

We began a 250 mile trip (of which we only traveled a part of), pulling our RV travel trailer, like we have done since 2015. I always drive with an Edge CTS scan gauge which connects to the OBDII port to provide displays of all the engine sensors. 19 miles into our trip, the powertrain went into limp home mode with the decreased boost and increased IAT, ECT remained the same. This was indicative of the well-known OEM IAT sensor oil fouling read error. This also happened several years ago on a trip, for which the sensor was replaced with the updated part. I pulled over saw, smell, felt and heard nothing abnormal. The OBDII scan tool showed no errors. After the ubiquitous reboot (turn off, wait a bit, start back up) gave a normal performance response, I was back on the road. Again, no codes, current or pending were displayed on the scan tool not was there a Check Engine Light (all instrument cluster lights passed the ignition on pretest). The only indicator that something was a bit off was that the ECTs were about 10°F higher at 203°F than the normal 192-193°F, but well within the acceptable range, for which the red zone on the vehicle gauge begins at 270°F. Drove about a half mile and noticed the blinkers were not working. Eased her to a safe spot off the highway a couple of miles at the next off ramp (no emergency lane). Again, nothing out of the ordinary engine wise, except for, a slightly elevated ECT. I checked fusing which was good and I could hear the relay behind the dash at the steering column area click with the hazard switch and turn signal. I reset the fuses for the circuit and the signals began working properly again. Back on the road, everything seemed to go back to normal for about the next 130 miles with the IAT, ECT temps and the temperament of the engine. About that time, the ECT would fluctuate +5 to +10 for the average OAT, which was running between 79-85°F, average of 83°F. However, the IAT appeared to remain normal. We stopped at Walmart for groceries. I did a thorough check again of the whole vehicle, and everything was good. We shopped for about an hour. shopping. The engine was off during this time. Fluids were checked before leaving. After eating, we left.

As I monitored closely with my Edge CTS scan gauge, all seemed well for the next 15-20 miles. The asphalt highway was smooth and level. The highway speed limit was 75MPH, for which I was maintaining a speed of 63MPH. When going up a slight rise for an overpass, the ECT temp rose up to 212°F, which is about +20 from the normal average of 192-193°F. I slowed down to about 55-56MPH and the temp went back to the 203°F mark. So I carefully progressed back up to my previous speed with no changes. Approximately 2 minutes later, while driving on a level road back at 63MPH, the ECT suddenly went to 224°F. As I let off the throttle to slow down, I noticed the engine began to lose power and I could see black smoke was coming out of the exhaust, which is not normal for this van. Then I noticed that the black smoke was starting to come from the right front fender area. At this point the engine RPM began to fluctuate erratically and I could hear mechanical vibrations coming from what appeared to be the turbo side of the engine compartment. All the while, I was carefully braking and trying to safely maneuver the van/travel trailer onto the emergency lane which is skirted by a steep embankment down into a bayou canal (Louisiana). Just as I was about halfway onto the emergency lane, the red oil press light came on. I steadied the wheel expecting the motor to shut down. It did not, so I waited till I was straight before turning off the key, which was about 2-3 seconds after the light came on. Struggling with no power steering or accidentally locking the steering column, would have

put us on the slope and into a disastrous roll-over.

With the vehicle stopped, I pulled the hood release but it did not lift it open. It was around about midnight on the 20th. With flashlight in hand, I exited and went to the front to see if it was safe to open the hood. Fluids were pouring out all over the ground from the front of the engine, behind the radiator. It appeared to be engine coolant by the quantity/viscosity/smell. There was no discernible sight or smell of transmission fluid or diesel fuel. Oil may have been mixed in but it did not appear to be in anything under the oil pan. There was an excessive amount of heat rolling out from under the hood. Expecting a possible fire, I went back to the driver's seat to retrieve my fire extinguisher and returned to the passenger fender area to look for flames. I had suspected from the red no oil pressure light, the heavy black plume that came out from the exhaust, then from the passenger fender, and the shuddering that the turbo had tore apart, breaking the oil pressure line to the center cartridge. Upon seeing a faint yellow glow thru the seam of the hood and passenger fender, I yelled, "Fire, everyone get out!" as I discharged my fire extinguisher. At no time was the hood ever opened. About 5-10 seconds later, the first flames were lapping out of the hood/fender seam. I yelled for Alexis to get everyone out of the van and back down the emergency lane at a safe distance and to call 911 and report a vehicle fire. I went for my older spare fire extinguisher at the same time. Upon pulling the pin, the bottle discharged minimally. Making sure that the kids were safely away, I retrieved the fire extinguisher from the RV travel trailer. About a minute had past, the flames becoming more intense, I dispensed this extinguisher completely in less than 3 seconds. In about two minutes, the entire engine compartment was engulfed and the van filled with thick smoke. Soon after, the windshield cracked, telling me that the firewall had been breached and that, absent the Fire Department, the van would be a total loss. I made one last attempt to pull out what I could but the smoke was too thick. I pulled back out. We estimated about 4-5 minutes had elapsed from when I first stepped out of the van to investigate to this point in time. I shifted my focus to securing my Family safely along the highway, then to saving the travel trailer.

The trailer has Andersen weight distribution hitch that needs the tension slacked before it can be released. I had taken the keys with me when I first left the van, so I was able to unlock the hitch and began releasing the tension to extract the hitch from the receiver. I went to the driver's seat to put the van in neutral in hopes of pushing it away from the trailer. It was too late as the entire dash, steering column were already engulfed in flames. [REDACTED] came up behind me to assist when the engine cranked over and ran for about 2 seconds then it shut off. This startled [REDACTED], as it was eerie. The seat was now on fire. I showed her the keys. Then the engine began cranking again, but failed to start. It did this a couple of more times over the course of about 40 seconds to a minute. Our attempt to separate the two vehicles was unsuccessful. By the time that the Fire Department showed up and had their first hose out, the conflagration had fully engulfed the interior and was coming out the back window. Only by the grace of God was the travel trailer saved.

It was a couple of minutes prior to the Fire Department coming on scene that the full 7-gallon LPG tank safely blew the safety valve, ejecting the LPG fueled flame safely away from the vehicle, a mandated safety feature designed by the manufacturer (Manchester). Note: The outflow valve to the propane accessories was securely closed since it was filled on July 12th. No propane accessories had been in

use since filling, nor were in use at the time of the incident.