

# Know Your Car - Part Two

## Clutch

The clutch provides a break in the transmission of power between the engine and gear box. If the clutch does not exist, then the gears will mash together and a grinding noise can be heard.

### *How it works:*

- When you push your foot down on the clutch pedal it disengages.
- When you release your foot the clutch engages.
- To get a vehicle moving, you need to select the first (or reverse) gear while holding the clutch pedal down. In order to move forward (or back) you will gradually need to release the clutch pedal.

### *Releasing the clutch*

Release to friction point. The friction point is the point at which the clutch starts to engage and begins to transfer power from the engine to the gear box. You will know you have reached it because the engine note will change. At this point release the park brake (if applied) gently increase pressure on the accelerator and smoothly release the clutch the rest of the way and take your foot off the pedal. You will know if you are using the clutch incorrectly because the vehicle will keep stalling or hop.

### *Quick checklist:*

- ✓ Release the clutch smoothly and do not stall the engine.
- ✓ Passengers and vehicle do not jerk when the vehicle moves off.
- ✓ Do not allow clutch to slip or engine to over rev when moving off.
- ✓ Do not rest your foot on the pedal when not in use. .
- ✓ Clutch is released before commencing manoeuvres.

## Gears

At first your supervisor should advise you when to change gear, but listen to the engine revs and get a feel for how the engine is performing. This will help you to understand when to change gear.

Guide the lever from one gear position to the next, don't grab it or force it, it will get stuck and the gear change will be jerky. The clutch and accelerator movement should be undertaken simultaneously, otherwise the vehicle will dip forward and the speed will drop off.

### *Common Problems*

- Trying to change at the wrong speed – the vehicle shudders because it is travelling too slowly for the gear selected.
- Selecting the wrong gear – the engine strains and may stall.
- Releasing the clutch too fast – this causes the vehicles to lurch forward and stall or hop down the road.
- Check that your foot is positioned on the clutch and your knee is bent. Make sure your seat is not too far away.



**Quick checklist:**

- ✓ Make sure changing gears does not jerk the car.
- ✓ Select the correct gear in five seconds or less.
- ✓ Drive in a suitable gear so the engine isn't over revving or straining.

## Accelerator

The accelerator is operated with your right foot. The ball of your foot should rest in the centre of the pedal. The weight of your leg should be supported by your heel, or the side of your heel. Pivoting your foot on your heel to apply pressure gives you greater control over the amount of pressure applied.

Press down to go faster, ease off and the speed will decrease. Adjust the pressure on the pedal to adjust your speed. Every vehicle is different; as you grow more confident you will learn to adapt to different vehicles.

Make sure your toes are not the only part of your foot resting on the bottom of the pedal, this will make it difficult to apply a smooth, even pressure.

**Quick checklist:**

- ✓ Keep steady speed by adjusting the accelerator smoothly.
- ✓ Use accelerator smoothly and do not jerk the vehicle.
- ✓ Adjust speeds to suit changing conditions.
- ✓ The weight of your leg should be supported by your heel