

2014 Rule Change Decisions

Posted by Sterling Doc - 12 Nov 2013 18:15

We had a good debate this year with lots of suggestions. The series directors deliberated over these offline, and some good solutions and compromises were hashed out. The decisions, and a brief explanations follow below.

1. Balance shaft (belt) delete

Denied

There is too much uncertainty about the adverse consequences, even among major engine builders.

The vote was about even, and offered no compelling reason for a rules change given the potential risks involved.

2. Oil Pan Gasket retainer

Approved

This had fairly overwhelming support in the vote count, and seems low risk for unintended consequences.

3. Expand legal ballast mounting area

Denied

No compelling reason for a rules change, and vote was negative.

Current location is one of the stronger/safer places to mount ballast in a 944.

Competitors are reminded that attempts to end run around the ballast rule are subject to penalties. Anything that is heavy, and unnecessary, or unreasonably heavy for it's intended function may be deemed ballast at the discretion of a NASA official, and subject to ballast restrictions on mounting and location. If anyone has questions on this, they are encouraged to contact their series director, or me on what they have in mind, or with any concerns.

4. Allow 205/50/15 RR Toyo RR tires

Denied

Vote went against. Potentially messy.

5a. Remove rule 12.5 Heads and allowable shaving

Denied

Popular vote was close.

After some discussion among the series directors, it was decided that dyno and whistler availability is not sufficient to eliminate this rule at this time.

5b. Remove rule 13.5 computer management system

Denied

Vote was unanimous against this proposal

6. Remove 18 - Special Transition allowance

Denied

Vote was to keep this rule, and series directors thought it was useful enough to keep.

7. Allow offset Woodruff key

Approved, but limited to 2 degree offset key, and low compression piston engines only

This proposal had the most debate by the series directors. While it is widely agreed that there should be some allowance to improve the situation of the low compression piston cars, there was significant concern over the expense of dyno testing to dial this in for a given car and head shave. There is also little hard data to guide racers. Online sources indicate that somewhere around 3 degrees is needed to correct a significantly shaved head, and less for lesser shaves. Commonly available offset keys come in 2 and 4 degree offsets. It was thought that offering a single, conservative option would greatly simplify the process, and lessen the expense involved in implementing this new rule, while still offering some benefit to the low compression cars. It should also be low risk. So the compromise is one take-it-or-leave-it option: OEM, or an offset Woodruff key with 2 degrees of advance.

8. Outlaw '88 computer

Denied

Vote was negative, and it was thought there was not a compelling reason to force change on a large installed base of cars.

9a. Allow blocks to be honed 20 thousandths oversize, and bores redone by factory process

9b. Allow exact reproduction '88 piston, 20 thousands oversize

Denied

The vote was surprisingly close, and the day for this rule change is coming, but not yet. As of now, the availability of motors has not reached the pain threshold for a major rules change.

10. Transmission Cooler

Approved

The vote was close here as well.

We now have data showing high temps, especially with sustained running in hot ambient temps. While the effect of these temps on failure rates is not clear, expert opinion on the observed 270 degree oil temps is unfavorable with regard to transmission life. LSD transmissions, in particular, are getting more scarce and expensive. As this is an entirely optional modification, with no significant performance potential, it was passed.

We will not allow Turbo cases/oil pump gears, only external pumps and coolers.

11. Allow crankcase breather to vent to a catch can

Approved

Vote was highly positive. Little downside, and removed any gray area for cars so equipped.

12a. **Limit ram air ducting to bumper turn signal hole - or-**

12b. **No ducting to air filter element outside of OEM configuration. May use open element air filter within the engine compartment**

Denied

Both went down by popular vote by a substantial margin.

13. Allow use of Lexan for rear side windows.

Approved

Vote was highly positive, and has several years of requests now.

The Lexan will have to be in the OEM window gaskets to maintain OEM look.

May be used to mount ducts for cooling purposes - driver or car.

14. *Removal of spare tire well for all cars*

Denied

Surprisingly (to me) went down hard by popular vote. This does not change the existing allowance for late cars.

Dyno Rules

Moving forward, we will clarify that cars may be topped off of fluids, and that dyno sessions are open to all. In practice, this has been the case, but it was thought wise to mak the rules clear.

We will allow competitors to request a 5 pull compliance run, with the lowest, and highest pulls being dropped, and the middle 3 averaged. A competitor must request this option before the start of compliance pulls, and than they are stuck with the results. If a standard 3 pull run would have worked out better, they cannot go back and ask for their results to be reconstructed *it ex post facto*). We will monitor this option moving forward, to see if this option results in any significant change in outcomes.

No change in temperature specifications. Series directors will need to be prepared need to use external means to determine oil temps on cars without gauges that read in numbers (or no oil temp gauge at all).

These rules will be inserted into the rules and sent to the NASA main office. While they are always subject to revision and approval by NASA, the expectation (and practice for many years) is that they are adopted as recommended.

I hope this helps all with their offseason plans for the 2014 season!

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Re: 2014 Rule Change Decisions

Posted by 944Racer72 - 16 Dec 2013 09:28

Mine is about the same setup as Jim's with some metal cut although I'm not sure how much. Unfortunately I won't be able to access my car until after Christmas to measure.

I have a new turbo radiator in my car and mounting the cooler in front of the radiator in my car caused the water temps to go marginal. Moving it out of the way lowered temps to where I have no concern.

For what it's worth, I'm pretty sure Tyler's car had a Setrab similar to mine with about the same or more metal cut out. Nearly every car out here has a big oil cooler on the right side of engine bay and some metal has to be removed to fit it. We're talking 1 LB of metal and additional drag. Zero performance advantage. Why is this suddenly an issue?

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Re: 2014 Rule Change Decisions

Posted by Sterling Doc - 16 Dec 2013 10:12

It's only an issue because it was recommended by NASA that we put a number on this when they reviewed the rules draft. While I understand that it's good practice in rules to define things as much as possible (and that is the intention of the national offices recommendation), I can see that this is making a big deal out of something that not neccessary.

I will go back to Will, and try to push through the original "minimum neccessary" wording. While it's vague, it seems better than over-regulating this.

Edit: Email was sent today. Will was out of the office last week. he is back today. Hopefully he is not too backed up, and we will get this done soon.

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Re: 2014 Rule Change Decisions

Posted by 944Racer72 - 16 Dec 2013 11:41

Thanks Eric. I think this would be a big deal for the entire west coast race group.

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Re: 2014 Rule Change Decisions

Posted by Sterling Doc - 16 Dec 2013 11:51

Update - Will got back to me already (catches up quickly!). We have the OK to go back to the "minimum necessary" wording in the first draft. This is just to put a lid on extorting this rule for large scale unibody modifications. The specific size limitation is gone.

To be clear, this is for the oil cooler specifically, and does not apply to ram air. The ruling outlawing cutting holes in the unibody for ram air stays.

The only thing we are waiting on is getting the picture of the "Ken bracket" into the rules. The rules drafts are in an RTF format, so I need NASA to do this on the back end.

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Re: 2014 Rule Change Decisions

Posted by rd7839 - 16 Dec 2013 13:43

FWIW, I had my oil cooler in front of the radiator for a long time but deep in the summer my water temps ran high(per the factory gauge). I put an oil temp gauge in and saw some high numbers as well. I moved it to the right side, buggered up a nice big hole, much bigger than 4 inches and still had high temps. We moved the cooler forward a bit to help the air from getting packed in behind it, put a two hole scoop in the turn signal and one hole scoop in the foglight hole, ran some brake cooling hoses to the cooler and now I can barely get to 210 degrees even on a 100+ degree day! I still run the factory water temp gauge for now but it generally runs in the middle in the summer unless I'm right up behind someone

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