



R.A.G.E.[™] TCS

RAPID ADJUSTABLE GAS EXPULSION TOTAL COMPENSATION SYSTEM

INSTRUCTION & SAFETY MANUAL

READ ALL INSTRUCTIONS PRIOR TO
INSTALLATION AND USE OF THE R.A.G.E. TCS.

**WARNING: MAKE SURE YOUR FIREARM IS UNLOADED
WITH THE MAGAZINE REMOVED & ACTION OPEN PRIOR
TO INSTALLING OR ADJUSTING R.A.G.E. TCS. ALWAYS
KEEP YOUR FIREARM POINTED IN A SAFE DIRECTION.**

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Caution: If you are unfamiliar or uncomfortable with installing the TCS barrel on your firearm, have a professional gunsmith install it.

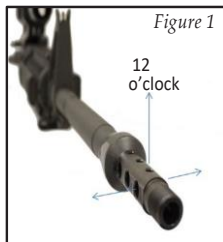
TCS Barrel Installation:

Place crush washer on threaded firearm barrel. Thread on the TCS Barrel by hand until it stops turning easily and has contacted the crush washer. Pay very close attention to where the 12 o'clock index hole is on the TCS Barrel, as you will need that to line up perfectly at the top once you have crushed the washer. (Figure 1)

Important: To ensure that your assembled brake does not come loose during shooting, you should crush the washer through at least a 90 degree turn of the TCS Barrel, once it has contacted the crush washer.

Care and Cleaning:

Always clean the TCS along with your firearm after each shooting session. Make sure your firearm is unloaded and the magazine removed. Remove the set screws, the TCS nut and the port washers. Clean all components with powder solvent and a soft bristle brush. Lightly oil all components and reassemble.



Warning: Prior to handling and or making any adjustments to the firearm, make sure the chamber is clear, magazine removed, and action open according to your firearm instruction manual.

Warning: Burning Hazard - Prior to handling your muzzle device or gun barrel make sure you have allowed an ample cool down period.

Warning: Muzzle brakes by their nature redirect high pressure gas and can blow dirt or other materials back towards the shooter or bystanders. Always wear eye and ear protection when shooting or observing. Exercise caution about dirt and debris in your immediate area when shooting in a prone position.

Size Information:

TCS-308 muzzle brake accommodates bores .65mm to .308 calibers and has 5/8 -24 TPI
TCS-556 muzzle brake accommodates bores up to .223 / 5.56m calibers and has 1/2 -28 TPI
TCS-9mm muzzle brake accommodates bores up to 9mm/.354 calibers and has 1/2 -36 or 1/2 -28 TPI
TCS-AK47 muzzle brake accommodates bores up to .762 calibers and has M14 x 1 Left Hand TPM

TCS Kit Contents

- | | |
|---|--|
| A) 1 each TCS Barrel & TCS nut | F) 1 each 3530 Port washer * |
| B) 1 each 3500 Port washers | (muzzle rise) 4x down force |
| C) 1 each 3515 Port washer
(muzzle rise) 1x down force | G) 1 each 3535 Port washer
(muzzle rise) 5x down force |
| D) 1 each 3520 Port washer
(muzzle rise) 2x down force | H) 1 each Crush Washer (Angled side to the
shoulder of the gun barrel) |
| E) 1 each 3525 Port washer
(muzzle rise) 3x down force | I) 4 each #10-32 Alloy set screws
(locks the TCS nut to the TCS barrel) |

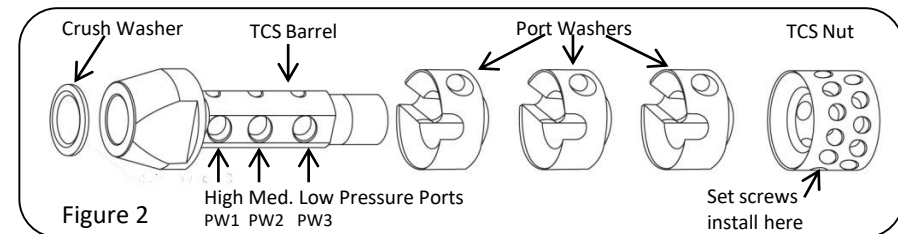
*The TCS 556 does not receive a 3530 washer.

There are 5 washers in this kit.

**Port washers are available for left hand shooters.

Port Washer Installation:

After the TCS barrel is installed on your rifle, you are ready to install the Port Washers and TCS Nut.



Slide 3 port washers on and then hand tighten the TCS nut. Install and hand tighten the four #10-32 alloy set screws using the provided hex wrench. (Figure 2)

Test Fire and Re-zero: The next step is to test fire with your new muzzle brake. Your point of impact may have shifted from the new brake, so you may need to re-zero.

Caution: Prior to shooting a cold bore gun make sure the port washers and TCS nut are tight and secure. After shooting, the port washers will be hot and the TCS nut will be much tighter until the system cools. **DO NOT TOUCH A HOT MUZZLE OR TCS.**

Tuning the TCS

Warning: Make sure the firearm is unloaded, the magazine is removed, action open and pointed in a safe direction before attempting any tuning or adjustments.

Symbols:
 ")))" is a measure of recoil and up right compensation.
 "+" is a measure of recoil and muzzle rise compensation. (See Figure 4)

Remember: More +++++ will apply more downforce to compensate for muzzle rise. When you move the Port Washer from the Low Pressure Port to the High Pressure Port, it will apply 3x's more down force to the muzzle of the rifle.

The recoil port washers 3500))) can be placed on the TCS barrel with top port open or in the off position, depending on how much up and right muzzle motion you have. ONLY port Washers with))) can be installed upside down (180 degree rotation) closing off the top ports.

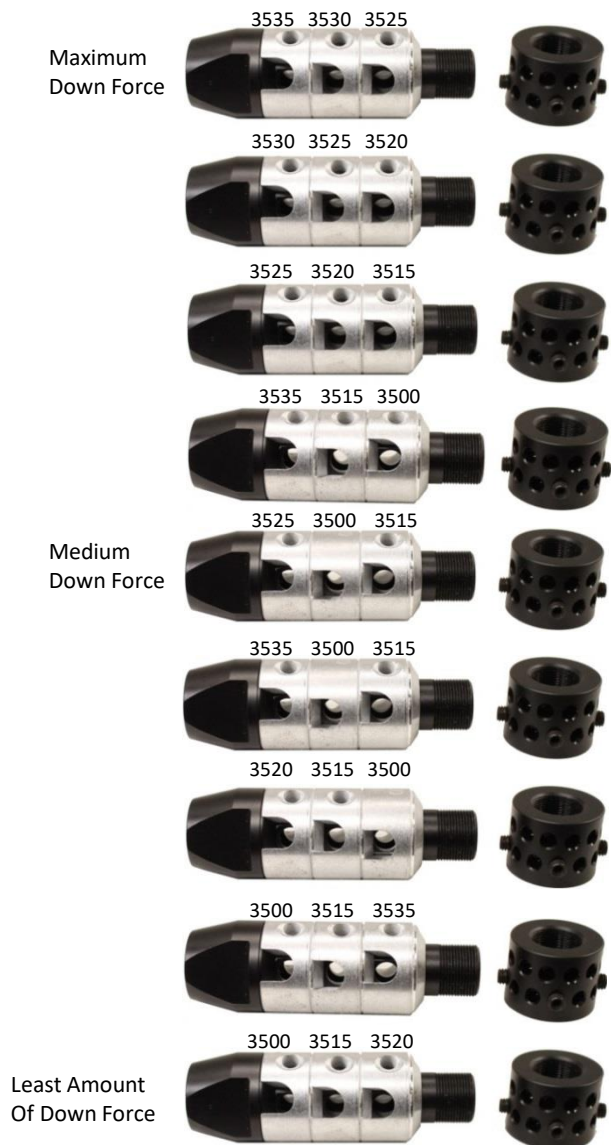


Understanding Down Force Configurations (Muzzle Rise)

The larger the number *Port Washer* as you move that *Port Washer* to a higher pressure port, the down force at the muzzle will increase.

Example: Maximum Down Force Applied for Muzzle Rise

Place one 3535+++++ port washers on the TCS barrel (high pressure port position), then 3530++++ (medium pressure port position) and 3525+++ (low pressure port position).



AR15 .223 / 5.56

Medium
Down Force



9mm

Carbine

Maximum
Down Force



6.5-.308/7.62/Up to .300 Win Mag Semi-Auto Off Hand Rifle

Maximum
Down Force



Less Down Force

