

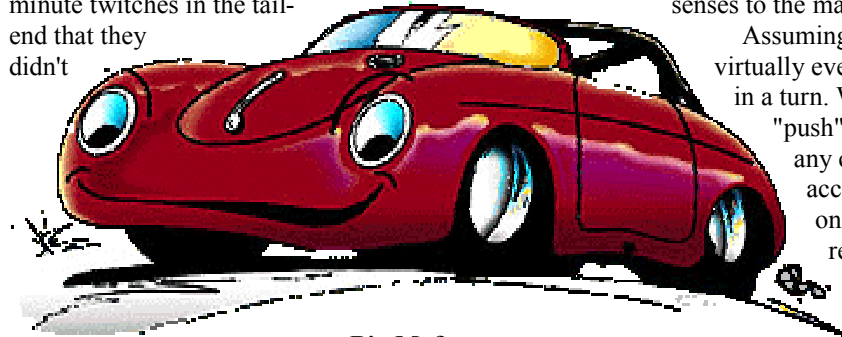
Driver's Ed. Education
A Series of Specifics for Success
by John Hajny
Central NY Region Chief Instructor,
Zone 1 Instructor

Article #7 - "Big Mo"

"Big Mo" is your Friend!

Last time we talked about getting that good, clean, tight late apex that will increase your acceleration zone. Let's assume you've learned the line and drive it pretty consistently at a good pace. You've learned to finish all of your business before that "Business Cone" have a good grasp of where that turn-in point is (or at least how to find it!), and have now converted it to the "Acceleration Cone" This next theme is going to become increasingly important as your speed continues to build. "Trust is a Must."

Eventually, most of my students reach a point where real consistency and speed are just a breath away. They know the line and are beginning to notice what effect their inputs have on the car as it corners. They now notice what jumping on the throttle to begin cornering acceleration is doing to their line (it throws the front end away from the apex!) and they feel those minute twitches in the tail-end that they didn't



before. When the student starts to correctly critique their own driving, I know we are really close. But once again, just when you thought you had it down, I'm going to throw another curve ball at you.

When you've reached a certain point in your driving, that deep, late turn-in we've been pounding into your brain may not be the best line to take into a corner. It was designed to keep you on the track surface and out of the weeds until you learned the basics, but it is not the be-all and end-all of cornering theory. Ultimately, you need to learn to drive the way that works best for you and your car.

If you are beginning to carry more speed into that late turn-in area, you may likely find that this is making it difficult to reach a tight apex. The car is drifting wide and you find yourself really cranking the

steering wheel trying to get over there, and the result is a lot of front end push and that old, "I'm running out of track-out" feeling. It's likely time to modify that late turn in a bit, and to develop Trust.

At this point, I instruct my students to start turning in a little earlier so that they can reach that tight apex that is so important. It now becomes a balance between the point where they turn, and the amount of Momentum they are willing to carry. At first, the earlier turn in will cause a perceived early apex situation, which obviously is very unnerving, and will entice you to steer away from your apex. But, you do not want to do that, do you? Now is the ultimate moment... when "Trust is a Must", and "Momentum is our Friend!"

Now that we've begun to turn in a little earlier to tighten our apexes, we need once again to fight that improper reflex; to turn away from that apex! This is a potentially dangerous time in your "driving career," because you have learned enough to begin driving with some decent pace, you've learned that the car is much more capable than you, but you have not necessarily developed confidence in the amount of momentum you can safely carry through the turns. With that extra speed you've developed, this is the time to really concentrate hard and use those car-feel senses to the max.

Assuming smooth technique (as always!), virtually every car will initially understeer mildly in a turn. We have learned to mitigate that "push" by turning decisively, and to quell any chance of sudden oversteer by accelerating smoothly. This sets the car on its suspension evenly. When one reaches perhaps 85% of the cars capability, if one has been tactful, the car will gradually ease into a four-wheel-drift, and ultimately begin to oversteer slightly. How much oversteer is a matter of how well you've combined the ingredients. Believe it or not, this is the point we are trying to reach... Trust Me!

By driving the car past initial push, through drift, and on to mild oversteer, we have now begun to rotate the back of the car around that apex and to effectively point the car up the next straightaway earlier than if the car were drifting or understeering. This is the principal that has made the 911 so effective in racing, and that makes the 914 such a dynamite autocrosser, but it can be done with any car that is properly set up and driven. You may have heard it said that, "a Loose Car is a Fast Car," and this is true, but now is not the time to realize that you should have already developed that sensitive throttle foot! Incidentally, if you are having difficulty tuning your car to this slightly loose state, it's time for an adjustable

Big Mo?
Now you're talking my language!

rear sway bar to tighten the rear of the car to the right degree for comfortable and manageable oversteer.

So, if you have a good fix on how much speed to enter a turn with, know where and how much to steer, how much throttle to add, and how to maintain that cornering balance you've set, hang on and enjoy the ride! If you've set all these things up properly, simple minute throttle and steering inputs will arc you by that apex like you were driving on rails. Guess what...

... you are!

**All Text and Graphics herein are Copyrighted
(C) 1995-2003**

by John L. Hajny

I have striven to make this an extremely well written and accurate series on a subject that is not to be taken lightly and can obviously be dangerous. To maintain the accuracy and proper presentation of that message, I would ask that absolutely no use whatsoever of any text herein be made without my express written consent.

I ask you to please abide by this request.

Thank you.