



Frequently Asked Questions-BOV Product

1. Is my BOV Product an Authentic TiALSport product?

We sure hope so! But, for confirmation of authenticity please email a clear photo of the actuator cover, with serial number, to tech@tialsport.com and we will confirm for you.

2. How do I decide which springs to use?

*Unlike wastegates, spring pack choices for BOV products are made using engine idle **negative** pressure, or vacuum, rather than boost pressure. Use a reliable gauge to measure vacuum at idle, then use the chart published on each BOV specific page here: https://tialsport.com/prod_cat/bov/.*

3. Why is there a unique spring pack for supercharged applications?

*Supercharged engines typically produce positive manifold pressure at idle, and most supercharger manufacturers recommend bypassing that pressure for tuning purposes. As a result, we suggest a very weak spring to allow the valve to remain open at idle, but to close very rapidly once that negative pressure transitions to positive pressure. **It is perfectly normal for our BOV to be open at idle on supercharged applications.***

4. What is the best way to test a BOV?

It is best to connect a hand vacuum pump to the air fitting and slowly create vacuum while monitoring valve travel. The valve should begin to move at the low range of the spring rating and should open completely as vacuum increases numerically. A comprehensive testing guide can be found here: <https://tialsport.com/wp-content/uploads/2022/12/BOV-Static-Testing.pdf>.

5. How do I connect the BOV?

The BOV is designed with an air fitting sized for ¼" (or 6mm) hose. The larger hose allows for quicker response and better control under positive boost pressure. This hose should be connected to full engine vacuum, preferably directly to the intake manifold, without any check valve or "tee" in place. Various routing methods can be seen here: <https://tialsport.com/wp-content/uploads/2024/06/BOV-Routing.pdf>.

6. How can I make my BOV louder/quieter?

It is surprising that this question is often very polarizing; some customers want the valve to be quieter, some want it to be louder. In general, the open body of the Q BOV results in a quieter discharge with the greatest flow, where the QR BOV discharges at a higher velocity with a reduction in flow and is therefore typically louder when not recirculated. The QRJ, with a very modular outlet design, can configure to discharge to atmosphere or recirculate. Therefore both 'quieter' and 'louder' operation can be accomplished with one valve.