

In Omnia Paratus, Evil Genius Racing and the 25 Hours of Thunderhill



The race was interesting... . There were cars that caught fire, cars that traded paint, cars that spun off track, cars that replaced alternators, cars that lost brakes, cars that broke exhausts, cars that lost wheels and cars that were rolling down the track without their drivers. What a spectacle!

Unfortunately, all of the above happened to just one car of the 60 that took the checkered flag; ours!

Let's start the saga on test day,

We got going early. After 1.5 hours of testing the clutch started to slip. Out with the transmission, We replaced the complete clutch and flywheel, as well as the engine rear main seal as there seemed to be oil on the clutch. We stuffed the trans back in and went out to test some more. 1.5 hours later the clutch started to slip again. We qualified the car with the slipping clutch, getting 35th, and then went to the drivers meeting. Out with the trans again. What is going on? It turns out that the front seal of the trans was wiped out and the gear oil was getting on the clutch. We had a spare trans, but wanted to go with the 'hot rod' trans. So we replaced the front seal and reinstalled the trans for the second time, rebuilding the clutch master and slave cylinders for good measure.

After the aerobatic display, the piper playing amazing grace and the flyover by three Air Force F-15s the race started. 4 laps in, our starting driver, John Curtis radioed in; the temperature

gauge was climbing, the car was overheating. I told him to come in. No evidence of overheating, no real pressure in the cooling system, I sent him back out. He radioed in again after one lap, the gauge was now even higher. Another pit stop, more checking things over. I'm starting to think the gauge is freaking out. I sent him out again. The radio instantly crackles in my ear; the gauge is now pegged in the red. In again; this time we use an infrared pyrometer on the engine, it's running a cool 160 degrees. John gets sent back out with instructions to ignore the gauge.

John hands the car to Steve and then Steve gives it to Ed, no real problems and we are creeping up the leader board.

Will gets into the car and starts lapping. Not far into his stint, he radios in, the ignition switch is not staying in position; the car is cutting out. Then it happens, all I hear is the word FIRE! and nothing more. The ignition switch failed, melted and shorted out, causing a fire behind the dash. Will got out of the car, it started rolling (not in gear) He steps in, puts his foot on the brake and shoots the fire extinguisher at the fire, the chemical blasts him back in the face and he bails out, foot off the brake. The car rolls down beside the track from turn 9 almost to turn 10; Will is standing at the top of turn 9 without a car, holding a fire bottle..... The safety crew tows the car to the paddock, we get busy, replacing the switch didn't take all that long, cleaning the fire extinguisher chemical out takes a lot longer. We find and strap in a new fire extinguisher, the car starts, cheers erupt. Will is back out cracking off good laps after 38 minutes in the pits.

It is now night, our lights are on and we are going along with a couple of small problems with the front bearings/brakes forcing some 5 minute stops. Our creep up through the mid pack runners continues

Our driver rotation goes around, Will gets back in sometime in the early morning, Soon he is on the radio; the ignition is cutting out again, he manages to coast into the pits, the car is dead. A little investigation reveals that the alternator is not putting out any power. We replace the alternator, disconnect one pair of driving lamps to allow the battery to charge and send him back out. Will comes in for a stop; he asks that I check the tire pressures. Sure enough, the right rear is down to 10 lbs, it has a leak. We replace it, and send him on his way. In the pits we look over the tire to see what happened. We find that our luck with parts is holding...The wheel is leaking air through a weld, not the tire, We can't buy a break!! He pits and hands the car over to John. He says the brakes are soft; we do another bearing/rotor and send John out. He radios in; no brakes! We bring him in, the brake master cylinder is toast. We don't have a spare master cylinder, but I know there is one in the paddock as I was offered it the night before while we were struggling with the clutch master cylinder. I find the trailer it's in, nobody is there, I take it and leave a note "I took your master cylinder, John from Evil Genius" and gave my phone # Kiwi, are you out there? I owe you a master cylinder! We replace the master cylinder, bleed the brakes and send the car out. Everything is fine.

Our slow creep up the board has had some setbacks, but it now continues; 37th, 35th, 33rd, we are gaining positions.

I finally go to rest for an hour or so. I get woken by a crewmember. The car is coming in for fuel and a drivers change, the driver is saying that the fuel gauge and the tach are not working, but the car is running fine. We do some more bearing work during the pit and send the next driver out, this time we instruct him to ignore all the gauges, not hard to do, none of them work! I notice that the car is getting louder and look under the hood. There is glowing plasma coming out from cracks in the exhaust header near the engine.... Not good. But, the car is still running well and still under the 98db sound limit. Out on track again. I hear the car getting louder, the driver is breathing the exhaust, dawn is breaking over the Eastern hills. Our pit space neighbor, Manfred Duske and his C-Note racing team, has a welder, they let me borrow it. In again, the header is totally broken, not just cracked, it is totally misaligned, broken clear through in two places. I bend it back into place, weld it and send the driver back out.....

35th, 33rd, 31st We are creeping again.

All goes well for a while, with 5 hours to go we put Will (poor Will, it always happens to him!) into the car with a new right front tire, I don't like the way the lugnuts tighten, soft...however, the torque wrench clicks on all 4; I wish it hadn't... Out on track he loses the right front while going through turn 8, 100 mph, the wheel and tire will never be found, they bounced over the fence and off track property, hell, it could still be rolling.... A side note here, after the race Will and David go look for the tire/wheel and Will gets zapped by an electric fence..... We get towed in again (frequent flier miles?) Replace the right front rotor and bearing, the studs had pulled straight out, no threads left. We put a new tire/wheel on and get back out there.

33rd, 32nd, 30th

Nothing eventful happens for the last 4.5 hours, we just crank out the laps. Will sets our best lap time a few laps after his three wheel excursion, a 2:10.8
Steve takes the checkered flag at noon..... we finish 27th overall, 6th in class. Later a car gets DQed and we are moved to 26th and 5th

Thanks to the crew, **Ken Davis, David Ng, Justin Silva and Tirey Pagel**, thanks also to **Gillian Pagel** for the good food and moral support, not to mention finding a hose to wash the fire extinguisher chemical out of the car.

And thanks to our drivers, **John Curtis, Steve Arellano, Ed Gaven, Will Faules and Jon Emmerson**. Jon had a family emergency and couldn't make it to the race, but he recruited Will to drive in his place....

Thanks also to all the workers and the safety crew, particularly the ones that towed us in twice.

We finished. And more importantly, we had fun!

In Omnia Paratus- Prepared for anything

-John

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