

BLOW-OFF VALVE VEE PORT WRX01 (WRXVP) INSTRUCTIONS

IMPORTANT NOTES ON FITTING YOUR BOV II

Turbosmart recommends that your BOV II is fitted by an appropriately qualified technician. See the following steps for details on the fitting procedure:

- Identify the standard Blow-off Valve or BOV (see figure 1)
- Remove the two M8 mounting bolts holding the standard BOV to the intercooler (see figure 1)
- Remove the vacuum / pressure hose (see figure 1)
- Disconnect the return hose from the exhaust side of the standard BOV and remove the BOV from the engine bay – take care not to lose or drop the gasket
- Block the return hose with the Bung Plug supplied and refit the standard hose clamp over the Bung Plug (see figure 2)
- Ensure that the mating surfaces are clean and free from oil
- Fit the BOV II and gasket to the intercooler and tighten the M8 mounting bolts (see figure 3)
- Ensure that the BOV II is clear of the inlet manifold, if it is touching loosen the mounting bolts and move the BOV II until it is clear (see figure 3)
- Refit the standard vacuum / pressure hose to the top cap of the BOV II – ensure that the hose is in good condition and has not been kinked or twisted

Intercooler

Figure 1 View of standard BOV

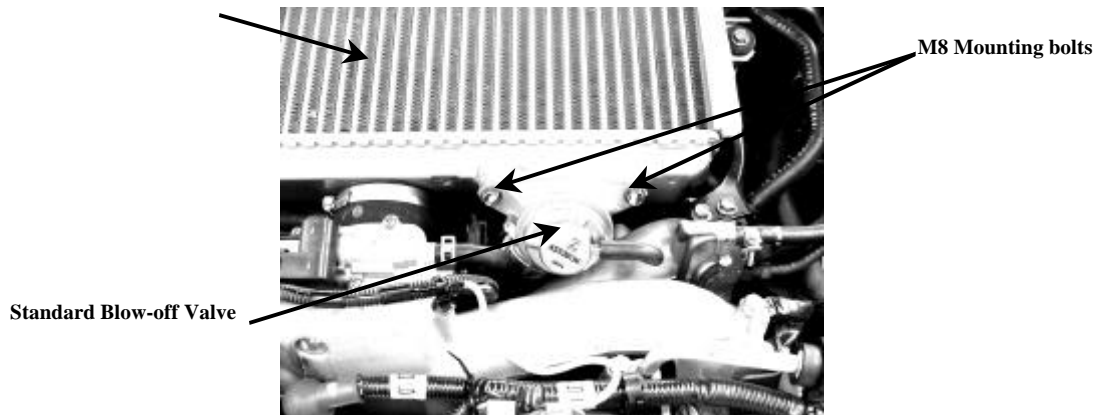


Figure 2 View with standard BOV removed

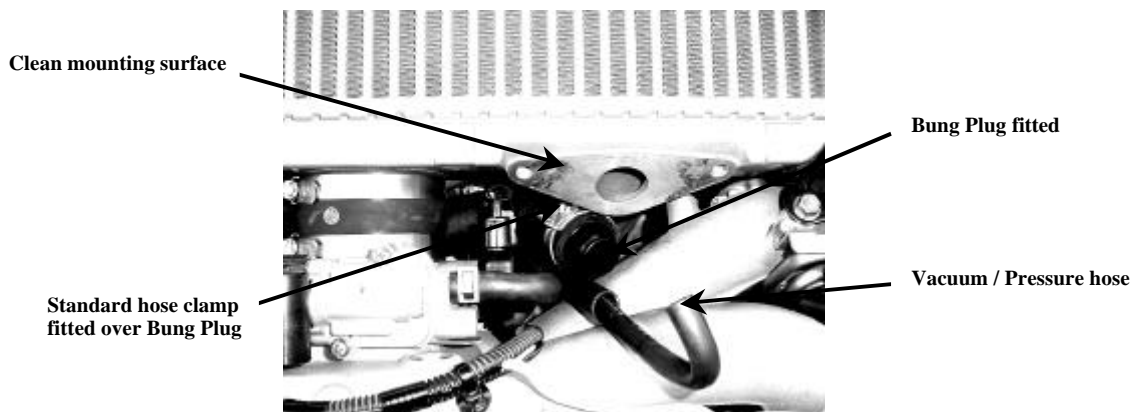
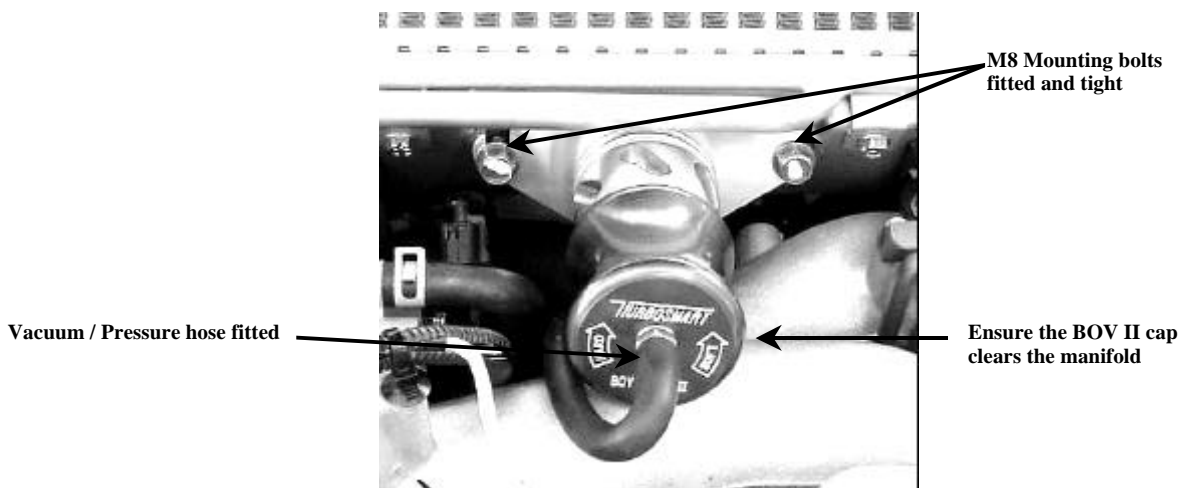


Figure 3 View with BOV II fitted

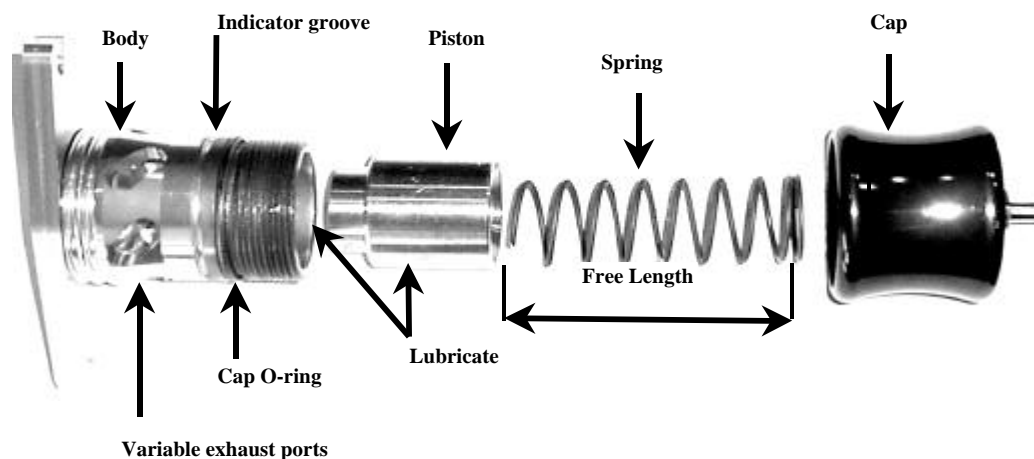


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IMPORTANT NOTES ON SETTING THE SPRING TENSION

- Adjustment to the BOV II is made by rotating the cap (see figure 1), to increase spring tension rotate in the direction of hard, marked on the top of the cap
- Rotate the cap in the direction of soft to decrease the spring tension – **CAUTION** Do not rotate the cap beyond the indicator groove (see figure 1)
- With the engine at idle the exhaust ports should be closed off by the piston – the piston should be hard against the seat and not floating or moving
- Free rev the engine and back off quickly, the engine should return to normal idle speed – if the engine drops below idle or stalls increase the spring tension by half a turn
- Repeat this process until the engine free revs and returns to normal idle speed
- Test drive the car and ensure that when decelerating or changing gears that the engine does not backfire or stall. If backfiring or stalling is noticed then check all connections made during the installation, otherwise increase the spring tension
- Turbosmart recommends that your BOV II is adjusted by an appropriately qualified technician
- Turbosmart recommends that a boost gauge be permanently fitted to the vehicle

Figure 4 Exploded View of the BOV II



MAINTAINING YOUR BOV II

Turbosmart recommends that the following maintenance procedure is carried out at six monthly intervals. Regular maintenance will ensure that your BOV II is operating at its peak and will extend the working life of the product:-

- Remove the cap of the BOV II by rotating in an anti-clockwise direction (see figure 1) – **CAUTION** The cap is under spring tension, wear safety glasses and remove with care!
- Remove the spring and measure the free length or the overall length of the spring (should be no less than **155mm or 6.125"**) – replace if below
- Remove the piston, thoroughly clean the piston and the bore of the BOV II
- Inspect the surface of the piston and the bore of the BOV II for scoring or excessive wear, silver coloured marks are an indication of excessive wear
- Check the Cap O-ring for any damage – replace if necessary
- Lubricate the bore and the piston with Uni-Glide™, hydraulic oil or sewing machine oil (see figure 1) – **DO NOT** use grease or viscous oils
- Re-assemble the BOV II in the reverse order

TROUBLE SHOOTING

The following points should be checked if you find that your engine is dipping below normal idle, stalling or if the BOV II is functioning poorly. Please note, the following checks will cure 99% of problems experienced with a BOV II

- Check the vacuum hose for splits, cracks, loose connection, kinking or any obstruction – old or fatigued hose may collapse under vacuum causing an obstruction
- With the engine running remove the vacuum / pressure hose from the nipple in the cap of the BOV II, there should a loud hissing sound. The engine should idle poorly, double check by covering the end of the hose with your finger – otherwise the hose is blocked
- Check to see if the BOV II is blocked or contaminated with dirt or debris, if the valve appears to be contaminated follow the maintenance directions above
- Ensure that the vacuum / pressure source is not shared and that the vacuum source is directly from the inlet manifold
- Check the seal between the BOV and the intercooler, ensure the gasket is in good condition and check for any air leaks

Warranty

Turbosmart warrants its products to be free from faults or defects for the life of the product. *
* Subject to Turbosmart trading terms and conditions

Warning!

Incorrect use of this product may result in damage to your vehicle. Failure to observe any notes or recommendations may result in incorrect use of this product. This product is intended for use in off-road racing only. Turbosmart will accept no responsibility for the incorrect use of this product.

Disclaimer!

Turbosmart will not be held responsible for any damage caused to property or person, directly or indirectly related to the use of a Turbosmart product.