# Fuel and refueling

#### SAFETY PRECAUTIONS

## **AWARNING**

Do not smoke, use an open flame, or cause sparks while refueling. The resulting fire and explosion may cause serious injury or death.

## WARNING

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

## **AWARNING**

Switch off the engine when refueling, as it is both a source of extreme temperatures, and electrical sparks. Failure to do so may cause a fire or explosion.

## **AWARNING**

Switch off any personal electronic devices such as cell phones or music players. They have the potential to trigger an explosion or a fire.

# **AWARNING**

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.

# **AWARNING**

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.

# NOTICE

Do not use leaded fuels, lead substitutes, or fuel additives.

#### NOTICE

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

#### NOTICE

Only use high quality fuel. Using lower quality fuels can damage the engine, fuel and emission control systems.

#### **OCTANE RATING**

Premium unleaded gasoline with a Cost of Living Council (CLC) or Anti Knock Index (AKI) octane rating of 91 or higher is recommended.

#### NOTICE

Even a very small amount of leaded fuel will damage your vehicle's emission control system and could invalidate the emissions warranty. in addition, leaded fuel will damage the oxygen sensors in the fuel injection system and also seriously damage the catalytic converter.

**Note:** Federal law requires that gasoline octane ratings be posted on the pumps.

If premium unleaded fuel is not available, you may use unleaded fuel with a lower octane rating, down to a minimum of 87 AKI, but this may reduce engine performance, increase fuel consumption, cause audible engine 'knock' (a metallic rapping noise from the engine) and other driveability problems.

#### NOTICE

Do not use fuels with an octane rating lower than 87 AKI as severe engine damage may occur.

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 your Retailer to have the problem corrected. Failure to do so is misuse of the vehicle, for which Land Rover is not responsible.

**Note:** An occasional light engine knock when accelerating or climbing hills is acceptable.

#### ETHANOL

#### NOTICE

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 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**

#### NOTICE

Wherever possible avoid using fuel containing methanol.

Use of fuels containing methanol may cause serious engine and fuel system damage. 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 that the ratio of MTBE to conventional fuel does not exceed 15%. MTBE is an ether based compound derived from gasoline, which has been specified by several refiners as the substance to enhance the octane rating of fuel.

#### REFORMULATED GASOLINE

These fuels are specially formulated 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.

#### **RUNNING OUT OF FUEL**

#### NOTICE

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

If the vehicle does run out of fuel, a minimum of 1.1 U.S. gallons (4 liters) will be required to restart the engine. The vehicle should be left with the ignition on for 5 minutes after refueling before attempting to restart the engine. The vehicle will need to be driven 1 - 3 miles (1.6 - 5 km) in order to reset the engine management and monitoring systems.

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

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#### **FUEL FILLER FLAP**

#### **AWARNING**

Take 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.

The fuel filler flap is located on the right side of the vehicle, at the rear.

- 1. Press the left side of the flap to unlatch it.
- 2. Open the flap fully.
- **3.** Twist the cap counter-clockwise to release.
- **4.** Use the retaining clip to keep the filler cap out of the way while fuelling.
- After refuelling, tighten the cap until it clicks 3 times. Close the filler flap and push until it is latched shut.

## **FUEL FILLER**

# **AWARNING**

When refueling ensure that all windows, doors, and sunroof are fully closed, particularly if young children or animals are in the vehicle.

# **AWARNING**

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.

# NOTICE

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

## NOTICE

If the vehicle is filled with 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. Fully insert the filler nozzle and fill the tank until the filler nozzle automatically cuts-off the supply. Do not attempt to fill the tank beyond this point.

#### **FUEL TANK CAPACITY**

Avoid the risk of running out of fuel and never intentionally drive the vehicle when the fuel gauge indicates that the tank is empty. When refuelling your vehicle after the fuel gauge reads empty, you may not be able to add the fuel quantity shown below, as there will be a small reserve remaining in the tank.

Total tank capacity (usable)	27.7 US gallons (105 liters)
Fuel specification (minimum)	Unleaded 91 RON Octane