

injection pump reseal: leaking seal replacement- Bosch VE model on VW or Audi TDI

DIY Bosch VE injection pump seal replacement on a TDI engine

Introduction

Seals can leak due to age or switching from a high percentage of biodiesel to regular ULSD ultra low sulfur diesel. Many old pumps also leaked when the US government required all pump diesel to be ULSD by 2010. Make sure you buy a quality seal kit! Don't buy a cheap knock-off seal kit - if the price is too good to be true it is!

If you need to remove the injection pump from the car, please refer to the timing belt articles here and either article on removing or swapping the pump: [1000q: mk3 injection pump removal](#) or [ALH pump swap](#) or [1000q: mk4 injection pump removal](#). Please thoroughly read each article for the best understanding of how it's attached and the adjustments to pump position and timing.

If you only need to replace the very top quantity adjuster seal or fuel temperature sensor, see [1000q: top cover replacement](#). When you're done, here is more detail on how to adjust the quantity adjuster position: [1000q: hammer mod and IQ adjustment](#). Do not run the car without checking the quantity adjuster because without control over the quantity of fuel injected, the car won't run right. The VCDS cable is required! If you decide that the pump needs to be rebuilt, send it to a Bosch authorized shop for a total rebuild. They will also replace all seals at that time.

Parts

[1 seal kit for VW TDI injection pump](#)

[Ross tech VCDS cable](#)

24mm or 15/16 socket for the fuel shut off solenoid

17mm flare nut wrench for the fuel lines

[triangle head security socket for the injection pump head](#)

10mm, 13mm socket

T30 torx bit

Procedure to fix leaking TDI injection pump seals

The pictures show a Bosch VW injection pump. Here are a series of videos showing replacement of the head seal, quantity adjuster seal, and top cover seal.

TDI-pumpseal-1.mpg



TDI-pumpseal-2.mpg



TDI-pumpseal-3.mpg



TDI-pumpseal-4.mpg



TDI-pumpseal-5.mpg



TDI-pumpseal-6.mpg



TDI-pumpseal-7.mpg



As an interesting side note, using biodiesel can sometimes stop a small leak because it swells the seals. You will have to continue to use biodiesel and going off biodiesel will cause the leak to return. Biodiesel will also clean out the buildup in the fuel system so it's recommended to change the fuel filter early at least once or twice depending on how dirty the fuel system is. If the fuel filter clogs it will cause fuel starvation. Here is a video showing the basics:

VW TDI Leaky Injection Pump: Healing With B99 Biodiesel

