

Now It's Your Turn

We talked a little about safety, and about how flags and the corner workers make sure all that happens on the track has everyone involved well informed. Now let's understand how you and your Mustang can best maneuver around a turn. We will talk about the dynamics of a turn and how to make the turn as fast and as safe as possible.

The goal through the turn is to spend as little time as possible and to maximize the speed out of the turn. The fact is anyone can take their car to the limits on a straight-a-way by using their engine to its limits. It's driving your car to its limits using braking, cornering, and accelerating out of a corner best, which separates the true driver from the others.

Many books have been written on how to drive through a corner, and in this short article I hope to give you the most basic concepts to hopefully whet your appetite

It can be simplified by saying that to maximize the speed through a turn all you have to do is drive to the limits of adhesion. But, how much time you spend at various points on the turn can vary. And how you determine the path or "line" through the corner is critical.

The line is one of the most critical factors. The line that has been driven which resulted in the fastest track times has determined that line. To determine the best line, many factors come into play that you have to take into account. Factors such as track variables, length of straight ways before and after a corner, its outside and inside radii, tracks banking—both positive and negative, and the track's surface coefficient of friction.

Although it can get very technical, beyond that are basically three most important reference points in a turn. They are in order of how you enter a turn:

1. The turn-in point
2. The apex
3. The exit.

The turn-in point is, in many ways, the most important part of the corner; it is the determinate on how you drive through the rest of the corner, it determines where and how fast you apex and exit the turn.

The apex of a corner is the point where the inside wheels run closest to the inside of the road. The apex can also be thought of as the area of the turn where

you are no longer driving into the corner, but begin driving out of it. Many times it is also called the clipping point and is where your inside wheels clip past the inside of the roadway. Determining whether you hit the right apex is relatively simple. If you come out of the corner having to turn more to keep from running off the road, then your apex was too early. If you chose to late an apex, the car will not be using the entire road on the exit, it will still be too close to the inside of the corner.

In most corners, if you're doing much more than just unwinding the steering wheel after the apex, you did not follow the correct line.

When you follow the correct line through a corner your car will want to naturally follow the line out through the exit point.

Just remember—IT IS MUCH BETTER TO GO INTO A CORNER SLOW AND COME OUT FAST RATHER THAN VICE VERSA.

Take a look at the illustrations in figure 1 and figure 2.

From what we just said, review figure 1 which shows a typical 180-degree corner and the turn in, apex, and exit.

Figure 2 shows the line through a 90-degree turn.

Understanding the dynamics of a turn do not just help you drive quicker but can also help make it more fun as well as more safe your next time through a challenging entrance or exit ramp on the highway.

Reference:

Speed Secrets
By Ross Bentley

Figure 1

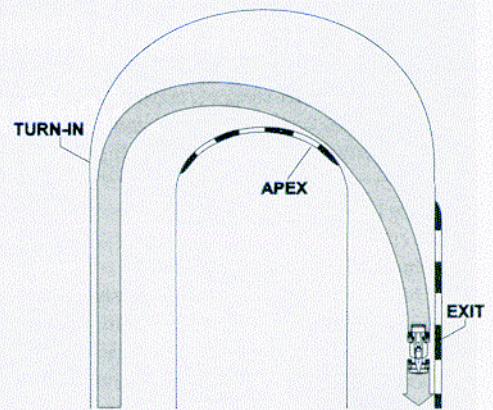
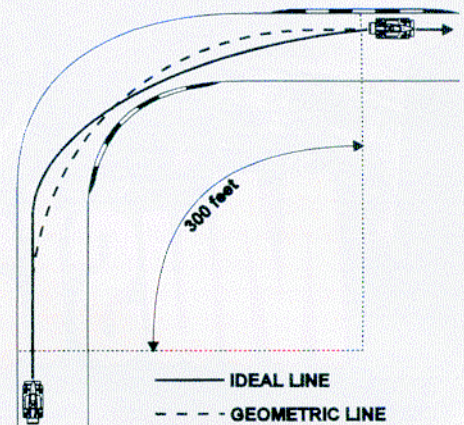


Figure 2



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