HP limit / power to weight / pro built /low cost

Posted by SvoChuck - 24 Sep 2010 14:41

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Racers

We the series directors are looking into an issue and more input is better.

My desire is to keep/return 944-spec to low cost equal racing the issue we are interested in finding more information about is do you need a "pro built" engine to compete like spec miata or can you just freshen up a non 88 piston engine. ? If we continue to go the spec miata route then maybe we could add more cars to our racing by allowing other high cost items .

story

I did some work on Scott Boves 4th place car before Nationals when I shared the dyno with Tim C. He asked that I look deeper for non compliance (the car was built for Cup before I fixed it) as it turns out those numbers were a bit lower than what we saw from others at Nationals...

Another director spoke about how 130-133hp used to be great dyno numbers but now it seems that those numbers will not run upfront.

Ram Air ? does this work and or does it fit with 944-spec in the future ?

Claimer rule ? If you finish in the top 10 you can buy the winners engine for $4,000 ??? I will chime in on this one right away I have never seen a claimer series where the competitors can be or remain friends ...

HP vs weight ? Dyno HP ? Traqmate HP ?

Could we add a restrictor plate to cars making over 130 HP/135TQ or have them make a small change that would give then a smaller advantage while keeping most of our other rules intact ?

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Re:HP limit / power to weight / pro built /low cost

Posted by SvoChuck - 25 Sep 2010 13:39

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A few years ago 944-spec took away headers and chips. I still feel sorry for one of our largest regions losing so many cars over that BUT it resulted in explosive growth for our class we went from being fought over by Cup and GTS (who was going to take us over) to being the largest class in 2 or 3 regions.

Yes "pro built" is not the best word for what we are talking about but I feel we could have legal 944-spec engines making over 142 TQ and 147 legal HP . Those number can be had but it's going to cost you $$$ to get it and I do not think a standard factory spec low compression rebuild or a fresh head/rod bearings engine can compete.

SO my big question is what can we do to grow this class ? How can we say we are "low cost equal racing" best ? I do not feel status quo is going to carry 944-spec into the future.

Change is always bad. 944-spec fading away is worse.

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Re:HP limit / power to weight / pro built /low cost

Posted by Sterling Doc - 25 Sep 2010 23:32

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Chips & Headers were taken away because there were actual dynos to show that people could make significant HP with many hours of dyno tuning various chip & header combos. This year, custom chips made for GTS were shown to make 4-6 on a spec car. Taking these away was simple, had little to no net cost for those affected, and made making HP in 944 Spec motor much more difficult. All good things, and needed to be done. Even the best rule changes like this hurt (it took SoCal at least 2 years to recover), but are sometimes needed. The lesson is that we should not take rule changes lightly.

No one has shown that 147/142+ is currently possible *without* chips & headers. IMO, that rule change has done its job. There is lots of speculation about what is
possible
, but current reality is that a home built motor won every race at Nationals, running away from "pro-optimized" (to coin a term) motors by nearly 2 sec per lap in the Championship Race. Right now, a national championship caliber motor can be done for around $3K, and last for several seasons. This is
not
Spec Miata. As Joe, mentioned, the sky is not falling.

What about the future? With regards to "pro optimized" engines, it is a time for close surveillance. We need to look for outliers, find how they make power, *legal or otherwise*, and tighten the ruleset as needed. It needs to be known that if you are exploring "gray" areas in the rules, you may become a guinea pig on how to tighten the rules, and have your gray area made black and

white going forward. Don't complain when this happens, you have been given fair warning. Conversely, if you are not pushing the envelope, you should be able to enjoy a stable ruleset, without having to deal with dynos, or uncertainly. While TM data is not precise enough to justify DQ'ing people over, it may be good enough to identify those motors needing closer scrutiny. Certainly dynos are good enough to make this distinction. We should take a close look at those "outlier" motors to find how they're making more power (when this happens), and tighten the ruleset as needed. Minimal pain (we only hassle the guys making the most power), and we learn how to improve a good ruleset, rather than go an entirely new direction.

As far as low compression motors. I've run one most of the last three years and, like Joe, I'm of the opinion they can compete. However, this remains an issue, and given the choice, we'd all like 10.2 pistons, I suspect. I see several options here:

1) Gather more data about the actual differences (head to head dynos of fresh low & high compression motors?), and make no rule changes now.

2) Allow a spec'd offset crankpin to fix the timing issues that shaving a head causes

3) Spec a widely available, lower cost aftermarket replica of an '88 piston.

4) Spec a weight penalty for '88 pistons (simple, but can be a slippery slope).

Keep the comments coming guys!

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Re:HP limit / power to weight / pro built /low cost
Posted by Big Dog - 26 Sep 2010 01:59

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So, what happened to the rest of this thread???????

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Re:HP limit / power to weight / pro built /low cost
Posted by Sterling Doc - 26 Sep 2010 02:38

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Big Dog wrote:

So, what happened to the rest of this thread???????

Nothing, but your previous posts are here: 944spec.org/944SPEC/component/option,com...mit,6/limitstart,18/ . This topic is now spread over three threads...

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Re:HP limit / power to weight / pro built /low cost

Posted by Big Dog - 26 Sep 2010 04:45

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OK, I see it now.

Thanks.

Jim

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