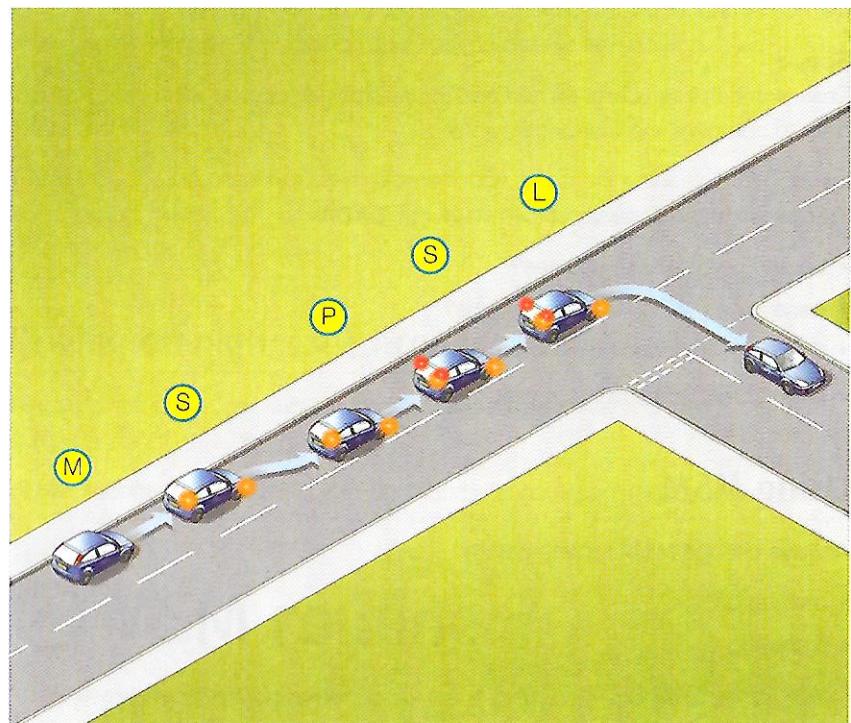


Never

- signal without checking mirrors first
- rely solely on mirrors when you're reversing. Keep looking around to watch for other road users
- assume that, because you've signalled, you can carry out the intended manoeuvre safely. Check to be sure, because other road users might not
 - have seen your signal
 - understand your intention.



(M) Mirror (S) Signal (P) Position (S) Speed (L) Look



Section five

Starting to drive

This section covers

- Getting started
- Starting the engine
- Moving off
- Braking
- Stopping in an emergency
- Skidding
- The parking brake
- Steering
- Changing gear
- Signalling
- Moving off at an angle
- Moving off on hills

➡ Getting started

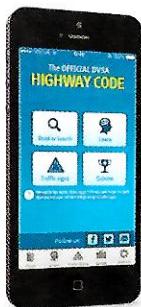
Before you drive on busy roads and in traffic, you should master the basic techniques of starting, moving off and stopping. You must have full control of your vehicle at all times. This involves

- a good working knowledge of the various controls
- being able to coordinate hand and foot controls.

In addition, you need to have

- an understanding of the rules of the road
- respect for the needs of other road users
- a basic knowledge of your vehicle. That way, you can check it to make sure everything's working properly and it's safe to start your journey.

Driving isn't just a matter of starting the engine and moving off.



Cockpit drill

Make these checks for the safety of yourself, your passengers and other road users.

Every time you get into your vehicle, check that

- all doors are properly closed and the parking brake is on
- the driving seat is adjusted so that you can see clearly in all directions and reach all the controls comfortably
- the head restraint is in the correct position (see section 3)
- the mirrors are clean and correctly adjusted (see section 4)
- you and your passengers have seat belts on
- the gear lever is in neutral (if you're driving an automatic, the gear lever should be in 'P' or 'N')
- you have enough fuel for your journey. If not, plan where to refuel the vehicle.



Driving a vehicle unfamiliar to you

Before you start your journey, make sure you know and understand the vehicle's

- controls: where they are and how they work
- handling: front-, rear- or four-wheel drive
- brakes: if anti-lock (ABS) brakes are fitted, know how to check and use them.

Consult the vehicle handbook if anything is unfamiliar to you.

➡ Starting the engine

After you've made the preliminary checks and you're settled comfortably in the driving seat, begin the drill for starting the engine.

- Check the parking brake is on by trying to pull it on slightly further.
- Check that the gear lever is in neutral (or 'P' or 'N' if driving an automatic).
- Pull the choke out if your vehicle has one. Most vehicles have an automatic choke.
- Switch on the ignition by turning the key. The ignition and oil pressure light, if fitted, will come on. Other warning lights should also come on. With a diesel engine you might have to wait for a glow-plug light to go out.
- Operate the starter by turning the key further, or use the separate starter switch, if one is fitted.

- Release the starter key or switch as soon as the engine begins running; otherwise the starter could be damaged. Don't operate the starter if the engine is already running.



If the engine fails to start

If the engine fails to start first time

- release the key or switch
- wait a moment
- try again.

When the engine starts

You may need to press the accelerator slightly to keep the engine running.

The engine should now be idling ('ticking over').

The ignition and oil pressure warning lights should go out when the engine is running. If either light stays on, switch off the engine and have the fault checked. Never drive a vehicle with the oil pressure warning light showing – it could damage the engine.

If your vehicle has a manual choke, push it in as the engine warms up. Don't drive with the choke out any longer than necessary. This wastes fuel, causes wear to the engine and can be dangerous, especially with automatic transmission.

Move off as soon as possible after starting the engine. Allowing the engine to warm up while you're stationary wastes fuel and causes pollution.

Moving off

With your left foot, press the clutch pedal fully down and hold it there.

Move the gear lever into first gear. If it won't engage, move the gear lever to neutral, then let out the clutch and repeat the first two steps.

To prepare to move off

- With your right foot, press the accelerator slightly and hold it steady.
- Slowly and smoothly, let up the clutch pedal until you hear the engine noise change slightly. This change means the clutch is at the biting point (see later in this section). With experience, you'll be able to feel the biting point.
- Hold the clutch steady in this position.
- Now make your final safety checks, use your mirrors and look over your right shoulder to check the blind spot.
- Decide if a signal is necessary. The timing of any signal is crucial. Avoid waiting with the clutch at biting point.
- If it's safe to move off, be ready to release the parking brake.
- Look round again if necessary and keep an eye on your mirrors.
- When you're sure it's safe and convenient to move off, release the parking brake and at the same time, let the clutch pedal come up a little more. The vehicle will begin to move. Tight clutch control is needed, so keep the clutch pedal just above the biting point.



- Gradually depress the accelerator for more speed and let the clutch come up smoothly, then take your left foot off the clutch pedal. Accelerating fiercely wastes fuel.

Biting point

The 'biting point' is when the clutch plates start to engage. You must be able to find this point confidently when you bring up the clutch pedal. Although you can press the pedal down quickly, you mustn't let it come up too fast. Practise finding the biting point until you become familiar with it.

Although this process is the same for all vehicles with manual gearboxes, there can be slight variations in how different vehicles feel, and sound, when at the biting point. If you have to use a different vehicle on occasion while learning, take a few minutes to practise finding its biting point first, before driving on the roads.

This advice also applies after you've passed your test, whenever you have to drive an unfamiliar vehicle.

Practice makes perfect

Getting these steps in the right order is difficult at first. Choose a quiet, level road to practise starting, moving off, and stopping.

Don't

- signal and move out regardless
- sit with the signal showing when you can't move out safely.

Defensive driving

- Check all round before moving off.
- Signal if necessary.
- Don't move out into the path of oncoming traffic.
- Don't rush.



Braking

Safe and controlled braking is vital to good driving. Try to slow down gradually and smoothly.

Anticipation

If you anticipate properly, you'll seldom need to brake fiercely.

Good anticipation will give you time to brake progressively over a longer distance.

Late, harsh braking is a sign of poor anticipation and of reduced safety margins.

Braking and steering

Braking shifts the weight of the vehicle forward. This can make steering more difficult.

If you have to brake hard, try to do so when you're travelling in a straight line.

Whenever you brake, you should consider

- the safety and peace of mind of everyone concerned, including your passengers
- wear and tear on brakes, tyres and suspension
- vehicles behind you whose brakes might not be as powerful as yours.

REMEMBER, the greater your speed when you brake

- the more difficult it is to control the vehicle
- the greater the distance you need to stop the vehicle.



Braking on bends

If you have to brake on a bend, remember that the weight of the vehicle is thrown outwards as well as forwards. The front tyre on the outside of the curve will have an increased load on it and this can lead to skidding.

Road surface conditions can have a big effect in these situations. Watch for uneven, loose or slippery surfaces.



Think ahead

Think well ahead to avoid the need for harsh, uncontrolled braking.

You should never drive too fast or too close to the vehicle in front. Other drivers might be affected by your actions.

Always use your mirrors before braking and give yourself plenty of space.

Consider

- your own speed of reaction
- the size and weight of your vehicle and its load
- the gradient of the road
- whether the road has a camber or bend
- the weather and visibility
- the road surface. Is it rough, smooth, loose, wet, muddy, or covered with wet leaves, ice or snow?

Five rules for good braking

1. Anticipate. Think and look well ahead.
2. Know your own limitations and those of your vehicle.
3. Take note of the state of the road and its surface.
4. Give yourself plenty of time and distance to brake progressively.
5. Avoid the risk of skidding, rather than trying to control it.

Defensive driving

If the vehicle behind is too close, slow down gradually to increase your distance from the vehicle ahead so that you can avoid having to brake suddenly.

Stopping

The drill for stopping is always the same, except in an emergency. You must learn it thoroughly from the beginning.

The amount of pressure you need to apply to the footbrake depends on

- your speed
- how quickly you need to stop.

To stop you should

- use the mirrors
- decide whether you need to signal your intention to stop
- signal if necessary
- take your foot off the accelerator. The engine will slow down
- push down the brake pedal lightly with your right foot and then more firmly (see 'Progressive braking', later in this section)
- press the clutch pedal right down with your left foot just before the vehicle stops. This disengages the engine from the driving wheels and prevents stalling. Don't do it too soon; the engine's resistance helps slow the vehicle down

- ease the pressure off the footbrake just as the vehicle stops
- apply the parking brake
- put the gear lever into neutral
- take both feet off the pedals.



Check your mirrors before braking.



Brake after you've checked your mirrors.

Changing down before you stop

When stopping normally, you can stop in the gear that you're in; you don't necessarily have to change down. However, your vehicle should always be in the right gear for the road speed and conditions.

Progressive braking

This is a safe driving technique that

- allows other drivers time to react
- prevents skidding
- saves wear and tear on brakes, tyres and suspension
- uses less fuel than harsh braking
- is more comfortable for your passengers.

To brake progressively

- put light pressure on the brake at first
- gradually increase the pressure as required to stop the vehicle

- when the vehicle has almost stopped, ease off the pressure so that the vehicle stops smoothly. There should be little or no pressure as the vehicle actually stops.

Practise

Find a quiet road and make sure you won't affect another road user. Choose a particular point at which you would like to stop. See how near to it you can get.

It's better to stop short of the mark than to overshoot it. You can always ease off the brakes and run forward a bit more.

Stopping at the kerb needs practice too. Aim to stop reasonably close to the kerb without hitting it.

Keep full control of the steering so that you can accurately position the car as you stop.

→ **Stopping in an emergency**

In normal conditions, a good driver shouldn't need to brake really hard.

However, emergencies can happen – for instance, when a child runs into the road in front of you – so you must know how to stop quickly under control. Stopping in an emergency increases the risk of skidding.

Remember, even when stopping quickly, follow the rule of progressive braking – pushing the brake pedal harder as the vehicle slows down.

A quick reaction is crucial in an emergency. The sooner you start braking, the sooner you'll stop!

Practise the following routine

- Keep both hands on the steering wheel. You need as much control as possible.
- Avoid braking so hard that you lock any of the wheels. A skid may cause serious loss of control.

- Don't press down the clutch pedal until just before you stop. This helps with your braking and stability. For vehicles fitted with ABS, read the owner's manual. The manufacturer may advise a different technique to get the best out of its system.
- Don't use the parking brake while the vehicle is moving. Most parking brakes work on the back wheels only. Extra braking here can cause skidding.

Unless you're moving off again straightaway, put the parking brake on and the gear lever into neutral.

If it's safe, practise braking to judge the correct pressure and remember to take into account road and weather conditions.

If the road is dry you should apply firm pressure, but on a wet road or loose surface you should avoid using too much. This means you'll need to reduce speed and increase your separation distance from the vehicle in front.

When braking in an emergency

- Don't signal – you need both hands to control the steering.
- Don't make a special point of looking in the mirror – if you've been using your mirror regularly you should know what's behind.
- Stop as quickly and safely as possible, keeping your vehicle under full control.
- Look all round before moving off again.



Defensive driving

- Try to avoid the emergency arising.
 - Look well ahead.
 - Watch for children playing.
 - Remember school times.
 - Look out for pedestrians.
 - Look for clues, such as reflections.

- Always drive at such a speed that you can stop safely in the distance you can see to be clear. If it's not clear, slow down.
- Prepare for the unexpected.

Anti-lock braking systems

If your vehicle is fitted with ABS brakes, the system activates automatically under conditions of harsh braking.

ABS employs wheel-speed sensors to anticipate when a wheel is about to lock under extreme braking. Just before the wheels begin to lock, the system releases the brakes momentarily before automatically reapplying them. This cycle is repeated several times a second to maximise braking performance, sending a pulsing sensation through the brake pedal. You may find this a little disconcerting the first time it occurs and you may be tempted to respond by relaxing the pressure on the brake pedal. However, it's important that maximum pressure is maintained.

ABS doesn't necessarily reduce your stopping distance, but because the wheels are prevented from locking you can continue to steer – something you wouldn't be able to do if the wheels were locked. Reducing the pressure or pumping the brake pedal reduces the effectiveness of the system. The pressure on the brake pedal must be maintained until the hazard is safely avoided.

Knowing ABS will help you stop safely shouldn't encourage you to drive less carefully. ABS can't overcome the laws of physics; it's still possible for one or more of the tyres to skid because of

- poor road contact
- surface water
- a loose road surface.

→ Skidding

Skids don't just happen. They're caused by a driver asking too much of the vehicle for the amount of grip the tyres have on the road at that time.

A skid happens when you change speed or direction so suddenly that your tyres can't keep their grip on the road.

There's a greater risk of skidding as you

- slow down
- speed up
- turn a corner or round a bend
- drive uphill or downhill.

The risk increases on a slippery road surface.

Skids caused by braking

Harsh and uncontrolled braking is one of the chief causes of skidding. Brakes have their greatest stopping power when they're nearly, but not quite, locked.

The weight of the car is thrown forward when braking. The heavier the braking, the more weight goes to the front and the less there is on the rear wheels.

The less weight there is on the rear wheels, the more likely they are to lock.

Skidding on dry roads

Skids can happen on dry roads, even with good tyres, if you brake harshly.

A lot of the weight is thrown forward and it's impossible to keep the vehicle straight. It begins to swing and only has to touch something to be in danger of turning over.

Anti-lock brakes

ABS brakes help you to continue steering while braking, but on wet or slippery roads this will be less effective. The brakes are only as good as the tyres' grip on the road.

Don't assume that ABS brakes will reduce the stopping distance.

Skids caused by steering

These are caused by steering too sharply for the speed at which you're travelling.



Skids caused by acceleration

Sudden or harsh acceleration while cornering, particularly in the lower gears, may cause the driving wheels to spin on the road surface. Unless you ease off the accelerator very quickly, the vehicle could go into a skid because of the wheelspin.

Skids caused by braking and steering

If you brake harshly while turning, the combined forces can quickly overcome your tyres' grip, leading to a skid.

You may skid if your tyres are only just gripping while you're cornering and you start braking.

You could also skid if you're braking when you start cornering.

The answer is simple: adjust your speed to the conditions and give yourself plenty of space. If the road is wet or icy, your tyres have much less grip.

Avoiding skids

There's no better protection against skids than driving in a way that will avoid them. Skids are caused by drivers; they don't just happen. Take note of the following.

- On very slippery surfaces your stopping distance can be as much as **10 times** longer than on a dry road.

- Look out for signs of slippery roads. Any wet road, even in summer, is likely to be slippery. Be wary of rain, ice, packed snow, frost, wet mud, loose surfaces and wet leaves. Diesel and oil spillages will also make the road slippery, as will patches of new tarmac.
- If you suspect the road is slippery, keep your speed down. When your tyre grip is poor, braking is more likely to cause a skid.
- Use engine braking. Change down in good time.



Anti-skid technology

Electronic stability control (ESC), sometimes known as Electronic Stability Program (ESP®), allows the vehicle to turn exactly where the driver expects and remain under control – providing the speed of the vehicle isn't excessive for the situation.

ESC can't overcome the laws of physics; if the driver is travelling too fast there's still a risk of losing control. Drivers still have a responsibility to be able to stop in the distance they can see to be clear and safe.

The system comprises the functions of ABS and traction control system, and aims to prevent a vehicle from skidding sideways.

Its key benefits are

- continual readiness, becoming active when vehicle skidding is imminent

- detecting the risk of a skid at an early stage, even before braking
- comparing the driver's steering intention with actual travel direction (25 times per second)
- selective braking intervention to restore vehicle stability.

ESC is widely available in new cars in the UK.

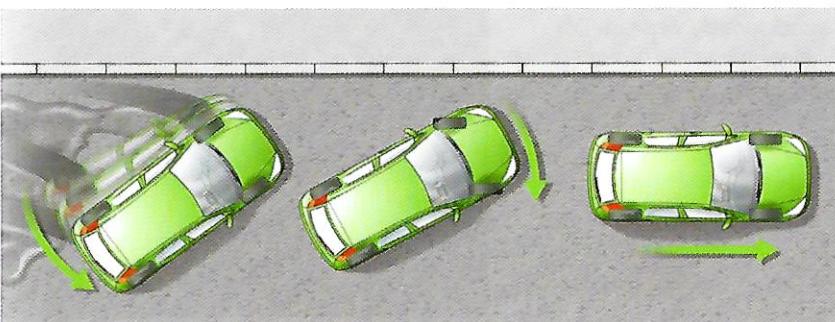
Dealing with skids

If your car is skidding, there are a number of things you should do.

- Release the brake pedal fully. Drivers often instinctively do the opposite, keeping their right foot hard down on the brake pedal throughout the skid. This makes matters worse, so keep off the brakes. If you have ABS brakes you should follow the manufacturer's instructions.
- If the skid is more than a slight slide, to bring the wheels into line again, ease right off the accelerator and turn into the skid. That is
 - if the rear of the vehicle is going left, you should steer left to bring the front wheels into line with the direction of the back wheels
 - if the rear of the vehicle is going right, steer to the right. Be careful not to overcorrect with too much steering. Too much movement of the front wheels will lead to another skid in the opposite direction.

If the front wheels are sliding instead of, or as well as, the back wheels, release the accelerator and don't try to steer until the wheels regain some of their grip.

Too much power on a front-wheel-drive vehicle can produce the same problem. Again, ease off the accelerator.



Remember

- adopt safe driving techniques that avoid the build-up to a skid
- adjust to the conditions and give yourself time to react safely.

→ The parking brake

You should normally apply the parking brake whenever the vehicle is stationary.

Apply the parking brake according to the instructions in your vehicle's handbook and put the gear lever into neutral when you're stopped at traffic lights or queuing behind other vehicles, unless the wait is likely to be very short.

Your foot could easily slip off the footbrake if, for example, your shoes are wet or if you're bumped from behind. You could then be pushed into another vehicle or a pedestrian.

Always leave a safe gap between your vehicle and the vehicle in front while queuing, especially on a hill. This will give you room to manoeuvre should the vehicle in front roll back.

In vehicles fitted with automatic transmission, the use of the parking brake is even more important. The parking brake will help avoid

- the possibility of the vehicle creeping forward
- the vehicle surging forward if the accelerator is pressed accidentally while in 'D' (Drive).



→ Steering

When you're learning to drive, practise steering your vehicle (at low speed at first) while keeping about 1 metre (3 feet) from the kerb.

Look well ahead, not just at the front of your vehicle. Keep your movements steady and smooth. Never make a sudden or jerky action while steering.

Steering with one hand

When you can steer a straight course with both hands on the steering wheel, try steering with only one hand.

The reason for practising steering with one hand isn't so that you can always drive like that. It's because there are times when you'll only have one hand free for steering – for example, when you're changing gear or operating a control.

Stiffen your arm slightly to help you steer a straight course without pulling the wheel down or swerving. Practise with each hand.



→ Changing gear

To drive safely, you must combine the skill of knowing how to change gear with knowing when to change gear, as well as which gear to select. These are skills which take time – and practice – to acquire.

The gear positions

You need to know the various positions of the gear lever without having to look down.

You can practise and get to know the gear position with the clutch disengaged and the engine switched off. A light but firm touch should be all you need to move from one gear to another. Never force the gear lever.

On some gearboxes you might require slight pressure to select some gears.

First to second

You might need to put a little pressure to the left on the gear lever when you change up from first to second gear. This is to prevent the lever slipping into fourth while passing through neutral.

Down to first

You may need to put slight pressure to the left when you change down from third or second gear to first.

Up to fifth or sixth

You'll need to put pressure to the right when you change up to fifth or sixth gear.

Don't force the gear lever

If you feel resistance, don't force the gear lever into any position.

Don't

- rush gear changes
- take your eyes off the road when you change gear
- coast with the clutch pedal pressed in, or the gear lever in neutral
- hold the gear lever longer than necessary.

Changing up

When to change up

You need to change gear in order to match the engine speed and load to the speed of the vehicle.

This will vary with the vehicle you're driving and whether you're moving on the level, uphill or downhill. As a general rule, change up as the road speed increases.

Listening to the engine helps to determine when to change up. You'll become more familiar with this as you practise, and will soon learn to recognise the appropriate level of sound at which to change gear.

To change up

- place your left hand on the gear lever
- press the clutch pedal right down at the same time as you ease off the accelerator pedal. Don't take your foot off the accelerator altogether
- move the gear lever to the next highest position required
- let the clutch pedal come up smoothly and, at the same time, press the accelerator gradually
- put your left hand back on the steering wheel.

Matching engine and road speed

Releasing the accelerator when changing up lets the engine speed drop to match the higher gear to give you a smooth gear change.

Being able to judge when it's time to change up comes with experience.

Changing down

When to change down

You'll need to change down to a lower gear

- if you've slowed down and the gear you're in doesn't provide enough power for driving at the lower speed
- if you're going uphill in too high a gear and your engine labours or struggles to give enough power
- to increase the effect of the engine braking – for example, when on a long downhill gradient.



Driving in a high gear at low speed makes engine performance sluggish, and is bad driving practice.

Unless you intend to stop, you'll need to change to a lower gear once you've slowed down.

As a general rule, use the brakes to reduce speed before changing down to the most suitable gear for the lower speed.

In the early stages of learning to drive, it may help you to become familiar with the gearbox if you change down through each of the gears in turn. Be guided by your instructor.

When changing down, you might need to

- raise the engine speed to get a smooth change, or
- keep a light pressure on the footbrake to stop the vehicle gathering speed on a downhill slope.

To change down

- place your left hand on the gear lever
- press the clutch pedal right down and, at the same time, keep a little pressure on either the accelerator pedal or the footbrake, whichever is appropriate to the road and traffic conditions
- move the gear lever to the most suitable lower gear for the speed
- let the clutch pedal come up smoothly. Return to the accelerator or continue braking as necessary
- put your left hand back on the steering wheel.

Never rush gear changes. Smooth, even movements are best.



How much pressure is needed on the accelerator or footbrake when changing down will depend on

- the road and traffic conditions
- the speed of your vehicle at the time the clutch pedal is released.

The sound of the engine will help you judge this.

Finding the right gear

To change gear, you need to anticipate and assess the situation well in advance. Ask yourself if the gear you're in is correct for that particular situation.

Overtaking

You should consider changing to a lower gear to overtake. A lower gear can give you the extra acceleration to pass safely.

Try to avoid changing gear while you're actually overtaking. It's preferable to keep both hands on the wheel during the manoeuvre.

Your engine is more responsive in a lower gear and will therefore give you better vehicle control.

Going downhill

When descending a steep hill a lower gear gives more engine braking and control, particularly on a bend.

General rule

You should change down

- to accelerate more quickly
- if your speed drops.



Smooth gear changing

Smooth gear changes are a mark of good driving. Take your time and think ahead.

Selective/block gear changing

Missing out gears

The flexibility of modern engines and the efficiency of braking systems and gearboxes often makes it unnecessary to change into every gear when changing up and down the gearbox.

Missing out gears at the appropriate time will give you more time to concentrate on the road ahead and allow you to keep both hands on the steering wheel for longer.

Changing down

As a general rule, it's preferable and safer to brake to the desired speed and then change down into the appropriate gear. It might be necessary to maintain a light pressure on the footbrake while changing down.

Changing up

There are many occasions when missing out gears while changing up is desirable; however, don't accelerate too fiercely or for too long in the lower gears.

This

- uses much more fuel
- could damage your engine
- could cause wheelspin and loss of control.

How many gears to miss out

It depends on the individual vehicle and the road and traffic conditions.

It's possible to miss out various gears but the most common examples when changing down are

- fifth to third
- fourth to second
- third to first.

The most common examples when changing up are

- first to third
- second to fourth
- third to fifth.

See also section 17 on ecosafe driving.



Coasting

Coasting means that, although the vehicle is moving, it's not being driven by the engine. This occurs either when the clutch pedal is held down or when the gear lever is in the neutral position.

Coasting for any distance is wrong because

- it reduces the driver's control of the vehicle
- you might have difficulty engaging a gear if something unexpected happens
- it almost certainly leads to the vehicle gathering speed when travelling downhill. It means harder braking and it removes the assistance of engine braking in a low gear.

Each time you change gear you coast a little; this is unavoidable, but it should be kept to a minimum.

Over-run

If there's only light pressure on the accelerator pedal when the vehicle is travelling at speed, the engine may not appear to be 'driving' the vehicle.

This is known as travelling on the over-run and shouldn't be confused with coasting. There's no loss of control, because the vehicle is still in gear and either engine braking or acceleration are available immediately.

Slipping the clutch

This is holding the clutch pedal partially down so that the clutch isn't fully engaged. This allows the engine to spin faster than if it were fully engaged and is often necessary when manoeuvring at slow speeds.

Slipping the clutch to compensate for being in too high a gear at a low speed is bad driving practice and should be avoided. This can result in excessive wear of the clutch.

Judgement

As you become more proficient, you'll be able to judge exactly the gear you need for the speed you intend and the manoeuvre you're planning.

➡ Signalling

Signals are normally given by direction indicators and/or brake lights. There are occasions when an arm signal can be helpful.

It's important that you use the correct signal.

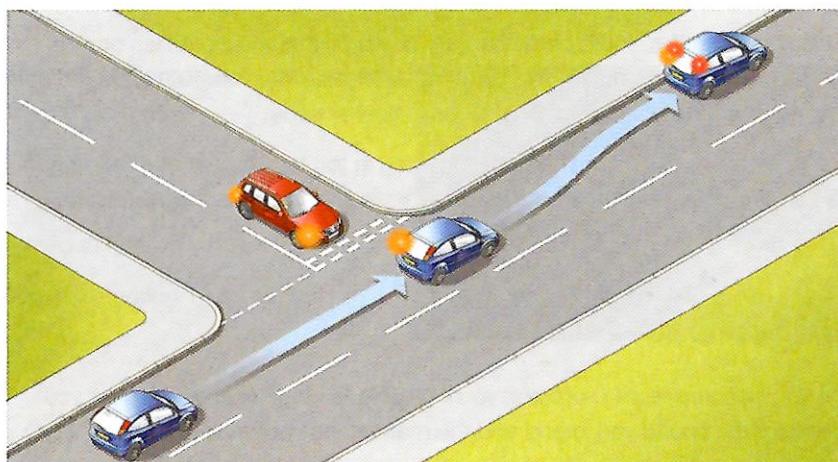
Use signals

- to let other road users, including pedestrians, know what you intend to do
- in good time and for long enough to allow other road users to see the signal and act upon it.

Signalling too soon can confuse rather than help – for example, when there are several side roads very close together.

Signalling too late can cause vehicles behind you to brake hard or swerve.

Watch out for situations that call for special timing in signalling. For example, when you signal to pull up on the left, make sure there isn't a junction just before the place you intend to stop. If you signal left too soon, a driver waiting at that junction might think you intend to turn left. Delay signalling until you're in a position where your signal can't be misunderstood.



Unnecessary signals

A signal might not be necessary where there's no one to benefit from it, or where the signal could confuse other road users. Consider whether a signal is necessary before

- moving off
- pulling up
- passing stationary vehicles, when you can position early and maintain a steady course.

Don't

- signal carelessly
- wave pedestrians across the road
- fail to check that the signal is cancelled after your movement is completed
- mislead other road users. Always use the correct signal.

REMEMBER, Mirrors – Signal – Manoeuvre.



Arm signals

Nowadays, arm signals are seldom used. However, there are occasions when you might need to use one.

Approaching zebra crossings

When yours is the leading vehicle, using an arm signal when slowing down or stopping can be helpful.

This not only tells traffic behind you that you intend to stop, but also tells approaching traffic and waiting pedestrians, who can't see your brake lights.

Turning right

Use an arm signal when necessary

- to emphasise a difficult right turn on a road carrying fast-moving traffic
- to turn right just after moving out to pass a stationary vehicle.

Stopping

Use the 'slowing down' arm signal where any confusion to other road users might be caused by a 'left turn' indicator signal.

Signalling with brake lights

Brake in good time. If necessary, lightly press the brake pedal early or more than once, to show your brake lights to traffic behind you.



Using the horn

If you're driving safely and anticipating correctly, you'll seldom need to use the horn.

Only use it if you think other road users haven't seen you or can't see you.

On a blind bend or narrow winding road, the horn might help pedestrians and other road users who can't see you coming.

Warning others of your presence doesn't relieve you of the responsibility to drive safely. Always drive with caution.

Don't sound your horn

- to reprimand other drivers
- aggressively
- in a built-up area between 11.30 pm and 7.00 am or while you're stationary at any time, unless a moving vehicle creates a danger.

Flashing your headlights

Flashing the headlights has the same meaning as sounding the horn and can be used in situations where the horn might not be heard or at a time when the horn shouldn't be used.

Avoid flashing your headlights to

- instruct other drivers
- reprimand another road user
- intimidate a driver ahead.



Sometimes you may need to move around an obstruction where the view ahead is restricted. Flashing your headlights as you pass can help any approaching driver to see you.

Other drivers flashing their headlights

Some drivers flash their headlights for a variety of reasons, including

- inviting you to pass before them
- thanking you for your courtesy
- warning you of some fault with your vehicle
- telling you your headlights are dazzling them.

When other drivers flash their headlights, the signal

- might not mean what you think
- might not be intended for you.

Make sure you know their intention before you act on the signal.

REMEMBER, flashing of headlights might not be an invitation. The other driver might have flashed someone else or have flashed accidentally.



→ Moving off at an angle

Use the same steps as for moving off straight ahead – see 'Moving off', earlier in this section.

Before moving off, ask yourself these questions

- At what angle should I move out?
- How far will this take me into the road?

Your decision will depend on

- how close you are to the vehicle or object in front
- how wide the vehicle ahead is
- oncoming traffic.

Your window pillar can obstruct your view ahead. Make sure there's nothing in the area hidden by this obstruction.



Watch out for other vehicles behind and signal, if necessary, then

- look over your right shoulder
- release the parking brake as you ease the clutch pedal up. The vehicle will begin to move. Tight clutch control is needed, so keep the clutch pedal at or just above the biting point
- give yourself time to complete the amount of steering you need to clear the vehicle in front
- release the clutch pedal smoothly when your vehicle is clear of the obstruction
- if you're steering around a vehicle, allow room for someone to open a door
- move out slowly, straighten up, and be ready to brake; a pedestrian might step out from the other side of the parked vehicle
- check your mirrors when you've moved off.

→ Moving off on hills

Moving off uphill

Your vehicle will want to roll back. To avoid this you must use the accelerator, clutch and parking brake together.

Much of the drill for moving off uphill is the same as for moving off on the level.

- With your left foot, press the clutch pedal down and hold it down.
- Move the gear lever into first.
- With your right foot, press the accelerator further than you would when starting on the level and hold it perfectly steady. The amount will depend on how steep the hill is.
- Bring the clutch pedal up to the biting point, which will be slightly higher than when you're moving off on the level.
- Make your safety checks, use your mirrors and look round over your right shoulder to check the blind spot.
- Signal if necessary.
- Look round again if necessary.
- Lift the parking brake and release the button while you press the accelerator a little more. How much acceleration you need depends on the steepness of the hill.
- Let the clutch up a little more, until you feel and hear the engine trying to move the vehicle.
- Release the parking brake smoothly.
- Gradually press the accelerator as the vehicle begins to move, and bring up the clutch pedal smoothly.

Some vehicles are fitted with hill-start controls that are designed to stop a car from rolling away when on a gradient. If your vehicle is fitted with such a device, consult your vehicle handbook and follow the manufacturer's guidelines.



Controlling the parking brake and clutch

This requires good timing. If you release the parking brake too soon, the vehicle will roll back.

The vehicle will stall if

- you release the parking brake too late
- you bring up the clutch too quickly or too far
- you don't use enough acceleration.

Practise the steps until you've mastered the technique. Then practise moving off uphill from behind a parked vehicle and at an angle without rolling backwards.

REMEMBER

- Allow a safe gap in any traffic because your vehicle will be slower pulling away and building up speed.
- Don't cut across or block traffic coming uphill.

Moving off downhill

This routine is simpler than moving off uphill because the weight of the vehicle helps you to move away.

The aim is to prevent the vehicle from rolling forward down the hill while moving away.

- Press the clutch pedal down fully.
- Engage the appropriate gear for the steepness of the hill. (This could be second gear.)
- Apply the footbrake.
- Release the parking brake, keeping the footbrake applied.
- Check mirrors. Look round just before you move off to cover the blind spots.
- Signal if necessary.
- Only move away when you're sure it's safe to do so.
- Look round again if necessary.
- Release the footbrake and release the clutch pedal smoothly as the vehicle starts to move.

REMEMBER

- Use the right gear for the steepness of the hill to give you more control.
- Drivers coming downhill will need more time to slow down or stop.
Again, leave a large enough gap before pulling away.



Section six

Traffic signs

This section covers

- The purpose of traffic signs
- Signs giving orders
- Signs giving warning
- Signs giving directions and other information
- Waiting restrictions
- Road markings
- Traffic lights
- Traffic calming
- Level crossings