

It is often under hard acceleration and fast gear changes when a driver grabs the wrong gear or misses a gear, making an awful noise, creating a lot of embarrassment and potentially damaging the car.

CHANGING GEARS IN A MANUAL ("Stick Shift")

Putting your hand on top of the gear selector and stirring the pot is a technique that will surely result in many missed gear changes.



Likewise changing gears with only a finger or two just doesn't cut it as good driving.

Sometimes when down-changing from fifth in many cars a driver may inadvertently try and select reverse instead of fourth gear.

Thankfully with some cars the shift pattern will not allow reverse to be selected accidentally without returning to neutral first.

A better gear changing technique drivers can use which is applicable to daily driving is to cup the hand when changing gears, so that gears are directed into the right position.



To up-change from Neutral, turn your left hand over, cup the gear knob gently and smoothly push across and up to select first, to change to second reach across with your hand turned over, cup the gear knob using your fingers to push down, to change up again keep your hand right-way up and cup the gear knob gently and smoothly push to third using your palm, to select fourth cup your hand around and use your fingers to direct from behind as you pull down, to go from fourth to fifth gear, use the same technique as from second to third.

Using this method to up or down change gears is smooth and reliable.

CHANGING GEARS IN AN AUTO

In many smaller cars the automatic transmission has 4 forward gears and one reverse gear. The driver uses the gear selector lever to set the transmission for parking, reversing, neutral or forward gears.

This selector is equipped with a lock button on the side to avoid inadvertently selecting the wrong gear.

When parked and stationary, P for Park is selected. In this setting the transmission locks to prevent the vehicle from moving. This setting compliments the use of the park brake. The engine only be started from this position or neutral, it cannot be started in a gear.

To move from Park to select another setting, the button must be used. This safety feature helps prevent unwanted or accidental vehicle movement.



Using the button R for Reverse can be selected, though this should only be done when the vehicle is completely stopped. The driver can without using the button then select N for Neutral. Neutral disengages the transmission allowing the vehicle to be pushed or roll freely. It is not recommended to select Neutral when driving, especially not when going down hill nor under heavy braking.

Again without using the button the selector can move from Neutral to D for Drive. This position allows the forward gears to change up or down depending on the speed of the vehicle and the position of the accelerator. For example under heavy acceleration the transmission will hold the lower gear until the optimum up-shift point is reached or the driver eases off the accelerator. Under light acceleration gears will change earlier to improve economy.

In some situations the driver can without depressing the selector button change to the 2 setting. This is not just second gear but rather will allow the gears to change between first and second gear only.

This position is used for extra power when driving up steep gradients for lower speed overtaking or to provide engine braking when descending prolonged steep gradients.

The 2 setting should not be used for braking, like before entering a corner.

To prevent inadvertently selecting first gear at high speeds to change into L for Low the selector button must be used. Selecting Low holds the transmission into low gear for driving up or down very steep slopes.

When moving up from Low the selector button is not required when moving to 2, Drive or the Neutral position. The instrument panel of many cars also indicates which setting has been selected.

Some vehicles will also have a power and economy switch on the centre console. Use economy whenever possible for normal driving.

Use Power only for sporty driving or when you need more engine power, such as driving in mountainous areas, towing or to overtake another vehicle in higher speed zones.

In many modern automatics the 4th gear is often an overdrive gear, used for highway driving and/or good fuel economy.

In some vehicles there is an overdrive control switch beneath the selector lock button. During normal driving the overdrive switch should be left in the pressed-in position.

This will allow automatic gear shifting from 1st to 4th gear with the selector lever in Drive.

When quick acceleration or when going up or down long steep gradients, the overdrive button can be pressed to cancel the overdrive function.

The overdrive off indicator lamp on the instrument panel will illuminate and automatic shifting will only be performed from 1st to 3rd gear.