Product Name: Product Description:

Product Number:

WRX Supersonic Fits WRX 01 – 07, WRX STI 01 – 08, Forester XT 06' TS-0205-1315, TS-0205-1216



**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.

RECOMMENDATIONS

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

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## HOW TO INSTALL YOUR BOV

Please check that the following items have been provided in your WRX STI 08 Supersonic kit.

Quantity	Description	Use
1	WRX STI 08 Supersonic BOV	Model Specific blow off valve
1	34mm Blanking plug	To blank off standard plumb back hose
1	1/2" straight hose joiner	Re-route breather hose
1	1/2" rubber hose	Breather hose
1	1/2 " tee piece joiner	Re-route breather hose
1	6mm Hose clamp	To secure vacuum hose onto vacuum nipple
1	Gasket	To seal the BOV to the intercooler pipe

1. Remove the standard BOV from the intercooler by removing the two bolts. Disconnect the vacuum line to the top of the standard BOV.



2. Using pliers, carefully clamp onto the spring clamp on the plumb back hose and pull the BOV off the hose. Then carefully remove the clamp completely.



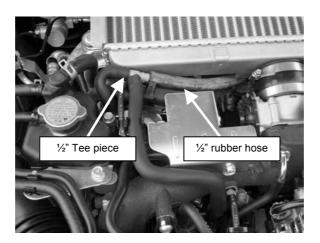
3. Fit the supplied 34mm blanking plug to the plumb back hose



4. Remove the standard hose breather



5. Using the provided  $\frac{1}{2}$ " tee piece, connect the standard oil breather lines on the left hand side of the intercooler in the orientation shown in the picture below and run the provided  $\frac{1}{2}$ " hose under the intercooler to the oil breather line on the other side of the intercooler, using the provided  $\frac{1}{2}$ " straight joiner to join the rubber hose to the existing breather line on the right hand side.



6. Install the WRX Supersonic BOV to the intercooler using the standard screws. Re-fit the Vacuum hose, then start up the car and check for leaks.

## **IMPORTANT NOTES ON SETTING THE SPRING TENSION**

- 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 <u>CAUTION</u> Do not rotate the cap beyond the red indicator groove
- 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

## **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.

