



Engineered For Performance



## *Valve Tuning Instruction Sheet*

### Applications:

Most Forge Valve Models  
\*\*\* Spring tensions and usage  
may vary slightly between valve  
models with different port  
sizes. \*\*\*

Forge Motorsport has 5 uniquely rated springs and two spacers/shims available for the tuning of most of our valves. The strongest spring is the Red, followed by the Blue, then Yellow, then Green and finally Black which is the weakest. The spacers are included to enable you to fine tune an individual spring's settings between two spring tensions if required.

**Black 3-9 PSI / Green 5-15 PSI / Yellow 15-23 PSI / Blue 23-30 PSI / Red 30+ PSI**

We normally supply our valves, unless requested otherwise or stated differently, with a spring that will match the tension of the manufacturer's original equipment valve, however, as many owners undertake tuning and other modifications that increase boost pressure, some may wish to re-tune the valve's performance characteristics to suit their specific application. Please keep in mind that ***not all of the springs are necessarily required for each application and may not be included.***

If you are finding that your Forge valve is dumping more air, or sooner than required, or if you are loosing boost pressure before reaching redline, it is normally an indication that a stronger spring is required. Conversely, if the valve is failing to dump, or is holding pressure for too long, it may be necessary to install a weaker spring. If during this tuning of your valve you are faced, for example, with the Blue spring being too strong and the Yellow spring being too weak, you can add one spacer at a time to the Yellow spring to increase the tension by small increments, thus achieving a setting between the Blue and Yellow springs. ***Please do not install any more than two shims at a time inside any Forge valve.***

Please note that fitting a stronger spring into any valve will not increase the boost pressure of the engine unless existing pressure is being lost through a faulty or improperly tuned valve. Failure to allow the valve to operate properly by installing a spring which is too strong may cause damage to the turbocharger and engine. ***Also note, the Red colored springs should not be installed in the DVR, DVR-A, Eliminator nor any other Forge diaphragm valves.***

Please contact us directly with any additional questions or concerns about tuning a valve to your specific application.

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