

INSTRUCTOR'S CORNER

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COMMAND AND CONTROL

How many times have you heard “The Instructor is in control” during a High Performance Driving School?

Well, Bad News, We are not.

A definition of Control: “to exercise restraint or direction over; dominate; command: The car is difficult to control at high speeds”

The driver (Student in this case) has hands or feet on or near all the systems that control the behavior of the vehicle, Brakes, Clutch, Accelerator, Steering Wheel, Shifting system. This is the “Student in Control”

A definition of Command: (From the US Air Force)“We suggest a different and more dynamic view of command and control which sees **command as the exercise of authority** and control as feedback about the effects of the action taken”.

The Instructor has feet on the floor and hands holding onto something to help them brace against the forces they are subject to. The only control devices we have are our voice, and if needed, actions to change behaviors. This is the “Instructor in Command”.

The Instructor is not just along for the ride. The instructor is there to help the student learn the skills of High Performance Driving, or with an advanced student to coach them in areas where the skills acquired can be improved. The Student provides feedback to the Instructor. Safety must always be the primary concern.

A good friend of mine often says he began to instruct shortly after the earth cooled (that is you Bob). In those days, the high performance cars were modified 2002s, E21 and E30 series, with a few 5 and 6 series sedans. Most of these were on street tires.

Then the e36 M3 showed up and all hell broke loose. At the first event I attended where there were e36M3s. 5 of them left the gray surface and contacted tires, guard rails and other immovable objects. Concern followed.

“What are we going to do with these insanely quick cars”?

Eventually we figured it out. The answer was “We need to adapt our Command abilities to be able to achieve both safety and learning with these cars.”

Now we are faced with GT3s, GTRs, Corvettes, and newer versions of M cars each of which can easily hit speeds in excess of 150mph on the back straight at VIR.

“What are we going to do with these insanely quick cars”?

Same answer as before-Adapt.

So what tools do we have to work with that can help us achieve “Command”?

Things to remember:

Pre Track Interview. This is the most important tool we have. Taking the time before you get in the car and go on track is critical in learning as much as you can about your student and about the vehicle you are about to enter. You cannot ask enough questions, but you can try.

Vehicle Inspection: Our chapter does involve the Instructor in the pre-track inspection process, except for Group A. While the form we fill out is specific as to items, please take the time to look at whatever safety gear is in the car. At some point you will be glad you did. Some drivers install safety gear incorrectly, and that could be a problem. With Group A students, don't eliminate this step just because they did the self tech.

Hand Signals: Before you go out for the first session, be sure that you and your student have a set of hand signals that you both understand. Cars are sometimes really loud, and communicators can fail. You must have a fall back to maintain Command.

Goals: Encourage your student to articulate a set of goals for the first session. Hold them to it!

There is a common thread to these first four tools-they help you establish a relationship with your student that puts you in the command position before you begin on track.

All of these tools work with any vehicle, as they are all about the relationship between you and the student.

But what about the really quick cars? How do we adapt, how do we cope with “insanely quick?”

Most of these cars have a variety of systems, designed by masses of engineers to whom the arrival of computers in vehicles was the beginning of new, uncharted opportunities. As with your laptops and hand helds, the power of these systems has continued to grow each year.

There was a time when it was not that difficult to understand the basic Vehicle Dynamic Control systems-ABS, DSC, etc. They did basic tasks and could be turned either on or off. Not so much anymore. Many of these systems now have more than on/off settings, and many of them will turn themselves on if the system senses something the engineers wanted to avoid (even if you turned them off). But not always.

You might want to ask your Student if they understand how the system works, and what its limitations are. If they cannot answer, (and you don't know either) perhaps the default should be-leave everything on, until an understanding develops.

As to “insanely quick”. It is pretty well understood that a Student does not learn much at top speed on the straight, other than braking at the end. Bad things can happen on straights, not just in corners, and if they happen, the consequences can be severe. To the best of my knowledge, no one has tested 3 point seat belts in a 150mph incident.

As you are in Command, if you feel the need to establish a speed limit at any point in time, or at any point on the course, you have every right to do so. Your Student may want to experience the full capability of the car, and if and when you feel comfortable, you may let them do so of course. Your tolerance or limits for this should take into consideration the safety equipment in the vehicle, as well as the attitude and composure of the Student.

Remember, the goal is to have a fun, safe, learning experience.

Be safe out there.

As always, your comments and suggestions are welcome. Please send to:

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