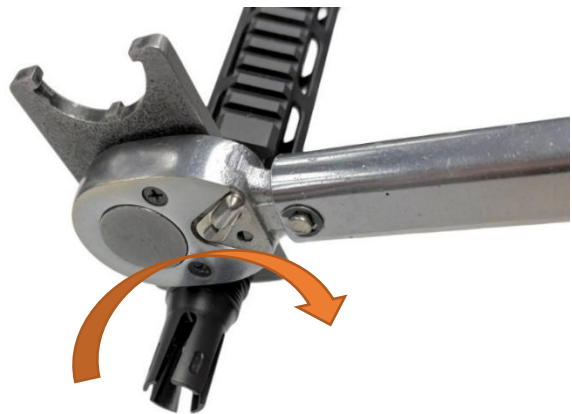


Figure 5

Installation of the CS5 Mod 1 Onto the KFMR

Before continuing, ensure the locking taper and ratcheting teeth on both the CS5 Mod 1 and KFMR (**Figure 1 & 2 on Page 1**) are clean of Carbon or Foreign Object or Debris (FOD).

From the front of the rifle looking rearward, install the CS5 Mod 1 by turning the suppressor onto the KFMR counterclockwise (**Figure 6**) rotating slowly until the ratchet engages with a singular audible click; stop rotating. Reference Pictogram on the suppressor (**Figure 7**) for the direction of Locking and Unlocking. To complete installation, depress the Ratchet Latch on the CS5 Mod 1, and continue to rotate counterclockwise until the internal taper lock in the CS5 Mod 1 fully engages with the taper lock on the KFMR. At this point, release the ratchet latch. Give the suppressor an additional counterclockwise tightening motion. There should not be another audible click, indicating a full lock on the taper. If there is an audible click, continue the tightening motion until there is not an audible click. At this point, the suppressor is fully timed and locked in place. There should be no fore-and-aft or side to side movement of the suppressor.

Failure to keep the Ratchet Latch depressed during installation can lead to premature wear of the ratchet teeth over time, decreasing service life of this secondary locking feature.



Figure 6



Figure 7

Check alignment using a suppressor alignment rod. If the alignment rod has equal spacing around it, between the suppressor and the bore, the alignment is **GO (Figure 8)**. If the alignment rod has a bias and/or touches the suppressor's bore, the alignment is **NO GO (Figure 9)**. If alignment is **GO**, you are clear to proceed. If alignment is **NO GO, DO NOT PROCEED**, you could induce a baffle strike, cause damage to the suppressor, and/or sustain personal injury. If alignment fails, the barrel of the firearm, KFMR, or suppressor may need to be replaced to achieve proper alignment.



GO

Figure 8



NO GO

Figure 9

Reassembled your host firearm from the disassembled condition. The suppressor is installed on the fully assembled host firearm and ready for use (**Figure 10**).



Figure 10

Removal of Suppressor from KFMR

From the front of the rifle looking rearward, depress Ratchet Latch and rotate the suppressor clockwise to loosen. Keep the Ratchet Latch depressed until the Ratchet Latch has cleared the teeth on the KFMR. Failure to keep the Ratchet Latch depressed during removal of the suppressor can result in damage to the ratchet teeth on both the KFMR and the Ratchet Latch. Damaged or rounded ratchet teeth (**Figure 11**) on either the KFMR or the CS5 Mod 1 could lead to a failure of this secondary locking feature. The ratchet teeth should be sharp and clean with no rounded or rolled edges (**Figure 12**). The primary locking feature of the suppressor is the Taper Lock. Even if the latch is damaged, the suppressor can still install and function as intended. If the CS5 Mod 1 is carbon locked onto the KFMR, you may hit the sides of the CS5 Mod 1 with a non-marring impact tool to break loose carbon built up on the interface between the CS5 Mod 1 and KFMR.



Damaged Teeth

Figure 11



Good Condition Teeth

Figure 12

Cleaning and Storage:

Clean the suppressor by soaking with any combination of a mild degreaser and/or detergent and water for a minimum of 20 minutes and then flush with the same combination. Before firing, allow suppressor to drip dry or void with high pressure air. We do not recommend the usage of sonic cleaners, as they can damage the finish of the suppressor.

We recommend cleaning the suppressor at the regularly scheduled maintenance interval for the host weapon, or every 1,000 rounds, not to exceed 2,000 rounds.

For Technical Assistance or Support please contact: info@RDUSA.com



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