

# Clutch Control

## **What is clutch control?**

A driver will use clutch control to enable them to move their vehicle from a parked/stationery position, under full control and at the speed that the driver wants.

## **How the clutch works.**

First a brief explanation as to how a clutch works. The clutch has two plates; the first is linked to the engine and is rotating all the time the engine is running. The second plate is linked to the vehicle's wheels and will only rotate when the two plates are held against each other (clutch pedal up). When the driver depresses the clutch pedal the plates will be forced apart. With the clutch pedal depressed (down) there is a gap between the plates, therefore no power is being transferred between the engine and the vehicles wheels.

In short if the clutch pedal is up the engine is connected (subject to being in gear) to the wheels, if the clutch pedal is down the engine is disconnected from the vehicles wheels.

## **Bite point.**

Next we need to look at the Biting Point (Bite Point) which is the point when the two clutch plates begin to make contact/come together. By controlling the amount of contact, by either slightly raising or depressing the clutch pedal, the driver will be able to control the amount of power being transferred through to the vehicles wheels.

Whilst the driver can depress the clutch pedal as quickly as they want/need, if the clutch is raised too quickly it will cause the clutch plates to come together too suddenly, which is likely to cause the engine to stall, or the vehicle to jump/move forward faster than intended and out of control.

## **Practice.**

Practising clutch control will help you to be able to move the vehicle under full control, which is essential for safe driving and passing the driving test.

You should practice this control by selecting 1st gear then raising the clutch pedal to the biting point, holding the pedal at this point for a moment then depressing the pedal again.

Identifying when the bite point has been reached can be difficult at first. You should listen for a change in the sound of the engine, as the engine starts to connect to the vehicles wheels it begins to take on the load or weight of the vehicle. This causes the engine speed to drop and the engines sound to change. You may also notice a change or feel as the engine starts to take on the load of the vehicle.

Another way of identifying the bite point is to practise somewhere quiet and level. You can (without the handbrake engaged/on) select first gear, apply slight pressure on the gas/ accelerator pedal, then slowly raise the clutch pedal until you start to feel/hear the bite point. Also as you are on a level section of road you will be able to judge this bite point by the fact that the vehicle will start to move forward as the engine begins to connect through the clutch transferring its power to the wheels.

**Remember.**

Always make sure that you practice safely. Ideally the vehicle you are practicing in will have dual controls, so that if you make a mistake your accompanying driver can depress the clutch or brake using their own pedals.

Even if your vehicle does have dual controls, clutch control is best practiced somewhere quite without any other vehicles or obstructions nearby.

Remember the higher you raise the clutch pedal (when in gear) and the more pressure on the gas/accelerator pedal the faster you will move away. So be careful and take your time.