

2010 rules Released

Posted by joepaluch - 20 Jan 2010 21:40

Rules have been released for 2010.

As with last year change are marked clearly in Red.

Here is the link.

www.nasaprорacing.com/rules/944_spec_rules.pdf

Below is the list of what came of all the rules proposals. This to clearly inform you of what was accepted and what was not.

These are PROPOSED changes gather from the various discussions with responses in red to each proposal. All responses have a stated reason for accepting or rejecting. Accepted responses also denote which section of rules has been revised.

Engine Proposals 1-3

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)

--- 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 to maintain a supply of engine blocks.

Response: Rejected

The concept has some validity, but we do not feel 2010 is the year to make a change.

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.

Response: Rejected

We do not feel that fuel used is a performance factor. Therefore we recommend no change for 2010. If we determined non-pump gas may be a factor in on track performance this may be revisited.

3 Valve springs

Aftermarket (non-OE spec) valve springs may be used when rebuilding the head. Spec TBD

Response: Rejected

We do not see strong enough benefit from a change that might create unintended consequences.

Cooling System Proposals 4-5

4 Any Radiator including Mods Radiator mounts may be modified to facilitate radiator installation and secure mounting. The lower radiator mount rail may be moved up or down to allow for a taller or shorter radiator than stock. The upper mount rail and both left and right side rails must remain in their original position and still function as radiator supports. Radiators must be installed at 90 degrees to the ground and in their original position forward/aft in the chassis.

Response: Accepted (slight reword) Section 11.4

The intent to give 944 drivers greater options to ensuring they maintain safe engines temperatures during racing by allowing modifications to allow for 944 Turbo radiators or slightly taller and/or thicker radiators.

5 Radiator Fans

Radiator Fans and fan shrouds are may removed or replaced with any replacement fan or fans. Fans and fan shrouds may only be used to direct air flow through the radiator.

Response: Accepted Section 11.3

The intent to give 944 drivers greater options to ensuring they maintain safe engines temperatures during racing.

Body Proposals (6-10)

6 Min weight 2650 Minimum 2650lbs with driver

Response: Rejected

The current weight is achievable even with larger drivers and therefore there is no reason to change.

7 Starters (no heavier than stock)

Aftermarket starters are allowed, but they may not weight more than TBD lbs (weight would be the stock early starter)

Response: Rejected

There is no clear benefit from making this change the rules.

8 Cut metal supports on hood

The sheet metal support frame on the under side of the hood that may be removed or modified

Response: Rejected

There is no clear benefit from making this change the rules. Rules on cutting of metal will remain the same.

9 Lexan Windshield

Lexan windshields are allowed (per NASA CCR 15.13) with a minimum thickness of 1/4 inch. (EDITED 11/24/09, Was 3/16),

Response: Revised Section 16.3.8

There is sufficient push to allow lexan as a way to reduce cost of multiple windshield replacements. It is believe that this will reduce costs by increasing the overall useful life of a windshield. Any performance impact from a reduced center of gravity is considered minimal. Installation is per NASA CCRs which were revised for 2010. NASA CCR min is 3/16 min with center support. By design we are following the NASA CCR not some other min standard.

10 Jack plates

Factory Jack points located on each rocker in the middle of the car may have steel or aluminum plates of 4"x4" max per side and 1/8" thick added to limit deformation of these points that can occur during raising of the car.

Response: Accepted Section 16.3.14

There it is believed this will aid in the maintenance of a race car and reduce the chance of damage.

Wheels & Tires Proposals (11-14)

11 Fuchs

15x7 fuchs 23.3 mm offset allowed

Response: Rejected

The fuchs wheel despite being a factory option is considered too light and a performance advantage over the existing cookie cutters and phone dials

12 Any wheel no lighter than cookie cutter

Any 15x7 wheel is allowed not less than TBD lbs (no less than current ATS cookie cutter wheels). Any offset may be used but overall track width must comply with current rules.

Response: Rejected

The number of cheap aftermarket wheels in 5x130 mm bolt pattern is slim. This means most any new wheel will cost more than the current alternatives which are still in adequate supply. Also allowing different wheels opens up the possibility of performance advantage by selecting where the weight is located in the wheel.

13 205/50 R15 RA-1

Spec tire is 205/50 R15 RA-1

Response: Rejected

The tire size of choice for the 944 NA is 225/50 and has been that way for many years with good success. 205/50 offer no clear advantage and a few possible disadvantages. While the 205/50 may be slightly cheap it is also expect to see less life. It is not fully understood how this impacts the cost per mile of the tire, but no changes is recommended at this time.

14 225/50 RA-1 With allowance for R888

Spec tire for 2010 is the 225/50 R15 RA-1. Competitors may use up existing supplies of R888 for the first 3 regional races throughout 2010. The only tire allowed at Nationals will be the RA-1. Tire shaving is allowed.

Response: Revised Section 14.10

The spec tire for 2010 will be the 225/50 R15 RA-1. Per the announcement from NASA National, 944 Spec will allow use of R888 in 22/50 R15 for the first 3 events of season in each region. If you have a certain hardship and may require using old R888 past this point please discuss with your local 944 spec director.

Fuel System Proposals (15-16)

15 Fuel Filler neck Restrictor

Fuel filler neck may be modified to remove the diameter restrictor.

Response: Accepted Section 12.4

This change will have no impact in sprint race formats, but allow the 944 to have more efficient and safer fuel stops in enduros by preventing the fuel hose from being caught on the restrictor. This will reduce the chance of fuel spilling.

16 Fuel Lines Aftermarket & Coverings Rubber fuel lines from the chassis to the fuel rail may be replaced or modified. Any covering or heat shielding allowed on these lines in the interest of fire prevention.

Response: Accepted Section 12.6.5

This change will improve the safety of the 944 by allowing drivers better opportunity to protect the fuel lines. 944 fuel lines can be source of fire as they are subject to extreme heat and modifications to these lines to limit susceptibility to damage will make the cars safer.

Suspension Rules Proposals (17)

17 Front Ball joints using bronze cups

Any material may be used in the ball joints cups on aluminum A-arms when rebuilding. Aftermarket ball joints may be used. Pin diameter must remain stock at 17 mm. Longer than stock geometry correction pins are not allowed.

Response: Accepted Section 14.12

This change will improve the maintainability of the 944 by allowing use of a material in the ball joint that is better suited to racing.

Clarifications of Existing allowances (18-21)

18 Aftermarket Parts sold as direct replacements legal

Aftermarket parts designed and sold as direct replacements for stock genuine Porsche original equipment parts with no change in performance or weight may be used and will be considered "stock" for the purposes of these rules. Subsequent sections of these rules which specifically state "genuine Porsche OE" will allow use of only original factory produced parts or genuine Porsche OE replacement parts. This is intended to allow general use of non-Porsche branded replacement parts in place of genuine Porsche parts in non performance critical areas to reduce costs. Aftermarket parts that are sold and/or designed as improvements to factory parts are not considered direct replacement parts for the purposes of rules compliance.

Response: Accepted Section 2.1, Section 11.1, Section 12.1, Section 12.5, Section 12.7.1, Section 14.1, Section 15, Section 15.7

This clarification will clearly allow what is common practice of allowing standard off the shelf knock-off brand replacement parts. However any part that is performance advantage must have a specific allowance in the rules for it. Engine rules also restricted to just original parts for key and complex parts where it may be quite hard to ensure these parts meet OE specs.

19 Fog light holes for ducting - Brakes or other

The backing of Fog Light buckets may be removed for cooling purposes including, but not limited to oil cooling and brake cooling.

Response: Accepted Section 16.1.1

This clarification will clearly allow what is common practice.

20 Remove power steering bracket

Power steering reservoir tank bracket may be removed.

Response: Accepted Section 14.8

This clarification will clearly allow what is common practice. Also clearly stated the tank and cooling lines can be removed as well.

21 Aftermarket A/C Delete brackets (Alternator relocation) & revised tensioner

Alternators maybe relocated or reposition by use of either the factory A/C delete bracket or any aftermarket bracket or tensioning system. The alternator may be mounted no lower than the positioning defined by the factory A/C delete bracket.

Response: Accepted Section 11.10

This clarification will clearly allow what is common practice.