Product Name: Kompact Mazda/Subaru PB BOV A
Product Description: Model-Specific Kompact BOV

Product Number: TS-0203-1209



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Suitable for: Mazda MPS (Mazdaspeed) 3, 6, CX7

Subaru Legacy/Liberty GT, WRX MY08 (not STi) - Current, Forester XT MY08 - Current

#### **IMPORTANT NOTES:**

- Please thoroughly read and understand these instructions before commencing this installation.
- The thread on the cap for the vacuum source is AN#3. The standard swivel nipple can be changed to a AN#3 fitting if desired.
- The Kompact Plumb back is designed to be open at idle and does not require adjustment.

### **RECOMMENDATIONS**

- Turbosmart recommends that your Blow off valve (BOV) is fitted by an appropriately qualified technician
- Turbosmart recommends that a boost gauge be permanently fitted to the vehicle

# **HOW TO INSTALL YOUR BOV**

Please check that the following items have been provided in your kit

| Qua | antity | Description                 | Use                                      |
|-----|--------|-----------------------------|--|
|     | 1      | Kompact Mazda/Subaru PB BOV | Model Specific plumb back blow off valve |
|     | 1      | Gasket                      | To seal the BOV to the intercooler pipe  |

#### Installation on a Mazda 3 MPS / Mazdaspeed 3

1) Remove the engine cover by removing the two securing screws/plugs.



2) Locate the standard BOV. Remove the vacuum/pressure source from the standard BOV.



3) Remove the bolts securing the standard BOV and then remove the plumb back hose by removing the spring clamp.



4) Push the plumb back hose onto the plumb back fitting on the new BOV. Use the factory bolts to fit the new BOV onto the intercooler pipe. Remember to install the supplied gasket in between the BOV flange and the intercooler flange. Reinstall the vacuum/pressure source to the nipple. Refit the engine cover. Start the engine and check for leaks.

# Installation on a Subaru WRX MY08

1) Locate the standard BOV and remove the vacuum/pressure source tube and the plumb back hose.



2) Remove the securing bolts and remove the standard BOV



3) Use the factory bolts to fit the new BOV onto the intercooler pipe. Remember to install the supplied gasket in between the BOV flange and the intercooler flange. Reinstall the vacuum/pressure source to the nipple and plumb back pipe to the plumb back fitting and clamp using the factory clamp. Start the engine and check for leaks.

# Installation on a Subaru Legacy/Liberty GT

1) Remove engine cover by removing the 4 securing screws.



2) Locate standard BOV and remove the plumb back hose and the vacuum/pressure source line.



3) Remove standard BOV.



4) Use the factory bolts to fit the new BOV onto the intercooler pipe. Remember to install the supplied gasket in between the BOV flange and the intercooler flange. Reinstall the vacuum/pressure source to the nipple and the plumb back hose. Reinstall the engine cover. Start the engine and check for leaks.

# **MAINTENANCE**

Turbosmart recommends that the following maintenance procedure is carried out at six monthly intervals or at higher intervals if the environment is very dusty or wet. Regular maintenance will ensure that your BOV is operating at its peak performance and will extend the working life of the product.

- Remove the cap of the BOV by rotating in an anti-clockwise direction <u>CAUTION</u>, the cap is under spring force, remove with care!
- Carefully remove the piston and 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 on the bore 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 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 / boost 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 otherwise the hose is blocked.
- Check to see if the BOV is blocked or contaminated with dirt or debris.
- Ensure that the vacuum / boost source is not shared and that the vacuum source is directly from the inlet manifold.
- Check the seal between the intercooler flange and the BOV. Make sure the supplied gasket is installed and the BOV Flange is secured on the intercooler flange with the two factory bolts.
- Ensure the spring clamps are secured on silicon hoses and fittings.



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