JB CUSTOM
PRECISION RIFLE SERVICES

VENOM S2

Congratulations on your purchase!

The **VENOM S2-4 and S2-5** Self timing muzzle brake is specifically designed for the competitive high-volume shooter that needs fast target re-acquisition and less fatigue-inducing back blast.

We have developed a unique port design that reduces recoil substantially, channels gas away from the shooter and tames muzzle jump to keep you on target and allow you to get that follow up shot away quicker and more accurately.

Best of all, your brake is 100% Designed, manufactured and packaged right here in Australia using materials sourced in Australia at every stage and we intend to keep it that way!

Fitting Instructions

IMPORTANT !

Prior to fitting, **ensure that your muzzle brake is of the correct calibre for your rifle**. You can check this by taking a round of your ammunition and inserting it bullet first into the front of the muzzle brake (Figure 1). The bullet should be able to enter the hole in the front of the muzzle brake loosely.

If the bullet does not fit into the brake, you have the wrong calibre brake and it should not be fit to your rifle. Fitting the wrong (too small) calibre muzzle brake to your rifle will damage the rifle and can cause injury to the shooter and bystanders

DISCLAIMER

VENOM S2 Muzzle brakes have been manufactured to high standards with quality materials and tightly controlled dimensional and fit tolerances. While we offer full warranty on our products we take no responsibility for any fit or alignment issues, damage to goods or property or personal injury caused by substandard barrel threads or fitting practices.

Fitting Instructions

How to fit your brake

Step 1

After confirming the muzzle brake is the correct calibre for your rifle and the rifle's muzzle thread is the same as the thread designation on your muzzle brake packaging, Ensure the rifle is in safe unloaded condition with the bolt removed / action open.

Mounting the rifle securely in a gun vise or padded bench vice is recommended.

Step 2

On the rear of your VENOM S2 muzzle brake is a hexagon 'Self-timing' nut.
By hand only, screw the nut (clockwise) all the way in against the body of the brake.
(see Fig.3).

Fitting Instructions

Step 3

Screw the brake (clockwise) onto the rifle barrel's muzzle thread all the way until the back of the self timing hex nut meets the shoulder of the muzzle thread (Fig.4 and Fig.5). At this stage the brake will probably be indexed incorrectly. We'll fix this in Step 4.

TIP: Applying a small amount of nickel based anti-seize to the muzzle thread will prevent thread galling and protect the thread from corrosion.

Fitting Instructions

Step 4

Unscrew the muzzle brake body until it is indexed with the rear ports facing upwards (12 O'clock position) as shown in (Fig.6) (unscrewing the brake less than one thread will achieve this).

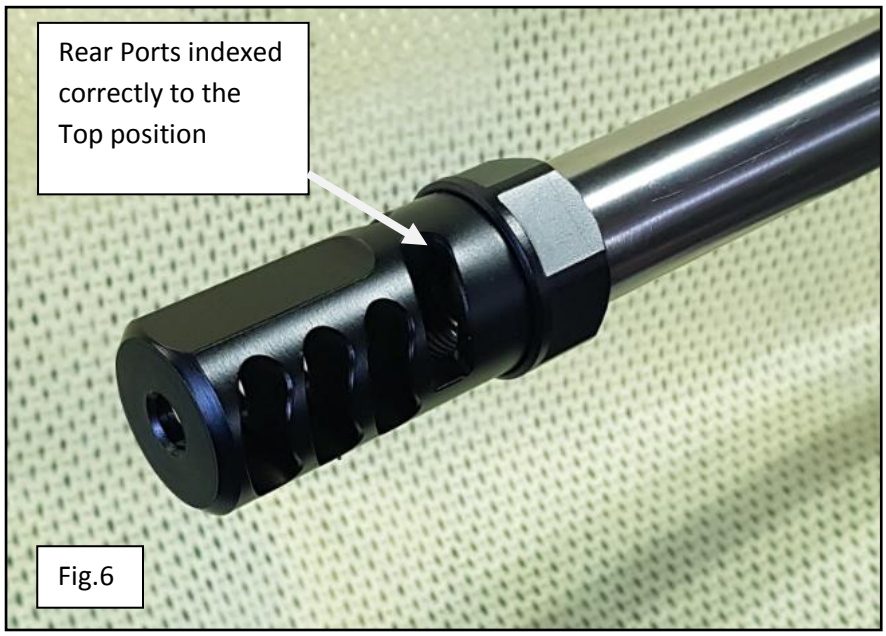

Fig.6

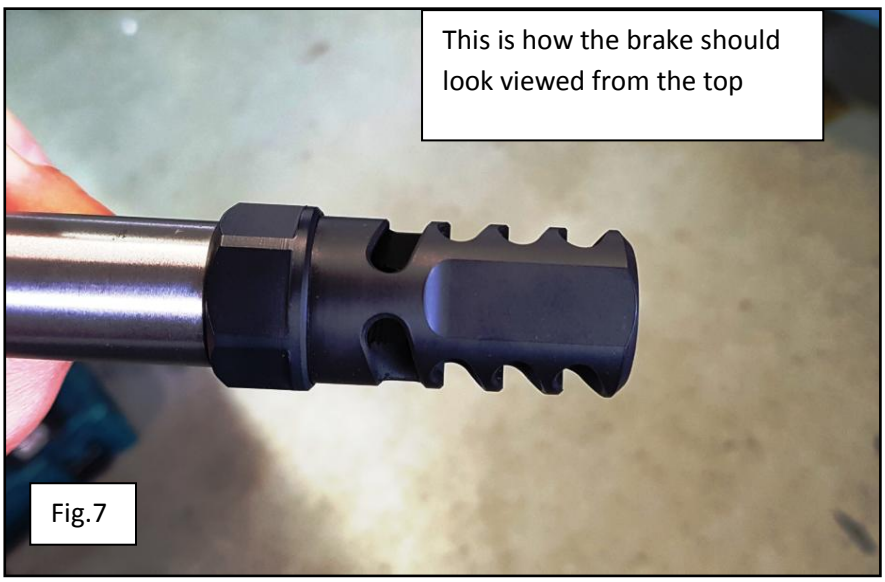

Fig.7

Fitting Instructions

Step 5

The brake must now be tightened in position. This is done by either holding the body of the muzzle brake by hand and tightening the hex nut against the muzzle thread shoulder with a properly fitting spanner or adjustable hex wrench (Fig.8)

Fig.8

OR

With the Brake body under-indexed by a couple of degrees and the hex nut screwed back firmly against the muzzle thread shoulder by hand – The hex nut can be held against the barrel shoulder by hand and a padded round tool (Like a pin punch or screw driver wrapped in masking tape) can be inserted into one of the front ports to torque the brake tightly into position. A firm fit is all that is required. (see Fig.9 & Fig.10).

(This is our preferred method of fitting as it is prevents marring the finish.)

Fig.9

Fig.10

Fitting Instructions

Muzzle threading dimensions for Gunsmiths.

Muzzle threading must be carried out by a competent gunsmith with the tools and equipment to ensure the thread is cut to the correct dimensions to fit the brake and is fit parallel and concentric to the rifle's bore.

Threads should be single point cut on a lathe and bore indicator rods ("range rods") or deltronic pins are the preferred equipment for setting up the barrel and ensuring the machined thread is concentric to <0.001"Max. TIR and parallel to <1.5 minute of Angle.

Correct dimensions and specifications are found below in Fig.11 and Table 1.

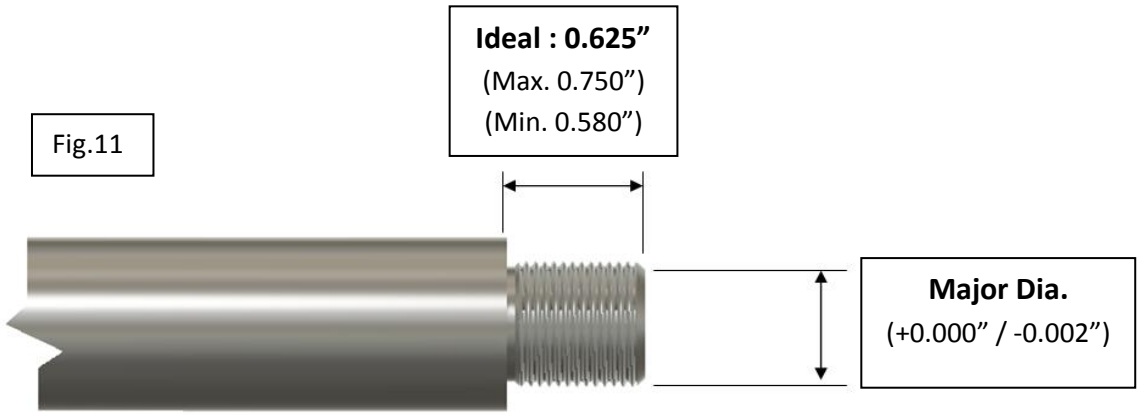

Table 1.

Muzzle Brake Thread	Major Dia.	Thread form	Thread Pitch	Pitch Dia. Max. Min	Fit Class
M14 x 1.0	14.00mm	60Deg Metric	1.000 mm	13.324mm 13.212mm	6H
5/8"x 24 UNEF	0.625"	60Deg UN	24TPI / (0.04167")	0.5967" 0.5927"	2A
M18 x 1.0	18.00mm	60Deg Metric	1.0 mm	17.324mm 17.212mm	6H