

Product Name: Nissan Dual port
Product Description: Fits Skyline GTS-1 R33- R34,
Skyline GT-T R34, Skyline GTR R32 – R34
Product Number: TS-0205-1026/TS-0205-1027



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 an AN#3 fitting if desired.
- **The Nissan R32, R33 and R34 GTR series requires 2 Dual Port BOV kits to replace the 2 standard Bypass valves. Each BOV kit is sold separately.**

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**

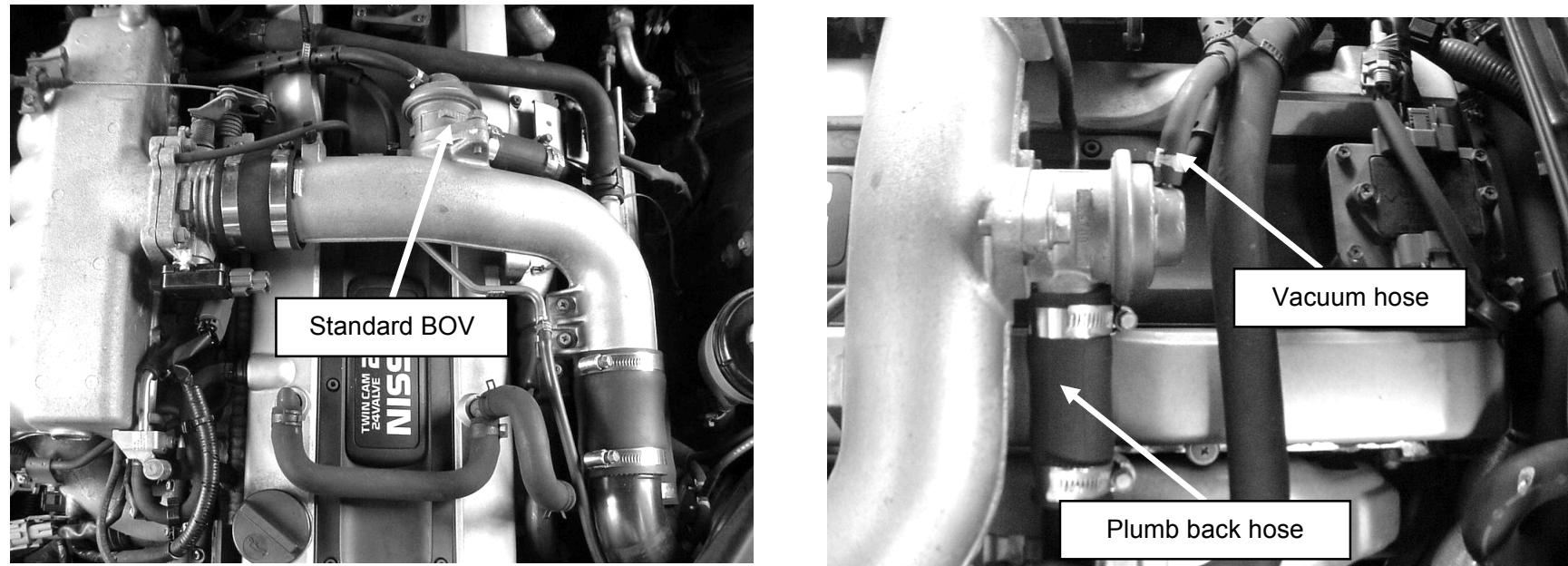
HOW TO INSTALL YOUR BOV

Please check that the following items have been provided in your Nissan Dual port kit.

Quantity	Description	Use
1	Nissan Dual port BOV	Model Specific blow off valve
1	Port Blanking plug	To blank off a port to convert the BOV to full atmospheric or plumb back
1	Gasket	Sealing BOV to flange
2	6mm Hose clamps	To secure the vacuum lines to the BOV and the engine
1	400mm of 6mm Silicone vacuum line	To connect vacuum source to the BOV

Installation on a Skyline GTS-t and GT-T (Diagrams from a R33 Skyline GTS-t)

- 1) Locate standard BOV on the inlet manifold. Remove the plumb back hose and vacuum nipple by removing the hose clamps. Unbolt the BOV flange and remove the standard BOV.



- 2) Install the Dual Port BOV using the standard bolts. Remember to install the supplied gasket in between the mounting flange and the BOV flange. Refit the plumb back hose to the plumb back fitting on the dual port BOV. Remember to secure the lines with hose clamps. Refit the vacuum hose.



- 3) Start the car and check for leaks. Proceed in adjusting spring tension

Installation on a R32 – R34 Skyline GTR (2 dual port BOV's are required to replace the 2 standard BOV's)

- 1) Locate the standard BOV's. On all GTR models, they are located on the left hand side of the front bumper bar.
- 2) Remove the pipe adapter with the two standard BOV's from the intercooler pipe. Access to this pipe might require the removal of the left hand head light and/or front bumper bar depending on the model.
- 3) Unbolt the two standard BOV's and replace them with the two dual port BOV's. Remember to use the provided gaskets between the mounting flange and the BOV flange.
- 4) Reinstall the pipe and hook all necessary lines.
- 5) Start the car and check for leaks. Proceed in adjusting spring tension.

Note: The Dual port is supplied with a blanking plug for the vent to atmosphere side of the BOV to convert the BOV to full recirculation mode. Simply unscrew the trumpet and screw in the supplied blanking plug. Alternatively, the blanking plug can be used to convert the BOV into full vent to atmosphere mode by installing the blank onto the plumb back side. An additional 29mm hose blank (sold separately) is required to block off the plumb back hole in the intake pipe.

ADJUSTING YOUR BOV

Each BOV needs to be adjusted to suit the vehicle it is being mounted on. The aim of the adjustment on Vee Port's, Supersonic's and Dual ports is to make sure that the piston is hard closed at idle and that the piston closes fast enough to minimise backfiring and not stall the engine. Plumb back BOV's are equipped with a spring which are designed to keep the piston open at engine idle and hence the cap can be left in the middle position.

Adjustment to the BOV is made by rotating the cap. To increase the spring force on the piston, rotate the cap clockwise in the direction of hard as marked on the top of the cap. To decrease the spring force on the piston, rotate the cap anticlockwise in the direction of soft as marked on the top of the cap - **CAUTION** - Do not rotate the cap beyond the first O-Ring indicator groove.

- Start with the BOV cap at the maximum soft position (The indicator O-Ring should be completely covered by the edge of the cap)
- With the engine at idle the exhaust port 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 has 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

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 – **CAUTION**, 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.

- 4) Check the vacuum hose for splits, cracks, loose connection, kinking or any obstruction – old or fatigued hose may collapse under vacuum causing an obstruction.
- 5) 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.
- 6) Check to see if the BOV is blocked or contaminated with dirt or debris.
- 7) Ensure that the vacuum / boost source is not shared and that the vacuum source is directly from the inlet manifold.
- 8) 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.
- 9) Ensure the spring clamps are secured on silicon hoses and fittings.

The Turbosmart Pledge

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Limited Warranty: Turbosmart warrants its products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of Turbosmart to the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall Turbosmart be liable for special or consequential damages. This warranty is only valid on products purchased from Turbosmart Authorized Dealers.

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Happy motoring!
The Turbosmart Team.

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