

# Autocross

The Loma Prieta driving event will be an autocross. It will be an all forward motion, skill autocross with a rolling start and finish. Automobiles will be timed while driving a course laid-out on a paved area. Safety will be of paramount importance in the design and conduct of the event.

## **A-1. REFERENCED RULES**

The rules referenced below apply to the autocross.

### **1. G-2.6. Eligible Automobiles**

Only Porsches may be entered. As specified in the PCA Bylaws, “A Porsche is defined as an automobile body and suspension which is, basically, as manufactured by or designated as a Porsche automobile by Porsche AG or its successor, which is powered by an Porsche engine which is basically one which was installed in such bodies by the manufacturer of such automobiles, although not necessarily in the body concerned,” except that any Porsche engine may be installed in any Porsche-built automobile. Ruf AG-built automobiles are considered Porsches for LPR and Parade event purposes. (See Appendix I, PCA PCR’s Thoroughbred Racers, for additional eligible automobiles.)

1. The Loma Prieta AX rules are based on the Porsche Club of America (PCA) Parade competition Rules (PCR’s). We use the large Region format for grouping the cars into the various classes.
2. The Loma Prieta AX Chair or representative will update the rules yearly following the Updates provided by the PCA National PCR committee.
3. All References and appendixes are on the PCA.org website
4. (d) (deleted)

## **A-2. CLASSIFICATION**

Drivers are responsible for properly classifying their automobiles. Refer to G-5.2. “Misclassification”, G-3.2. “Questions”, and G-9.5.3. (b) “Automatic Disqualifications” in the PCA PCRs.

### **A-2.1. Categories**

There are four categories of classes – Showroom Stock, Production, Improved and Modified. Categories are related to automobile configuration.

**The Showroom Stock (S) Category** contains classes of automobiles as normally delivered and specified for use in the United States and Canada. Factory options

as normally available for a specific model year are permitted. Certain factory and/or dealer installed equipment/ options will move an automobile out of S and into Production or higher as specified in the Modifications Allowed List (Appendix V) table so as to maintain the intent and integrity of the Showroom Stock classes. The Production (P) category contains automobiles (as normally delivered to the United States and Canadian public through authorized sales outlets of the manufacturer plus others with limited performance-affecting changes from stock.

**The Improved (I) category** contains automobiles with more substantial performance-affecting changes from standard (stock) specification, whether changed by the factory, dealer or owner. These modifications have defined limits. These automobiles are classed according to their number of cylinders and actual displacement.

**The Modified (M) category** contains automobiles that have performance-affecting modifications outside of the limits of the Improved category and for race automobiles (factory-built or otherwise). These automobiles are classed according to their specified number of cylinders and actual displacement.

#### **A-2.2. Classes**

Each category is divided into classes, grouping automobiles with similar performance potential. Each class is divided into separate men's and ladies' groups for scoring purposes. Classes prefixed with "S" are for Showroom Stock, those with "P" are Production Classes, those with "I" are Improved Classes and those with "M" are Modified Classes. Men's and Ladies classes are designated with a suffix "M" or "L" respectively as appropriate for each class as designated in the Class Chart below (example: S01M, P08L or M04M).

Showroom Stock classes are available for a limited number of recently manufactured automobiles. Those automobiles exceeding the Showroom Stock class allowances, not listed in Showroom Stock or not considered factory race cars are considered Production automobile models and are initially assigned to a Production class. Those individual automobiles with significant modifications are "progressed" into classes with higher performance potential. Modifications are discussed under "Class Progression" below. The numerical assignments of the classes do not necessarily indicate relative performance potential between classes. Factory and non-factory race cars are considered modified and are classed by the number of cylinders and actual displacement.

These classes, plus those reserved exclusively for progressed cars, are presented in the Class Chart. For the purpose of automobile classification, factory options as normally delivered for a specific automobile and/or model year are permitted. Certain factory and/or dealer installed equipment/options will move the automobile out of Showroom Stock or Production. This includes R-rated tires even if they were on the automobile as delivered. However, those dealer and factory options that are not considered to improve performance are allowed in the Showroom Stock and Production classes (i.e., trim packages, air-conditioning, etc.). Showroom Stock or Production classes are also the starting point in the determination of final classification of the automobiles that have been changed from stock. Production based "racing" automobiles will be classed according to their initial car type and the modifications they have as specified in these rules.

If an automobile is not a United States-specification automobile, the entrant must be able to prove that the automobile is equivalent to the respective Production automobile (as delivered to the United States public through authorized sales outlets of the manufacturer) to qualify for Production classification or equivalent to the respective Improved automobile to qualify for Improved classification; otherwise the automobile will be classified in the Modified category. DOT and/or EPA Certification alone do not make an automobile equivalent to a U.S. specification automobile for the purposes of the PCR's.

## **CLASS CHART**

### **A-2.2.1. Showroom Stock Category**

S1: 968 (All), 911 Carrera 2 (964:1990-1994), Carrera 4 (964:1989-1994), RS America (1993-1994), Boxster (986:1997-2004)

S2: 911 Carrera (993:1995-1998), Boxster S (986:2000- 2004), Boxster (987:2005-On), Cayman (2006-On)

S3: 911 Carrera (996:1999-2004), 997 (2005-On); 911 Carrera (991:2012-On), all except 991S, 911C2 Turbo (965: 1990-1994), Boxster S (987:2005-On), Cayman S (2006-On)

S4: 997S except X51 (2005-2009); 991S (2012-On), (All), 993 Turbo (All), Boxster Spyder, Cayman R

S5: 996 Turbo (Non-GT2), 997S X51 (2007-2009), 997S/GTS (2010-On)

S6: 996 GT2/GT3 (2002-2005), 997 GT2/GT3/GT3RS (2007-On), 997 Turbo/Turbo S (All), Carrera GT (980:2004-On)

S7: Cayenne (9PA:2003- On), Panamera (2010- On)

#### **A-2.2.2. Production Category**

P1: 356 (All), 912/912E (All), 914/4 (All), 924 (All)

P2: 911 (1965-1969), 914/6 (All), 924S (all), 924 Turbo (931: All), 944, (All)

P3: 911 (1970-1977), 944S (All)

P4: 911SC (1978-1983), 928 & 928S (All)

P5: 911 Carrera 3.2 (1984-1989), 911 Speedster (1989); 944 Turbo (951: All), 928 S4/GT/GTS (All)

P6: 911 Carrera 2 (964:1990-1994), Carrera 4 (964:1989- 1994), RS America (1993-1994); 944S2 (All), 968 (All), Boxster (986:1997-2004)

P7: 911 Turbo (1976-1989), 911 Carrera, Carrera S, C4S (993:All), Boxster S (986:1997-2004), Boxster (987:2005-On), Cayman (2006-On)

P8: 911 Carrera (996:1999-2004), 997 (2005-On); 911 Carrera (991:2012-On), all except 991S, 911C2 Turbo (965: 1990-1994), Boxster S (987S:2005-On), Cayman S (2006-On)

P9: 997S except X51 (2005-2009); 991S (2012-On), (All), 993 Turbo (All), Boxster Spyder, Cayman R

P10:996 Turbo (Non-GT2), 997S X51 (2007-2009), 997S/GTS (2010-On)

P11:996 GT2/GT3 (2002- 2005), 997 GT2/GT3/GT3RS (2005-On), 997 Turbo/Turbo S (All), Carrera GT (980:2004-On)

P12:Cayenne (9PA:2003- On), Panamera (2010- On)

### **A-2.2.3. Improved Category**

I1: Improved Automobiles (All 4 Cylinder, up to 1999cc, 1800 pounds minimum); (All 4 Cylinder, 2000cc up to 2699cc, 2500 pounds minimum); (All 4 Cylinder, 2700cc and above and All 6 Cylinder, up to 2399cc, 2200 pounds minimum)

I2: Improved Automobiles (All 6 Cylinder and above, 2400cc up to 3199cc; All Turbo/Supercharged 4 Cylinder, 2150 pounds minimum);

I3: Improved Automobiles (All 6 Cylinder and above, 3200cc and above, 2700 pounds minimum); (All Turbo/Supercharged 6 cylinder and above, 2500 pounds minimum)

### **A-2.2.4. Modified Category**

M1: Modified Automobiles (All 4 Cylinder, up to 1999cc; All 4 Cylinder, 2000cc up to 2699cc; All 4 Cylinder, 2700cc and above; All 6 Cylinder, up to 2399cc)

M2: Modified Automobiles (All 6 Cylinder and above, 2400cc up to 3199cc; All Turbo/Supercharged 4 Cylinder)

M3: Modified Automobiles (All 6 Cylinder and above, 3200cc and above; All Turbo/Supercharged 6 cylinder and above)

### **A-2.4. Class Progression**

Showroom Stock automobiles are not permitted any modifications beyond A-2.5.3. and A-2.5.4.

For Production category automobiles, the classification of your automobile depends not only on the model but also on the type of changes (if any) made to or options on the automobile. Improvements and alterations may cause your automobile to progress into a more competitive class.

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 classes depending on the performance effect of the modification. The Modifications Allowed List provides an overview, but not a definition, of what modifications are allowed for what categories. Each category section will define the limits or allowances for particular items as listed below. 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**

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

#### **IF THE PCR’S DO NOT SPECIFICALLY PERMIT A MODIFICATION, IT IS NOT ALLOWED EXCEPT IN MODIFIED.**

Some modifications are "free," that is, allowed without effect on classification. If certain modifications specified in the text are performed on your automobile, you will be moved to 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.

**A-2.5.1. Engine Swaps.** Only Porsche automobiles with Porsche-based engines and transmissions may enter the autocross.

**A-2.5.2. 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.
- (b) Changes Outside the Model Range: The degree of updating or backdating will, in most cases, affect the degree of class/category progression. Selective substitution, as opposed to complete substitution, may result in a category change. For instance, if only one or two major components (such as an engine and/or transmission) are substituted from outside the model range without completely updating or back- dating the

automobile, then the automobile may change categories. However, if an automobile should be completely updated or backdated, it would then be classed according to its new (substituted) model range. An example would be a 1972 911 engine installed in a 1967 chassis. Then to achieve a complete update, a 1972/1973 transmission and associated ring and pinion gear must also be installed plus the wheel base must be lengthened and the new weight must be in the 1972/1973 range. Items that do not affect performance need not be changed. Car must meet all specifications per Appendix VI.

## MODEL RANGES

Series Models Year 356: 356 Super 90 & SC	
All Carrera-1500 & 1600	
All Carrera-2000 cc	
All Any Other 356 Model .....	All
911: Any 911 Model.....	1965-71
911: Any 911 Model .....	1972-77
911SC .....	1978-83
911 Carrera .....	1984-89
911 Carrera 2/4 .....	1989-94
911 Carrera (993) .....	1995-98
911 Carrera (996) .....	1999-05
911 Carrera (996 GT2) .....	2002-05
911 Carrera (996 GT3) .....	2003-05
911 Carrera (997) .....	2005-11
911 Carrera (997 GT2) .....	2008-On
911 Carrera (997 GT3) .....	2006-On
911 Carrera (991).....	2012-On
912: 912 .....	All
912E.....	All
914: 914/4 .....	All
914/6 .....	All
924: 924 .....	1977-82
924S .....	1987-88
924 Turbo (931) .....	All
928: 928 .....	1978-86

928 .....	1987-95
930: 930 .....	1976-80
911 Turbo.....	1986-89
911 Turbo (965).....	1990-94
911 Turbo (993).....	1996-98
911 Turbo (996).....	2001-05
911 Turbo (997) .....	2006-On
944: 944 .....	All
944S .....	All
944S2 .....	All
944 turbo (951) .....	All
968.....	All
Boxster .....	1997-04
Boxster S.....	2000-04
987: Boxster .....	2005-On
Boxster S .....	2005-On
Cayman .....	2006-On
Cayman S .....	2006-On
Cayenne .....	2004-On
Cayenne S .....	2003-On
Cayenne Turbo .....	2003-On
980: Carrera GT .....	All
970: Panamera .....	All

**A-2.5.3. “Free” Modifications.** Safety equipment is free in all classes except Showroom Stock, provided limits of any class category are met. Items considered free include harness bars, fire extinguishers, non-factory seat belts, race seats, window nets, head rests, cut-off switches, tow hooks, seat back braces and required mounts for any of the above. In Showroom Stock, attachments points or mounts for any of these items may be left in the automobile, but the actual device will not be allowed to remain or be used if it could be considered to provide the driver or the automobile any performance advantage.

**A-2.5.4. Showroom Stock Modifications.** Unless otherwise specified in these rules, no alterations or modifications are allowed to these automobiles. Only original equipment manufacturer (OEM) wheels as originally specified and OEM tire sizes as originally specified for each specific model year are permitted. All Showroom Stock class tires must have a tread wear rating of 140 or greater.



Wear and tear items, excluding tires, must be comparable in construction and specifications to the originally supplied factory components. Adjustments are permitted provided no modifications and/or alterations are necessary to achieve the desired adjustment. Automobiles must run with their spare tire, jack, lug wrench, owner's manual(s), tools, etc. Owner's manual(s) will be used to help verify questionable equipment options and designated wheel/tire sizes.

No aftermarket equipment that might be reasonably perceived as performance affecting is permitted in these classes. Items included in this restriction include, but may not be limited to, aftermarket air filters, aftermarket exhaust systems, aerodynamic aids, computer chips, five/six point seatbelts, race seats, harness bars, roll bars, roll cages, etc.

**A-2.5.5. Production Modifications.** The Production category is for street automobiles altered beyond the Showroom Stock limits and older Porsches. The following adjustments, alterations or modifications are allowed in the Production class automobiles plus what was allowed in Showroom Stock. Automobiles may be updated to another model provided all of the automobile is brought up to that model's specifications.

**A-2.5.5.1. Engine**

1. (a) Air Cleaner: The air cleaner may be removed or replaced with another type.
2. (b) Modified Ignition: Any modification is permitted, provided an original type distributor is used.
3. (c) Modified Carburetors: Any automobile originally carbureted may have any carburetor, provided the throttle bore and venturi dimensions are not changed from original specifications. Jet sizes may be changed. 911 models with mechanical fuel injection or Solex carburetors may change to replacement carburetors that have throttle bores no larger than 40mm. 914/912E models may be converted to carburetors with throttle bores no larger than 40mm.
4. (d) Fuel Injection: No substitution of performance effecting components for mechanical fuel injection is permitted. Any DME EPROM chip may be used except for those chips programmed to alter turbo boost. No modifications to the intake manifold are allowed.
5. (e) 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.

6. (f) Modified Oil Cooler/Filter: The addition of any oil cooler and/or filter is permitted.
7. (g) Substituted Roller Bearing Cranks: For 356-based or Carrera 4-based engines, any roller bearing crank may be used. Plain bearing cranks may be substituted for roller bearing cranks. Counterbalanced cranks are permitted.
8. (h) Balanced Engine: Balancing of internal engine parts is permitted.
9. (i) Camshafts: The stock camshaft must be used.
- 10.(j) 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.
- (k) Air Conditioning: Removal is permitted provided original automobile may have been delivered without it.
- (l) Overbore: Overbore is allowed up to 1.2MM(0.047”).
- (m) Gasoline: Any grade of automotive gasoline available to the general public through normal retail service stations is permitted.
- (n) Clutch: Any model clutch is allowed. Rubber center clutch discs may be replaced with spring discs. The flywheel may be lightened.
- (o) Velocity Stack: Velocity stacks may be added or modified.
- (p) Compression Ratio: Engine compression ratio's may be increased up to .5 points from U.S. production specifications.
- (q) Fuel Pump: Fitting of an electric fuel pump is permitted.
- (r) Chain Tensioners/Guards: Any chain tensioner or guards are permitted.
- (s) Battery: Any battery may be used. Those automobiles delivered with two batteries may remove one.

#### **A-2.5.5.2. Suspension**

- (a) Limited Suspension Adjustments: Any adjustment of the standard suspension components is permitted, provided no machining is required for the adjustment. Factory components must be used for mounting of struts and shock absorbers to the body.
- (b) Alignment: Any adjustment may be made provided no other change is necessary to make the adjustment.
- (c) Coil Springs/Torsion Bars: Any coil 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.

4. (d) Shocks Absorbers: Any shock absorber may be used provide it has no more than a single adjustment.
5. (e) Adjustable spring perches are allowed.
6. (f) Sway Bars: Any anti-sway bar may be installed. Sway bar may not be adjustable from the cockpit.
7. (g) Rear Camber Compensation (356 Only): Any rear camber compensating device may be used.
8. (h) Bushings: Non-standard (non-elastic) suspension bushings may be used.
9. (i) Shock Tower Brace: A front and/or rear shock tower brace may be used in any automobile provided that: (1) it can be quickly and easily removed, it must be a bolt-in component. Any number of attachment points may be used; (2) all attachment points are within three inches of a vertical plane passing through the top center of the shock absorber.
- 10.(j) Spring Plates: Adjustable spring plates are permitted on any automobile not so equipped from the factory.

other than increasing the stud 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: All wheels shall be the same diameter as available from the factory for the model range of the automobile or within an increase or decrease of 1.0" from the factory specifications.

(f) Spare Tire: The supplied spare tire may be removed (k) Tie-Rod Ends: The use of 911 Turbo tie-rod assemblies is permitted.

#### **A-2.5.5.3. Brake/Wheel/Tire**

1. (a) Tires: All tires must be Department of Transportation (DOT) approved. Any DOT listed tire may be used providing they have a visible tread, have DOT wear indicators and have visible tread across the entire tread surface. These may be "R" type tires. Tire aspect ratio and width is free but must fit under the stock fender wells. Tires must be marketed nationally and generally available to all competitors. The cord may not be visible before,

during, or after runs. Recapped tires or re-grooved tires are not allowed. Competitors are responsible for policing the "rubbing tire" rule and protests must be made before timed runs.

2. (b) Track Width: Modifications to track width are permitted provided no modifications to the automobile,

(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 and 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, unless as delivered as a factory option, is permitted provided the leading edge of the spoiler is attached to the automobile, the spoiler is no wider than the stock body width and the spoiler doesn't exceed 5" in height from the leading edge.

5. (e) Air Dams: Any front air dam , unless as delivered as a factory option, is permitted provided it does not extend to less than 3" above the ground and not forward of the front bumper.

6. (f) Seam Reinforcement (914 Only): Seam reinforcement kits are permitted "free" on 914s, provided each reinforcement is limited to a single seam and that all reinforcements combined do not substantially increase the rigidity and stiffness of the chassis. It is recommended to 914 model owners to have the chassis inspected for rust on a periodic basis.

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

8. (h) Weight: Automobile must meet minimum weight. Ballast is not allowed.

9. (i) Bolt-on windshields: Bolt-on windshields may be removed.

- 10.(j) Jack/Tools/Manuals: Removal of jack, tools and owners manual(s) is allowed.

#### ***A-2.5.5.4. Chassis/Body/Interior***

(l) Hydro-pneumatic Suspension: Removal of this suspension is not only allowed but is encouraged.

(m) A-arms: 924/944/968 series may use aftermarket a- arms provided suspension geometry is not altered.

#### ***A-2.5.5.5. Transmission***

1. (a) Limited Slip: Only automobile models as could have been ordered from the factory with limited slip may use the same factory limited slip.
2. (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-2.5.6. 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-2.5.6.1. Engine***

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

#### ***A-2.5.6.2. 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-2.5.6.3. 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" over stock. Only 356 models with drum and very early disc brakes may use individual spacers for each wheel stud.
  - 4. (d) Increased Rim Width: Rim width may be increased up to 2" over 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 fender.
  - 5. (e) Wheels: Wheels may be any diameter.

#### **A-2.5.6.4. Chassis/Body/Interior**

- 1. (a) Roll Bars/Roll Cages: Roll bars or full interior cages are permitted.
- 2. (b) Spoilers: Any spoiler is permitted.
- 3. (c) Air Dams: Any front air dam is permitted.
- 4. (d) Interior: Automobile must have dashboard, windows (glass or plexi-glass), 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.
- 5. (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.
- 6. (f) Fenders: Fenders may be altered to allow fitting of alternative wheels and tires.
- 7. (g) Fuel Tanks: Fuel tanks may be changed and/or relocated.
- 8. (h) Weight: Automobiles must meet the minimum weight for its class as autocrossed, without the weight of the driver. Ballast may be added to

meet the minimum weight. Ballast must be securely bolted or attached inside the vehicle. Scales will be available, if necessary.

#### **A-2.5.6.5. Transmission**

1. (a) Transmission: Any Porsche based transmission is permitted.
2. (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 limited slip may be used.

**A-2.5.7. 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-2.5.7.1. 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 carburetion 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-2.5.7.2. 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-2.5.7.3. 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-2.5.7.4. Chassis/Body/Interior**

(a) Chassis: Original Porsche based chassis, unibody or tube frame chassis is permitted.

2. (b) Roll Cage: Any roll cage may be used. It may be used to connect suspension or any other component.
3. (c) Bodywork: Automobile bodywork must maintain recognizable external features of the Porsche model. All four tires shall not extend beyond the fender openings at the highest point of the tire, unless the Porsche model was originally an open-wheeled design. Automobile bodywork must include a front and rear trunk or deck lid and doors.

#### **A-2.5.7.5. Transmission**

(a) Transmission: Any Porsche based transmission is required.

**A-2.5.8. 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-3. COURSE**

The course will be designed with the safety of the spectators, workers, entrants and their cars in mind. The course used will be reviewed and approved by the LPR Autocross Chair or representative.

#### **A-3.1. Boundaries**

The autocross boundaries will be defined by existing terrain, edge of pavement, clearly marked white lines, pylons or a combination of these.

#### **A-3.2. Entrance/Exit**

Where the beginning and/or ending of the actual course is not the same as the start and/or finish line (to provide the rolling start and finish), such points will be clearly marked where automobiles are to stop after exiting the course to pick up timing slips and return any borrowed helmets.

#### **A-3.3. Course Map**

A map of the course, approximately to scale, Should be posted. The map will show the methods used to define the course boundaries and the location(s) of the entrance and exit.

### **A-4. FLAGS**

A grid official will review all flags to be used during the event with each driver. Drivers must obey flag signals or risk being removed from the event and/or disqualification.

(a) Green – Go. The course is clear.

(b) Red – Emergency. Pull over and stop safely.



## **A-5. DRIVERS SAFETY**

The LPR PCA safety inspection is basic in nature and is not intended to be a substitution for a proper technical inspection. The track worthiness of the automobile is the responsibility of the entrant(s).

### **A-5.1. AUTOMOBILES AND DRIVERS**

The following rules apply to all automobiles and drivers entering the autocross. Safety/tech inspection will check for compliance with the following rules.

(a) Roll Bars/Roll Cages. Roll bars (roll cage optional) are required in all Modified category running auto- mobiles and recommended in all open automobiles running in the Improved category. The roll bar/cage must be equipped with adequate padding in all areas potentially exposed to the driver. Roll bars/cages, when installed, must meet current PCA Club Racing rules. For more information, see the PCA Club Racing rules. For a copy of the PCA Club Racing rules, write or call the PCA Executive Office, or see [www.pca.org](http://www.pca.org).

(b) Shoulder Harnesses. Non-factory shoulder harnesses may be used in an open automobile only if the automobile is equipped with a roll bar or cage and they are installed according to the manufacturer's directions.

(c) Sunroofs. Sunroofs may be open.

4. (d) Removable Windshields. Bolt-on windshields may be removed.
5. (e) Eye Protection. Contestants must use face shields if driving an automobile without a full windshield in any class.
6. (f) Removable Roof Panels/Convertible Tops. Any auto- mobile may run with their top down. Removable roof panels must be removed or fully secured. Tilt- up style panels/sunroofs must be removed or fully closed.
7. (g) Windows. The driver's/passenger's window must be fully down (LPR)
8. (h) Tires. Must be free of visible sidewall breaks. Surfaces inside the fenders will be checked for evidence of rubbing tires. The clearance between the tires and any potential rubbing point will be checked. Tires on Showroom Stock or Production automobiles must not rub against any surface during the driving event runs. Slightly rubbing tires will be permitted in the Improved and Modified classes. However, disqualifi- cation of any automobile and its drivers may result from rubbing tires that appear hazardous in the opinion of inspectors during the final safety check or course officials during the driving event runs. Tires will receive a final safety check for compliance before runs begin (i.e. tread and condition; 30 psi minimum is recommended for street tires). Tires on a given automobile must have a speed rating that meets or exceeds the potential speed for

that event. See A- 2.5.5.3 and individual category allowances for more information. Recapped tires are not allowed.

9. (i) Loose Objects. Loose Objects: Loose objects inside the trunk(s) or passenger compartment
- 10.(j) Wheel Covers and Trim. Snap-on wheel covers and wheel trim must be removed from steel wheels.
- 11.(k) Clothing. Full-length pants, long sleeved shirts, socks and full shoes are recommended for all drivers. Bare feet, sandals and open-toed shoes are not permitted. Fire-resistant driving suits, gloves and driving shoes are recommended. Recommended fabrics are natural fiber (cotton, wool, silk) and PCA Club

Racing approved fire-resistant fabrics. For more information, see the PCA Club Racing rules. For a copy of the PCA Club Racing rules, write or call the PCA Executive Office, or see [www.pca.org](http://www.pca.org).

(l) Helmet. Each contestant must wear an approved helmet in good condition. The helmet shell must have no structural damage. The padding must be intact. The chin strap must not be frayed, and the strap attachments must be operable and securely attached. Face shields, when required, and/or used, must be made of polycarbonate plastic or the equivalent and must be in good condition.

Acceptable approvals are the latest or next two most recent SA, M or K Snell Memorial Foundation, FIA 8860, SFI 31.1 and BS6658-85 Type A-FR approvals. Any helmet acceptable for PCA Club Racing is also permitted. (For more information, see PCA Club Racing rules. For a copy of the PCA Club Racing rules, write or call the PCA Executive Office, or see [www.pca.org](http://www.pca.org).)

(m) Gas Caps. The gas cap must be securely in place.

(n) Seat Belts. Must be present and adequate. Factory seat belts must be used in Showroom Stock classes. Use of additional belts or substitute belts/harness is only allowed as per the category allowances. A grid worker will check to assure that such seatbelt is fastened immediately before each driver enters the course. Where installation is other than original factory design, the seat belts must be installed according to the manufacturer's directions. If there is any question, it is the responsibility of the entrant to demonstrate to the tech inspector's satisfaction that the belts are properly installed. (For more information, see PCA Club Racing rules. For a copy of the PCA Club Racing rules, write or call the PCA Executive Office, or see [www.pca.org](http://www.pca.org).)

(o) Knowledge of Flags and Procedures. No drivers will be allowed to enter the course without knowledge of the flag signals and the correct procedures.

(p) Brakes. Brakes must be tested for pedal “fade while the automobile is stationary. Brake pad and/or lining thickness should visually be adequate for an autocross type event.

17. (q) Steering and Suspension. Must not have excessive looseness, including but not limited to, steering free play, wheel bearings, etc.
- 18.(r) Camber (356 Automobiles). Should be negative on the rear suspension if the automobile is entered in the autocross.
- 19.(s) Wheels. Must be free of cracks. The correct number of lugs and nuts must be present. All lug nuts/wheel bolts must have a minimum thread engagement equal to one bolt diameter. All lug nuts/wheel bolts must be torqued to the manufacturer's specifications.
- 20.(t) Fluid Leakage. No fluid leaks of any kind will be allowed.
- 21.(u) Passenger Seat Backs. Must be suitably secured if not equipped with locking devices.
- 22.(v) Hoods, Deck Lids and Doors. Must be fastened securely.
- 23.(w) Exhaust System. Must be in a safe condition (i.e., no leaks, securely mounted, etc.)
- 24.(x) Battery. All batteries must be attached securely to the frame or chassis. The positive terminal on all batteries should be covered.
- 25.(y) Throttle Return. Throttle must be safe and positive. Throttle must return to the closed position when released manually or by the pedal.
- 26.(z) Mufflers. All automobiles must have a functional muffler and comply with any local noise ordinances or motor vehicle laws. If the local area and the Parade Committee permits open exhausts during the autocross (for the Improved and Modified classes), the muffler may be removed at the site of the autocross.

A worker on grid or in the safety area will perform a cursory inspection (helmet, clothing, seat belts, loose objects, etc.) of all automobiles for compliance before competition begins.

#### **A-6. AUTOCROSS RUNS**

Automobiles will run in 2 (two) run groups. 2 (two) driver cars will be in separate run groups.

##### **A-6.4. Penalties**

All pylon penalties for each run or re-run will be recorded. If the driver was not at fault in hitting the pylons, e.g., swerving to avoid a collision with something/someone on the course, then those pylons will not count. The final pylon penalty assigned to a run or rerun will be the pylon penalty recorded during

that run. If the driver observes a pylon(s) moved or upset by someone else, the driver should stop immediately, indicate the problem to a course worker, who will verify the problem and then proceed at a reduced speed to the grid for a rerun without penalty. The automobile should return to grid as specified in the autocross supplemental instructions and/or as specified in the driver's meeting. If the course worker verifies there is no problem, then the automobile should continue on the course knowing that the time for this run will be counted.

#### **A-7. COMPETITOR'S RULES**

Compliance with the following rules is mandatory.

(a) (deleted)

(b) (deleted)

(c) Auto Safety (Tech) Inspection. All automobiles must successfully pass the safety inspection before running the event as specified in G-7.

4. (d) Final Safety Inspection. Drivers and automobiles must meet the requirements of A-5. "Driver Safety" before beginning competition.
5. (f) One Automobile Rule. An entrant may drive only one automobile in the autocross and that must be the one registered for the event by that entrant
6. (g) Passengers. When there are two persons in a car, One must be a registered Instructor.
7. (i) Walking the course is permitted when approved by the organizers at specified times. Wheeled conveyances are prohibited except to accommodate physically impaired competitors.
8. (j) Leaving/Deviations From the Course. For a run to count, the driver must stay in the driver's seat and the automobile must remain on the course after passing the "Entrance" and until passing the "Exit". If all four wheels leave the course, the automobile will have left the course and will be a DNF (Did Not Finish) unless the automobile reenters the course at or before the point of exit at the time of exit. Failure to comply, whether voluntarily or for mechanical reasons, will result in a DNF. No points (or awards) will be given for a DNF run. A rerun will not be granted for a DNF.
9. (k) Stopping. Failure to make a complete stop in the proper area (where marked), if required, after a timed run will result in a DNF.

(m) Automobile Numbers. Assigned automobile numbers must be in place before running the course.

(n) Flags. Competitors must know the flag signals prior to entering the course. Failure to obey flag signals could result in dangerous situations and/or disqualification. (If you do not know the meaning of the flags, read A-4. or ask a worker.)

(o) Mufflers. (See G-6.2. "Mufflers") Cars must meet the Autocross Chairmans Good neighbor policy for sound limits. This will vary for each site.

(p) Mechanical Changes. All changes to the automobile during competition must be made while on grid. Any mechanical changes should not interfere with the running of the event or your timed runs. Changes other than altering tire air pressure or adjusting components, such as sway bars or shocks, may require a re-tech while on grid. Any changed components must be brought with the automobile to impound.

## **A-8. TIMING AND SCORING**

### **A-8.1. Timing**

**A-8.1.1. Equipment.** The timing devices will be automatically started and stopped by the competing automobiles. The timing devices will display times with a resolution of at least 0.01 (1/100) second. A backup timing device shall be in position, tested and available for immediate use in the event of failure of the primary timing device.

**A-8.1.2. Timing Problems.** In the event a timer problem occurs, the competing automobile may be flagged off the course at the discretion of the events operational crew. The automobile should proceed at a reduced speed to the grid for a rerun without penalty. The competing automobile should return to grid as specified in the autocross supplemental instructions and/or as specified in the driver's meeting.

**A-8.1.3. Timing Slips.** Each competitor is to receive a time slip, including time of run, penalties and/or DNF notification as applicable, at the end of each run and prior to any subsequent runs. These timing slips are not considered official. An electronic timing display may be used as a replacement for timing slips.

### **A-8.2. Scoring**

**A-8.2.1. Official Time.** The official time for a run will be the time measured by the automatic timer plus any penalties incurred. If the official time is audited, due to procedure or protest, then the official time, as originally recorded, may be changed.

**A-8.2.3. Pylon Penalties.** If a competitor knocks over a pylon or moves it completely outside its outline, a penalty will be incurred. All pylons will have the same penalty. The penalty will be 1 (one) second for each pylon so moved. (See A-6.4. "Penalties")