

Engine Related rules Changes (1-3)

Posted by joepaluch - 07 Nov 2009 23:28

These are PROPOSED changes gather from the various discussions. Use this area to further discuss these. Based on the feedback we get the rules will be changed (or not) to reflect these updates. It is anticipated that some rules changes will NOT be accepted, but all are up for debate.

1 Replacement Pistons

The following OE Porsche pistons and aftermarket pistons are allowed 100 mm Nominal diameter. Overbore pistons (100.5 mm or 101 mm) from ANY source are not allowed

OE Piston Tol group 0, 99.980 mm Comp ratios 9.5:1 , 10.2:1, Cyl bore 100.000 mm

OE Piston Tol group 1, 99.990 mm Comp ratios 9.5:1 , 10.2:1, Cyl bore 100.010 mm

OE Piston Tol group 2, 100.000 mm Comp ratios 9.5:1 , 10.2:1, Cyl bore 100.020 mm

YYYY Piston PN XXXX, 100.050 mm Comp ratio 9.5:1,--- Only, - Cyl bore 100.070 (intended for repair only)

--- Note this spec is intended to be a tolerance group 5-6 effective and still much less than the first oversize piston. In fact first oversize is 100.480 mm and this is 100.050 mm. That 0.430 mm difference. To put in US units. Stock allows the piston to be 3.9362 inches to 3.9370 inches. This allows 0.0008 piston diameter range. The "repair piston" would be .0020 larger than Tol group 2. Thus allowing .001 machining per size. Note first over size would allow for .019 or just about .010 per side from tol group 2. This means this piston is 10x smaller than the first oversize. The performance impact from the diameter changes is nothing. The performance impact from close piston to cylinder clearances is unknown.

The goal is to develop a piston that can be used with lightly repaired blocks with the same weight and performance as stock. Over time the supply of good blocks may become limited and this may be required maintain a supply of engine blocks.

2 Pump Gas

Cars may be required to add 5 gallons of fuel from a local source(Pump Gas). This fuel will be a standard road fuel local to the area with a minimum of 91 octane. Fuel may contain up to 10% ethanol and no additives or octane boosters may be added to or mixed with the reference fuel at any time. The

competitor is responsible for the cost of the fuel. A reasonable attempt will be made to add the fuel to an empty tank as to not provide excessive fuel weight.

3 Valve springs

Aftermarket Valve springs may be used when rebuilding the head. Spec?

(EDITED 11/9/09 to added in piston dimensions)

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Re:Engine Related rules Changes (1-3)

Posted by Motul 47x - 08 Nov 2009 09:48

SO let me get this straight. i have to pay for and run fuel of someones choice that could be possibly contaminated.??

Why don't we just leave the fuel alone.?

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Re:Engine Related rules Changes (1-3)

Posted by cbuzzetti - 08 Nov 2009 13:54

Wow I hope none of this gets through.

These are not changes that will control costs. I have scratches on all my bores. I will need all new pistons. My engine will now seal better than any one elses. My car will make great power. Everyone else will need to do the same to keep equal.

I don't have a huge problem with the valve spring rule but there is simply no need to change what we got. A stiffer spring in these cars will not be an advantage. We don't rev them high enough. Making sure they are all in tolerance is what will provide the best results.

Not sure there is a real fix for the fuel non-issue.

Lets be sure we are only changing rules that really need to be changed. Otherwise "NO NEW RULES"

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Re:Engine Related rules Changes (1-3)

Posted by JerryW - 09 Nov 2009 12:33

joepaluch wrote:

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On the pistons I don't know enough to go one way or the other. I don't see an issue with using stock valve springs - they are still easily available.

On the pump gas - why 91 Octane which is the highest blend available here in Nor Cal for pump gas ?

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Re:Engine Related rules Changes (1-3)

Posted by joepaluch - 09 Nov 2009 21:30

91 is the highest octane normal pump gas in the USA. Some places might have 93 available, but every place has at least 91 with 10% ethanol. Some cars could run 87 pump gas, but that was only in 100% stock form and only the low compression motors. Most everyone that run pump gas runs 91 at minimum. 87 is a bit risky. So if we are targeting pump gas 91 is a reasonable minimum standard.

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Re:Engine Related rules Changes (1-3)

Posted by Weston - 10 Nov 2009 05:41

#1 and #2 seem good, but I'd like more info on #3... I don't see a need for aftermarket valve springs unless stock ones are expensive.

cbuzzetti wrote:

These are not changes that will control costs. I have scratches on all my bores. I will need all new pistons. My engine will now seal better than any one elses. My car will make great power. Everyone else will need to do the same to keep equal.

Mixing of tolerance groups is already legal. The only real change is that a slightly larger aftermarket 9.5:1 piston of the same weight as stock may be allowed. I would have a problem with this if it was the 10.2:1 pistons, but it's really just the 9.5:1 here. Personally, I'd still go out and get 10.2:1 pistons before I got larger 9.5:1 pistons, so it makes no difference to me.

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