RUNNING-IN

This vehicle is built using high-precision manufacturing methods, but the moving parts of the engine must still bed-in, relative to each other. This process occurs mainly in the first 3 000 km of operation.

During this running-in period of 3 000 km, observe and follow the instructions below:

- Do not use full throttle during starts and normal driving.
- Avoid high engine speeds (rpm) until the engine has reached its full operating temperature.
- Avoid labouring the engine by operating the engine in too high a gear at low speeds.
- Gradually increase engine and road speeds.
- Avoid continuous operation at high engine speed and abrupt stops.
- Avoid frequent cold starts followed by short-distance driving.
- Preferably take longer trips.
- Do not participate in track days, sports driving schools, or any similar events.

OWNER MAINTENANCE

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

In addition to the routine maintenance, a number of simple checks must be carried out more frequently.

DAILY CHECKS

- Operation of the lamps, horn, direction indicators, wipers, washers and warning lamps.
- Operation of the seat belts and brakes.
- Look for fluid deposits underneath the vehicle that might indicate a leak. Condensation drips from the Air Conditioning (A/C) system are normal.

WEEKLY CHECKS

- Engine oil level.
- Engine coolant level.
- Brake fluid level.
- Power steering fluid level.
- Screen washer fluid level.
- Tyre pressures and condition.
- Operate the Air Conditioning (A/C).

Note: *The engine oil level should be checked more frequently if the vehicle is driven for prolonged periods at high speeds.*

ARDUOUS DRIVING CONDITIONS

When a vehicle is operated in extremely arduous conditions, more frequent attention must be paid to servicing requirements.

Arduous driving conditions include:

- Driving in dusty and/or sandy conditions.
- Driving on rough and/or muddy roads.
- Frequent wading.
- Frequent driving at high speeds in high ambient temperatures above 50°C.

- Frequent driving in severe cold weather below -40°C.
- Frequent driving in mountainous conditions.
- Frequent trailer towing.
- Driving in areas using road salt or other corrosive materials on the driving surface.

Contact your Retailer/Authorised Repairer for advice.

EXHAUST FILTER

Diesel vehicles equipped with a Diesel Particulate Filter (DPF) have more efficient emissions control. The particles in the exhaust gases are collected in the exhaust filter during normal driving.

Cleaning of the exhaust filter, also known as regeneration, occurs automatically approximately every 300-900 km depending on driving conditions, and requires the engine to reach normal operating temperature.

This self-cleaning takes place when the vehicle is driven steadily at speeds between 60 km/h to 112 km/h (40 mph to 70 mph). This process normally takes 10-20 minutes. It is possible that the self-cleaning will occur at lower vehicle speeds, but the process may take a little longer at a 50 km/h (30 mph) average speed.

Exhaust filter self-cleaning

Some driving conditions (e.g., frequently driving short distances, in slow-moving traffic, or in cold weather) may not provide sufficient opportunity to begin the exhaust filter self-cleaning automatically. When this occurs, a warning icon is displayed in the Message centre, depending on status, as follows:

- **Amber**: Exhaust filter self-cleaning is required. Driving above 60 km/h (40 mph) for 20 minutes should clean the filter.

  Note: *Failure to follow the above driving approach to enable filter self-cleaning, may result in reduced vehicle performance. The amber exhaust filter icon will eventually be replaced by a red exhaust filter icon, and the filter may need to be replaced.*
- **Red**: The exhaust filter is full; contact a Retailer/Authorised Repairer as soon as possible.

Note: *A small increase in fuel consumption may be noticed temporarily during exhaust filter self-cleaning.*

Note: *If diesel fuel with high sulphur content is used regularly, the exhaust may emit a cloud of smoke at the start of the self-cleaning process. This is the sulphur deposit being burnt off and is no cause for concern. If possible, only use low sulphur diesel fuel.*

ANTI-THEFT SYSTEM

⚠ **No modifications or additions should be made to the Anti-theft system. Such changes could cause the system to malfunction.**

AIRBAG SYSTEM

⚠ **The components that make up the airbag system are sensitive to electrical or physical interference, either of which could easily damage the system and cause inadvertent operation or a malfunction of the airbag module.**

To prevent malfunction of the airbag system, always consult your Retailer/ Authorised Repairer before fitting any of the following:

- Electronic equipment such as a mobile phone, 2-way radio, or in-car entertainment system.
- Accessories attached to the front of the vehicle.
- Any modification to the front of the vehicle.
- Any modification involving the removal or repair of any wiring or component in the vicinity of any of the airbag system components, including the steering wheel, steering column, instrument or fascia panels.
- Any modification to the fascia panels or steering wheel.

PARTS AND ACCESSORIES

The fitting of non-approved parts and accessories, or the carrying out of non-approved alterations or conversions, may be dangerous and could affect the safety of the vehicle and occupants, and also invalidate the terms and conditions of the vehicle's warranty.

Jaguar Land Rover Limited will not accept any liability for death, personal injury, or damage to property, which may occur as a direct result of fitment of non-approved accessories or the carrying out of non-approved conversions to your vehicle.

All replacement parts for the Air Conditioning (A/C) system should be new and equivalent to the manufacturer's original equipment, while complying with the SAE Standards. Contact a Retailer/Authorised Repairer for advice.



This symbol may be used on an under bonnet label and is relevant to the air conditioning refrigerant fluid. The symbol identifies extremely flammable chemicals that have an extremely low flash point and boiling point, and gases that catch fire when in contact with air.

ROAD TESTING DYNAMOMETERS (ROLLING ROADS)

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 Retailers/Authorised Repairers.

SAFETY IN THE GARAGE

If the vehicle has been driven recently, do not touch the engine, 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.

⚠ **The jack is designed for wheel changing only. Never work beneath the vehicle with the jack as the only means of support. Always use correctly rated vehicle support stands, before putting any part of your body beneath the vehicle.**

⚠ **Keep your hands and clothing away from drive belts, pulleys, and fans. Some fans may continue to operate or start operating after the engine has stopped.**

⚠ **Remove metal wristbands and jewellery, before working in the engine compartment.**

⚠ **Do not touch electrical leads or components while the engine is running, or the vehicle's ignition is switched on.**

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

POISONOUS FLUIDS

Fluids used in motor vehicles are poisonous and should not be consumed or brought into contact with open wounds.

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

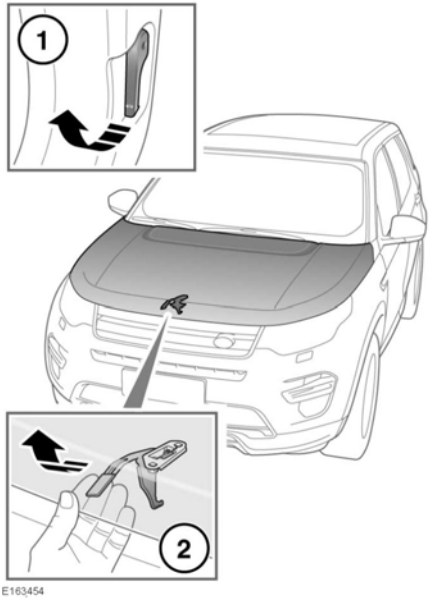
USED ENGINE OIL

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, watercourses or soil. Use authorised waste disposal sites to dispose of used oil and toxic chemicals.

OPENING THE BONNET



E163454

1. Pull the bonnet release lever, located in the left-side front footwell.
2. Lift the bonnet safety catch, located below the centre point of the bonnet, then raise the bonnet.

CLOSING THE BONNET

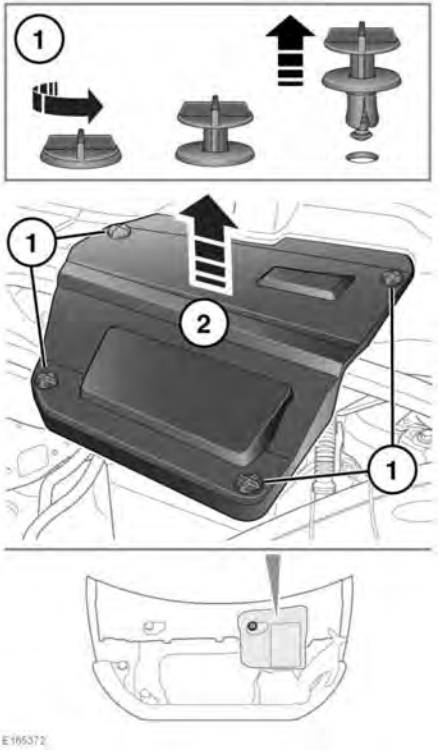
⚠ **Do not drive with the bonnet retained by the safety catch alone.**

1. Lower the bonnet until the safety catch engages.

2. Using both hands, press the bonnet down until the catches click.
3. Check that both catches are engaged by trying to lift the front edge of the bonnet.

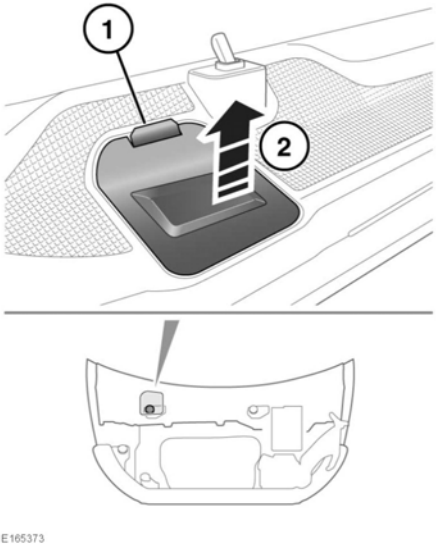
UNDER BONNET COVERS - REMOVAL

Left-side under bonnet cover



1. Unscrew the turnbuckles clips counter-clockwise and remove.
2. Lift the front edge of the cover and slide it forwards to remove.

Right-side under bonnet cover



1. Pull the cover securing catch towards the front of the vehicle, to release.
2. While still holding the cover securing catch, lift up the edge of the cover to remove.

UNDER BONNET COVERS - REFITTING

Left-side under bonnet cover

Before refitting the under bonnet cover, make sure no pipes, cables or other items, have been trapped between the cover and the casing.

1. Place the under bonnet cover over the casing, making sure that all of the holes are aligned.

2. Push the cover down firmly and screw the turnbuckle clips clockwise to tighten.

Right-side under bonnet cover

1. Place the 2 locating lugs at the rear edge of the cover into the surrounding panel.
2. Press the cover down to engage the cover securing catch.

FUEL SYSTEM

Under no circumstances, should any part of the fuel system be dismantled or renewed by anyone other than a suitably qualified vehicle technician.

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

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

EMISSION CONTROL SYSTEM

Land Rover vehicles are fitted with emission and evaporative control systems. In many countries it is unlawful to tamper, modify or renew such equipment and legal penalties apply if the laws are flouted.

Retailers/Authorised Repairers are properly equipped to perform repairs and to maintain these systems.

Exhaust fumes contain poisonous substances which can cause unconsciousness and may even be fatal.

- Do not inhale exhaust gases.
- Do not start or leave the engine running in an enclosed unventilated area.
- Do not drive the vehicle with the tailgate open.
- Do not modify the exhaust system.
- Exhaust leaks should be repaired immediately.
- If exhaust fumes are thought to be entering the vehicle, have it investigated immediately.

Note: *Running out of fuel can result in a misfire. This can cause damage to the emission control system.*

CHANGING A BULB

If the lighting has just been switched off, give the bulbs time to cool. Handling them when hot may cause personal injury.

Always replace bulbs with the correct type and specification. If you are in any doubt contact a Retailer/Authorised Repairer for advice.

Before attempting a bulb change, make sure the ignition and affected lamp are switched off. If the circuit remains live, a short circuit can occur which may damage the vehicle's electrical system.

Not all bulbs are renewable. The following bulbs can be renewed:

Lamp	Specification	Power (Watts)
Halogen headlamp (DRL/high beam)	H15	15/55
Halogen headlamp (low beam)	H7 LL	55
Front direction indicators	PSY24W	24
Rear direction indicators	PY21W	21
Reverse lamps	W16W	16

All other exterior lamps and some interior lamps are either LED (Light Emitting Diode) or Xenon units and can only be renewed by a Retailer/Authorised Repairer.

All replacement procedures require the removal of components to gain access to the bulbs.

Moving a headlamp unit should be undertaken only by a qualified technician. If in doubt, consult a Retailer/Authorised Repairer.

Note: *To change any bulb in a headlamp unit, a cross head screwdriver and a 10 mm spanner is required.*

XENON LAMPS

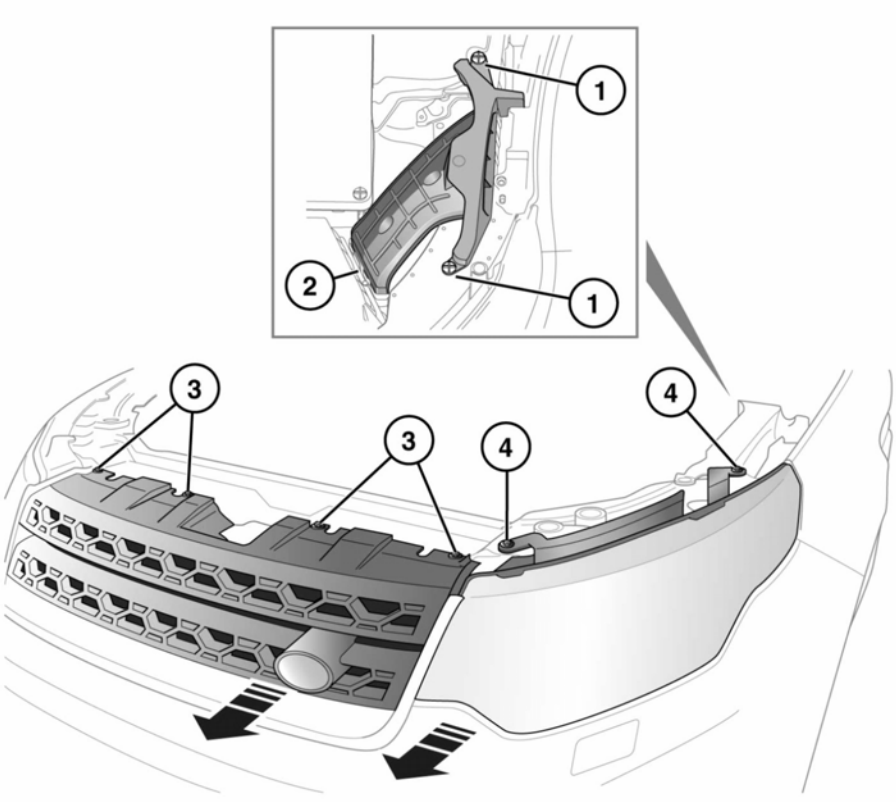
High voltage is required to ignite the gas and metal vapour which are used to power Xenon lamps. Contact with this voltage can cause serious injury. Replacement or maintenance of Xenon lamps should only be carried out by suitably qualified personnel.

Xenon lamp units operate at a very high temperature. Make sure the lamp units have cooled before attempting to touch them.

Xenon lamp units contain mercury which is highly toxic and can be extremely harmful.

Seek advice about the correct disposal of Xenon lamp units from a Retailer/ Authorised Repairer, or your local authority.

HEADLAMP REMOVAL

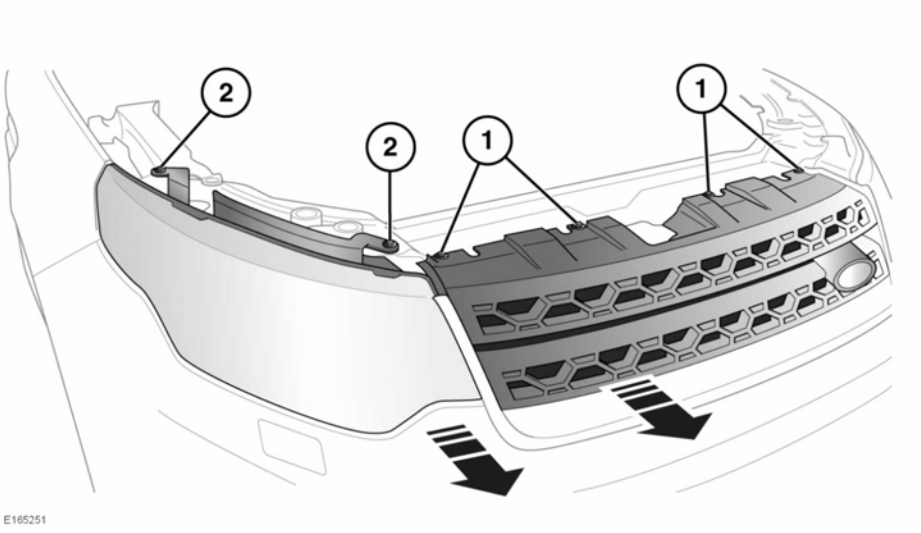


E165250

Moving the left headlamp unit to access the bulbs:

1. Remove the 2 plastic fixings.
2. Pull the tube up, to release it from the air box. This will allow more room for manoeuvrability.
3. Remove the 4 grille fixings.
4. Remove the 2 retaining bolts.

The headlamp unit can be withdrawn by 45 mm.

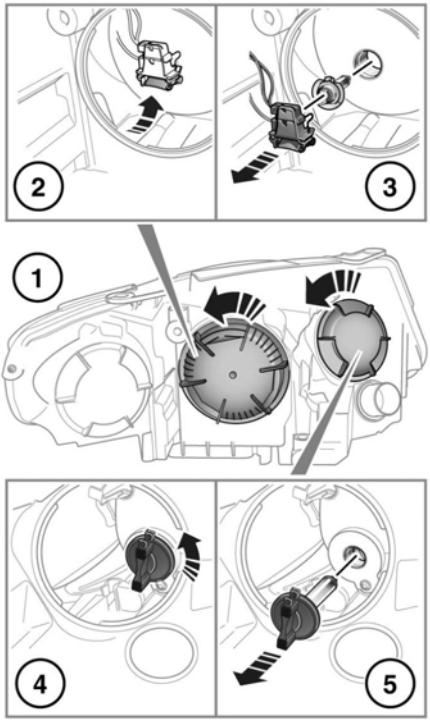


Moving the right headlamp unit to access the bulbs:

1. Remove the 4 grille fixings.
2. Remove the 2 retaining bolts.

The headlamp unit can be withdrawn by 45 mm.

HEADLAMP BULB REPLACEMENT



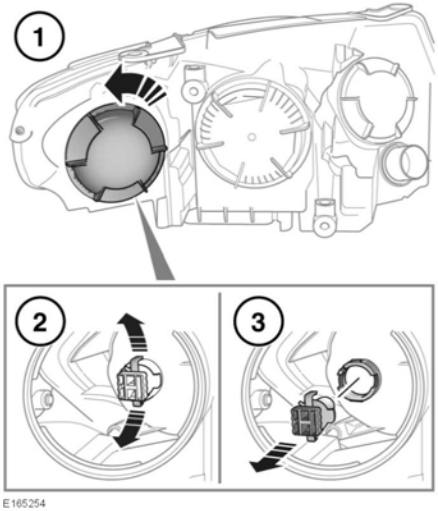
E165252

1. At the back of the headlamp unit, rotate the appropriate bulb cover counter-clockwise and then lightly pull to remove it.
2. Remove the low beam bulb holder from the headlamp.
3. Unclip the low beam bulb and remove it from the bulb holder.
4. Rotate the DRL/high beam bulb unit counter-clockwise.
5. Remove the DRL/high beam bulb unit from the headlamp housing.

Reverse the removal procedure to install a bulb holder/bulb unit.

Note: *Note the orientation of any removed components to aid refitting.*

DIRECTION INDICATOR BULB REPLACEMENT



E165254

To gain more room for accessibility, follow the process for removing the headlamp unit. See **249, HEADLAMP REMOVAL**.

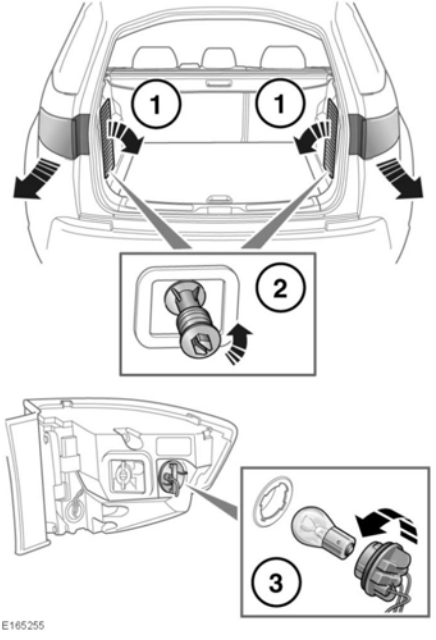
1. At the back of the headlamp unit, rotate the appropriate bulb cover counter-clockwise and then lightly pull to remove it.
2. Release the sides of the bulb holder.
3. Pull the holder to remove it from the headlamp and access the indicator bulb.

Reverse the removal procedure to install a bulb holder/bulb unit.

Note: *For Xenon headlamp units, the bulb cover for the direction indicator is located on the inboard side.*

Note: *Note the orientation of any removed components to aid refitting.*

REAR DIRECTION INDICATOR AND REVERSING LAMP BULB REPLACEMENT



Replacing a rear direction indicator:

1. Remove the appropriate loadspace vent door.
2. Rotate the rear lamp's retaining screw counter-clockwise, until fully released and then remove. This allows the rear lamp unit to be withdrawn.
3. At the back of the rear lamp unit, rotate the bulb holder counter-clockwise and pull to access the indicator bulb.

Reverse the removal procedure to install a bulb holder/bulb unit.

Note: *Note the orientation of any removed components to aid refitting.*



Replacing a reversing lamp bulb:

1. Remove the appropriate tailgate access door.
2. Rotate the bulb holder downwards. Pull to remove the holder from the lamp unit and access the reversing bulb.

Reverse the removal procedure to install a bulb holder/bulb unit.

Note: *Note the orientation of any removed components to aid refitting.*

WIPERS SERVICE POSITION

To avoid damage to the bonnet, do not lift the wiper blades when they are in the normal parked position.

Note: *The Smart key must remain in the vehicle while the wiper blades are replaced.*

Before changing a wiper blade, the wiper arms must be set in the 'service' position as follows:

1. Make sure the ignition is switched off.
2. Switch the ignition on and then off again.
3. Immediately press the wiper/washer control to its lowest position (as if to command a single wipe, see **71, WIPER OPERATION**), hold this position while switching on the ignition again.
   The wipers will move to their service position.
4. When the new parts have been fitted, switch the ignition off. This will return the wipers to the park position.

Note: *Fit only replacement wiper blades that are identical to the original specification.*

Note: *Replace the wiper blades in accordance with manufacturer's instructions.*

WINDOW RESET

The windows will need to be reset if the battery is disconnected, becomes discharged, or power supply is interrupted.

Reset as follows:

1. Close the window fully.
2. Release the switch, then lift it to the close position and hold for 1 second.
3. Repeat the procedure on each window.

FIRE EXTINGUISHER

For certain markets, fire extinguishers are fitted to comply with local legislation. Please note it is the owner's responsibility to make sure the fire extinguisher is maintained in accordance with the manufacturer's instructions.

It is also the responsibility of the owner to make sure the pressure is at a suitable operating pressure as indicated on the pressure gauge. Use only Land Rover approved fire extinguishers.