



CRN Summer 14 Rules Proposals

From: Walter Fricke, Technical and Rules

Fellow racers: Here are the changes to the Club Race Rules which have been proposed by you and the National staff, and have been determined to be worthy of putting out for comment. Note that this does not mean that the Rules Committee favors any particular proposal. Our job was to eliminate those which simply would not be approved. Example, the proposal to require mufflers on Spec Boxsters. Proposals concerning operational areas governed by the Stewards, or addressed to the points system are not covered here either.

Comments should be sent to crrules@pca.org by August 30. It would help me in collating responses if you would address only one rule per e-mail, and put some identifier (e.g., extinguisher) in the title. I spend quite a bit of time sorting responses which address several proposals into separate proposal slots, so that the Rules Committee can see all of the comments on Proposal X at one place, and we can discuss the proposal without having to rely mainly on our memories for the various points made. Of course, comments covering several proposals in one document or e-mail will not be discounted.

GENERAL

Video. Should all cars be required to be equipped with a video camera, with recordings capable of being reviewed by a steward using common programs, and functioning and with adequate memory, during all on track sessions?

SAFETY

Extinguishers. The rules require at a minimum a 2.5 lb fire extinguisher. An on-board fire system is strongly recommended. Should an on-board system be required? If so, what should the minimum size be? Be advised that if a system is required, it will also require that it be both driver operable and externally operable.

Vent window. Should Stock/Prepared cars with a door frame and "vent" window be allowed to remove the window portion on the driver's side?

Dry break. Should a single opening dry break be allowed in Stock/Prepared as long as it fits in the stock compartment under the gas cap with minimal modifications to that area and the pathway to the fuel tank?

Roof net. Should a roof net custom fabricated based on an individual template of the halo area of the roll cage by a manufacturer of SFI or FIA approved webbing goods be allowed on all cars, including SPB, which run or are allowed to run a plastic roof, as a substitute for arm restraints?

Seat mounting. Please comment on these open issues concerning mounting requirements for seats which qualify for the FIA seat exception to the seat back brace rule:

The Appendix J guidance requires that all fasteners of components of the system must use bolts of at least M8 8.8 grade, as is currently required for attachment of the seat to its mount and the mount to a

seat adjuster (slider) if used. Porsche upgraded chassis mount bolts to 8mm starting in mid-1985 with 944s, and in 1986 for all or most other models. Should 6mm bolts, as used in early Porsches, continue to be allowed in the chassis mount portion of the system?

It appears that the later 10mm chassis attachments are adequate if inspected frequently for cracks in the sheet metal. Which earlier attachments taking the 8mm bolt are also adequate? It must be recognized that the 1989 Carrera whose front mount failed by distorting, leading to the death of the racer, used 8mm mounting bolts and was of a design much improved over the earlier cantilevered mounts. The current rule is that all mounts must be reinforced no matter what their design is.

Some tall drivers have felt they had to lower the seat mounting in order to allow their helmet to be at a level required by the roll bar rules. Many professional racing organizations prohibit modifying the factory mounts, and some quite tall drivers have been quite successful nonetheless. However, PCA Club racing cannot adopt as simple but arbitrary a rule. Modification generally requires cutting out all or part of the factory chassis mount, and fabricating a substitute lower down. Wording specifications for re-engineering what Porsche has done which are specific enough so that racers and shops can understand what is required, and that scrutineers can inspect for compliance is no easy matter, and not overly lengthy, is no easy task.

ICE MODE. There have been many reports concerning ABS systems of "Ice Mode," starting with the Boxster. One solution proposed is to allow the brake booster's size to be reduced, the master cylinder diameter to be increased, or both. This reduces the available peak pressure, which pressure is to be expected in a "panic" breaking event. Whether or not you believe this will cure Ice Mode, should it be allowed in Stock for these models?

STOCK

PS Underdrive. Boxsters and Caymans are allowed to use an underdrive pulley on the power steering pump, even though it is advertised to produce a horsepower gain. However, there is no room for a larger pump pulley on the 2d Generation of these models. The available Gen 2 underdrive kit is expensive, and advertises even larger horsepower gains because it reduces the power draw from all the accessories powered by the serpentine belt by using a smaller crank pulley and other pieces. Should these models be permitted to use an underdrive crank pulley kit on the main belt, with the understanding that this will slow down the other systems as well? Should this modification be allowed in Gen 2 GTB Caymans as well?
993 X51. Should the 993 X51 engine power option be included in the list of similar factory options which are treated as Prepared modifications?

993 Weight. Should the 993s be given a 120 pound minimum weight reduction? The proponent notes that the 964 chassis has a slightly better aerodynamic rating, and that when the 964s shed their restrictive exhaust system as allowed, their power is approximately equal to that of the 993s, whose much improved exhaust leaves little room for improvement. In addition, the 964 transmission has a gearing advantage in 3d through 5th. The minimum weight for 964s which run at their allowed G base weight is substantially less, and would still be less under this proposal.

PCCB and Aero Prepared. At about the time of the advent of the water cooled sixes, Porsche began offering an increased range of options as part of the "build your own car" approach. Many have to do with style, but at least two affect performance: PCCB brakes and Aerokits. Traditionally, brake modifications and wings have been Prepared modifications. The proposal is to treat these options in the same way - you can use them, but run in Prepared. The proponents do not believe, among other things,

that it should be permitted that PCCB brake calipers can be used in Stock, even (or perhaps especially) when a steel rotor, never offered for these models, is used instead of the PCCB rotor.

Gen 1 997 Carrera to I. Excluding one Panamera model, the 2005-8 997 Carrera has the most favorable weight to power ratio in H. Its ratio is equivalent to two models classed in I, and nearly so to two more. Proponents of this change believe its race results show it would be competitive in I. Should this model be moved to Class I?

Block Resleeving. Should the water cooled 6 cylinder motors with a block rather than a case be allowed to be resleeved with liners using Nikasil to repair wear (ovality) or damage? It appears that resleeving with the Factory Lokasil is simply not possible. If approved, the stock piston for the motor would have to be used.

Certain Aftermarket parts not to be custom. Considerable ingenuity has been used over the 22 years of PCA Club Racing to exploit the suspension modifications allowed in Stock. It has gotten to the point where some racers have had modifiable components custom made. Should the Stock suspension rules be changed to require that shock absorbers, camber plates, springs, torsion bars, sway bars and links, adjustable spring plates, and toe links allowed to be aftermarket must be readily available from businesses which advertise these parts for sale from a catalog or listing, and are not custom parts (even if the manufacturer would happily make custom parts as well)?

Shock Tower forward bracing. Should reinforcements from the shock towers to the front of the car which attach with fasteners which share a stock fastener (e.g., fender bolts, shock mounts) be allowed? These have been accepted by at events under the rubric of being a shock tower brace. The shock tower brace allowance can easily be altered to prohibit this or allow it.

SPB

Should the minimum SPB weight be raised 50 pounds? The proponent argues that, because it is difficult for many drivers to get their cars down to minimum weight, considering the things which are allowed or required which add weight (roll cage, cool suit equipment, fire systems, and so on). The assertion is that weight removal often requires use of allowed, but expensive, substitute parts. Raising the minimum weight this modest amount would reduce costs and make the playing field even more level.

SP996

Should the rain tire for SP996 be changed to: Hoosier SPORTS CAR D.O.T. RADIAL WET (H2O) P245/35R18 front, P275/35R18 rear allowed as rain tires. Toyo R888s previously allowed (front: 245x40x18 and rear: 285x30x18) are allowed as rain tires until the end of 2015.

GTP

The GTP structure for historic race cars never offered as street models or otherwise included in our class system has not changed in years. Its architecture is similar to the previous GT structure - cars are classed by displacement and intake system (NA or blown). Retired race cars of the Daytona Prototype character, have on occasion entered our races, after demonstrating that Porsche recognized them as Porsches despite the fact that the chassis was constructed by someone else. The result is that very modern, highly modified 4 valve water cooled race motors could be in the same class as an older, 2 valve engined car. Should additional factors be considered in classing these cars, and if so, what? Should a system similar to the current GT system, which included displacement, weight, and an engine types theoretical maximum HP/Liter be considered? What should the factors be?

GTB

GTB allowed selected Stock modifications. The stock class rules allow a variety of engine modifications which improve reliability but do not otherwise offer a performance advantage. These are found under Stock. 1. Engine. paragraphs K, P (if amended as proposes), and Q. Should these rules, if not already included in allowed GTB modifications, be extended to that class?

GTC

Should one piece rims of class dimensions be allowed in GTC3?

Should the rear wing of GTC3 cars be allowed to be raised to gain better rear vision, and if so, how much?

Should GTC and GTA cars which came from the factory with plastic door windows be allowed to reattach those windows, if removed, with rivets or other fasteners? Note that such a replacement window on the driver's side would require use of a window net.

RULES EFFECTIVE IN 2015: These are not being put out for comment, but for advance warning or notice:

Window nets must attach at the top so that they fall down when disconnected.

Window nets must attach to the roll cage.

The two event rookie stock class roll bar allowance will be deleted from the rule book, and all cars will be required to have a complying roll cage.

For the FIA seat mount exception in Appendix J, in addition to the Porsche Cup/manual adjustment slider, double locking sliders which lock with at least two teeth on both sides, are formed from steel at least as thick as that used on the Cup style mounts, and are designed, manufactured, and widely marketed for use in race cars will be acceptable. Cars with the 10mm seat to chassis mounting bolt may use adapters attached with those bolts to the stock mounts which are made, tested, advertised, and commercially available for securing approved seat mounts.

RULES EFFECTIVE IMMEDIATELY

Stock Suspension Rule 2.H is changed to read: Spring rates are free, but torsion bars must be of stock length, with their ends fixed only in the stock locations, and able to rotate freely within the stock torsion tubes.

The Stock engine rules are clarified to allow a power steering cooler to be inserted into the power steering system.

Stock engine rule 1.A. defines where the engine, for rules purposes, starts and stops. A subsequent rule makes the exhaust system free after the point where the exhaust headers attach. No rule clearly allows

alterations for the intake air system which are not "after the air filter box," although some modification is intended to be allowed by necessary implication. Such modifications (e.g., aftermarket air filters, modification of the stock air filter cover, or omitting the air filter entirely) are allowed.

PROPOSALS NOT ACCEPTED FOR COMMENT.

There isn't room to indicate the rationale for rejecting proposals. But two deserve explanation. Suggestions were received to alter the GT tire rule, and to impose more equalizing weight on cars with the PDK. As those changes only started this year, not enough events have been held to make any meaningful analysis of how they affected results. Such an analysis will be undertaken next year, but anyone believing that race results show that there should be changes should feel free to communicate them at any time, and they will be thrown in the hopper at the time of review.

A number of racers, some of whom have made this request before, asked that Stock/Prepared cars be allowed to delete the passenger seat. The seat is required not because the rules started out requiring it specifically, but because the rules allow modifications only if a rule permits the modification. All Stock cars came with a passenger seat. Stock/Prepared were intended to assist the progression from DE into racing.

The Guiding Principles of PCA Club Racing include: "12. **Allow for participation by cars that can be driven to and from the racetrack.** The principle still weighs heavily in the stock class rules. A streetable car with minimal modifications can be raced competitively. This is the reasoning behind the stock class rules requiring interiors, stock weight, lights, etc." While, subsequent to its formulation, removal of much of the interior has been allowed, not all of the interior may be removed. The first paragraph under Stock Cars in the Car Classification rules is consistent with this principle.

The goal here is to aid the progression from DE into racing without requiring too many modifications to make the car competitive. The fact that not many racers these days drive their race car to the track, or that the rules allow spending quite a bit of money on go fasts does not undercut this purpose.

Seat removal is urged as a safety measure, and there are assertions, backed sometimes by experiment, that seat removal eases right side exiting. However, a suitable right seat presents a platform one can use while positioning one's self for diving out the passenger door window. A cool suit box, or ballast collection, or fire bottle, or data recorders, or helmet blower motor or other things which could conveniently be put into the vacated space are not apt to be superior terrain to crawl over than a seat. The passenger seat is not required to have the lateral support that the driver's seat pragmatically demands. And others find the seat to be a benefit.

It is true that if removal is allowed, it would not be mandated. However, drivers who chose to leave the seat in would perceive themselves to be at a center of gravity disadvantage over ballast on the floor pan.

The same is true for proposals to allow removal of various other parts of the car. Those proposals start with a paradigm of rules which allow removal of everything in the car which is not strictly necessary either for safety or unibody strength or suspension and power train, and leave to ballast the meeting of weight limits. Headlights and parking brakes and allowance of plastic rear windows have been suggested in this vein, and its logic would encompass use of plastic body parts as well, because weight savings there can also be compensated with ballast. If that results in excessive ballast, well then minimum weights could be reduced on a percentage basis. This approach is not illogical, but it is inconsistent with what PCA racing aspired to.