

What makes a Spec car faster (and slower)?

Posted by Sterling Doc - 13 Oct 2010 10:33

At our last 3 day event, we had a ton of track time - friday T&T, 2 enduros, 2 sprint races, + several HPDE sessions thrown in. I personally put in 100's of laps (burned 50 gallons of fuel!). The MW guys used this as an opportunity to gather some data on various configurations on a spec car. While I still have to dig through some o the reams of data, there are some concrete observations I can make on the data I've seen.

The track (Putnam Park), is a handling/grip intensive track with the track record a 1:22.64 ,for reference.

The best lap of the weekend was set in qualifying = 1:22.7. This car was on Toyos that started at 5/32nds, and had around 20 heat cycles, and were down to about 2/32nds tread (tires lasted 2 more days, including a 100 mile enduro). This car later dyno'd 132/133.

Same car made dozens of laps carrying passengers, varying from 175-220lbs of "ballast." The best time with a passenger on board (180lbs), was a 1:23.1. As there were many laps in both configurations, with a consistant driver, this data seems pretty solid. 180lbs of ballast = 4/10ths at this track.

Put new, full tread Toyo's on the same car. Best lap was 1:25.1. The car was much harder to drive - felt quite soft in turn-in and hard to place as accurately, especially in high-speed corners (which this track has a lot of). So full tread, vs. optimal (worn in) RA-1's was just over 2 seconds!

Car dyno'd at 132HP/133/TQ. Car that dyno'd 138/137 has been mid pack all year, running 1-3 seconds off the pace, depending on who was driving it (rental car). Hard to make much out of this, d/t the variety of drivers in it. Unfortunately, it was rented for HPDE this weekend, and did not get in the hands of the reference driver this weekend.

More to come, as a go through Traqmate data...

=====

Re: What makes a Spec car faster (and slower)?

Posted by Sterling Doc - 13 Oct 2010 19:53

Here's the dyno of my car - you can see the choppy HP curve. The 3 pulls varied by about 5 HP, as well.