

BOSCH VE injection pump pressure regulating valve adjustment and repair

The pressure regulating valve controls the output pressure of the low pressure vane pump within the injection pump. The valve is located at the front of the pump and is removed using a 10mm box end wrench or equivalent. Since VW will not allow dealerships to work on components due to training and experience with internal or control systems this is not taught in the VW SSP training. There is no feedback to the ECU or OBD systems and therefore no codes will be triggered other than perhaps an injection timing related code due to low pressure available to properly position the timing advance solenoid.



Loosen and remove the pressure regulating valve. There is a chance that the internal spring and plunger and expansion sleeve are down in the pump, use a magnet to extract the spring and steel plunger along with the expansion sleeve.



If the pressure regulator is intact, verify the internal steel plunger moves freely within the brass bore, this will tell you if the valve is able to compensate for pressure.



Use a pair of Channel locks to press the expansion spring back into the body of the pressure regulator until flush with the top.



Reinstall the valve and evacuate the pump of air using a miti-vac type tool, suction the return line until you get a steady stream of fuel. Reconnect the return line and start the car.

Check the injection timing and do not use "Basic Settings Mode" this will allow you to monitor the timing corrections and the stability of them.

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