

The "TDI-SVO controversy"

A number of years ago when the VW TDI hit the market in North America, and SVO use here was really in it's infancy, I was asked by a few owners of these cars whether we had a kit for them, and if we'd convert them. They were often from places where biodiesel, or B5 or B20, was available. My advice at that time was to wait until the warranty expired and run biodiesel, or if they were feeling particularly adventurous, and could afford to make engine repairs if such became necessary, to use a two-tank approach, and the best oil they could find/afford, but to be aware it was very much experimental at that time.

Some people went ahead and did this.

One was a customer in Ontario, Canada, who operates year round on used cooking oil. He has since accumulated over 200,000 km, by his estimate on a 1998 VW TDI running on used cooking oil. He has had no problems with the car. It has close to triple that number of kilometers on it, in total, original engine. A number of other customers have similarly operated several years now, with no problems, in cold weather, etc.

Much of the information in the literature concerning use of vegetable oil in direct injection engines (DI) is not particularly relevant to the TDI, it seems. Those older diesels did not have the sort of injector and piston design of a TDI. Many of the older studies also did not start and purge those older type DI engines on diesel and use heated vegetable oil in between.

For these reasons, and given the number of VW TDI's that seem to be performing very well for significant miles now, I do not think there is much, if any, greater risk to running good oil in a two-tank heated approach SVO system on a VW TDI than there is for running the same kit and oil in the earlier 1.6TD and 1.9TD IDI engines, and those have been established as being quite reliable on SVO.

For example, we have the first Vornax-equipped car in the world here, our daily driver, which has now run over 100,000 km and four years on used Canola cooking oil that was only allowed to settle then filtered to 70 microns (and often, to be honest, not even that was done), and the car starts and runs beautifully.

My next car will no doubt be a TDI. Now, I may not extend this idea of my personal ownership of an SVO powered VW TDI to the PD (Pumpe- Duse, Unit Injector) models of the last few years, which have their own problems, and of which also have examples of conversions doing quite well, but I would certainly not shy away from the first TDI's in North America, which other than a few Passats from, I believe 96 and 97, are the 98-2003 models.

We have had customers convert these in the Jetta, Golf, and New Beetle variants and they are all quite happy with the results to date to the best of my knowledge. The only cautionary tale I have on these, as with any engine, is be conscious of the need to use good oil. There was one TDI I heard of which came to a premature end, and the owner was trying to figure out what happened. It turned out that the owner had been running out-of-date flax (linseed) oil. There is probably not a worse oil you could use. Flax and some other oils polymerize quite easily, forming a hard plastic, and are to be avoided!

Edward Beggs B.E.S., M.Sc.
PlantDrive(tm) Products div. of Neoteric Biofuels Inc.
edwardbeggs@plantdrive.com
<http://www.PlantDrive.com>
1-250-833-0275
Unit 9000 Suite 305
190 Trans Canada Highway NE
Salmon Arm, British Columbia, Canada, V1E1S3