

Important Information from your PCASDR Tech Advisor

I know you are all looking forward to running the upcoming DE or Time Trial. What will make this event run easier is if all cars are pre-teched before arriving at the track. Therefore I am sending a list of pre-tech shops as well as a checklist of what is expected in the check out. There will also be a tech team at the track. You will have to wait in line. You will be much better off doing this ahead of time, as repair services will be minimal trackside.

The authorized service facilities in San Diego will be:

Black Forest – (858) 292-1192

Mirage International – (858) 581-1101

Comeau Racing Enterprises – (619) 994-0919

Dieter's – (619) 234-8106

European Motorsports – (760) 599-9307

C2 Motorsports – (858) 495-9200 (Porsche's and X-cars)

For more info see: http://pcasdr.net/2013/?page_id=592

If you are coming from areas outside San Diego you can use any of the authorized inspection stations listed on the Zone 8 website (but you still *must* use SDR's Tech form; see link 2 paragraphs below): http://www.zone8.org/events/tech_stations.php. **However, all cars not inspected at one of the 6 above San Diego shops or by our at-track techs are subject to random reinspection at the track.** Still, for your own safety, you are encouraged to have an authorized local shop tech your car.

We have not called any of these shops. They may or may not do this service for you. No shop is under any obligation to tech your car. I suggest going to a shop with whom you have a relationship and that you call in advance. **Make an appointment at the shop of your choice as early as possible!** These shops are doing you a favor and are very busy especially the two weeks prior to our events.

Bring in a completed 2015 Tech/Registration form with you at your appointment time. This form can and should be filled out and printed from the Zone 8 classification website (print out and bring both pages): <http://zone8.pca.org/CarClass/Default.aspx>. X class cars should use the form located at <http://pcasdr.net/2013/misc/AXRegForm.pdf> and must indicate Class and Performance Equipment points (but preferably all requested point categories) on the form prior to having the car tech'd. Download the form to your computer, then open it with a PDF reader (*not* in your browser), and use the fill-in feature to complete the form. With X class cars, modifications are relative to the stock version of that car and take points for the same categories as a Porsche, and safety equipment requirements are identical for a given Performance Equipment point level. For help determining Performance Equipment points and safety equipment requirements for X class cars, see the spreadsheet located at http://www.zone8.org/assets/docs/DE_TTSafetyEquipCalculator.xlsx. Only the first page of the tech form should be turned in when you register at the track.

Techs, please note the Performance Equipment points of the car you are tech'ing. This must be written on the form by the driver before you start your inspection. As indicated below, certain safety equipment may be required for a car (including X cars) depending on Performance

Equipment points. *The tool to calculate these points for Porsche's is located at:*
<http://zone8.pca.org/CarClass/Default.aspx>.

The specific items that need to be checked follow (in order from the tech sheet; **if you do not use one of the San Diego facilities please give the list below to the shop you use so that they fill out the form properly**). *Cars with improperly filled out forms are subject to reinspection!*

Tires/Lug nuts-Tires must be in good condition with no less than 2/32 tread depth. We suggest greater tread depth but this is a minimum. (Note from event chair: this really is a minimum and, in my opinion, most likely won't get you through the entire weekend if you are driving hard and your tire compound is soft. 3/32" on Kumho 710's is not going to make it! The track can be pretty hard on tires and brakes if driven aggressively. There can be lots of sliding. Come prepared. It's a long way to drive and then have to sit out the second day because your tires are bald or brakes are shot.)

Wheel nut or bolt must fully engage the threads on the stud or hub for a length at least equal to the outside diameter of the wheel stud or bolt. The use of open-ended steel lug nuts is required in all cars with 400 or more Performance Equipment Points where lug nuts and wheel studs are fitted. The use of open-ended steel lug nuts is additionally required on all cars using lug nuts that have non-stock wheel spacers fitted, to allow verification of compliance with this section. Wheels must be torque to specification.

Write percentage of tread front and rear and torque spec like this 60F/50R/93T

Brakes-Brake rotors must be in good condition, minor cracks OK but none from hole to hole or touching an edge. Pads must be at least 50-60% thickness. This is about 7mm of pad material. The backing plate is usually about 5mm. (Don't confuse the two) Brake fluid must be clean, fresh and topped off. Check with moisture indicator if available. If it is over 6 months old it is a good idea to replace it. It is much easier to do now than at the track.

Write percentage of pad thickness, front and rear like this: 80F/90R

Bearings-Check front and rear wheel bearings for tightness and correct any issues. Rear wheel bearings should be free from play, as well as front bearings on most 90+ cars. Pre-90 cars should have slight play. Check front suspension at this time (Ball joints, tie rods, etc.).

Write OK or note for future service – Such as: OK-need adjustment before next event

Fluids/Leaks-Pressurize cooling system check for other fluid leaks. Top off oil and check cap for tightness. Correct any fuel or oil leaks that might cause an issue under track conditions. Check master cylinder and brake lines for leaks.

Write none or note minor leaks, such as: OK-Minor trans leak

Battery-Check that the battery cables are tight and that the battery is firmly mounted in place (PCA does not require a metal strap over the battery as POC does-but it can't hurt). Only cars that originally came with rubber battery straps may use them; 1968 and earlier cars.

Write: Secure

Seat Belts & Harnesses-Five or six point harnesses are required for all cars with 200 Performance Equipment points or higher in DEs & Time Trials and are strongly recommended for all entrants. Harnesses must be less than five years old. Cars with less than 200 Performance Equipment points

must at least have fully functional OEM (Original Equipment Manufacturer) style 3 point seatbelts or Schroth 4-point ASM Technology harnesses. If required belts are visibly frayed, damaged or dysfunctional they must be replaced with new belts.

Schroth 4-point harnesses WITH ASM® TECHNOLOGY will be allowed to be used at Autocrosses and at DE/TT's on cars with less than 200 Performance Equipment points, provided they follow the prescribed seat guidelines as well as technical inspection according to the applicable parts of Section XIII, Subsection B. For 4-point harnesses, the lap belt may use the factory belt mounting points.

4-point harnesses with the ASM® system may be used with a HANS® device. However, The ASM® system in Schroth racing harnesses should never be used with other types of head and neck devices e.g. SFI 38.1 approved.

Seat belt & harness notes:

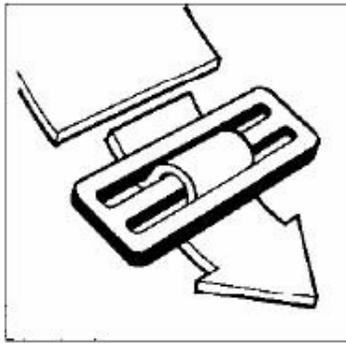
Driver for single seat cars or driver and passenger for two seat cars.

All cars with passenger seating must have equal restraints for driver and passenger. (Equal safety; visual equality or expiration date is not mandated. Belts should be less than five years old.)

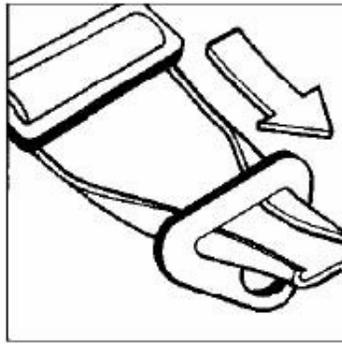
When 5 or 6-point harnesses are installed, they are required to be any current FIA and /or SFI 16.1 harness system, mounted in the manufacturer approved configuration*. This means 5/6 point harness systems cannot be used on seats that do not have harness pass through holes. *Harness threading must be as follows:

General installation guidelines (In all cases, the manufacturer's instructions must be followed when installing harnesses):

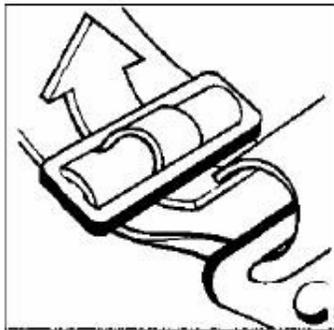
1. Hardware should meet or exceed the DOT or SAE strength standards. Example: Forged eye bolts with 7/16" SAE threads.
2. Attachments to sheet metal portions of the car must have adequate backing plates. (1-1/2" O.D. washers minimum backing per 7/16" eyebolt.)
3. Lap belts should be mounted to approximately bisect the angle between the thigh and the spine as viewed from the side. Competition harnesses should be mounted so that the rearward horizontal portion leaves the shoulders at an angle approximately 90 degree to the spine as viewed from the side.
4. Anti-submarine straps must be routed through the seat bottom in a hole and routing created by the seat manufacturer.
5. Models Boxster and 914 must have separate mounting points for each shoulder belt. If the distance from the mounting point to the seat back in the driving position is greater than 18", crossing the shoulder belts is recommended.
6. Attachments must be to the car itself and not to the seat frames.
7. Shoulder harness mounting that depends on the seat back either for position or support in a crash will not be allowed.



STEP 1: Insert strap through tightening buckle.



STEP 2: Pull strap to 8"-10" beyond buckle, fold edges and insert into mounting bracket.



STEP 3: Fold back strap and re-insert through



STEP 4: Fold back strap again and insert

924/944/968 fender clearance-All 924/944/968 cars with aluminum A-arms should have the ball joint inspected before each event. In addition, the dimension between the wheel center and the lowest portion of the top fender edge shall be greater than 13.0 inches. If an entrant wishes to lower the car below this, Fabcar or equivalent A arms shall be fitted. For parking lot courses, vehicles may be evaluated on a case-by-case basis.

Write wheel center to fender opening distance in inches like this: 13.5 in

Helmet-Inspect helmet Snell rating sticker inside the helmet. The helmets may be full or open face. Normally all helmets must be of the current available Snell rating or the one previous. For purposes of defining it in the rules, expiring helmets are good until the end of the year of the new standard.

SA-2000 or M-2000 helmets are no longer allowed! It is recommended that you replace expiring helmets immediately upon release of the new standard. They must be SA-2005 or SA-2010, M-2005 or M-2010, or FIA 8860-2004, SFI 31.1A, SFI 31.2A, or BS6658-85 type A/FR. SDR helmets will have a sticker on left side. All helmets will need this sticker to enter the track.

Check tech sheet box for helmet certification, then circle the exact Snell rating

See the event Tech Inspection Chair for helmet sticker

Loose items-Car must be free of all loose items. Check under seats in door pockets and in trunk. If there are loose items, correct this before continuing inspection.

Write None, as there is no other acceptable answer

Throttle return-Check that all necessary throttle return springs are in place and that all linkage is in good working order. Make sure carpets are not interfering with throttle pedal and the travel is smooth. If the throttle linkage cannot be accessed, (Boxster, 993, 996, 997) just mark the sheet with N/A. *Other cars write OK*

Fan Belts-Take a quick look at the belts for tightness and cracks. A cracked belt or a belt with a small fray will last a long time on the street but will fail after a session at 5-6,000 RPM. Also check 944/951/968 for power steering belt to lower radiator hose contact. There should be at least ¾ of an inch clearance as the motor can shift forward under hard braking on rough surfaces and the belt can cut the hose. Coolant on the track is BAD!

Write: OK

Membership Verification-Look at the drivers Membership card and write PCA membership expiration date on the line. If the driver is not a PCA member, write N/A.

Brake lights-Check for brake light operation, all lights must be equal and bright. If there is a center mounted brake light all 3 must function. Lights should activate with light pedal pressure, if they don't correct this before moving on.

Write number of lights and check box

Fire Extinguisher-A securely fastened 2.5 Halotron; 2-lb. Halon or 10-BC rated dry chemical fire extinguisher is required for DEs & Time Trials for all cars with 200 Performance Equipment points or above. They are recommended for all cars in all classes. However; cars with less than 200 Performance Equipment points are not required to have a fire extinguisher. When required; the fire extinguisher must be within reasonable reach of the driver. Any built-in or on-board system that meets these minimums is also acceptable. This may include Aqueous Film-Forming Foam (AFFF) systems. Visually inspect the pressure gauge; it must be in the green.

Check the box for full extinguisher if the gauge is in the green or N/A for cars with less than 200 Performance Equipment points and no fire extinguisher

Arm restraints-

Section XIII Part P. For Time Trials and DE, sunroofs, convertible tops, or removable tops (Targa tops, removable sunroofs for 924, 944, 968 vehicles) must be in place, fully fastened and closed. If the sunroof, convertible or removable top is not present, or cannot close over the roll bar or roll cage, the use of arm restraints shall be mandatory in lieu of closing the top, in vehicles that require safety harnesses (i.e., cars with 200 or more Performance Equipment points). For all such cars, all occupants helmets must clear a straightedge placed over the opening, as in Section XIII Part F.

For Time Trial and DE it is recommended that all open cars be equipped with arm restraints for all occupants, if not mandated by Section XIII Part P.

Open cars are defined as Cabriolets, Roadsters, Speedsters, Boxsters, or any other car with a soft-top or a removed top. 911 Targas, 914's, and cars with sunroofs are not considered "open".

Check box when arm restraints are required and present

Driving suit-Driver must show driving suit for cars with 400 or more Performance Equipment points and all open cars. Event chair can modify clothing requirements for lower Performance

Equipment points due to weather, but not for 400 or more points. Cars requiring driving suits must also have required gloves, shoes and socks. Specifications for driving suits are: SFI 3-2A/5 Two or three-layer suit SFI 3-2A/1 or SFI 3-2A/3 with the use of Nomex or Proban underwear; Any FIA approved suit. NOTE: Military flight suits are not acceptable substitutes for fire retardant driving suits.

Check box when driving suit is required and an acceptable one is present

Roll bars-(Mandatory for cars with 400 or more Performance Equipment points) For DE & Time Trials roll bars are mandatory in "open" cars with 200 or more Performance Equipment points. All "open" cars in Time Trials and DE are also required to have roll bars/cages, except for Boxsters, 996 and 997 cabriolets with less than 200 Performance Equipment points. Minimum dimensions are: Wall thickness .120", diameter 1¾". A 3/16" diameter hole shall be drilled in a non-critical area too allow verification of the wall thickness. Forward braces (roll cage) and the main hoop subject to contact with an occupant's helmet, should be padded with a no resilient material such as Ensolite, Ethafoam, or similar material to a thickness of ½ inch. All occupants helmets must clear a straightedge placed between the top of the windshield frame, directly in front of the occupant's head and the top of the roll bar directly behind the occupant's head when seated in a normal driving position and restrained by belts and harnesses.

A car equipped with a roll bar or roll cage that meets the technical requirements for that car to participate in PCA Club Racing is adequate for PCA Zone 8 driving event use.

<https://www.pca.org/rules-licensing-forms>

Boxsters may use a roll bar extension such as the Brey-Krause unit. The 996 & 997 Cabriolet will be measured using an 8.5" block to represent the hidden roll protection. Roll bars must be braced. Full roll cage dimension is 1½" diameter. The roll bar hoop and all braces must be seamless, ERW or DOM mild steel tubing or chrome molybdenum alloy steel such as SAE 4125 or SAE 4130. It is recommended that mild steel tubing be used as chromium alloys present difficulties in welding and must be normalized to relieve stress. Proof of the use of alloy steel will be the responsibility of the entrant. No aluminum roll bars or cages allowed. Full roll cages are required for cars without a supportive front windshield.

EXCEPTION:

For cars with less than 200 Performance Equipment points ONLY, Porsche models 986 (Boxster) may use a bolt-on roll bar extension subject to the following requirements: a.) Five (5) point seatbelt harnesses must be installed b.) The extension must meet the roll bar requirements.

Write OK if the roll bar is securely mounted and meets material and thickness standards

Convertible Roll bar Clearance-Measured in inches, all drivers must be below a straightedge placed on the top of the roll bar and windshield frame, with helmet on. Exception: Boxster, 996 and 997 Cabriolets with less than 200 Performance Equipment points are not required to pass the "straightedge/broomstick" rule as outlined in rules XIII & DRIVER SAFETY EQUIPMENT – section F.

Write measurement from straightedge to helmet

The following summarizes the safety equipment that is required for all cars as they pass up through the classes due to Performance Equipment points (not Total points, do not include Base or Tire points):

All classes:

Helmet

At least DOT harnesses

<200 Performance Equipment points:

Open-ended steel lug nuts for cars with non-stock wheel spacers that use lug nuts and wheel studs

All classes-Roll bar or cage is required for open cars except Boxster and 996, 997 Cabriolets (at TT/DE)

200+ Performance Equipment points:

Fire extinguisher (at TT/DE) 5 or 6 point harnesses are required (at TT/DE)

Roll bar or cage is required for Boxster, 996 & 997 Cabriolet (at TT/DE)

400+ Performance Equipment points:

Roll bar or cage is required for all cars (at TT/DE)

Open-ended steel lug nuts are required for all cars that use lug nuts and wheel studs (AX and TT/DE)

All cars must have a tow hook, strap, or other suitable device (at TT/DE)

Driving suits, gloves, socks and boots are required

If the car was never intended for use on any public road (a real race car), the following safety equipment is mandatory:

Open-ended steel lug nuts

5 or 6 point harnesses

Roll bar or cage

Driving suits, gloves, socks and boots

A securely fastened fire extinguisher or equivalent

If you or your inspection station has any questions they can check the full list of rules at:

<http://www.zone8.org/assets/docs/2015/2015Z8Rules.pdf>.

If you have any additional questions please use the following contacts:

Region Rules (Questions/clarifications) rules@pcasdr.org

Tech Inspection (Questions/requirements) techinspection@pcasdr.org

Or I can be contacted by phone 8:30am to 4:00 pm M-F for last minute immediate response only. (858-292-1192) or at techadvisor@pcasdr.org.

Steve Grosekemper

PCASDR Tech Advisor