

Brake gear overlap.

How to break the habit of overlapping.

Always find a quiet road and check mirrors to see it's clear to practice any new driving technique.

Brake gear overlap usually occurs when changing down into 2nd gear from a higher gear to negotiate a left or right hand turn, but is also applicable to gear changes for other manoeuvres e.g. approaching bends or roundabouts.

- The first step is to get used to braking without having your foot near the clutch.
- Then move on to the next step which is getting the car into 3rd gear and braking down to 10-15 mph by gentle then firmer braking (or as slow as you can without stalling or causing the car to falter or judder) and keep your foot away from the clutch.
- Release the brake pedal and let the vehicle roll on. (If you practice this going down from 3rd to 2nd then most cars will not complain as they are capable of this low speed in 3rd gear).
- Count to 2 then depress the clutch and take 2nd gear.
- As you get the hang of it, reduce the time you wait to take the 2nd gear.
- As a rule your hands shouldn't go near the gear lever until your foot is going to the clutch and vice versa.

The most common cause for people not being able to separate brakes and gears is because they don't allow enough time for their gear change. Turning right from a major road onto a minor one you will probably be traveling at about 10mph. At that speed you're traveling at 15ft per second. You probably need 2 seconds for an unhurried gear change, i.e. 30 feet.

Now Imagine approaching a side road to the left into which you want to turn and parked between you and the side road is an imaginary articulated lorry (parked right up to the mouth of the junction). First you need to have your speed down for your manoeuvre. This is achieved first by braking gently, then more firmly by the time you reach the back of the lorry; then its foot off brakes when you reach the back of the lorry, then use the length of the lorry to depress clutch and select 2nd gear (your unhurried gear change.). Then off the clutch and have the clutch and accelerator balanced to match the road speed before you enter the junction. This manoeuvre really needs to be practiced at slow speed first to get the sequence right and can then be speeded up as you become more competent and are able to approach the junction in a higher gear (say 4th).

There is a slight variation to this procedure and that is when changing down from a much higher gear to lower gear such as 5th or 6th gear down to 2nd to negotiate a turn or bend (think I.P.S.G.A.). In this instance the lower speed needed to negotiate the turn or bend etc. would cause the car to falter snatch or judder, as the higher gear would not be compatible with the much lower speed (the point between the speed adjustment in I.P.S.G.A, but immediately before the gear selection, where the clutch and brake pedals are not normally depressed together) to negotiate the hazard. In this slight variation the brake and clutch can be depressed together (to avoid the falter, snatch or judder) until the gear needs to be selected. At the point where the gear is selected leave the left foot depressing the clutch pedal and transfer the right foot from the brake pedal to the accelerator pedal ready to balance the clutch and accelerator to match the road speed. The gear is selected only when the right foot is off the brake and back on the accelerator.

If you're concerned that because of not overlapping (depressing the clutch to change gear and brake together) you are taking more time over your gear change and therefore holding up the people traveling behind you, then show your brake lights good and early to let them know your intention. Hopefully they will then back off giving you the space and time you need for your gear change.

Situations where brake/gear overlap may be appropriate.

During normal driving brake gear overlap is to be avoided, however, in some circumstances it is allowable in order to maintain car control or to warn other of your intentions. E.G. When going down a hill and negotiating a turn, or when negotiating a sharp turn and a vehicle is close behind. See 'Roadcraft' pages 69 and 70. When brake/gear overlap is used it should always be part of a well thought out driving plan.