



The lure of using Vegetable oil for fuel can no doubt be nearly overwhelming. No matter what your motivation, be it saving money on fuel, supporting America, helping the environment or some combination thereof, the use of alternative fuels in your diesel can be very promising. However the old adage that there is no such thing as a free lunch certainly applies here. Just because it CAN be done, doesn't always mean it SHOULD be done. Below is a list of questions to think about before diving in headfirst:

1. Am I patient?

Using Oil for fuel be it straight or as biodiesel will try your patience. Preparation goes a long way toward minimizing issues, but the basic idea here is that you will be exchanging time for cheap fuel. Your ingenuity, how much you spend, and how much research you do up front will directly correlate to how much time it takes to get set up, and to maintain once setup.

2. Do I mind turning a wrench?

While the newer systems are becoming more and more reliable chances are you will have to do some of your own wrenching at some point. The better the system you buy will directly relate to how much wrenching you have to do, the level of support, and even how likely you are to be stranded if something goes wrong. One variable that kit manufacturers have no control over is oil quality, which consequently can have the most affect on the reliability of a system.

3. Can I handle a mess?

This is one that I have heard time and time again. "I got it under control, I won't make a mess". And without fail every time somehow a mess is made, be it from slipping, a hose popping off, a lid not quite getting sealed, changing filters, etc. In other words, make sure you have clean up materials. TIP: Castrol Super Clean is some of the best cleaner we have found. Brake clean does a great job as well but a bit more toxic.

4. Do I have a source of oil?

Unlike Gasoline or Diesel, or even propane, there is no support infrastructure for obtaining vegetable oil. Before ever even considering the purchase of a kit, a good source should be found. Where? Well anywhere that has a deep fryer. If the place sells deep fried foods, that

means they have oil. Could be a small Diner around the corner, or your local supermarket that has a deli section. Some areas have CO-Ops or renderers that are willing to sell oil. Whatever you do make sure you have the permission of the establishment from which you collect. If possible scope out the oil first to see if it is anything you even want to mess with. Some places like to use their oil container as a catch all for all food products and can be far more trouble to collect and clean than it's worth. One of the biggest pitfalls in collecting oil is the chance for lye contamination. Some restaurants use lye based (caustic) cleaner for cleaning the oil vats. And instead of disposing of the caustic slurry properly, it gets dumped in the waste oil vat. Lye in oil is a guarantee of ruined injectors.

5. Do I have the space to setup a filtering station?

This may seem intuitive to some, but don't laugh. Unless you are using new oil, you will need someplace to filter and store your oil. A spare bedroom on the third story of an apartment building won't cut it. Depending on how much oil you collect, filter and store along with how elaborate or simple the filtering station will dictate the amount of room required. Absolutely no less than 150²ft will be required to adequately filter and store even small amounts of oil. You will need to have power, and an environmentally controlled space will make life tons easier, especially if you live in an area that gets cold, meaning less than 40°f

6. How am I going to collect oil?

a. Alright, you have your system installed, got the home filtering rig built, even have the wife's support. Great! Now how are you going to get the oil home? Methods of collecting oil are very diverse. You can swap barrels; use a hand pump, an electric pump, gas pump, vacuum setup, or even 5 gallon buckets. In my experience the 5 gallon bucket was the most reliable and oil viscosity doesn't matter. Consequently it was also the messiest. The ideal transport is a small trailer behind the collection vehicle to keep the mess out of the back of the truck. The best pumps for collecting oil are gas powered trash pumps such as the Honda WX-10, or sewage diaphragm pumps such as the 12vdc Gulper 220 made by Whale ind. Typically 12volt pumps are out of the question for collecting raw oil. The amount of current required at 12 volts to get any power out of the pump is simply cost prohibitive. In other words to get 240 watts of power from a pump at 120volts would require 2amps of current where a 12volt pump would need 20amps of current!! Still somewhat new in design is the small scale vacuum pump. Connecting a vacuum pump to a large canister and pulling the oil out of the drum into the vacuum canister is showing some great promise and seems to be impervious to thick oil.