

The New Performance Driver's Guide to High Performance Driver's Education Events Golden Gate Chapter, BMW CCA

Welcome New High Performance Driver!

At your first High Performance Driver's Education event you'll learn skills that you can use in your everyday driving. You're probably excited and maybe a bit anxious. As you study this guide, remember that everyone at the track was new once and probably felt just as you do now. *This is not a racing school.* Your instructor will help you learn at a comfortable and enjoyable pace.



While the Golden Gate Chapter takes these driving events very seriously, particularly with regard to safety and education, we are also a friendly, outgoing bunch of folks who genuinely want you to have a fantastic time.

It's completely natural to have a number of concerns. Golden Gate Chapter events have a reputation for safety and professionalism. Your first track experience will likely be relatively easy on the wear-and-tear to your car. Your everyday car probably will suffer only a bit of brake pad and tire wear, plus a few rubber marks, which may later be removed. If the addiction takes hold, you may eventually begin to modify your car or even purchase a car specifically with track driving in mind.

Worried about embarrassing yourself? Don't be! This is a learning experience, not a competition. Most of us look back with fondness, not with reticence, at our first day. There will be other new drivers at the track, too. This guide and the friendly Golden Gate Chapter team will make your inaugural day easy and exciting.

You'll be driving quickly, but few drivers find the speeds on the straights too intimidating. The track is simply not long enough to test your car's top speed. You'll find that the challenge – and the fun – lies in the turns.

If you are supremely confident in your driving skills, consider tempering that. Most highly experienced Golden Gate Chapter drivers consider themselves so-so drivers because they know how much more there is to learn. Similarly, having a good car does not make you a good driver. Eschew overconfidence and bravado and keep an open mind to what your instructor will be telling you. Some of the things you will be learning may not be intuitively obvious at first, but rest assured they will begin to make sense in no time.

You do have some work to do in preparation for your big day. Your car will need some attention and care. You'll need to buy or borrow some things. And you'll need to study – a lot. Let the journey begin!

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Requirements – What you'll need

To attend this event, you need to:

- ★ Pre-register, be accepted, and pay for this event online at <http://ggcbmwcca.motorsportreg.com>
- ★ Be 18 or older and hold a valid full driver's license (not a learner's permit).
- ★ Be free of any limitation which prevents your from safely operating your car at speed. If you have a condition or limitation that we can accommodate by advance planning, contact us as soon as possible.
- ★ Have access to a car in solid working condition, maintained and inspected by any competent mechanic whom you are comfortable having work on your car. Your car need not be a BMW – many of the cars will be other marques. Most any modern hardtop car will do, from a Toyota Tercel to an M5. High center-of-gravity vehicles are excluded, such as trucks, pick-ups, vans, mini-vans, and most SUVs. BMW SAVs such as X3's, X5's, and X6's are acceptable, as is the Porsche Cayenne. Foretell any performance modifications (suspension upgrades, stickier tires, more horsepower, etc.) until you have more track experience.
 - Shared cars are prohibited due to the impact that driver changes have on student track time.
 - **Convertibles and T-top cars must have 5-point/6-point belts and arm restraints, as well as an approved roll cage installed.** Factory "rollover protection" for a soft top (i.e. BMW Z3 and Z4, Porsche Boxster) is not sufficient for the school. Convertibles with hard tops, including folding hard tops, are NOT ALLOWED. Examples of cars NOT ALLOWED include: Firebirds and Camaros with T-tops or convertibles; any Corvette other than the Z06 coupe; Porsche convertibles and Targas, and folding-hardtop BMW convertibles. The Lotus Elise, while a targa-style car, IS ALLOWED due to its structural design provided that the hard roof panel is in place (the soft roof panel is not sufficient). **It is essential that you email the Track School Team at trackschools@ggcbmwcca.org to discuss these issues well in advance if you plan to bring a convertible or T-top car. No refunds will be given for ineligible cars!**
- ★ Obtain an approved helmet. See Logistics for requirements and advice. The Golden Gate Chapter has a small supply of rental helmets available on a first-come first-served basis at the track for a small fee of \$15.
- ★ Abstain from alcohol, illegal drugs and performance-limiting medications before and during the event.
- ★ Be aware of the limitations of your auto insurance coverage at HPDEs. Recent changes to automobile policies have limited coverage while at a driving school – *check your own policy for your coverage limits*. While damage to your car at your first driving event is rare, it can happen. Consult your insurance agent or carrier if in doubt.
- ★ Review (perhaps with your spouse) the liability waivers which you'll be required to sign.

Background – What it's all about

You'll be driving your car at speed on a race track, learning to better control your car and understand how it reacts to your hands and feet. This will help prepare you for emergencies, both on the track and on the street. While you will explore both your own and your car's capabilities, you won't be pushed or encouraged to go any faster than is comfortable for you.

You are *not* attending a *racing* school; racing and lap timing are strictly forbidden. This is not practice for any racing or speed contest. Until you have much more experience, you will have a trained instructor with you in your car whenever you are on the track.

Overview. Briefly, you will:

- ★ Download from the chapter website (www.ggcbmwcca.org) the event overview document and Tech Inspection Form, which you'll read and follow.
- ★ Prepare your car by having it inspected and maintained by a competent mechanic.
- ★ Prepare yourself by reading, understanding, and remembering the important information in this guide.
- ★ Arrange to use a proper-fitting approved helmet.
- ★ Attend a Car Control Clinic, a fun day consisting of a series of low-speed driving exercises held in a parking lot. See www.ggcbmwcca.org.
- ★ Attend pre-registration from 7-9pm on the evening prior to the school at the Event Headquarters Hotel, if at all possible.
- ★ Arrive at the track on time, sign waivers & register if you did not attend pre-registration, and prepare yourself and your car for the day.
- ★ Attend the mandatory Drivers Meeting where you'll learn specifics for the day.
- ★ Go to the classroom to learn cool things.
- ★ Meet your instructor, chat, and discuss letting him or her drive your car for a few laps. Then you'll take the wheel and follow your instructor's instructions to drive your car at speed.
- ★ Finish up your day by thanking your instructor, packing up your car, cleaning up, returning anything borrowed or rented, and driving home safely, no doubt grinning all the way.

Logistics – What to do and where to go

Signing Up. Complete the online registration, if you haven't already, at ggcbmwcca.motorsportreg.com. Carefully read all the information on the form. Event sign-up is handled on a first-come basis; avoid disappointment and sign up promptly when registration opens. Some events sell out, sometimes very quickly. Online payment is required at the time of registration.

Next, download, print, and read the event overview document and GGC Tech Inspection Form. Please print the Tech Inspection Form – the mechanic performing the inspection will need to fill it out and sign it. Only Golden Gate Chapter Tech Inspection Forms will be accepted – please do not bring a tech inspection form from another BMW CCA chapter. *Students may not perform the tech inspection themselves.* We do not have a list of approved shops or mechanics for tech inspections, but you can check the GGC Web site for a list of Local Vendors in your area: www.ggcbmwcca.org/?page=benefits.

No tech inspections will be performed at the track.

The event overview document contains:

- ★ location of the track,
- ★ local hotel information
- ★ track-specific instructions,
- ★ event schedule,

Preparing your Car. About 20-30 days before the event, bring the inspection form and your car to a competent mechanic who is familiar with your make and model of car. This lead time will give your mechanic time to address any problems.

Have the mechanic attend to all the maintenance and repair items on the form's check list. *Students may not perform the tech inspection themselves.*

There are some areas that deserve extra mention:

- ★ Completely flush (not just bleed) your brake system if this hasn't been done within the past 3-6 months. Brake fluid absorbs moisture from the air and loses its ability to withstand the high temperatures of braking. Take this *seriously*. Several of the tracks we run are quite hard on brakes.
- ★ In most cars, stock brake pads will be sufficient for your first track day, but they must have plenty of wear material left.
- ★ Be sure your tires have adequate tread for wet-weather driving. Check the side-walls for bulges. All tires must be DOT approved (no slicks), and R-Compound track tires are *strongly discouraged* for novice and intermediate drivers.
- ★ Track driving is tough on motor oil. Change your oil if it is getting toward the end of its service life. Use summer weight oil.
- ★ Batteries must be secured so that they can't move or short in an accident. Most cars will have a satisfactory factory clamp unless a replacement battery has been installed. Bungee cords, zip ties, and other low-strength mounting means are insufficient.
- ★ While your mechanic will check the tightness of your wheel lug bolts (or nuts) and the inflation of your tires, you *must* re-check these at the track the morning of the event.

If you have concerns about the eligibility of your vehicle, contact the trackschools@ggcbmwcca.org well before the event. We don't want to send you home from the event because your car isn't safe or approved. It is unlikely that there will be time at the event to perform any corrections or repairs, at least not without you losing out on some of the fun. There are no refunds for failure to perform a proper Tech Inspection or for mechanical failure at the track.

If you have an aftermarket exhaust or a loud car, ensure that your car's sound, at full throttle and maximum RPM, is under the track's maximum Sound Pressure Level (SPL) as measured in decibels (dB), usually measured about 20 yards from the car. There are no refunds for exceeding the track's loudness regulations. Almost all cars with unmodified exhausts will be fine. Please see the Track Info section for more information on sound levels at our tracks.

Beyond the tech inspection, you should also clean out your car, removing anything that isn't either needed at the track or bolted down. Cars that have recently been smoked in are not in particular demand by instructors. Please clean and air out your car and refrain from smoking in it during breaks as a courtesy to your instructor.

On-site Mechanic Services. No onsite mechanic services are available at the track. Our volunteer mechanic's duties consist of authorizing cars' mechanical ability to be on the track and brief consultation (e.g., "Yup, you broke your car, keep it off the track."). If you show up with mechanical problems that keep you off the track, or such problems develop during the school, no enrollment fee refunds will be issued.

Helmets and Special Apparel. Your helmet *must* be Snell rated, either M (motorcycle) or SA (car). It may be open face or full face. Don't bring a motorcycle "half shell" or other unapproved helmet; DOT approval is insufficient. The sticker date may be no older than 9 years from the current year. For example, an M2000 helmet is okay through 2009 (or until the 2010 helmets are available). Since this is your first event, consider borrowing an approved helmet from a friend, so long as it fits you well.

If you are pretty sure that you are going to enjoy HPDEs and continue driving at the track, go ahead and buy a helmet. Fit is very important. Ideally you should go to a motorsports store and try on several helmets with the help of a qualified sales person rather than purchase mail order.

Generally, lighter helmets are a bit safer (because there is less mass attached to your head), but are more expensive. SA helmets are rated for fire and multiple impacts. The fire rating is probably not too important to you unless you also plan to eventually wear a fire-resistant suit. While the Golden Gate Chapter also accepts M (Motorcycle) rated helmets, some other clubs do not. Most drivers prefer a full-face helmet.

If your car has an airbag:

- ★ remove any sun visor over the helmet eyeport, and
- ★ if the clear face shield fogs up, remove it completely, rather than wear it raised partially.

If you wear glasses, consider a helmet with a larger eyeport for comfort. Expect to pay \$100+ for an M-rated helmet or \$200+ for an SA-rated helmet.

If you can't borrow a helmet and are unsure about attending future HPDE events, some rental helmets are available from the Golden Gate Chapter. Quantities and sizes are limited and helmets cannot be reserved in advance – they are handed out on a first-come first-served basis each morning. If you do rent a helmet, you are responsible for it. If you drop it or damage it (including scratching the face shield), you'll of course have to buy it. The rental fee is \$15.

You may know of people driving with special apparel such as driving shoes, driving gloves, or neck collars. Most new drivers wait to make these purchases until they have driven more and know what, if anything, they want. Similarly, while a fire resistant suit provides protection, and you may see a few people wearing them, it is rare for a new driver to feel the need for one. Most people feel that the risk of fire is quite low.

BMW CCA Helmet Discount Program. Wine Country Motorsports, located in the paddock at Infineon Raceway, has kindly created a helmet discount program for BMW CCA members in the Pacific Region. Wine Country will sell any helmet they carry at a 10% discount as well as throw in a free helmet bag. Please identify yourself as a BMW CCA member.

Wine Country Motorsports
28001 Arnold Dr
Sonoma, CA 95476-9710
(707) 935-7223
<http://www.winecountrymotorsports.com>

Preparing you. Attend a Car Control Clinic. The in-car low-speed driving experience will give you confidence and help you get the most out of your first track day. The cost is low. This is also a great experience for spouses and friends. In addition, the Golden Gate Chapter runs special clinics for new teen

drivers (see www.ggcbmwcca.org and www.streetsurvival.org). The skills learned at these clinics may well prevent your next accident.

Study this guide and the event overview document. You must be completely familiar with the Study Materials and Track Information sections below. It's vital that you know what a waving yellow flag means, for example.

Your Instructor. You will also have an instructor who will ride in the car with you. Your instructor will have considerable track driving experience and will have received special training to help you learn comfortably and quickly. The Golden Gate Chapter, along with the rest of the Pacific Region, has spent over 20 years building a top-notch corps of experienced and talented instructors.

You should obviously follow instructions from your instructor. You should not, however, feel pressure to drive faster than you are comfortable. Having memorized the Study Materials, you will both speak the same jargon, so that if you're told, "breathe off the throttle" you'll know that you should slightly relax the pressure on the gas pedal, not suck air out of the engine. Don't try to impress your instructor; you can't. Don't try to scare him; he already is. Or her, as some of our best instructors are women.

It's important that you and your instructor can understand each other clearly, even in a pinch situation. It's also important that you "click" enough for you to feel comfortable and learn easily. If you have a language, communication, or "chemistry" incompatibility, bring it to the attention of the chief instructor immediately, so that a different instructor can be assigned to you.

Family, friends, pets, and minors. Spectators are welcome, provided they are self-reliant. This is not a good time to be tending to children or worrying about a pet, so leave them at home unless someone else can tend to them. You will be busy and want to focus on learning without any distractions. Guests must sign all waivers to be admitted to the paddock and minors must have the signature of a parent or guardian. Minors are not allowed in the Hot Pit area.

Other than your instructor, you *may not* take passengers (e.g. friends, family, and other students) on the track. Passengers who wish to experience the thrills of a ride on the track may obtain a passenger wristband by signing the waiver – they may then take a ride with an instructor.

The day/evening before. If you are planning on driving to the track in the morning, be sure to allow enough time to arrive promptly when registration opens. This may mean an early departure, and if it needs to be much before about 5am, consider staying the night before in a nearby motel. You may be excited, but try to get a good night's rest. Abstain from alcohol and anything else that might affect your performance or sleep. Drink enough water so that you start the day properly hydrated.

Check the weather forecast and adjust your clothing as appropriate. This event runs regardless of the weather, even in pouring rain, freezing cold or broiling heat.

You should pack the car (and a suitcase if staying overnight) the night before. A list of what to bring – and what to leave home – can be found later in this guide. Keep your printed driving directions and maps where you can get to them. It will be easier to sleep if you know that all you need to do is get up and drive to the track.

Consult the event overview document for travel and lodging tips. We recommend www.mapquest.com or maps.google.com for specific driving directions.

The morning: Getting to the Track. Get up and get going at your planned time. If it is chilly or cold, dress in layers so that you can shed later as the day warms. You may want to enjoy a hot cup of coffee in the car, but allow time for fuel and bathroom breaks. You'll probably be excited, but drive safely. *Police may be patrolling the area around the track and aggressive driving reflects poorly on our club.* Plan to arrive at the track well in advance of registration. Top up your gas tank near the track so that you start with a full tank. At the gas station, check your tire pressures and add air if needed. You may well need additional gas during the day; many cars will have fuel starvation when the gas gauge indicates less than half a tank. Gas is available at all of our local tracks, but the prices may be even higher than you expect.

The Morning at the Track. Expect to be busy. Your registration packet typically will contain a name tag and lanyard, an event schedule, and your car numbers, run group letter, and colored square indicating tent color. The car numbers are to be placed on the rear passenger windows on each side (or equivalent), while the run group letter goes on the driver's side rear passenger window and the colored square should be placed in the upper-left hand corner of the rear window.

- ★ Take a minute to examine the event schedule. All students will go to the Driver's Meeting. Find your run group. Locate your on-track run sessions and classroom time. You may wish to highlight your activities in the schedule to help them stand out. Keep track of time throughout the day as the classroom sessions are mandatory. The schedule is *very* tight, and it's really important that you arrive on time. Listen for PA announcements, but they may not be heard everywhere in the paddock.
- ★ Consider your run group. Your run group is determined by your previous driving history and any feedback from previous instructors. Your run group may vary based on the composition of the school, so do not get too wedded to being a C or a B, etc.
- ★ Determine your tent color. This color is printed on the tag on your packet and matches the colored vinyl square placed on the rear window of your car. When it's time to meet your instructor, you will park your car at the appropriate tent in the Hot Pits.
- ★ Insert your name tag and event schedule into your lanyard. Smiling a lot and looking a bit helpless will solicit assistance.
- ★ Leave the wrist band you received at registration on your left wrist (so that it is easy to show track personnel). Without your wristband, you may be denied access to the track. The wristband signifies that you've signed the liability waiver. If this is a multi-day event, don't remove the wrist band(s) until the event is over.
- ★ Empty out the contents of your car – maps, tools, floor mats, trunk mat, radar detectors, garage door openers, coins, glove box contents, trunk contents – everything. The purpose is to prevent things from hitting you in an accident, from wedging under a pedal, or from flopping around distractingly. If the day is in-and-out of the sun, you may keep sunglasses in the car only if there is a secure place to stow them. Your spare tire must be removed unless it is in an enclosed trunk (i.e. not a hatchback) as it may break loose in an accident. Place your belongings on your small tarp and/or in your plastic bins to keep them clean.
- ★ Clean your windshield and make sure it is streak-free. Early and late in the day, you may be driving directly into the sun.
- ★ Check the pressure in each tire. If your tires are warm from a long drive up, they should be 2-4 pounds above the upper range of the recommended pressure, found in your owner's manual or driver's door jamb. (Don't confuse this with the maximum inflation pressure on the sidewall of the tire; that's the pressure above which the tire may rupture.) If your tires are cold, they should be at the upper

recommended pressure. If in doubt, ask an experienced driver near you.

- ★ Check the tightness of every single lug bolt or lug nut on each wheel using a torque wrench. Consult your owner's manual for the correct torque setting. For most cars, a torque setting of 80 to 90 ft-lbs is about correct. If you do not own a torque wrench, borrow one. *Do not skip this step.* Retorque again right before your second run group, after your car has cooled down. (Tightening the lug bolts when your wheels are hot will over-tighten them, possibly ruining the bolts (or studs).
- ★ Some people protect some parts of the front of their car against tiny pebbles and black rubber "marbles" that form on the track. Blue painter's masking tape over expensive headlights is the most common area. Many people don't apply any protection – it's up to you. Compulsive car owners have been known to encapsulate their cars in a protective cocoon of painter's tape, to the amusement of all.
- ★ Adjust the seat and mirrors as described in the Driving Techniques /Driving Position section.
- ★ Tend to any personal needs. Drink a little water, snack a bit, or apply some sunscreen. Find and use the bathroom. Walk around and familiarize yourself with the paddock. Look at the track map to freshen up your memory. Introduce yourself to some new friends. Time allowing, your instructor may try to find you so you can chat a bit. But keep an eye on the clock and the schedule. Listen for announcements. If you've arrived right on time, you won't be rushed.
- ★ Soon it will be time for the driver's meeting. Report as soon as you hear the announcement. Stand in front and listen carefully as there will be information and details for your safety, comfort, and fun. Pay particular attention to the demonstration of the safety flags and the definition of the passing zones. There may be late-breaking news. *Missing the meeting is a fantastic way to lose track time.* Clap for the organizers; they've worked hard. After the meeting is over, consult the schedule. You will likely report to the classroom next. Locate the classroom so you know where to go (ask anyone). Locate the staging area where you'll meet up with your instructor as discussed in the meeting (or ask someone).
- ★ Report to class. Your first classroom session will review vital things that you must know, such as the flags, the track map, the passing zones, and the basics of driving the car on the track. Before you know it, the class will be over and soon you'll hear your run group announced.
- ★ Return to your car, ensure that you have your helmet, and drive the car to your assigned colored tent in the hot pit area. Please park Le Mans-style (back up to the wall at an angle). Leave the car running, turning it off only if it warms up fully (about 5 minutes after the water temperature reaches normal). You will meet your instructor, who will briefly chat about your experience and your car. The instructor will drive the first few laps in your car to help familiarize you with the track, the flagging stations, and the pit-out and pit-in procedures – *if you have strong objections to this, please advise your instructor.* Your instructor will provide you with an in-helmet communicator. Put on your helmet (and glasses if any), then before fastening the helmet strap, slide the ear speaker to be directly over your ear. Orient the microphone to be on your chin, just under your lower lip. Then fasten your chin strap.
- ★ The driver's and instructor's side windows must be always completely down when on the track. Sunroofs must be completely closed.
- ★ After your introductory laps, it's time for you to drive! Switch seats. Your instructor will have tried to avoid adjusting your seat and mirrors, but may have made some changes. Readjust them. Fasten your seat belt as tightly as possible, low and across your hips, pulling out any slack. Follow your instructor's instructions and proceed to pit-out. When signaled, proceed onto the track, staying within the blend line as instructed. Now your homework will pay off. You will know where the track goes and where the flagging stations are. You will likely have more fun than you've had in years, maybe ever.

- ★ When your session is over, as signaled by the checkered flag, drive at a pace that is slow enough to avoid braking (about 40 MPH). You will have a partial or complete cool-down lap, depending upon track. Some corners require very heavy braking; this cool-down lap helps your brakes cool a bit to prevent problems. Drive the proper line and wave to each flagger, as it thanks them and helps you remember where they are.
- ★ Cool your head down too. This lap is your opportunity to discuss your driving with your instructor. If you would like either more or less feedback from your instructor, discuss that. Your debriefing should be completed by the time you reach the Pit Road.
- ★ Signal your pit-in with a fist and enter Pit Road. Check your mirrors, and as soon as it is safe, decelerate to a prudent Pit Road speed. If your instructor has another student in the upcoming run session, drop him or her off at the colored tent *without delay*.
- ★ If your vehicle is being driven in the next track session by a co-driver, stop your car at the colored tent. Carry out driver and instructor changes. Otherwise, return to your parking spot, following any traffic flow instructions given during the driver's meeting. Manual transmission cars should gently coast to a stop and be turned off using little or no brake. Do *not* engage the parking brake as it may stick on. If your schedules permit, take additional time to discuss your run session and set goals for the next one.

Throughout the track day. Keep on top of your schedule and drink to stay hydrated (even in cool weather).

- ★ There will be a scheduled lunch break, or you can grab lunch as your schedule permits. Pack your lunch or purchase it at the track.
- ★ One of the thrills for most new track drivers is taking a ride in an instructor's car. You may be able to coordinate this with your instructor. Otherwise, stand at the head of pit lane (the Yellow tent) to wait for an available instructor. While this experience is optional, most find it thrilling and educational. Pay attention to the instructor's line and smoothness with hands and feet. The instructor will rely on extensive experience to drive much faster than your skills allow. ***Don't try to imitate instructor-level speeds*** and braking points when you return to the driver's seat. It's not uncommon to feel queasy when riding as a passenger (ask any instructor), so ask to enter Pit Road and be let out if you begin to feel unwell.

End of day at the track. As the day goes on, you may become fatigued. If you feel you are too tired or distracted to drive safely, tell your instructor and call it a day. Our schedules allow for four 20-25 minute sessions, which you will likely find exhausting.

- ★ Be aware of the so-called "red mist" which can set in when you are fatigued and in the excitement of high-speed driving, causing you to make an overly aggressive driving error.
- ★ Clean up any fluid spills or trash. Take any old car parts home with you. The track charges an exorbitant clean-up fee, which may be charged back to you.
- ★ Remove your car numbers (as they tend to attract police) and pack up your car. Say goodbye to your instructor, and drive home safely. You have been driving at well over the normal speed limit, so the highway may seem initially rather leisurely. Be careful because the police know this too and may be patrolling the area around the track. When driving through towns and residential areas, remember that your behavior reflects on our club, and that continued track operation relies on good rapport with the local residents.
- ★ If any maintenance items came up at the track, tend to them promptly at home. Check your brake pads

and tires to be sure they are adequate for your street driving. Your car may have received some black marks from rubber “marbles” bouncing up and hitting the car. These may be removed with bug-and-tar remover. You may also find quite a bit of brake pad dust on your wheels and sides of your car.

- ★ Watch for the post-event email thanking you for your attendance and soliciting feedback about the event. Many people have donated their time to make the events possible and your feedback is highly appreciated.
 - ★ Sign up for your next event and tell your friends how much fun you had.
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Preparation – Checklists of what you need to get and do

As soon as the event opens for registration:

- Print and begin reading and studying this guide and the event overview document
- Register online at ggcbmwcca.motorsportreg.com
- Download and print the Tech Inspection Form
- Make arrangements for a helmet (borrow or buy)
- Schedule a tech inspection 2-4 weeks before the event with a competent mechanic

3-4 weeks before the event:

- Have your tech inspection, as described in the Logistics section. Bring the form and have it signed and stamped by your mechanic, then sign and date it yourself
- Collect everything on your To-Bring list
- Download the track video and study the track map and track video.

To-Bring List:

For you:

- Printed copy of:
 - the event overview document
 - registration information
 - hotel reservation, if any
 - street maps and driving directions from maps.google.com or mapquest.com
- Completed and signed Tech Inspection Form
- Approved helmet (unless you are planning to arrive early enough to secure a loaner helmet)
- Rain clothes (jacket and pants, or poncho) and umbrella if appropriate
- Lace shoes with socks. We recommend a snug-fitting thin-soled shoe. No big boots or open-toed shoes.
- Spare clothes in case of rain, cold, or heat. If warm weather, include a t-shirt and shorts for when you aren't driving. Some people enjoy driving home in fresh underwear and socks.
- Optional ice chest with beverages, snacks and perhaps your lunch.
- Hat for sun protection
- Sun glasses
- Sunscreen
- Wallet and coins for beverage machine
- Spare car keys
- Cell phone (perhaps best turned off during the day)
- Suitcase if staying overnight
- Personal medications (prescription and perhaps a few basic first aid items)
- Extra prescription eyeglasses
- Hand wipes or sanitizer (if desired)
- Plastic tarp and/or waterproof plastic bin to protect your belongings from rain and dirt. Bungee cords will hold the tarp down in the wind. Some tracks have no place to store your belongings out of the rain.
- Collapsible lounge chair (optional, but you may get tired of stranding around)
- Yellow highlighter to highlight where you need to be on the schedule
- Pen for filling out paperwork

For your car:

- Torque wrench with socket for your lug bolts (if you own one, otherwise borrow one at the track)
- Tire pressure gauge
- Window cleaner and paper towels to clean your windshield
- Basic automotive hand tools. Extensive tools aren't necessary on your first day because you can borrow tools.
- Flashlight (for looking into the recesses of your car in the event of car trouble)
- Duct tape
- Mechanics work gloves and/or latex gloves (optional, but helpful in keeping your hands clean)
- Extra Motor oil and brake fluid, if you think you might need them
- Small portable compressor or air tank, with air chuck (optional)

To leave at home:

- Anything in your car that you don't absolutely need, such as irrelevant maps, floor mats, junk in your trunk, trash, car seats – anything that isn't bolted down or necessary
- Weapons or firearms
- Illegal drugs
- Children, pets or guests who aren't self-sufficient, unless someone else can tend to them.
- Anything that can't get a bit wet or dirty (*e.g.* fancy leather suitcase)
- Distracting thoughts and worries

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Study Materials – Stuff to understand and remember

For your safety, you'll need to study and know this material cold. It's a lot. We know. Start studying early.

Flags. Flag stations are located at specific corners and elsewhere around the track. At these stations, corner workers watch the cars and monitor the track's condition. When problems arise, the workers display or wave signal flags to warn the drivers of danger ahead before they encounter it. The flag and *how* it's displayed communicate specific situations and command specific responses from the driver. In order to make this event safe for you and other drivers, you must know where the flag stations are, watch for the signal flags, and know what the flags mean. The flags will be also be demonstrated at the Driver's Meeting.



Caution!
Slow down.
No passing.

The **YELLOW FLAG** indicates trouble on the track, either on-track incidents or other conditions that threaten the safety of the event. **No passing and slow down** in the area in which the yellow flag is displayed.

A **WAVING YELLOW FLAG** indicates immediate danger – the more vigorously waved, the greater the danger. **No passing. Be prepared to stop.** The waving yellow flag is the first and immediate response by corner workers to any incident.

A **STANDING YELLOW FLAG** may also used to indicate no passing on the warm-up and cool-down laps.



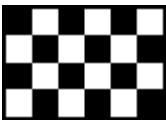
A car wants
to Pass

The **PASSING FLAG** (Blue with Diagonal Yellow Stripe) indicates that perhaps a car behind you wishes to pass. You should consider *if* it is safe and appropriate to give that driver a point-by. This is not a mandate to let the car behind you pass, as the ultimate decision regarding safety rests with you. If you decide to let the car behind you pass, begin to execute a safe passing maneuver, including appropriate point-by, at the next safe opportunity in a designated passing zone. Use a distinct point-by for each individual car you want to let pass. Stay on line and lift if necessary to help faster vehicles pass safely.



Slow cars.

The **WHITE FLAG** indicates that a slower vehicle is entering or is already on the track. At some tracks, the white flag is used whenever a car re-enters the track from Pit Road. It may also indicate the presence of slow-moving emergency vehicles on the track.



End of
session

The **CHECKERED FLAG** will be displayed at designated flagging stations at the conclusion of the Run Group's track session. After receiving the checkered flag, you may see a standing yellow flag at every flag station you reach. Do not pass other cars and do not try to squeeze in an extra lap. Proceed around the track at reduced speed to cool your brakes and debrief with your instructor.



Return to Pit Road

The **BLACK FLAG** is used as a warning to a particular driver. Upon direction from Control, certain designated flagging stations will display the black flag and point it at the offending car. If you receive the black flag, acknowledge with a hand wave, proceed to Pit Road and report directly to Control. The black flag may indicate either mechanical trouble or incorrect driving. Extremely careless, unsafe behavior or failure to respond to a black flag may result in ejection from the event. Flag stations must report all safety problems to Control.

A **FURLED BLACK FLAG** may be pointed at you as a warning about specific behavior. You are driving in a manner that is questionable. If you continue to drive in this manner you will be black flagged on the next lap. It may mean that you would benefit from an instructor to accompany you and remind you of the correct line, or other helpful information to make your track session and driving school even more enjoyable.

A **STANDING BLACK FLAG** is also used to indicate that all cars must smoothly and safely exit the track, usually to clear an incident.



Slippery!

The **DEBRIS FLAG** (Red and Yellow Vertical Stripes) indicates that there is an obstacle on the track you should avoid, such as slippery fluids, a cone, car parts, dirt, or an animal. **No Passing. Slow Down.** Reduce speed until you understand the obstacle. This flag may be pulled in after you've seen it, yet the obstacle remains. If you see the debris flag again, it may be a different obstacle.



Stop

The **RED FLAG** is waved to indicate serious trouble on the track. **All cars must promptly come to a controlled stop.** It is displayed only when Control determines that an on-track incident or condition requires that the event be stopped. It will be displayed at all flag stations simultaneously. *Do not slam on the brakes*, but rather first check your mirrors for cars following closely behind you and bring your car smoothly to a stop off-line and within sight of a flagging station.



Broken car

Rarely used, the **MEATBALL** (Black with Orange Circle) is a special version of the black flag specifically indicating a mechanical problem. Slow down and drive off line because you might be trailing a slippery fluid. Just as for the regular black flag, return to Pit Road and report directly to Control.

How to enter the track (Pit-Out procedure) So you and your instructor are ready to go out on the track. You've checked your tire pressures and the tightness your wheels' lug bolts. Your seat and mirrors are adjusted. Your seat belt is tight and low across your hips. Your helmet is on and buckled, with your instructor's communicator on your ear. Your windows are down and your sunroof closed. Your instructor will direct you out into the Hot Pit Road. Using a prudent speed, you'll proceed down Pit Road where a worker may stop you, perhaps check your wrist band, and wave you onto the track. *Do not enter the track until the Steward has waved your forward.* The White Flag may be waved for you to warn other cars of your entry onto the track.

Following your instructor's instructions, you'll briskly accelerate up to track speed and merge in with any fast-moving cars already on the track. Many tracks have a lane separated from the main track by a yellow "blend line", which you may not cross on your pit-out lap.

How to leave the track (Pin-In procedure) A turn or two before the track's exit onto Pit Road, place your left hand out the window, forearm pointing up, and make a fist. You are telling other vehicles that you are slow-moving and intend to exit the track. Drive the normal line (unless otherwise instructed) until you reach the pit road exit. If you are leaving a hot track (*i.e.* other cars are still driving at speed), drive as quickly as you are comfortable to avoid inconveniencing others. Enter Pit Road and smoothly decelerate to a prudent Pit Road speed. You can take your hand in now. Proceed to the instructor drop-off area. Your instructor will tell you where to go.

How to Pass and Be Passed – C & D Groups. Proper passing procedures ensure that everyone has a rewarding driving experience. If you are faster than the car ahead, you will naturally want to pass it so that you can drive at your pace. Similarly, if you have a faster car behind you, you will want to let it pass so that you can return your focus to your driving. In this way, cars of different speeds can harmoniously co-exist on the track.

The passing zones will be discussed in the driver's meeting and may also be defined in the Day of Event package. Most passing zones are long straights. Passing is allowed only:

- ★ in designated passing zones,
- ★ when authorized by a point-by given by the car being passed,
- ★ when track flags allow passing (*i.e.* no YELLOW, RED, BLACK, DEBRIS or CHECKERED), and
- ★ when your good judgment deems it safe.

In the turn just before a passing zone, check your mirrors to see if a car is waiting to pass you. Complete the turn just before the passing zone, then *immediately* give the point-by hand signal. To authorize the car to pass on your left, point straight out your window with your left hand. To authorize the car to pass on the right, point up and over the top of your car with your left hand.

If your car has more power than the car behind you, you may need to facilitate the pass by gently easing off the throttle. Remain on-line and *don't abruptly lift* off the throttle as the trailing car may not be expecting this. The overtaking car will pull off-line in the direction you indicated and overtake you. Passes are made to the *inside* of the next corner unless specifically addressed at the Drivers Meeting.

Never race the car to the next corner as it is vital that the overtaking car have time to be safely in front of you before the turn.

In cases where many cars are waiting to pass you, give additional point-bys for each additional car, in sequence, as you are being passed. Three passing cars? Then three distinct point-bys. Do not give more point-bys than you intend cars to pass. In order to get a number of cars past you, you may need to lift gently off the throttle. Your instructor will help you get comfortable giving and taking point-bys. Don't fret about cars behind you. They aren't hassling you; they just want to get by you so they can drive at their own pace. You may want to tap your interior mirror to indicate that you are aware that they are there and that you will let them by at the first safe opportunity.

A car right behind you got there because it is faster. It is common for a high horsepower car to pull away from the car behind, only to be caught again in the subsequent corner. Since passing is allowed only in designated straights, this can be very frustrating for the faster but low-powered car. Be courteous to your

fellow drivers – one day you may be the faster car. Giving lots of point-bys will make you a hero; withholding point-bys will eventually garner irritated glares, and perhaps a black flag.

How to Pass and Be Passed – A & B Groups. The A & B groups enjoy passing anywhere on the track that it is safe and where the passing car has received a point by from the car being passed. *Exceptions for certain corners where passing is never allowed will be covered in the morning Drivers Meeting.* All other passing rules as listed above for the C & D groups apply.

Waivers. Without waivers of liability, driving events could not be held. No rational person would volunteer without both these waivers and the liability insurance that the Golden Gate Chapter buys for each event. Your participation is contingent upon you reading, understanding, and signing the waivers.

You should treat these waivers seriously.

Advice. Some well-honed tips from those with lots of track days:

- ★ Read and follow the Driving Techniques (see below): look ahead at where you want to go (not what you want to avoid), don't brake and turn at the same time, keep your hands at 3 and 9 o'clock (not resting on the gear shift lever), keep your foot on the dead pedal, know what to do in a spin.
- ★ Study the track map and description, driving techniques, and jargon *before* you get to the track.
- ★ Do more listening than talking. Ask lots of questions.
- ★ Drive slowly at first. Work on driving the line, being smooth, and consistently hitting your reference marks. Speed will come later. If you miss your reference marks a couple of turns in a row, slow down; you're probably trying too hard. No one cares how fast you go; there's no trophy at the end of the day.
- ★ Don't follow the line of the car in front of you. If they make a mistake, you'll follow them right off the track. Drive your own (correct) line.
- ★ After you've pointed a faster car by, don't try to follow at its faster pace. Drive at your own pace.
- ★ Do not abruptly lift off the throttle in a turn. You will invite a spin. See Trailing Throttle Oversteer in the glossary.
- ★ Avoid the "money shift." Don't rush your shift, but rather make it slow enough to be deliberate. Make sure you are in the right gear before letting out the clutch. If you shift at redline from, say, 3rd gear into what you hope is 4th, but really is 2nd, the transmission will force the engine to exceed its redline. The electronic rev limiter won't help you. If you discover your mistake before letting the clutch all the way out, you may save your engine. This isn't a race, so don't risk your engine by rushing.
- ★ Relax. Breathe. Don't hold your breath in turns. Relax your hands on the straights as nerves will make you grip the wheel tightly. The nervousness will dissipate after the first lap or so.
- ★ Check your ego. Unless you have previous motorsports experience, you are not a good driver. Yet.
- ★ If you don't click with your instructor, ask your Group Leader for another one. No one's feeling will be hurt.
- ★ Don't worry if you're not very mechanically inclined. Beyond tire pressures and checking the tightness of your lug bolts with a torque wrench, it's unlikely that your car will need any maintenance during the day. Over time, many track addicts learn how to do common tasks, such as change brake pads. That may come with time, but you need not be concerned about looking like a klutz with tools. First, no one cares. Second, someone will probably be glad to help you.
- ★ Stay hydrated, even if it isn't really hot. Use the bathroom before your session as it's hard to drive with

your legs crossed.

Credits. Many thanks to the Boston Chapter of the BMW CCA for providing the basis for this document. The tireless work of their team of volunteers is very much appreciated.

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Glossary Of Terms

Glossary of Driving Terms and Jargon. You and your instructor need a common vocabulary to communicate fluently. Please read and understand these terms. Terms in **bold** must be memorized; they are used in-car and must be instantly understood. If your instructor tells you to “unwind”, and you relax and put your hands behind your head, you both will be in for either a very long or very short day.

APEX	The point in the middle of the turn where the car comes closest to the inside edge of the track.
BREATHE	To <i>slightly</i> relieve pressure on throttle.
BOTH FEET IN	To depress both the clutch and the brake <i>hard</i> to stop a spinning car. “If you spin, both feet in.” (Automatic transmission: press brake only.)
CAMBER	The lateral grade (<i>i.e.</i> tilt) of the roadway.
CONTACT PATCH	The portion of a tire coming in contact with the road.
COOL-DOWN LAP	The final lap before entering the pits at the end of the driving session.
EARLY APEX	Apex in which the car reaches the inside edge of the track too soon in the corner. Usually caused by early turn-in, the car may run out of track at the track-out point. <i>Very</i> bad.
EASE ON/EASE OFF	To smoothly add or remove throttle input.
EDGE IN	To gradually leave the outside edge of the track before reaching the turn-in point. Wastes road width, tightening the corner. May lead to an early apex. <i>Bad</i> .
FRICTION CIRCLE	A graph on which the cornering, braking and acceleration forces of a car are plotted.
HEEL & TOE	A method of simultaneously downshifting and braking.
LATE APEX	Apex in which the car reaches the inside edge of the track too late in the corner. Usually caused by late turn-in, the car will not need all the track width at exit. Slow but safe.
LIFT	To remove throttle input partially or completely.
THE LINE	The optimized path around the track.
OVERSTEER	A condition where the rear tires are sliding more than the front tires in a turn.
PASSING ZONE	A portion of the track designated for over-taking (passing).
PINCH	To add steering input while turning (such as when making up for an early apex) or alternatively to not allow the car to drift out to the track-out point. Invites a spin.
PIT-IN SIGNAL	A hand signal given by the driver of a vehicle warning that he or she is traveling slowly, whether about to enter the pits or not.
POINT-BY	A hand signal given by the driver to indicate on which side another car should pass.

POWER OVERSTEER	Oversteer caused by applying too much throttle too soon.
REFERENCE POINT	A landmark used by the driver to initiate braking, turn-in, apex, or track-out. Also known as mark as in “hitting your marks.”
RED MIST	Over-aggressive judgment caused by the excitement and fatigue of track driving. Also known as Helmet Fire.
ROTATION	The turning of a car by using brakes and/or throttle. See trailing throttle oversteer, trail brake, and weight transfer.
SKID PAD	A circular training course that provides a driver with a perpetual corner
SPIN	A condition where the tires have lost traction and the vehicle is spinning around its vertical axis.
SQUEEZE	To smoothly add more throttle.
STAY IN/STAY OUT	A command given by an instructor asking the driver to either keep the car closer to the inside of the corner (STAY IN), or position the car closer to the outside of the corner (STAY OUT).
STRING RULE	Rule that as you increase one input, another must be decreased, as if connected by a string. Examples include unwinding as you squeeze on power or coming off the brake as you turn-in.
THRESHOLD BRAKE	To use 100% of the car’s braking ability in a straight line. Just shy of wheel lock-up (skid) or ABS (Antilock Brake System) activation.
TRACK-OUT	The exit point of a corner where the car passes close to the outside edge of the track
TRAIL BRAKE	To intentionally use some brakes, in diminishing amounts, from the turn-in point toward the apex, often to induce rotation.
BRAKE OVERSTEER	Oversteer caused by excessive trail braking or by applying the brakes while turning.
TRAILING-THROTTLE OVERSTEER	Oversteer caused by abruptly lifting off the throttle as the car is turning.
TURN-IN	The entry point of a corner where the driver first turns the steering wheel.
UNDERSTEER	A condition where the front tires are sliding more than the rear tires in a turn.
UNWIND	To return the steering wheel to the center position.
WEIGHT TRANSFER	Change in the car’s distribution of weight on each of the four tires as a result of lateral (sideways) or longitudinal (front/back) acceleration.

Driving Techniques – How to drive on the track

While there are many advanced and varied techniques, we've found that focusing on a small set of essentials will help you get the most out of your first track day.

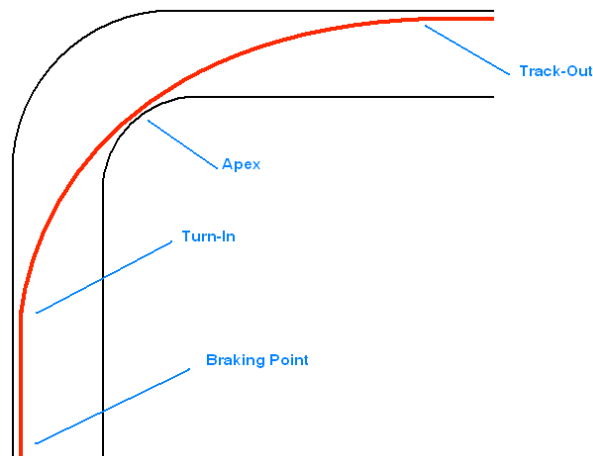
Driving Position. Position the seat so that you can comfortably reach the pedals, including being able to fully depress the clutch. For your safety, lower the seat so that you have at least a fist of room above your helmet. Adjust the back of the seat so that you can drape your wrist on top of the wheel without your shoulders coming off the seat back. If your chest is closer than 12" from the air bag, recline the seat slightly. Place your hands at the 3 and 9 o'clock position. This is where you will keep them while driving.

Adjust your side mirrors so that you just barely *cannot* see your car in your side mirrors. With this adjustment, an overtaking car should move from the rearview mirror to the side mirror to your peripheral vision without a blind spot.

Brake or turn; pick one. Your car can brake at 100% of its ability. It can turn at 100% of its ability. It can't do both at the same time. As a novice, you will be braking in a straight line, without turning. Similarly, while you are turning, you must not use the brakes (except to stop in the event of a spin, of course). And last, you must be gentle in applying power (easing onto the throttle) as you exit the turn and unwind the wheel.

Going through a turn. Most turns will have the key reference points of turn-in, apex, and (sometimes) track-out marked with orange traffic cones. You will likely be at full throttle (gas pedal to floor) as you approach the turn.

- ★ Position the car on the outer side of the track.
- ★ Smoothly come off the throttle and brake in a straight line, starting at your braking reference point. Your instructor will help you find this.
- ★ If you have a manual transmission, downshift as you approach the turn-in point. Let the clutch out gently to avoid lurching. Complete your downshift before the turn-in point.
- ★ At the turn-in point, smoothly turn the wheel to bring the car to the inner side of the track at the apex.
- ★ Apply a small amount of throttle to maintain your speed and bring your inside wheels close to the inner edge of the pavement at the apex.
- ★ Smoothly ease on the throttle and allow the car to drift to the outer side of the track at the track-out point.
- ★ As you approach the track-out point, smoothly unwind the wheel back to straight and smoothly press the gas pedal to the floor (or as desired).



Looking ahead. It is a natural reaction to look right in front of the car. Imagine that you walked through an airport looking only straight down. You'd bump into people, not be able to find the gate, and walk a crooked path. By looking ahead as you drive, your hands will naturally steer the car where you want it to

go, in a smooth path with many fewer steering correction wiggles. In addition, you'll see problems ahead far before you get to them.

The correct line through a turn has a series of reference points (orange cones, brake reference numbers, cracks in the pavement, whatever). These mark the braking point, turn-in point, apex, and track-out point. As you approach one of these reference points, but before you get there, turn your attention to the next reference point. For example, as you are braking and approaching the turn-in point, but before you actually turn the wheel, start looking at the apex.

If things don't go as planned. Your instructor is there to help you avoid driving mistakes. But no one is perfect, so you need to know what to do if things go wrong.

If you've **early-apexed** or misjudged the track-out point and put the outer **two wheels off** the pavement:

- ★ Immediately unwind the wheel to keep two wheels off the track
- ★ Smoothly come off the throttle and allow the car to slow down. If you need to brake, do it very gently.
- ★ Only when the car is slow and straight, gently steer back on to the track. Don't do this too soon or the car may abruptly jut across the track and go off on the other side.

If the car **understeers** and the front of the car starts pointing away from where you want to go:

- ★ Smoothly ease off the throttle a little. The front of the car will "tuck back in" and resume turning.
- ★ Do not add more steering input. In fact, you may have oversteered the wheel and need to unwind slightly.

If the car **oversteers** and the rear of the car starts sliding out:

- ★ *Immediately and abruptly* steer the other way to keep the front tires pointed at where you want to go. This is one time when you do not attempt to be smooth.
- ★ Don't suddenly lift off the throttle, as this will make it worse.
- ★ If you've just lifted off the throttle, add a little more throttle (because you're experiencing trailing throttle oversteer).
- ★ If you have been easing onto the throttle (squeezing on power), breathe off the throttle gently to restore rear traction (because you're experiencing power oversteer).
- ★ If you have been braking, smoothly come off the brake to allow the rear of the car to regain traction (because you're experiencing brake oversteer).
- ★ If you have successfully "caught" the car, *immediately* straighten the wheel out to avoid the car snapping in the opposite direction.
- ★ If the oversteer slide progresses and it becomes clear that you cannot catch the spin, immediately put both feet in – that is, simultaneously depress the clutch and brake – **HARD!** Don't release the brake until the car has *completely* stopped.

Track Information – Golden Gate Chapter

Golden Gate Chapter runs events at Infineon Raceway, Mazda Raceway Laguna Seca, and Thunderhill Raceway.

The Track web sites are located at:

<http://www.thunderhill.com>

<http://www.laguna-seca.com>

<http://www.infineonraceway.com>

Sound levels at our local tracks vary.

Track	Sound Limit
Thunderhill Raceway	103 dbA
Mazda Raceway Laguna Seca	92 dbA
Infineon Raceway	103 dbA

All measurements are at 50 feet.

These limits are strictly enforced. Sound is measured using a Three Strikes You're Out policy. The third violation results in an immediate Done Day. This is track policy, not GGC policy. There is no avenue of appeal. Nothing will screw up your weekend more than problems with the Sound Lady. Please fix your exhaust systems BEFORE you show up at the track!

Cleanup of trash, oil or fuel spills is charged at exorbitant rates. Please help keep the facility clean. Trash receptacles will be provided. Waste fluids need to be removed by participants. Fuel spills on the asphalt must be brought to the attention of track personnel immediately, and doused with lots of water. Save yourselves from major cleanup bills on this one, please.

No vehicles are permitted on any portion of the property other than the paddock or parts of the racetrack.

Sample Liability Waiver

You will also be asked to acknowledge a liability waiver when you register online for the school. Upon entering the track, whether student or spectator, you will be asked to sign a liability waiver at the front entrance gate for the track's records. You will then be required to sign the BMW CCA waiver when you register in-person.

RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK AND INDEMNITY AGREEMENT

IN CONSIDERATION of being permitted to compete, officiate, observe, work for, or participate in any way in the EVENT or being permitted to enter for any purpose any RESTRICTED AREA (defined as any area requiring special authorization, credentials, or permission to enter or any area to which admission by the general public is restricted or prohibited), EACH OF THE UNDERSIGNED, for himself, his personal representatives, heirs, and next of kin:

1. Acknowledges, agrees, and represents that he has or will immediately upon entering any of such RESTRICTED AREAS and will continuously thereafter, inspect RESTRICTED AREAS which he enters, and he further agrees and warrants that, if at any time, he is in or about RESTRICTED AREAS and he feels anything to be unsafe, he will immediately advise the officials of such and if necessary will leave the RESTRICTED AREAS and/or refuse to participate further in the EVENT.
2. HEREBY RELEASES, WAIVES, DISCHARGES AND COVENANTS NOT TO SUE the promoters, participants, racing associations, sanctioning organizations or any subdivision thereof, track operators, track owners, officials, car owners, drivers, pit crews, rescue personnel, any persons in any RESTRICTED AREA, promoters, sponsors, advertisers, owners and lessees of premises used to conduct the EVENT, premises and event inspectors, surveyors, underwriters, consultants and others who give recommendations, directions, or instructions or engage in risk evaluation or loss control activities regarding the premises of EVENT and each of them, their directors, officers, agents and employees, all for the purposes herein referred to as "Releasees," FROM ALL LIABILITY TO THE UNDERSIGNED, his personal representatives, assigns, heirs, and next of kin FOR ANY AND ALL LOSS OR DAMAGE, AND ANY CLAIM OR DEMANDS THEREFOR ON ACCOUNT OF INJURY TO THE PERSON OR PROPERTY OR RESULTING DEATH OF THE UNDERSIGNED ARISING OUT OF OR RELATED TO THE EVENT, WHETHER CAUSED BY THE NEGLIGENCE OF THE RELEASEES OR OTHERWISE.
3. HEREBY AGREES TO INDEMNIFY AND SAVE AND HOLD HARMLESS the Releasees and each of them FROM ANY LOSS, LIABILITY, DAMAGE, OR COST they may incur arising out of or related to the EVENT WHETHER CAUSED BY THE NEGLIGENCE OF THE RELEASEES OR OTHERWISE.
4. HEREBY ASSUMES FULL RESPONSIBILITY FOR ANY RISK OF BODILY INJURY, DEATH OR PROPERTY DAMAGE arising out of or related to the EVENT whether caused by the NEGLIGENCE OF RELEASEES or otherwise.
5. HEREBY acknowledges that THE ACTIVITIES OF THE EVENT ARE VERY DANGEROUS and involve risk of serious injury and/or death and/or property damage. Each of the UNDERSIGNED, also expressly acknowledges that INJURIES RECEIVED MAY BE COMPOUNDED OR INCREASED BY NEGLIGENT RESCUE OPERATIONS OR PROCEDURES OF THE RELEASEES.
6. HEREBY agrees that this Release and Waiver of Liability, Assumption of Risk and Indemnity Agreement extends to all acts of negligence by the Releasees, INCLUDING NEGLIGENT RESCUE OPERATIONS and is intended to be as broad and inclusive as is permitted by the laws of the province or state in which the Event is conducted and that if any portion thereof is held invalid, it is agreed that the balance shall notwithstanding, continue in full legal force and effect.

I HAVE READ THIS RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK AND INDEMNITY AGREEMENT, FULLY UNDERSTAND ITS TERMS, UNDERSTAND THAT I HAVE GIVEN UP SUBSTANTIAL RIGHTS BY SIGNING IT, AND HAVE SIGNED IT FREELY AND VOLUNTARILY WITHOUT ANY INDUCEMENT, ASSURANCE OR GUARANTEE BEING MADE TO ME AND INTEND MY SIGNATURE TO BE A COMPLETE AND UNCONDITIONAL RELEASE OF LIABILITY TO THE GREATEST EXTENT ALLOWED BY LAW.

ALL SECTIONS MUST BE COMPLETED

PRINT NAME HERE

SIGN NAME HERE

DUTIES