

The Greening of a 1984 Classic Mercedes-Benz 300SD Turbo Diesel



Gary Morris purchased this 1984 Classic Mercedes-Benz 300SD Turbo Diesel vehicle in 2007 with the intention to convert it to run on Waste Vegetable Oil. He had always dreamed of owning and driving a “Benz”.

Gary lived a passionate life! He was inventive, resourceful, funny, creative and of course, a “car guy”. He was always a trend setter and a good earth steward. He recycled or repurposed almost everything.

History

This 1984 Mercedes-Benz 300SD Turbo Diesel was converted to run on Waste Vegetable Oil (WVO) in 2007. With the upgrade, it runs on both diesel and WVO.

Gary learned about converting diesel vehicles to run on waste vegetable oil through his ongoing research to recycle. He observed that many restaurants were not disposing their waste oil properly. He found a series of DVD’s on the internet to educate himself about the possibilities. The following DVD’s were his greatest teachers.

Diesel - The Man-The Engine-The Potential is the history of Rudolf Diesel and his amazing engine, how it works, and the great potential the engine has.

S.V.O. Seminar 2006, Liquid Gold and **Liquid Gold 2** taught him how to gather and filter waste vegetable oil for fuel.



Photo 1
Front view

Photo 2
Rear view



Photo 3

A close up of the Frybrid WVO system that is used as an alternative to diesel. Gary also incorporated some of the WVO system from Greasecar.



Photo 4

The complete WVO system view from under the hood. The engine starts on diesel and the Greasecar and Frybrid WVO System is set up to switch to WVO when it reaches the correct temperature. It switches automatically or can be switched manually from diesel to WVO. A few minutes before the driver is ready to park, the system is purged and switches back to running on diesel.

Photo 4



Photo 5 a

The tank for the WVO is housed inside the back of the trunk. A small round Plexiglas window allows for viewing the fuel level.



Photo 5 b

There is still plenty of trunk space available for storage. Gary always carried a variety of spare parts and tools.



Photo 6

There is a series of switches and LED lights just above the gear shift that indicates which mode the car is operating in. It starts and stops on diesel. Once the diesel is the correct temperature, it automatically switches to run on vegetable oil. At the end of the trip, the driver switches back to diesel by hitting the P(purge) switch.

- P (red) purge
- VO (green) vegetable oil
- D (amber) diesel



Automatic LED switching system right above the gear shift.

Photo 7a Every week Gary diligently collected one or two 5 gallon buckets of the waste vegetable oil from 8 Asian restaurants in the area. He constructed the oil processing system in a free standing building on the home property. The oil is heated and filtered through cloth filters to remove the food debris and stored in 50 gallon drums.

Photo 7 b Gary made two pump systems to fill the vehicle with WVO from the 50 gallon drums.

Photo 7 c There are a multitude of spare parts if replacements are needed in the future, including a parts engine.



Operating the vehicle has a fragrance of the Asian restaurants where the oil is collected. And of course, Gary was delighted by the fact that he could run his Benz almost for FREE.

Photo 8 a 8 b

The leather steering wheel and instrumentation are original. The odometer has logged over 230,000 miles. This 1984 Benz is in beautiful condition inside and out.



Photo 8 c and 8 d

Back seat interior all original upholstery and automatic sunroof



Photo 9

Gary proudly displayed 2 medallions on the grill. The first is the 250,000 km Mercedes-Benz Mileage Award. The second is Mercedes Oil Burner Kartel medallion, one of the many online forums where he was a frequent participant.



Photo 10

Service Manual for the Engine, Service Manual Vol 1 and 2 for the Chassis, Complete Knowledge Base from research, various How to CD's, and accessories.



In 2008, Gary learned that it was not legal to drive his 1984 Mercedes-Benz 300SD Turbo Diesel in WA because there was no way to pay Road Use Tax on the WVO. He contacted Dan Roach, our local State Representative, who helped Gary get Bill 1225 passed on April 18, 2009. This law exempts those driving on WVO and other alternative fuel from paying road use tax.

Photo 11

Governor Christine Gregoire signing Bill 1225 into Law. Also included is the original pen she used to sign it.



Pictured from Left to Right

State Representative Dan Roach, Governor Christine Gregoire, Gary Morris initiator of Bill 1255, and wife Linda Morris.

The signed **Certification of Enrollment** with current government officials and the complete law on the books with the details are also included. The law took only 6 months to pass. Dan Roach alerted Gary so he could attend every session where this Bill was being reviewed and created the opportunity for him to make live presentations. Gary diligently knocked on doors of Congressmen and Senators to deliver valuable information he had put together to educate them on the benefits of utilizing “green energy”. When it came to a vote, with Yeas 32 and Nays 12, the bill was passed by the Senate on April 8, 2009. It was passed with Yeas 66 and Nays 11 on April on April 18, 2009 by House of Representatives and was signed into law by Governor Christine Gregoire.

Gary was always a good earth steward. I am honoring his memory by creating **The Greening of a Classic 1984 Mercedes-Benz 300 SD Turbo Diesel**. The “Benz” was the primary vehicle Gary Morris drove until he passed away in January 2015. It is now ready to be acquired by a new owner!

Linda Morris

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