

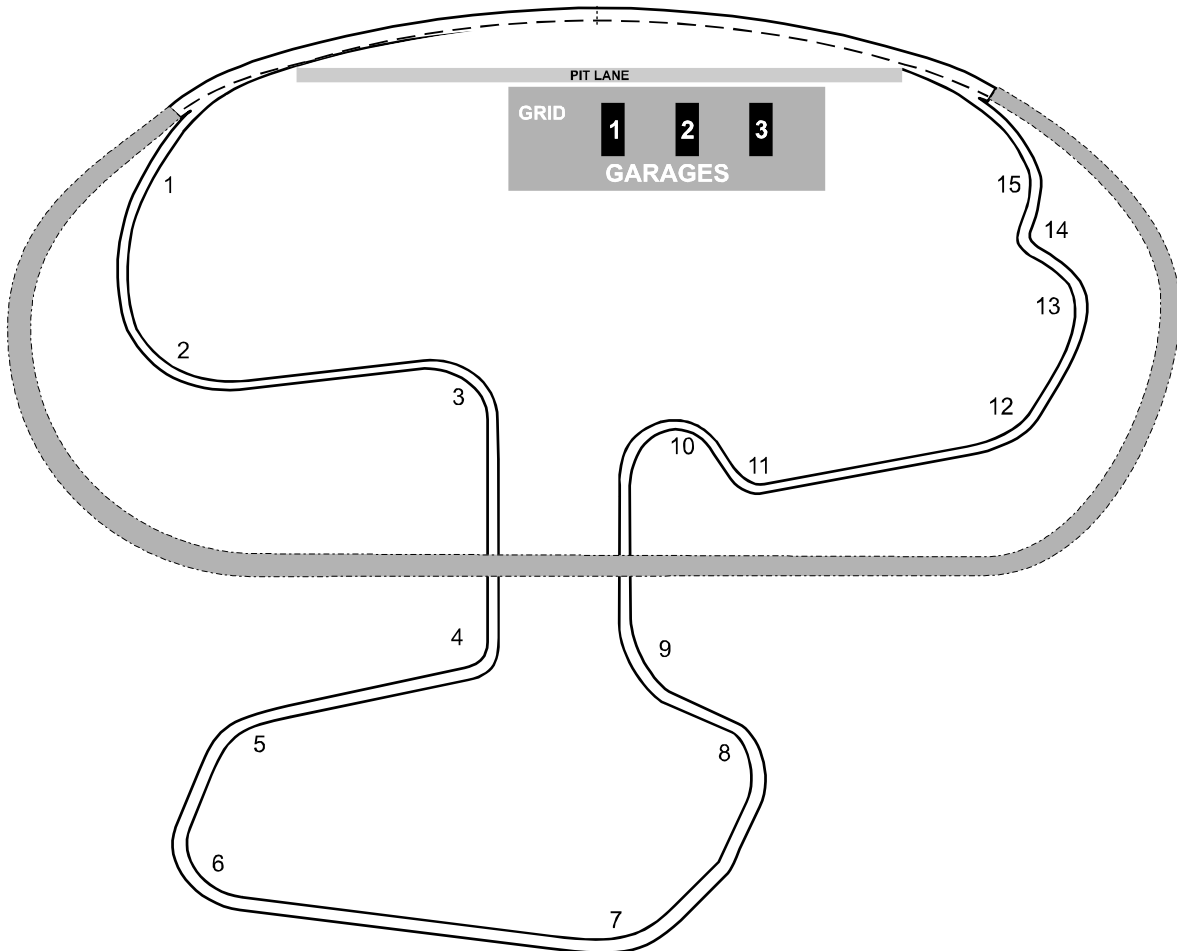
Instructional Line for TWS 2.9-mile Course - Clockwise

Lone Star Region, PCA

Green & Blue Group Students

Since the primary direction of the track is Counter-Clockwise (CCW), all turn numbers used in this description are those the same as used in the more familiar 2.9-mile CCW configuration. This means that the first turn will be referred to as Turn 15.

*The following offers a general description of the “instructional” driving line that the Lone Star Region will require all instructors to utilize for purposes of instructing students in the Green and Blue run groups. This is a relatively safe line that can be taught to all such students by all instructors **for the sake of consistency**.*



Front Straight & Transition into Turn 15

Take a line down the middle of the front straight, under the starter's stand and approaching turn one (T15). This will facilitate passing opportunities on either side, with a passing signal from the driver of the car allowing the pass.

As you near the end of the grandstands, identify the narrow “V” of grass separating the infield course from the oval course and turn down gradually until the car is heading in a straight line toward an imaginary target about 1-2 car lengths to the right of the point of the “V”.

Use this straight line segment coming off of the banking for a braking zone. In nearly all cases with any substantial speed, braking will commence before coming off the banking. As long as braking is done in a straight line, the relatively shallow angle across the transition at this point should not upset the car. With the high speed that is *capable* of being carried down the front straight, caution should be used in finding the proper braking point to suit the speed and skill of the driver.

Escape route: you will travel quite fast approaching T15. The Safety Route is to continue along the Oval at a speed limit of less than 40 mph and drive only on the flat lower apron of the oval (NOT ON THE BANKING!) until you reach sight of the T10 Corner Workers. Stop until you are specifically advised by the corner workers as to how to continue. You may have to wait out to the end of the session!

Turns 15-14 (the Esses)

Following braking in a straight line coming off the front straight, the turn-in for T15 commences about 1-2 car lengths before running off the pavement and into the grass. With this line of braking, the beginning of the curbing on the right (that is T15) is still several car lengths ahead and to the right, which is where the driver's line of sight should shift as turn-in for T15 is initiated. A broadly arching turn (as compared with the shorter radius of the curbing for T15) initiated well before reaching the curbing should be used for a late apex.

After reaching the T15 curbing, right side tires should be placed against the edge of the T15 curbing, which is fairly straight after apex, until the curbing ends. The end of the curbing (plus or minus ½ car length) is the turn-in point for T14. In most cars, only partial throttle is called for between turn-in point for T15 and turn-in point for T14. Light braking may be needed prior to turn-in for T14 and therefore the car needs to be going straight along the exit curbing of T15.

The set-up for T14, on the far right side of the track exiting T15, is critical for carrying maximum speed from T14 all the way to T11. After turn-in for T14, accelerate through the apex, barely touching the curb on the left with left front tire. Hold steering angle briefly after apexing and exiting T14 so as not to drive into the curbing on the right that marks T13.

Turn 13 (the Esses)

Attempt to begin your turn into T13 from the middle of the track between the two turns. Begin a slow arc around the curb at T13 and to generate a late apex on the curbing in T13. The point of apex at T13 cannot be seen from the apex of T14. Continue acceleration out of T14 and through T13, tracking out near the left edge of the track near the crest of the small change in elevation. Note that the grass off to the left of the track slopes downward toward a drainage ditch.

Turn 12 (Right-Hand Sweeper)

Continue accelerating along left edge of track approaching turn-in point for T12. The entrance and most of the exit to T12 can be seen upon approach. It is a fast sweeping right-hander that can be negotiated with minimal steering input. Use mid-point of turn for apex. Track out of T12 on left edge of track and continue on left side approaching T11.

Turn 11 (Entrance to the Carrousel)

T11 is a right-hander leading to the left-hand Carrousel T10. Brake appropriately in a straight line approaching the turn-in point for T11. After braking

(before the end of the rumble-strip on the right) and turn-in, accelerate through apex of T11, using a late apex to facilitate a mid-track entrance to T10.

Turn 10 (the Carrousel)

Slow entering T10 to get car to turn-in, and use a mid-track approach or wide entry to the middle of the Carrousel. Begin acceleration as early as possible near mid-corner and accelerate out of T10 to the track-out spot on the right side of the track (where the cones are blocking the 1.8-mile section).

Turn 9 (Up the Hill)

Accelerate along the right side of the track toward T9 and across the OVAL pavement. You should be able to see the entire turn ahead. Begin the turn in for T9 with a late apex - so that you will run up just alongside the concrete strip on the left side of the track. Continue to accelerate up the hill, as T9, 8, 7 all flow smoothly as one smooth motion.

Turn 8 (Over the Hill)

Continue under acceleration. Begin turn in for T8 near the top of the concrete strip with a late apex aiming for a track-out on the left side of the track at the VERY TOP OF THE HILL. An early apex runs the risk of running out of track at the top of the hill. You will be able to see the top of the hill before turn-in (though the pavement is not visible at this point).

Turn 7 (Down the Hill to Back Straight)

Exiting T8, you should be on the left side of the track at the top of the hill. This will give you a good look at and through T7. Continue down hill with a late turn-in and an apex just a few feet downtrack from the center of the curbing. This allows you to track out on the left side of the track with a good margin of safety. Continue toward T6 along the left side of track.

Turn 6 & 5 (Double Right-Hand Turns at end of Back Straight)

Approach along the left side of the track and slow for the turn. Near the end of the concrete strip on the right, begin a slow turn-in to a late apex (about 2/3rds downtrack on the curbing and with a track-out reference point of a distant tree and billboard). However, there is no need to track-out all the way to the right side of the track, since you will immediately flow back into T5. By holding your wheel steady and beginning to accelerate, you should exit this turn towards the outside of the track. T5 should be taken under constant throttle or slight acceleration, and the apex of T5 is normally about 3 feet off the curbing. The exit of T5 should be near the left side of the track. From there, begin to move to the right side of the track in anticipation for T4.

Turn 4 (Left-Hand Turn leading back across the Oval)

T4 begins as a flat surface but quickly drops away as you approach the apex. In addition, there is a large tire wall on your right as you approach the apex and then the Oval.

Approach T4 along the right side of track. Slow down significantly before turn-in. The apex is purposely late to give margin of safety for the tire wall on the

right. As you approach the apex, you should begin to focus on track-out located past the tire wall and at the grass past the Oval.

Turn 3 (Left-Hand Turn)

Exiting T4, keep the car on the right side of the track and begin to accelerate. Begin slowing as you go over the hump before turn-in to T3. Turn-in should begin just after the asphalt section on the right side. A late apex for T3 is used to minimize likelihood of going off on exit and visiting the Armco barrier off to the right side of the track.

Turn 2 & 1 (Right-Hand Turns leading to Front Straight)

After tracking out of T3 on right side of track, gently bring car across to left side to set up for entry into T2. Turns 2 & 1 are essentially one high speed right turn that leads onto the banked front straight.

Turn-in point for T2 is just before the end of the rumble strip on the left edge of the track. Then, apex at the right edge of the track about 10-20 feet past the end of the inside curbing on the right. Hold steering angle that was required to hit apex as car accelerates past apex, and then gradually steer along the middle of the track. Avoid approaching the left side of the track, as the grass slopes downward. Continue accelerating across the transition and up onto one of the lower two lanes on the banking. Continue mid-track down front straight.

Jake Taylor
Chief Driving Instructor
Lone Star Region (Houston)
Porsche Club of America
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