SAFETY PRECAUTIONS

Avoid exposing the fuel gases to any potential sources of ignition, as the resulting fire and explosion may cause serious injuries and/or death.

Switch off the engine when refuelling, as it is both a source of extreme temperatures and electrical sparks.

Switch off any personal electronic devices, such as mobile phones or music players, when refuelling.

PETROL ENGINED VEHICLES

Use high quality fuel that meets the specification defined by EN228 (or the national equivalent).

Do not use leaded fuels, fuels with lead substitutes (e.g., manganese-based), or fuel additives, as these may adversely affect the emissions control systems, and may affect warranty coverage.

Fuel system cleaning agents should not be used, unless approved by the vehicle manufacturer.

OCTANE RATING

3.0L (V6) petrol engine

Jaguar Land Rover Limited recommends the use of premium unleaded fuel with a minimum octane rating of 95 RON to achieve optimum performance, fuel economy and driveability.

2.0L (I4) petrol engine

Jaguar Land Rover Limited requires the use of premium unleaded fuel with a minimum octane rating of 95 RON to contribute to optimum performance, fuel economy and driveability.

If premium unleaded fuel is not available, you may use unleaded fuel with a lower octane rating, down to a minimum of 91 RON but this may reduce engine performance, increase fuel consumption, cause audible engine 'knock' and other driveability problems.

Do not use fuels with an octane rating lower than 91 RON, as severe engine damage may occur.

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

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

If in doubt, seek advice from a Retailer/ Authorised Repairer in the territory concerned.

Super Green Plus 98 RON unleaded fuel (where available) may be used as an alternative to the standard 95 RON unleaded fuel.

ETHANOL

Fuels containing up to 10% ethanol (E5 and E10) may be used.

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

Do not use E85 fuels (85% ethanol content). The 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.

Make sure that 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

Wherever possible, avoid using fuel containing methanol.

Use of fuels containing methanol, may cause serious engine and fuel system damage, which may not be covered under warranty.

METHYL TERTIARY BUTYL ETHER (MTBE)

Unleaded fuel containing an oxygenate known as MTBE can be used, provided that 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.

DIESEL ENGINED VEHICLES

Use only high quality diesel fuel according to EN590 or equivalent.

Jaguar vehicles are capable of running with up to a 7% blend of bio-diesel, in accordance with European Standard EN590. Jaguar Land Rover Limited does not recommend use of a higher blend of bio-diesel.

The quality and specification of diesel fuel varies significantly, depending on geographical location. Jaguar Land Rover strongly recommends the use of premium or highest quality available, fuel.

High quality fuel promotes a longer life for the 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.

Prolonged use of additives is not recommended. Do not add paraffin or petrol to diesel fuels.

If you inadvertently fill the vehicle with petrol instead of diesel, do not attempt to start the engine. Contact a Retailer/ Authorised Repairer immediately.

Jaguar Land Rover Limited can accept no responsibility for any damage caused by running the vehicle with fuel other than those stipulated.

SULPHUR CONTENT

If the vehicle is equipped with a Diesel Particulate Filter (DPF), an exhaust after treatment system, then the maximum sulphur content of the fuel must not exceed 0.005% (50 parts per million), in accordance with EN590-EU4, or World Wide Fuel Charter (WWFC) Cat 3.

The sulphur content of diesel fuel used in Jaguar vehicles not fitted with a DPF, should not exceed 0.3% (3 000 parts per million).

In some countries, diesel fuel will contain higher levels of sulphur, which will require reduced service intervals to reduce the effects on the engine and the exhaust after treatment components. If in doubt, contact a Retailer/ Authorised Repairer for advice.

Using an incorrect specification of fuel will cause serious damage to the engine and/or the exhaust after treatment system, which may not be covered by the vehicle's warranty. If in doubt, contact a Retailer/Authorised Repairer for advice.

DIESEL EXHAUST FLUID (DEF)

In order to comply with exhaust emissions requirements, some vehicles with diesel engines are fitted with a reservoir containing Diesel Exhaust Fluid (DEF). In some markets, DEF is known as AdBlue®.

Note: *It is a legal requirement that the DEF system is used correctly, as detailed in this handbook. It may be a criminal offence to run the vehicle when it is not consuming the correct specification of DEF.*

DEF consumption can vary greatly dependent on driving style and conditions but the average rate of consumption is approximately 1 litre for every 1 600 km.

Note: *When the DEF level becomes low, an appropriate message will be displayed in the Message centre. It is recommended to contact a Retailer/Authorised Repairer to arrange a DEF refill, at the earliest opportunity.*

The Message centre will display a distance countdown, when the DEF level becomes too low. The DEF should be topped up before the distance range falls to zero. Failure to do so, will result in the vehicle failing to start.

DEF can be added to the reservoir by using the top-up procedure; however, a full system refill is still recommended at the earliest opportunity.

Two standard sized non-drip refill bottles, each containing 1.89 litres of fluid, is the minimum amount required to restart the engine. Refill bottles are available from a Retailer/Authorised Repairer.

When refilling, make sure that the correct specification of DEF is used. See **248, LUBRICANTS AND FLUIDS**. Use of incorrect fluid could result in serious damage to the vehicle. Do not start the engine. Contact a Retailer/Authorised Repairer immediately.

Do not use DEF dispensing nozzles as used for commercial vehicles. The system is not designed to be filled under the pressure and flow-rate that such pumps dispense at and, therefore, damage could occur.

DEF can smell unpleasant and stain clothing or upholstery. Take care not to spill the fluid when performing a top-up procedure. In the event of spillage, rinse immediately with clean water.

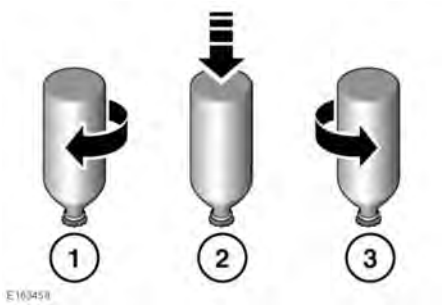
Read the label for safety precautions when using DEF.

DEF must be kept out of the reach of children.

DEF must be stored in the original container, in a cool, dry and well-ventilated area. Observe the manufacturer's storage and handling recommendations.

To perform a DEF top-up procedure:

Locate the DEF reservoir. See **203, FLUID FILLER LOCATIONS**. Remove the reservoir filler cap by turning counter-clockwise.



1. Place the refill bottle over the reservoir filler cap aperture and turn clockwise, until it is locked into position.
2. Press the base of the refill bottle, until all of the fluid has completely drained into the reservoir.
3. Turn the refill bottle counter-clockwise and remove.
4. Repeat the procedure with the second refill bottle.
5. Replace the reservoir filler cap. Tighten by hand, turning clockwise, until a click is heard.

Note: *In extremely low temperatures below -10°C, DEF may freeze in the reservoir making refilling difficult. It is recommended to take the vehicle into a warmer environment, e.g., a garage, to raise the ambient temperature, in order to thaw the DEF, before attempting to top-up. In these conditions, it may take up to 1 hour of driving before the low DEF message will extinguish.*

Note: *When starting and stopping the engine, you may hear the DEF pumps initiating and shutting down. This is normal operation and no cause for concern.*

INSTRUCTIONAL VIDEO

E173310

RUNNING OUT OF FUEL

Avoid running out of fuel!

If the vehicle does run out of fuel, a minimum of 4 litres will be required to restart the engine. The vehicle should be left with the ignition on for 5 minutes after refuelling, before attempting to restart the engine.

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

WATER IN FUEL

If the warning **WATER IN FUEL** is displayed in the Message centre, an excessive amount of water has collected in the fuel filter bowl. Seek assistance from a Retailer/Authorised Repairer to have the filter drained as soon as possible.

DIESEL ENGINES

Vehicles with a diesel engine are equipped with an automated system protection function, to prevent the fuel tank from emptying completely, as this may severely damage the fuel injection system. When the fuel reaches a minimum level, the system will activate a reduced power mode (i.e., the engine will not run properly). After a short period of time, this will also be followed by the engine being stopped. In this event, the engine can be re-started and run for approximately 60 seconds.

Note: *When the system protection function is activated, it will inhibit the operation the Intelligent stop/start feature and a diesel particulate regeneration.*

If the fuel gauge indicates low fuel or the warning indicator illuminates, the fuel tank should be refuelled as soon as possible, with at least 4 litres (0.9 gallons) of fuel.

If the system protection function has activated, the vehicle must be refuelled, and then restarted using the following procedure:

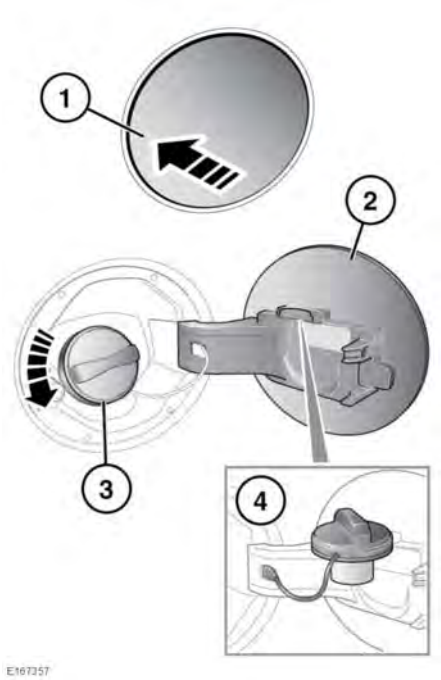
1. With the brake pedal pressed (for vehicles with an automatic transmission), or the clutch pedal pressed (for vehicles with a manual transmission), press and hold the engine **START/STOP** button and crank the engine for 5 seconds.
2. Release the **START/STOP** button.
3. With the brake pedal pressed (for vehicles with an automatic transmission), or the clutch pedal pressed (for vehicles with a manual transmission), press and release the **START/STOP** button to crank the engine. The engine should start within approximately 5 seconds.

Note: *If the engine does not start, pause for 10 seconds with the ignition in Convenience mode, before repeating the procedure from the beginning.*

Do not crank the engine for longer than 30 seconds continuously.

FUEL FILLER FLAP

Take note of all the warnings and instructions given on the label affixed to the inside of the filler flap.



The vehicle must be unlocked using the Smart key, before the filler flap can be opened.

1. Press and release the rear of the flap (in the area indicated) to unlatch.
2. Pull the flap open. The label on the inside of the flap indicates the correct fuel for the vehicle.
3. Twist the cap counter-clockwise to undo.
4. Stow the cap on the lip provided on the top of the hinge arm, as shown.

When replacing the cap, turn it clockwise until the ratchet clicks. Failure to do so may cause the Engine malfunction warning lamp to illuminate. If the warning lamp illuminates, make sure the cap is fitted properly.

To close the filler flap, push the flap until latched closed.

Note: *The filler flap will only be locked closed when the vehicle is centrally locked.*

FUEL FILLER

When refuelling, make sure that all of the windows, doors, and the sunroof are fully closed, particularly if young children or animals are in the vehicle.

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.

Do not operate the auxiliary heater when refuelling the vehicle. Doing so may cause fuel vapours to combust, causing a fire/explosion.

Check the fuel pump information carefully, to make sure that you are putting the correct fuel into the vehicle.

Make sure that the fuel filler nozzle is fully inserted into the filler neck.

If the vehicle is filled with the incorrect fuel, it is essential that you seek qualified assistance before you start the engine.

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.

Note: *Filling station pumps used for diesel commercial vehicles deliver fuel at a higher rate than normal. The higher fill rate can cause premature cut-off and may cause fuel spillage. Therefore, it is recommended that only standard light vehicle pumps are used.*

DIESEL MISFUELLING PROTECTION DEVICE

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

If the narrow filler nozzle fitted to pumps delivering unleaded petrol is fully inserted into the filler neck, the Diesel misfuelling protection device will activate.

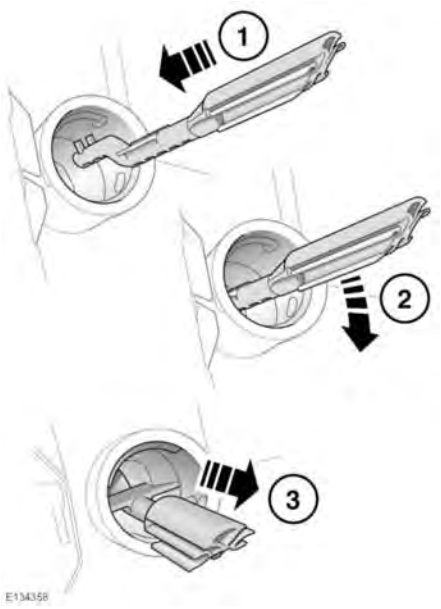
Note: *The Diesel misfuelling protection device may not activate if the petrol nozzle is only partially inserted.*

When the misfuelling protection device is activated, it may cause fuel to be discharged from the filler neck.

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

Note: *The filler spout on some fuel cans and older fuel pumps may trigger the misfuelling protection device.*

When activated, the yellow misfuelling protection device will be visible inside the filler neck. It will prevent fuel flow into the tank. Before fuelling can continue, with the correct fuel, the misfuelling protection device must be reset.



The reset tool is stored in the vehicle's tool kit, located under the luggage compartment floor panel. Vehicles supplied with a spare wheel, see **236, WHEEL CHANGING**.

To reset the misfuelling protection device:

1. Insert the reset tool with the teeth uppermost, as far as it will go into the filler neck.
2. Locate the teeth, by pushing down on the top of the reset tool.
3. With the top of the tool pressed down and the teeth engaged, slowly pull the tool out of the filler neck to reset the device.

Do not twist the device, once the teeth have engaged.

Note: *When reset, the yellow part of the misfuelling protection device should no longer be visible in the filler neck.*

Replace the reset tool back into the vehicle's tool kit.

FUEL TANK CAPACITY

Avoid the risk of running out of fuel and never intentionally drive the vehicle when the fuel gauge indicates that the fuel tank is empty. When refuelling the vehicle after the fuel gauge reads empty, it may not be possible to add the maximum fuel quantity, as there will be a small reserve remaining in the fuel tank. See **253, CAPACITIES**.

FUEL CONSUMPTION

The fuel consumption figures shown in the following table, have been calculated using a standard testing procedure (Regulation (EC) 715/2007), 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 driving technique, road and traffic conditions, environmental factors, vehicle load and condition.

Variant	Transmission	Urban Ltr/100 km	Extra-urban Ltr/100 km	Combined Ltr/100 km	CO_2 emissions g/km
3.0L Petrol	Automatic	11.6	6.1	8.1	194
2.0L Petrol	Automatic	10.2	6.0	7.5	179
2.0L Diesel (163 PS)	Automatic	5.0	3.5	4.1	106
2.0L Diesel (163 PS)	Manual	4.4	3.4	3.8	99
2.0L Diesel (180 PS)	Manual	5.0	3.7	4.2	109
2.0L Diesel (180 PS) With 17 inch wheels	Automatic	5.0	3.7	4.2	109
2.0L Diesel (180 PS) All other wheel sizes	Automatic	5.1	3.7	4.2	111

URBAN CYCLE

The urban test cycle is carried out from a cold start and consists of a series of accelerations, decelerations, and periods of steady speed driving and engine idling. The maximum speed attained during the test is 50 km/h (31 mph) with an average speed of 19 km/h (12 mph).

EXTRA-URBAN CYCLE

The extra-urban test cycle is carried out immediately after the urban test. Approximately half of the test comprises of steady-speed driving, while the remainder consists of a series of accelerations, decelerations, and engine idling. The maximum test speed is 120 km/h (75 mph) and the average speed is 63 km/h (39 mph). The test is carried out over a distance of 7 km.

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