

General Maintenance

INTRODUCTION

Owners are responsible for ensuring that the vehicle is regularly serviced at the correct distance/time intervals as specified in the Maintenance Schedules. The first part of this chapter deals with regular servicing.

The condition of the tyres is of the utmost importance. Advice about tyre wear and correct usage is given in this chapter. If in any doubt about the condition of your tyres, contact a Jaguar Dealer/Authorised Repairer.

REGULAR SERVICING

Each vehicle is given a full Pre-Delivery Inspection to ensure that all systems function correctly and the vehicle meets its specification.

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 and possible infringement of regulations.

Your Jaguar Dealer/Authorised Repairer will be pleased to arrange periodic servicing in accordance with the Service Portfolio book.

Battery/starter switch isolators

Non-approved battery isolator switches, which disconnect the power supply to all electrical circuits, are not recommended.

PROTECT THE ENVIRONMENT

Care should be taken at all times to avoid polluting the environment. Used materials, e.g. batteries, tyres, fluids and filters, should be disposed of at suitable disposal facilities in accordance with local legislation. If in doubt, clarification should be sought from your local authority/regulator.

Engine and throttle settings

Do not attempt to make adjustments to the engine or throttle settings. Many vehicle systems are controlled by complex electronic devices and require specialist knowledge. Such work should be entrusted to a Jaguar Dealer/Authorised Repairer.

Hydraulic fluid

The brake hydraulic fluid in the master cylinder and brake operating system uses Shell DOT4 ESL or a low viscosity DOT 4 brake fluid that meets ISO 4925 class 6 requirements. ONLY FLUID OF THIS TYPE AND STANDARD MAY BE USED.

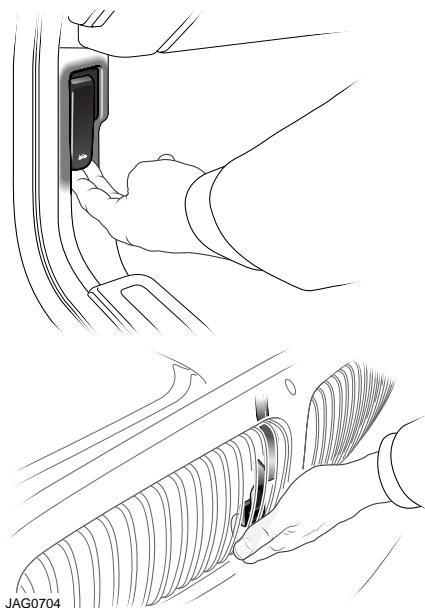


WARNING:

Contamination of the brake system fluid by as little as one per cent will cause rapid deterioration of the system seals. Ensure that the brake fluid reservoir cap is securely fitted.

Bonnet Release

OPENING THE BONNET



WARNING:

Before closing the bonnet ensure that no one is obstructing the closing area and that hands and clothes are clear. Remove tools, cleaning cloths, etc., from the engine compartment.

CLOSING THE BONNET

Close the bonnet to within a distance of 250 to 300 mm (10 to 12 inches) of the fully closed position, then let go to allow the bonnet to shut. Check by pulling the bonnet that both the right-hand and left-hand latches are engaged.



WARNING:

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



WARNING:

Take care to keep away from rotating components if the engine is running when you open the bonnet.

Release the bonnet lock by pulling the lever below the facia on the left-hand side of the vehicle.

Lift the bonnet slightly and pull up the safety catch under the bonnet, located centrally behind the grille. The gas filled struts will assist raising the bonnet, and retain it in the fully open position.

Regular Checks

CHECK INTERVALS

In the interests of safety and reliability, it is advisable to carry out the following checks at the recommended intervals, and always before starting on a long journey.

Daily

Check that there is sufficient fuel for the journey intended, particularly at night and before entering motorways.

Weekly

Tyres - Check the tyres, including the spare, for condition and pressure.

Lamps - Check that all exterior lamps and direction indicators function correctly and that the lenses are clean.

Engine oil - With the vehicle standing on level ground, check the oil level and replenish if necessary with oil of the correct grade.

Engine coolant - With the engine cold, check the level of the coolant in the coolant reservoir header tank. Any loss of fluid must be checked by a Jaguar Dealer/Authorised Repairer.

Brake/clutch fluid - Check the level of the fluid in the brake fluid reservoir. Replenish if necessary with new, unused Jaguar approved brake fluid.

The reservoir is initially nearly full, but the level will drop as the brake pads wear. If the level appears unusually low, location of the fluid leakage must be checked by a Jaguar Dealer/Authorised Repairer.

Power steering fluid - With the engine cold check the level of the fluid in the power steering fluid reservoir.

Replenish if necessary with fluid of the correct specification. Any loss of fluid should be checked by a Jaguar Dealer/Authorised Repairer.

Monthly

Windscreen washer fluid - Replenish with recommended windscreen washer fluid and clean soft water. Check the operation of the washer. Use Jaguar Windscreen Washer Fluid to keep the glass clean and also to prevent the fluid from freezing during cold weather.

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

Drivetrain lubricants

The rear axle (final drive unit), transfer box and automatic and manual transmission units (gearboxes) will not normally require to be checked or replenished.

ENGINE OIL CONSUMPTION

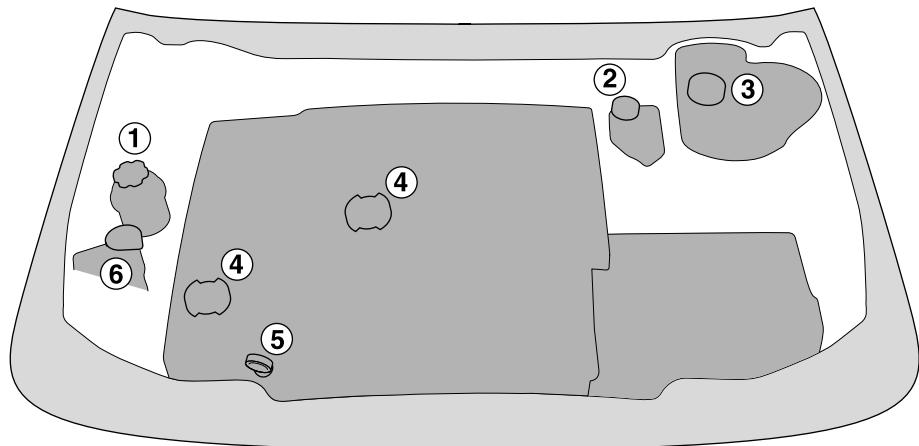
A certain amount of oil consumption is normal. The rate of consumption will depend on the following:

- The quality and viscosity of the oil.
- The amount of oxidation and dilution 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, and after running-in if high speeds are sustained.

Regular Checks

DIPSTICK AND RESERVOIR LOCATIONS



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1. Power steering reservoir.
2. Brake/clutch reservoir.
3. Coolant reservoir.
4. Engine oil filler.
5. Engine oil dipstick.
6. Windscreens washer reservoir (Blue top).

Capacities

	Litres	Imperial Pints
Engine oil change including new oil filter.	6.0	10.5
Windscreens washer reservoir.	4.2	7.4

Checking and Top-up

ENGINE OIL LEVEL

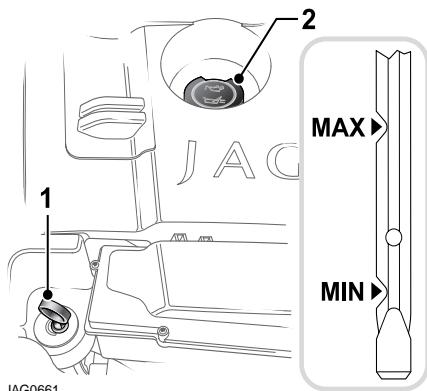
The oil consumption of your engine is influenced by many factors: new engines reach the normal value only after approximately 3,000 miles (5,000 km). Diesel engines consume slightly more oil than petrol engines. Under high loads your engine will also consume more oil.

Check the oil level regularly with the vehicle on flat, level ground. Refer to '*DIPSTICK AND RESERVOIR LOCATIONS*', page 197.

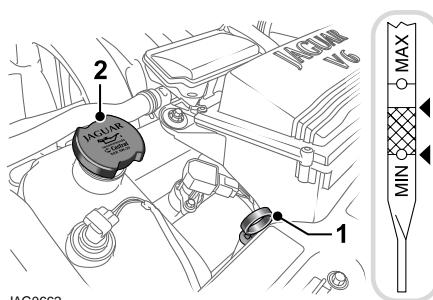
It is preferable to check the oil level after the vehicle has been standing, that is, with the engine completely cold.

If the engine has been started do not check the oil level until the engine has reached normal operating temperature. Stop the engine and wait for a minimum of five minutes to allow the oil to drain back into the sump.

Diesel engine:



Petrol engine:



Remove the dipstick (1) and wipe clean with a non-fluffy cloth. Replace fully, then withdraw the dipstick. If the oil level is above the minimum mark on the dipstick then no additional oil is required.

If the oil level reaches the minimum level, remove the oil filler cap (2) and add oil, to the quantity and specification shown: refer to Recommended Engine Oil.

Refit the filler cap and securely tighten it by hand.

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

Caution: Overfilling with oil could result in severe engine damage. Oil should be added in small quantities and the level rechecked to ensure that the engine is not overfilled.

Checking and Top-up

RECOMMENDED ENGINE OIL

Jaguar recommends 

When the oil level is at the dipstick lower mark, add 1 litre (1.76 Imp. pints) of oil.

Oil specification - petrol engine

An oil of 5W-30 viscosity meeting Jaguar specification WSS-M2C-913 - A or B is preferred. Where this is not possible, oil meeting API SJ/EC and ACEA A1 98 or A3 98 may be used.

SAE viscosity rating - For climates ranging from -30°C (-22°F) to +50°C (+122°F), the following oil viscosities may be used:

0W-30

5W-30 (preferred)

0W-40

5W-40

Note: It is recommended that the oil level is topped up using oil of the same viscosity. If you are unsure which oil viscosity is used in your car, your Jaguar Dealer/Authorised Repairer will be able to advise.

If you are operating this vehicle in climates outside the above temperature range, contact your Jaguar Dealer/Authorised Repairer for advice.

Oil specification - diesel engine

An oil of 5W-30 viscosity meeting specification WSS-M2C-913-B must be used in all vehicles fitted with a diesel engine.

For top-up purposes only, where oil of specification WSS-M2C-913-B cannot be found, ACEA B1 or ACEA B3 specification oils may be used.

USED ENGINE OIL



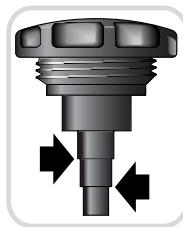
WARNING:

Prolonged and repeated contact may cause serious skin disorders, including dermatitis and cancer.

Always use a hand cream to protect the skin from oil contamination. Avoid contact with the skin as far as possible and wash thoroughly after any contact. Keep oils out of reach of children.

Checking and Top-up

POWER STEERING FLUID LEVEL



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Caution: It is imperative that the power steering system does not become contaminated in any way. Always dispense fluid from a fresh sealed container and clean the area around the reservoir neck both before and after replenishment. Never return drained fluid to the system.

Refer to '**DIPSTICK AND RESERVOIR LOCATIONS**', page 197 for power steering fluid reservoir location.

Check the fluid level when the engine is COLD and the vehicle is on a flat, level surface.

Wipe clean and remove the filler cap from the reservoir; take great care to prevent any foreign matter from entering.

Check that the fluid level is between the marks on the dipstick.

If necessary, replenish with power steering fluid to specification **Dexron III**, DO NOT OVERFILL.

Refit the filler cap.

Should the level be very low, report the loss of fluid to the nearest Jaguar Dealer/Authorised Repairer.



WARNING:

Do not allow power steering fluid to make contact with skin or eyes. If this happens, rinse the affected area immediately with plenty of water.



WARNING:

Power steering fluid is toxic and flammable. Be sure to observe all warnings indicated on the power steering fluid container.



WARNING:

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.



WARNING:

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

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

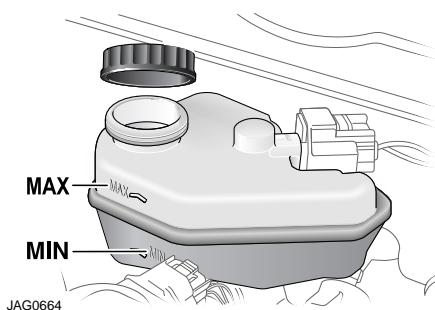
Caution: Seek qualified assistance immediately if there is a noticeable drop in the fluid level. Severe damage to the steering pump could result.

Caution: 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.

Caution: Do not fill the reservoir above the MAX mark.

Checking and Top-up

BRAKE/CLUTCH FLUID RESERVOIR



The manual transmission clutch fluid is shared with the brake fluid in a common reservoir.



WARNING:
Brake/clutch 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.



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



WARNING:
Take care not to spill the fluid onto a hot engine - a fire may result.



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



WARNING:

The fluid level will drop as the brake pads wear. If the level is very low report the loss of fluid to the nearest Jaguar Dealer/Authorised Repairer. Do not drive the vehicle until the cause is rectified.

Caution: While handling brake/clutch fluid, take extreme care; fluid must not contact the vehicle paintwork. Soak up any spillage with an absorbent cloth immediately and wash the area with a mixture of car shampoo and water.

Caution: Always use fresh, clean fluid from a new container. Never introduce used brake fluid into the system.

Refer to '*DIPSTICK AND RESERVOIR LOCATIONS*', page 197 for brake/clutch fluid reservoir location.

The fluid is visible through the translucent casing of the reservoir and must be maintained at the MAX mark.

If necessary, replenish as follows:

Before removing the cap, clean the reservoir and cap thoroughly with a non-fluffy cloth to ensure that no foreign matter enters the reservoir.

Unscrew the filler cap and top up to the **MAX** level. Use Shell DOT4 ESL or a low viscosity DOT 4 brake fluid that meets ISO 4925 class 6 requirements.

Refit the filler cap securely.

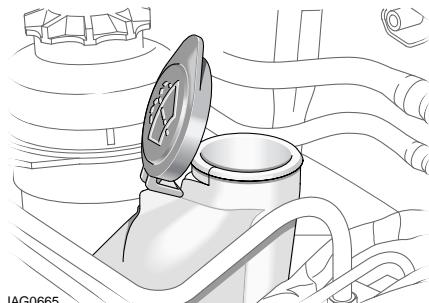
To avoid contamination should any brake fluid be spilt, replace the cap on the reservoir before cleaning the spilt fluid from the vehicle.

Checking and Top-up

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

Caution: Brake/clutch fluid is toxic and flammable. Be sure to observe all warnings indicated on the fluid container.

WINDSCREEN WASHER RESERVOIR



WARNING:

Some screen 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 sources of ignition.



WARNING:

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.

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

Caution: Body panels may suffer discolouration as a result of screen 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.

Refer to 'DIPSTICK AND RESERVOIR LOCATIONS', page 197 for windscreen washer reservoir location.

The washer reservoir contains the fluid for the windscreen washers and the headlamp powerwash system.

Fill to just below the neck with Jaguar Windscreen Washer Fluid diluted with clean, preferably soft water as specified in the instructions on the bottle.

Do not overfill.

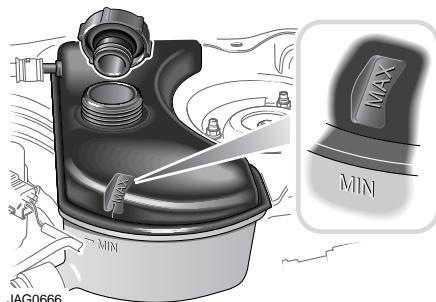
Note: Using a non-approved fluid may adversely affect the wiper blade rubber, resulting in ineffectual and noisy wiping.

Checking and Top-up

Cold weather precautions

To prevent damage to the pump during freezing conditions, use Jaguar Windscreen Washer Fluid at the strength shown on the bottle, for the anticipated ambient temperature.

COOLANT LEVEL



WARNING:

Do not remove the coolant header tank filler/pressure cap while the engine is hot. If the cap must be removed, protect the hands against escaping steam and slowly turn the cap counterclockwise until the steam pressure starts to escape. Leave the cap in this position until the pressure is released, and then remove the cap completely.

Caution: Running the engine without coolant will cause serious engine damage.

The coolant level must only be checked when the engine is COLD.

Refer to '*DIPSTICK AND RESERVOIR LOCATIONS*', page 197 for coolant header tank location.

The coolant level should be between the two marks located on the side of the header tank. If persistent coolant loss is noticed, report this to a Jaguar Dealer/Authorised Repairer to have the cause investigated at the earliest opportunity.

Topping up



WARNING:

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



WARNING:

Avoid spilling antifreeze onto a hot engine - a fire may result.



WARNING:

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



WARNING:

Do not allow antifreeze to make contact with skin or eyes. If this happens, rinse the affected area immediately with plenty of water.

Caution: When travelling in territories where the water supply contains salt, always ensure you carry a supply of fresh (rain or distilled) water. Topping up with salt water will cause serious engine damage.

Caution: Antifreeze will damage paintwork. Avoid spillage.

Checking and Top-up

Replenish with the correct strength antifreeze and water (50% mix each, of water and anti-freeze), until the coolant is within the MAX and MIN marks on the header tank.

Refit the filler cap and securely tighten it by hand until the ratchet operates.

ENGINE ANTIFREEZE



WARNING:

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.



WARNING:

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

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

Caution: 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, when used at the correct concentration, not only protects the engine from frost damage in winter, it also provides all year round protection against internal corrosion.

The cooling system should be filled or replenished with a mixture of 50 per cent water and 50 per cent antifreeze, conforming to specification:

WSS M97B44, coloured orange, Extended Life Coolant.

This mixture gives frost protection for temperatures down to -40°C (-40°F).

Do not mix any other antifreeze with that specified; inferior quality antifreeze may be ineffective in maintaining adequate frost and corrosion protection to the cooling system.

The coolant solution may remain in the cooling system for five years or 250,000 km (156,000 miles) after which the system should be drained, flushed and refilled.

Engine block heater

For further information consult your Jaguar Dealer/Authorised Repairer.

Caution: The fitting of an engine block heater does not eliminate the need for antifreeze under freezing conditions.

Battery

BATTERY WARNING SYMBOLS

There is a label on the battery depicting a number of warning symbols. The battery warning symbols are as follows:



No smoking, no naked flames, no sparks (Red)



Keep away from children (Red)



Shield eyes (Blue)



Battery acid (Yellow)



Explosive gas (Yellow)

BATTERY CARE

A low maintenance battery specifically designed for use with this vehicle is fitted in the engine compartment.

In hot climates more frequent checks of the battery electrolyte level are required. If necessary, the battery cells can be topped up with distilled water.



WARNING:

Do not allow the battery electrolyte (fluid) to come into contact with your skin or eyes. It is both corrosive and toxic, and the resulting injuries can be severe. If any electrolyte does come into contact with your skin or eyes, immediately rinse the affected area with clean, cold water. Immediate medical advice will be required.



WARNING:

If battery electrolyte comes into contact with your skin and/or clothes you should remove the affected clothing and flush the skin with copious amounts of water. Seek medical assistance immediately.



WARNING:

If battery electrolyte comes into contact with your eyes, flush with copious amounts of clean cold water. Seek medical assistance immediately, and continue to flush with water.



WARNING:

If swallowed, battery electrolyte can be fatal. If electrolyte is swallowed seek medical assistance immediately.



WARNING:

Do not connect any 12 Volt equipment directly to the battery terminals. Doing so may cause a spark, which can result in an explosion.

Battery



WARNING:

The cell plugs and vent pipe must be in place at all times when the battery is connected to the vehicle. Ensure that the vent pipe is clear of obstructions and not kinked. Failure to do so may cause a pressure build up in the battery, resulting in an explosion.



WARNING:

Do not expose the battery to a naked flame or spark as the battery produces explosive, flammable gas.



WARNING:

Never jump-start (boost) or charge, a frozen battery. Doing so can result in an explosion.



WARNING:

Remove all metal jewellery before working on, or near, the battery, and never allow metal tools or vehicle components to come into contact with the battery terminals. Metal objects can cause sparks, and/or short circuits, resulting in an explosion.



WARNING:

Do not allow the battery posts or terminals to come into contact with your skin. They contain lead, and lead compounds which are toxic. Always wash your hands thoroughly after handling the battery.

Caution: Do not allow battery electrolyte to come into contact with fabrics or painted surfaces. If battery electrolyte comes into contact with any surface, the surface should be washed down immediately with copious amounts of clean water. Battery electrolyte is both corrosive and toxic, and can damage a wide range of materials if left.

The exterior of the battery should be occasionally wiped clean to remove any dirt or grease.

If a new battery is to be fitted, it must be the same type as the original.

The use of unapproved batteries is not recommended and could invalidate the vehicle warranty.

Note: *The service life of the battery is dependent on its condition of charge. It must always be sufficiently charged for the battery to last an optimum length of time.*

We recommend that the battery charge is checked frequently if the vehicle is used mostly for short distance trips, or if it is not used for long periods of time.

ALTERNATOR

To prevent damage to the alternator, do not run the engine while the battery or any of the charging circuit cables are disconnected.

The alternator has polarity-sensitive components that may be irreparably damaged if subjected to incorrect polarity. Ensure that the battery earth lead is always connected to the battery negative terminal.

Battery

BATTERY CHARGING



WARNING:

Ensure that the charger used is of the correct type and rating for the battery. Using an unsuitable charger may damage the battery, and could cause the battery to explode.



WARNING:

Batteries produce combustible gas (hydrogen) when being charged. The battery must be removed from the vehicle before charging commences.



WARNING:

Never charge or boost a frozen battery.



WARNING:

Always charge the battery in a well ventilated area away from any naked flames, sparks or other ignition sources. During charging the battery can produce a highly explosive and flammable gas.

Caution: The battery must be disconnected and removed from the vehicle before charging. Failure to do so could result in damage to the vehicle's electrical system.

Caution: Always follow the instructions supplied with the battery charger. Failure to do so may result in damage to the battery.

To disconnect the battery, refer to Battery Lead Disconnection below.

When charging the battery ensure that the charge voltage is the same as the nominal voltage of the battery.

Switch off the charger before connecting or disconnecting terminal connections to avoid sparks and short circuits.

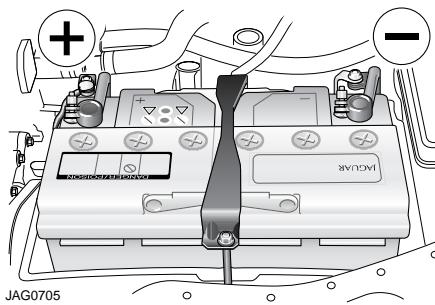
Ensure that the charger positive (+) lead is connected to the positive (+) terminal of the battery and the negative (-) lead is connected to the negative (-) terminal of the battery.

Do not remove or loosen any of the cell plugs when charging the battery.

Check, and if necessary replenish, the electrolyte level when the battery is fully charged.

Caution: Under no circumstances should a battery be disconnected whilst the starter switch is on, as permanent damage to the instrument pack may occur.

Caution: Disconnect the negative lead (earth terminal) first.



Open the bonnet and unclip the battery box cover. Remove the positive terminal cover.

Slacken the negative lead pinch bolt and disconnect the negative (-) battery lead. Slacken the positive lead pinch bolt and disconnect the positive (+) battery lead.

Clean the battery posts and coat the post bases with petroleum jelly.

Battery

Battery lead connection

Make sure the battery is replaced in the centre of the battery tray when refitting and that the clamping bar is also placed centrally.

Note: Upon battery reconnection the security system will be armed. Opening any protected entry will sound the alarm. Make sure that a key or key transmitter is available.

Connect the positive (+) lead, tighten the pinch bolt and clip the positive terminal cover on the battery. Connect the negative (-) lead and tighten the pinch bolt.

Caution: Do not overtighten the pinch bolts.

After the battery has been reconnected and the starter switch is turned to position **II**, the message centre display will initially show an erroneous reading i.e. - - - - -. This will remain until after the bulb check sequence, when the correct recorded mileage will be displayed. This is a normal function of the instrument pack.

Note: When the battery is disconnected and reconnected, some abnormal drive symptoms may occur while the vehicle relearns its adaptive strategy. The vehicle may need to be driven 10 miles (16 kilometres) or more to relearn the strategy.

- Reset the electrically operated windows anti-trap function; see '**WINDOW ANTI-TRAP FEATURE**', page 87.
- The trip computer will lose all recorded trip data and all trip functions will be reset to zero. The vehicle total odometer reading is retained.

- The radio will not operate until the correct security code has been re-entered. Refer to '**SECURITY CODE NUMBER**', page 233.
- If the battery is disconnected for more than 72 hours the radio preset channels will need to be reset.
- Reset the clock to the correct time.

Wiper Blades

CLEANING THE WINDSCREEN

Use Jaguar Screen Clean Paste to remove contamination from the windscreens to ensure effective wiping or if smearing or juddering becomes evident. A more aggressive cleaning agent may be required to remove stubborn contamination. Contact a Jaguar Dealer/Authorised Repairer for advice.

To ensure that the windscreens remains smear-free, the washer system should be operated whenever the wipers are used, even when it is raining.

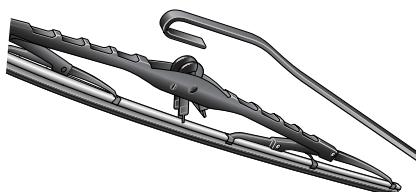
WIPER BLADE CLEANING

Lift the wiper blades clear of the windscreens and wipe the blades with a clean, soft cloth moistened with water to which a mild liquid detergent has been added.

Inspect the wiper blades, and if there are any signs of wear or damage; renew the blades.

Renew the wiper blades before and after each winter, or more often if required.

WIPER BLADE RENEWAL



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Move the wiper arm away from the windscreens, squeeze the retaining clip and withdraw the wiper blade from the arm. After fitting the new blade, check that it is held firmly in position. Reposition the wiper arm and blade onto the screen.

Caution: Only fit the correct length and type of wiper blade. Failure to do so may cause damage to the wiper system, it may also affect the operation of the rain sensor.

WINDSCREEN WASHERS

Two windscreens washer nozzles are mounted on the bonnet. Each nozzle directs two spray patterns to the windscreens.

Note: The windscreen wiper jets and headlamp washer jets are not adjustable.

Tyres

TYRE SPECIFICATIONS

Tyres of the correct type, manufacturer and dimensions, with correct cold inflation pressures are an integral part of every vehicle's design. Regular maintenance of tyres contributes not only to safety, but to the designed function of the vehicle. Road-holding, steering and braking are especially vulnerable to incorrectly pressurised, badly fitted or worn tyres.

Tyres of the correct size and type, but of different make have widely varying characteristics. It is therefore recommended that Jaguar approved tyres are fitted to all wheels.

Always ensure that the wheel nuts are fully seated before finally tightening the nuts in alternate sequence.

TYRE RENEWAL

When renewing tyres, it is preferable to fit a complete vehicle set. If either front or rear tyres only need to be renewed, new tyres must be fitted, as axle sets, to replace worn ones.

After new tyres have been fitted the wheels need to be dynamically balanced.

The radial ply tyres specified are designed to meet the high-speed performance capability of this vehicle.

Do not fit tyres with a different tread pattern, size or speed rating.

Caution: Ultra High Performance Tyres.

This vehicle is equipped with Ultra High Performance (UHP) tyre and wheel combinations designed to provide maximum dry road performance with consideration for hydroplaning resistance. These low profile high speed rated tyres may be more susceptible to damage from road hazards. UHP tyres have performance enhancing soft rubber tread compounds, which when driven aggressively experience rapid tread wear and shorter life than less performance oriented tyres.

These tyres are not recommended for driving on snow or ice, and should be replaced with winter tyres when weather conditions dictate.

Tyres

TYRE PRESSURES



WARNING:

Improperly inflated tyres can affect vehicle handling and can fail suddenly, possibly resulting in loss of vehicle control.



WARNING:

Never exceed the maximum pressure stated on the sidewall. Over-inflation could cause the tyre to fail suddenly.

Note: It is an offence in certain countries to drive a vehicle with tyres that are not inflated in accordance with the vehicle's proper use.

A tyre recommendation label is visible at the end of the dashboard on the driver's side, giving information specific to the vehicle's wheel and tyre equipment.

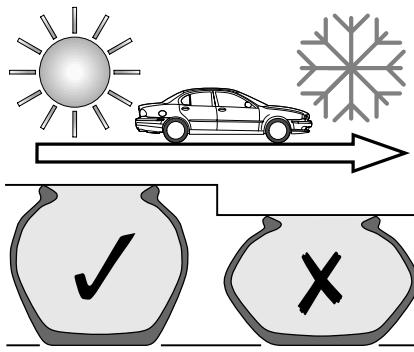
The tyre pressures recommended provide optimum ride and handling characteristics for all normal operating conditions. The pressures should be checked and correctly set each week, with the tyres cold.

Tyre temperatures and pressures increase when running. Deflating a warm tyre to the recommended pressure will result in under-inflation which may be dangerous.

A slight natural pressure loss occurs with time. If this exceeds 14 kPa (2 lbf/in², 0.14 bar, 0.14 kg/cm²) per week, the cause should be investigated and rectified.

Ambient temperature pressure compensation

If the intended journey will take the vehicle into an area where the ambient local temperature is known to be lower than the journey start point, tyre pressure under-inflation could occur.



A colder ambient local temperature will reduce pressure within the tyre. An effect is to decrease sidewall height and to increase tyre shoulder wear with the potential for tyre failure. Vehicle dynamics could also be adversely affected.

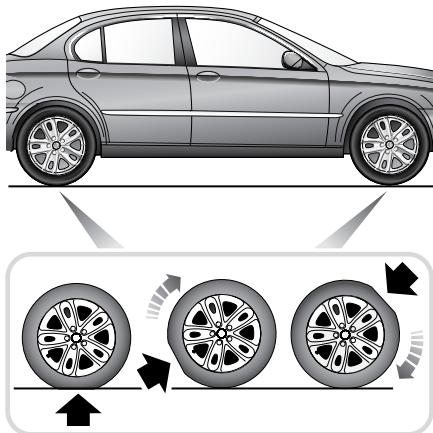
In order to minimise this effect, tyre pressures can be adjusted to compensate before the start of the journey. Alternatively, tyre pressures can be adjusted when the area of lower ambient temperature is reached.

In this situation the vehicle must be left in the ambient local temperature for at least one hour before tyre pressure is adjusted. To compensate for colder ambient temperatures, tyre pressures should be increased by 0.14 bar (2 lbf/in²) for each 10°C (20°F) decrease.

Tyres

Note: Ensure that correct tyre pressures are maintained when moving to areas of differing ambient temperature.

In areas of extended high ambient temperature, vehicle tyres can be affected by a softening of the tyre sidewall. If the vehicle is stationary for long periods, the effect is to slightly deform the tyre at the point where the tyre meets the standing surface. This is known as a flat spot.



JAG0708

This is normal tyre behaviour, however, when the vehicle is subsequently driven, vibration may be experienced from the flat spot. The condition will steadily improve with additional mileage.

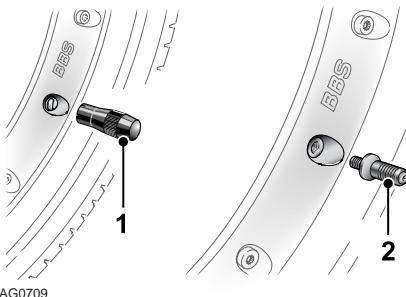
In order to minimise this effect, tyre pressures can be adjusted to compensate.

For each 10°C (20°F) increase in temperature above 20°C (68°F), tyre pressure should be increased by 0.14 bar (2lbf/in²).

Tyre pressure compensation chart - high ambient temperatures

Tyre Pressure Temperature Compensation	
Ambient Temperature °C (°F)	Pressure Compensation bar (lbf/in ²)
20 (68)	use placard label
30 (86)	+0.14 (2)
40 (104)	+0.28 (4)
50 (122)	+0.41 (6)

R performance wheels



JAG0709

These wheels have a slotted valve cover on the wheel face. A pouch containing a special tool and a valve adaptor, for use with these wheels, is stowed in the glove compartment.

Tyres

To access the valve, unscrew the slotted valve cover using the special tool (1). Screw in the adaptor (2) and hand-tighten.

After checking the pressure, remove the adaptor and refit the valve cover. The special tool will grip the valve cover, making it easier to refit.

Wear

All tyres fitted as original equipment include Tread Wear Indicators (TWI) in their tread pattern. When the tread has worn to a remaining depth of 1.6 mm the indicators appear at the surface as bars which connect the tread pattern across the full width of the tyre.

It is illegal, in certain countries, to continue to use tyres after the tread has worn to less than 1.6 mm over three quarters of the width and the entire circumference of the tyre.



It should be noted that the properties of many tyres alter progressively with wear. In particular the wet grip and aquaplaning resistance are gradually but substantially reduced. Extra care and speed restriction should therefore be exercised on wet roads as the effective tread depth diminishes.

Incorrect wheel alignment will accelerate tyre wear. Fins on the inner or outer edges of the tread pattern are caused by excessive toe-in or toe-out respectively. As fins may also be caused by high cornering speeds or road camber, it is advantageous to have the cause detected by having the wheel alignment checked.

Tyre repair

It is recommended that damaged tyres are discarded and new tyres fitted. They must not be repaired in view of the high performance capability of the vehicle.

Damage

Excessive local distortion can cause the casing of a tyre to fracture and may lead to premature failure. Tyres should be examined especially for cracked walls, exposed cords, etc. Flints and other sharp objects must be removed from the tyre tread; if left in they may work through the cover. Clean off any oil or grease contamination by using a suitable cleaner.

Caution: Do not use paraffin (kerosene), because this has a detrimental effect on rubber.

Tyre use after vehicle storage

After a long period of a vehicle standing, tyres may become locally distorted with a flat area. This will cause an uneven ride for a few miles until the tyres have warmed up and the flat rounds off.

However, to reduce the effects of flatspots, the tyres of a stored vehicle may be inflated to pressures not exceeding 3.4 bar (50 lbf/in²).

Tyres

Tyre ageing

Tyres degrade over time, even when they are not being used. It is recommended that tyres generally be replaced after six years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the ageing process.

You should replace the spare tyre when you replace the other road tyres due to the ageing of the spare tyre.

WINTER (SNOW) TYRES

The tyres fitted as original equipment are designed with a rubber compound, tread pattern and width specially suited for high speeds in normal road conditions, but they are less suitable during extremes of low temperatures, snow and ice. The use of winter tyres will considerably improve the vehicle's handling during these conditions.

It is recommended that only Jaguar approved winter tyres are used, as follows:

Pirelli 205/55R 16

or

Continental 205/55R 16

Pirelli 205/50R 17

Pirelli 225/45R 17

Tyre directional indicators must be rotating in a clockwise direction when viewed from the right-hand side of the vehicle, and counterclockwise when viewed from the left-hand side of the vehicle.

Do not exceed 130 mph (210 km/h) when using Jaguar approved winter tyres.

Winter tyres must be used in vehicle sets, that is, fitted on all four wheels.

If non-Jaguar approved winter tyres are fitted, the tyre pressure may need to be altered: refer to the tyre pressure information on the label visible on the end of the dashboard on the driver's side of the vehicle.

SNOW CHAINS

Snow chains, of the recommended type, may only be fitted to 16 inch front wheels.

Caution: Snow chains must not be fitted to 17 inch wheels or above.

Contact your Jaguar Dealer/Authorised Repairer for details and availability of approved snow chains.

The maximum speed when using snow chains is 30 mph (48 km/h).

Remove the snow chains immediately the roads are clear of snow.

Ensure the fitting instructions supplied with the snow chains are kept in a safe place, for example, with this literature pack.

Note: *Dynamic Stability Control, must be switched off when using snow chains.*

Vehicle Care

INTERIOR CARE



WARNING:

Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument pack to avoid contamination of the airbag system. Do not use chemical solvents or strong detergents when cleaning the seat-mounted side airbags. Such products could contaminate the side airbag system and affect performance of the side airbag in a collision.



WARNING:

Dry cleaning fluids may be toxic or flammable. Take adequate precautions when handling these products.

Brush and clean the interior regularly. Use a vacuum cleaner where possible to remove all dust from the interior and trim.

A valet kit containing a selection of Car Care products is available from the Jaguar accessory range.

Carpets

Marks or stains can be removed by gentle scrubbing with a weak solution of soap and warm water. For more stubborn stains a commercially available carpet cleaner should be used. See your Jaguar Dealer/Authorised Repairer for advice.

Headlining

Remove dust in the headlining with a vacuum cleaner. To remove stains, dab gently without pressing, using a fluff-free white cloth, moistened with Jaguar Upholstery Cleaner.

Do not use methylated spirit or solvents as this may cause damage or discolouration to the headlining.

Leather upholstery

For information about the care and maintenance of leather upholstery, refer to '*LEATHER CARE GUIDE*', page 35.

Cloth upholstery

Weekly light vacuuming can extend the life of the fabric.

Using Jaguar Upholstery Cleaner, following the instructions, will preserve and enhance cloth upholstery. Test the upholstery cleaner solution on an unseen part of the seat. Do not over wet.

Caution:

- **Never use soap, ammonia, bleach or other cleaners intended for use on hard surfaces.**
- **Do not use upholstery cleaner on electrical equipment such as facia switches.**

Removing stains

Most stains on woollen fabric can be removed if treatment is carried out immediately, before the stain has a chance to dry-in.

Keep the necessary cleaning materials in a convenient place.

Most stains can be treated with one of three cleaning fluids: Jaguar Upholstery Cleaner, dry cleaning fluid or clean water.

Mop up excess liquid with absorbent tissue (preferably white) or absorbent cloth; scoop up dry solids. Work inwards from the edge of the stain to prevent spreading. Use small amounts of cleaning liquid, blotting between applications.

Vehicle Care

Work slowly and thoroughly using light pressure. If the stain cannot be removed, contact a reputable dry cleaners.

EXTERIOR CARE

Note: All the cleaning materials mentioned in this section are available from the Jaguar Accessory Range.

Washing

For best results, do not wash the vehicle under strong sunlight. Always allow the vehicle to cool down before washing.

Do not use a dry cloth to wipe dirty paintwork. Dust and gritty substances are abrasive and will scratch the paintwork. Remove dirt using a cellulose sponge and plenty of warm (never hot) water. Rinse off with clean water and dry using a clean, damp chamois leather.

Do not use household soaps or detergents. The use of Jaguar Vehicle Shampoo is recommended.

Do not direct hoses at full force around door and luggage compartment seals. Using high pressure water jets on the paintwork is not recommended.

Do not allow bird droppings or tree sap to harden. Remove from paintwork immediately with a lukewarm soap and water solution.

In winter, when salt is used on the roads, wash the vehicle frequently, and immediately after encountering such conditions. Clean undersides and wheel arches using a high pressure jet.

Automatic car wash

Caution: Ensure the rain sensitive windscreen wipers are switched off before entering an automatic car wash, to prevent damage to the wiper blades/arms.

After leaving the car wash, switch on the windscreen wipers immediately to remove water and prevent a build up of wax. Jaguar Screen Clean Paste can be used to clean any residual wax from the glass.

Note: Regular use of automatic car washes tends to dull the lustre of the paintwork.

Removing grease or tar

Remove grease or tar with Jaguar Tar Remover or methylated spirit (alcohol). White spirit is also effective, but must not be applied to rubber, particularly the windscreen wiper blades.

Glass surfaces

To avoid scratching glass surfaces, do not clean dirty glass with dry paper or cloth. Use clean, warm water and a chamois leather which is reserved for glass only.

The following products will ensure glass surfaces and windscreen wipers are kept in good condition:

Jaguar Screen Clean Paste - Apply to the exterior of the windscreen only to ensure effective operation of the windscreen wiper.

Jaguar Glass Cleaner - Interior and exterior of all other glass surfaces.

Jaguar Screen Wash - Washer reservoir additive.

Vehicle Care

Jaguar Winter Care Kit comprising de-icer, ice scraper, anti-mist wipe cloth and aerial cleaner - for use in adverse weather conditions.

Note:

- *Renew the wiper blades when worn to prevent scratching. Clean the rubber wiper blades regularly with a mild detergent solution.*
- *It is advisable to clean the windscreen with Jaguar Screen Clean Paste at regular intervals.*

Cleaning the rear screen

To avoid damaging the heating and radio elements when cleaning the inside of the rear screen use only a soft damp cloth or chamois leather. Do not use solvents or sharp objects to clean the glass.

Polishing paintwork and brightwork

For maximum protection against road dust, salts, industrial fall-out etc., it is recommended that the vehicle is polished regularly using Jaguar Polish and Polishing Cloths.

Note: *The vehicle's brightwork should be cleaned in the same way as the paintwork: chrome polish and other abrasive cleaners must not be used.*

Paint chips

Scratches and chips should be touched in before weathering action begins. Inspect the paintwork immediately after the vehicle has been washed.

Underbonnet cleaning

Underbonnet cleaning using high pressure hoses or steam cleaners should be done by a Jaguar Dealer/Authorised Repairer.

Indiscriminate use of cleaning equipment could damage or contaminate the electronic control modules and fuse boxes.

CARE OF ALLOY ROAD WHEELS

The alloy road wheels are covered with a protective anti-corrosion coating. To prevent corrosion it is essential that this coating is not damaged.

When removing or fitting tyres always advise the tyre fitter to treat the alloy wheels with great care and to only use equipment with spigot or stud hole clamping. The equipment must not have any moving parts which contact the wheel, and tyre levers must not be used.

Wash the wheels with soap and water at two week intervals to avoid an accumulation of particles which could become embedded in the wheel surface. In salty conditions the wheels should be cleaned weekly.

In compliance with German Road Traffic Law the size of the wheel rims is stamped or cast on all wheels.

Electrical Accessories

USE OF ACCESSORIES



WARNING:

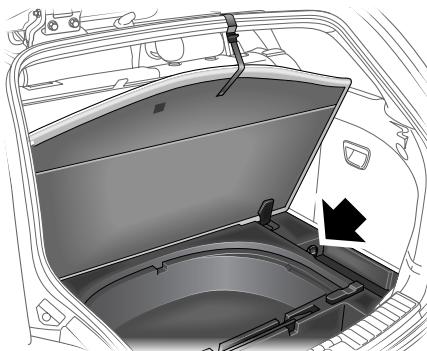
Alterations to the electrical system, including the fitting of accessories not designed for this Jaguar, will cause damage to the electrical circuits and systems. In some circumstances this could result in a malfunction or fire. All accessory work should be entrusted to a Jaguar Dealer/Authorised Repairer.

The cigar lighter sockets can be used for plug-in accessories which are only temporarily connected to the vehicle (for example, a car vacuum cleaner).

Caution:

- Under no circumstances must the power supply be obtained directly from either battery terminal.
- The use of non-approved accessories can reduce the battery capacity and charge period to an unacceptable level, therefore, Jaguar cannot accept any liability for the fitment of any such item.

Estate accessory socket



A 12-volt accessory socket is provided in the underfloor storage tray. The socket must only be used to power accessories that are temporarily connected to the vehicle.

The tray is designed to allow a cable to run from the socket to the tray's main storage area. For example, a laptop computer placed in the tray can be charged whilst hidden from view.

Note: The accessory socket is not powered when the starter switch is turned off.

Earth points

If an accessory needs to be connected to an earth point, consult a Jaguar Dealer/Authorised Repairer.

Caution: Under no circumstances must holes be drilled in the bodywork to accept earth terminals.