

Product Name: **BOV 5 Vee Port**
 Product Description: Blow off valve
 Product Number: TS-0205-1100



IMPORTANT NOTES ON YOUR BOV

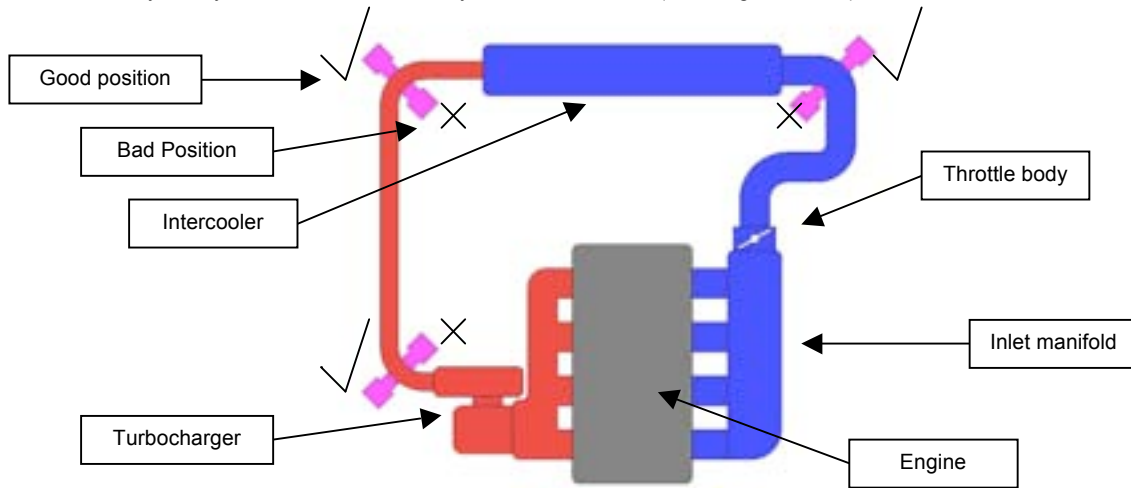
- Use only silicone hose that is the correct size and pressure/vacuum rating for your application when fitting your BOV
- Ensure that all plumbing is secured with suitable clamps or the correct fittings are used
- Your BOV should be mounted at least 100mm from any high heat source or adequately shielded
- This product might not work successfully on MAF/Airflow metered cars, please consult your local performance shop for more information

RECOMMENDATIONS

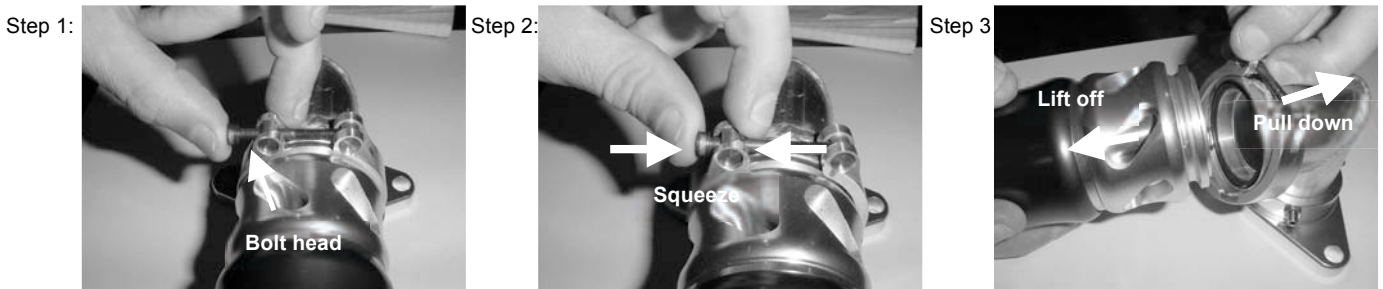
- **Turbosmart recommends that your BOV is fitted and adjusted by an appropriately qualified technician**

HOW TO INSTALL YOUR BOV

- Allow the engine to cool down before installing your BOV
- Identify a suitable location along the intercooler/intake piping for the BOV – this will need to be between the outlet of the turbo and the throttle body ideally between the throttle body and the intercooler (See diagram below).



- Remove the BOV from the weld on adapter by removing the V-Band clamp. The V-band clamp is removed by opening the screw until it has reached the end stop, then pushing the head of the screw in a "syringe" like motion and lifting the BOV off the weld flange.



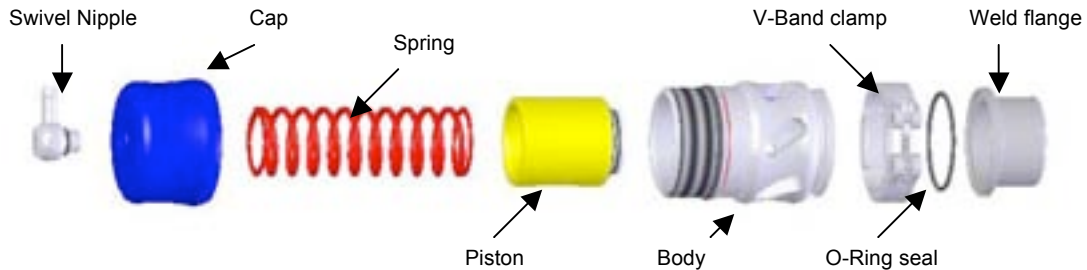
- Weld the adapter onto the intake pipe in your ideal position, then allow the adapter to cool down
- Put the V-Band clamp over the adapter before re-installing the O-Ring seal and the BOV
- Open the V-Band clamp and place in position. Tighten the V-Band clamp screw until it is finger tight then turn an additional 1 turn or 2 Nm (0.73 ft/lbs) with an allen key. Be sure not to over tighten the screw as this will cause damage to the V-Band clamp and deform the bore of the BOV.
- Identify a standalone vacuum / pressure source from a port after the throttle body and connect with correctly sized hose to the vacuum/boost port on the cap of the BOV. Ensure this line is as short as possible
- Secure all silicone hose ends with correct clamps
- Start the engine and check for air leaks in the system

Adjusting your BOV

- Adjustment to the BOV is made by rotating the cap, 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 red indicator groove
- Start with the BOV cap at the maximum soft position (The red indicator should be slightly covered by the edge of the cap)

- 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 one 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 minimal backfiring and no stalling. If backfiring is excessive or stalling is noticed then check all connections made during the installation, otherwise increase the spring tension

Maintaining your BOV



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

- Remove the cap of the BOV 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 piston, thoroughly clean the piston and the bore of the BOV
- Inspect the surface of the piston and the bore of the BOV for scoring or excessive wear, silver coloured marks are an indication of excessive wear
- Check the Base O-ring and 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 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 is functioning poorly. Please note, the following checks will cure 99% of problems experienced with a BOV.

- 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, there should a loud hissing sound. The engine should idle poorly, double check by covering the end of the hose with your finger. If this does not occur, the hose could be blocked or crimped. Check the hose and replace if necessary.
- 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 adapter and the BOV – ensure that there is no gap between the BOV base and the weld flange
- Check the join between the adapter and the intercooler pipe for leaking

The Turbosmart Pledge

DO NOT USE ANY TURBOSMART PRODUCT UNTIL YOU HAVE CAREFULLY READ AND UNDERSTOOD THE FOLLOWING AGREEMENT.

Please call if you have any questions or do not understand this agreement. Refer to our brochure, website or catalogue for terms and conditions and further information regarding your product. Turbosmart appreciates your business and pride ourselves on our customer service. We are always happy to offer you advice and will provide you with help in any way we can. The purpose of this agreement is to avoid any problems or hard feelings.

We sometimes make mistakes, as do our dealers, distributors and suppliers. Even customers can sometimes order the wrong parts. Do not use, modify, install, trial assemble, nick, drop, scratch or adjust any part until you first check for any damage. Damage must be reported immediately. NO EXCEPTIONS. If there are any components missing please contact your authorised reseller immediately upon receipt of your shipment. Missing components must be reported within five (5) business days of receipt. Parts returned for any reason MUST BE IN RESALABLE CONDITION. It is YOUR responsibility, "THE CUSTOMER" to carefully package any returns to avoid shipping damage. Insurance is highly recommended. Credit cannot be issued for damaged goods.

Turbosmart Pty Ltd warrants the quality of the products it designs and manufactures to be free of defects in material and workmanship. This limited warranty is extended only to the original purchaser and may not be transferred or assigned. This limited warranty applies to any product, which after careful inspection by Turbosmart Pty Ltd, after receipt of the product from our authorised reseller, is found to have a defect in either material or workmanship. Any modifications to the product will void any and all warranties and will not be exchanged. Before installation, check new car warranty. Turbosmart Pty Ltd is not responsible for voiding any original manufacturer's warranty.

All warranty claims must be returned to the authorised reseller, you must return the product and sales receipt, at your own expense, accompanied by a letter stating the reason for the claim. Proof of purchase must be provided with any warranty claim and will be verified with the authorised reseller from which the product was purchased.

If all the above procedures are followed, and the product is found to be defective in either workmanship or material, Turbosmart Pty Ltd shall either repair or replace the product, at its sole discretion, and sole cost. This limited warranty does not cover or apply to any personal injury, labour charges or any other incidental costs or damages caused by the defective product. The individual purchaser acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the individual purchaser agrees to indemnify Turbosmart Pty Ltd and to hold Turbosmart Pty Ltd harmless for any claim related to the item of the equipment purchased. Under no circumstances will Turbosmart Pty Ltd be liable for any damages or expenses by reason of use or sale of any such equipment.

THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY, WHICH APPLIES TO TURBOSMART PTY LTD PRODUCT AS EXPRESSLY GIVEN IN LIEU OF ANY OTHER WARRANTY EXPRESSED OR IMPLIED, INCLUDING THAT OF MERCHANTABILITY. ANY IMPLIED WARRANTY INCLUDING THAT OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED BY THE SAME TERMS AND TIME LIMITATIONS SET FORTH IN THIS LIMITED EXPRESS WARRANTY AND OTHERWISE EXCLUDED.

EXCEPT FOR THOSE OBLIGATIONS ASSUMED HEREIN, TURBOSMART PTY LTD ASSUMES NO OTHER OBLIGATIONS IN CONNECTION WITH THE SALE OF ITS PRODUCTS.

IN THE EVENT THAT THE INDIVIDUAL PURCHASER DOES NOT AGREE WITH THIS AGREEMENT THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UN-USED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN SIXTY (60) DAYS FROM THE DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE INDIVIDUAL PURCHASER HAS READ AND UNDERSTOOD THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

Happy motoring!
The Turbosmart Team

Turbosmart Pty Limited P.O.Box 264 Croydon, NSW, 2132 Australia ABN: 69 081 069 794
Tel: +(612) 9740 2866 Fax: +(612) 9798 2826 Email: instructions@turbosmart.com.au
www.turbosmart.com.au www.turbosmartusa.com www.turbosmart.co.nz