## 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 tcomeau - 25 Oct 2018 13:21

Saving \$ is a good reason, however, google search shows a group 24 battery costs around \$95, and a 13 lb odessey PC680 motorcycle battery is around \$130. My PC680's have lasted for yrs. Two downsides to moving the battery as you suggest are having to re-wire it, which adds minimal weight back in, but worse, now the battery in the cockpit can become a missile hazard to the driver, which could never happen in the stock location currently dictated in the rules. Batteries are free in the rules, provided

they start the car. Buy which ever you want, but I'd be for keeping them in the stock location.

No doubt there's guys using the 88 10.2:1 pistons (not 10.5:1 as you stated). Stock head gasket is 1.1 mm thick. "Repair" gasket is 1.4 mm thick. Some shaving of the head is currently allowed on cars with the 88 pistons, which puts them near the allowed limit of 10.5:1. Even with the .3 mm thicker head gasket, I'm not sure it would make up for the .4 change in the Comp ratio caused by the 10.6:1 piston. I honestly don't know.

When Marcelo's car failed impound at 2016 west champs, he was using 88 pistons with a heavily shaved head, which had just warped, because they had no other at the time. That combo blew well over 11:1 on the whistler test while JP Molnar and Chuck Sharp(?) blew just under 10.5:1 with 88 pistons. Sounds like those 10.6:1 pistons would put engines WELL over 11:1, which would mean many cars would exceed the HP limit, which means changing that rule, which means guys trying to find thicker cyl. heads, yada yada....on the other hand, we could keep the current piston rule, and let guys search out the 88 pistons if they want. BUT, you don't need them to win.

Re: 2019 Rules Thread Posted by tcomeau - 25 Oct 2018 13:35

JP Molnar posted this on face book and I know he's in the middle of a garage redo so I'll transfer it for him.

"JP Molnar- Tim Comeau, totally agree. We won Nationals both times making less power than the cap and each time someone throws out an idea that is "only \$600 here, and only \$700 there" for XYZ part change, it just increases the likelihood people will just park their cars and sit out the season. My late offset phonie sets cost me, on average, about \$200.00 a set to find and they have worked fine."

Re: 2019 Rules Thread Posted by tcomeau - 27 Oct 2018 10:52

Suggest wording only change in rule 16.3. From "backing plates" to their correct name, "disc brake splash guards."

Let's delete second sentence in rule 16.8. Seems kind of silly? You can't even bleed brakes in motion or you'll lose system pressure?

Rule 15.3: regarding increasing the track width of the 924S. The rule used to say the 924S can add spacers. Now it says 924S can use "updated suspension components" to increase track width. You CAN update to the early alum front control arms, but it doesn't change the track width since they're the same as the steel arms. I don't know how you could use the later ABS offset arms (30 mm wider) and still make the tires fit under the narrow fenders?

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Re: 2019 Rules Thread Posted by AgRacer - 02 Nov 2018 07:13

Im trying to gain access to a dyno sheet of an engine that has aftermarket pistons in it but everything else is spec legal. The dyno sheet max power is 146 and I would be willing to bet that the HP/TQ curve is basically the same. As stated elsewhere, the cam and head are the biggest factors in changing the stock HP/TQ curve. Pulling 4 HP out of an engine is as simple as a .5" piece of tape over the airbox inlet.

I am all in favor of allowing anything that lets racers build more reliable engines and I think allowing new pistons and sleeves goes a long way towards doing that. As parts continue to age, quality used parts will become more and more of a problem eventually killing the class because nobody can keep an engine under the hood. There sure are used pistons and blocks out there that can be used in a new race engine build, but you generally need to go through several sets of used pistons and blocks to find a combination that works. This is the same feedback I'm getting from most racers in my region (Southeast) to include the engine builders that are trying to help the class. Requiring original parts might be fine for those of us with good connections in the used 944 parts market, but for the newer racer who is just looking to pay a shop to put together a reliable engine, we would do ourselves a favor in allowing the shop the easiest path possible to doing that, which is allowing as many new parts as can be easily and cheaply sourced.

Let the dyno cap do its job.

We have the dyno cap, max allowed compression ratio, stock cam, and no porting of the head for a reason. As stated, racers in various regions are going through several blocks before finding a good one. How would we know an engine is sleeved to begin with? If the car is under the power cap, who cares? Same goes with pistons.

A set of used pistons are in the \$100-300 range or more if you have to go through several sets to build one good set. If you re-ring aftermarket pistons, you are paying ~\$180 on top of sourcing the pistons for the rings alone.

Wossner pistons that work in stock bores are \$700 with rings included.

Do you need any of this stuff to win? No but you cant win if you cant put together a good engine.

Re: 2019 Rules Thread Posted by Atteberry - 02 Nov 2018 18:46

As introduction I am one of the cars prepared by 7's Only in Buttonwillow California and have the camper/caster plates. Yes it makes the car turn in better but that does not mean you win every race, I am not winning every race in Southern California region in fact in the five+ years of using those camber/caster plates I may have finished first once or twice. In the end winning comes down to the driver not the car. Another racer in the region looked at the plates fabricated his own used them did not like them and switched back to his previous set up.

These plates have been reviewed by the Southern California regional director and have been deemed legal along with Tim who posted the first mention of these plates earlier in this thread. They have also been reviewed at 3 west coast nationals and the recent combined national event. No one voiced any concerns.

Any racer in the Southern California region could use this setup if they wished as 7's Only is more than willing to fabricate the parts. Further If anyone in the 944 Spec class nationwide wants a set they are free to order them from 7"s Only Racing in Buttonwillow California for \$550 for for the complete kit. The point of this is we have had nothing to hide regarding the system. We have shared all that we do to the car with all the racers in Southern California.

It is within the rules and has been for at least 5+ years (I may have been using them for longer memory is going too much exhaust) so I fail to understand that the issue needs to be brought up now and that there is some burning need to make them illegal.

On to other comments: I think the idea regarding allowing the movement of the battery is good as it saves some money and reduces the instances batteries dying and causing push starts during race weekends. The cost saving is both short term and long term as the larger batterylast multiple years while the small ones do not.

Quality parts are getting more difficult to find and if we want to have this class continue and potentially grow finding suitable after market parts and appropriate repairs needs to be considered. sleeves in the bock is fine we have a HP cap to control the class so let that be the governing rule. Further we should consider looking at other after market parts for the engine as well.

If someone wants to buy non OEM wheels due to difficulty in local sourcing that should be fine as long as the weight equals the current OEM options.

The fiberglass replacement part for the front is fine as well.

The current rule restricts how a car can be rewired. Specifically can we change the rule to allow for allowing a replacement connector to the ECU instead of making someone cut the wires to that connector about one inch from the end so that the rewired car can be spliced onto the OEM connector. While I agree with the idea of being cost effective in what we do Allowing this change does save on labor and makes rewiring the car for racing easier and more durable. As an aside 7's Only can provide a complete wiring kit with switches and all connectors. They are thinking for charging \$650ish for that kit.

Finally under non OEM parts front fenders are getting difficult to source. If the car is in an accident re-alining the front and getting the replacement fender to fit properly is difficult resulting in increased labor costs. From an aesthetics perspective many cars are on track with wrinkled and dented front fenders. It may pass the 50/50 rule but the car still does not look great. I propose we look into allowing fiberglass fenders with the requirement that they look exacting like the OEM fender and have the same weight as the current sheet metal fender. Long term I see this as a cost savings item and short term the cost is similar to a current replacement fender once all labor involved in that replacement is factored in. There is a fiberglass shop in Souther California that has the proper mold and can produce the fenders to our specifications. It should not result in an potential perfomance advantage for those that use the fiberglass fender.

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Re: 2019 Rules Thread Posted by cbuzzetti - 05 Nov 2018 20:55

We have seen multiple failures of the engine wiring harness in the SoCal region. I just recently had a failure on my own car. The wiring between the engine temp sensor and the DME broke. In this situation the engine management goes to a full rich mode.

On Atteberry's car we had an intermittent problem with the engine cutting out. This turned out to be the wires at the fuel injector connectors. Everything looked perfect externally but the wire insulation had failed under the injector boot and was shorting to the other wire.

Allowing an aftermarket replacement engine harness would be a benefit to the class and would not be a performance advantage.

I will see Jon Milledge this week and talk to him about sleaving blocks. For those of you not familiar with Jon. He is an engine builder and ex racers who raced the 944 from its beginnings in the USA in SCCA

Regional and National events as well as in IMSA Firehawk series. He still drives his personal 1989 944 Turbo at AX events as well as DE events with the PCA.

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