



# PREPARING FOR YOUR 1<sup>ST</sup> TRACK DAY...

“The key to successful participation in any new experience is Preparation”

Andre-Jacques Garnerin, World's First Parachutist, Oct. 22, 1797\*

## Congratulations!

You have made a great decision to take your first step into the fun, exhilarating and friendly camaraderie of amateur motorsports!

In order to maximize your enjoyment (and yes, even learning!) from your participation, it is essential to do some minor preparation work - on both your car and yourself - before any track driving activity. This will not only allow you to Safely enjoy your experience, but might allow you to learn something about your car, and yourself.

**WARNING: TRACK DRIVING CAN BE ADDICTIVE!!**

Our over-arching *Mission Objectives* (*get it?*) are for You to:

- (1) Have a Safe introduction to track day driving;
- (2) Have an enjoyable driving experience in a controlled setting; and
- (3) Want to return!

To those ends, our Training Objectives reflect the prioritized areas of focus your Driving Coaches will talk to you about before and after your track sessions as we are here to ensure You:

- (1) Safety First. Operate your car Safely on and around the track. This means driving in accordance with the rules of the track facility and the conditions of participation as laid out by Speedy Goat Motorsports Club...and in accordance with your Driver Coach's guidance;
- (2) Know your Car. Increase your awareness of your car's performance capabilities, such as FWD versus RWD cars, shifting points and techniques, braking points and technique, steering inputs, and where and how to look;
- (3) Know the Track Environment. Increase your awareness of your driving environment – such as position and relative speeds of other cars near you, passing zone etiquette for the passer and passee (that works, right?), the difference in mechanical grip due to FWD versus RWD cars, track surface condition and pavement type, braking zones, turn-in points, apex optimization etc.
- (4) Do the first three consistently, and you'll get signed off as 'Safe for Solo' by the end of the Track Day!

\*Nah, he never said that...even though he did do it.

The information that follows is primarily focused on a driver who has never been on a race track before, and who is interested in learning how to Safely, and incrementally, push their driving limits in a controlled environment. Note that your Driving Coach should reach out to you prior to the event to discuss any concerns and answer any questions you may have.

Keeping in mind our Mission Objectives & Training Objectives, here are our top “Gotta Do’s” and “Should Do’s” as you prepare for your first of what we hope is many Safe Track Days:

## **GOTTA DO’S: PREPARATION FOR YOUR CAR:**

Driving a car on the track can put a great deal of additional strain on your machine so some simple pre-Track Day maintenance is essential. Remember: it’s your responsibility to ensure your car is safe for driving on track.

### ○ **BRAKE FLUID**

1. Brake fluid should have been replaced within the last 6 months (with DOT 5) as it tends to absorb water from the atmosphere (it’s hygroscopic - especially on the ‘wet’ coast!) – and older brake fluid can boil when the brakes heat up leaving compressible steam in the brake lines which will cause spongy brake pedal feel and reduced braking effectiveness. Which isn’t good.

### ○ **FLUID LEVELS & NO FLUID LEAKS**

2. Make sure oil, water and other fluid levels are topped up – but not overfilled – and that your car has no fluid leaks. These are usually identified by brown, green, or clear fluids randomly appearing under your car and are not acceptable for Track Days.

**Note:** If you find that your car is leaking something, the day of, or a day or two prior to the event, *please* don’t hesitate to advise the organizer of your car’s temporary unsuitability so, worst case, you get your sign-up fee refunded, understanding that the ‘worst case’ from driving a leaky car on the track is significantly worse – especially for cars that crash because of it.

### ○ **BRAKE PADS**

3. Have a look at the wear levels of your brake pads. They should have at least 50% left from new, or about 4-5mm per pad. If you have any concerns about your brakes, PLEASE investigate and address your concerns BEFORE showing up for your Track Day. Trust us, brakes are THE MOST IMPORTANT system on your car when you Track your car.

## ○ TIRE TREAD DEPTH

4. Check your tire tread depth to make sure you'll have enough left after the wear and tear of track use to Safely get you home. Tires must be street legal, so I would not recommend anything at or below the tread wear bar indicator for dry conditions.

## ○ REMOVE EVERYTHING

5. Ensure you remove everything 'loose' from your car – specifically, things that might interfere with your driving on track, or that could come loose and be distracting on the track. These include: your cellphone, all floor mats, anything hanging from your rearview mirror, anything jammed in your car doors or center console like napkins, coins, Starbucks' cups, tire pressure gauges, umbrellas, etc; don't forget to empty your trunk as well (spare wheel, jacks, etc). Best to do all this at home, vice at the track the morning of your track day. Think of it as the cheapest weight loss program for your car...

## ○ WHEEL NUTS TORQUED

6. Make sure all the wheel nuts are torqued to spec. If you don't know what to torque your wheel nuts to, or don't have a torque wrench, you can take your car to a wheel shop and have them confirm your wheels are torqued correctly; alternatively, decent torque wrenches can be found at Canadian Tire and other stores for up to \$100. This latter option is helpful if you think you will be adopting Track Day driving as a recreational pastime.

## ○ SAFETY EQUIPMENT

7. Ensure any desired/required\* safety equipment such as gloves, helmets\* and shoes are not forgotten at home. On the day, wear comfortable, natural fibre (ie. Cotton) trousers and long-sleeve shirt, plus closed-toes (running) shoes for driving, though most bring extra clothes to change into at the end of the track day. Note: Provincial Health Authorities require mask use when outside your pit area.

## ASK QUESTIONS!

8. Lastly, do not be shy: ASK QUESTIONS!! Remember, every driver at the event was once where you are now, and more often than not, they are happy to answer any questions you may have about driving technique, braking points, tire pressures, what to eat the night before... whatever!

## SHOULD DO'S: PREPARATION FOR YOUR CAR:

### TIRE PRESSURES

9. Check your tire pressures and ensure they are all about the same pressure (+/- 1.0 psi), or appropriate to your car tires (Manufacturer's recommended tire pressure info is in the driver's door jamb) and, as a rule of thumb, increasing them by 5-10% should provide a better turn-in and be generally more suited to track conditions, especially in the wet. As well, there is no air compressor at the track...unless you bring your own.
10. Remember that, as the heat generated by your brakes increases and is transmitted to your wheel, your tire pressures will increase proportionally. It is worth checking your tire pressures after each 20+ minute session just to see what your pressures are doing...likely you will have to let out some air to get them back to your target pressure. This is a deep topic so I refer you to paragraph #8 above...

### FUEL

11. Plan to arrive at the track with no less than ½ tank of fuel. Most track days have a break for lunch, so it is possible to head over for a quick refuel. Full is ok too, but don't brim your car when fueling...(as in 'fill it to the brim') because sloshing can cause fuel spills which is the LAST thing anyone wants on a track.

### OTHERS

12. For those a little keener, you can inspect, clean or replace your engine's air filter to ensure optimum engine 'breathing'. It is also a good idea to remove your wheel's centrecaps before going to the track – the heat generated by the brakes can cause them to pop-off on track.

## GOTTA DO'S: PREPARING YOURSELF:

Driving a car on the track can put a great deal of additional strain on YOU, so some awareness and simple preventative maintenance is beneficial:

### ○ TRACK FAMILIARIZATION


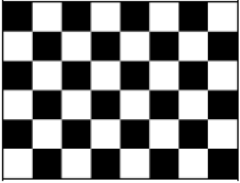
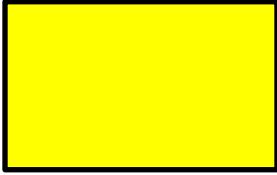
13. It makes sense to familiarize yourself with the track you will be driving for your Track Day in the days leading up to your Track Day, (ie. Track layout and turn numbers, ideally – See track map attached) and in today's digital world, there are plenty of resources online that can help with this. Use your favourite Search engine, or just go straight to YouTube, and

search “Mission Raceway Park Track Days”. There are literally hundreds of driver POV videos of cars lapping Mission.

Key Point: Don’t focus on lap times or speeds achieved in the video; focus on where the driver puts his car prior to turn-in, where he apexes the corner, and how he exits the corner – this is called the race line (the optimum path for a given car to drive through any given corner (or corners)). Also useful is watching the driver’s hands if visible...typically, smooth is Safe. & Fast.

## ○ FLAGS

14. It is important to know what each of the coloured flags mean, and where the flag stations are located around the track (see map). Flags are the primary means of communicating with drivers – whether its track condition-related, or the Chief Driving Coach wanting you to Pit to have a chat following an ‘undesired learning event’ (ie. Went off track, or spun your car).

| FLAG DESCRIPTION   | STATUS<br>(What is happening ahead)  | INSTRUCTION<br>(How the Driver is to respond)  |
|--|--|--|
| <br>GREEN FLAG                    | Displayed by the Starter to indicate the start of a session. May be displayed after a Caution period to indicate the track is clear and session may continue   | Session underway<br>&<br>Clear track ahead   |
| <br>CHEQUERED FLAG              | Displayed at all flag stations to indicate the end of the session  | All drivers are to return to the Pits. Remainder of the current lap is a cool-down lap. Drive at 6/10 pace and minimize use of your brakes to assist with cool down. Short-shifting is recommended.  |
| CAUTION FLAG<br><br>YELLOW FLAG | Universally warns of adverse conditions ahead.<br><u>UNWAVED</u> flag means something is happening ahead, but OFF the track surface – ie. a car has spun.<br><b>WAVING</b> means something is happening ahead ON the track surface, noting that the more frantically the flag is waving, the more imminent or serious the condition. | Get off the gas, Look Ahead, and SLOW DOWN enough so you are able to change your line to avoid the situation ahead, or to avoid a car re-entering the track.<br><br><b>PASSING IS SUSPENDED</b> until you pass the next manned flag station that is NOT displaying any warning flags |

| FLAG DESCRIPTION  | STATUS<br>(What is happening ahead)  | INSTRUCTION<br>(How the Driver is to respond)   |
|---|--|---|
|  <p>RED/YELLOW STRIPED FLAG</p>                        | <p>Displayed locally to indicate that there is something ahead on the track surface which could reduce grip or cause a car to lose control, such as oil, coolant, small pieces of debris, detached GoPros, etc.</p> <p><i>* Not used during during Time Attack</i></p> | <p>Get off the gas, Look Ahead, and <b>SLOW DOWN</b> enough so you are able to change your line to avoid whatever may be causing the grip to change. Be warned – this could include an extended section of track with reduced grip due to a prolonged oil or coolant spill.</p> |
|  <p>BLUE FLAG<br/>(May be diagonal yellow striped)</p> | <p>Informs a driver that a faster car is approaching, and <u>if in a passing zone</u> encourages the slower driver to Point-By the passing car(s).</p>   | <p>Driver of the car being given the flag is expected to allow the faster car (or cars) to pass. Give a Point-By for each passing car, while maintaining your driving line. Courtesy dictates a slight lift off the gas to facilitate the pass.</p>                             |
| <p>ROLLED UP</p>  <p>BLACK FLAG POINTING AT YOU</p>   | <p>It's a Warning.<br/>We know what you are doing, and if you correct your adverse behaviour, we're all good. Another instance of adverse behaviour, and you can expect to get Black Flagged.</p>  | <p>If you're doing something you shouldn't – Knock It Off.<br/>If you don't know why you got the Warning, it would be worth coming into the Hot Pits to find out Why.</p>   |
| <p>'CONSULTATION'</p>  <p>BLACK FLAG</p>             | <p>Used to summon a driver to the Hot Pits for a discussion with their Driving Coach, or Chief Driving Coach; usually a result of disobeying the rules, or creating a potentially Unsafe condition on track.</p>   | <p>Return to the Hot Pits at your next opportunity. In most cases, your Driving Coach or the Chief Driving Coach will permit you to resume your session after the Consultation.<br/><b>NOTE:</b> Do NOT repeat whatever it was that caused you to get Black Flagged.</p>        |
|  <p>RED FLAG</p>                                     | <p>Displayed when track conditions are too dangerous to continue the session.</p>  | <p>Depending on the circumstances (weather, crash), you are to come to a smooth stop and indicate so using your 4-way flashers, and arm raised outside your window. Then, under Marshall direction, proceed to the Hot Pits.</p>  |

## ○ DIET / ALCOHOL / DRUGS

15. To maximize your enjoyment at your Track Day, it is imperative you avoid alcohol and non-prescription drugs for at least 24 hrs prior to your driving event. Any alcohol or non-prescription drug use at the Track facility is grounds for immediate removal from the facility with no refund (in accordance with the Speedy Goat Motorsport Club Terms & Conditions). No special dietary considerations are required, other than it being recommended to have a light breakfast, but ensure you bring snacks and plenty of fluids to keep hydrated during the event.

## ○ RESTFUL SLEEP

16. Nervous anticipation is to be expected the night before, but given typically early Track Day start times, it is imperative that you get to bed reasonably early for a decent night's sleep. Also, it is better to be slightly early than slightly late in departing for the event...for many reasons...especially since attending the All-Driver's meeting is mandatory.

## ○ CAR PREPPED & PACKED

17. One thing that contributes significantly to a good night's sleep is ensuring your car is prepped and packed the night before with any needed tools, your safety gear, wet weather clothes, drinks/fluids, easy-up tents, folding chair, bug spray, sunscreen, etc. It is also recommended you acquire/bring a weather-proof Rubbermaid plastic tub for your personal gear storage while you are on track. Remember – events go ahead rain or shine.

## SECURITY & PRIVACY

18. Truthfully, the motorsport community is a close and supportive one, even more so now in the current Covid environment. As you will see, access to the track facility is restricted to participants (+1 'support' person) only, and I have yet to hear of any incidence of theft at any Track Day event. Similarly, if there is an accident on-track, let the professionals handle it. Do not take photos of the accident or the people involved, and DO NOT POST ANYTHING accident-related on Social Media (Whatsapp, Youtube, FB, Twitter, etc). Trust us on this. So please – don't be that guy/gal. ...'nuff said.

## SHOULD DO'S: PREPARING YOURSELF:

There are several things you can do before departing, and while driving to the track that will help keep you alert and prepare you for your first supervised lapping sessions.

## DRIVING POSITION

19. Prior to departing for the track, try setting your seat and steering wheel per the following advice. It will familiarize you with your sight picture, the required leg extension for clutch usage, etc, and don't forget to adjust your mirrors. When getting ready for the track you

should adjust your seat to a much more upright position than you may use when driving on the road. You should be able to rest your wrists comfortably on the top of the steering wheel while keeping a slight bend in your arms. This may mean moving closer to the wheel than you normally would which can feel strange at first, but will give you maximum control. Similarly, adjust your seat fore-aft so that your legs at maximum extension (for clutch and throttle) still have a slight bend. If you're tall or usually have your seat set high, headroom can be an issue when wearing a helmet. An inch or two of clearance is a must – banging your helmet repeatedly on the roof can be distracting.

## ROAD CONDITIONS

20. While driving to the track, it is opportune to be aware of the road surface condition and think critically about where you might find the best traction. For example, think of driving on a wet road where you see puddles and the tire tread marks from the car ahead...what sort of traction do you think you will have on painted road markings? What will happen to your braking points?

## DRIVING LINES

21. While driving around turns and corners enroute to the track, if it safe to do so, visualize where you would place your car for the turn-in, what line you would follow to apex the corner, and how you would exit the corner. Similarly, when you leave the track at the end of the day, don't drive on public roads as you were driving on the track. Visualize, sure, but save it for your next track event.

## KNOW WHERE TO GO

22. Plan your route to the track before getting in your car – ideally no later than the day prior. If you are travelling a fair distance, check with DriveBC.ca for any closures; similarly, you can use Google Maps with the Traffic overlay activated to show you real-time traffic conditions. Remember: there is a significant fine if caught using a phone while driving...

## AT THE TRACK...

### MENTALITY

23. It's very common to get nervous or excited before an event, but you can't let this go to your head. Ease into it, focus on your Situational Awareness (SA) and smooth consistency with respect to your racing line(s) and braking points. Do this, and your laptimes will naturally decrease.
24. There is a common saying amongst High Performance Driving Event (HPDE) participants: "You can't Win at a track day." This means there are NO Formula1 scouts watching you, and NO trophies at the end of the day, so follow your Driving Coach's directions, apply a liberal sense of self-preservation, and Enjoy your driving experience! You may be



somewhat surprised to see that as your anticipation, smoothness, consistency and enjoyment increases, your lap times will decrease.

25. Remember - what we are looking for is drivers who have good car control skills, who drive an appropriate line, who brake at the appropriate time, who are situationally-aware, and who are courteous in traffic at speed. Once this proficiency is consistently demonstrated, you will be signed off 'Safe for Solo'; And until this proficiency is consistently demonstrated, the driver will get more help from one of our Driving Coaches.

## **YOUR DRIVING COACH**

26. Your Driving Coach will meet up with you prior to the Drivers Meeting and do a quick technical check of your car (brake pedal, steering, loose items, etc), and chat with you about your background, and what your goals are for the day. Your Driving Coach will then describe the flow for the day.
27. After the Drivers Meeting, you can anticipate a little Q & A and driving theory with your other Novice colleagues before getting ready for your first on-track session.

Note: Your assigned Driving Coach is usually paired to you using several criteria, most important of which is your Driving Coach drives a similar class/weight/hp car; similarly, your age is also taken into account only as it applies to your overall driving experience.

28. That said, if after several on-track sessions, you find yourself unable to 'connect' with your Driving Coach, please approach the Chief Driving Coach and request a change. This is your driving experience, and your right. And don't worry – there is no ego amongst the Driving Coaches as they all share the same goal: to help you have a Safe & Enjoyable experience, and get you signed off 'Safe for Solo'.

## **WARMING UP YOUR CAR**

29. It makes sense to get your car's engine oil up to operating temperature before you start driving it hard - this will reduce the strain on the engine's internal moving parts. Top Tip: Keep an eye on the water and oil temperatures to make sure the extra load isn't causing your engine to overheat...when to look at your temps?? ...only on the main straight, provided it is safe to do so.

## **SO...WHAT IF YOU SPIN/GO OFF TRACK?**

30. Unfortunately, it's rather common to have someone go off on their first laps, so don't let it happen to you. Remember our Training Objectives – Safety First, Know your Car, & Know the track Environment – because if you've spun, or had an "off-track excursion", you have not applied at least one of the three objectives. What is the Key? Having a healthy sense of self-preservation and circumspection ensures you and your car live to drive another day. Or at

least enable you to drive home.

31. However, if it does happen to you, don't sweat it. Bring your car to a (ideally controlled) stop, safely off the driving line or off the track entirely, then take a moment to assess any damage/caution lights in your car. If you think your car has damage, wait in your car with helmet on and seatbelts fastened until the end of the session for the tow truck...unless your car is on Fire. If it's on Fire, GET OUT OF THE CAR & GET CLEAR, and only *then* worry about your car. The track fire marshalls will be along shortly...

**Note:** "Getting clear" includes NOT running across the racetrack, but taking the most direct route away from the race track to the relative safety of behind the tire barriers/wall.

32. If your car seems to have sustained no damage and you deem it safe to drive to the Hot Pits, make ABSOLUTELY SURE you will not re-enter the track into traffic at speed. Proceed if clear, using appropriate hand signals (left hand up, outside the window) to tell other drivers you are not driving at speed. Exit the track into the Hot Pits and come to a controlled stop. In the case of a more significant "off", your car may also require a visual inspection to ensure no unseen damage that could affect other drivers on track. This is to be done back in the paddock. Anticipate that the Chief Driving Coach or Event Organizer will come by to discuss with you what happened, why it happened, and how to avoid the same situation again. At their discretion, you will either be allowed back on track, or be asked to return to the paddock until the next session.

## PASSING ETIQUETTE

33. As a Novice driver driving amongst other Novice drivers, a high level of COURTESY to the other drivers is expected – this (especially!) includes when Passing and Being Passed – and will continue throughout your Track Day driving career. This includes anticipating being passed and offering the faster car a clear and timely point-by.
34. As in life, how you operate on track as a Novice driver will affect how you are perceived off-track. As such, Passing (and more importantly, How to be passed on track) will be taught incrementally in order to familiarize you with the process of Passing and Being Passed, where passing is permitted on track, and how it is done with a "point-by".
35. First off, what is a "point-by"? When a faster car approaches the car ahead, the forward driver will acknowledge the approaching driver by pointing out his/her driver's window in the direction that he/she will leave room for the approaching driver to pass. If the forward driver is going to leave room on his/her left, then the forward driver will give a clear point to the left of the vehicle. If the forward driver is going to make room on his/her right, then the forward driver will give a clear point up and over the roof the vehicle. (These instructions can be modified at the pre-event Drivers Meeting). Passes can occur ONLY in designated passing zones as briefed at the Drivers Meeting. Drivers MUST give a separate point-by for each vehicle. Point-

by signals must appear deliberate and clear, with a hand extended well outside the car and in clear view of the approaching driver. All drivers **MUST** use a “point-by” to coordinate passing. An approaching driver is **NOT** permitted to execute a pass without a point-by. Ever.

Question: What flag tells you a faster car is coming up behind you?

## **DRIVING IN THE WET**

36. When it rains, the track gets wet. Simple, right?
37. Understandably, a wet track surface will affect **MANY** aspects of track driving – from level of grip available for acceleration and deceleration, and your car’s handling responsiveness, to reduced visibility due to tire spray and fogged up windows, as well as a modified racing line to account for pavement grip and standing puddles of water.
38. Suffice to say that this can be a significant discussion; however, your Driving Coach will address these and other questions you may have regarding ‘Wet’ Track Days as the weather dictates.

## **SUMMARY**

So that’s it!

All we request is you keep the Big Picture in mind as you prepare for, and drive around the track:

1. Safety first;
2. Develop your awareness of your car; and
3. Develop your awareness of the track environment.

How do we assess these?

We watch you on-track to ensure you are applying good car control skills, you drive an appropriate line, you brake at the appropriate time, and that you are safely and courteously applying the briefed passing procedures. And don’t forget to Have Fun!

Doing these smoothly and consistently will enable us to sign you off ‘Safe for Solo’ for your participation in future events.

Enjoy! & See you at the track!

*Your SpeedyGoat Motorsports Driver Coaches Team*

© April 2021

# MISSION RACEWAY PARK

