



- **Completely self contained and independent.** Not one drop of vegetable oil ever touches anything in the OEM diesel system except the injectors. That means there is zero chance of fouling the OEM pump or filter if something doesn't go right. That also means quick purge times.

- **The system is pressure based**, and has no switching solenoids. By using check valves and pressure we are able to completely separate the two fuel systems without disconnecting either. The premise of operation is that the truck will start on the stock fuel system until the engine reaches operating temperature and V4 Manifold is over 140. Then the WVO pump comes on and starts building pressure. Once the fuel pressure exceeds 55psi(OEM spec) a pressure switch shuts off the diesel pump and the truck continues to run on WVO, and an indicator light on the system control switch on the dash lights up. Should anything at all happen to cause the fuel pressure to drop below the minimum threshold for the engine, the diesel pump kicks back on to ensure that the engine never loses pressure. This is done automatically and all but guarantees that if anything was to go wrong on the WVO side, you will never be sitting alongside the road trying to figure it out. Again, If you run out of fuel, plug up a filter, something goes wrong with the wiring, anything at all that causes the WVO pressure to fall below the required fuel pressure for the engine, it automatically and instantly diverts back to diesel. This process is so quick and smooth, the engine never skips a beat. Only you will notice the System indicator light is out. You simply stop when it is convenient for you.

- **System is fully automated.** You simply get in drive, and shut the key off. The only way the trucks differs from stock is that if you have been running WVO the truck will continue to run for up to 60 seconds after you turn the key off, kind of like a turbo timer. The purge and shutdown are all timed from us to ensure that all the WVO is purged from the fuel rails, and diesel is run back through the injectors. There is no need to worry about whether or not you purged long enough, or shut down soon enough. This means that anyone can drive the vehicle without a bunch of training or worrying about them shutting down correctly. The main system

switch has three modes of operation- Auto/OFF/Manual On. If you select "OFF" the system will be completely disabled and totally transparent to the driver. This can also be used for quick stops, drive-through, etc where you don't need to complete a full purge cycle. Manual on disables the timing circuits, and overrides the temperature switch. Anytime your key is on, the system is on. This is useful for diagnostics if need be, or if you were to use your system with diesel where warmup and purging are not required. Like on a long road trip where you have no oil.

- **V3 Manifold.** This has been the envy of the industry. 90% of our system mounts in about 5 minutes to the frame of your truck using existing bolts. This Billet aluminum manifold was designed by us specifically for this purpose, for this truck. Combined into one modular unit is the WVO pump, prefilter (to protect the pump), adjustable pressure regulator, air separation, Main Filter(2 micron Donaldson), pressure switch, temperature switch, Purge solenoid, and pressure test port. With the air separation there is no need to purge new filters, or worry about trapped air, it is purged automatically. Change your filter and go! And to top it off, this whole manifold has internal coolant passages and is heated with engine coolant, so besides everything else, it is a heat exchanger too. So far it has worked in off the shelf form to -39F. And because everything is all in one piece, there is minimal running of hoses, or any need to worry about keeping heat between components. Plus there is no clutter. Aside from a few fittings, there is nothing that mounts on the engine itself so when you open the hood, there is nothing out of place to look at. This also makes it easy to service the vehicle by either yourself or any mechanic. Most mechanics are not even aware anything is there.

- **Tanks.** Our tanks are 100% aluminum and built for us by a tank manufacturer to our specifications. We have a few different styles and budgets, but ALL tanks are built with an integrated heat exchanger that is built into the tank when it is made. Not added later as an afterthought, or done with some cheesy transmission cooler cut in through the top. They all have baffles, fuel pickup, fuel return, vent, and heater hose connections. Everything in the tank is aluminum. The tanks also include a fuel level sending unit. Our toolbox combo tanks are Extremely clean, and hide all hoses and fittings in a separate compartment under the lid. From the outside you can not see any hoses or fittings at all. Also the tanks are flush with the bed rail so you can add a Canopy or tonneau cover if desired.

Complete. Our systems are designed specifically for the Ford Super Duty. And as such it comes with EVERYTHING needed to install the system. All pre-made and weather sealed wiring harnesses, fittings, mounting brackets, system control, nuts. Bolts, thread sealant, etc. Our intent is that you do not have to go to the hardware store for anything at all. And if you buy a tank from us, we include the fittings for the tank, Again, everything needed to get the job done except tools and your custom gauge selection.

- **Easily transferable.** The system can be easily removed and transferred to a different truck, or even a 6.0 with the 6.0 parts pack. There is only 1 wire that has to be cut during installation, and only two others that tie into the truck wiring. Everything else is plug and play.

- **Almost completely per-assembled.** The kit comes with the manifold assembled, pressures set, times set, and engine hoses made. We use JIC style fuel fitting for the entire system except at the tank. This means the only hose clamps in the system are on the coolant hoses. The fuel lines are easily assembled, and disassembled. The only hoses you have to cut are the ones going to the tank since the length will vary based on cab configuration.(crew, super, standard)

- **Performance.** We are performance enthusiasts at heart, so this system is designed to handle all performance power modifications up to over 500hp.

Sum it Up!- Our system operates entirely different than anyone else on the market, and again was designed originally for these trucks and to make good use of the Deadhead fuel system these trucks come with from the factory. These systems will work anywhere the truck was originally designed for. You do not have to add a bunch of heating stuff or options to make the system work right in Montana. The only option is the fuel pressure upgrade kit. This allows you to monitor what your engines fuel pressure is, whether you are on diesel or WVO. And should you ever have to troubleshoot, since this is a pressure based system, testing the fuel pressure is usually step #1. If you have any other questions or want clarification on anything, feel free to ask. Shipping for systems is included in the price.