

2011 - Rules change proposals - List ideas here

Posted by joepaluch - 07 Oct 2010 08:28

Ok,

Time for 2011 rules change proposals.

List them here and I will work them into something we can formally evaluate.

I will start with 2.

1) Change - Clarification on use of Fog light hole(and other holes) for air intake (ie ram air)

Reason - Clearly define that fog light hole can be used for air intake. Also make clear what other holes need to be filled in vs used as in take for cooling air, and engine air.

2) Change - Larger jack pad

Reason - make pad size a close match for typical floor jack pads.

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Re: 2011 - Rules change proposals - List ideas here

Posted by Weston - 27 Oct 2010 09:21

cbuzzetti wrote:

So does that mean that Dirks motors will be illegal in RM?

I don't think anyone wants to simply outlaw them (and they are clearly legal under the current rules), but yes there is an issue with them making more power than the typical 944-Spec motor, so we need to find a reasonable way to balance that out.

I do understand that some find it worthwhile to spend the extra money and go through everything to have a solid motor, so I don't disagree with most people getting Dirks engines, but it has also noticeably raised the bar, performance wise. Now more people feel like they need to build a fresh motor just to have a fair race (or in some cases, to get an advantage), which effectively adds \$2-3k to our build cost and is contributing to the demise of the class. Yes, I could yank out my now perfectly reliable motor and go spend a few thousand bucks too... hell, I receive a nice annual bonus right before racing season starts, but as I've said all along, I have no intention of buying my results and that's a stupid way to spend money; I want to earn my finishing order, not buy it.

We like to say that it comes down to the drivers, and that is true to an extent, but I also see people who say that while building motors for performance reasons, so that's kind of BS too (actions speak louder than words)... A hot motor will not hand a win to someone who would otherwise finish in last place, and my nothing-special engine was still able to get some podium finishes with bent valves and severely compromised compression, but when in a close race between drivers of similar speed, engine power absolutely does matter and that's why some people are building motors.

You can only use driving skill to compensate for a guy who has a better motor when he doesn't drive consistently and is of lesser skill than you are, and that's harder to pull off when you're at a track with longer straights. Run up front with a typical junkyard 944 motor and you'll see what I mean. We're not talking about a difference of 1 hp between cars here, but rather 5-10 hp, which is a big deal when it's relative to a total of only about 130 whp.

So, build a reliable engine all you want, but expect to have any performance advantages gained from it taken away. If a skilled competitor is truly skilled, then surely he will not oppose playing on a level field and taking the class back to the "low cost, equal racing" that attracted many of us to it in the first place.

Collecting actual data will help close the gap between perception and reality, and will show us which things we need to work on balancing.

None of the top 5 cars at Miller have a problem with Davids motors as far as I know.

Under the current rule set, there is clearly no "problem" with his motor. But, was anyone in the top 5 *not* running a fresh motor? That's the real problem here... Building motors to run up front and disregarding anyone who doesn't want to play that game. There were 24 other drivers in that race, each of whom contributes to making this class what it is and deserves an equal vote. Without them, you have

no class, no Nationals, no plastic trophy.

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Re: 2011 - Rules change proposals - List ideas here

Posted by joepaluch - 27 Oct 2010 10:03

Weston wrote:

...But, was anyone in the top 5 *not* running a fresh motor? That's the real problem here... Building motors to run up front and disregarding anyone who doesn't want to play that game. There were 24 other drivers in that race, each of whom contributes to making this class what it is and deserves an equal vote. Without them, you have no class, no Nationals, no plastic trophy.

Car #7 Driven by Darren Griffith has a 2+ year old 9.5:1 piston motor, but in a a guys garage. The car is an 88, but motor was sourced a couple years ago when Darren damaged his 88 motor. So he go junkyard motor from another 944 racer. He had the motor torn down to put in fresh bearings etc and had the head done by the same guy I had 2 heads done by going back to 2003. I guess 1/2 most of the Az 944 field had head done by this guy until he retired in early 2009. In any event the motor was build for reliability using parts on had. Darren's car also run 60-80lbs heavy. He is fast because he is a great seat of the pants driver. Heck he does not even worry about set-up too much. Even so mistake on lap 1 of championship race pushed him back from his 4th place starting position and he had to claw his way back in.

This was the same car and motor he ran in 2009 championship where he finished in the top 10. That however was his first time at Miller. Even so by Saturday he was on the pace.

Locally Darren run strong and fast, but with in upper pack here. He wins some races and not others. Just as I would expect with well driven car given out local talent level.

Look if you show up to a race with bent valves and bad compression you can't expect to do well. I built a motor 2003 using 84 block that had blown headgasket and severe coolant mixing. I damaged the number 4 cylinder try to free up the stuck piston rings in the motor. Put it back together using the original rings and despite the light damage at the top of #4 cylinder. I used an 87 924S head that came off the 924S motor I blew the bottom out of when I spun a bearing. The head was cleaned-up corrosion holes clean and decked to be flat only. That motor made 131 hp on a dyno in 2003. It make 134 hp on a different dyno in 2005 (with in 1 hp of Norm Hamden on the same dyno). That motor in fact made less peak hp than a 138 hp motor I saw in 2004, but make more power in the upper mid range. In any eveny that motor was sound until through 2008. By 2009 it started to get soft. The reason was 2 leaky valves from carbon build up. I found that based on a leak down test and when pulled the motor in late 2008. That is when I installed my spare motor. By 2009 Nationals that motor had 3/4 of seasons worth of

racing on it.

Point is that there seems to be perception in Rocky Mountain that you need a fresh motor super motor to win. I don't believe in that at all. I do believe you will be slow with and motor that has poor compression and bad leakdown and using old plug wires and worn spark plugs. However take that old motor and fix what is wrong and you will be fine.

Don't be fooled into playing the game that you need a super motor to complete.

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Re: 2011 - Rules change proposals - List ideas here

Posted by Weston - 27 Oct 2010 11:13

joepaluch wrote:

Look if you show up to a race with bent valves and bad compression you can't expect to do well.

I agree with that, and I had only given that example to partially agree with your point that driver does play a large role. Mechanical damage like that gets fixed after the event. Nobody is racing with a crapped up motor and then saying that we need to slow everyone else down to give them a chance... It's just ridiculous to try to cast my statement in that light.

However, it is funny that you agree that being down on power by 10whp from the baseline due to a mechanical issue is clearly going to cause you problems, but when a good chunk of the class is up 10whp above the baseline due to a motor build, you say that's a non-issue. Sorry, but it just doesn't work that way... engine power either matters or it doesn't, and physics say that it does.

Point is that there seems to be perception in Rocky Mountain that you need a fresh motor super motor to win.

When you see multiple front-runners clearly get motored by guys with fresh engines, that is not just a perception, but a reality. I've seen this from the driver's seat, as well as from the spectator stands... Car A comes out of a corner with a clearly higher exit speed than Car B and is pulling on him, but then Car B just turns the tables and leaves him behind down the straight, even though Car A also has the benefit of

being in his draft.

If you don't believe me, then put some real data to it and share it openly. Until then, there are no grounds for saying that it's a false perception. I've already seen data that says I can purchase about a second of lap time at our Pueblo track. And that's relative to the 1:50 laps that I'm currently running... It sure would be nice to break a track record, but I'm not going to piss away a few thousand bucks to do it. There's nothing "wrong" with my current motor... it's in good condition, but it just doesn't make 138+ whp. And I'm far from being the only one in this situation.

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Re: 2011 - Rules change proposals - List ideas here

Posted by cbuzzetti - 27 Oct 2010 11:16

Well said Mr. Paluch!!!!

You must drive the car 100% every lap to win. The driver talent depth has gotten deeper and will continue to do so.

Bring your junkyard motor and expect to finish mid pack. Simple as that.

Do a few small things, prepare your car properly and drive the wheels off of it and you can be at the front. You don't need the big money head or 88 pistons.

You are going to have to step up Westin. It is the future.

That said, my motor is 4 years old and came with the car when I bought it. I have since changed the head to a lower compression one so that it is not so close to the limit. It is a Milledge head and it does make less HP than the one I took off. And then I re-set my track record at Buttonwillow. Hmmm....

Must be the motor!!!

So again it seems like a RM problem. Maybe only one or two people.

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Re: 2011 - Rules change proposals - List ideas here

Posted by joepaluch - 27 Oct 2010 11:26

Weston wrote:

...If you don't believe me, then put some real data to it and share it openly. Until then, there are no grounds for saying that it's a false perception. I've already seen data that says I can purchase about a second of lap time at our Pueblo track. And that's relative to the 1:50 laps that I'm currently running...

Where is the data? I have not seen a thing and only hear stories. We have not issues in Arizona and I believe our region did well at Miller and could have won the championship this year. The fact we did not had nothing to do with hp and everything to due with the fortunes of racing.

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Re: 2011 - Rules change proposals - List ideas here

Posted by Sterling Doc - 27 Oct 2010 11:36

Weston, Bottoz,

How do you go about equalizing cars to within 5 HP in a racetrack environment?

Supposing you can, how often do you recheck cars to re-equalize them, since a simple tune up (plugs, wires, airfilters), can be done any time, and easily net a 5 HP improvement.

How do you keep the same individuals who you are concerned about, from working the system (purposfully install dirty air filter, then remove it after "equalization"), without accidentally penalizing the guy who just changes a filter, plugs, etc, because it's time, or his car isn't running quite right?

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If you really want to "equalize" motors, you've got to deal with all these issues, or as I've said before, you're just handing out random penalties. That's a mess for class moral.

If we gather data, we can see over time, what makes for a significant difference, but we are a long ways off from knowing that now. Too much noise in the data right now.

Finally, how much laptime is 5 HP worth on an average track, would you guess?

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