MacGyvering My Turbo-Diesel

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I'm a car guy, and once while travelling from my home in Iowa to New York City and back, I had the turbo in my Cummins Diesel truck go out. The bearing seal totally disintegrated, causing engine crankcase oil from the turbocharger's high-pressure oil-cooling-supply-line to rush into the engine's air-intake.

Since Diesel engines will run on practically anything, my truck took off at full-tilt and ran away on me! I shut the key off, so there was no diesel fuel being supplied anymore, but the engine was actually running on its own life-blood (oil)!

Copious plumes of smoke were billowing out the tailpipe, fogging out all 4 lanes of interstate 90 behind me. I rode it out, and managed to take the next exit into Gary, Indiana, where we smoked and sputtered and clattered into the parking lot of a local police station.

Trouble is . . . I couldn't get the engine to shut off, because it was injecting its own motor oil right into the air intake, and that, in turn, was being burned in the combustion chambers. It just kept running, and I had to step on the brake pedal with both feet to get the truck to stop going forward. I dared not take it out of gear, for fear the engine would've revved up and probably thrown a connecting rod through the side of the engine block – or something worse (diesels can't tolerate ultra-high RPMs).

Luckily, it finally died, but only after consuming several quarts of 30-weight engine lubricating oil. With no AAA towing insurance, no money in hand, no place to go, and surrounded by what appeared to be a very rough neighborhood – and with an upset mother-in-law in the passenger seat who happened to be along for the ride – I commenced removing the oil-supply line from the turbocharger and *re*-routing it back into the engine via the dip-stick tube, a length of rubber hose. With a whole lot of duct tape, I managed to seal it all up.

I topped off the engine with some fresh oil to replace what the engine had drunk minutes before, and we were back on the road again. I disconnected the intake horn so that shards of the disintegrating turbo impeller and spool wouldn't be blown into the intake manifold of the engine. That spent, dry (unlubricated) turbocharger made some horrible noises on the remaining 400-mile drive, and the engine sure was a pooch on the hills running "naturally aspirated", but the truck made the journey home on a length of hose, and some duct tape![*]

I later found an inexpensive replacement turbocharger on eBay and fixed my truck for less than $125. A repair shop would've probably ordered me in a new one (at a cool $1,200 or so, plus labor . . . ouch!).

Special thanks to MacGyver for making all those highly improvisational television episodes I watched as a kid!

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[*] My first attempt at re-routing the oil supply line from the turbocharger back into the dipstick tube on the Cummins Dodge *didn't* work, as it completely firehosed the entire underside of my under-hood insulation and sprayed oil all over the entire engine bay (too much pressure and volume). . . . So I actually had to do it a *second* time, routing it into the oil-fill cap, which had a bigger opening and ability to accept such copious amounts of oil for re-direction back down to the destination of the crank-case, i.e., oil back to the oil-pan.