

## How to fix your leaky injector pump without taking it off the car

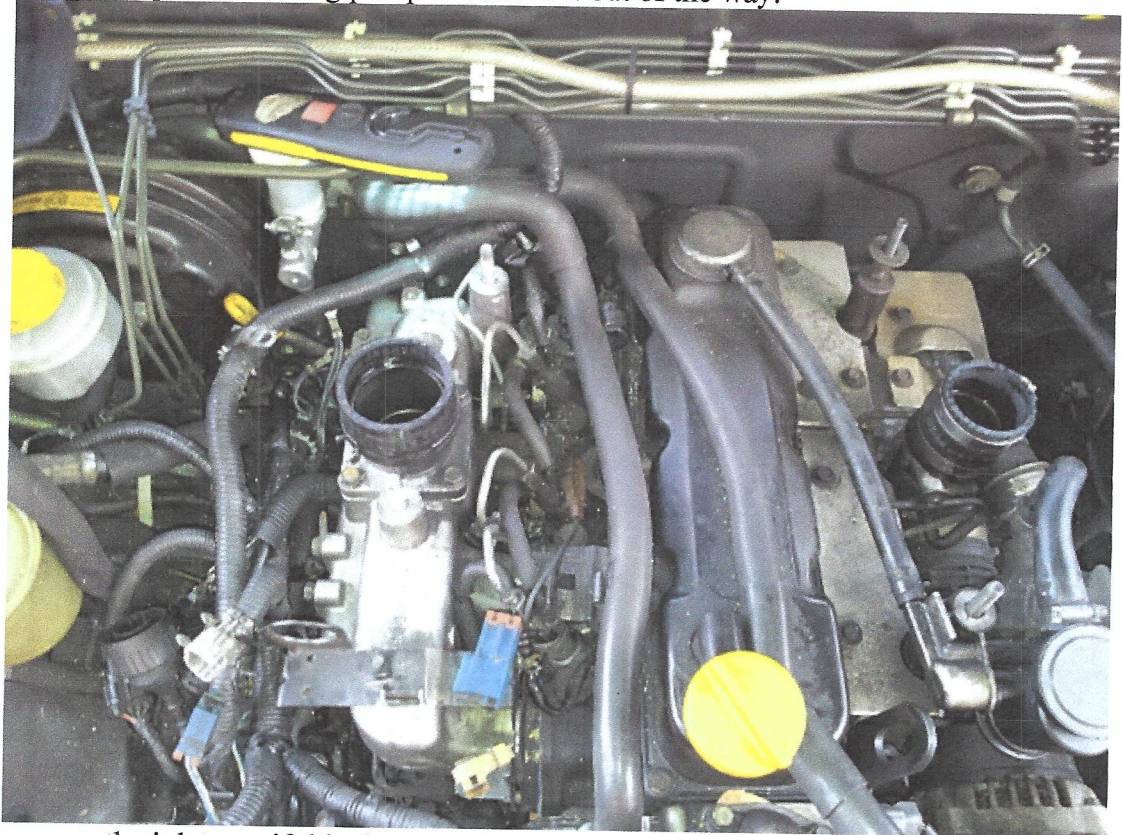
At some stage your injector pump will leak these terranos use a standard bosch VE injector pump and they are well documented to leak from 3 main seals 1. top cover 2. quantity adjuster housing 3. distributor O ring

You will need a basic socket set/tool kit, seal pick, torx 30 bit a 9/32 socket, dentist mirror and a seal kit bosch part number 467 010 003 it's a complete seal kit but you only need to use 3 of the seals .

I watched several times the very excellent guide on you tube by Robby Plenge and took my inspiration from this

<http://www.youtube.com/watch?v=VR44StvcXms>

1. remove the intercooler
2. remove the battery
3. unbolt the power steering pump and move it out of the way.



4. remove the inlet manifold take your time the bolts are difficult to get to but doable, no.4 injector pipe is in the way bend it up and over to allow removal of the inlet manifold don't forget to disconnect all those electrical connectors .

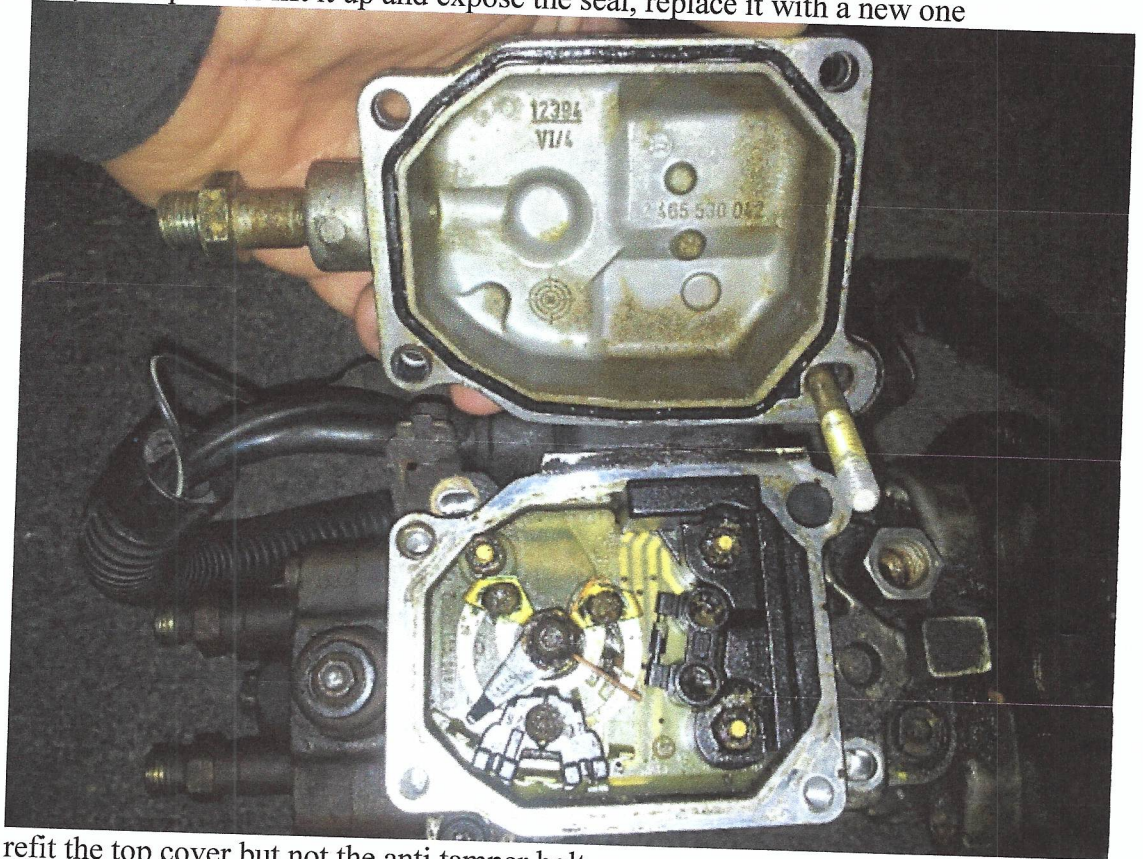


You can now see the IP clearly.



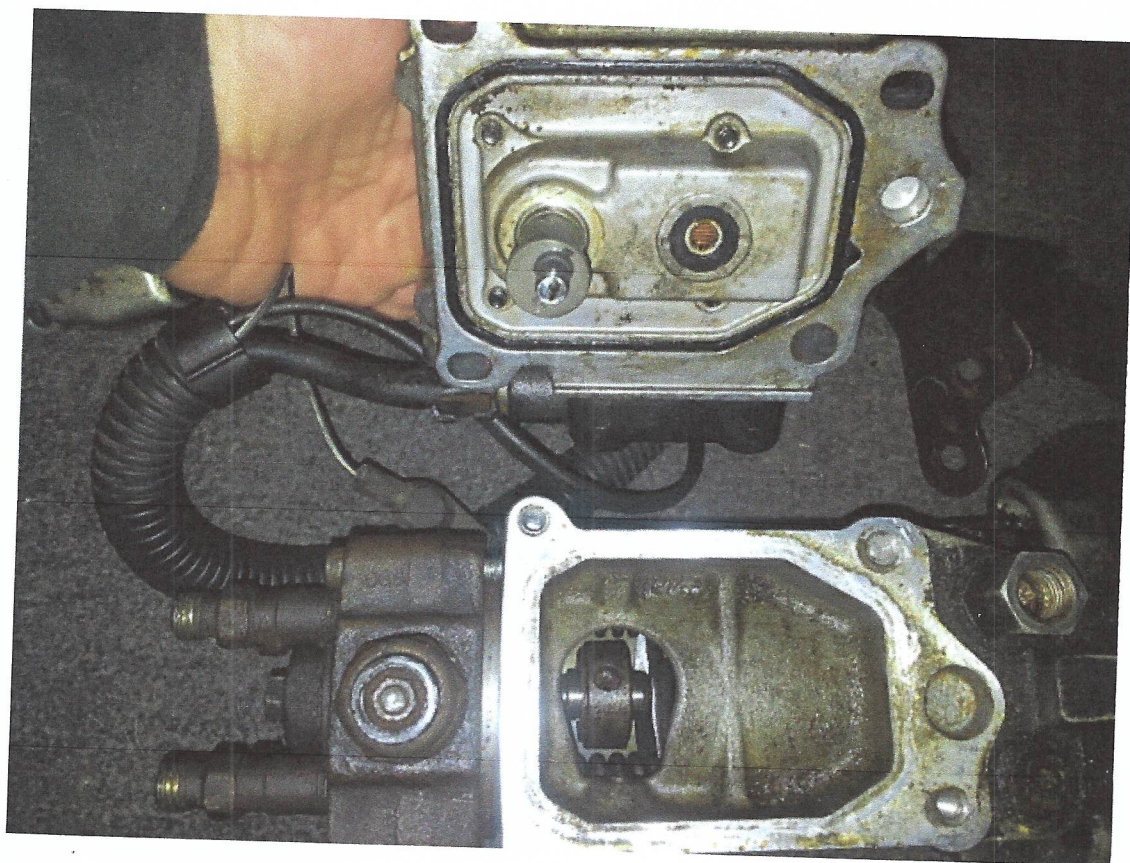
5. here is my IP very dirty and this is after a few attempts at cleaning with a few different products. remove the injector pipes from the distributor head and injectors, don't remove them 1 at a time but as a complete set you don't want to get them mixed up.
6. disconnect the wire from the stop solenoid
7. there are 6 torx 30 bolts here and 1 anti tamper bolt you can see it in the photo place the 9/32 socket on it and give it a few hard taps with a hammer it will go on

8. remove the anti tamper bolt and the 3 bolts holding the top cover in place and only the top cover lift it up and expose the seal, replace it with a new one



9. refit the top cover but not the anti tamper bolt.
10. now this is very very important before removing the QA housing you must mark it on at least 3 sides scribe a mark along the join. Remove the banjo bolt and main fuel feed to the pump and finally the last 3 bolts and lift off the QA housing off, replace the seal and place the QA housing to one side

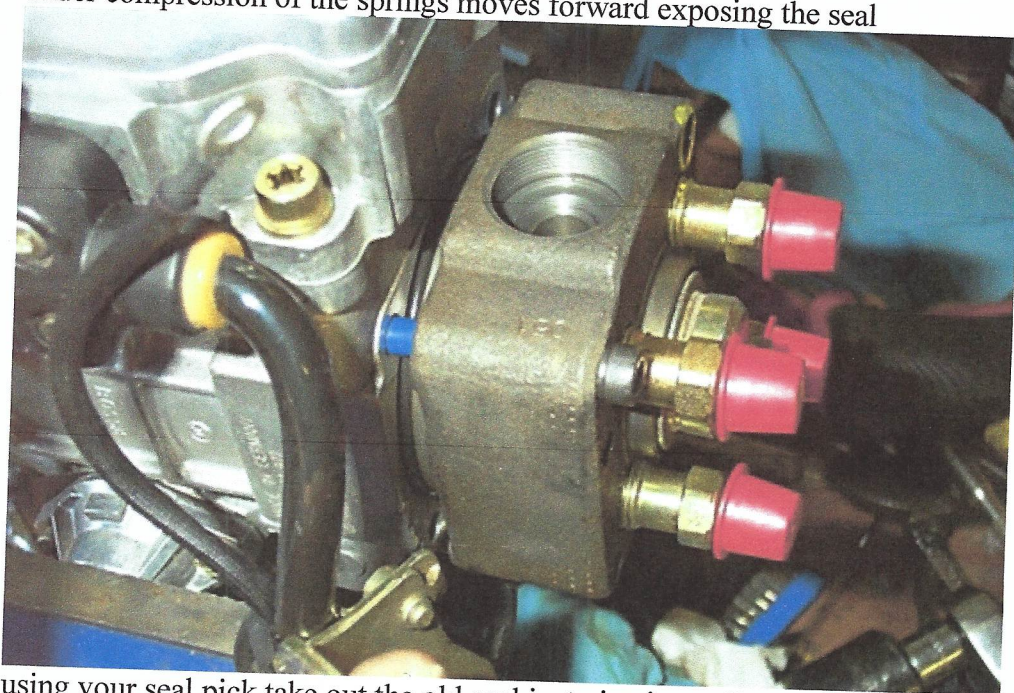




11. you can now see inside your pump exposing the springs it is full of fuel so use an old diff oil bottle to suck as much of it out as possible.
12. its now time to replace the distributor head O ring seal the pump needs to be in compression before doing this so crank the engine over by hand until you see the springs inside the pump compress they only move about 10mm but its enough to keep everything in place when you loosen the distributor head.
13. there are 4 torx 30 bolts holding the head in place remove 2 diagonally leaving 2 in place.



14. now slowly very slowly half a turn at a time loosen each bolt until the head under compression of the springs moves forward exposing the seal



15. using your seal pick take out the old seal just give it a pull cut it if you have to and make sure you get it all.
16. take your new seal stretch it over the distributor head and let it drop into place it will get hung up on the 2 remaining bolts. Replace the 2 bolts you took out earlier to keep the head in place and 1 at a time remove the other bolts the seal is hung up on and let the seal drop in, phew your almost done
17. go make a cup of tea that seal needs to shrink back to its original size give it 15 minutes or so, if your worried about any dirt that mite have gotten on the seal give it a spray with wd40 or similar. Then tighten up those bolts diagonally 1 turn at a time pulling the head back in place, don't over tighten those bolts. I used a dentist mirror and torch just to check that the seal was seating properly in its grove.
18. now back to that QA housing refill the pump with clean fuel and refit it to the pump that male pin must go into that little hole you can see, align those marks you should have put on the outside of the housing and replace the bolts securing everything back down.

That's it your pump is now resealed and is good for another 130k miles all you need to do is refit in reverse order everything you took off and start your engine if it runs poorly on idle then you havnt got the QA housing aligned spot on if it wont rev then that male pin isn't in that little hole

Good luck it's a lot easier than you think

Dave