

Cornering Systematically



**Farrah
Driver
Training**
Pioneers of Road Safety

Information:-

Look down the road as far as you can to see where the road goes next. The line of the trees, hedges, lamp posts and possibly telegraph poles will tell you which way the road curves. As you approach the bend it is **vital** to look 'across' the bend, if the roadside vegetation is low enough, or through gaps in the hedges or buildings whenever possible, not only to assess the severity of the bend but also to get an early warning of the next bend or other approaching hazard. Traffic ahead, entering the bend, or that opposing, exiting the bend, will also show you the direction of the bend and may also give an indication of its severity (although that should not be relied upon wholly).

Position:-

To put things simplistically, you go to the left for a right and to the right for a left. In other words, for a right-hand bend you position your vehicle to the left of your lane, however, before doing so you must consider nearside dangers such as junctions, pedestrians or the poor condition of the road surface. Conversely, for a left-hand bend position to the right of the lane and again, before you do so consider offside dangers such as approaching traffic encroaching onto your lane or very close to the centre of the road. Also, you must once again consider the Information phase and decide whether you need a signal for the benefit of other road users. For instance:- if, on a right-hand bend, there is a vehicle waiting at a nearside junction just on the apex of the bend, a position to the nearside of the road on the approach to the bend may cause the waiting driver to believe that you are going to enter the junction, therefore a right turn signal may be beneficial.

Speed:-

The 'LIMIT POINT', more properly known as 'The Limit Point of Visibility', is 'what it says on the tin', in as much as *it is the furthest point along the road to which you have an uninterrupted view of the road surface*. Put simply, if you look ahead towards the approaching bend the two verges (or one of the verges and the centre white line, whichever is easiest to see) appear to join at a point. You all the while need to adjust your speed so that you can stop within the distance you can see to be clear, therefore, if the 'limit point' is not moving away from you, it is necessary to slow down. Sometimes the correct speed can be achieved by just removing your foot from the accelerator but at other times braking is required. You can use the 'limit point' to assist you to judge whether or not to brake :- if the 'limit point' is close to the start of the bend, it is sharp and you need to brake but if it is 'quite some distance' from the start of the bend the correct speed can probably be achieved by a relaxed accelerator. Eventually, as you get closer the 'limit point' will appear to move away from you towards the exit of the bend. Another rule you can use is the Deviation of the bend. You know from the Highway code the more arrows there are, the sharper the bend. Do not be afraid of slowing the car down to 20mph of a sharp bend with three or more Chevrons. Use your horn during daytime or flash your dipped headlights before you approach the bend. These are signals to warn other drivers approaching the bend from the other side. This is the blind side of the bend.



Gear

Put simply, when you turn the steering wheel it creates a 'cornering force' which acts on the 'outside' of the car to slow it down, Nature likes two opposing forces to act on an object and so you need to use an 'internal' force to counterbalance the 'cornering force'. The only force available to you is an acceleration force accessed by pressing the accelerator pedal. It is vital to select the correct gear to enable you to have sufficient power to counteract the 'cornering' force and '*maintain a constant speed while negotiating the curve*' so that the car is balanced with minimal roll. To a certain respect it is a question of 'know your car' in deciding the correct gear, however, there is a 'rule of thumb' that works very well, namely :- If you have approached the bend along a straight in 'a high gear' and you lose 10 mph on approach, you probably need to lose a gear, if you lose 20 mph you probably need to lose 2 gears. To put some numbers on this, you are travelling at 60 mph in 5th gear and you slow to between 40 and 50 mph, then 4th gear is going to provide you with enough power to negotiate the bend comfortably, if you slow to between 30 and 40 mph then 3rd gear will

provide that power. The correct gear should be selected **AS SOON** as the 'limit point' starts to move away from you.

Acceleration:-

Once a lower gear has been selected or, if a change of gear was not necessary, **AS SOON** as the 'limit point' starts to move you should apply sufficient power (acceleration) so that the vehicle maintains its final approach speed while negotiating the curve. In other words, you 'chase' the 'limit point' maintaining a constant distance from it. It is important to remember that you don't catch it up but you don't let it escape either.

Position through the bend:-

Maintain your approach position while 'chasing' the 'limit point' until you can see where the road goes next and adjust your position so that as you exit the bend you are ideally placed for the next hazard.

For advanced driver training, contact Tariq Musaji ADI on 07903 99 77 33 or visit www.fleetmasteruk.com

