SAFETY PRECAUTIONS

WARNINGS

Petroleum gases are highly flammable, have a low flash point and are explosive, especially in confined spaces. Avoid exposing the gases to any potential source of ignition as the resulting fire and explosion may cause serious injuries and/or death.

Only use containers specifically designed for carrying fuel and always remove them from the vehicle to fill them. Failure to do so may result in spillage and cause a fire.

Switch off the engine when refuelling, as it is both a source of extreme temperatures and electrical sparks. The resulting fire and explosion may cause serious injury and death.

If your vehicle is equipped with a fuel burning heater, ensure it is switched off when refuelling. The resulting fire and explosion may cause serious injury and death.

Switch off any personal electronic devices such as mobile phones, or music players. They have the potential to cause electrical sparks. The resulting fire and explosion may cause serious injury and death.

Do not smoke, use a naked flame, or cause sparks. The resulting fire and explosion may cause serious injury and death.

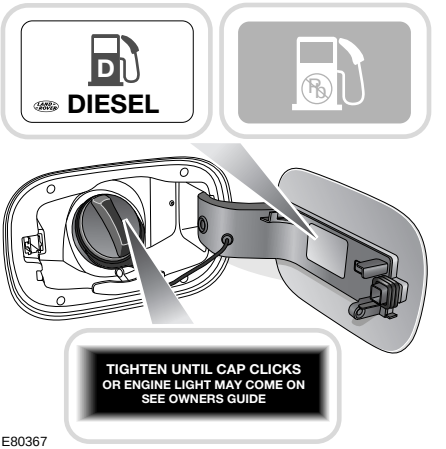
Do not overfill the fuel tank. Overfilling may cause spillage when the vehicle is driven. Spillage may also occur if the fuel expands in high ambient temperatures.

FUEL SPECIFICATION

CAUTIONS

Only use high quality fuel as using a lower quality can cause damage to the engine, fuel and emission control systems.

Fuel system cleaning agents should not be used, unless approved by Land Rover. Unapproved products maybe harmful to fuel system components on your vehicle.



E80367

The correct fuel specification for your vehicle is shown on the inside of the fuel filler flap.

FUEL FOR PETROL ENGINES

CAUTION

Do not use leaded fuels, lead substitutes, or fuel additives. Doing so can cause damage to the engine, fuel, catalytic converter and emission control systems.

Unleaded fuel must be used for the emission control system to operate properly. Use of unleaded fuel will also reduce spark plug fouling, exhaust system corrosion and engine oil deterioration.

Octane rating

It is recommended that you use unleaded fuel conforming to specification EN 228 and having an octane rating of 95 RON (Research Octane Number) or higher. However, you may also use unleaded fuel with a lower RON, but performance will be reduced. The minimum octane rating for fuel to be used is 90 RON.

During manufacture, engines are tuned to suit the fuel supplies commonly available in the country for which the vehicle is destined. However, if a vehicle is later exported to a different country, or is used to travel between different territories, you should be aware that the octane rating (RON) and type of petroleum available may not be compatible with the engine specification. If in doubt seek advice from the territory concerned.

Using unleaded fuel with a lower octane rating than recommended, can cause persistent, heavy engine knock (a metallic rapping noise). If severe, this can lead to engine damage.

If a heavy knock is detected, even when using fuel to the recommended octane rating, or if you hear knock while holding a steady speed on level roads, consult your Dealer/Authorised Repairer to have the problem corrected. Failure to do so is misuse of the vehicle, for which Land Rover is not responsible.

Note: *Occasional, light, engine knock experienced while accelerating or climbing hills is acceptable.*

ALTERNATIVE FUELS FOR PETROL ENGINES

Ethanol fuels

CAUTIONS

This vehicle is not suitable for use with fuels containing more than 10% Ethanol.

Do not use E85 fuels (85% Ethanol content). Equipment necessary for the use of fuels containing more than 10% Ethanol is not fitted to this vehicle. If E85 fuels are used, serious engine and fuel system damage will occur.

Fuels containing up to 10% Ethanol (grain alcohol) may be used. Ensure the fuel has octane ratings no lower than those recommended for unleaded fuel. Most drivers will not notice any operating difference with fuel containing Ethanol. If a difference is detected, the use of conventional unleaded fuel should be resumed.

Methanol

Some fuels contain Methanol (Methyl or wood alcohol). If you use fuels containing Methanol the fuels must also contain co-solvents and corrosion inhibitors for Methanol. Also, do not use fuels that contain more than 3% Methanol even if they contain co-solvents and corrosion inhibitors. Fuel system damage or vehicle performance problems resulting from the use of such fuels is not the responsibility of Land Rover, and may not be covered under the warranty.

Methyl Tertiary Butyl Ether (MTBE)

Unleaded fuel containing an oxygenate known as MTBE can be used provided the ratio of MTBE to conventional fuel does not exceed 15%. MTBE is an Ether based compound, derived from Petroleum, which has been specified by several refiners as the substance to enhance the Octane rating of fuel.

Reformulated gasoline

Several petroleum companies have announced the availability of reformulated fuels. These fuels are specially designed to further reduce vehicle emissions. Land Rover fully supports all efforts to protect and maintain ambient air quality and encourages the use of reformulated gasoline where available.

FUEL FOR DIESEL ENGINES

CAUTIONS

The maximum allowable Bio-diesel mix is 5%, meeting EN 590 specification.

If the fuel tank is accidentally filled with petrol, do not attempt to start the engine. Seek qualified assistance immediately.

The quality of diesel fuel is variable depending on geographical location. Always use premium or the highest quality fuel available in your locality. High quality fuel ensures a longer life for your engine components. Lower grade fuel contains higher levels of Sulphur which is detrimental to engine components, If low quality fuel is used, light coloured smoke may be evident at the exhaust.

Only use Diesel or Automotive Gas Oil (AGO) to EN 590 specification.

Note: *Land Rover vehicles are capable of running with up to a 5% blend of bio-diesel in accordance with European Standard EN590.*

Sulphur content

CAUTION

When a Diesel Particulate Filter (DPF) is fitted the maximum Sulphur content must not exceed 0.005%. Using an incorrect fuel will cause serious damage to the DPF. See **DIESEL PARTICULATE FILTER (DPF)** (page 147).

In some countries diesel will contain higher levers of Sulphur, and will require reduced service intervals to offset the effects on engine components. If in doubt contact a local Land Rover Dealer/Authorised Repairer for advice.

Vehicles without DPF

The Sulphur content of diesel used in Land Rover vehicles without DPF should not exceed 0.3%.

FUEL FILLER

WARNINGS

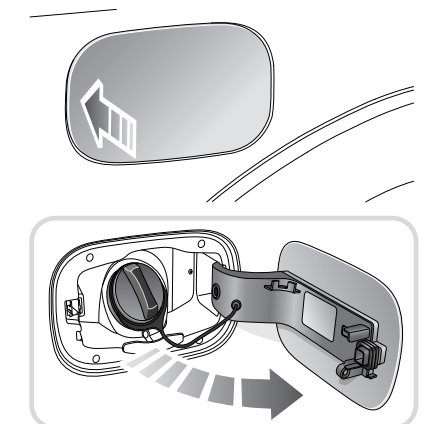
Take careful note of all warnings and instructions given on the label affixed to the inside of the filler flap. Failure to do so may result in injury or death.

Open the fuel filler cap slowly and allow the pressure to release before fully removing the cap to avoid fuel spillage due to rapid expansion.

CAUTION

Do not force the fuel filler flap open, it may fail to close properly and you will need to seek qualified assistance.

The fuel filler is located behind the rear right-hand wheel arch. An arrow on the fuel gauge points to that side of the vehicle.

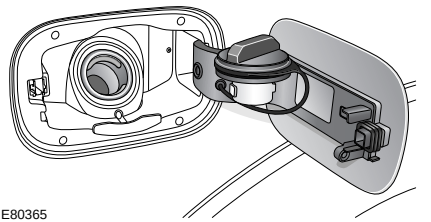


E80364

With the vehicle unlocked, press the left side of the fuel filler flap to open.

The fuel filler flap springs open revealing the filler cap.

Note: *The vehicle must be unlocked using the Smart Key before you can open the fuel filler flap.*



E80365

The filler cap is secured to the vehicle by a strap. For your convenience a holder is provided on the flap to store the cap whilst refuelling.

Note: *When replacing the fuel filler cap, tighten it until it clicks three times. Failure to do so may cause the engine warning indicator to illuminate due to increased evaporative emission levels.*

REFUELLING

WARNING

Do not attempt to fill the tank to its maximum capacity. If the vehicle is to be parked on a slope, in direct sunlight, or high ambient temperature, expansion of the fuel could cause spillage.

CAUTIONS

Do not leave the Smart Key in the vehicle while refuelling. Always lock the vehicle if it is to be left unattended.

Check the fuel pump information carefully to ensure that you are putting the correct fuel into the vehicle. Filling the vehicle with the incorrect fuel can cause serious engine and fuel system damage.

If t he fuel tank is accidentally filled with the wrong type of fuel, do not start the engine. It is essential that you seek qualified assistance. Running the engine can cause serious engine and fuel system damage.

Filling station pumps are equipped with automatic cut-off sensing to avoid fuel spillage. Fill the tank slowly until the filler nozzle automatically cuts-off the supply. Do not attempt to fill the tank beyond this point.

Petrol engine vehicles

The fuel filler neck will accept only a narrow filler nozzle of the type found on pumps that deliver unleaded fuel.

Diesel engine vehicles

The diesel pumps on garage forecourts fill at a maximum of 55 litres (12 gallons) per minute.

If the fuel cuts off as soon as the trigger on the pump is operated, check that the correct fuel has been selected. Immediate cut-off may have been caused by the misfuel protector.

DIESEL MISFUEL PROTECTOR

WARNING

When the misfuel protection device is activated, it could cause petrol to be discharged from the filler neck.

Diesel engine vehicles in some markets are equipped with a misfuelling protection device, incorporated into the fuel filler neck.

The protection device is designed to alert you that the wrong fuel type has been selected. If the narrow filler nozzle fitted to pumps delivering unleaded petrol is correctly inserted (i.e. fully inserted) into the filler neck, the misfuel protector will activate.

The misfuel protection device continually interrupts the fuel flow from the pump, until the mechanism in the filler neck is reset.

When activated, the yellow misfuel protector will be visible in the filler neck. The protection device will need to be reset before the tank can be correctly filled with diesel fuel. This is achieved using the reset tool, located in the luggage compartment.

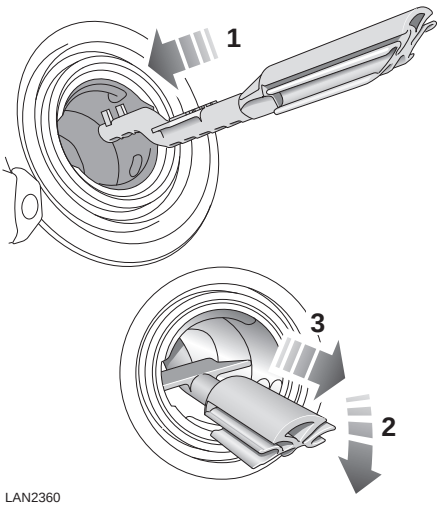
Note: *It is the driver's responsibility to fill the vehicle with the correct fuel. The diesel misfuel protection device only reduces the risk of filling the vehicle with the incorrect fuel.*

CAUTIONS

Using the incorrect fuel can result in major damage to your vehicle's engine and fuel system.

Note: *When refuelling the vehicle using a disposable fuel canister, use a canister designed for diesel fuel where possible. The spout on petrol canisters may activate the misfuel protection device. The protection device may also be activated by fuel pumps with a smaller nozzle than those fitted to standard diesel pumps.*

Resetting the misfuel protection device



LAN2360

Reset the misfuel protection device as follows:

1. Insert the reset tool (with the teeth uppermost) into the filler neck opening, as far as it will go. The triangular section on the reset tool stops on the misfuel protection device at the required insertion depth.
2. Pivot the reset tool handle downwards to engage the teeth into the protection device.
3. Keeping the reset tool handle held down, slowly pull the reset tool out of the filler neck to reset the protection device.

Note: *To ensure that the protection device is correctly reset, check that the yellow misfuel protector is no longer visible in the filler neck before refuelling with diesel fuel.*

After resetting the misfuel protection device, remove the tool from the filler neck and return it to the luggage compartment. If subsequent driveability difficulties are encountered, seek assistance from a Land Rover Dealer/ Authorised Repairer.

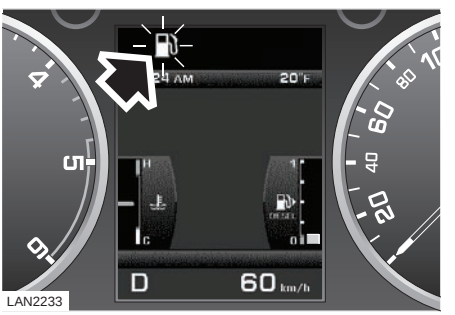
RUNNING OUT OF FUEL

CAUTION

Avoid running out of fuel. Doing so can cause damage to the engine, fuel and emission control systems.

Note: *If the vehicle does run out of fuel, seeking qualified assistance is advisable.*

Note: *If the vehicle runs out of fuel it will be necessary to add a minimum of 4 litres (0.8 gallons) of fuel in order to restart the engine. In some circumstances it will be necessary to drive a short distance, typically 1.6 - 5 km (1 - 3 miles) in order for the vehicles monitoring systems to register the additional fuel.*



LAN2233

When the remaining fuel reaches a minimum of 12 litres (three gallons), the amber low fuel warning indicator illuminates. The remaining fuel should give a range of approximately 80 km (50 miles).

WATER IN DIESEL FUEL SENSOR

If the message **WATER IN FUEL SEE HANDBOOK** is displayed in the message centre, an excessive amount of water has collected in the fuel filter bowl. This excess water needs to be drained from the filter. Seek assistance from a Land Rover Dealer/ Authorised Repairer as soon as possible.

CATALYTIC CONVERTER

WARNING

Exhaust system temperatures can be extremely high - do not park on ground where combustible materials such as dry grass or leaves could come into contact with the exhaust system.

CAUTIONS

Severe damage to the catalytic converter could occur if the engine is stopped for any length of time when being driven through water, where the water level is above the exhaust pipe.

Catalytic converters can be easily damaged through improper use, particularly if the wrong fuel is used, or if an engine misfire occurs.

The exhaust system incorporates a catalytic converter, which converts poisonous exhaust emissions from the engine into environmentally less harmful gases. It cannot, however, remove all harmful exhaust emissions.

FUEL CONSUMPTION

Fuel consumption figures

The fuel consumption figures shown below have been calculated using a standard testing procedure (the new EC test procedure from Directive 99/100/EC), and produced in accordance with the Passenger Car Fuel Consumption (Amendment) Order 1996.

Under normal use, a vehicle's actual fuel consumption figures may differ from those achieved through the test procedure, depending on your driving technique, road and traffic conditions, environmental factors, vehicle load and vehicle condition.

Variant	Urban l/100km (mpg)	Extra urban l/100km (mpg)	Combined l/100km (mpg)	CO2 emissions g/km
V8 Petrol	19.8 (14.3)	10.5 (26.8)	13.9 (20.3)	327
V8 Petrol (Supercharged)	21.8 (13.0)	10.7 (26.3)	14.9 (19.0)	348
V6 Diesel	11.2 (25.2)	8.1 (34.9)	9.2 (30.7)	243
V8 Diesel	14.7 (19.3)	9.0 (30.3)	11.1 (25.4)	294

Urban cycle

The urban test cycle is performed from a cold start and comprises a series of accelerations, decelerations and periods of steady speed driving and engine idling. The maximum speed during the test is 50 km/h (30 mph) with an average speed of 19 km/h (12 mph).

Extra-urban cycle

The extra-urban cycle test is performed immediately after the urban test. Approximately half of the test comprises steady-speed driving, while the remainder is a series of accelerations, decelerations and engine idling. The maximum test speed is 120 km/h (75 mph) and the average speed 63 km/h (40 mph). The test is performed over a distance of 7 km (4.4 miles).

Combined

The combined figure is an average of the urban and extra-urban test cycle results, which has been weighted to take account of the different distances covered during the two tests.

For additional information on fuel consumption figures and exhaust emissions, visit the Vehicle Certification Agency (VCA) website at **http://www.vcacarfueldata.org.uk/**.

Note:

These figures should not be compared with the figures produced using the ECE/EEC procedure previously required by The Passenger Car Fuel Consumption Order 1983. Because of the changes in the test procedure, even the urban figures would differ if the same car were subjected to both tests.