



BMW Car Club
of America
North Star Chapter



Standard High-Performance Driving Terminology



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Specific Locations and Objects Around the Track

Apex. The smallest turn radius of any given corner (i.e. the slowest portion of the corner) where the car is closest to the inside edge of the track. In symmetrical corners, it is the center of the turn.

Brake Zone. A section of the track where the car is slowed down to a speed consistent with the entry needs of the next turn.

Camber. The slope or grade that runs across the width of the track. Positive camber helps you turn. Negative camber or "off-camber" hinders turning.

Crown. The high point or ridge typically found in the center of the track.

Curbs. Raised concrete edges of the track found on either the inside or outside of turns. These are often painted red/white.

Entry/Turn---in. The location at which the driver initiates a turn, the degree of turn may gradually increase from "turn in" and ending before or at the apex.

Exit/Track---out. The location where the car is closest to the outside edge of the track and the turn is complete. Usually, there is a continuous "opening" of the wheel (reduction in the amount of turn) from apex to exit.

Esses. Two or more turns linked together to form an "S".

Flag Station. A small covered structure where the Flaggers will be standing. Usually located near corners of the track.

Gators. Uneven portions on top of or on the outside of curbing. It Will cause wheels to vibrate and can unsettle the car.

Marbles. Rubber chunks from tires usually found along the outside edge of the track. Driving over them can unsettle the car.

Straight. A section of the track where the steering wheel is neutral and maximum acceleration and speed is sustainable for several seconds.

The Line. A theoretically optimal path through the turns. Note that the true optimal path will vary by car (and driver) and conditions.

Off-Line. A car taking a path that is not following "the Line".

Turn. A curved section of the track usually requiring steering input.

What the Car is Doing

Oversteer/Loose. A situation where the front wheels have MORE traction than the rear. This results in the back end breaking loose, increasing the rate of turn. Except in the case of intentional rotation, this must immediately be corrected with counter steering.

Understeer/Push. A situation where the front wheels have LESS traction than the rear. In this case, the rate of turn decreases and the actual turn is noticeably less than the steering wheel input would normally produce. Excessive understeer must be immediately corrected by reducing the steering input.

Balanced. The car's weight is evenly divided between front and back.

Techniques

Blip. Give a brief increase to the throttle --- typically used to match engine revs to wheel revolutions.

Brush. Smoothly add brake pressure to produce a small speed reduction.

Feed. Slowly and smoothly increase the throttle.

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Heel-Toe. Simultaneously blipping the throttle while the clutch is depressed to match engine revs to the lower gear when downshifting.

Rotation. A small controlled amount of oversteer in which the car's rate of turn is increased. Rotation can be achieved by trail breaking, lifting in the corner, or increasing the throttle.

Settle. A slight pause between control inputs to allow the car to regain its balance

Threshold Braking. Applying brake pressure to the point where the tires are on the threshold between turning and locking up. This usually occurs immediately before the ABS initiates.

Throttle Steering. Modulating the throttle in a turn to increase or decrease the turn radius or arc of the car. Adding throttle in a turn can be used to increase understeer, resulting in a wider arc. In contrast, lifting in a turn can be used to remove understeer, resulting in a decreased arc.

Tap. Briefly add brake pressure to increase downforce (and traction) to the front tires without slowing the car. Typically used before entering high speed turns to help the car turn in.

Trail Braking. Braking beyond the entry or turn-in point to continue to slow the car to the speed necessary to complete the turn

Actions/Commands

Brake. Increase the pressure on the brake pedal.

Clutch. Smoothly depress or release the clutch so as not to upset the car's traction.

Gas. Increase the pressure on the throttle.

Hold. Maintain a constant arc with the steering wheel.

Lift. Release the pressure on the throttle. In most instances, the instruction is not to come completely off.

Look/Eyes Out. Look down the track to where you want to go, or where the instructor is pointing.

Maintain/Feather. Maintain current pressure on the throttle --- no change in car's speed or balance.

Release. Release the pressure on the brake pedal.

Trail. Continue to apply brake pressure beyond the entry or turn-in point to slow the car to the speed necessary to complete the turn

Turn. Increase the current amount of steering input.

Upshift. Shift to the next higher gear.

Downshift. Shift to the gear that will be used to exit the turn.

Turn-in. Initiate a turn into a corner.

Track-out. Gradually reduce the amount of steering input and drive to the outside edge of the track.

Unwind/Open. Gradually reduce the amount of steering input to straighten out the car's geometry.

Commands Requiring Immediate Actions

Both Feet In. Immediately apply full brake pressure and depress the clutch. These inputs will bring the car to a safe stop following a loss of control and an ensuing spin.

Counter-steer. Quickly reverse the steering input to correct the over---steer situation that is developing

Stay off. If you drop 2 or 4 wheels off track, continue to stay off the track until you slow the car and it is safe to come back on.