

2019 Rules Thread

Posted by dpRacing Dan - 23 Oct 2018 13:32

Ok guys, its that time of year.

I'm hoping we can keep this one short and sweet.

Here's a few things on the docket;

1: Engine sleeving.

2. Rims (allowing aftermarket same-sized and weight as original but all new and non stock looking).

3. Short-shifters. Allow any?

THIS is the place to discuss any changes you may have in mind.

Please keep this discussion productive by refraining from insults or trash talkin. Lets keep in mind that whatever we change effects 150 cars in NASA nationwide- so whatever it is we suggest must be readily available, not excessively expensive, and a benefit to EVERYONE- not just you.

Ready? Set. Go.

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Re: 2019 Rules Thread

Posted by cbuzzetti - 07 Nov 2018 12:20

If we could find a piston/sleeve with lower compression that would be preferable.

Having it be affordable or at least equal or less than the cost of a used 88 engine would be optimal.

I have raced both cars with high and low compression engines and have won many races with both as well as set track records.

At the pointed end of spec racing a few HP does make a difference. But setup and driving are by far more important.

Unless you are winning races all the time you should be hiring a driving coach and testing setup at every track day you can.

Re: 2019 Rules Thread

Posted by AgRacer - 07 Nov 2018 13:09

All you need to do is pull a spark plug and put a bore scope down the hole to see what compression ratio pistons are being used. Its plainly obvious if there is no dimple. A simple inspection of other things like DME chip and AFM can tell you if they are doing any other funny business to compensate for more things done inside the engine. For all we know there might already be sleeved blocks with aftermarket 9.5 or 10.2:1 pistons competing in our class. If they meet the dyno cap, how would we know?

The easiest solution to all of this is to eliminate ambiguity. Allow a specific aftermarket piston from a specific company which can be easily inspected with a bore scope to ensure it still has the appropriate dimple like the 9.5 or 10.2 CR pistons. Also publish a generic HP/TQ curve as a template to be used to compare dyno results with.

Of the 20 or so dyno charts I have from compliance testing in the Southeast, the following narrative is consistent across all of the OEM chipped engines I have tested:

Torque Curve: Peak at ~3000, valley at ~3500, peak 3700, peak at 4400, falls off after 5000.

Horsepower Curve: linear up to a peak around ~5600-5900 then falls off

I have found one illegal chip which showed a torque/horsepower curve that didn't follow the above narrative. We swapped the DME out with a verified stock one, and the dyno chart then matched the above narrative.

I also have a dyno chart of an otherwise legal engine that has aftermarket pistons in it. The engine is

otherwise brand new but the horsepower and torque curves still roughly match every other dyno chart I have, it just overall makes more power which is to be expected out of a brand new engine built by a reputable builder. We have restricted engines down before very simply and it pulls power out of the engine across the board, not just at peak.