



BMW CCA Puget Sound Drivers Education Handbook

Car Control Clinic and High Performance Driving Education





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BMW Car Club of America Puget Sound Region





Background and Overview

Welcome to one of the best driving education programs in the Northwest! Our club has a proven program that continues to exceed our member's expectations. Our events are well known as being great events that are well structured, safe, and fun.

History

The Puget Sound Region chapter has provided High Performance Driving events at Pacific Raceway and other tracks for more than 40 years. We have a very good safety record and an experienced corps of experienced volunteer Instructors. Track events have long been a part of the Club experience; so much so that track driving is really part of the Club's DNA. Our Why

For members, these events provide an opportunity to drive your BMW in a manner that simply isn't possible under normal circumstances. Driving your BMW on a racetrack, with expert supervision and in a safe manner is simply an opportunity not to be missed. Yes, we drive fast and it will be a thrill for you. But you won't be pushed and you really will have the time of your life. Why did you buy your BMW? It is, after all, the Ultimate Driving Machine.





Mission, Principles, and Values

- Our Mission: To make high performance driving safe, fun and accessible to all Club members.
- **Our Driving Program Principles, and Values:**
- Safety—first and foremost, we strive to keep our drivers safe.
- Fun—we strive to make high performance driving in our BMWs fun.
- Educational—our track events are schools and have an emphasis on learning.
- Welcoming—we want our track events to be friendly and to be welcoming all our members.
- Approachable—we strive to make our track events approachable and to minimize obstacles that might discourage participation.
- Inclusive—our track events are open to Club members of all skill levels and with every type of BMW automobile. (We also accept non-BMWs at our events, although there are some restrictions on what types of cars can participate in HPDEs...more details are in <u>Section 3.0</u> of this handbook.)





CCC and HPDE Common Concepts

- There are two aspects of our Drivers Education program, the Car Control Clinics (CCC), and the High Performance Driving Education (HPDE) events. Each has a different focus and requirements, but the CCC is the entering point for the HPDE program so there is a link.
- Opportunities. The Club typically runs 4 CCC's and 5 HPDE's a year. Most are typically at Pacific Raceways in Kent, WA, an easy drive from most of the Puget Sound Region. The last HPDE of the year is typically done at The Ridge Motorsports Park in Shelton, WA. Club Membership is not required for the CCC but is required for HPDE's. BMW CCA Puget Sound has reciprocity agreements with the Porsche Club of America (PCA) and Audio Club of North America (ACA) for HPDE's.
- Season. Typically there will be one track day (with a CCC and HPDE) each month from May-September. There is typically a kick-off event at a local car enthusiast spot (typically 425 Motorsports in Kirkland) in March or April to discuss the program in detail. Check the BMW CCA Puget Sound Facebook page or website for upcoming events.
- Registration. Registration for both CCC's and HPDE's is done on <u>motorsportreg.com</u>. <u>Section 5</u> of this handbook has details on this process.
- Excitement. Don't forget this is supposed to be fun! Check out our club video on track days. https://www.youtube.com/watch?v=v64v_h_fqmU





Pacific Raceways Information

Pacific Raceways is in Kent, WA.

The address is:

31001 144th Ave SE, Kent, WA 98042

Google Link: https://goo.gl/maps/KjNostiVMSs

Website: pacificraceways.com

More detail on the next page...





Driving Machine

Pacific Raceways (Detail)



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The Ridge Motorsports Park Information

- The Ridge is in Shelton, WA.
- The address is:
- 1060 W Eells Hill Rd, Shelton, WA 98584
- Google Link: https://goo.gl/maps/XHf7t6Qo5uk
- Website: https://www.ridgemotorsportspark.co m/
- More detail on the next page...





Driving Machine



The Ridge Motorsports Park (Detail)

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Car Control Clinic Fundamentals

Purpose and Overview.

The Car Control Clinic (CCC) is a non-competitive event intended to allow drivers to experience the attributes of car control at and beyond the limit, in a safe and controlled environment. The Clinic will help you improve your driving skills while learning about car dynamics. The Clinics dual purpose is to prepare students for our high-performance driving schools plus teach skills useful in everyday driving situations. The school is held in the large parking lot at Pacific Raceways, using plastic cones, to provide a safe learning environment for these low-to-moderate-speed maneuvers. The Car Control Clinic (CCC) is the most important drivers education program the club operates. It is open to all drivers and all types of cars. You are not required to be a club member to participate. You just need a car that is mechanically sound, has properly operating safety equipment, and a driver with a willingness to learn.

Following a classroom session, students, with an instructor in the car with them, demonstrate techniques such as braking while turning, inducing rotation, countering oversteer, and other techniques by navigating through a challenging course. The goal is to remove misconceptions, and promote confidence and understanding of what the car and driver are capable of accomplishing, as well as understanding and respect for the limits of car control.

Although this is not a racing school, you will learn to drive your car better at its limits, and increase your ability to brake, corner, and accelerate quickly and precisely without losing control of your car; skills that can be life-saving in an emergency. We emphasize skills and knowledge to make better drivers on the course, and on the road.

Ultimately, the CCC will make you a better, more defensive driver and increase your confidence in understanding the limits of your cars performance, regardless of whether you go on to participate in HPDE's or not.





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CCC Requirements and Preparation

- View the BBW NA Video on this page: https://www.bmwcca.org/events/carcontrol
- View this video from another BMW CCA club: https://www.youtube.com/watch?v=ubc7hhpiysM
- Sign up for the CCC on motorsportreg.com.
- **Pre-Event Requirements**
- No special equipment required (no helmets, harnesses, etc).
- No tech inspection is required but your vehicle must be mechanically sound and not leaking any fluids.
- You must be at least 16 years old and have a valid driver's license.
- You do not need to be a BMW CCA member.
- Get a good nights sleep and avoid alcohol/etc the night before. You will need to be alert and focused!
- Expect an email from the CCC instructor several days before your event with more details.



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Car Control Clinic Event Day Expectations

- Please arrive at the track no later than 7:45 am.
 - Have your vehicle ready to begin drills by 8:00 am.
 - Inspect your engines oil level, be sure it is at the FULL mark.
 - Inspect/set the air pressure in your tires at the factory recommended settings (look in the driver's door jamb for the sticker or google it)
- Remember to sign the wavier when you arrive at the track prior to attending class
- Our classroom session begins at 8:00 am
- Bring a chair to our morning class room session (8:00 8:40am) We will be sitting down for our discussions.
- Bring some water and snacks, keep yourself hydrated and well fed so your mental capacity is at its best.
- Be ready to have a blast! At the end of our day, you will wonder why you had any apprehensions at all about participating. Table of Contents





Puget Sound Region

The Ultimate Driving Machine

Car Control Clinic Event Activities

Activities.

Each exercise is designed to focus on a specific car control skill. Participants will be coached at the beginning and end of each run, providing useful feedback. Participants will learn to engage the ABS system and improve their skills in controlling their vehicle.

The exercises are:

- **1.** Emergency braking.
- 2. Emergency braking on a curve.
- 3. Slalom.
- 4. Wet skid pad.
- 5. Autocross (a small course defined by cones).

All activities take place on a flat paved area with instruction provided and you will get multiple runs on each exercise. Note: We run in all weather conditions.



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Car Control Clinic Schedule

Schedule.

- Arrive early so you have time to get yourself acclimated. You need to empty all loose items from your car. If there is a chance of rain, bring plastic bags or bins for the items you remove from your car.
- 8:00 Drivers' Meeting-the day's activities will be discussed. Please be on time!
- 9:00-1:00 The exercises described on the previous page will be run with each participant getting multiple runs through each exercise.
- Lunch Break and Parade Lap. During the lunch break (sometime mid-day), participants will get a chance to do slow-speed parade laps of the race track. It is a moderate speed lead-follow event and there are no helmets required.
- **2:00** (approx.) Participants will get an opportunity to get a helmet (provided by the club) and take a ride with Instructors on the track at high speed. This is an optional activity (but tons of FUN!)





High Performance Driving Education Fundamentals

Purpose and Overview.

High Performance Driving Education (HPDE) is about learning how to safely push you and your cars limits on the track in a non-competitive, instructor supervised environment. HPDE's are high speed driving on a racetrack under controlled conditions with continuous instruction and education. All activities take place on a road racing track and we run in all weather conditions. HPDE's are NOT racing but are still a lot of fun! (we can offer information on area racing programs if that is what you are interested in). There are more safety controls and requirements (such as a helmet) to participate in an HPDE than the CCC, but not so many as to be a significant hindrance or a burden...you are, after all going to be driving your ultimate driving machine at high speed on a track! It only makes sense. The event is organized by skill level(A - instructors, B - Experienced, C – Intermediate, D- Beginner) so that like-skilled drivers are grouped together and you don't feel pressured by the drivers around you. This selection is by the Instructors, not self-selected. There are typically four 20 minute sessions per group for an 80 minute "block". The group order is randomized each event (i.e. one event may be D,A,B,C, the next B, C,D A, etc). This allows discussion/training group sessions, and rest between sessions. Everyone in C and D group will have an instructor in the car to provide assistance and oversight to ensure you are safe and being pushed (just a little!) to learn new skills and find your limits. Requirements and other information are on the following pages of this handbook.



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HPDE Requirements

Requirements.

- Drivers must have completed a Car Control Clinic or equivalent at a reciprocating club. Ask us to
 evaluate your previous experience if you think it qualifies.
- Car must have a tech inspection to ensure it is safe. These can be done at any local BMW dealer or other high quality shop. The form can be downloaded <u>here</u>.
- All participants must wear a Snell-rated (2010 or newer) helmet.
- All novices will have an Instructor in the right seat at all times.
- Event organizers will place drivers in the most appropriate run group based on their experience and skill level.
- You must be at least 18 years of age to participate in a HPDE event.
- You must be a BMW CCA member.
- Registration is via <u>motorsportreg.com</u>.





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HPDE Track Day Preparation

- Just prior to the event
- Wash and vacuum car.
- Inflate the tires to stock pressures (look in your drivers door jamb or google it).
- Clean out all loose items from trunk and interior (you will be exerting a good bit of lateral G-forces on your car and yourself!)
- Fill the gas tank (cars are thirsty when you are driving hard!)
- Get a good nights sleep and avoid alcohol/etc the night before. You will need to be alert and focused!
- Expect an email from the HPDE instructor several days before your event with more details.
- You will need numbers (assigned at motorsportreg) and class (A,B,C,D) markers for your car or purchase them when you register and they will be waiting for you at the track.

Items to bring to the track.

- Helmet.
- Coat/Jacket (dress in layers—you'll be outside).
- Driving gloves (optional).
- Ball cap (if you want to cover your helmet hair).
- Ice chest and drinks (especially water!).
- Tech form.
- Something to cover your possessions in case of rain (they can't be in the car).
- Tire gauge (optional, but highly recommended).
- Torque wrench (optional but you'll need to borrow one to check wheel bolt torque between sessions).
- Camping chair (optional).





Puget Sound Region

The Ultimate **HPDE Event Day Expectations** Driving Machine

• Check-in starts at 7:00 am. Please arrive at the track no later than 7:45 am. As you enter the paddock, you will be asked to sign the BMWCCA waiver which is required by the club. Please turn in your tech sheet, if not already done, as you sign the club waiver in the paddock. In exchange, you will receive a packet containing:

A Wristband – please wear this at all times – it is your "ticket" to get on the track!

A Red Ticket – Keep it handy as you will need to use it to pay for your lunch at the main concession stand.

A copy of the schedule for the day.

Optional Vinyl Numbers & Class Letter if you ordered them.

- Have your vehicle ready to go by 8:00 am and be ready to meet your instructor for the day. They will typically stop by to meet you between 8:00-8:20 am.
- Inspect your engines oil level, be sure it is at the FULL mark.
- Inspect/set the air pressure in your tires at the factory recommended settings (look in the driver's door jamb for the sticker or google it)
- Remember to sign the wavier and turn in your tech form when you arrive at the track and prior to attending the Mandatory Drivers Meeting. This should happen at the entrance but sometimes people "sneak" through.
- Mandatory Drivers Meeting begins promptly at 8:20 am where rules, requirements, and safety items such as flags and track specific rules will be discussed. Location of the meeting is indicated in Sections 1.4 and **<u>1.5</u>**, depending on the track.



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The Ultimate

HPDE Event Day Expectations (continued)

- Understand your run group and the days schedule (a sample is to the right).
- You should be in your car ready to go several minutes before your run group starts, waiting for your instructor to join you (don't waste track time!)
- Track typically opens at 9:00 am and closes at 4:00 pm. There is a lunch period somewhere around noon.
- Understand your run groups post run meeting time and BE THERE. You will learn a lot and be able to engage with your fellow drivers to build trust and camaraderie.
- Stay hydrated!

Come with a willingness to learn and have fun!



	6 to 8
C and D	Left only
Groups:	Front straight until kink (10)
	2 to 3a
	3b to 4

All let-hvs must be done with a point



The Ultimate Driving Machine Pacific Raceways Primer

- Pacific Raceways is a 2.25 mile road course that blends the track facilities into the natural landscape. The track has nine turns plus a kink on the main straight and 125 feet of elevation changes and the natural beauty of the "backside" looks more like a winding country road surrounded by trees than a race track. With two left-hand sweepers, two hairpin corners (one right, then one left) and the combination esses of 5A, 5B and 6, this track offers many challenges while being a very fun track to drive. Pacific Raceways is currently (2018) going through a transformation as the track owners are upgrading the facilities and the track itself. Don't be surprised to find the track layout and configuration changing and improving over the next few years.
- Rain notes: Generally speaking, Pacific Raceways drains fairly well in rainy conditions. There are a few places on the back side where runoff may flow over the track surface (possibly bringing some dirt with it) at the exit of Turn 3B and near Turn 5A and 5B. Recent track improvements may solve this problem. The front straight can have standing water in places along the left wall, past the apex of Turn 9, in the area of the transition onto the drag strip and near the turn-in for Turn 1. Wet conditions on the drag strip can be treacherous due to application of traction compounds (VHT) for drag events. Be especially careful in areas of standing water where seams in the asphalt run parallel to your direction.



Pacific Raceways Primer (continued)



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The Ridge Primer



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- The Ridge Motorsports Park is the Pacific Northwest's premier destination motorsports complex. The Ridge
 is located near the city of Shelton, between the picturesque Cascade and Olympic mountain ranges, in
 Mason County, the birthplace of racing in Washington State. Set in a relaxed rural natural forest
 environment with stunning views of Mt. Rainier and Mt St. Helens, only minutes from The Olympic National
 Forest and scenic Hood Canal, The Ridge Motorsports Park is centrally positioned to serve the major
 population centers of Seattle, Washington and Portland, Oregon, as well as British Columbia Canada.
- Ground was broken for the Steve Crawford designed road course on 26 April 2011. The full road course is 2.47 miles long with 16 turns and a change in elevation of more than 300 feet from start to finish. The first event at "The Ridge" was a charity event benefiting local Mason County food banks, held on 10–11 December 2011.



See 2 A alle

The Ridge Primer (continued)

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TS

TS

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Office



BMW Car Club of America Puget Sound Region MOTORSPORTS 11 THE CAROUSES TS TS 6 THETHUMB 4 TS 8a 10 TS TS 8b 3 TS M Revision 2016-a Chris Mason **RIDGE STRAIGHT** 9 12 2 TS FRONT STRAIGHT Pit Lane 1 Main Paddock High on the Hog **Track Information:** BBQ Classroom Width: 40' Length: 2.47 miles Bathrooms Front Straight: 1/2 mile Olympic Grand Pr **TS** Turn Station





Contact Information

- Driving Events Coordinator Steve Libby <u>dec@bmwpugetsound.com</u>
- Chief Driving Instructor Mitch Delebarre cdi@bmwpugetsound.com
- Registrar Tammy Wiest registrar@bmwpugetsound.com
- Membership Chairman Daren Morales membership@bmwpugetsound.com

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Photographer – Christian Bouchez – photographer@bmwpugetsound.com







- Motorsportreg is a centralized, nationwide registration and tracking system for motorsport events. BMW CCA
 Puget Sound uses motorsportreg for all signup and processing of CCC and HPDE events. To participate in a CCC
 or HPDE you will need to:
- Create an account at <u>motorsportreg.com</u>
- Search for "BMW CCA" events within 100 miles of a Seattle Area Zip Code (such as 98101)
- Select "Driver School" and/or "Car Control Clinic" as filters.
- You should now see our events.
- Click on the event (s) you want to register for, then read and follow the instructions and prompts through until submission.
- You will not be a confirmed participant yet so can check you status regularly in your Dashboard. It will go green when you are confirmed.
- Your credit card will not be charged until about a week before the event.
- If you have any questions or issues, contact the registrar via the contact link in the event.