



What, why, when?

Issue 2007

Version 1
4th March 2007

Contents

- DSSSM
- Mirrors and Zones of vision
- Clutch & Biting point
- Steering – Pull/Push method
- Stopping Distances
- Slalom
- Approaching a left hand junction
- Approaching a right hand junction
- Left Hand Reverse
- Right Hand Reverse
- Parallel Parking
- Turn In The Road

Help!

Is this the word I can hear many times over when you're learning to drive? Well, have no fear as in the next few pages the Club has put together some helpful hints and tips to make life just that little bit easier for us all.....

Throughout this book you will see many abbreviations some of which are now explained -

- DSSSM – Doors, Seats, Steering wheel, Seat belts, Mirrors
- POM – Prepare, Observe, Move
- MSM – Mirror, Signal, Manoeuvre
- MSPSL – Mirror, Signal, Position, Speed, Look – expanded version of MSM
- SCALP – Safe, Convenient, And Legal Position

Most I believe you can all work out what they mean except for the second one – POM. If you do then well done but if not please read on.

If we assume we are about to move our vehicle forward driving down the road then we need a safe, logical manner in which to start all this off. What we do then is break each little bit down into bite-sized chunks as below using the POM routine –

Moving off forwards on a level straight road

1. Clutch down and keep it down
2. Hand on gear lever, select 1st gear
3. Set the gas
4. Slowly bring clutch pedal up to biting point – now keep both feet still
5. Check left blindspot, all mirrors, right hand shoulder/blindspot – check road ahead
6. Indicate if necessary
7. Release handbrake
8. Slowly bring clutch up until vehicle moves forward
9. Steer to the right a little then back to the left to straighten vehicle up
10. Clutch smoothly all the way up and rest left foot on floor
11. Check mirrors and if safe, give a little more gas

POM – Prepare, Observe, Move

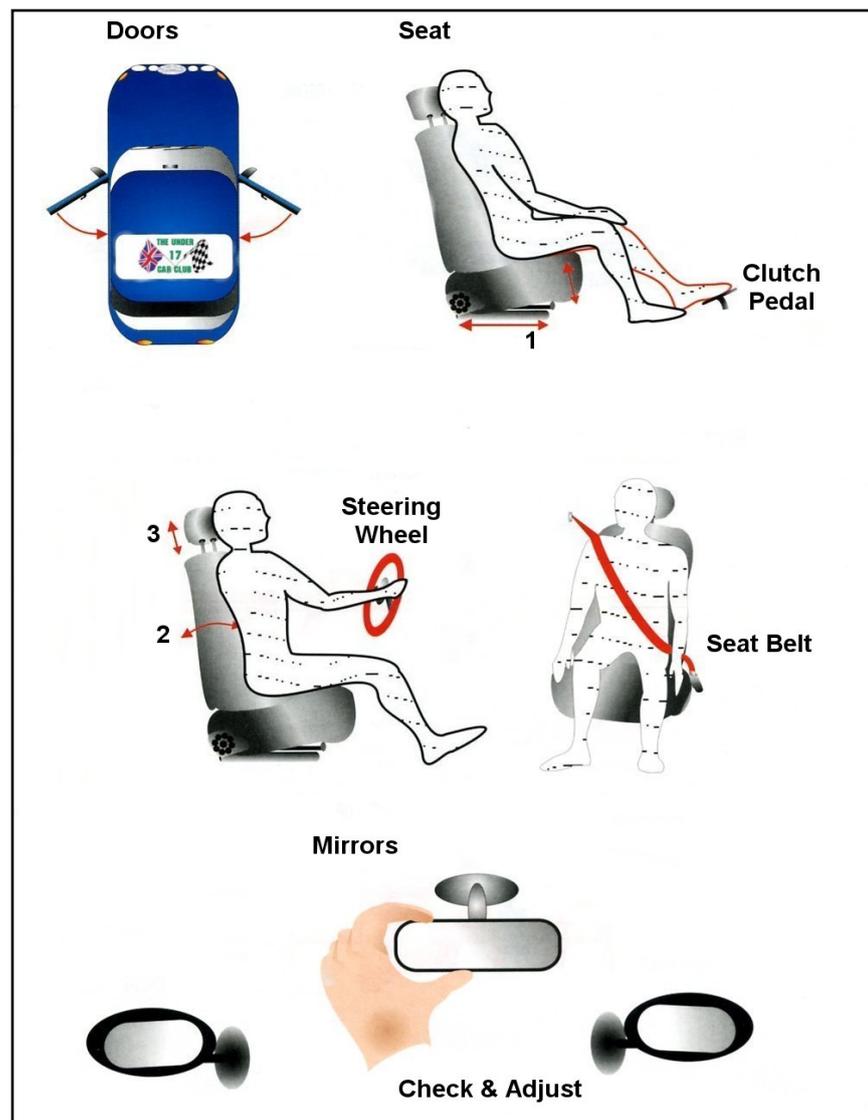
As you can see 'Prepare' does mean exactly that – preparing the vehicle to move in the direction you want to go. 'Observe' means all the visual checks. 'Move' means getting that vehicle to physically move.

DSSSM

This stands for **D**oors, **S**eat, **S**teering wheel, **S**eat belts and **M**irrors.

Lesson Plan –

- Check doors are shut
- Seat is set-up in 3 stages
 1. Move base of seat so you can depress the clutch using left foot and still have a slight bend in your leg as in pic.
 2. Rake or back of seat set so your wrists rest upon the top of the steering wheel. Arms will be straight but be slightly bent whilst steering to allow for easy movement and use of controls.
 3. Headrest is set so that the top is in-line with the top of your ears and therefore, in the centre of your head
- Steering wheel is set using rake and height adjustments. Make sure your wrists can be placed upon top of the wheel with arms slightly bent. *NB. Some cars don't have rake movement.*
- Seat belt are then used and the member must make sure everyone within the vehicle is wearing their own
- Mirrors are set-up.

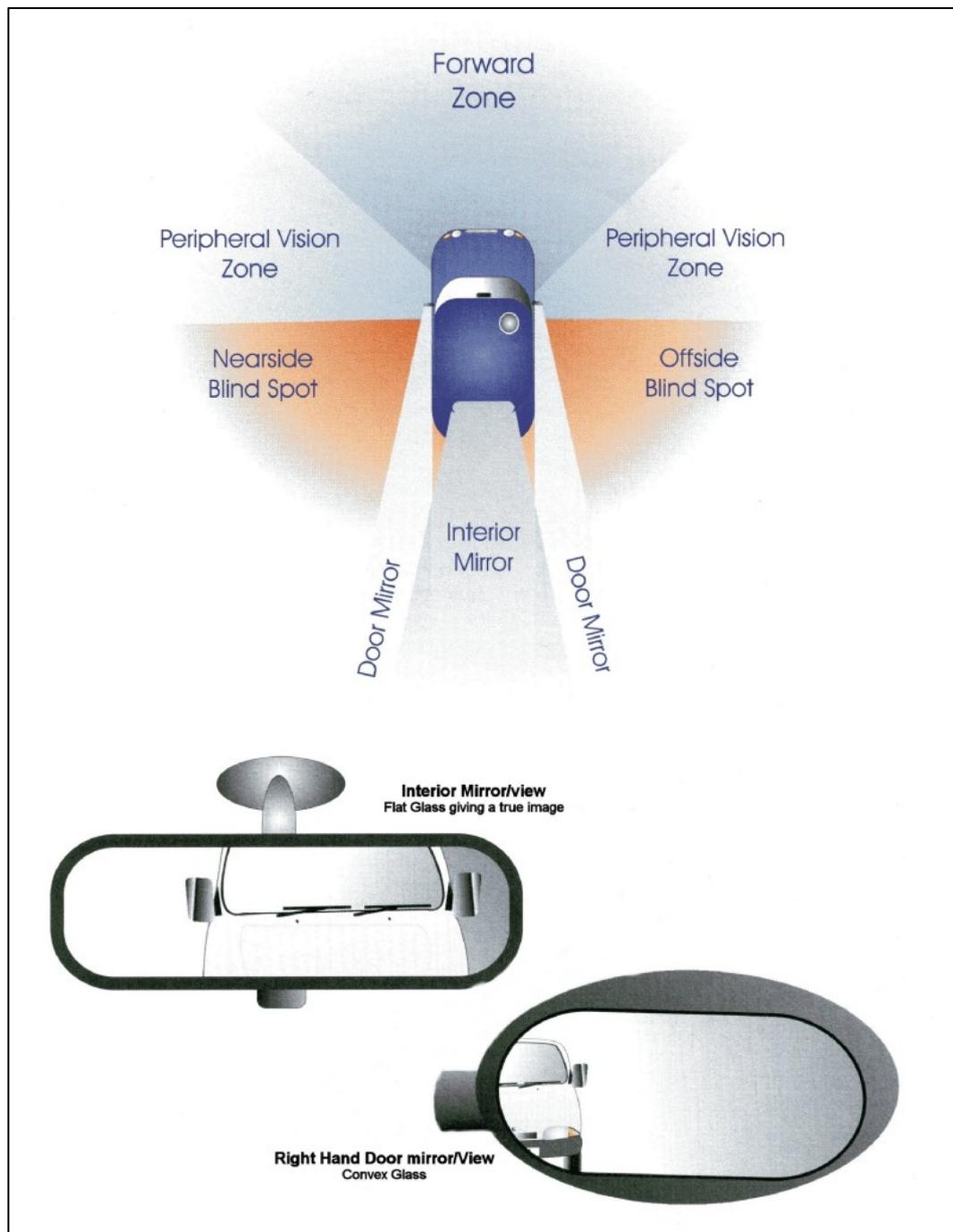


Mirrors and Zones of vision

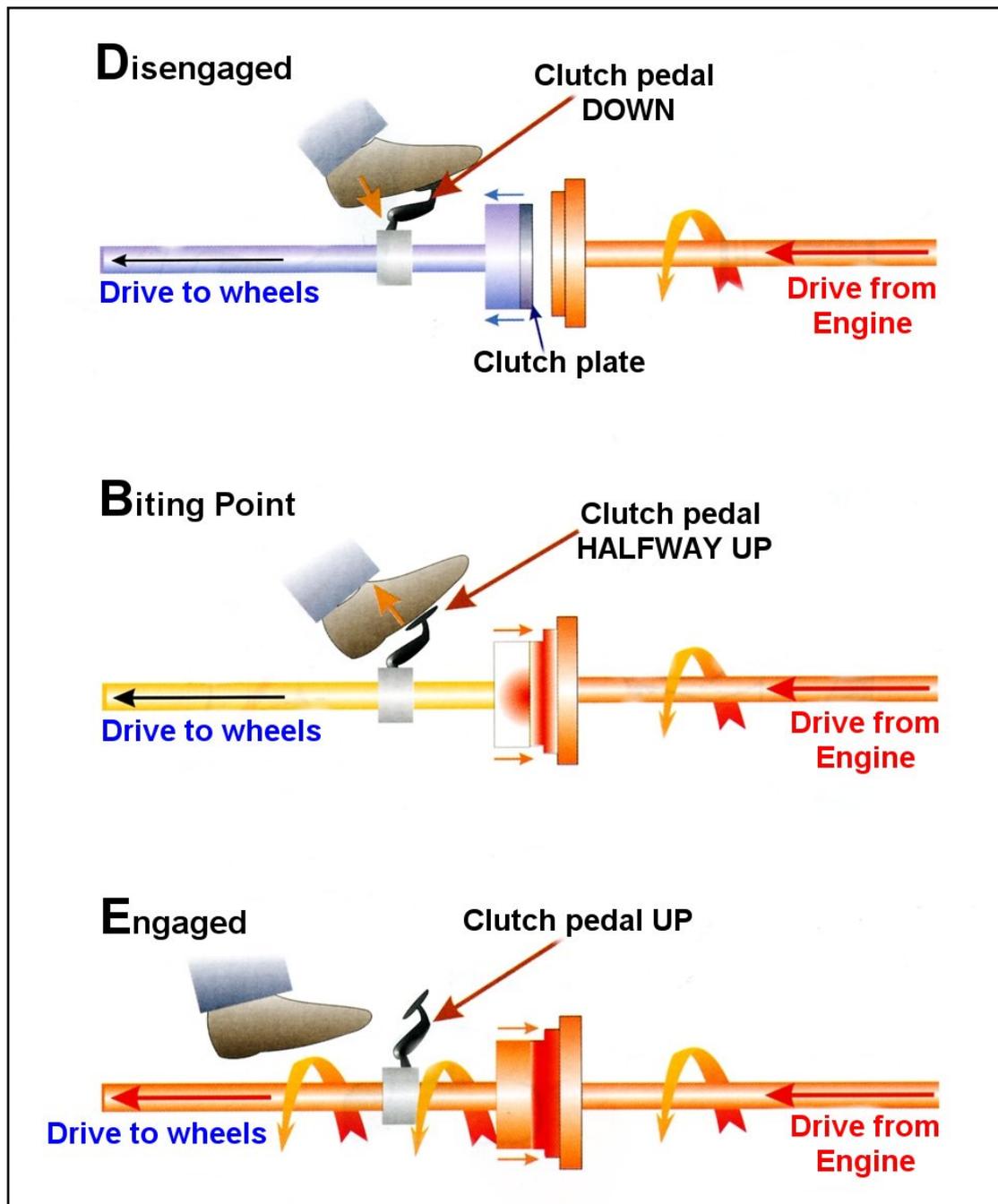
Below is a diagram of the zones of vision you will have whilst sitting in the drives seat. Be especially aware of the red zones indicating your blindspots which are there unless you turn you head towards the given area.

Mirrors should be adjusted so that maximum rear view can be obtained with little, or no, head movement. *Do not to touch the mirror glass with your fingers when adjusting the mirrors - this can impair your view, especially at night.*

Exterior mirrors are often made from convex (curved) glass. Convex mirrors usually distort the image of following vehicles making them seem further away than they actually are. Because of this you should never rely on outside mirrors alone; your picture of the road and traffic situation behind should be gained by using the interior and one, or both, of the exterior mirrors.



Clutch and Biting Point



Pull – Push steering method

Lesson Plan – Pull–Push Steering

- Correct method to hold the steering wheel whilst driving
- Why do we leave the thumbs resting on the outside of the wheel and not gripping?

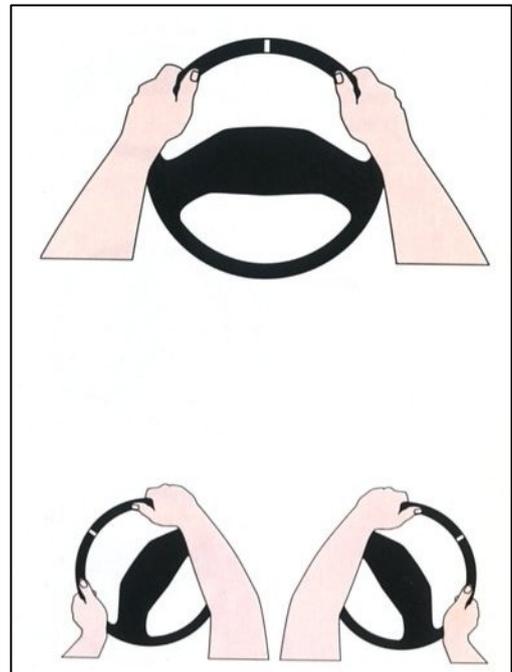
How to hold the steering wheel

- Place hands on the wheel with your palms on the rim at either quarter to three or ten to two position.
- Hold the wheel lightly but be ready to tighten if necessary.
- Keep both hands on the wheel at all times unless you are changing gear, operating one of the controls or to give an arm signal.

This method of steering enables you to turn the wheel in either direction. It is both safe and efficient steering method.

Make changes in either direction smoothly and progressively. Make small changes in either direction by turning the steering wheel without altering your hand hold. Always make sure that either hand doesn't pass the 12 o'clock position.

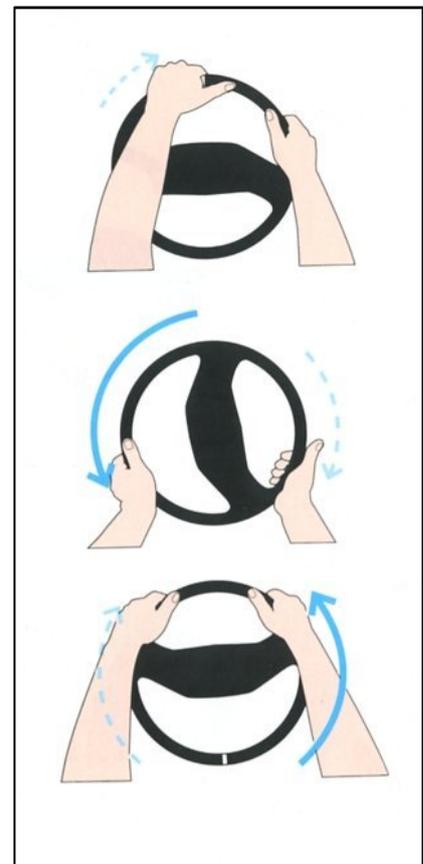
To make a more positive turn, use the pull – push method described below.



Pull – Push Method

With the pull-push method neither hand will pass the twelve o'clock position. Your hands should remain parallel to each other on the steering wheel except on the initial movement to turn either left or right. The advantage of this method is that it keeps both hands on the steering wheel to all for an immediate turn in either direction at any point during steering.

- Top Diagram shows left hand sliding to top position to turn left.
- Pull wheel down with left hand and the right hand slides down the rim keeping it parallel with the left.
- If the turn requires more steering, the right hand now takes over and grips the wheel at the bottom and pushes up with the left hand sliding up the rim.
- Straighten the steering wheel after the turn by feeding the wheel back through your hands with similar but opposite movements. Do not let the wheel spin freely back on its own.



Lesson Point

Use a plate or Frisbee to practice. If it's your mums' best china plate then I bet you wouldn't drop that and you would soon find out how to get the 'pull-push' steering correct.

Stopping distances and ABS braking

In dry weather conditions you should leave at least a two second gap between yourself and the vehicle you are following. This is true when travelling within all the legal speed limits.

However, if the road conditions are slippery or wet then at least a 4 second gap should be applied between yourself and the vehicle you are following.

You do this by selecting a fixture on the side of the road (such as a bridge or telephone box) and allow a gap of 2 seconds between you and the rear of the vehicle in front. You can time this by saying in your mind 1001, take a breath then 1002 or by using the saying *'Only a fool breaks the 2 second rule'*

Remember different vehicles will have very different braking characteristics and some may pull up a lot quicker than you expect!

The actual stopping distances as per the Highway Code are as follows based upon an average car length of 4 metres;



Anti-Lock Braking Systems (ABS)

Introduction

The Antilock Brake System [ABS] is a safety feature found in most modern cars. It helps drivers maintain control of their vehicles while braking in slippery road conditions and during sudden "panic" braking.

Why Is ABS Required

When drivers suddenly become aware of danger, their reflexes cause them to slam hard on the brake pedal in an attempt to slow down the car quickly. However, the force applied by the brakes can often exceed the traction between the car tyre and the road. When this happens, the car's wheels will lock and the car will skid.

A skid is dangerous as the driver will lose steering control over the car. This makes it impossible for the driver to avoid hazards while the car is still skidding and therefore is very likely to slide into the hazard it is trying to avoid. In addition, the distance required for a skidding car to stop is further than if the wheels were still spinning. This is due to the effect that skidding has on tyre friction.

Because of the vast differences in the behaviour of these systems in different vehicles, it is strongly advisable to test them out in a safe area. The sudden noise and feeling from the brake pedal itself can often cause a driver to lift off the brakes completely thinking something else is wrong, **NOT A GOOD IDEA!**

It is also often a misconception, that anti-lock brakes allow you to stop in a shorter space, this is also NOT true, they only server to allow the driver to have more control of the braking manoeuvre under emergency conditions so that you have the chance to steer around the hazard whilst still slowing down rather than skidding!

Slalom

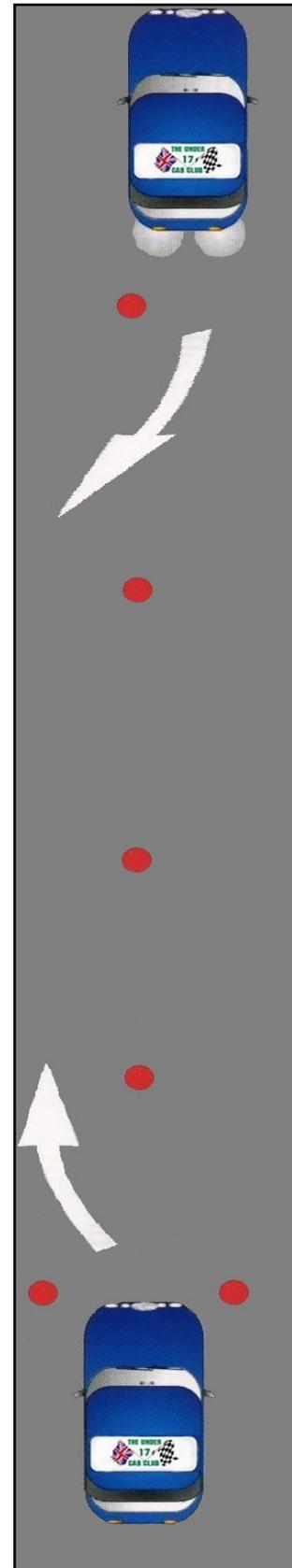
This will give Members the idea opportunity to practice good steering techniques, good smooth clutch control, precision at slow speed as well as finding out how a car moves in both forward and reverse gears and how it reacts/turns in those directions.

Key Points –

- Reaction to control in both direction
- Control – clutch, gas, steering wheel
- Pull/Push steering
- Mirrors used correctly when reversing
- Accuracy – don't rush it!

Lesson Plan –

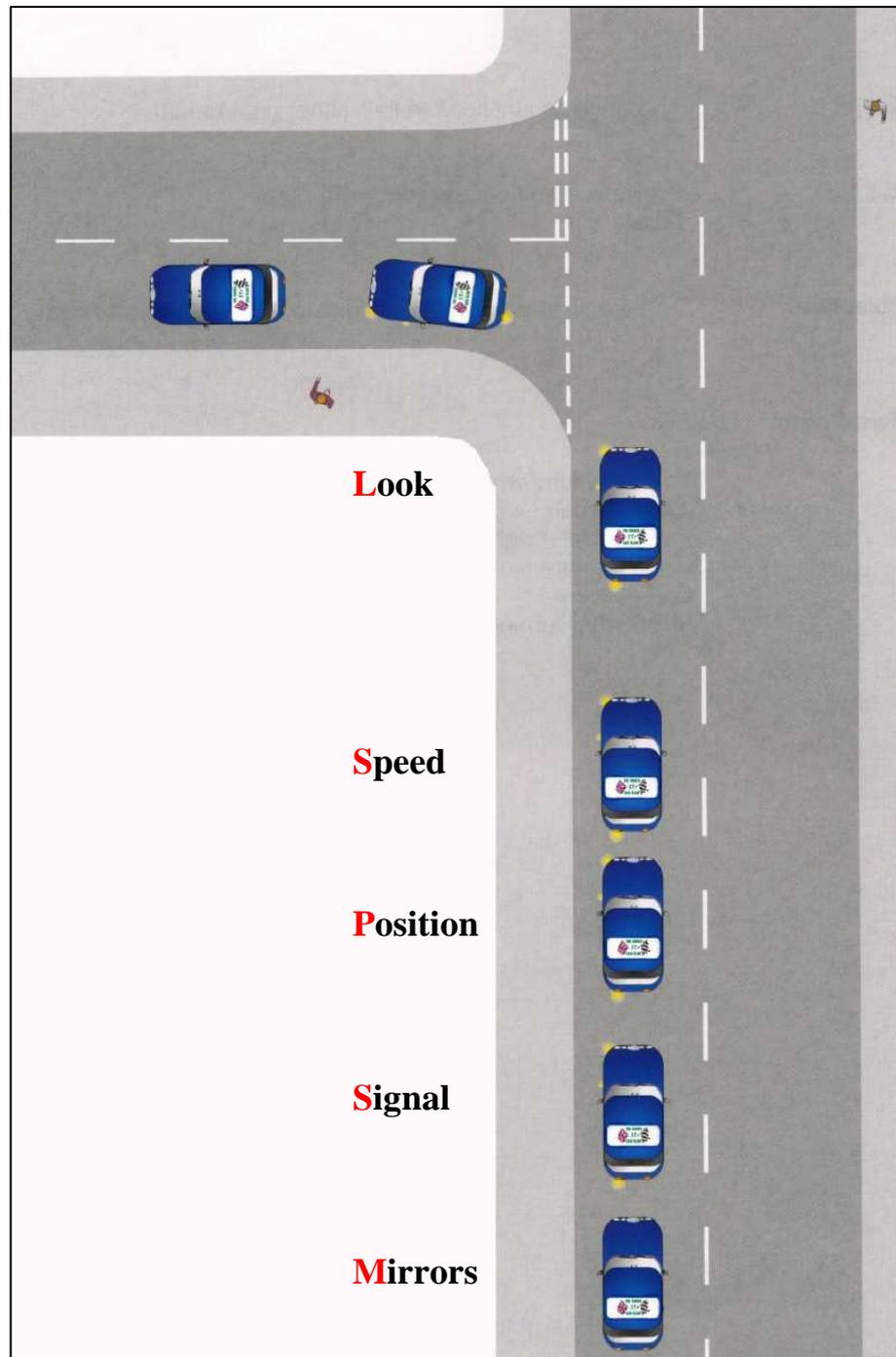
- Move the car forwards between the cones using 1st gear
- Fluent 'Pull/Push' steering using full circumference of the wheel
- Smooth clutch and gas control in both direction
- See how the car reacts when steering whilst in reverse
- Good mirror work when reversing to aid positional control of vehicle around cones



Approaching a junction to turn left

Lesson Plan – MSPSL

- Mirrors – which 2 mirrors do you use and why?
- Signal – which one, when and why?
- Position – to the left or right and why?
- Speed – which gear?
- Look – where do you look?
- Mirrors – which one do you check once you have completed the turn and why?



Approaching a junction to turn right

Lesson Plan – MSPSL

- Mirrors – which 2 mirrors do you use and why?
- Signal – which one, when and why?
- Position – to the left or right and why?
- Speed – which gear?
- Look – where do you look?
- Mirrors – which one do you check once you have completed the turn and why?

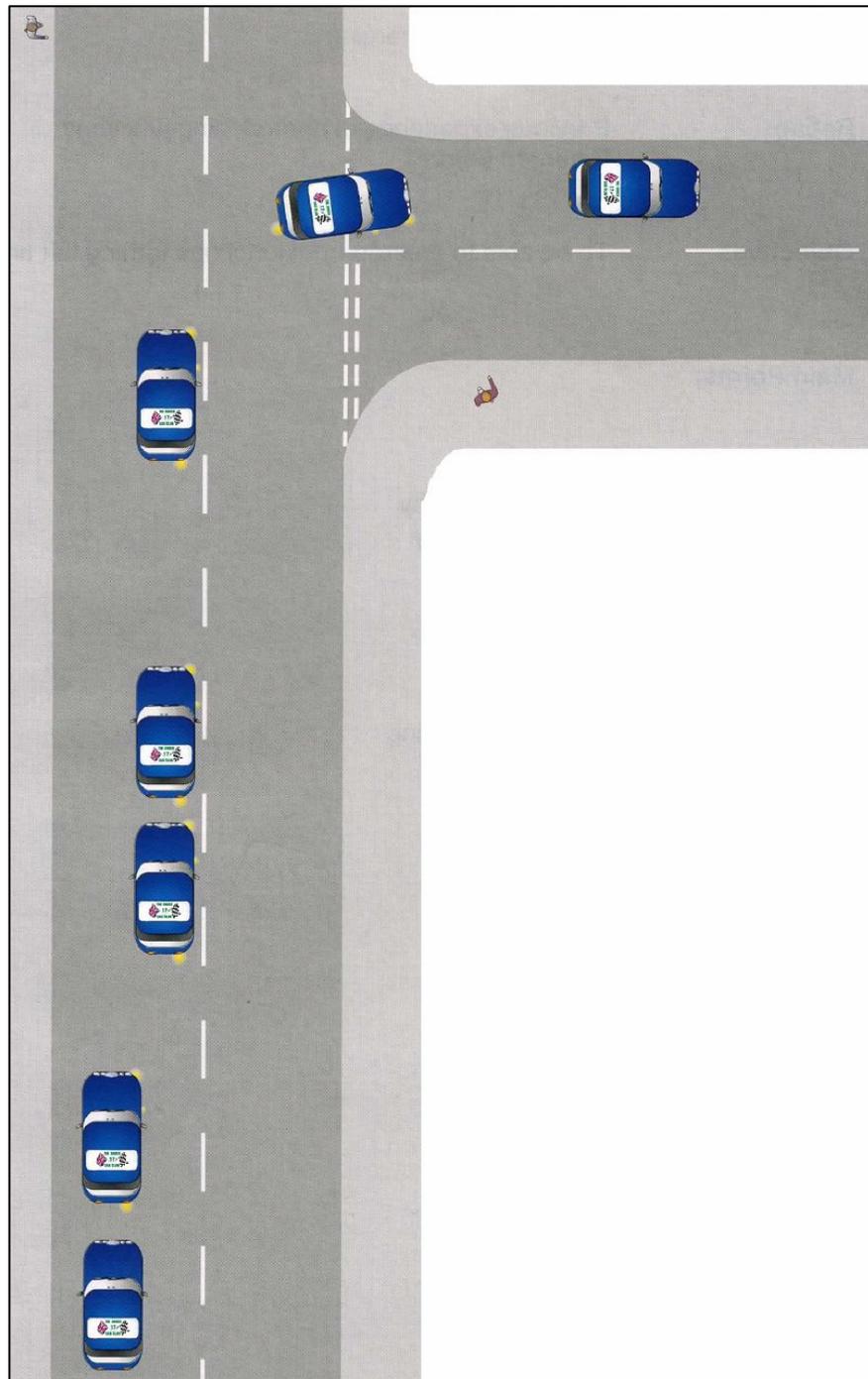
Look

Speed

Position

Signal

Mirrors

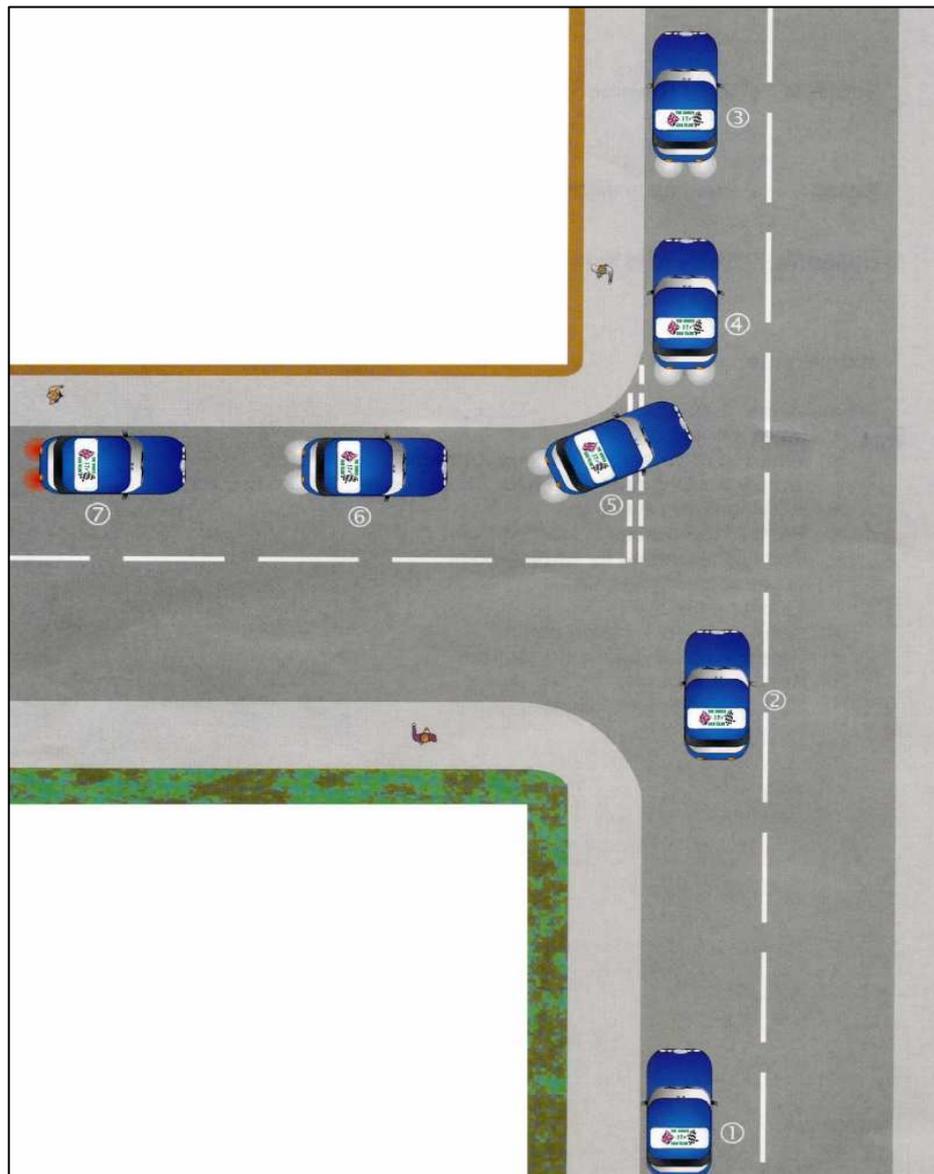


Left Hand Reverse round a corner (LHR)

Lesson Plan – Break this lesson into 3 simple stages – the straight reverse, reverse round corner and straight reverse again

- Mirrors – which 2 mirrors do you use and why?
- Signal – which one, when and why?
- Position – 2 or 3 car lengths past junction and 18 inches (*drain cover width*) from the kerb
- POM – before reversing
- Turning – just before turn good observations and why?
- Turning – when the kerb begins to turn round corner, begin to turn steering wheel to the left
- Turning – when the kerb begins to straighten up, begin to straighten car
- Finishing - about 4 to 6 car lengths from corner and why?

Remember – slow car and quick hands & good all round observations at all times



Right Hand Reverse round a corner (RHR)

Lesson Plan – Break this lesson into 3 simple stages – the straight reverse, reverse round corner and straight reverse again

- Mirrors – which 2 mirrors do you use and why?
- Signal – which one, when and why?
- Position – when do you drive across onto opposite side of road?
- Position – 2 or 3 car lengths past junction and 18 inches (*drain cover width*) from the kerb
- POM – before reversing
- Turning – just before turn good observations and why?
- Turning – when the kerb begins to turn round corner, begin to turn steering wheel to the right
- Turning – when the kerb begins to straighten up, begin to straighten car
- Finishing - about 6 to 8 car lengths from corner and why?

Remember – slow car and quick hands & good all round observations at all times



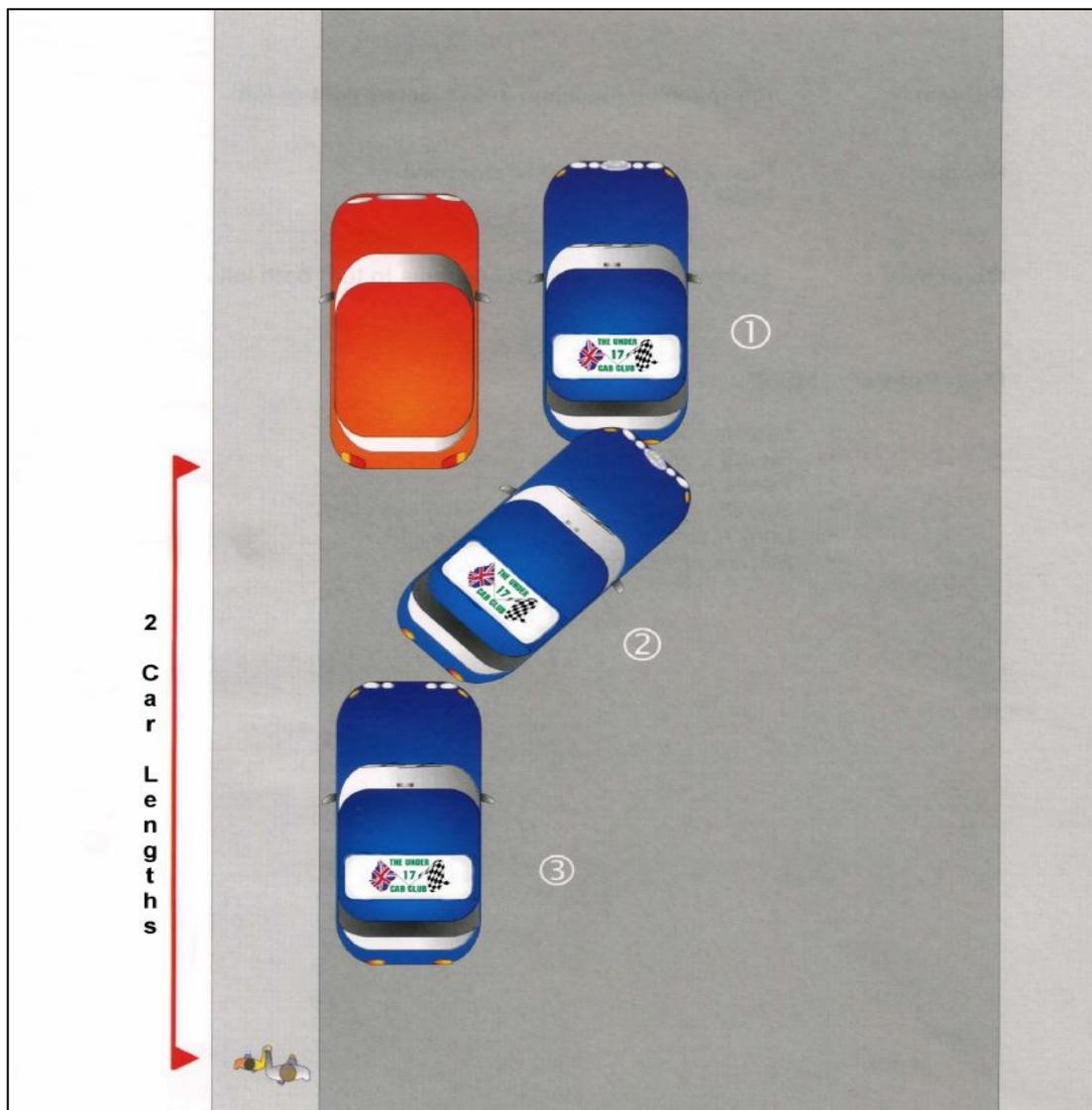
Parallel Parking

Please remember that at venues, most parallel parking will be into a bay marked with cones which is just like parking between 2 vehicles. The lesson below is how the DSA will require it to happen on your driving test and within the Car Club at a later date.

Lesson Plan –

- Pull along side of car – about 1 metre or doors width away
- POM
- Reverse back until back ends of vehicle are level
- Good all round observation especially over right shoulder
- Begin to steer left
- 45 degrees and then straighten up
- When front is clear or rear wheels appear to be near the kerb in left mirror – steer right
- Just before end of manoeuvre – make sure wheels are straight

Remember – slow car and quick hands & good all round observation at all times



Turn in the road (TIR)

Key Points –

- Observation at all times
- Control – clutch, gas, steering wheel
- Accuracy – don't rush it!

Lesson Plan -

1. POM
2. Forward nice and slowly – full right lock and steer to the left just before kerb
3. POM – look to your left as you steer left then look right and steer right just before kerb
4. POM – drive your car forward straightening the wheel as you go

Remember – slow car and quick hands & good all round observations at all times

