GENERAL INFORMATION

Protect the environment

We must all play our part in protecting the environment. Correct vehicle usage and disposal of waste cleaning and lubrication materials are significant steps towards this aim.

Avoid using high engine speeds. This will protect your engine, reduce fuel consumption, lower the engine noise level and help towards reducing the environmental burden.

Dispose of used parts and fluids at your local authorised waste disposal facilities.

Regular servicing

CAUTION

Severe damage to the electrical system and electronic components can occur if any attempt is made to diagnose faults in the electrical system using conventional diagnostic equipment (for example, the use of test lamps or low impedance voltmeters). The fitting of any electrical accessory should only be entrusted to a Jaguar Dealer.

Regular maintenance and servicing is the responsibility of the owner. Failure to implement maintenance at the recommended intervals could result in deterioration of vehicle performance.

Your Jaguar Dealer will be pleased to arrange periodic servicing in accordance with the Passport to Service (USA and Canada) or Service Portfolio (Mexico).

Warranty - USA and Canada

The Passport to Service contains warranties applicable to the vehicle, which include:

- The Limited Vehicle Warranty.
- The Emission Control System Warranty and covered parts list.
- The Corrosion Warranty.

Tires are not warranted by Jaguar Cars Limited, but by the specific manufacturer of the tires on the vehicle. Details of tire warranties are included in the vehicle literature pack.

Warranty - Mexico

The Warranty Benefits booklet contains warranties applicable to the vehicle, which include:

- The Limited Vehicle Warranty.
- The Emission Control System Warranty and covered parts list.
- The Corrosion Warranty.

OWNER MAINTENANCE

CAUTION

Any significant or sudden drop in fluid levels or uneven tire wear, should be reported to a qualified technician without delay.

In addition to the routine services and inspections, a number of simple checks must be carried out more frequently. You can carry out these checks yourself.

Daily checks

- Operation of lamps, horn, direction indicators, wipers, washers and warning indicators.
- Operation of seat belts and brakes.
- Look for fluid deposits underneath the vehicle that might indicate a leak. Condensation drips from the air conditioning is normal.

Weekly checks

CAUTION

Ensure that you take notice of any message center information and warnings relating to engine oil level. Top-up the level when advised to do so. See **ENGINE OIL CHECK** (page 180).

- Engine oil level. See **ENGINE OIL CHECK** (page 180).

  The engine oil level should be checked more frequently if the vehicle is driven for prolonged periods at high speeds.
- Engine coolant check. See **ENGINE COOLANT CHECK** (page 183).
- Brake fluid level. See **BRAKE FLUID CHECK** (page 184).
- Power steering fluid level. See **POWER STEERING FLUID CHECK** (page 186).
- Screen washer fluid level. See **WASHER FLUID CHECK** (page 187).
- Tire pressures and condition.
- Operate air conditioning.

Monthly

Wiper blades - Check the quality of the wipe. If smearing or juddering is evident, clean the windshield and renew the wiper blades.

Severe driving conditions

When vehicles are used under severe driving conditions maintenance must be carried out at six-monthly intervals.

Severe driving conditions include:

- Driving in dusty conditions.
- Driving on unmetalled road surfaces.
- Driving in countries with high ambient temperatures.
- Driving in severe cold weather.
- Driving in areas using road salt or other corrosive materials.

Emission control

Your vehicle is fitted with various items of emission and evaporative control equipment, designed to meet specific territorial requirements. You should be aware that unauthorised replacement, modification or tampering with this equipment by an owner or repair shop, may be unlawful and subject to legal penalties.

In addition, engine settings must not be tampered with. These have been established to ensure that your vehicle complies with stringent exhaust emission regulations. Incorrect engine settings may adversely affect exhaust emissions, engine performance and fuel consumption. They may also cause high temperatures, which will result in damage to the catalytic converter and the vehicle.

Road testing dynamometers (rolling roads)

Because your vehicle is equipped with anti-lock brakes, it is essential that any dynamometer testing is carried out only by a qualified person, familiar with the dynamometer testing and safety procedures practised by Jaguar Dealers.

SAFETY IN THE GARAGE

WARNINGS

If the vehicle has been driven recently, do not touch exhaust and cooling system components until the engine has cooled.

Never leave the engine running in an unventilated area - exhaust gases are poisonous and extremely dangerous.

Do not work beneath the vehicle with the wheel changing jack as the only means of support.

Keep your hands and clothing away from drive belts and pulleys.

Remove metal wrist bands and jewellery, before working in the engine compartment.

Do not touch electrical leads or components while the engine is running, or with the starter switch turned on.

Do not allow tools or metal parts of the vehicle to make contact with the battery leads or terminals.

Fuel system

WARNINGS

Under no circumstances should any part of the fuel system be dismantled or replaced by anyone other than a suitably qualified vehicle technician. Failure to comply with this instruction, may result in fuel spillage with a consequent serious risk of fire.

Ensure sparks and naked lights are kept away from the engine compartment.

Wear protective clothing, including, where practicable, gloves made from an impervious material.

Poisonous fluids

Fluids used in motor vehicles are poisonous and should not be consumed or brought into contact with open wounds. These include; battery acid, antifreeze, brake, clutch and power steering fluid, gasoline, diesel, engine oil and windshield washer additives.

For your own safety, always read and obey all instructions printed on labels and containers.

Used engine oil

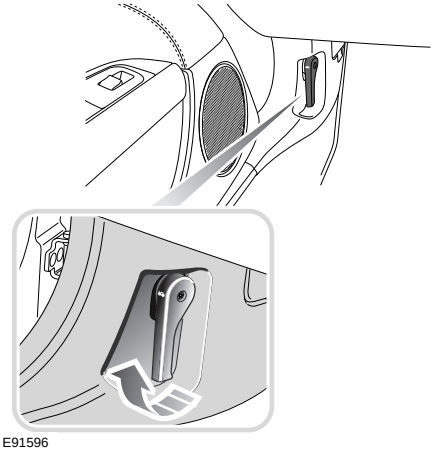
Prolonged contact with engine oil may cause serious skin disorders, including dermatitis and cancer of the skin. Always wash thoroughly after contact.

It is illegal to pollute drains, water courses or soil. Use authorised waste disposal sites to dispose of used oil and toxic chemicals.

OPENING AND CLOSING THE HOOD

WARNING

When working within the engine compartment, take care to avoid contact with moving parts and hot components.



E91596

The hood release lever is below the facia on the left-hand side of the vehicle.

To open: Release the hood by pulling the lever. Reach across to the center rear edge of the hood and lift. The gas filled struts will assist raising the hood and retain it in the fully open position.

Closing the hood

WARNINGS

Before closing the hood ensure that no one is obstructing the closing area and that hands and clothes are clear.

Do not drive with the hood retained by the safety catch alone.

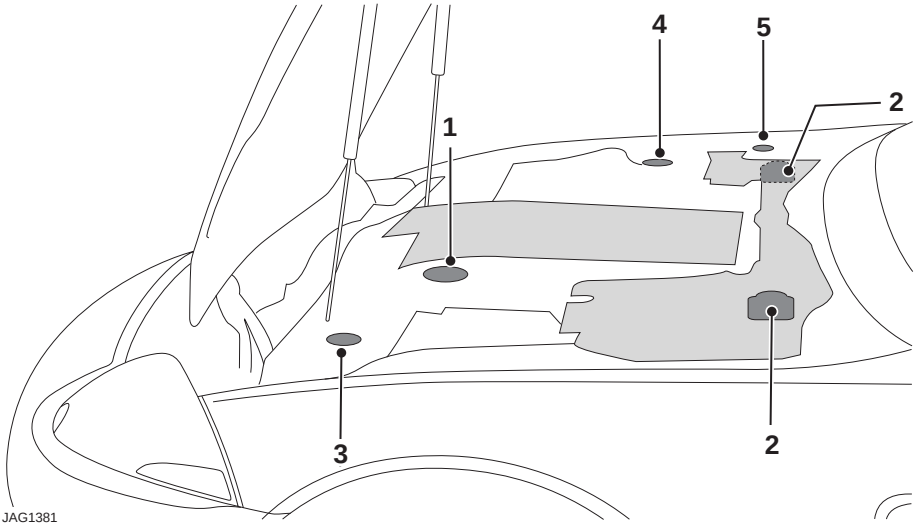
CAUTION

Do not press downward on the top of the hood to close it, especially within the final centimetres (inches) of closing, as this may damage the hood.

Close the hood to within a distance of 300 to 350 mm (12 to 14 inches) of the fully closed position, then let go to allow the hood to shut.

To check that the hood is closed, pull the hood upwards to ensure that both the right-hand and left-hand latches are engaged.

ENGINE COMPARTMENT OVERVIEW



JAG1381

WARNINGS

While working in the engine compartment, always observe the safety precautions listed under Safety in the garage. See **GENERAL INFORMATION** (page 175).

Do not drive the vehicle if there is a possibility that leaked fluid will come into contact with a hot surface, such as the exhaust. A resulting fire may cause death or serious injury.

1. Engine oil filler cap (Black)

JAG1636

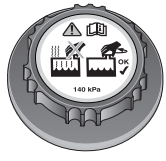
2. Brake fluid reservoir cap (Yellow)

E91601

3. Power steering fluid reservoir cap (Black)

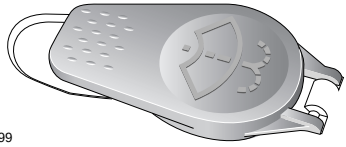
E91603

4. Coolant reservoir cap (Black)



JAG1413

5. Washer fluid reservoir cap (Blue)



E91599

ENGINE OIL CHECK

CAUTIONS

If the warning **ENGINE OIL CRITICALLY 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 identified and rectified.

Your vehicle's warranty may be invalidated if damage is caused by the use of improper engine oil. Low quality or obsolete oils do not provide the protection required by modern, high performance engines. Failure to use an oil that meets the required specification could cause excessive engine wear, a build up of sludge and deposits and increased pollution. It could also lead to engine failure.

Do not use oil additives of any type as engine damage could occur. Use only specified lubricants.

Engine oil consumption

A certain amount of oil consumption is normal. The rate of consumption will depend on the following:

- The quality and viscosity of the oil.
- Climatic conditions.
- The speed at which the engine is being operated.
- Road conditions.

Drivers should expect above normal consumption when the engine is new.

Oil level warnings

Warnings will be displayed in the message center if the oil level is not maintained within the safe operating levels (minimum and maximum). A warning will also be displayed if there is a fault with the oil level monitoring system.

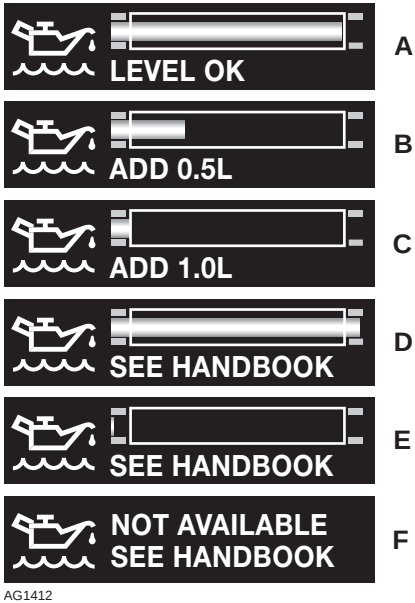
- **ENGINE OIL LOW** (amber): The oil is at the minimum level for safe operation. Top-up with 1 litre (2 US pints) of oil.
- **ENGINE OIL HIGH** (amber): This warning is displayed when the engine is started, if the oil is above the maximum level for safe operation. Seek qualified assistance to have the engine oil drained, before driving the vehicle.
- **ENGINE OIL CRITICALLY LOW** (red): The oil is below the minimum level for safe operation. Stop the vehicle as soon as safety permits and top-up with 1.5 litres (3.2 US pints) of oil. Wait for 5 minutes, recheck the oil level reading and top-up again if necessary.
- **ENGINE OIL LEVEL MONITOR SYSTEM FAULT** (amber): A fault with the oil level monitoring system is indicated. Seek qualified assistance as soon as possible.

Checking the oil level

The engine oil level is automatically monitored and is displayed in the trip computer area of the message center.

The current oil level can be viewed with the ignition on, with the engine stopped and the transmission in Park (**P**) and the vehicle parked on level ground.

To view the current oil level, allow 5 minutes after stopping the engine (to allow the oil level to stabilise), then press the **TRIP** button on the end of the left column stalk repeatedly, until the oil can icon is displayed at the bottom of the message center.



AG1412

A. Oil at recommended level. No top-up required.

B. Add 0.5 litres (1 US pint) of oil.

C. Add 1 litre (2 US pints) of oil.

D. Oil level above maximum for safe operation. Do not drive the vehicle. Seek qualified assistance.

E. Oil level below minimum for safe operation. Add 1.5 litres (3.2 US pints) of oil, then recheck level.

F1. Oil level stabilising, oil level not available. Wait ten minutes and then recheck the oil level display.

F2. If this display is accompanied by the warning message **ENGINE OIL LEVEL MONITOR SYSTEM FAULT**, a fault with the oil level monitor is indicated. Seek qualified assistance.

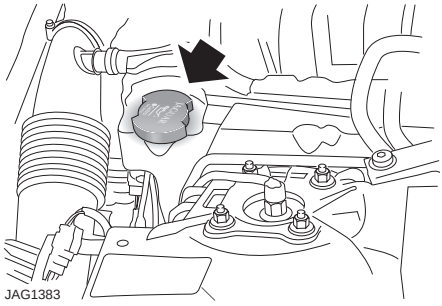
Topping up the oil

CAUTIONS

Your vehicle's warranty may be invalidated if damage is caused by the use of improper engine oil. Low quality or obsolete oils do not provide the protection required by modern, high performance engines. Failure to use an oil that meets the required specification could cause excessive engine wear, a build up of sludge and deposits and increased pollution. It could also lead to engine failure.

Do not use oil additives of any type as engine damage could occur. Use only specified lubricants.

Overfilling with oil could result in severe engine damage. Oil should be added in small quantities and the level re-checked, to ensure that the engine is not overfilled.


JAG1383

1. With the ignition on, but the engine not running, unscrew the oil filler cap (arrowed).
2. Add the appropriate quantity of oil (as indicated by the message center oil level display). Wait 5 minutes to let the oil level stabilise and re-check the level.

   Clean up any oil spilled during topping up.
3. Once the correct level is achieved, refit the filler cap and hand tighten securely until one click is heard.

Note: *The approximate quantity of oil required to raise the level from the minimum level of safe operation to the maximum, is 1.5 litres (3.2 US pints).*

Note: *The ignition must be left on during the top-up, so that the electronic dipstick can register and display the new oil level. This enables an accurate level re-check.*

Engine oil specification

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

Use only 5W-20 engine oil, meeting specification WSS M2C925-A.

Jaguar recommends:
Castrol SLX Professional OE 5W-20.

In an emergency, if the oil of the above specification is unavailable, the engine can be topped-up using a maximum of 1 litre (2 US Pints) of 5W-20 oil meeting specification ILSACGF-4 API SM.

ENGINE COOLANT CHECK

WARNINGS

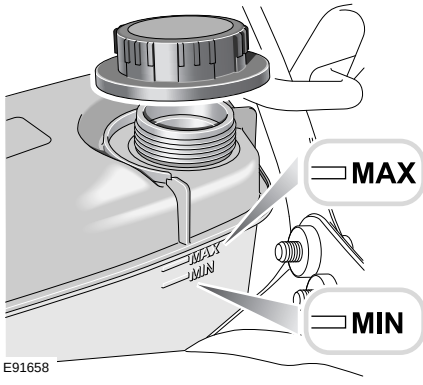
It is unsafe to run the engine in an overheated condition.

The radiator cooling fans may continue to run after the ignition has been switched off but will automatically switch off when the engine has cooled sufficiently.

Do not remove the coolant reservoir filler cap while the engine is hot. If it is essential, then protect your hands against escaping steam. Slowly turn the cap counterclockwise to allow the steam pressure to escape completely before removing the cap.

CAUTION

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



Check the level only when the engine is cold. The coolant level should be between the **MAX** and **MIN** indicators.

If the message center displays the message **ENGINE OVERHEATING**, pull over and allow the engine to idle for five minutes and then switch off for ten minutes. Switch on, and provided that the warning does not re-occur, continue your journey avoiding harsh acceleration. Seek qualified assistance as soon as possible.

Topping up the coolant

WARNINGS

Never remove the filler cap when the engine is hot - escaping steam or scalding water could cause serious personal injury.

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

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

Top up to the **MAX** mark on the side of the expansion tank. Use only a 50% mix of water and antifreeze meeting specification WSS M97B44 (coloured orange) Extended Life Coolant.

Refit the filler cap and hand-tighten securely until one click is heard.

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 if frost protection. Do not top-up or refill with conventional antifreeze formulations. If in doubt, consult a qualified technician.*

Antifreeze

WARNINGS

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

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

CAUTIONS

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

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.

Antifreeze contains important corrosion inhibitors. The antifreeze content of the coolant must be maintained at 50% ± 5% all year round (not just in cold conditions). To ensure that 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 distance travelled. Failure to do so may cause corrosion of the radiator and engine components.

The specific gravity of a 50% antifreeze solution at 20°C (68°F) is 1.068 and protects against frost down to -40°C (-40°F).

Use antifreeze to specification WSS M97B44 (coloured orange) Extended Life Coolant.

BRAKE FLUID CHECK

WARNING

Seek qualified assistance immediately if brake pedal travel is unusually long, unusually short 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 message **LOW BRAKE FLUID** is displayed, do not drive the vehicle until the brake fault is rectified. Seek qualified assistance before continuing.

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

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

Brake fluid is highly inflammable. Do not allow brake fluid to come into contact with naked flames or other sources of ignition (e.g. a hot engine) - a fire may result.

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

USA only

Canada and Mexico only.

If the quantity of fluid in the brake reservoir drops below the recommended level, a red warning indicator in the instrument pack will illuminate and the message **BRAKE FLUID LOW** will be displayed in the message center.

Note: *If the warning indicator illuminates or the message is displayed 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).

The brake fluid reservoir is located beneath a cover to the rear of the engine compartment. See **ENGINE COMPARTMENT OVERVIEW** (page 179).

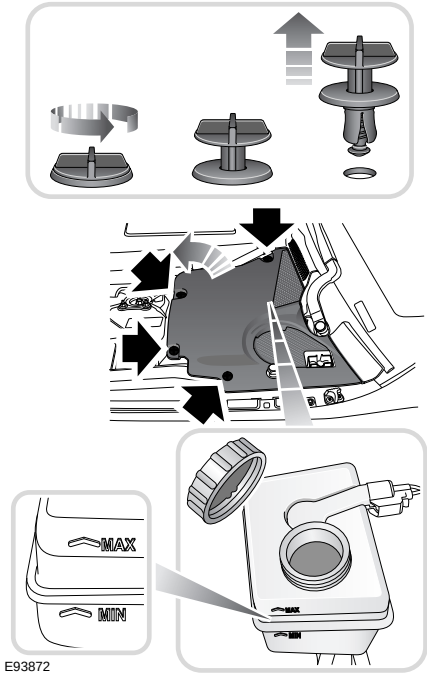
Remove the turnbuckles securing the cover and check the fluid level through the translucent casing of the reservoir. The fluid must be maintained between the **MIN** and **MAX** marks on the side of the reservoir.

Topping up the fluid

CAUTIONS

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.

Only use 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.



E93872

1. With the cover removed, clean the reservoir and cap thoroughly with a clean, dry, lint-free cloth, to prevent dirt or moisture from entering the reservoir.
2. Unscrew the filler cap and top up to the **MAX** level using brake fluid to specification **Shell DOT 4 ESL** or low viscosity DOT 4 brake fluid that meets ISO 4925 class 6 specification. Only fluid of this type and standard may be used.
3. Refit the filler cap securely and refit the cover.

POWER STEERING FLUID CHECK

WARNINGS

Power steering fluid is highly toxic. Keep containers sealed and out of reach of children. If accidental consumption of fluid is suspected, seek medical attention immediately.

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

Power steering fluid is highly inflammable. Do not allow power steering fluid to come into contact with naked flames or other sources of ignition (e.g. a hot engine) - a fire may result.

Checking the fluid level

CAUTIONS

The engine must not be started if the fluid level has dropped below the **MIN** mark. Severe damage to the steering pump could result.

Seek qualified assistance immediately if there is a noticeable drop in the fluid level. Severe damage to the steering pump could result.

If fluid loss is slow, the reservoir may be topped-up to the upper level mark to enable the vehicle to be driven to a repair facility for examination. However, it is recommended that you seek qualified assistance before driving the vehicle.

Check and top-up the fluid when the engine is cold and the vehicle is on a flat, level surface. Ensure that the steering wheel is not turned after stopping the engine.

The fluid level should be maintained between the upper and lower marks on the dipstick.

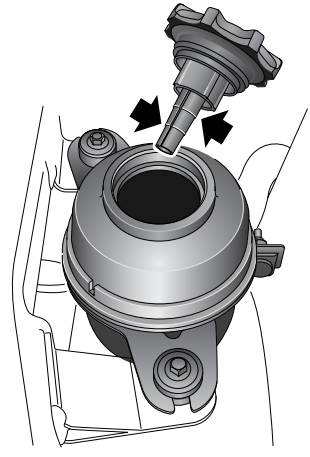
Topping up the fluid

CAUTIONS

It is imperative that the power steering system does not become contaminated in any way. Always use new fluid and clean the area around the reservoir neck both before and after topping up. Never return drained fluid to the system.

Power steering 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.

Do not fill the reservoir above the upper mark.



E91679

1. Wipe clean and remove the filler cap from the reservoir; take great care to prevent any foreign matter from entering.
2. Check that the fluid level is between the marks on the reservoir dipstick.
3. If necessary, top-up with Pentosin CHF202 power steering fluid. Do not overfill.
4. Refit the filler cap.

WASHER FLUID CHECK

WARNINGS

Washer fluid is highly toxic. Keep containers sealed and out of reach of children. If accidental consumption of fluid is suspected, seek medical attention immediately.

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

Some windshield washer products are inflammable, particularly if high or undiluted concentrations are exposed to sparking. Do not allow screen washer fluid to come into contact with naked flames or other sources of ignition (e.g. a hot engine) - a fire may result.

If the vehicle is operated in temperatures below 4°C (40°F), use a washer fluid with frost 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.

CAUTIONS

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.

Body panels may suffer discolouration 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.

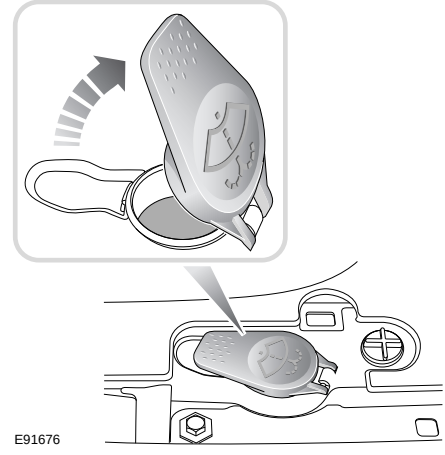
The washer reservoir contains fluid for the windshield washers and the headlamp powerwash system. Fill with Jaguar Windscreen Washer Fluid, diluted with clean water, as specified in the instructions on the bottle. Do not overfill.

Using a non-approved fluid may adversely affect the wiper blade rubber, resulting in ineffectual and noisy wiping.

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 fluid



1. Clean the filler cap before removing to prevent dirt from entering the reservoir.
2. Open the filler cap.
3. Top-up the reservoir until the fluid is visible in the filler neck.
4. Close the filler cap.

TECHNICAL SPECIFICATIONS

Lubricants and fluids

Part	Variant	Specification
Engine oil	All vehicles	Use only Castrol 5W-20 engine oil, meeting specification WSS M2C925-A. In an emergency, if the oil of the above specification is unavailable, the engine can be topped-up using a maximum of 1 litre (2 US Pints) of 5W-20 oil meeting specification ILSACGF-4 API SM.
Power steering fluid	All vehicles	Pentosin CHF202
Brake fluid	All vehicles	Shell DOT4 ESL. If Shell DOT4 ESL is not available, seek advice from your Jaguar Dealer.
Windshield washer	All vehicles	Windshield wash with frost protection
Coolant	All vehicles	50% mixture of antifreeze to specification WSS M97B44 (coloured orange) Extended Life Coolant and water.

Capacities

Item	Variant	Capacity
Fuel tank	All vehicles	71.1 litres (18.8 US gallons)
Fill capacity (when the fuel gauge indicates empty)	All vehicles	65.1 litres (17.2 US gallons)
Reserve capacity (when the fuel gauge indicates empty)	All vehicles	6.0 litres (1.6 US gallons)
Engine oil refill and filter change	All vehicles	7.25 litres (15.3 US pints)
Windshield and headlamp washer reservoir	Normally aspirated engines	6.3 litres (13.3 US pints)
	Supercharged engines	6.6 litres (14.0 US pints)
Cooling system, including reservoir and climate control	Normally aspirated engines	10.4 litres (22.0 US pints)
	Supercharged engines	10.0 litres (21.1 US pints)

Note: *The quoted capacities are approximate and provided as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.*

Note: *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 after the fuel gauge reads empty, you may not be able to add the fuel quantity shown above as there will be a small reserve remaining in the tank.*