



2015 AMR-RMR

TECH INSPECTION REQUIREMENTS & TRAINING GUIDE

FOR DRIVER'S EDUCATION EVENTS

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Introduction

This document specifies the technical requirements that vehicles must meet prior to RMR/AMR Driver Education events and also provides interpretive guidance to technical inspectors to so they fully understand the requirements.

Tech Inspectors are expected to validate the safety of cars running in PCA Driver's Education events. technical inspections are required not only for the safety of the person driving the car, but also for the safety of other drivers, corner workers, spectators, and the event in general. It sounds pretty awesome, but it's not all that difficult.

Our Driver's Education events are governed by a set of rules, which are published annually and available at <http://rmr.pca.org>.

Tips for Technical Inspectors: Interviewing the Entrant

Always talk to the person whose car you are inspecting. Make a quick assessment of their technical competence. This will guide you as to how far to look into potential problems the car might have. The more you talk with the entrant, the more faith and trust this person will have in your judgment. Always show an entrant what it is you are looking at, and why it is important. Try to spark a mechanical interest or concern in the entrant about his or her car. It will save you time at the next tech.

From a technical competence point of view, there are several classes of people that come to our events:

Type 1: The person who knows where the gas goes, where the key goes, and where the stereo is.

Type 2: The person who, in addition to the above, also knows where the dipstick is, and what it's for.

Type 3: The person who does most of the simple maintenance on his or her own car.

Type 4: The person who does all the maintenance and modifications of his or her own car.

A Type 1 person either doesn't care much or just doesn't know much about mechanical things. Check this person's car out very carefully. Neglect can cause serious damage to life and property. Show the entrant what you've found. Ask who services the car, and when the most recent service was done.

A Type 2 or 3 person usually wants to know what needs to be done and you are the expert. As an expert, you should point out potential problems.

The Type 4 person can be an asset or a potential problem. Your quick determination of competence level should indicate whether the person is fully competent or minimally competent. Check everything closely on a minimally competent person's car. This type of person might possibly have an exploding car that could halt an event because of faulty maintenance work.

The Inspection Process

Before addressing specific items on the tech sheet, stand back and get an overall impression of the car. Is it clean? Does it appear to be well taken care of? Is there unrepaired body damage? Is the interior in good condition, or does it show signs of neglect? Your first impressions will give you some hints about the level of maintenance the car receives.

Tech Inspectors do not have unyielding power to boss people around. Instead, we make recommendations to entrants based on what we do or do not find. Remember that this is a club and we are all friends.

Some of the items in the inspection have clear pass/fail indications, but there are also a number of judgment calls. If you find something suspect, get a second opinion from another inspector or the person heading the Tech. Entrants will have more respect for your judgments if they are seconded.

Sometimes cars fail the tech inspection. If a car fails tech, it fails, regardless of stated fact that the car is going to the garage tomorrow. As Tech Inspectors, we will help our members the most by maintaining the club's safety standards. Cars that fail are re-inspected at the track before the event. There is no charge for re-inspection at the track.

Give special attention to any car or driver that is new to RMR or AMR driver education events. Ask the owner about the car's maintenance, and how recently various items have been serviced. Remember that the driver may not be fully aware of the car's maintenance history, or even physical damage that may have been improperly repaired. These cars should be checked closely to identify any potential problems.

Be considerate of entrants and their cars. It is not unusual to find Porsche owners that are somewhat fanatical about their cars and are very sensitive about how they are treated. Sitting in an entrant's car is a poor idea, especially if you have been lying on the ground while inspecting other vehicles. It won't be appreciated if you leave grease spots on the immaculate leather seats. (You can reach inside to test the seat belts and pedals.)

Be especially careful when lifting cars. Cars have been dropped off jacks, sometimes with real damage. Ask the entrant to lift his or her own car.

Be aware that as a Tech Inspector, you are an important point of personal contact with our members. Many first-timers at driver's schools have their first "official" contact at a tech inspection. You can help these members get off to a good start by giving them a friendly and knowledgeable welcome. They will appreciate it, and this will also help the club grow.

The Tech Inspection Sheet

A tech inspection sheet must be filled out for each entrant for every event. The tech sheet is signed by the entrant, acknowledging that he or she is solely responsible for the safe condition of the car.

The tech sheet lists all of the major items of the inspection. Each item can be checked off as it is inspected. Space is also provided for written comments, which are helpful if a vehicle fails tech and must be re-inspected. The tech sheet is signed and dated by the inspector.

A copy of the tech sheet is found in this booklet and can be used to make additional copies. It is also on the club website, <http://rmr.pca.org>.

The following pages provide a step-by-step guide to the tech inspection. For each of the major items on the tech inspection sheet, the applicable rule is cited along with a description of the inspection procedure and what to look for.

The pre-tech sheet and this Guide follow the general sequence of the inspection:

- Lights and Controls
- Front and Rear
- Restraint System
- Engine
- Lift

Lights and Controls

Front/Rear Headlights, Brake Lights, Turn Signals (1, 2 & 3)

Rule: Headlights and turn signals shall be operable on all street-driven cars. Operable brake lights are required on all cars.

Comments: Put one person in the car and check proper operation of headlights, brake lights and turn signals. Only faulty brake lights are sufficient cause to fail a car, but street-driven cars must have all required lights in place.

Pedal Travel (4)

Rule: All pedals shall move freely and brakes must not exhibit pedal "fade" or "sponginess".

Comment: Check all the pedals; the brake should not travel very far, and should feel firm. Hold it for a second or two; it should not move further toward the floor. The clutch should operate smoothly as well as the gas pedal. Pedals go down and up, not side to side, check it out. If the pedals are hard to press or if they bind, the pedal bushings are shot.

Steering Wheel Play (5)

Rule: Steering wheel play must not be excessive or sticky.

Comments:

Fire Extinguisher (6)

Rule: It is recommended that all cars participating in Drivers' Education events that have been modified beyond stock configurations (as delivered from the Porsche factory) contain a minimum 5BC fire extinguisher. This includes a recommendation if tires have a wear rating of less than 140. Fire extinguishers must be properly charged and securely mounted within the passenger compartment convenient to the driver. Installed fire suppression systems in accordance with PCA or other nationally recognized racing organizations are acceptable.

Comments: Most fire extinguisher mounting devices were intended to be attached to a wall, so the extinguisher may be slightly loose in the bracket. Check to be sure that the fire extinguisher will not come loose. Cars are not required to have fire extinguishers at driver's education events, but every driver should carry one. It is recommended that cars with R compound tires, wear ratings less than 140 and/or racing seats/harnesses should have a fire extinguisher.

A car that burns far from help is a tragedy, and a fire extinguisher in the car can be mighty cheap insurance.

Front and Rear

Battery (7)

Rule: The battery shall be adequately secured in its holder. Replacement hold down devices must be equal to or better than the original. All loose objects (jack, tools, etc.) shall be removed. Items to be left in the trunk (i.e. spare tire or jack) shall be adequately secured.

Comments: 911 replacement batteries often just don't fit right. You will find boards, plastic, bailing wire, and twine used to secure them. The correct method is a clamp and bolt. It doesn't matter if the clamp is a factory part or a fabricated piece: it must keep the battery from moving. Covering the battery terminals is recommended to prevent contact with the body which can arc and cause a fire.

Brake Fluid (8)

Rule: The brakes should be bled prior to each event and fluid must be changed yearly. More advanced drivers should change brake fluid more frequently.

Comments: Check to see if the brake reservoir is full. Ask the owner about the condition of the brake fluid and when it was last changed. Brakes should be bled frequently, especially when they are used hard at track events.

Wiring (9)

Rule: Wiring shall not interfere with moving components and all connections shall be tight.

Comments: Look for loose wires that could interfere with the throttle linkage or get caught in the fan.

Body, Rust or Unsafe Damage (10)

Rule: Every car must have a complete body, at least similar to what came from the factory, with full fenders, hoods, deck lids, and doors. All cars must be structurally sound to participate in autocross and Driver's School events. Any rust or unsafe damage that impairs the safe operation of a car shall be grounds for disqualification. Cosmetic rust on non-structural panels will not result in disqualification, but may indicate the presence of rust in critical areas such as suspension mounting points.

Comments: Has the car been in an accident? Did it get repaired properly? Look for loose body parts, bad fitting doors, and trunk lids. Rust usually appears first around the battery and suspension components frame mounts. A lot of built-up undercoating is usually the clue that there is unrepaired damage or terminal rust underneath. Cars with serious body damage, such as jagged edges, are not allowed at driving events.

356s rust around battery boxes and at the jack points on each side first. 914s rust in the same places, but also check the trailing arm mount under the battery and in the front trunk where the torsion arms mount. 911s and 912s rust in the same places as the 914s. Also check the rear torsion bar tube mounting points. Front engine cars and late model cars usually don't have a rust problem because they were built with galvanized panels. Just look for significant body damage.

Negative Camber (11)

Rule: All 356 cars should have negative camber on the rear suspension (no exceptions).

Comments: Camber is the angle of the tire to true vertical. Negative camber makes the tire look as if the top leans into the car. Positive camber looks as if the top of the tire leans away from the car. Positive camber is a bad situation on any car and should be checked out. Neutral camber is where the tire doesn't appear to lean at all. 356s with neutral or positive camber can roll over very easily. Camber Compensators are highly recommended for 356's. Note that negative camber, while conducive to better handling, can cause the insides of the tires to wear faster than the outsides.

Restraint System

Seats Secure (12)

Rule: Seats must be securely anchored. Passenger seat backs without locking devices shall be suitably secured.

Comments: 356 Speedsters are usually the culprits here. Some early 911s and 912s have problems, and 924/944 cars may exhibit cracking in the floor where the seat attaches. Firmly shake the seat; try to identify the source of any movement. Looseness in the sliders is usually the cause of the movement; attempt to verify this. Loose seat mounting bolts must be tightened prior to approval.

Equivalent Restraint System (13)

Rule: Restraint system for both the driver and the passenger must be the same.

Comment: If the car has a front passenger seat installed, it must have the same or equivalent system as the driver.

Factory Seat (14)

Rule: Factory seats must have factory 3-point belts for both sides.

Comment: 5-6 point harnesses cannot be used with factory seats.

Aftermarket Street Seat/Race Seat (15)

Rule: All cars must be equipped with an approved Seat/Harness Restraint System.

Seat: A "Non-Stock Seat" is an aftermarket seat that is designed for use with the factory 3-point harness system or one intended for use with a 5-6 point harness. These are typically the folding performance seats (aftermarket) with low seat bolsters, such as the Recaro SPD, and high-sided fixed performance/race seats, such as the Recaro Pole Position.

A folding performance seat, (aftermarket), with a hinged back and low seat bolsters, can be used with the factory 3-point harness or a 5-6 point harness. When used with a 5-6 point harness, the seat must have the proper routing holes for the shoulder and anti-submarine belts. The 5-6 point harness must be within 5 years of its manufacture date.

A performance/race seat, with high sides and a fixed back, can only be used with a 5-6 point harness. (The seat cannot be used with the factory 3-point system on the track). These seats will have routing holes for shoulder straps, lap belts, and anti-submarine straps.

Where installation is other than factory original, the belt mounting hardware must be anchored securely with large diameter washers or plates on both sides of the mounting holes. Swivels must have the eye bolts welded closed. Seat Belt Mounting Clips must be safety wired closed after attachment to the eye bolts.

Aftermarket belts shall be mounted according to these rules and the manufacturers' specifications. The angle of the shoulder harness going back from the driver's shoulders cannot be more

than 30 degrees above nor more than 10 degrees below the horizontal plane of the shoulders. Shoulder webbing should attach as near to the rear of the seat as convenient, in order to reduce belt length and stretch. Where applicable, belts should be threaded 3-times through the adjustment buckles.

Comments: Check out the seat/harness restraint system carefully. Some cars might have aftermarket racing harnesses in addition to the stock belts. Make sure they work and are properly connected. Ensure that the date on the harness meets the time requirement (SFI belts show the month/year of manufacture; FIA belts show the end of the 5-year expiration). Some racing harnesses use a clip installation. Check to see that they are clipped properly and safety wired closed.

Shoulder harnesses can be mounted through the package tray behind the rear seats, and can be anchored to the "kiddie" seat belt mounting points in the rear seats. They can also be attached to a reinforced section of the floor, if they pass over a horizontal harness bar that is located at a suitable height behind the seats. A harness bar should not be considered adequate to serve as mounting points for the harnesses unless appropriate documentation is provided. Early 911s had their lap belts mounted too high at the rear outside anchoring point. Belts were attached to the inside of the fender, not to the floor. This resulted in holding the driver at the waist, rather than across the pelvis. This is clearly a dangerous situation. Owners should be warned about it.

Roll Over Protection (16, 17)

Rule: A car which does not have factory installed roll over protection must have a roll bar installed and pass the broomstick rule to participate in DE's. All models are subject to this requirement. Design, installation and materials of roll bars or cages must reasonably meet the intent of PCA Club Racing specifications. Roll bars must be covered with closed cell foam padding in any place where a helmet could come in contact with the bar.

Targa tops must be installed and sunroofs closed unless the car has roll over protection installed.

Porsche convertible models 996 and 997 have factory installed roll over protection ("pop up" type).

Porsche models 986 and 987 (Boxsters) have factory installed roll over protection (Not "pop up type) and may run without

modification.

Comments: A straight edge held from the top of the windshield to the roll bar must be above the driver's helmet. Rollbar extensions are allowed. Rollbar padding is required if the helmet can come into contact with the bar and is not to be included in the broomstick test.

Engine

Engine Cleanliness (18)

Rule: The engine should be free from excessive grease, oil and dirt. No leakage of any fluids will be allowed.

Comments: A dirty, grimy engine is probably an accident looking for a place to happen. Let it happen somewhere other than our track events. Advise an entrant of this and suggest that they go to the nearest car wash and spend \$20 or so cleaning things up. And then fix whatever is causing the problem. A Porsche engine compartment should be clean.

Engine Belts (19)

Rule: Belts should have proper tension and be in good condition.

Comments: Proper tension means that when it is pushed at a point halfway between two pulleys the belt should deflect only about one-half inch. Air conditioner belts are usually the biggest problem. While checking air conditioner belts, check that the air conditioner is mounted securely. Quite often on early 911s bolts will come loose and disappear.

Engine Hoses (19)

Rule: Hoses shall be in good condition and have all clamps tightened. No external clamps shall be used on pressurized oil lines.

Comments: Check pliability. Old hoses may be stiff and crack easily. The other problem is hose clamps that are tightened too much or not enough. Both of these situations will cause problems over time. Properly tightened clamps will not bulge the rubber on either side of the clamp. Also, hoses should not interfere with carburetor or fuel injection linkage. Be sure to check coolant and heater hoses on 944s. Don't miss the heater hose at the top rear of the cylinder

head.

Engine Ignition Distributor (20)

Rule: The distributor shall be properly secured.

Comments: The distributor shouldn't wobble. All the wires should be tight, and there should be no visible or audible arcing when the engine is running.

Engine Air Cleaner (21)

Rule: The air cleaner shall be properly secured.

Comments: Some 911s have rubber straps that hold the air filter and cover in place. These straps stretch and dry out over time, and weaken to the point where they can break. Check for this condition. The other problem is that some people like to remove air cleaners for more power. That's okay to do as long as nothing else is flapping around because of it. Note that this is not good for the engine.

Carburetor and Fuel Injection Linkage (22)

Rule: Linkages shall be tight and in good working order, especially throttle return springs.

Comments: Manipulate the linkage. Everything should move all at once. The throttle return properly without hanging up. Each carburetor should have its own return spring. Fuel injection should have return springs also. 914s usually mount more than one spring as a safety backup. Note that newer cars will have electronically controlled throttles with no return springs.

Engine Gas Lines (23)

Rule: Gas lines shall be in good condition and all connections tight.

Comments: Are they dry? Are they all clamped? If any smell of gasoline can be detected in the engine compartment, check closely for leaks. Fuel injections of carburetors should be secure and free of cracks. Fuel injection systems can carry upwards of 45 psi. Fires are no fun. Any car that smells of gasoline fumes automatically fails tech inspection.

Lift Inspection

Wheels (25)

Rule: Wheels shall be free of cracks. Snap-on wheel covers (used on 356s and early 911's) must be removed.

Comments: Cracks on alloy wheels usually appear as tiny fissures coming from the lug nuts or near where the spokes meet the inner and outer wheel sections. Does the wheel spin true? If not, look for a curb bump, there may be a crack there. Straightened wheels often get cracks; look for evidence, usually a "massaged" area. Steel wheels, if recently repainted (ask), should have the paint removed where the lug nuts contact them. This paint will boil out under heat. Check welds and potential cracks around lug nuts.

Rotors (26)

Rule: No cracks on rotors that extend to edge.

Comments: Brake rotors are specifically addressed in the rules, and they should be checked. Deep cracks can be extremely dangerous. (This is not the same as crazing; a network of many small lines on the surface that looks something like a spider web. Crazing is common on brake rotors and is usually not a safety problem.) Brake rotors that have cracks that extend to the edge of the rotors must be replaced.

Look for excessive wear on brake rotors. This may be indicated by a lip around the outside rim of the rotor. As the center part of the disk is worn down, a raised lip is left around the outside edge. You can feel the lip with your finger, and it is often visible as a bright reflective ring around the edge of the rotor.

Wheel Lug Nuts and Center-Lock devices (27, 28)

Rule: Lug nuts shall be torqued to proper specification (94 to 98 foot pounds or per factory recommendations). All lug nuts must be installed. All lug nuts shall have a minimum thread engagement equal to one bolt diameter. Center lock nuts must have a safety retaining clip installed. Center-Lock wheels must have their locking devices fully engaged.



Picture with locking device fully engaged.



Picture with Locking device NOT engaged.

Comments: Ensure that the entrant is aware of the proper torque required for their wheels. Check torque on each lug nut.

Tire Clearance (29)

Rule: Tires must not rub against any surface of the car. No sheet metal shall interfere with the steering or suspension.

Comments: Ask the entrant if these are the tires they plan to use during the event. If the answer is yes, check for tire rubbing. Signs of rubbing are usually visible at the tops of the fenders on the outside, and against the frame, hoses, and suspension on the inside. Rubbing tires will usually exhibit a wear line around the circumference of the tire. Any rubbing should be questioned.
If the entrant plans to use other tires at the event, ask if those tires or other like them have been used previously on the car. If yes, check for rubbing. If no, put a note on the tech sheet to check tires at the track.

Tire Condition (30)

Rule: Tires must be free of cuts and bruises and must meet minimum tread requirements. It is highly recommended that all tires be of the same make.

Tread depth: Street tires shall have visible tread showing at all times in at least the centermost tread grooves and for substantially the entire circumference and width of the tire. Race tires must have visible tread depth indicators for the circumference and across tire width. The tread requirements apply for the entire event and tires should exceed these guidelines at tech in order to have sufficient tread depth throughout the event.

Street tires must meet Colorado state requirement for tread depth. This requires at least 2/32nds of an inch of tread depth measured in any two tread grooves at three locations equally spaced around the circumference of the tire. If the tire has tread wear indicators, the tire is deficient if it is worn to the point that the tread wear indicators contact the pavement in any two tread grooves at three locations equally spaced around the circumference of the tire.

Comments: Racers are hard on their tires. Look for bubbles, bulges, and cords. Spin the wheel. It should spin concentric with the wheel. Radial grooves or smooth polish lines around the tire indicate interference

(rubbing) problems. Look for rubber dust on the closest body/suspension/brake part.

As far as tread depth is concerned, ask yourself if this tire will last the entire event? If the answer is no, then talk to the entrant. Race tires are another story. There are wear indicators all over the tires. They should all be visible; obviously there should be no cord or steel belt showing or chunks of tread missing which could cause a blowout on the track. Note that negative camber, while conducive to better handling, can cause the insides of the tires to wear faster than the outsides.

Brake Pads (31)

Rule: Brake pad thickness shall be above factory recommended minimum for the entire event. Pads showing less than 3/16th inch remaining thickness must be replaced prior to a Driver's Education event. If an instructor will be required, the pad thickness must be greater than 3/16th inch.

Comments: After tires, racing is next hardest on the brakes. Brakes are probably the most important safety components for high speed driving events, so they should be carefully inspected.

Wheels usually don't need to be removed to do this. A flashlight can be used to check the pad thickness. Use the wear indicator as your guide if the pad is substantially gone. Ask yourself, will these pads last through this event?

If pad thickness is borderline, recommend that the entrant take a spare set of brake pads to the event, preferably pads that have been bedded in. This is a good opportunity to make sure that the entrant understands why pads need to be bedded in.

Drum brakes on 924s and 356s are checked differently. 924s have inspection holes in the backing plates to peer through. 356s are next to impossible to check. Ask the owner and use your judgment.

Wheel Bearings (32)

Rule: Wheel bearings shall be free of excessive play. To check front wheel bearing play: jack up the car, grasp the tire at 6 and 12 o'clock and attempt to move it back and forth.

Comments: As front tires and wheels get hot, the wheel bearing will also get hot. A little free play is necessary so that as everything gets hot and expands there is play to absorb it. Rear wheels should also be

checked: check the same as the front wheels; however, shake the car violently and listen for distinct clunks.

All front wheel bearings will have some free play. 911 rear wheel bearings should feel tight, but 944 rear wheel bearings may have some free play. Free play in rear 914 wheel bearings may indicate a loose rear trailing arm or wheel bearing that needs adjustment. Follow up as necessary.

Steering (33)

Rule: All steering mechanisms shall be sound and free from excessive play. While the car is jacked up to check wheel bearings, grasp the tire at 9 and 3 o'clock and with someone holding the steering wheel, attempt to move the tire back and forth. Excessive movement indicates worn components.

Comments: Excessive play in the steering is usually found on 356s that have a worm and sector steering box, but also occurs in newer vehicles that have rack and pinion steering. Another way to check it is to leave the car on the ground and lightly turn the steering wheel back and forth while looking at the nearest front wheel. Does it respond to your movements quickly, or is there some lag time? It's a judgment call.

Shock Absorbers (34)

Rule: Shocks shall be in good working order, properly mounted and free from leaks. When one end of the car is pushed down and released, it should bounce back once and come to rest.

Comments: Check rubber mounting bushings. They should exist and not be pounded out. McPherson strut insert shocks should be tight. Shake a wheel violently with hands at 12 and 6 o'clock. No movement or clicking noise should come from the strut. Look for oil leaking from shock absorbers. A leaking shock absorber will have dirt and grime stuck to it, recommend replacement. A failed shock absorber will have an oil wetted body.

Brake Lines (35)

Rule: Brake lines shall be tight and free from visible defects.

Comments: Inspect the rubber or stainless steel braided Teflon flexible lines that connect the brake caliper on the rotor to the solid steel lines mounted on the body. Look for leaks, crimps, twists, and cracks. Any sign of rubbing is a serious problem. Sometimes, brake lines

leak slightly before breaking. This can be detected by a dirty or grimy coating on the rubber line. These must be replaced before participating in a Driver's Education event. Remember, even cars which are 4-5 years old can have faulty brake lines. We recommend all DE participants replace their brake lines with stainless steel brake lines for safety.

Suspension Components (36)

Rule: Suspension shall be securely attached and free from visible damage or defects. Drive train half-shafts or drive shafts shall be free of excessive play.

Comments: Is anything loose? With the car on the ground shake a tire violently so the car rocks. If you hear anything abnormal, check it out. Someone else may have to shake while you look. Check half-shafts by holding the transmission CV joint fast, and turning the tire with the other hand. Note any free play. Abnormal tire wear can indicate alignment problems and loose parts. Again, it's a judgment call.

Also, glance at the rear trailing arms. If these are seriously dented or partially collapsed, they could fail under the stresses of high performance driving.

Drive Line Components (37)

Rule: All driveline components must be tight, serviceable and free of leaks.

Comments: Inspect the CV joints; the bolts should be tightened and the boots should not leak.

Leaks (38)

Rule: No leakage of any fluids (oil, gas, brake fluid, or water) shall be allowed. In addition to indicating a problem with the car, fluids can make the track slippery and endanger other drivers.

Comments: This is a tough one to judge. If the car has leaked a puddle of anything as it sits in the inspection area, that's a good indication of a problem. Find the source of the leakage.

Don't know what it is? Here are some guidelines: Rub your finger in it, feel it and smell it. Oily (sometimes with a dirty smell) is engine oil; oily and sulfur smell is transmission fluid, oily and red is automatic transmission fluid; watery, hot and slimy is antifreeze; oily but drying when wiped off is brake fluid.

Oil leaks are the most common leakage problem in Porsches. If the car has oil lines to a cooler in the front, check it out. Many events have been halted because of spilled oil from these lines, connections, or coolers coming loose. Check to see if the lines are mounted securely, where nothing rubs on them.

Look closely at 911 oil lines, especially on older cars where the rubber oil lines may have become hard or cracked.

Top Tech

Interior Hazardous Objects, Cleanliness

Rule: All objects that could cause injury or impair the movements of the driver shall be removed (CB's, garage door openers, radar detectors, add-on speakers, etc.), however, a securely mounted radar detector is considered safer than bare, exposed brackets on the dash or windshield. The entire interior shall be free of loose objects.

Comments: This is a Top Tech item to be checked at the track on the day of the event. Tell the entrant to remove all the stuff, preferably at home. This includes radar detectors, garage door openers, and removable floor mats. Nothing is worse than to be slowing from 90 mph for a corner and have a beer can; cassette tape, speaker or grapefruit emerge from between your legs and say hello. The rule is simple; if it's not glued or screwed in, it comes out.

Helmet

Rule: All entrants must wear a helmet meeting the Snell Memorial Foundation standard M, K or SA 2005 or newer.

Comments: Helmets should be presented for inspection at Pre-Tech. This is also a Top Tech item to be checked at the track on the day of the event. Check the rulebook for the current requirement.

Specific items that will be inspected on grid:

1. Floor mats must be removed or securely attached.
2. The entire interior shall be free of loose objects.
3. Check battery for secure mounting.
4. Verify hoods and trunks are securely latched.

5. Helmets: All entrants must wear a helmet meeting the Snell Memorial Foundation standard M, K or SA 2005 or newer. RMR inspection sticker must be affixed to the left side of the helmet.
6. Verify seat belts are fastened.
7. Verify helmet chin straps are fastened.
8. Verify proper run group.
9. Verify if instructor is required.
10. Gas cap is secure.
11. Verify proper clothing attire
12. Windows down unless otherwise directed by Chief Driving Instructor.
13. Verify car numbers are in place and legible to Control.

Miscellaneous Recommendations

1. The vehicle should be in proper alignment not only for tire wear, but proper handling.
2. It is recommended any vehicle participating in track driving events with tires with a tread wear less than 140, a harness/seat system or significant chassis, suspension or engine modifications should contain a minimum 5BC fire extinguisher. The fire extinguisher must be properly charged and securely mounted within the passenger compartment convenient to the driver. If the vehicle contains a fire bottle extinguishing system instead of a portable fire extinguisher, it must meet the same minimum 5BC specification, must have a head which will cover the driver and the front seat passenger (if a passenger seat is provided), and another head which will cover the engine, and the driver must be able to actuate the bottle without releasing the seat belt or harness.
3. Avoid mounting new street tires immediately before a driving event. The track is not the proper place to break them in.
4. Keep the underside of the vehicle clean. Air-cooled engines will run at lower temperatures if all surfaces are clean.
5. The gas tank should be no more than two-thirds full to prevent spilling.
6. Tire pressure should be checked prior to going on the track.
7. Pump brakes prior to going on the track to insure that the brakes have not failed due to boiling brake fluid from a previous practice session.

APPENDIX A - RMR/AMR Driver's Education Pre-Tech Inspection Form (2015)

Name of Event _____ Date of Event _____
 Driver's Name _____ Car # _____ Today's Date _____
 Year _____ Mfg _____ Model _____ Color _____ License Plate # _____
 Car Use Type (check one below) _____

- This car is street driven and driven between DE events (Fill out this form before each event, bring to registration)
- This car is street driven and trailered to DE events (Fill out this form before each event, bring to registration)
- This car is not street driven and is trailered to DE events (Fill out this form once per year, bring copy to registration)
- This car is not street driven and participates in Club Racing (Fill out top only, attach copy of current year PCA Tech & Annual Inspection Form or equivalent current year racing organization inspection form)

Lights and Controls:

1. Brake lights (Must have both brake lights on track)
2. Headlights (Courtesy check)
3. Turn signals (Courtesy check)
4. Pedals - Travel & Feel (Must have firm brake pedal)
5. Steering wheel play (Must not be excessive or sticky)
6. Fire Ext recommended for non-stock, R-comp tires

Front/Rear:

7. Battery (Must be tied down securely)
8. Brake fluid _____ (bleed/change date)
9. Wiring (Must be tied down securely)
10. Rust/unsafe body damage (Good structural integrity)
11. Neg. Camber (on 356 Positive Camber not allowed)

Restraint System:

12. Seats Secure – L & R
13. Equivalent Restraint System – L & R
14. Factory Seat – L & R (3-Point Belts – Both Sides)
15. Aftermarket Street Seat/Race Seat – L & R
 (5 or 6 Point Harness (Req'd w/ Race Seats))
 (3-Point Harness-Aftermarket Street Seat only)
 Belt Expiration Dates _____
16. Factory Roll Over Protection (convertibles)
 (986/987-Porsche, 996/997-Porsche)
17. Roll Bar/Roll Cage/Extenders
 (Broomstick Test - Helmet Must be Below Stick)

Engine:

18. Cleanliness (No excessive leakage allowed)
19. Belts & hoses (Good condition-secure clamps)
20. Distributor/Ignition components secure
21. Air cleaner secure
22. Linkages and throttle return spring (No sticking)
23. Gas lines (No leakage-secure clamps & fittings)
24. Oil fill cap secure (Check tightness to prevent fire)

Lift:

25. Wheels (No excessive damage)
26. Rotors: no cracks that extend to edge
27. Lug nuts (Aluminum lug nuts Not recommended)
28. Lug nuts torqued to _____ ft-lbs
29. Wheel centerlocks: verify locking devices fully engaged
30. Tire clearance (No excessive rubbing allowed)
31. Tire condition (1/16" minimum for street tires)
32. Brake pads (Must have 3/16" minimum)
33. Wheel bearings (No excessive play)
34. Steering mechanism (No sticking-good condition)
35. Shock absorbers (Check for leakage)
36. Brake lines (Absolutely no leakage, cracks, abrasions)
37. Suspension components (Fasteners must be tight)
38. Drive line components (Check CV joint boots, no leaks)
39. No substantial leakage (Oil or coolant)

Any deficiencies must be corrected prior to the event.

A signed/approved Pre-Tech Inspection Sheet is required to obtain your event packet at registration the morning of the event.

Inspectors Comments: _____

1. This OFFICIAL TECHNICAL INSPECTION FORM submitted to the Rocky Mt. Region of the Porsche Club of America, in connection with the above noted High Performance Driver Education Event was performed on the date shown below by a Porsche mechanic or other person authorized by the Region to conduct such an inspection. 2. The completed Form correctly and accurately shows the condition of the Car identified above on the date of the inspection. 3. There have been no changes in the condition of the Car since the date of the inspection that would affect the track-worthiness of the Car. The undersigned hereby agrees to defend, indemnify and hold harmless PCA, its zones and regions, as well as the inspector, from any and all claims or demands arising directly or indirectly from any incorrect and/or inaccurate statements set forth in this form.

I understand that the technical inspection performed on my Car and my helmet is solely for the purpose of meeting minimum standards of car preparation for the Zone's or Region's High Performance Driving Event. No warranties or guarantees are implied or expressed by the passing of the inspection performed. I acknowledge that the safe condition and operation of my Car is entirely my responsibility. I take full and sole responsibility for any vehicle problems, malfunctions, or damage that may occur in connection with the operation or performance of my Car prior to, during, or subsequent to the Event.

Owner's Signature _____ Date _____

Track Inspection? (circle one)	
N	Y = \$50

Pass Fail Inspected by (Print Name) _____ Date _____

Top Tech Check Reminder Remove all loose objects from the trunk/interior; floor mats secured or removed. Helmet SA, K or M2005 or newer. **Helmet MUST have an RMR/AMR sticker affixed to the left side.** Driver's window remains open on track.

Note: Tech inspections may be completed by any prof. repair shop or any club member who has attended the RMR tech inspector training course. Members may not inspect their own cars. Pre-inspected cars are subject to verification/spot-checking in the paddock and at Top Tech.