

Bulletin No.: 2011-2

Date: 03/22/11

Subject: Frequently Asked Questions – Tech Inspection & Helmets

What is a “Pre-Event Tech Inspection” and why does my car need it?

A driver school can stress your vehicle more than everyday driving on the street. So a pre-event inspection by a qualified individual(s) is required to establish that the vehicle is in fact suitable, and safe, for track use. Any items found to be needing attention during the pre-event inspection should be addressed at that time. Therefore, not only is it a pre-event inspection, it is pre-event car preparation as well.

The attached “Tech” form is intended to serve as a guide for the pre-event inspection. In completing the form, the participant is documenting the inspection that they and/or a designee performs. Furthermore, the participant is certifying that the vehicle has been inspected, any necessary repairs performed, and that he/she is responsible for the safe condition of the vehicle.

Please note that the pre-event inspection should entail putting the car up on jack stands or a lift and removing all 4 wheels for access to the brakes and rotors.

What does a “properly completed” Tech form look like?

Please refer to the attached example Tech form. Note that the “Xs” for Items 1 – 23 have been typed in for the example. They should be filled in by hand on an actual Tech form.

What do I do with the Tech form?

After completing the form at the time of the pre-event inspection, bring the form with you to the event and present it when asked to as part of the “Tech” and registration process at the event. Please see “What does ‘Tech’ at the event entail,” below.

My car is almost new, why does it need a Pre-Event Inspection?

Even if your car is only several months old, it still should receive the pre-event inspection. Although it is not likely that a new vehicle will have worn components, it is possible that the vehicle has sustained damage from road debris, potholes, etc. Moreover, wear items such as brakes, tires, drive belts, etc, should receive a close inspection even on a practically new vehicle. And even on a new car, the brake fluid will likely be more than 6 months old and may need to be flushed/replaced. Please see “Why does my brake fluid need to be less than 6 months old,” below.

And of course, the wheel-nut or wheel-bolt torque should be checked, both prior to the event and periodically during the event. This requires a torque wrench and a socket of the appropriate size for your wheel lug bolts/nuts.

Can I do my own Pre-Event Inspection or must I take my car to a shop?

Our requirement is that the car be inspected by a qualified individual who is familiar with the make and model of the car being inspected. If you feel you are qualified to inspect the car and certify it is safe for driver-school use, that is fine with us. If you have a friend who you feel is qualified, and you and he/she inspect the car together, or he/she inspects the car for you, that is fine with us as well. If you choose to hire a shop or other qualified individual to inspect the car, that also will be fine with us.

The important thing to remember is that, regardless of who performs the Pre-Event Inspection, it is the event participant(s) who, by signing the Tech form, are certifying that the car has been inspected and properly prepared for the driver school, and who are assuming the responsibility for the safe condition of the vehicle.

So even if you choose to hire a shop or automobile technician to perform your pre-event inspection and vehicle preparation, and even if the shop or technician “checks the boxes” in the Tech form as part of the service they are performing, it is the event participant(s) who must sign the Tech form in the “Safety Inspection Waiver” section of the form.

Why does my brake fluid need to be less than 6 months old?

DOT 3 or DOT 4 brake fluid, the type normally found in automobiles, is hygroscopic, meaning that it will absorb moisture. Over time, the brake fluid becomes contaminated with atmospheric moisture, and the fluid’s boiling point is reduced significantly. This can lead to fluid boiling, and partial or complete loss of your brakes, under hard-braking conditions such as can be experienced at a driver school. The only way to remove this contamination is by replacing the brake fluid with new fluid from a sealed container and flushing the old fluid from the system. Plan on using about a quart or liter of brake fluid for this procedure.

Why do all of my brake lights have to work?

We strongly urge you to buy an extra set of the bulbs used in the brake lights on the rear of your car. These only cost a few dollars (even if you insist on buying them from a dealer) and even if you do not use them at a Driver School, you will eventually need them anyway. Lamps do not give any obvious warning when they are going to burn out and losing your brake lights is a dumb reason to have your day cut short.

We require that all of the lights work because in the stress of track driving we have found that students sometimes fixate on one light and will fail to notice when the others come on. This is especially true of the third (high) brake light. The last thing we want on track is a collision because someone didn’t realize the car in front had applied the brakes abruptly.

Why do you care about window tint?

The requirement for “minimal” window tint is because the driver and instructor in the car behind you need to be able to see not only into your car but through your car to see the car in front of you. You may say, “Well you shouldn’t be ‘tailgating’ on track anyway.” That is certainly true, but at the speeds you may experience, you need all the “situational awareness” you can get. I’m sure you have been behind a minivan or SUV that you can’t see around and depend on the driver in front to brake soon enough for you to react. Imagine doubling the speed and you can appreciate the need for the need to see as far ahead as possible.

What does "Tech" entail at the event?

For many years we have been using a "multiple stage" approach to driver school technical inspection ("Tech").

The first person you will encounter in our "Tech" line is our Helmet Checker/Tech screener. This person will examine your helmet to see if it is Snell 2000 or later approved (See question on helmets, below). This person will also take a quick look at your Tech form, which you should have completed when your pre-event inspection was performed. Small omissions on your Tech form will be pointed out to you and you will be asked to complete the missing information. If for some arcane reason you do not have a Tech form or your form is not nearly complete, you will be asked to pull out of the Tech line until you can present a properly-completed Tech form.

It is a huge help to us if you arrive at the event with your Tech form already properly completed.

The Helmet Checker will then direct you to pull ahead to the next stage of "Tech", the Pre-Checkers.

The Pre-Checkers verify that your Tech form is properly completed. They also check your stop lamps, compare the VIN (Vehicle Identification Number, AKA Serial Number) to what you indicated on your tech form, examine any window tinting, and ensure you have equal front-seats and seat belts and that you have a passenger-door mirror. The passenger-seat and door-mirror requirement is only for student cars. The Pre-Checkers also will caution you that your car's interior must be emptied of all loose items, including radar detectors and E-Z Pass transponders, prior to your driving on the track. (Any loose items in the luggage compartment/glove compartment will of course also be removed.)

The Pre-Checkers will then direct you to pull forward to the final stage of Tech. Here our personnel will take a quick look under the hood of your car for filler caps out of place or loose, cracked drive belts, broken fan blades, fluid leakage, etc. Tech personnel also will quickly examine your track tires, check that your gas cap is in place and tight, look for major leaks, turn your steering wheel to check for obvious lost motion or clunks, and step on your brake pedal. On some cars, the battery is checked to see if it appears to be securely installed.

Clearly, the above-described "Tech," in which your car is looked at for only several minutes, cannot possibly serve in lieu of the much more detailed pre-event inspection that you documented on the Tech form. The purpose of our event Tech is to attempt to catch obvious problems that somehow went undetected during the pre-event inspection and/or emerged on your trip to the track. Note that your car is not lifted off the ground for event "Tech."

At this point your Tech form will be approved, or you will be advised of any problems, and you will be directed to move your car elsewhere in the paddock and to present your approved Tech form to event registration, or correct any problems and return for approval. At registration, after signing the liability waiver you will be issued your car numbers, an event schedule, and a wrist band.

After this you should return to your paddock spot, apply your car numbers to the rear-quarter windows, ensure your car interior is empty and your car windows are clean, do a final check on your tire pressures and wheel lug bolt/nut torques, and prepare to attend the drivers' meeting.

Do you “Tech” instructor cars?

Generally instructor cars are “self-teched” but subject to the same pre-event inspection requirements and event “Tech” requirements as student cars. The only difference is that instructor cars are not required to have equal passenger seats and harnesses and a passenger-door mirror. The exception to this rule is if you are a new instructor to the DelVal Chapter, we will ask that you present your car for tech inspection so that we may ensure that you understand the tech requirements for participation in a DelVal Driver School.

I plan on participating in another organization's driving event the week before the yours. Should I perform another pre-event inspection before coming to your event?

Absolutely, Yes!

The registration materials and Tech form I down-loaded refer to “Snell Rated” helmets. What does this mean? Is any other rated helmet acceptable?

The Snell Memorial Foundation is an organization that performs testing on automobile and motorcycle helmets. All the major helmet manufacturers submit helmets for Snell testing. When a helmet meets the requirements of Snell’s testing, the manufacturer is allowed to represent the helmet as such by affixing what we call the “Snell Label” to the liner of the helmet. The photo shows what the Snell label looks like. We will only accept helmets with Snell 2005 or Snell 2010 ratings. (Note: Snell 2000 is accepted for the 2011 season only.) Any helmet not Snell approved (no Snell label inside the helmet) or with a Snell rating older than 2000 is not acceptable for use at our driver school. In addition to the Snell rated helmets, there are a few SFI rated and FIA rated helmets available. The acceptable SFI rating is SFI 31.1/2005 and is evidenced by a sticker on the inside of the helmet; the FIA rating is 8860. While we recognize that there are other (e.g., European) safety standards that apply to helmets, the BMW CCA does not recognize those approvals as acceptable for Driver School participation. If you present a helmet with other than a Snell 2000, 2005 or 2010 rating, it will be impounded by tech personnel and returned only when you are leaving the event.



I see that the Snell helmet approvals are either “M” or “SA,” do you accept both and what does this mean?

The “M” rating stands for “Motorcycle,” and the “SA” for “Special Application.” Either is acceptable for use at our driver school.

Do you accept open-face helmets?

Yes. Note that the majority of driver school participants choose closed-faced (i.e., those with a chin guard) helmets. **Note: for NJMP events only a “full face” helmet is acceptable.**

Where can I purchase a helmet suitable for use at your driver school?

A quick Internet search will reveal that there are many sources of Snell, SFI 31.1 or FIA 8860 approved helmets. We strongly recommend that, as part of your helmet-selection process, you try on helmets and with the help of a sales professional determine your correct helmet size. An improperly fitted helmet can be at best uncomfortable, and at worst, unsafe. Also, note that just because a size "X" helmet from Manufacturer A fits you, do not assume that a similarly sized helmet from Manufacturer B will fit the same. Indeed, some size variations may exist among different helmet models from the same manufacturer.

Remember that the sales professional you are relying on to properly size your helmet is relying on you to provide income to support their salary. A good place to "try on" helmets is the annual Motorsports show at the Convention Center in Oaks. All of the local vendors of helmets and other "goodies" are there and willing to help.

Are any other approved helmets accepted?

Will I be able to borrow a helmet from you for the driver school?

No, the DelVal Chapter does not have any "loaner" helmets available. It is permitted for 2 participants to share a helmet, as long as they are in different run groups.



Pre-Event Technical Inspection Form

Student

PLEASE LEGIBLY PRINT, IN INK, THE FOLLOWING INFORMATION:

Participant #1: Robert L. Driver Participant #2: Rosemary B. Driver
 Driver License #: 15672796 Driver License #: D1347-23734-10376
 Vehicle Make & Model: BMW M3 Year: 1999 Mileage: 87254
 VIN #: WBAAK9312MEE73952 Date of Last Brake Fluid Change: 5/21/08

The Pre-Event Safety Inspection includes, but is not limited to, the following items. The vehicle must be inspected by a qualified individual, who is familiar with the make & model of the vehicle, no more than four (4) weeks before the event. Indicate with an "X" the items deemed acceptable (Do not use ditto marks, etc):

- 1. **LIGHTING:** Functional including hazard lights. **ALL BRAKE LIGHTS FUNCTION.**
- 2. **WINDSHIELD WIPERS:** Functional and in sound condition.
- 3. **WINDOWS:** Secure and in sound condition. No extended cracks. **Aftermarket tinting of front or back windshield must be pre-approved. (Contact Event Techchair for inspection prior to the event.)**
- 4. **MIRRORS:** Securely mounted. Must have inside rear-view mirror and a passenger-door mirror for instructor use.
- 5. **PEDALS:** Securely mounted. No binding. Good pads. No excessive brake pedal travel.
- 6. **SEATBELTS:** Securely mounted. Sound condition. Metal-to-metal buckles. Three-point minimum, **equal both sides.**
- 7. **ROLLBAR/CAGE** Properly installed & padded.
- 8. **BRAKE FLUID:** Adequate level. **We require that the brake fluid be less than six (6) months old.**
- 9. **BATTERY:** Securely mounted. No fluid leaks.
- 10. **DRIVE BELTS:** Sound condition. Properly tensioned & locknuts tight.
- 11. **THROTTLE LINKAGE:** Free return. No binding throughout full travel range.
- 12. **SEATS:** Securely mounted. Sound condition. **Front passenger seat is required for all student vehicles.**
- 13. **DRIVE AND HALF SHAFTS:** No loose joints or cracked boots. Center bearing in sound condition.
- 14. **ENGINE, TRANS & DIFF MOUNTS:** Good condition. No excessive motion permitted.
- 15. **STEERING:** No looseness, excessive play, or binding. Steering box securely mounted. No deteriorated mount bushings.
- 16. **SUSPENSION:** Mounting points secure and in sound condition. No excessive side-to-side height variation. Adequate damping.
- 17. **BRAKES:** Sufficient lining thickness. >50% recommended. No cracks, abrasions, or corrosion on hoses and lines. Rotors and drums within mfg. wear and runout tolerances. No master cyl. bleed-down exhibited. Equalization OK per road test.
- 18. **WHEEL BEARINGS:** Properly adjusted. No excessive looseness. No lube leakage.
- 19. **WHEELS:** Proper offset. No cracked or bent rims. Lug nuts/bolts properly torqued.
- 20. **TIRES:** No cracks, blisters, or cord evident. Same size on each axle. Adequate tread for wet track. No Snow Tires!
- 21. **LEAKS:** No coolant, brake fluid, steering fluid leaks. No excessive oil leaks.
- 22. **FUEL AND COOLANT HOSES:** Good condition. No cracks, swelling, abrasion, or other deterioration.
- 23. **EXHAUST:** Muffled, securely mounted, good condition. No cracked or deteriorated hangers.

DATE OF INSPECTION: 5/21/08 Joe Technician
(Signature of person performing the inspection)

I, the undersigned, acknowledge and agree that the condition and operation of my vehicle is totally my responsibility. I further acknowledge and agree that the Pre-event Spot Check performed by DelVal Technical Inspection personnel in no way guarantees the road-worthiness of the vehicle for street driving or for driving on any closed driving circuit. My vehicle has been inspected by a qualified individual and meets or exceeds the standards required. I further certify that I am at least eighteen (18) years of age and possess a valid automobile driver's license.

PARTICIPANT SIGNATURE (S): Robert L. Driver Rosemary B. Driver
(DO NOT WRITE BELOW LINE - FOR DELVAL CHAPTER USE ONLY)

VEHICLE SPOT-CHECK (PERFORMED AT DISCRETION OF THE EVENT TECH OFFICIALS) AND APPROVAL OF INSPECTION REPORT

 PRE-CHECK #1: Form Complete, VIN OK, Helmet(s) Snell 2000 or later, signature(s) OK
 PRE-CHECK #2: Equal Belts, Stop Lamps OK, Pass-Side Mirror OK, Window Tinting Pre-Approved
 ACCEPTANCE OF PRE-EVENT SAFETY INSPECTION REPORT BY DEL VAL CHAPTER, BMW CCA, INC.