

## **2021 CVR AutoX Classification Guide**

CVR AutoX events use the PCA Medium sized AutoX Program classification system (Containing: 8 Stock Classes, 6 Production Classes, 2 Improved Classes, 2 Modified Classes) with the addition of a Novice class for Porsche cars, and an “Other” car class. This structure ensures that you will drive with Porsches of similar performance, that AutoX newcomers in Porsches start out together, and that as a PCA member you can share the fun and learning with your teens, family, and friends in their Other cars. Overall Championship AutoX Series points are earned as a percentage of the Fastest Time of Day (FTD) for Porsches at each event. This remarkably stable measure lets you track your driving skill journey over the season and the years. Data consistently shows that any stock Porsche can reach a Top Twenty season ranking without modification by refining driving skills through the ***AutoX-University*** lessons integral to each event, leading to “***Better Driving...Faster!***”.

### **Quick Overview (Unofficial)**

**Several car classes have changed for 2021.** Please determine your CVR AutoX Class by reading this Quick Overview, then check the Detailed Summary if needed, noting that wording is unofficial so check the official **2021 Parade Competition Regulations (PCRs)** if in doubt to be sure your car meets all of the requirements for a class and contains none of the changes that would put it in a higher class. CVR AutoX events require that every car is muffled and meets event site noise requirements (Lime Rock Park is 86dB).

**Novice.** For your first three AutoX events drivers start in the Novice (“N”) class. After that, or after a Novice Class win, you move to your car based class.

**Stock.** For cars that retain everything as delivered from Porsche to USA showrooms. No alterations, modifications, performance enhancing items, or weight reduction is allowed. Only OEM wheels and tire sizes are allowed and tires must be an “N-spec” equivalent with a Tread Wear Rating of 180 or higher. If your car meets Stock requirements, find which of the 8 “S” classes it runs in from the [CVR AutoX Class Table](#).

**Production.** For otherwise Stock cars with only mild, and specifically allowed, performance enhancements as listed. Tire tread wear rating must be 180 or higher. Check that all changes to your car are allowed in the unofficial Production Detailed Summary below, and the official PCRs if in doubt, and that it has none of the Improved or Modified changes, then find which of the 6 “P” classes it runs in from the [CVR AutoX Class Table](#).

**Improved.** For street legal cars that have any of the substantial performance-affecting changes as listed in the unofficial Improved Detailed Summary below, and the official PCRs if in doubt. These cars still have interiors, headliners, sun visors, full dash boards, etc. They may have roll bars but not full roll cages. Weight reduction is limited to only the items described. Tires must be DOT approved but may have tread wear rating of below 180. Check that all changes to your car are allowed, and that it has none of the Modified changes, then based on the car’s **engine** find which of the 2 “I” classes it runs in from the [CVR AutoX Class Table](#).

**Modified.** For highly modified and race cars, with major performance-affecting changes beyond what the Improved class allows. These cars are typically non-street legal, have full roll cages and race safety systems, purposeful weight reduction, and include Porsche race, rally, or special limited-production performance cars. Check the unofficial Modified Detailed Summary below, and the official PCR wording if in doubt, then based on the car’s **engine** find which of the 2 “M” classes it runs in from the [CVR AutoX Class Table](#).

## **Detailed Summary (Unofficial)**

This Detailed Summary is provided to further guide your determination of which CVR AutoX Class your car belongs in. This is intended to unofficially “boil down” the PCRs to be easier to read, however the 2021 Parade Competition Regulations (PCRs) provide the official wording. If your car has any changes allowed in the higher class, then it runs in that higher class, so please check carefully. CVR AutoX events require that all cars are muffled and meet any event site noise requirements (Lime Rock Park is 86dB).

**Stock.** This “showroom stock” class is for cars that retain everything OEM, in a “could have been delivered from Porsche for the USA market” configuration.

- No alterations, modifications, performance enhancing items, or weight reduction is allowed. Any adjustments to stock settings must not require modifications or alterations.
- Only OEM wheels and tire sizes are allowed. Tires must be “N-spec” equivalent and Tread Wear Rating must be 180 or higher.
- Must run with the spare tire, jack, tools, and manuals (all must be secured).

If your car meets all of the Stock Class requirements then find which of the 8 “S” Classes it should run in from the [CVR AutoX Class Table](#) below.

**Production.** This class is for otherwise Stock cars with one or more of these limited, and specifically allowed, mild performance enhancements as noted:

- **ENGINE.** Changes allowed are: any air filter; any ignition system changes (such as pointless) but OEM type distributor must be retained; carburetor modifications including jet sizes (providing that OEM Carb bore and venture are retained). Note that 914/912E and certain 911 models can replace fuel injection with carbs of 40mm bores or less. No fuel injection component performance modifications are allowed however chips and DME EPROM changes are allowed (but may not change turbo boost). Wet sump systems may be modified to enhance oil pick-up, but may not be converted to dry-sump. Any oil cooler or oil filter is allowed. You may alter headers and exhaust; remove air pump and Cat; remove Air Conditioning (if that was a Stock option). Stock camshafts must be retained. Any clutch may be used and the flywheel/pressure plate may be lightened. Compression Ratio may be raised up to +0.5 points over Stock. Overbore up to 1.2mm is allowed. The engine may be balanced. Any normal retail automotive gas grade is allowed. Any battery may be used in its stock position (dual batteries may be switched to one battery).
- **SUSPENSION.** Any adjustments of stock suspension and alignment settings are allowed permitting that machining is not required. OEM mounts of struts and shocks to body must be retained. You may use any: bushings; torsion bars or springs (but cannot switch types); spring plates; spring perches; shocks (if not remotely adjustable); Turbo tie-rods; sway bars (but not cockpit adjustable); as long as they mount to OEM points without modification. Bolt-in shock tower braces are allowed if mounted within 3” of center. 924/944/968 aftermarket A-Arms may be used provided factory geometry is not altered. 1996-on water cooled cars can use a GT3 style lower control arm, anti-caster control arms and any rear toe links.
- **WHEEL/TIRE/BRAKE.** Tires must be DOT approved, have tread wear-bars visible across whole surface, and have a Tread Wear Rating of 180 or more. Tire aspect ratio may be changed but tire must fit within stock fenders, meet “rubbing tire” rule, and wheels must be no more than one inch wider than Stock within +/-

one inch in diameter, and still fit under the Stock fenders (measured at tire top). Fenders may be modified (rolled) but only if you can prove that a stock tire at stock ride height would still fit. Tire brand must be readily available nationally, no re-cap or re-grooved tires. Tire spacers are allowed if no other mods are required except longer studs/bolts. Spare tire may be removed. Any brake pad or brake lines may be used. Brake rotors may be drilled or slotted. Brake bias valve may be changed (but not cockpit adjustable). The car may run with the spare tire removed.

- CHASSIS/BODY/INTERIOR. The following may be used: race seats and braces, race belts, harness bars, roll bars (but not roll cages), and different diameter steering wheels. Unless delivered as a factory option, any rear spoiler is allowed if the leading edge is attached to the car and doesn't exceed 5" height. Any rear wing is allowed but is limited to no wider than the Stock door handles, does not extend past the rear of the Stock car, no part is higher than the Stock roof, and is less than 6 square feet of areas measured from above for all elements. Any type of limited-slip differential is allowed (but welded/spool types are not). Gear shift linkages may be modified or exchanged, short-shift kits are allowed, any 914 may use a side-shift transmission. Unless delivered as a factory option, any front air dam is allowed provided that it does not extend more than 4 inches forward from the front Stock bumper, is no lower than 2.5 inches above the ground (static), and is not wider than the Stock front bumper. 914 rear seam reinforcement kits are allowed provided that each reinforcement is limited to a single seam. Jacks, tools, manuals, and 356 bolt-on windshields and bumpers, may be removed to run.

If your car has any or all of the allowed Production Class changes, and has none of the Improved or Modified class changes, then find which of the 6 "P" Classes it should run in from the [CVR AutoX Class Table](#) below.

## Improved

This class is for cars capable of being street licensed and driven, that have one or more of the following substantial performance-affecting changes, per the 2021 PCRs.

- ENGINE. Changes allowed are, any: muffler; ignition; gasoline; Porsche engine substitution; fuel management/chips/boost mods/turbo/supercharger; compression ratio up to +1.0 point; battery (may be relocated); intake system; wet/dry sump oil system; camshaft.
- SUSPENSION. Changes allowed are any: multi-adjustable or remotely-adjustable shocks; camber plates including machining of factory mounting points; raised spindles; suspension mount (provided number and location of mount points remain stock); any suspension arm may be used provided no other mod is required (this allows any lower control arm, tie-rod assembly, or bump-steer kit).
- WHEEL/TIRE/BRAKE. Changes allowed are any: brake mods; brake proportioning valve; DOT tire (no cord can show during or after run); Track width up to 2.0" more than Stock; rim width (as long as it does not extend beyond the fender when measured at top of tire). Wheels may be any diameter.
- CHASSIS/BODY/INTERIOR. Changes allowed are any: roll bars, full interior roll cages. Unless delivered as a factory option, any rear spoiler is allowed if the leading edge is attached to the car is no wider than the Stock body, and doesn't exceed 10" height. Any rear wing is allowed but is limited to no wider than the Stock door handle width, does not extend past the rear of the Stock car, no part is higher than the Stock roof, and is less than 8 square feet of areas measured from above for all elements. Unless delivered as a factory option, any front air dam is allowed provided that it does not extend more than 5 inches forward

from the front Stock bumper, is no lower than 2.0 inches above the ground (static), and is not wider than the Stock front bumper.

- **INTERIOR.** Must have: a dashboard, windows (glass or plexiglas), visors (if originally equipped), headliner, door panels. The original number of seats and passenger restraints must be present. Loose mats and carpeting may be removed (only if they were not originally glued or screwed down). Must have working: headlights, tail lights, brake lights, and turn signals. Fiberglass or other composites are allowed for front and rear hoods/lids, bumpers, and rockers. Fenders may be altered to allow alternate wheels/tires but they must cover the tires (at the top). Open wheels are only allowed if Porsche delivered it that way. Fuel tanks may be changed and relocated.
- **TRANSMISSION.** Any Porsche transmission is allowed. Gear ratios, including ring and pinion, may be changed. Any limited slip may be used.

If your car has any of the Improved Class changes, and has none of the Modified changes, then based on Engine displacement and whether it is Turbocharged or Supercharged, determine if it will be in the I1 or I2 Class from the [CVR AutoX Class Table](#) below.

## Modified

This class is for highly modified and race cars, with performance-affecting changes beyond the Improved class allowances, per the 2021 PCRs. These cars may be non-street legal and include Porsche race, rally, or special limited-production performance cars.

- **ENGINE.** A Porsche based engine is required. Non-factory turbo or superchargers are allowed with any boost level, any fuel management system, and any ignition system, however Nitrous Oxide is not allowed.
- **SUSPENSION.** Machining is allowed to make any adjustments or to relocate suspension pick-up points. Multi-linked suspension is allowed.
- **WHEEL/TIRE/BRAKE.** Any wheel/tire combination is allowed including non-DOT tires (no cord can show during or after run).
- **CHASSIS/BODY/INTERIOR.** Original based chassis, unibody, or tube framed chassis are required. Roll bars and full roll cages are allowed (and may be required). Bodywork must retain recognizable features of the Porsche Model and retain front and rear trunk/deck-lid and doors. Tires may extend beyond the fenders.
- **TRANSMISSION.** Any transmission is allowed.
- **ANY** performance affecting items not specified elsewhere (in Stock, Production, or Improved) may subject the car to be moved to Modified (this is particularly true for weight reduction items not specifically allowed in those classes).

If your car has any of the Modified Class changes then determine, based on **Engine displacement** and whether it is **Turbocharged** or **Supercharged**, if it will be in the M1 or M2 Class from the [CVR AutoX Class Table](#) below.

## Other

All non-Porsche street licensed and driven cars (vehicles allowed are at the discretion of the CVR Event Chair).

## **Parade Competition Regulations (Official)**

CVR uses the 2021 PCRs for the official wording of what is allowed in each class (Stock, Production, Improved, Modified). Once you determine which of those 4 classes your car fits in, then CVR uses the PCA recommended “Medium” sized region class structure to combine cars (not the “Parade” class structure) as captured in the [CVR AutoX Class Table](#).

Official PCRs can be found by logging into [pca.org](http://pca.org), clicking on the “Porsche Parade” link (on the right-hand sidebar), and then selecting “PCRs” from the “Information and More” drop down menu.

See the **Autocross section** on pages 16-29, and the **Autocross Appendix V** on pages 75-76, as well as the **Tech Specs** for a Stock car in Appendix VI on pages 77-84.