

A-2.3. Class Scoring

All automobiles in a class must run in the same time frame. Small classes may be combined for run-group efficiency, but the classes will remain separate for scoring and trophies.

A-2.4. Category Progression

Showroom Stock automobiles are not permitted any modifications beyond A-2.5.1. and A-2.5.2.

Production category automobile classification depends on the model and type of changes (if any) made to or options on the automobile.

The Modifications Allowed List provides an overview, but not a definition, of what modifications are allowed for what categories. Each category section defines the limits or allowances for particular items. If a modification is not specifically listed, it is not allowed in that category except in Modified. See Appendix V for the Modifications Allowed List.

A-2.5. Allowances**IF THE PCRS DO NOT SPECIFICALLY PERMIT A MODIFICATION, IT IS NOT ALLOWED EXCEPT IN MODIFIED.**

Allowances are divided up into five categories: Free, Showroom Stock, Production, Improved and Modified.

Some modifications are “free,” that is, allowed without effect on classification. Other modifications from Stock are considered to affect performance and therefore may move the automobile into any of the Production, Improved or Modified Class, depending on the performance effect of the modification. If certain modifications specified in the text are performed on your automobile, they progress into the Production, Improved or Modified class where that modification is permitted. In Modified, the rules specify the minimum requirements necessary to compete. General automobile technical specifications are listed in Appendix VI.

Any equipment, component, part, or modification which is deemed performance-affecting, and which not specified will subject the automobile to reclassification to a higher category by the Safety Inspection team or the Protest Committee at their discretion if done before the competition, or disqualification or any other penalty deemed appropriate by the Protest Committee if discovered during or after the competition by the Protest Committee or by protest of a competitor in the same class in which the automobile was competing.

A-2.5.1. “Free Modifications

Safety equipment is free in all classes except Showroom Stock, provided limits of any class category are met. Items considered free for Production Class include harness bars, fire extinguishers, headrests, cut-off switches, tow hooks, non-factory seats and non-factory seat belts provided that the seating surface must be fully upholstered and be a full back, bucket-type automobile seat incorporating a functional headrest but not “halo” type headrests. Kart seats, low-back dune buggy seats, and other similar types of seats are expressly prohibited. Cars may have no fewer than the standard number of seats. The seat tracks are considered part of the seat and may be substituted. Standard seat belts may be removed to facilitate the installation of alternate restraints complying with safety requirements. An alternate seat which replaces an airbag-equipped seat is not required to have an airbag. For Improved, the additional “free” items include race seats (however, Kart seats, low-back dune buggy seats, and other similar types of seats are expressly prohibited and cars may have no fewer than the standard number of seats), window nets, headrests, cut-off switches, tow hooks, seat back braces and required mounts for any of the above. In Showroom Stock, attachments points and mounts for Production Class allowed safety items may be left in the automobile, but not the actual device.

A-2.5.2. Showroom Stock Modifications

A-2.5.2.1. Tires

All Stock Class vehicles must utilize one of the following tire options in OEM sizes only. Note that "N-Spec" refers to the tire specification prescribed by Porsche to tire manufacturers of its OEM tires and can be found on the sidewall of tires made to that specification. Such tires may evolve over time from N0, to N1, N2, etc. as older specifications are superseded:

- (a) Any brand or model tires with a minimum TW (treadwear) rating of at least 300.
- (b) Any brand or model Porsche "N-Spec" tires with the minimum TW rating of at least 220 that were specified by Porsche for their vehicle.
- (c) GT (does not include GTS), Turbo S, or R model vehicles may use Porsche N-Spec tires specified for their vehicle with the minimum TW rating of at least 180 or any tire with a TW rating of at least 300.
- (d) 1996 and earlier Porsche vehicles may use Porsche N-Spec tires specified for their vehicle with the minimum TW rating of at least 180 or any tire with a TW rating of at least 300.

Tire cord may not be visible before a timed run.

A-2.5.2.2. Wear & Tear Items

Wear and tear items such as brake pads must be comparable in construction, compound, and specification to the originally supplied factory components. Adjustments (such as wheel alignment) are permitted provided no modifications and/or alterations are necessary. Owner's manual(s) will be used to help verify questionable equipment options and designed wheel/tire sizes.

A-2.5.2.3. Allowed Modifications

A restrictive list of reliability allowances is shown below:

- i. IMS Bearing upgrades to M96 and M97 engines are allowed.
- ii. Any chain tensioner or guards are permitted on air-cooled engines.

A-2.5.3. Production Category Automobile Allowances for 1997+ Water-cooled Porsches

A-2.5.3.1.

The Production category is for automobiles altered beyond the Showroom Stock limits. Automobiles may be updated to another model provided the entire automobile is brought up to that model's specification. Automobiles may be updated or backdated per section A-2.5.9.

A-2.5.3.2. Engine

- (a) Engine internals shall remain stock with the exception of Stock Class Category durability allowances (see section A-2.5.2.3).
- (b) The air cleaner may be modified or replaced with another type.
- (c) Reprogramming of the DME is allowed for normally aspirated engines only.
- (d) Alternate exhaust systems are permitted after the cylinder heads. Headers are permitted. High flow catalytic converters are allowed but must be fully functional. Secondary catalytic converters may be removed. A functional muffler is required.
- (e) Turbochargers must remain stock.
- (f) Aftermarket or alternate OEM fuel injectors are permitted.
- (g) Alternate or modified plenums, throttle bodies, and associate tubing are allowed.
- (h) Gasoline: Any grade of automotive gasoline available to the general public through normal retail service stations is permitted.
- (i) Any single disk clutch and pressure plate is allowed. The flywheel and pressure plate may be lightened or replace with ones of alternate material.
- (j) Any lead acid or AGM battery may be used as long as any resulting weight reduction is no more than 20% from OEM battery weight.
- (k) Any Air Oil Separator may be used on all models.
- (l) Any engine mount or transmission mount may be used.

A-2.5.3.3. Suspension

Provided that no machining (or "clearancing") is required to install any of the following items:

- (a) Any adjustment of the standard or approved alternate suspension components is permitted.
- (b) Coil springs may be replaced with ones of different specifications. Adjustable spring perches, spacers, and helper springs are permitted.

- (c) Any shock absorber may be used provided it has no external reservoirs. Alternate electrically adjustable shock absorbers may be used (only) if electrically adjustable shock absorbers were originally fitted (including any allowed through update/backdate allowances). Alternate shock controllers are allowed.
- (d) Mono-ball camber plates and/or upper shock mounts are permitted. Non-standard (non-elastic) suspension bushings including mono-ball types may be used in any position.
- (e) Any anti-sway bar may be installed. Sway bars may not be adjustable from the cockpit.
- (f) Bump steer correcting steering rack links and spacers are permitted.
- (g) Shock tower braces must remain stock. Bolt-on braces may be added to models not originally equipped with one.
- (h) Any "GT3 style" OEM and aftermarket adjustable lower control arms, including functionally equivalent types, may be used. Adjustable caster control arms, upper control arm, and adjustable toe links may be used.

A-2.5.3.4. Tires/Wheels/Brakes

- (a) Any Department of Transportation (DOT) approved tire may be used providing they have a visible tread across the tread surface. Tires must have a minimum tread wear rating of 200 with the exception that Showroom Stock automobiles delivered from the factory with tread wear of less than 200 must run the N-Spec tires specified by Porsche for that year and model and have no additional alterations or modifications and must run in their respective Production Category class.

Tire aspect ratio and width is free.

- (b) For models with multiple OEM wheel options, changes authorized in this section apply to sets of alternate wheel specifications in their entirety and position on the vehicle. OEM diameter, width, and offset specifications are the starting point for the following allowances.
- (c) All wheels shall be OEM diameter for the model range of the vehicle, or no more than an increase or decrease of 2" from the factory specifications.
- (d) Rim width may be increased up to 1" over OEM specification. The use of wheel spacers and/or alternate wheel offsets is permitted provided the resulting combination does not decrease the wheel offset by more than 17mm from OEM.
- (e) Any combination of allowable wheels, spacers, and tires must not rub the fender lip throughout the range of suspension movement during competition.
- (f) Wheel bolts may be any length or may change to studs, as long as factory thread engagement is maintained. Non-OEM Titanium wheel bolts are permitted.
- (g) Tires must be marketed nationally and generally available to all competitors. Tire cord may not be visible before a timed run.

- (h) Brake pads, OEM dimension rotors, and brake lines of any manufacture or specification may be used.

A-2.5.3.5. Chassis/Body/Interior

- (a) Any accessory if its purpose is to improve driver or passenger comfort, appearance, or convenience and provided such items have no effect on mechanical performance is permitted.
- (b) Removal of jack, tools, spare tire, and owner's manual(s) is allowed.
- (c) Floor and trunk mats and loose carpeting may be removed.
- (d) Roll bars are permitted. Full interior roll cages are not permitted.
- (e) Any OEM rear spoiler or rear wing, front air dam or lower lip, side skirt, or other aerodynamic device may be used as long as it originates from the same model family.

A-2.5.3.6. Transmission and Transaxles

- (a) Gear shift linkages, cables, and shifter assemblies may be modified or replaced with items of unrestricted origin or design. Consoles may be modified to fit these items.
- (b) A limited slip differential may be used.
- (c) Torque-vectoring differentials may not be installed in vehicles models not originally equipped with one, except as allowed by complete update and backdate modifications. Mechanical parts may not be modified but differential controllers may be reprogrammed or replaced.

A-2.5.4. Production Class Automobile Allowances for all Air-Cooled and Pre-1997 Water-cooled Porsches

The Production category is for street legal automobiles altered beyond the Showroom Stock limits. Automobiles may be updated to another model provided the entire automobile is brought up to that model's specification. Automobiles may also be updated or backdated per section A-2.5.6.

A-2.5.4.1. Engine

- (a) Air Cleaner: The air cleaner may be removed, modified or replaced with another type. Any modification may not conflict with other rules.
- (b) Modified Ignition: Any modification is permitted, provided an original type distributor is used.
- (c) Modified Carburetors: Any automobile originally carbureted may have any carburetor. Jet sizes may be changed. 911 models with mechanical fuel injection or Solex carburetors may change to replacement carburetors. 914/912E models may be converted to carburetors.

- (d) Fuel Injection: Any DME EPROM chip may be used except for those chips programmed to alter turbo boost. No modifications to the intake manifold are allowed.
- (e) Turbochargers must remain stock.
- (f) Wet Sump Modifications: If an automobile has a wet sump lubrication system, the sump may be modified to ensure a constant source of engine lubrication at the oil pickup tube. If an automobile has a dry sump lubrication system, no modifications are permitted.
- (g) Modified Oil Cooler/Filter: The addition of any oil cooler and/or filter is permitted.
- (h) Substituted Roller Bearing Cranks: For 356-based or Carrera 4-based engines, any roller bearing cranks. Counter-balanced cranks are permitted.
- (i) Balanced Engine: Balancing of internal engine parts is permitted.
- (j) Camshafts: The stock camshaft must be used.
- (k) Exhaust Modifications: Alternate exhaust systems are permitted after the head(s) for automobiles with or without catalytic converters. Headers are permitted. A muffler is required. Air pumps may be removed.
- (l) Air Conditioning: Removal is permitted provided original automobile may have been delivered without it.
- (m) Overbore: Overbore is allowed up to 1.2MM (0.047").
- (n) Gasoline: Any grade of automotive gasoline available to the general public through normal retail service stations is permitted.
- (o) Clutch: Any model clutch is allowed. Rubber center clutch discs may be replaced with spring discs. The flywheel and pressure plate may be lightened.
- (p) Velocity Stack: Velocity stacks may be added or modified.
- (q) Compression Ratio: Engine compression ratios may be increased up to .5 points from U.S. production specifications.
- (r) Fuel Pump: Fitting of an electric fuel pump is permitted.
- (s) Battery: Any lead acid or AGM battery may be used as long as any resulting weight reduction is no more than 20% from OEM battery weight. Those automobiles delivered with two batteries may remove one.

A-2.5.4.2. Suspension

- (a) Limited Suspension Adjustments: Any alignment adjustment of the standard suspension components is permitted, provided no machining is required for the adjustment. Aftermarket components may be used for mounting of struts and shock absorbers to the body.
- (b) Coil Springs/Torsion Bars: Any coil spring may be replaced by any other coil spring. Any torsion spring may be replaced by any other coil spring. Any torsion bar may be replaced by any other torsion bar as long as they are of the same type and mount in the same manner without modification to the chassis or suspension components.
- (c) Shock Absorbers: Any shock absorber may be used provided it has no external reservoirs.
- (d) Adjustable spring perches are allowed.
- (e) Sway Bars: Any anti-sway bar may be installed. Sway bar may not be adjustable from the cockpit.
- (f) Rear Camber Compensation (356 Only): Any rear camber compensating device may be used.
- (g) Bushings: Non-standard (non-elastic) suspension bushings may be used.
- (h) Shock Tower Brace: A front and/or rear shock tower brace may be used in any automobile provided that it is a bolt-in component. Any number of attachment points may be used. All Attachment points are within three inches of a vertical plane passing through the top center of the shock absorber.
- (i) Spring Plates: Adjustable spring plates are permitted on any automobile not so equipped from the factory.
- (j) Tie-Rod Ends: The use of 911 Turbo tie-rod assemblies is permitted.
- (k) Hydro-pneumatic Suspension: Removal of this suspension is allowed and encouraged.
- (l) A-Arms: 924/944/968 series may use aftermarket A-Arms provided suspension geometry is not altered.

A-2.5.4.3. Brake/Wheel/Tire

- (a) Tires: All tires must be Department of Transportation (DOT) approved. Any DOT tire may be used provided they have a visible tread, have DOT wear indicators and have visible tread across the entire tread surface. Tires must have a minimum tread wear of 180. Tire aspect ratio and width is free but must fit under the stock fender wells without rubbing during competition runs. Tires must be marketed nationally and generally available to all competitors. The cord may not be visible before a timed run. Recapped tires or re-grooved tires are not allowed.

(b) Track Width: Modifications to track width by the use of wheel spacers and/or wheel offsets are permitted provided no modifications to the automobile, other than increasing the stud/bolt length, are performed. Increase may not be more than 1.0" over stock. Only 356 models with drum and very early disc brakes may use individual spacers for each wheel stud.

(c) Brakes: Pads, linings, and brake lines of any manufacture may be used. Any type of brake cooling may be used. Rotors may be drilled or slotted. Brake bias valve may be changed but cockpit adjustable valves are not permitted.

(d) Increased Rim Width: Rim width may be increased up to 1.0" over the widest rim available from the factory (front and rear respectively; see Appendix V) for that model range so long as the width does not extend beyond the stock fender width as measured from the top of the tire and fits the stock fender wells.

(e) Wheels Diameter shall be the same as available from the factory for the model range of the automobile, or alternatively up to a maximum of 17 inches in diameter.

(f) Wheel Bolts: Cars using wheel bolts may change to studs, as long as factory thread engagement is maintained.

A-2.5.4.4. Chassis/Body/Interior

(a) Limited Fender Modifications: Fenders (including wheel openings) may be modified provided the tire-wheel-spacer combination and ride-height setting used could be used without the fender modification (i.e., could be used on an unmodified automobile of the same model and year). In the event of a protest, the entrant must be able to prove compliance with this rule.

(b) Interior Modifications: Any accessory, gauge, or indicator may be fitted if its purpose is to improve driver or passenger comfort or convenience and provided such items have no effect whatsoever on mechanical performance. Alternate seats may be used provided that the seating surface must be fully upholstered and be a full back, bucket-type automobile seat incorporating a functional headrest but not "halo" type headrests. Kart seats, low-back dune buggy seats, and other similar types of seats are expressly prohibited. Cars may have no fewer than the standard number of seats. The seat tracks are considered part of the seat and may be substituted. Standard set belts may be removed to facilitate the installation of alternate restraints complying with safety requirements. An alternate seat which replaces an airbag-equipped seat is not required to have an airbag. Floor mats may be removed. Any steering wheel is allowed.

(c) Roll Bars: Roll bars are permitted. Full interior roll cages are not permitted.

(d) Spoilers: Any rear spoiler permitted provided the leading edge of the spoiler is attached to the automobile, the spoiler is no wider than the stock body width, unless as delivered as a factory option, and the spoiler doesn't exceed 5" in height from the leading edge. Any rear wing may be used as long as it is not wider than the door handles; does not extend past the rear of the car; no part is higher than the roof; and has less than six (6) square feet of area for all wing element, measured from directly above the car.

(e) Air Dams: Any front air dam or splitter, unless as delivered as a factory option, is permitted provided it does not extend to less than 2.5 inches above the ground and not more than 4 inches forward of the front bumper. Splitters cannot be wider than the bumper.

(f) Seam Reinforcement (914 Only): Seam reinforcement kits are permitted "free" on 914s. It is recommended that all cars have the chassis inspected for suspension pick-up point and other structural rust on a periodic basis.

(g) Bumpers: Bumpers may be removed on any 356 series automobiles.

(h) Bolt-on Windshields: Bolt-on windshields may be removed.

A-2.5.4.5. Transmission

(a) Limited Slip: Any type of differential is permitted in all automobile. Spools or welded differentials are not permitted.

(b) Gear Shift Linkages: Gear shift linkages may be modified or exchanged. This permits the use of a short shift kit in any automobile or the use of side-shifter transmission in any 914.

A-2.5.5. Improved Modifications.

The Improved category is for street vehicles with modifications beyond those allowed in the Production Category. The modifications are limited but much more liberal than those in the Showroom Stock or Production Categories. The following adjustments, alterations, or modifications are allowed in the Improved class automobiles plus what was allowed in the Showroom Stock and Production classes.

A-2.5.5.1. Engine

- (d) Mufflers: Mufflers may be removed provided this is permitted by the event organizer and the local authorities/jurisdiction.
- (e) Ignition: Any ignition system is allowed.
- (f) Gasoline: Any gasoline is permitted.
- (g) Engine Substitution: Any Porsche engine is permitted in any Porsche automobile.
- (h) Fuel Management: Automobiles may use any fuel management/induction system including chips or other means that alter turbo boost. Turbochargers or superchargers are permitted.
- (i) Compression Ratio: Engine compression ratios may be increased up to 1.0 points.
- (j) Battery Location: The battery may be located anywhere within the automobile.
- (k) Intake System: Any intake system may be used.
- (l) Wet/Dry Sumps: Any change or addition is permitted.
- (m) Camshafts: Any camshaft may be used.

A-2.5.5.2. Suspension

- (a) Shocks Absorbers: Multi-adjustable or remotely adjustable shock absorbers are permitted.
- (b) Camber Plates: Camber plates are permitted. Machining of factory mounting points is permitted to allow greater suspension adjustment.
- (c) Raised Spindle: Raised spindles are permitted on strut type suspensions.
- (d) Suspension Mounts: Any suspension mount may be used provided the number of mounting points and mounting locations remain as factory.
- (e) Suspension Arms: Any suspension arm may be used provided use requires no other automobile modifications. For example, this includes the use of any lower control arm, tie-rod assembly and/or bump steer kit.

A-2.5.5.3. Wheel/Brake/Tire

- (a) Brakes: Any brake modifications are permitted. Any brake biasing valve is permitted.
- (b) Tires: Any DOT tire is permitted. The cord may not be visible before, during or after official timed runs.
- (c) Track Width: Modifications to track width are permitted up to 2.0" overstock. Only 356 models with drum and very early disc brakes may use individual space for each wheel stud.
- (d) Increase Rim Width: Rim width is free so long as the width does not extend beyond the fender.
- (e) Wheels: Wheels may be any diameter.

A-2.5.5.4. Chassis/Body/Interior

- (a) Roll Bars/Roll Cages: Roll bars or full interior cages are permitted. See Appendix XII for additional information, specifications and requirements.
- (b) Spoilers: Any rear spoiler, delivered as a factory option, is permitted. All others are permitted provided the leading edge of the spoiler is attached to the automobile. The spoiler can be no wider than the stock body width and the spoiler does not exceed 10 inches in height, from the leading edge. Any rear wing can be used as long as it is not wider than the door handles; does not extend past the rear of the car; no part is higher than the roof; and has less than 8 square feet of area for all wing elements (measured from directly above the car)
- (c) Air Dams: Any front air dam or splitter delivered as a factory option is permitted. All others are permitted provided it does not extend to less than 2 inches above the ground and not more than 5 inches forward of the bumper. Splitters cannot be wider than the front bumper.
- (d) Interior: Automobile, at minimum, must have dashboard, windows (glass or Plexiglas), visors (if originally equipped), headliner, and door panels. The original number of seats and passenger restraints must be present. Removal of mats and loose carpeting is allowed (i.e., what isn't originally screwed and/or glued down). Headlights, taillights, brake lights and turn signal lights must be operational.
- (e) Bodywork: The use of fiberglass or other material body components is permitted for the following components: hoods (front and rear), rear deck lids, bumpers and rocker panels.
- (f) Fenders: Fenders may be altered to allow fitting of alternative wheels and tires. All four tires shall not extend beyond the fender opening at the highest point of the tire, unless the Porsche model was originally an open-wheeled design.
- (e) Fuel Tanks: Fuel tanks may be changed and/or relocated.

A-2.5.5.5. Transmission

- (a) Transmission: Any Porsche-based transmission is permitted.

- (b) Transaxle gear ratios. Any ratio set may be used outside of the specified gear set. Ring and pinion may be altered.
- (c) Limited Slip: Any differential may be used.

A-2.5.6. Modified Modifications.

The modified category includes all automobiles modified beyond the allowable limits specified in the Showroom Stock, Production and Improved categories as well as some Limited Production and “tuner” automobiles. These rules provide the minimum that is required for the automobile to compete in this category. Some items are specified that are not allowed in this category. Unless defined as a production vehicle with complete documentation proving so, all racing, rally and special non-production Porsche models shall be included in this category.

A-2.5.6.1. Engine

- (a) Engine: A Porsche-based engine is required.
- (b) Displacement: The displacement may be increased to that of the maximum in the class.
- (c) Fuel Management: Modifications to the fuel injection or carburetor system are free. The use of turbochargers or superchargers other than those used in production is permitted by class allowance. Modified boost pressure is permitted.
- (d) Ignition: Any ignition system is permitted.
- (e) Nitrous Oxide Systems: These systems are not permitted.

A-2.5.6.2. Suspension

- (a) Machined Suspension: Any adjustment may be made and machining is allowed (such as machining to attain negative front camber on 356-series cars). Suspension points may be relocated.
- (b) Multi-linked Suspension: This suspension type is permitted and is free.

A-2.5.6.3. Wheels/Brake/Tire

- (a) Wheel and Tire: Any wheel and tire combination is permitted. Non-DOT tires are permitted. The cord may not be visible before, during or after official timed runs

A-2.5.6.4. Chassis/Body/Interior

- (a) Chassis: Original Porsche-based chassis, unibody or tube frame chassis is permitted.
- (b) Roll Bars/Roll Cages: Roll bars or full interior cages are permitted. In some instances, they may be required. See Appendix XII for additional information, specifications and requirements.
- (c) Bodywork: Automobile bodywork must maintain recognizable external features of the Porsche model. Tires may extend beyond the fender opening. Automobile bodywork must include a front and rear trunk or deck lid and doors.

A-2.5.6.5. Transmission

- (a) Transmission: Any transmission is allowed.

A-2.5.7. Other Modifications.

Any equipment, component, part, or modification which is deemed performance-affecting and which is not specified will make the automobile entered subject to reclassification to a higher class or category by the Safety Inspection team or the Protest Committee at their discretion or by protest of a competitor in the same class the automobile is competing.

A-2.5.8. Engine Swaps

Only Porsche automobiles with Porsche-based engines may enter the autocross.

A-2.5.9. Update/Backdate Modifications (Production/Improved)

Major assemblies, such as engines and transmissions, may be substituted if the parts are from the same series automobile. Some changes affect classification, others do not.

- (a) Changes Within Model Range: Automobiles may be updated or backdated without effect on classification provided the specifications remain within the boundaries of the model range for the automobile. Model ranges are defined in the chart below. Major specifications are given in Appendix VI.