

## Ignition/Steering Lock (Petrol Models)

The ignition switch also incorporates the steering column lock. The key can only be removed in position '0'.

The face of the switch is marked as follows:-

- 0 = Steering column locked – Ignition off
- I = Steering column unlocked – Ignition off
- II = Ignition on
- III = Starter motor engaged

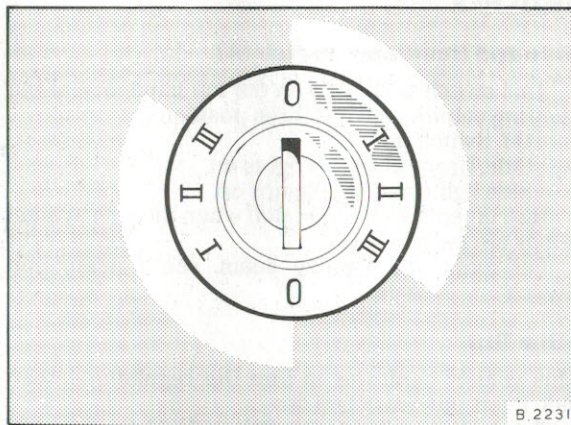
## Starter/Steering Lock (Diesel Models)

The starter switch also incorporates the steering column lock and a fuel cut-off switch. The key can only be removed in position '0'.

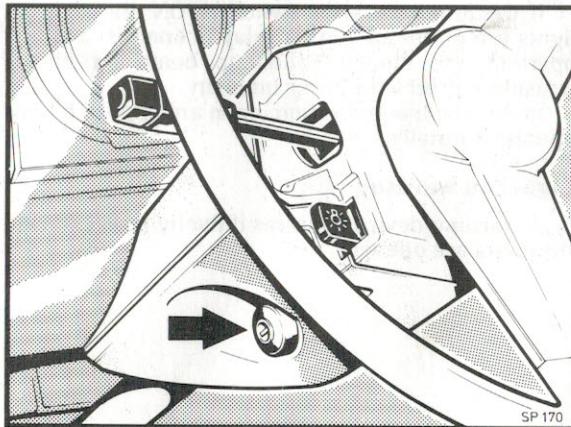
The face of the switch is marked as follows:-

- 0 = Steering column locked – auxiliaries off, fuel off
- I = Steering column unlocked – auxiliaries off
- II = Auxiliaries on, fuel on
- III = Thermostart (heater) on

Turn key through the III position against its stop to engage starter motor.



*Ignition/starter switch*



*Switch location*

## Warning Light Checks

Before starting ensure that the vehicle is in neutral and the handbrake is applied. With the cab door open, check that the brake fluid level warning light is on. The light should go out when the door is closed.

Turn the starter key to position II and check that the 'no charge', oil pressure and low vacuum/air warning lights are illuminated.

Temporarily release the handbrake when the low vacuum/air warning light should extinguish. If it does not, refer to the vacuum/air gauge reading, and to paragraphs given under "Brake Warning Light".

## Petrol Model

### *Starting from cold (Automatic Choke)*

Switch on the ignition and depress the accelerator pedal once, all the way to the floor and release it.

Operate the starter motor (through position III). As soon as the engine starts, the oil warning and 'no charge' warning lights must go out.

Once the engine has been operating for about 30 seconds depress the accelerator pedal briefly to allow the choke to return to the fast idle position.

If, when cold, lukewarm or warm, the engine does not start at the first attempt, depress the accelerator pedal to the floor and keep it in this position whilst operating the starter.

## Diesel Models

### *Starting from cold*

With the throttle fully depressed turn the starter key to the heater position (III) and hold for 15-20 seconds. Turn the key through the III position against the spring pressure to engage the starter motor. Release the key as soon as the engine starts and ease the throttle.

If the engine does not start within 15 seconds return the key to the heater position for a further 10 seconds and try again. Should the engine fire but not run repeat the operation for a third time.

### *Starting from warm*

To start a warm engine it should not be necessary to use the heater. With the throttle fully depressed turn the starter key clockwise to its fullest extent.

Release the key as soon as the engine starts and ease the throttle.

If the engine fails to start ensure that the starter has stopped revolving before trying again.

## STOPPING THE ENGINE

1. Remove your foot from the accelerator pedal.
2. Switch starter/ignition switch to the 'OFF' position.

**NOTE. When stopping T/charged engines always allow the engine speed to return to idle before stopping it. Never stop the engine immediately from full throttle.**

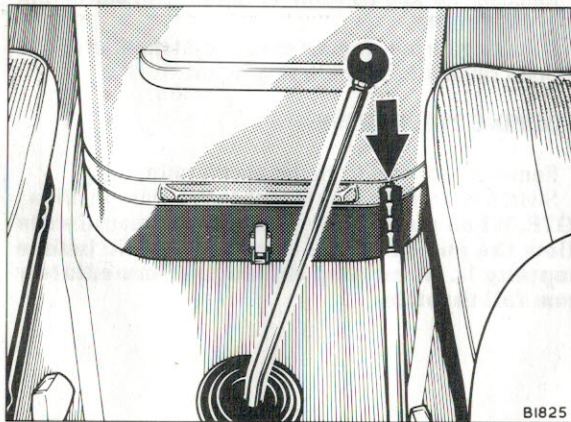


## Handbrake (vacuum/hydraulic models)

The handbrake is situated at the side of the drivers seat adjacent to the gear lever. It operates on the rear wheels and is completely independent of the hydraulic system.

Apply the brake firmly but, do not snatch or wrench the lever as this will strain the linkage and make it difficult to release.

When releasing the brake, lift the lever slightly to ease the pressure of the pawl in the ratchet, press the pawl release button on the end of the lever and then move the lever fully downwards.



Handbrake

## Parking Brake (air/hydraulic models)

The parking brake on the air hydraulic models operates on the rear wheels only.

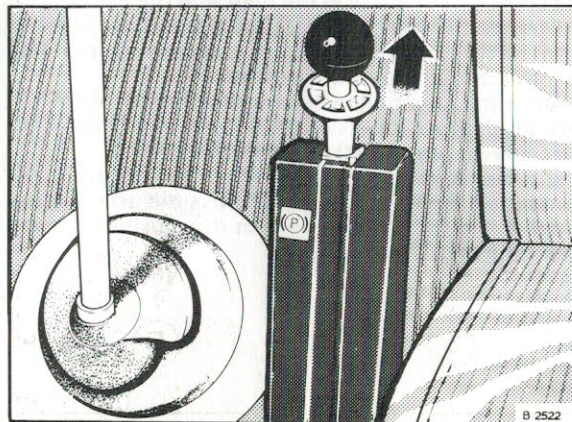
To engage the parking brake pull the handle up making sure that it locks in the 'on' position. To release, lift the locking device out of engagement and then lower the lever to the 'off' position.

### WARNING

#### Parking Brake Application

Except in cases of extreme emergency, only apply the parking brake after the vehicle has been brought to rest.

FAILURE TO OBSERVE THIS INSTRUCTION  
COULD RESULT IN HANDBRAKE FAILURE.



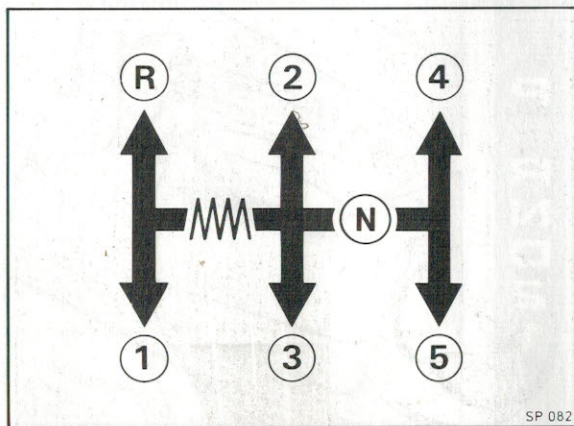
Parking brake

### Gearchange Lever

The gear positions are as illustrated below. Always move off from rest in first gear and then smoothly through each successive gear. Select the next highest gear as soon as road speed is suitable.

When selecting first or reverse on the five speed unit it is necessary to overcome the bias spring pressure acting on the gear lever.

Remember that fuel economy can be improved by sensible use of the gearbox.



SP 082

Manual gear change

### Running in

Maximum load can be applied to the diesel engines from new as soon as the oil reaches operating temperature. The petrol engine requires the usual running in procedures. However, remember that other major units, gearbox, rear axle and tyres and brakes require care during the first 500 to 1000 miles in order to reach full potential.

### WARNING

#### Brake Warning Light and Buzzer

Under no circumstances should the vehicle be driven with either the warning light on or the buzzer sounding.

If the warning devices should operate whilst driving the vehicle, it should be brought to a halt as soon as safety permits.



## AUTOMATIC TRANSMISSION

The automatic transmission greatly simplifies driving since all gear changes are made automatically. This eliminates the need for a clutch and a gearshift lever.

Automatic gearchanges are made at speeds which are relative to road speed and throttle opening. Forced throttle and Kickdown techniques provide the driver with a degree of gear control and, in addition, he may also control his gearchanging by use of the gear selector lever.

All these techniques are described in the following pages.

### Selector positions

#### 1 – Automatic Drive

This position is normally intended to be selected from rest when the vehicle is travelling on rough ground, descending or ascending steep hills.

With the transmission in top gear moving the selector lever from 'D' to '1' will initially cause a downshift to second gear, followed automatically by a downshift to first gear as the vehicle speed is reduced. Upchanges will not occur until gear lever is moved into 2 or D.

#### 2 – Automatic Drive

This selector position is intended for use on long down grades to provide additional engine braking. Moving the selector lever from 'D' to '2' with the transmission in top gear will cause an immediate downchange to second gear. If the speed drops sufficiently the downchange will go into first gear.

#### D – Automatic Drive

This selector position is used for all normal driving conditions. The transmission starts off in first gear and automatically changes up at given road speeds or according to the position of the throttle pedal.

#### N – Neutral

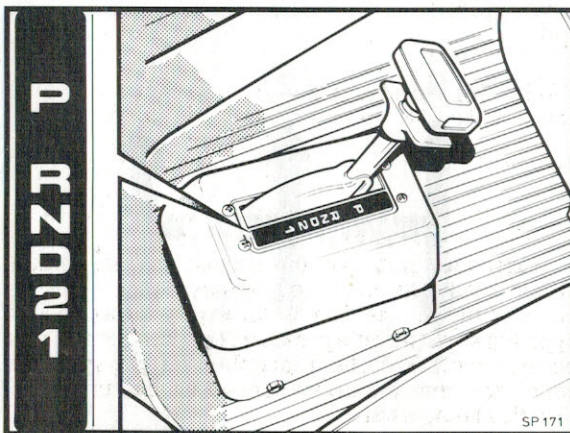
With the selector in 'N', no power is transmitted to the rear wheels.

#### R – Reverse

This position must only be selected with the vehicle stationary, engine idling and brake applied.

#### P – Park

This position, as well as providing a neutral, also locks the transmission so that the rear wheels cannot turn, e.g. when parking on a steep gradient. 'P' must only be selected when the vehicle is stationary.



SP 171

Auto. transmission selector

**IMPORTANT NOTES**

1. The engine can only be started with P or N selected.
2. Before selecting the reverse or forward drive ensure the brakes are applied.
3. The vehicle will 'creep' when a drive gear is selected and the brakes are released.
4. Do not select R or P whilst the vehicle is moving.
5. Always select P when working on the vehicle with the engine running.
6. When in D avoid selecting 2 if road speed is greater than the maximum upshift speed to third gear. This will prevent over speeding the engine.
7. See "Towing".

**Driving**

Selector lever operation  
lift the collar from:  
P to R, D to 2, 2 to 1  
and  
N to R, R to P.

NOTE: A higher lift is required  
between P and R, R and P.

**Starting**

With the brakes applied and the selector in N or P start the engine as previously described.

Apply the footbrake and release the handbrake. When ready to move off release the footbrake allowing the vehicle to move forward at the same time applying slight throttle pressure. Up-changes will now occur automatically but remember that the speeds at which the changes occur depend on the amount of throttles being used.

**Hill Starting**

This is similar to the method described above except that the footbrake is applied with the left foot whilst accelerating slightly with the right foot to prevent any backward movement.

**Forced Throttle**

Forced throttle is achieved by depressing the accelerator down through its hard spot. In this position, and starting from rest, gear changes will not occur until maximum road speed for each gear is reached, i.e. maximum acceleration.

**Throttle Controlled Change Down**

'Kickdown' is another expression used for this technique.

By pressing the accelerator sharply to its stop (hence 'Kickdown'), and provided that road speed is less than the next lowest gear maximum, an immediate change down will occur. If road speed is low enough when the kickdown is made it is possible that a change down to first gear may occur.

**Manually Controlled Changes**

Full up-change control is available should it be desired by moving the selector lever progressively through the selector gate to the 1, 2 and D positions. However, when employing the same method of changing down (D, 2, 1), ensure that the road speed is within the range of the lower gear before making the change thus preventing unnecessary stress on the transmission or overspeeding the engine.



## **Emergency Starting**

**It is not possible to tow or push start a vehicle fitted with this type of automatic transmission.**

## **Towing**

### *Transmission Inoperative*

Tow the vehicle with a rear end pickup or disconnect the propellor shaft.

### *Transmission Operating Correctly*

The vehicle may be towed for short distances in N (neutral) with rear wheels on the ground at a speed not to exceed 48 kph (30 mph). If the vehicle is to be towed for extended distances, it must be done with a rear end pickup or the propellor shaft disconnected, because the transmission receives lubrication only when the engine is running.