

INSTRUCTOR'S CORNER

Issue #3 May 1, 2014

Corner Workers and Incident Safety

Responses to Tech Topics 1 and 2

How Corner Workers and Track Control respond to incidents is important for HPDE students and Instructors to understand. The simple fact is once the incident happens, the track professionals have a set of procedures they will follow guided by the following priorities:

1. Worker Safety
2. Safety of the Drivers in the incident
3. Property Damage Review
4. Preparing the Track to go Green
5. Learning from the Incident.

As an Instructor, how should you respond if you are part of an incident? It is important to know how the system works.

The Corner Worker system has changed over the years. Corner stations used to have two workers, one to do the job, one to keep them both safe by keeping an eye on traffic, or changes which might affect their safety. They used a system of whistles to keep in touch.

How Corner Workers respond to incidents today is different, no one will come rushing to your car as it comes to a halt.

For their own safety, no Corner Worker is permitted to leave their station without a release from Control. This release will come only after Control has Black Flagged all cars, and the cars are on Pit Lane, or, in the case of a Red Flag, all cars are stopped on track. All stations must confirm to Control that no cars are moving.

Only then will Emergency Vehicles and Corner Workers be released to address the incident. In rare cases, with Control approval, Emergency vehicles may be released while cars are still on track. This would be done under a White Flag. This does pose additional risk to all, but may be justified. All of this takes time.

So, we all need to understand that we, the Instructors and Drivers, are the First Responders to an incident. We need to understand the rules with respect to Flags, particularly Black and Red Flags. We should all know the answers to these questions if we are involved in an incident with impact.

1. Where is the nearest Corner Station, and can they see me?
2. Should I try to move my vehicle to another location if they cannot see me?
3. Should I shut down the power to my vehicle?
4. Am I at risk from another car in my location?
5. Should I remove any personal safety equipment?
6. Should I exit the vehicle?
7. If I do exit, where should I go?

The longest few seconds on a track occur when your car is being controlled by the laws of physics, and is going to come to a stop by means other than the brakes. You don't have much time to think safety procedures then, or anyone around to ask for advice. Think about these issues ahead of time and develop automatic responses.

We are truly fortunate to have the very best corner workers at VIR. They are amazing. So don't forget to show your appreciation to them with a wave, or even better, thank them in person when you get a chance.

TECHNICAL TOPIC RESPONSES:

In Issue #1. The Topic posed was:

A Wet and Cold track. First session on Saturday. Your student is an advanced student on street tires. Their air pressures are currently set to two pounds above

the recommendation on the door jamb. Your student asks you “What should I do with my tire pressures?”

Of course there were opposing points of view expressed. We are after all Instructors and have many such opposing views about many things. Some advised raising pressures to “crown” the tread a bit to avoid hydroplaning. Some advised dropping pressures to soften the vehicle and to build heat in the tires. In the end, Gerry Low (Classroom Instructor) asked Ross Bentley what he would do-here is Ross’s response:

The simple answer is yes. :)

Here's my experience... If the track is damp, sometimes (but not always - it depends on the tire) lowering the pressures help. I'm not an engineer, but my understanding is that lower pressures effectively reduce the wheel rate (like softer springs or anti-roll bar) due to softer sidewalls. This improves grip in lower traction conditions, like a wet track. If it's raining hard and there is some build up of water on the track, higher pressures help. If you get enough pressure so that the tread surface has a crown, it will cut through standing water better - much like a narrower tire.

Since tire temperatures do not increase as much on a wet track (less loading on tire, and more cooling), you may want to start with higher pressures. For example, if the tire generates max grip at 36psi, and you usually start at 28 to get it there after the tires are at full temp, you may have to start at 30 or 32 to get them there in the wet.

So what's the right answer? It depends. The only way to know for sure with your tire and car is to try it. One thing we know for sure - it's unlikely that the starting tire pressure in dry conditions will be right in the rain!

Oh, and it also depends on whether you're using air or nitrogen in your tires. As you know, air absorbs water, which expands when heated; nitrogen doesn't absorb as much.

ISSUE #2 The Topic posed was:

Your B student drives an E92M3 with track tires. They have several schools at this track. In session 1, they eventually cause the “nanny lights” to occur, more and more frequently as the session goes on. During the de-brief, you ask if they were aware that the vehicle electronic control systems were intervening. They respond “Yeah, I think I felt them come on a couple of times, and sometimes the throttle response was poor. I want to turn them all off for the next session”.

Again, our responses to this were varied. Here are my two favorites:

1. "In my observations, traction control is a wonderful thing for the unskilled driver, always. Once we start talking about a SKILLED driver, the equation becomes far more difficult: *How good is the driver, how good is the traction control?* The E92's "M" traction control is truly magnificent, as is Chevy's "Competition" setting on ZO6 Corvettes. Under **MOST** circumstances, you're actually wasting time if you try to skid more than those systems allow."
2. "Use the lights (flickering) and the feel that intervention is happening to your advantage. It is like having a highly sophisticated tutor cueing you as to where you are scrubbing off speed. A perfectly balanced car will always be a faster car. Once you have mastered the balance of the car such that the intervention does not happen, then you can evaluate whether it is a help or hindrance to you. Until then the system stays on."

CONTACT US:

Please do, we want to hear what you want to say on the subject of Instructing

Contact us at scottmeyer400@gmail.com