

New Jersey Chapter - BMWCCA

Frequently Asked Questions Concerning

Pre-Event Car Inspection And Helmets

What is a pre-event inspection and why does my car need it?

A driver school can stress your vehicle more than everyday street driving. 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 New Jersey Chapter "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 she/he 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 jackstands or a lift and removing all 4 wheels for access to the brakes and rotors.

What does a "properly completed" NJ Chapter Tech form look like?

Please refer to the attached sample Tech form. Note that the "Xs" for Items 1 – 26 have been typed in for the example. They should be filled in by hand on your actual Tech form.

What do I do with the Tech form?

After completing the Tech 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 NJ Chapter "Tech" and registration process at the event. Please see "What does the NJ Chapter '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 will 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. For the current tightening-torque specification for your particular car, query your dealer, your owner's manual or a service manual.

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 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 qualified 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, it is the event participant(s) who must sign the Tech form in the "Safety Inspection Waiver" section on Page 2 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.

What does the NJ Chapter "Tech" entail at the event?

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 should 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 and you will be directed to leave your car in the paddock and to present your approved Tech form to event registration. 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 when it is announced on the PA system.

Does the NJ Chapter "Tech" instructor cars?

Yes, instructor cars are 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.

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

The registration materials and Tech form I received refer to “Snell-Approved” helmets. What does this mean?

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. The NJ Chapter will only accept helmets with Snell 2000 or Snell 2005 ratings. 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 a NJ Chapter driver school.



I see that the Snell helmet ratings 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 a NJ Chapter driver school.

Are open-faced helmets accepted by the NJ Chapter?

Yes. Note that the majority of driver school participants choose closed-faced (i.e.: those with a chin guard) helmets.

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

A quick Internet search will reveal that there are many sources of Snell-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.

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

For our newcomers, the NJ Chapter has a few helmets that are available to borrow. Please e-mail helmets@njbmwcca.org early if you would like to arrange to borrow a helmet. Helmets are available first-come, first-served, so sign-up early! We ask that you bring a head-sock for your use with our helmets.

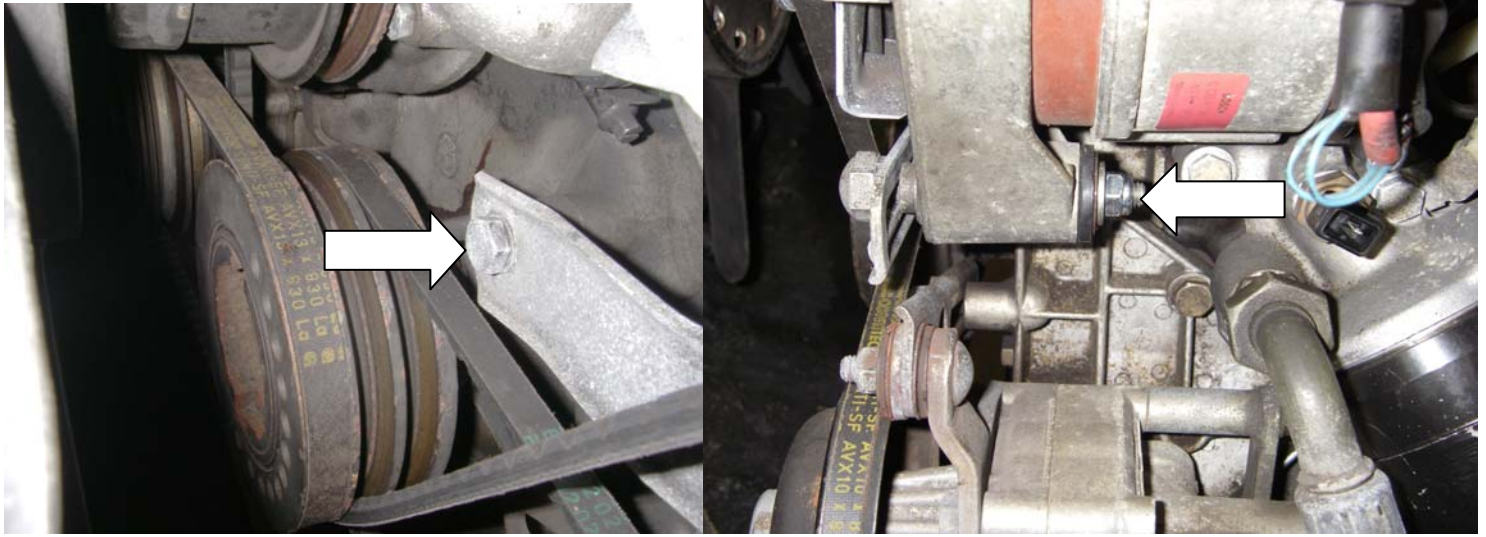
Head socks are available for less than \$10 at most online race-supply shops. If you need any help, please email us.

I have aftermarket glass tinting on my rear windshield. The other track organizations and BMWCCA chapters I participate with do not object to the tinting, and it passes my state’s motor-vehicle inspection. Will my tinting be allowed at a New Jersey Chapter driver school?

We will have to see your tinting prior to your coming to the event in order to make this determination. If you have aftermarket glass tinting, please request a copy of our “tinting letter” from vic.sr@njbmwcca.org. It describes making arrangements for us to see your tinting ahead of time.

Item #23 on the Tech Form refers to torquing the M3 alternator-belt-adjusting-bar bolts. Where are these bolts and how tight should I make them?

Refer to the following 2 photographs. Tighten the bolt in the left-hand photo and the nut in the right-hand photo [see arrows] to 16-18 lb.-ft. Note that this only applies to the E30 ['88-'91] 4-cylinder M3.



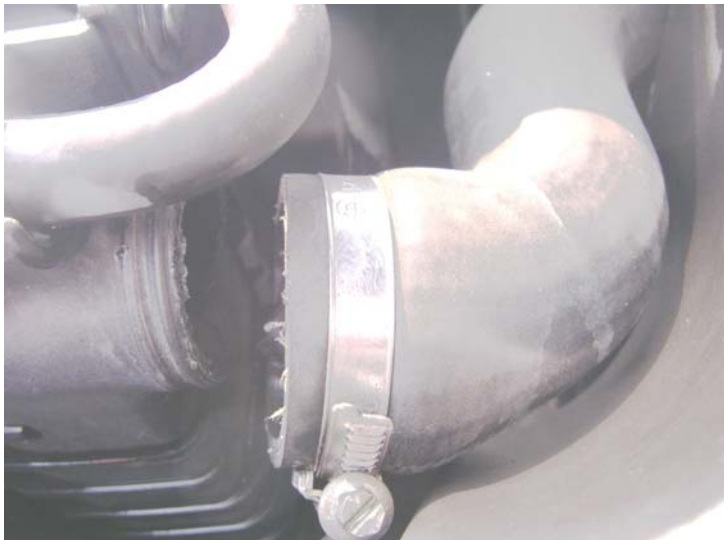
I have heard something about problems with radiators on some BMW models. Can you elaborate?

The following BMW models have experienced catastrophic failures of the upper radiator neck [see photo]:

E34 [5-Series '89-'95]; E36 [3-Series '92-'99]; E38 [7-Series '95-'01]; E39 [5-series '96-'05]

The upper radiator neck shears off without warning. A large amount of coolant is quickly disgorged, resulting in slippery coolant being spread over the track surface and almost immediate overheating of the engine. In some instances, the “plastic” engine-coolant outlet has failed in the same manner.

It is unlikely that the imminence of either of these failures can be predicted by your pre-event inspection. Therefore, if your original or replacement radiator or “plastic” engine-coolant outlet is more than a few years old, it is strongly recommended that it be replaced as a preventive measure.





BMW CAR CLUB OF AMERICA, INC. - New Jersey Chapter

DRIVER SCHOOL PRE-EVENT TECHNICAL INSPECTION FORM

Driver School participants are responsible for the safe condition of the vehicle to be driven to, at, and from this event. The vehicle must undergo a technical/safety inspection no more than four (4) weeks prior to the event. The inspection must be performed by a qualified individual who is familiar with the make and model of the vehicle. The participant(s) must document the inspection by legibly completing and signing this inspection form which must be presented to NJ Chapter personnel at the event. The participant(s) will not be allowed to drive the vehicle on the track or skidpad without NJ Chapter approval of the previously signed and completed inspection form. **Note that the participant(s) must sign this form regardless of who actually inspects the vehicle.**

PLEASE LEGIBLY PRINT (in ink) THE FOLLOWING INFORMATION:

<i>Participant #1</i>	<i>Participant #2 (If sharing car)</i>
Name: Berthold M. Werner	Name: Brunnhilde M. Winifred
Driver license # W9774 1234 0975 2	Driver license # W 9774 4321 0749 1
Vehicle Information	
Car make: BMW Model: 2002tii	Year: 1972 Mileage: 140749
Car VIN: WBAAG12345TV04795	Date of pre-event inspection: March 25, 2008
Date of last brake fluid change: March 25, 2008	

The Pre-Event Technical/Safety Inspection should include, but need not be limited to, the following items. Additional items should be included by the inspector to assure the safe condition of the vehicle. Indicate with an "X" the items which are deemed acceptable (**Do not use ditto marks, etc**):

(Indicate "NA" for items which do not apply to this particular vehicle EG: Items #23 – 26.)

- ☒ 1. **GENERAL:** No excessive body or chassis corrosion. All exterior lighting functional, including hazard lamps.
- ☒ 2. **WINDSHIELD WIPERS:** Functional and in sound condition.
- ☒ 3. **GLAZING:** Secure and in sound condition. No cracks. **Aftermarket tinting must be pre-approved.**
- ☒ 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/HARNESSES:** Securely mounted, sound condition. Three-point minimum. Installed per mfg. & BMWCCA Club Racing guidelines. **WE REQUIRE EQUAL BELTS/HARNESSES FOR DRIVER AND FRONT-SEAT PASSENGER.**
- ☒ 7. **BRAKE FLUID:** Adequate level. **WE REQUIRE THAT THE BRAKE FLUID BE LESS THAN SIX (6) MONTHS OLD.**
- ☒ 8. **BATTERY:** Securely mounted. No fluid leaks.
- ☒ 9. **DRIVE BELTS:** Sound condition. Properly tensioned and all locknuts properly torqued.
- ☒ 10. **THROTTLE LINKAGE:** Free return. No binding throughout full travel range.
- ☒ 11. **SEATS:** Securely mounted. Sound condition. **EQUAL PASS. SEAT REQUIRED FOR ALL STUDENT VEHICLES.**
- ☒ 12. **DRIVE AND HALF SHAFTS:** No loose joints or cracked boots. Center bearing and trans. coupling in sound condition.
- ☒ 13. **ENGINE, TRANS., SUBFRAME AND DIFFERENTIAL MOUNTS:** Good condition. No excessive motion permitted.
- ☒ 14. **STEERING:** No looseness, excessive play, clunking, or binding. Steering box securely mounted. No deteriorated mount bushings.
- ☒ 15. **SUSPENSION:** Mounting and pivot points in sound condition. No excessive side-to-side height variation. Adequate damping.
- ☒ 16. **BRAKES:** >50% lining thickness remaining. 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.
- ☒ 17. **WHEEL BEARINGS:** Properly adjusted. No excessive looseness. No lube leakage.
- ☒ 18. **WHEELS:** Proper offset. No cracked or bent rims. Lug nuts/bolts properly torqued. **WE RECOMMEND THAT LUG NUT/ BOLT TORQUE BE CHECKED IMMEDIATELY PRIOR TO THE EVENT AND PERIODICALLY DURING THE EVENT.**
- ☒ 19. **TIRES:** No cracks, blisters, or cord evident. Same size on each axle. Adequate tread for wet track. No snow tires!
- ☒ 20. **LEAKS:** No coolant, brake fluid, steering fluid leaks. No excessive oil leaks. All fluid-reservoir caps in place and tight.
- ☒ 21. **FUEL AND COOLANT HOSES:** Good condition. No cracks, swelling, abrasion, or other deterioration.
- ☒ 22. **EXHAUST:** Muffled, securely mounted, good condition. No missing, cracked or deteriorated hangers.
- ☒ 23. **BMW E30 M3:** Retorque alternator belt adjusting-bar bolts.
- ☒ 24. **BMW E30 6-cyl:** No contact between power steering pump pulley and lower radiator hose.
- ☒ 25. **BMW E36:** Unibody OK in areas of rear Subframe, rear shock mounting and trailing arm mounts.
- ☒ 26. **BMW 2002:** Front subframe anti-roll bar attachment tabs OK.

SAFETY INSPECTION WAIVER

I hereby certify that the above-described vehicle has been carefully examined by a qualified individual to verify that all of the foregoing items meet or exceed the standards required. I understand that I am solely responsible for the safe condition and operation of the vehicle and that the NJ Chapter, BMW CCA, Inc., its members, and other event participants are not liable for any vehicle problems, vehicle damage, personal injury, or property damage which may occur in connection with the operation of the vehicle prior, during, or subsequent to the Driver School. Moreover, I certify that all persons (other than instructors) who will operate the vehicle at the Driver School have reviewed and signed this document. Further, I certify that I possess a valid motor vehicle driver license and that I am at least eighteen years of age.

PARTICIPANT NAME(S) / SIGNATURE(S)

(PRINT) **Berthold Maximilian Werner**

/ (SIGN)

B. M. Werner

(PRINT) **Brunnhilde Mathilde Winifred**

/ (SIGN)

B. M. Winifred

(DO NOT WRITE BELOW LINE - FOR NJ CHAPTER USE ONLY)

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PRE-CHECK: Form Complete, VIN OK, signature(s) OK, Equal Belts and Seats, Stop Lamps OK, Pass-Side Mirror OK, No Window Tinting

VEHICLE SPOT-CHECK (PERFORMED AT DISCRETION OF NJ CHAPTER) AND APPROVAL OF INSPECTION REPORT

PARTICIPANT ACKNOWLEDGEMENT

I, being a participant in the NJ Chapter, BMW CCA, Inc. Driver School, do hereby agree and acknowledge as follows:

1. That the safe condition and operation of the above-described vehicle are entirely my responsibility and that the NJ Chapter, BMW CCA and/or its members cannot be held liable or responsible for any vehicle problems, malfunctions, or damage which may occur in connection with the operation of this vehicle prior, during, or subsequent to the Driver School.
2. That the event-eve or event-day spot-check which may have been performed on the above-described vehicle cannot verify that the vehicle has in fact been properly prepared and inspected for this high speed driving event. Further, I understand that not all participant vehicles receive the spot-check.
3. That in performing the spot-check, no representation or warranties, express or implied, are made by the NJ Chapter, BMW CCA, Inc., or its members regarding the vehicle's roadworthiness for street driving or for the Driver School.
4. That at all times I remain solely responsible for the safe condition and roadworthiness of the above vehicle, and that I am not relying on the event-eve or event-day spot-check in deciding whether to drive the vehicle.

PARTICIPANT SIGNATURE(S):

DATE: _____

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ACCEPTANCE OF PRE-EVENT SAFETY INSPECTION FORM BY NJ CHAPTER, BMW CCA, INC.

Form Date March 2008