Engine Related rules Changes (1-3)

Posted by joepaluch - 07 Nov 2009 23:28

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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, Cly 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 intened 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 maching 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 peformance 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 weightand performance as stock. Over time the supply of good blocks may become limited and this maybe 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 minumum of 91 octane. Fuel may contain up to 10% ethanol and no additives or octane boosters may be added to ro mixed with the reference fuel at any time. The

competitor is resposnsible 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 spings

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 cbuzzetti - 10 Nov 2009 07:26

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IMO it opens a door that should (for the time being) stay closed.

There is no shortage of blocks, pistons or cranks at this point in time.

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Re:Engine Related rules Changes (1-3)

Posted by 944cer - 10 Nov 2009 23:28

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No to all three. Unnecessary changes

Lee

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Re:Engine Related rules Changes (1-3)

Posted by Big Dog - 11 Nov 2009 12:28

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Allowing repair of our engines is a great idea. I see no issue of performance here, only allowing us to save blocks

I do not see any need for a gas rule at this time.

I do not know enough about the spring issue. If it improves our reliability, I support the idea. I have had several valve spring failures. Of course, I don't know why they failed but if some other spring can avoid this known problem, I say wonderful.

As for the concern about reving higher, who cares. Our engines quit making power at 6K or so but if better springs can prevent an issue on an over-rev, again, great idea to protect our engines. I know of many engines that have been damages due to drivers making a mistake and we should try to prevent as many of these as we can. Again, I do not see this as a performance issue and it should be considered.

Jim

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Re:Engine Related rules Changes (1-3)

Posted by DrLudlow - 15 Nov 2009 06:36

#1 Yes on the pistons 100.05 @ 9.5-1

I do think there is a shortage of saveable motors. It seems you have to buy a whole $1500 car, strip it, sell stuff to recoup, recycle, discard etc. Tear the motor apart only to find its crap. I already have 3 of every thing except useable shortblocks. After all of that $600-800 for a non performance advantage piston set seems like free to me. I haven't had any luck finding local junkyard motors priced right, and am not paying non refundable freight to buy sight unseen motors from afar. I say yes on rebuilder 9.5 pistons and teleport all 10.2 88 pistons into outerspace including my set

#2 no opinion yet

#3 no opinion yet

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Re:Engine Related rules Changes (1-3)

Posted by joepaluch - 15 Nov 2009 23:30

My Take

1) Mixed feelings. I understand where we are going with this, but also fear guys doing rebuilds with new pistons for no reason. Our bores are generally long lasting and don't need maching work. This would open things up to making machine work a standard practice when doing a motor. That will drive up costs. The counter arguments are two fold. The performance gain form this piston size is tiny. In fact more gain probably will come from a better match from piston clearance vs bore diameter. It will allow

us to reuse older slightly damaged blocks. One day blocks will become scarce and that will limit the growth of the class. At that time this will be an important step to keeping the class viable.

However I am not sure we are there now. My perference is to say no to this for 2010. This is a big step and once opened we will not have any easy time taking it away. So rather than make a mistake and allow somehting now that we may regret... Lets no do it for 2010. We can reconsider next year for 2011. This will give us more time to understand the implications of this.

2) No, but mixed...I personally have no issues/fears with race gas. As such we don't need this. However if we really do think pump gas is the way to go in our class I think this is the best way to control it. Fuel sampling is not hard, but it will take a chemical analysis to validate and the nature of fuel additives in pump gas can make it hard to know what is legal. Seems so much easier to say "here use this fuel" as a way to contol it. Even so it far easier to no even do anything. Since I don't see it as major issue I don't even think we should mess with it.

3) No... Some guys asked for Turbo valve springs. Now where are you? If Turbo's are ok how about other springs? Nah keep it stock.

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