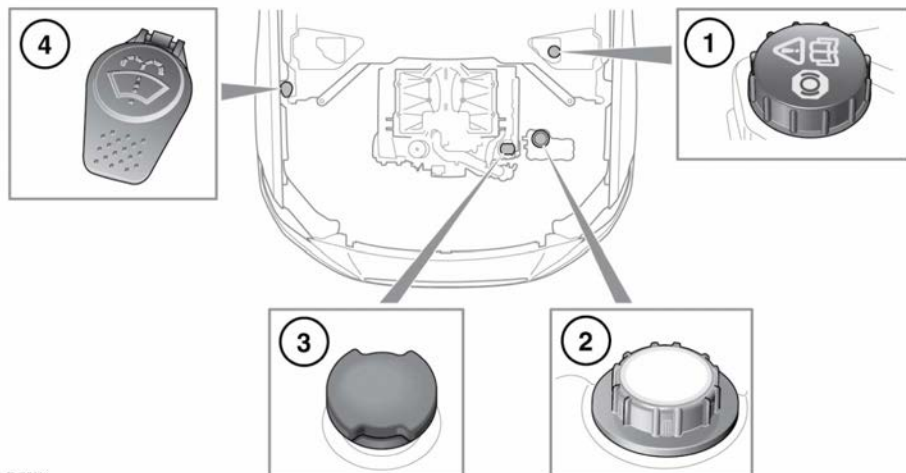


# Fluid level checks

## FLUID FILLER LOCATIONS



E175081

1. Brake fluid reservoir cap (left-hand drive). Remove the left-side under hood cover for access.
2. Engine coolant reservoir filler cap.
3. Engine oil filler cap.
4. Washer fluid reservoir filler cap.

### **⚠ WARNING**

While working in the engine compartment, always observe the safety precautions. See 183, SAFETY IN THE GARAGE.

### **⚠ WARNING**

Do not start the engine, or drive the vehicle, if there is a possibility that any leaked fluid will come into contact with a hot surface, such as the exhaust. Seek qualified assistance immediately.

## CHECKING THE ENGINE OIL LEVEL

The engine oil should be checked frequently and topped up, as required, using the correct grade for the engine.

### **NOTICE**

Check the engine oil weekly. If any significant or sudden drop in oil level is noted, seek qualified assistance.

### **NOTICE**

Never allow the oil level to fall below the lower mark on the oil level indicator.

### **NOTICE**

If the message **ENGINE OIL PRESSURE LOW** is displayed in the Message center, stop the engine as soon as it is safe to do so and seek qualified assistance. Do not start the engine until the cause has been rectified.

## Engines without a dipstick

These engines feature an electrical monitoring system. The engine oil level is not monitored when the engine is running, or when the vehicle is in motion.

Before checking the engine oil level, make sure that:

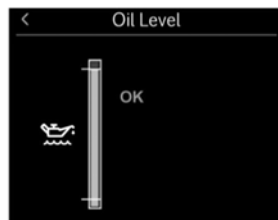
- The vehicle is stationary and the Electric Parking Brake (EPB) is applied.
- The vehicle is on level ground.
- The engine oil has reached its normal working temperature (oil is hot).
- The engine has been switched off for 10 minutes, as the system will not give an accurate reading until the oil level has stabilized.

The oil level can then be checked as follows:

1. Switch on the ignition (do not start the engine).

2. Select **Oil Level** from the **Vehicle Information** menu. See **47, INSTRUMENT PANEL MENU**.

The engine oil level indicator will be displayed in the Message center.



An indication of the oil level will be displayed in the indicator. Messages to the right of the indicator advise you of any action you may need to take.

Message	Action
<b>OK</b>	No action required.
<b>Overfilled</b>	Seek qualified assistance immediately. Do not drive the vehicle as this will cause serious damage to the engine.
<b>Low</b>	Add 3.2 U.S. pints (1.5 liters) of oil, then recheck the level.
<b>Critically Low</b>	Seek qualified assistance immediately.
<b>Add XX L</b>	Add the advised quantity of oil to the engine, then recheck the level.
<b>Not Available</b>	The oil level is stabilizing. Switch off the ignition, wait 10 minutes, then recheck the oil level display.
<b>ENGINE OIL LEVEL MONITOR SYSTEM FAULT</b>	Seek qualified assistance immediately.

# Fluid level checks

## TOPPING UP THE OIL

### NOTICE

*Your vehicle's warranty may be invalidated if damage is caused by using oil that does not meet the required specification.*

### NOTICE

*Failure to use an oil that meets the required specification could cause excessive engine wear, a build up of sludge and deposits, and increase pollution. It could also lead to engine failure. See **244, LUBRICANTS AND FLUIDS**.*

### NOTICE

*Overfilling with oil could result in severe engine damage. Oil should be added in small quantities and the level rechecked to make sure the engine is not overfilled.*

### NOTICE

*It is essential to use the correct specification oil and to make sure the oil is suitable for the climatic conditions in which the vehicle is to be operated.*

1. Turn the oil filler cap counter-clockwise to remove.
2. Add oil as indicated by the engine oil level indicator messages in the Message center.
3. Clean up any oil spilled during topping up.
4. Check the oil level again after 5 minutes.
5. Refit the oil filler cap by turning clockwise, until an audible click is heard.

## CHECKING THE COOLANT LEVEL

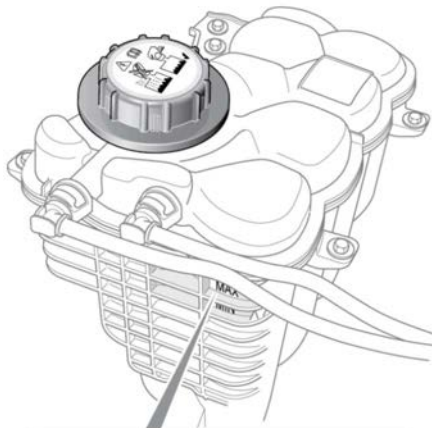
### NOTICE

*Running the engine without coolant will cause serious engine damage.*

### NOTICE

*If persistent coolant loss is noticed, seek qualified assistance immediately.*

The coolant reservoir level should be checked at least weekly (more frequently in high mileage or arduous operating conditions). Always check the level when the system is cold.



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Make sure the coolant level remains between the **MIN** and **MAX** indicator marks on the side of the expansion tank.

If the level has dropped suddenly, or by a large amount, arrange for the vehicle to be examined by a qualified technician as soon as possible.

## TOPPING UP THE COOLANT

### WARNING

Never remove the coolant reservoir filler cap when the engine is hot. Escaping steam or scalding water could cause serious personal injury.

### WARNING

Unscrew the filler cap slowly, allowing the pressure to escape before removing completely.

### WARNING

Antifreeze is highly inflammable. Do not allow antifreeze to come into contact with open flames or other sources of ignition (e.g., a hot engine) - a fire may result.

### WARNING

Antifreeze is poisonous and can be fatal if swallowed. Keep containers sealed and out of the reach of children. If consumption is suspected, seek medical attention immediately.

### NOTICE

*When traveling in territories where the water supply contains salt, always make sure you carry a supply of fresh (rain or distilled) water. Topping up with salt water will cause serious engine damage.*

### NOTICE

*The use of non-approved antifreeze will have an adverse effect on the engine's cooling system and; therefore, engine durability.*

### NOTICE

*Antifreeze will damage painted surfaces; soak up any spillage with an absorbent cloth immediately and wash the area with a mixture of car shampoo and water.*

### NOTICE

*Do not use any anti-leak products in the cooling system, as damage to the vehicle will occur.*

Antifreeze contains important corrosion inhibitors. The antifreeze content of the coolant must be maintained at 50%  $\pm$  5% all year round (not just in cold conditions). To make sure the anti-corrosion properties of the coolant are retained, the antifreeze content should be checked once a year and completely renewed every ten years, regardless of the distance traveled. Failure to do so may cause corrosion of the radiator and engine components. The specific gravity of a 50% antifreeze solution at 68°F (20°C) is 1.068 and protects against frost down to -40°F (-40°C).

1. Remove the coolant reservoir filler cap by rotating counter-clockwise.
2. Top up to the **MAX** indicator mark on the side of the coolant reservoir. Use a mixture of 50% water and 50% antifreeze. See **244, LUBRICANTS AND FLUIDS**.

**Note:** *In an emergency - and only if the approved antifreeze is unavailable - top up the cooling system with clean water, but be aware of the resultant reduction in frost protection. Do not top up or refill with conventional antifreeze formulations. If in doubt, consult a qualified technician.*

3. Refit the coolant reservoir filler cap by rotating clockwise, until the cap's ratchet clicks.

## CHECKING THE BRAKE FLUID LEVEL

### WARNING

Brake fluid is highly toxic - keep containers sealed and out of the reach of children. If accidental consumption of fluid is suspected, seek medical attention immediately.

# Fluid level checks

## ⚠ WARNING

If the fluid comes into contact with the skin or eyes, rinse immediately with plenty of water.

## ⚠ WARNING

Take care not to spill brake fluid onto a hot engine - a fire may result.

## ⚠ WARNING

Do not drive the vehicle with the fluid level below the MIN mark.

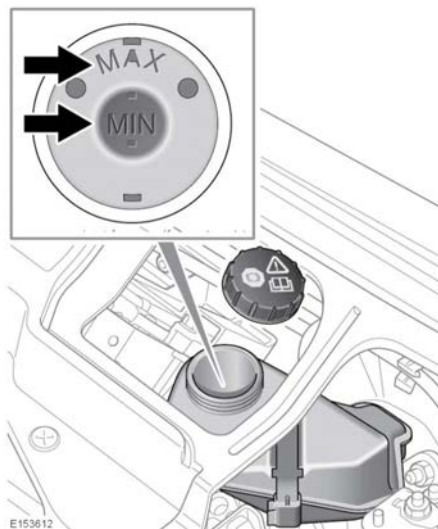
## ⚠ WARNING

Seek qualified assistance immediately if brake pedal travel is unusually long or if there is any significant loss of brake fluid. Driving under such conditions could result in extended stopping distances or complete brake failure.

If the quantity of fluid in the brake reservoir drops below the recommended level, a red warning lamp in the Instrument panel will illuminate. See **52, BRAKE (RED)**.

**Note:** If the warning lamp illuminates while the vehicle is being driven, stop the vehicle as soon as safety permits by gently applying the brakes. Check and top up the fluid level, if necessary.

With the vehicle on level ground, check the fluid level at least every week (more frequently in high mileage or arduous operating conditions).



1. Remove the left-side under hood cover. See **185, UNDER HOOD COVERS - REMOVAL**.
2. Clean the brake fluid reservoir and the filler cap before removing, to prevent dirt from entering the reservoir.
3. Remove the reservoir filler cap by rotating counter-clockwise.
4. Check the brake fluid reservoir level. The level should be between the **MIN** and the **MAX** marks.

**Note:** The fluid level may drop slightly during normal use, as a result of brake pad wear, but should not be allowed to drop below the **MIN** mark.

## TOPPING UP THE BRAKE FLUID

### NOTICE

Always use brake fluid which has the correct specification. See **244, LUBRICANTS AND FLUIDS**.

## NOTICE

*Brake fluid will damage painted surfaces. Soak up any spillage with an absorbent cloth immediately, and wash the area with a mixture of car shampoo and water.*

## NOTICE

*Only use new fluid from an airtight container (fluid from open containers or fluid previously bled from the system, will have absorbed moisture, which will adversely affect performance, and must not be used).*

## NOTICE

*Do not top up the brake fluid to the maximum mark unless the brake pads have been renewed. If unsure, seek qualified assistance.*

1. Top up the brake fluid reservoir to at least the minimum mark.
2. Refit the brake fluid reservoir filler cap by rotating clockwise.
3. Refit the under hood cover. See **185, UNDER HOOD COVERS - REFITTING**.

## CHECKING THE WASHER FLUID LEVEL

### WARNING

**Some windshield washer products are inflammable, particularly if high or undiluted concentrations are exposed to sparking. Do not allow washer fluid to come into contact with exposed flames or sources of ignition, as this can cause a fire or explosion.**

### WARNING

**If the vehicle is operated in temperatures below 40°F (4°C), use a washer fluid with antifreeze protection. In cold weather, failure to use a washer fluid with frost protection, could result in impaired vision and increase the risk of a vehicle crash.**

## NOTICE

*Do not use an antifreeze or vinegar/water solution in the washer reservoir - antifreeze will damage painted surfaces, while vinegar can damage the windshield washer pump.*

## NOTICE

*Body panels may suffer discoloration as a result of windshield washer fluid spillage. Take care to avoid spillage, particularly if an undiluted or high concentration is being used. If spillage occurs, wash the affected area immediately with water.*

The washer reservoir supplies the windshield and headlamp washer jets.

Check and top up the reservoir level at least every week. Always top up with windshield washer fluid to prevent freezing.

Operate the washer switches periodically to check that the nozzles are clear and properly directed.

## TOPPING UP THE WASHER FLUID

**Note:** *National or local regulations may restrict the use of Volatile Organic Compounds (VOCs) which are commonly used as antifreeze agents in washer fluid. A washer fluid with limited VOC content should be used only if it provides adequate freeze resistance for all climates in which the vehicle is operated.*

1. Clean the washer fluid reservoir filler cap before removing, to prevent dirt from entering the reservoir.
2. Remove the filler cap.
3. Top up the reservoir until the fluid is visible in the filler neck.
4. Replace the filler cap.