



## CP4 Disaster Prevention Kit

### ***Cascade Valve Adjustment***

**(For Tuned VW CBEA/CJAA, CRUA, CKRA, and BMW N47 Applications Only)**

**This instructional document applies to customers with 2.0L TDI / BMW N47 cars who experience low rail faults ONLY.**

There is no performance increase to be had by adjusting the cascade valve, and we do not recommend it unless you are experiencing low rail fault issues after installing a CP4 disaster kit.

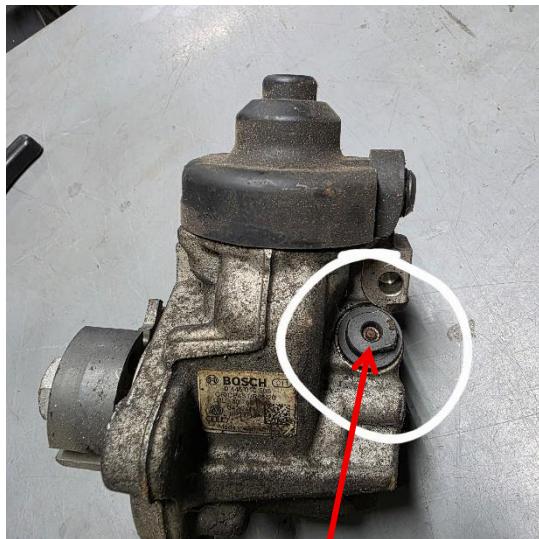
A very small percentage of tuned cars will throw low rail faults at WOT in higher gears after the installation of the metering valve bypass kit. The entire fuel supply system pressure (which includes the metering solenoid feed) is controlled by the cascade valve, which is a very basic spring and piston relief valve screwed into the cp4 at the base of the return barb. Stock pressure is set to 62-65psi. The end of the cascade valve has an exposed plug in the center that can be tapped into the plug body to increase spring pressure which increases fuel supply system pressure. By tapping in the plug in .110" (2.8mm), the supply pressure is increased to 75-78psi. This increase in supply pressure has been shown to correct the low rail fault issue in all cases in which it was tested.

The cascade valve adjustment socket and depth setting punch kit is intended as an easy, low-cost way to accomplish this fix quickly, accurately, and reliably.

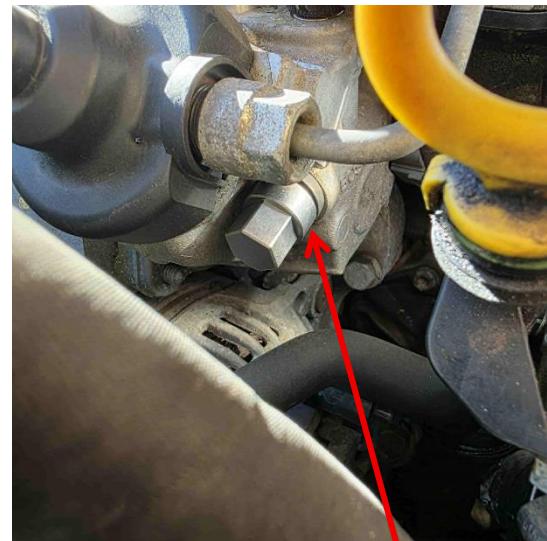
#### **Instructions:**

During this operation your engine's high pressure fuel system will be open and exposed to some degree, it is important to be mindful of this at all points during the process. Clean the cascade valve and area around it well prior to removal from the pump to ensure that no dirt or debris enter the pump while the valve is removed. It is a good idea to use a plug for the open port in the pump when you have the cascade valve removed for adjustment.

1. Using a 16mm socket to drive the custom socket, remove the cascade valve from the cp4. A little bit of fuel will leak out so make sure to shove a rag underneath the cp4 when you pull the valve out.



Cascade Valve



Custom Socket on Cascade Valve

2. Set the valve inside a deep 16mm socket to support the body of the valve, and then use the included punch to gently tap the plug down until the punch bottoms out on the body of the cascade valve.



Depth Setting Punch

Cascade Valve

16mm Deep Socket

3. Reinstall the valve and cycle the lift pump using VCDS (VW), ProTool (BMW), or another capable scan tool (see CP4 disaster kit instructions for how to do this with VCDS).