#### SERVICE INTERVAL INDICATOR

An upcoming service interval will be notified to the driver via the message centre, as either a distance or time left until service is due. Once the distance or time are exceeded, the display will show a negative value (-) to indicate that a service is overdue.

One or both types of service interval (distance and time) may be displayed.

#### 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 lamps, horn, direction indicators, wipers, washers and warning lamps.
- Operation of seat belts and brakes.
- Look for fluid deposits underneath the vehicle that might indicate a leak.

### **WEEKLY CHECKS**

- Engine oil level.
- Engine coolant check.
- Brake/clutch fluid level.
- Power steering fluid level.
- Screen washer fluid level.
- Tyre pressures and condition.
- Operate air conditioning.

**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 and/or wading.
- Driving in extremely hot conditions.
- Towing a trailer or driving in mountainous conditions

Contact a Land Rover Dealer/Authorised Repairer for advice.

# **DIESEL PARTICULATE FILTER (DPF)**

Diesel vehicles equipped with a particle filter have more efficient emission control. The particles in the exhaust gases are collected in the filter during normal driving.

When a DPF message is displayed, the filter requires a regeneration cycle to clean itself. This requires the engine to have reached normal operating temperature. Regeneration takes place automatically at an interval of approximately 300-900 km (190-560 miles) depending on driving conditions. Regeneration normally takes 10-20 minutes and is automatically requested by the engine control module if the vehicle is driven steadily at vehicle speeds between 60 km/h to 112 km/h (40 mph to 70 mph). It is possible that the regeneration process will occur at lower vehicle speeds, but the events may take a little longer at a 50 km/h (30 mph) average speed.

# DRIVING SHORT DISTANCES OR IN COLD WEATHER

If the vehicle is frequently driven short distances or in cold weather conditions then the engine may not reach normal operating temperature. This means that regeneration of the diesel particle filter does not take place and the filter is not efficiently cleaned. When the filter reaches a condition when a filter regeneration is appropriate and the current drive style is not appropriate, a warning triangle on the instrument panel illuminates, and the message DPF Full. See manual is displayed on the instrument panel. This is not indicating a fault condition with the vehicle and no dealership support should be required. Start regeneration of the filter by driving the vehicle. preferably on a main road or motorway. The vehicle should then be driven for approximately 20 minutes or more.

When regeneration is complete the warning text is cleared automatically.

**Note:** A small increase in fuel consumption may be noticed temporarily during regeneration.

# 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 Land Rover Dealers/ 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.



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



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**



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



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.

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.

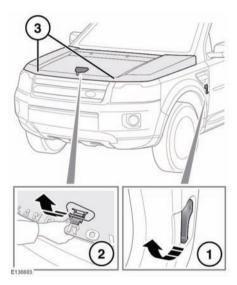
## **CLOSING THE BONNET**



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

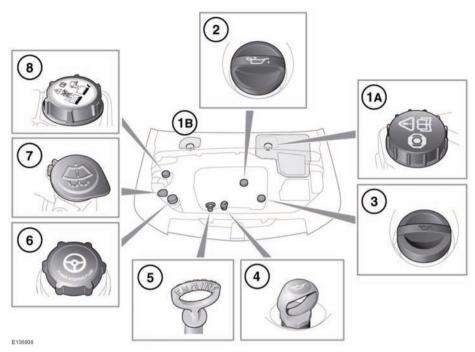
- Lower the bonnet until the safety catch engages. Using both hands, press the bonnet down until the catches click.
- 2. Check that both catches are engaged, by trying to lift the front edge of the bonnet.

# **OPENING THE BONNET**



- **1.** Pull the bonnet release lever, located in the left-hand front footwell.
- Lift the bonnet safety catch lever, located below the centre point of the bonnet, then raise the bonnet.
- **3.** When closing the bonnet ensure that both catches are securely latched.

# **ENGINE COMPARTMENT OVERVIEW**

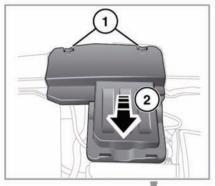


- 1. Brake fluid reservoir cap:
  - (A) Left-hand drive vehicles.
  - (B) Right-hand drive vehicles.
- 2. Engine oil filler cap.
- 3. Engine oil filler cap.
- 4. Oil level dipstick.
- 5. Oil level dipstick.
- 6. Power steering fluid filler cap.
- 7. Windscreen washer fluid filler cap
- 8. Engine coolant filler cap.

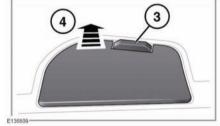


Do not drive if there is a possibility that leaked fluid will come into contact with a hot surface, such as the exhaust.

#### **UNDER BONNET COVERS - REMOVAL**







1. Press the tabs to release the cover from the casing.

**Note:** Releasing the inboard tab on the front edge of the cover first will make it easier to release the remaining tabs.

- 2. Lift the front edge of the cover and slide forwards to remove.
- 3. Release the catch.
- 4. Remove the cover.

# UNDER BONNET COVERS - REFITTING

- Before refitting the underbonnet covers, ensure that no pipes, cables or other items, have been trapped between the cover and casing.
- 1. Slide the rear edge of the cover under the rubber trim fitted to the scuttle panel.
- 2. Make sure the front edge of the cover is flush to the casing, and then press down until the cover clicks into place.

### UNBLOCKING WASHER JETS



Do not operate the washer jets during unblocking or adjustment.

Windscreen washer fluid may cause irritation to the eyes and skin. Always read and observe the washer fluid manufacturers instructions.

If a washer jet becomes blocked, use a thin strand of wire to unblock the jet by inserting the wire into the jet. Ensure that the wire is completely removed after unblocking. The washer jet position may also be adjusted by inserting the point of a needle into the jet and gently repositioning it.

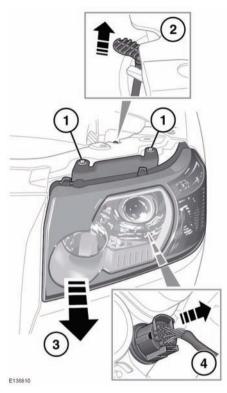
# **CHANGING A BULB**



Always replace bulbs with the correct type and specification. If you are in any doubt contact your Land Rover Dealer/Authorised Repairer for advice.

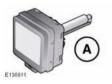
**Note:** In certain territories it is a legal requirement to carry spare bulbs. A replacement bulb kit is available as an approved accessory from your dealer.

# **HEADLAMP REMOVAL**



- Do not place the removed lamp unit face down on hard or abrasive surfaces. Doing so may scratch the surface of the lens.
- 1. Undo and remove the two retaining bolts.
- 2. Pull up the locking lever to release the headlamp unit.
- **3.** Pull the headlamp unit forward to allow access to the rear of the unit.
- 4. Disconnect the electrical connector from the back of the unit by pressing the tab and pulling the connector.

## HEADLAMP BULB IDENTIFICATION





- A. Xenon bulb.
- B. Halogen bulb.

### HALOGEN BULBS

Dependent on vehicle specification, halogen bulbs may be used for high beam, low beam, and front fog lamps. Take care not to touch the glass part of the bulb with your fingers; always use a cloth to handle the bulb. If necessary use methylated spirits to remove finger prints.

### XENON LAMPS



Replacement or maintenance of Xenon lamps should only be carried out by suitably qualified personnel.



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.



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



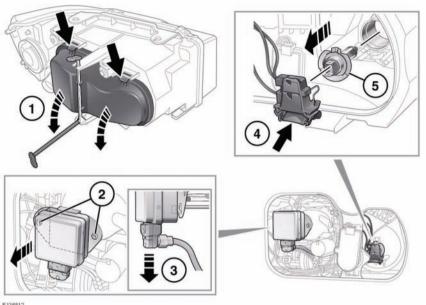
Xenon lamp units contain Mercury which is highly toxic and can be extremely harmful.



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

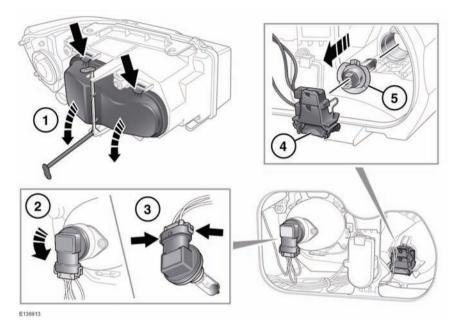
# **HEADLAMP BULB REPLACEMENT**

# **Combined Xenon and Halogen**



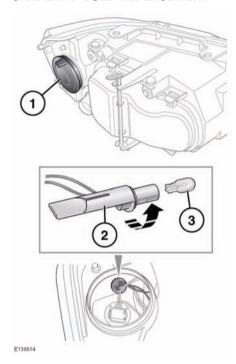
- E136812
- 1. Unclip the locking lever, press down the two tabs and remove the cover.
- 2. Undo the two retaining screws and remove the Xenon unit.
- 3. Remove the connector from the Xenon unit.
- 4. Pull the connector off of the Halogen bulb.
- **5.** Unclip the halogen bulb and remove it from the unit.

# **Halogen Only**



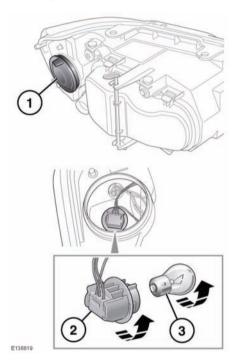
- **1.** Unclip the locking lever, press down the two tabs and remove the cover.
- 2. Pull the Halogen dipped beam connector off of the bulb.
  - Take care not to touch this type of bulb with your fingers; always use a cloth to handle them. If necessary, clean the bulb with methylated spirits to remove fingerprints.
- 3. Unclip the bulb and remove it from the unit.
- **4.** Pull the main beam connector off of the bulb.
- 5. Unclip the bulb and remove it from the unit.

# SIDE LAMP BULB REPLACEMENT



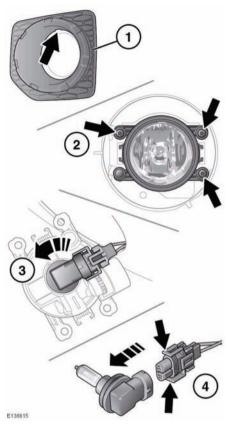
- 1. Remove the cover.
- 2. Twist the side lamp bulb holder and remove it from the lamp unit.
- 3. Pull bulb from holder to remove.

# DIRECTION INDICATOR BULB REPLACEMENT



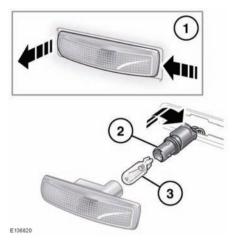
- 1. Remove the cover.
- **2.** Twist the indicator bulb holder, and remove it from the lamp unit.
- **3.** Press the bulb into the holder, then twist it and remove.

# FRONT FOG LAMP BULB REPLACEMENT



- 1. Using the slot at the top of the lamp surround, lever out with a suitable implement to remove.
- 2. Undo the three retaining screws, and remove the lamp unit.
- **3.** Rotate the bulb holder (anticlockwise) and remove from the lamp unit.
- **4.** Press the two clips together, and remove the electrical connector.

# SIDE REPEATER LAMP BULB REPLACEMENT



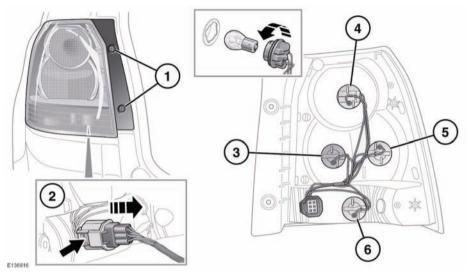
Follow the steps illustrated. Insert a new bulb and refit the components.

# LICENSE PLATE LAMP BULB REPLACEMENT



Follow the steps illustrated. Insert a new bulb and refit the components.

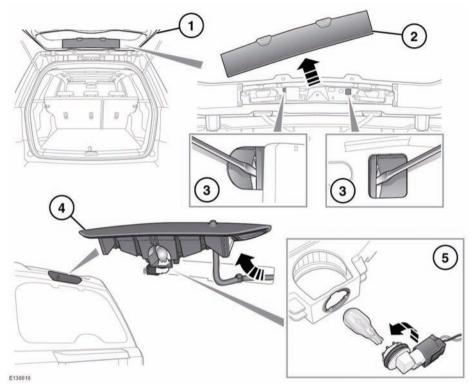
# **REAR LAMP BULB REPLACEMENT**



- 1. With the tailgate open, remove the two screws from the inner edge of the unit.
- Pull the unit carefully away from the vehicle, disconnect the electrical connector and remove the unit from the vehicle
- 3. Direction indicator.
- 4. Stop/tail lamp.
- 5. Reversing lamp
- 6. Rear fog lamp.

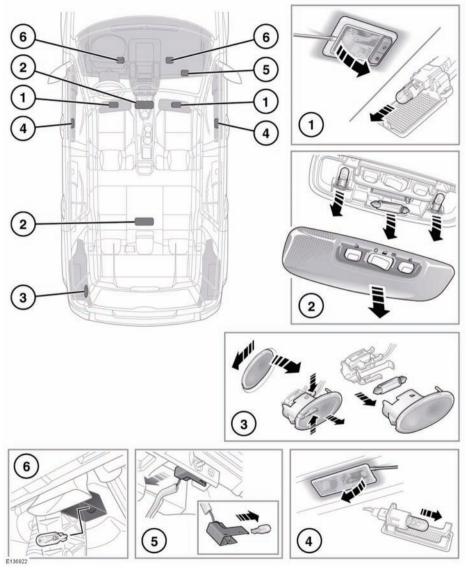
Twist the relevant bulb unit and pull to access the bulb. Push, twist and pull to remove the bulb.

# HIGH LEVEL BRAKE LAMP BULB REPLACEMENT



- 1. Open the tailgate.
- 2. Remove the interior trim cover.
- **3.** Using a suitable implement, press in the lamp unit retaining clips and close the tailgate.
- **4.** Remove the lamp unit from the tailgate.
- **5.** Rotate the bulb holder and remove it from the lamp unit, then pull the bulb from the holder.

# INTERIOR LAMP BULB REPLACEMENT



Follow the steps illustrated. Insert a new bulb and refit the components.

1. Sun visor lamps.

- 2. Courtesy lamp and map lamps.
- 3. Load space lamp.

- 4. Puddle lamps.
- **5.** Glove box lamp.
- 6. Footwell lamps.

#### 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.

### SUNROOF RESET

If the battery is disconnected or the power supply is interrupted whilst the sunroof is partially open, it will need to be recalibrated.

Once the battery is reconnected or the power supply is restored, recalibrate the sunroof as follows:

- **1.** Switch the ignition on.
- With the sunroof closed, press and release the front of the switch. The sunroof will move to the tilted position.
- **3.** Press the front of the sunroof switch and hold for 20 seconds.
- After 20 seconds, the sunroof will begin to move. Keep the front of the switch pressed until the fully open/close cycle has completed.
- **5.** Once the sunroof has stopped moving, release the switch.

The sunroof can now be operated as normal.

## 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 warranty.



Land Rover 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 Land Rover vehicles.

# **CLEANING THE EXTERIOR**

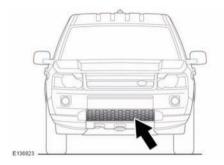
- Never aim the water jet directly at the engine air intake, heater air intakes, body seals (doors, sunroof, windows etc.) or at any components which may be damaged (lights, mirrors, exterior trim etc.).
- **①** Do not use a power wash system in the engine bay area.
- Following cleaning of the vehicle exterior (particularly with a pressure washer), it is recommended that the vehicle is taken for a short drive to dry out the brakes.
- Substances which are corrosive, such as bird droppings, can damage the vehicle's paintwork and should be removed as soon as possible.

## **UNDER BODY MAINTENANCE**

Regularly flush the underbody with plain water, and pay particular attention to areas where mud and debris collect

If damage or corrosion are detected, have the vehicle checked by a Land Rover Dealer/Authorised Repairer as soon as possible.

# CLEANING AFTER OFF-ROAD DRIVING



Ensure that the areas around air intakes and the front grille are clean and clear of debris. Pay particular attention to the lower grille and radiator. Failure to do so may cause the engine to overheat, leading to severe engine damage.

Ensure that the vehicle underside is cleaned as soon as possible after driving off-road.

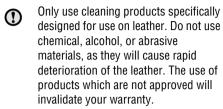
#### **CLEANING THE INTERIOR**

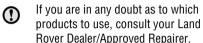


Do not polish the instrument panel. Polished surfaces are reflective, and may interfere with the drivers view.

Clean plastic or cloth faced surfaces with warm water and non-detergent soap. Then wipe clean with a soft cloth.

# **CLEANING LEATHER UPHOLSTERY**





Leather should be cleaned and protected at least every six months.

To prevent ingrained dirt and staining, inspect the seat upholstery regularly and clean every 1 to 2 months as follows:

- Wipe off fine dust from the seat surfaces using a clean, damp, non-coloured cloth. Avoid over wetting the leather.
- 2. If this is not sufficient, use a cloth which has been dampened with warm soapy water and then wrung out. Use only mild non-caustic soap.
- Use Land Rover leather cleaner for heavily soiled areas. Dry off and rub the with a clean soft cloth, changing surfaces regularly.

Use Land Rover leather cleaner several times a year to maintain the leather's suppleness and appearance. The cleaner will nourish and moisturise and help to improve the surface protection film against dust and substances.

- Dark clothing may stain leather seats just like other upholstery products.
- Sharp objects such as belts, zippers, rivets etc can leave permanent scratches and scratch marks on the leather surface.
- Unless spillages such as tea, coffee or ink are washed away immediately, permanent staining may have to be accepted.

If a valet service is used, ensure that the specialist concerned is aware of, and follows, these instructions precisely.

**Note:** Some materials/fabrics are prone to dye transfer, which can cause unsightly discolouration of lighter coloured leathers. Affected areas should be cleaned and re-protected as soon as possible.

# **CLEANING THE SEAT BELTS**



Do not allow any water, cleaning products, or fabric from cloths to enter the seat belt mechanism. Any substance which enters the mechanism may affect the performance of the seat belt in an impact.

Extend the seat belts fully, then use warm water and a non-detergent soap to clean. Allow the seat belts to dry naturally whilst fully extended.

**Note:** Whilst cleaning the seat belt, take the opportunity to examine the webbing for damage/wear. Any wear or damage should be reported to, and rectified by, a Land Rover Dealer/Approved Repairer.

# **AIRBAG MODULE COVERS**



Airbag covers should only be cleaned using a slightly dampened cloth, and a small amount of upholstery cleaner.



Do not allow the airbag covers, or surrounding areas, to become contaminated with liquids. Any substance which enters the mechanism can prevent correct deployment of an airbag during an impact.

## CLEANING THE TOUCH SCREEN

- Clean with a lightly moistened cloth.
- Do not use chemical agents or domestic cleaners.
- To prevent errors occurring, ensure that only one finger at a time is in contact with the screen.
- Do not use excessive pressure.
- Do not allow sharp, hard or abrasive objects to make contact with the screen.
- Avoid exposing the screen to direct sunlight for long periods.