#### SWITCHING ON THE IGNITION

To turn on the ignition without starting the engine:-

- Do not depress the brake/clutch pedal,
- Press the START/STOP button and hold until the warning lamps illuminate, then release the button.

 $(\mathbf{n})$ 

If the brake/clutch pedal is applied when the start/stop button is pressed, the engine will start.

#### **ENGINE STARTING**

- Never start the engine, or leave it running, when the vehicle is in an enclosed space. Exhaust gasses are poisonous and can cause unconsciousness and death if inhaled.
- If the engine fails to start, do not continue cranking as this will discharge the battery. It may also damage the catalytic convertor due to unburnt fuel passing through the exhaust.

**Note:** For diesel engined vehicles the delay period before cranking begins will be longer in low ambient temperatures due to extended glow plug operation. During this extended delay the clutch pedal (manual transmissions) or brake pedal (automatic transmissions) must remain depressed.

The diesel engine glow plug warning lamp will remain illuminated while the glow plugs

are operating.

## ENGINE STARTING: AUTOMATIC TRANSMISSION

- 1. A valid Smart Key must be inside the vehicle.
- 2. Make sure the gear selector is in **P** or **N**.

- 3. Firmly depress the brake pedal.
- 4. Press and release the start button. The engine will crank automatically until it starts. For diesel engined vehicles there may be a delay while the glow plugs warm up, then the engine will crank automatically until it starts.

## ENGINE STARTING: MANUAL TRANSMISSION

**Note:** Do not press the accelerator pedal when starting the engine.

- 1. A valid Smart Key must be inside the vehicle.
- 2. Fully depress the clutch pedal.
- Press and release the start button. For diesel engined vehicles there may be a delay while the glow plugs warm up, then the engine will crank automatically until it starts.

#### **IF THE ENGINE FAILS TO START**

**Note:** If the engine fails to crank when the START/STOP button is pressed and there has been a recent collision, seek qualified assistance.

If the engine fails to crank, or fails to start, consult your Dealer/Authorised Repairer.

#### **Diesel engines:**

If the engine persistently fails to start, make sure the transmission is in  $\mathbf{P}$  or  $\mathbf{N}$  (neutral for manual transmission vehicles) then press the START/STOP button (with the brake pedal applied). Keep the START/STOP button and the brake pedal pressed until the engine starts, then release.

If the engine still fails to crank, or fails to start consult your Dealer/Authorised Repairer.

#### SWITCHING OFF THE ENGINE

Before switching off the engine, ensure that the vehicle is parked safely with the park brake applied.

1. Select **P** for automatic transmission, or neutral for manual transmissions.

**Note:** If any other gear is selected at switch off, the rotary selector will automatically move to **P** before retracting into the centre console.

2. Press the START/STOP button.

**Note:** The park brake will apply automatically if it has not already been applied.

## SWITCHING OFF THE ENGINE WITH THE VEHICLE MOVING

- ▲ It is not advisable to switch off the engine while the vehicle is moving. However, should such a situation arise, then the following procedure applies.
- Press and hold the engine START/STOP button for 2 seconds, or;
- Press the engine START/STOP button twice within 2 seconds.

In either case, the warning **Engine Stop Button Pressed** will be displayed in the message centre.

#### **ROLLING RE-START**

If the engine is switched off while the vehicle is moving, a rolling re-start can be initiated.

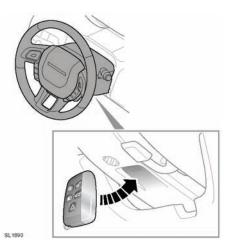
Automatic transmission - select neutral ( $\mathbf{N}$ ) and then press the engine START/STOP button. When the engine re-starts, select transmission position  $\mathbf{D}$ .

Manual transmission - depress the clutch and then press the engine START/STOP button. When the engine re-starts, select an appropriate forward gear.

#### **KEYLESS START BACKUP**

If the vehicle has been unlocked using the emergency key blade or the Smart Key is not detected by the vehicle, it will be necessary to use the keyless start backup to disarm the alarm and start the engine.

The keyless start backup can only be used when the message **Smart Key Not Found Refer to Handbook** is displayed in the message centre.



Position the Smart Key against the underside of the steering column cover with the buttons facing downwards.

With the brake (Auto) or clutch (Man) pedal depressed, press and release the START/STOP button to start the engine.

When the engine starts, you no longer need to hold the Smart Key beneath the steering column.

**Note:** If the Smart Key is not recognised or the engine still fails to start, consult your Dealer/ Authorised Repairer.

*Note:* If the message *Smart Key Not Detected* is displayed, ensure that the key is being held in the correct position and try again.

#### STOP/START (MANUAL TRANSMISSION ONLY)

The Stop/Start system has been designed to improve fuel efficiency. The system is automatically activated when the ignition is switched on.

When the engine has been stopped by the stop/start system, the ECO icon will illuminate.



When the vehicle comes to a stop, neutral is selected and the clutch is fully released, the engine

automatically switches off.

When the clutch is depressed prior to selecting a gear, the engine automatically restarts.

#### CONDITIONS PREVENTING AUTOMATIC ENGINE STOP

The engine will not automatically stop if:-

- the external temperature is below approximately 0°C (32°F)
- the external temperature is above approximately40°C (104°F)
- engine has not reached operating temperature
- driver's seat belt is not fastened
- driver's door is not fully closed
- the driver's foot is on either the clutch or accelerator pedals
- climate control system demand is high
- battery charge is low
- the DPF is regenerating

• HDC or a Terrain Response special program are selected

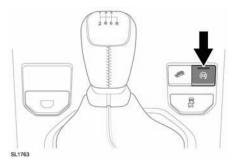
**Note:** The stop/start system is disabled when a trailer electrical connection is made.

# CONDITIONS CAUSING AUTOMATIC ENGINE RESTART

The engine will automatically start if:-

- climate control system demand increases
- the vehicle's speed reaches approximately 4km/h (2.5mph)
- HDC or a Terrain Response special program are selected
- battery charge becomes low
- brake vacuum has been reduced (eg using the brake pedal repeatedly with the engine off)

### DISABLING STOP/START



To switch the system off (preventing automatic stop/start) press the **ECO** switch. The LED indicator will extinguish to confirm that the system is off.

**Note:** The engine will restart automatically If the switch is pressed to disable the system, while an automatic engine stop is in progress.

If the LED indicator fails to illuminate at start up, a system fault may be present. Contact your Land Rover dealer for assistance.

#### ECO STALL RECOVERY

In the event that the engine stalls, it can be restarted by fully depressing the clutch pedal.

**Note:** Automatic stall restart will only operate once. If the engine is stalled a second time the engine must be restarted normally.

#### EMISSION CONTROL SYSTEM

Land Rover vehicles are fitted with emission and evaporative control systems. In many countries it is unlawful to tamper, modify or replace such equipment and legal penalties apply if the laws are flouted.

Land Rover Dealers/Authorised Repairers are properly equipped to perform repairs and to maintain these systems.



# Exhaust fumes contain poisonous substances which can cause unconsciousness and may even be fatal.

- Do not inhale exhaust gases.
- Do not start or leave the engine running in an enclosed unventilated area.
- Do not drive the vehicle with the taildoor open.
- Do not modify the exhaust system.
- Exhaust leaks should be repaired immediately.
- If exhaust fumes are thought to be entering the vehicle, have it investigated immediately.

**Note:** Running out of fuel can result in a misfire. This can cause damage to the emission control system.

#### DIESEL PARTICULATE FILTER (DPF)

Diesel vehicles equipped with a particulate filter have more efficient emission control. The particles in the exhaust gases are collected in the filter during normal driving.

When a DPF message is displayed, the filter requires a regeneration cycle to clean itself. This requires the engine to have reached normal operating temperature. Regeneration takes place automatically at an interval of approximately 300-900 km (190-560 miles) depending on driving conditions.

#### **Regeneration procedure**



The regeneration procedure produces high temperatures in the DPF. Heat can be felt radiating from beneath the vehicle, which is normal. The heat generated could be sufficient to start a fire when in close proximity to combustible material such as long dry grass, paper etc.

Regeneration normally takes 10-20 minutes and is best achieved if the vehicle is driven steadily at speeds between 60km/h (40mph) and 112km/h (70mph).

Regeneration may take longer if the average speed is reduced to 50km/h (30mph).

#### Driving short distances or in cold weather

In these conditions the engine may not reach normal operating temperature. Regeneration of the diesel particulate filter will not take place and the filter will not be cleaned. If the filter requires regeneration but current driving style is not appropriate to perform it, a warning triangle will illuminate on the instrument panel and the message **DPF Full. See manual**, will be displayed. This does not indicate a fault condition. Start regeneration by driving the

## Starting the engine

vehicle, preferably on a main road or motorway. The vehicle should be driven for approximately 20 minutes more.

When regeneration is complete, the warnings will clear.