GENERAL INFORMATION

There are three types of headlamp systems:

- Halogen high/low beam main lamp with a fill-in high beam halogen lamp alongside.
- Bi-xenon high/low beam main lamps with fill-in high beam halogen lamp alongside.
- An Adaptive Front Lighting System (AFS). See **ADAPTIVE FRONT LIGHTING SYSTEM (AFS)** (page 89).

Halogen headlamps

Halogen bulbs are very similar to the standard light bulbs fitted to side or tail lights. Added traces of halogen inside the bulb make it 10 to 20% more efficient than a standard light bulb of similar voltage and wattage. Halogen bulbs have an operating life of two to three times longer than a standard bulb.

Bi-Xenon headlamps

Some vehicles are fitted with Xenon low/high beam headlamp units. Xenon lamps provide significantly improved visibility, especially during adverse weather and driving conditions.

Bi-Xenon units use a Xenon bulb for both high beam and low beam, whilst a halogen bulb is used for high beam fill-in. A shutter, operated by a solenoid, changes the direction of the Xenon light beam, to give either low or high beam.

The operational life of a Bi-Xenon light is significantly longer than that of a conventional or halogen bulb.

Daytime running lamps

In certain markets, the side lamps, licence plate lamps and headlamp low beams will illuminate with the engine running and the lamps master switch turned off. The instrument pack illumination remains off.



Unless they are required or prohibited by law, daytime running lamps can be disabled or enabled by a Land Rover Dealer/Authorised Repairer.

Stop lamps

The stop lamps will illuminate while the brake pedal is pressed.

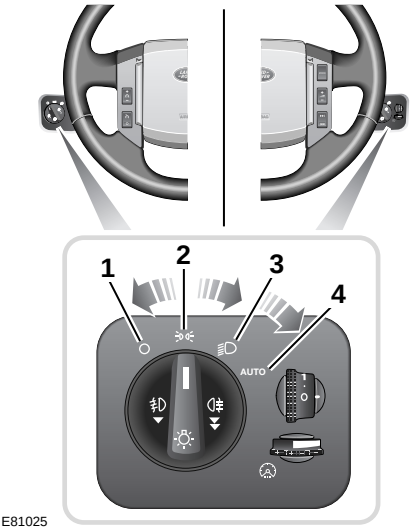
The stop lamps also illuminate when Hill Descent Control is braking the vehicle or during Electric parking brake dynamic operation. See **ELECTRIC PARKING BRAKE (EPB)** (page 153).

Reversing lamps

Selection of reverse gear will operate the reversing lamps.

LIGHTING CONTROL

Lamps master switch



E81025

1. Off
2. Side lamps
3. Low beam headlamps
4. Automatic control lamps

Side lamps

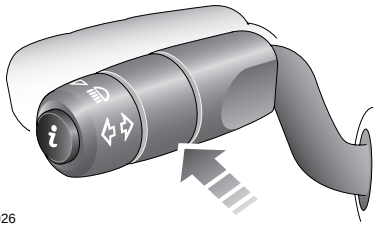
The side lamps and licence plate lamps, illuminate when the lamps master switch is turned to positions **2** or **3**, regardless of the position of the starter switch.

A green warning indicator in the instrument pack will illuminate when side lamps are on.

Low beam headlamps

The low beam headlamps, illuminate when the lamps master switch is turned to position **3**, and the starter switch is in position **II**.

High beam headlamps



E81026

With the lamps master switch in position **3** and starter switch in position **II**, push the column stalk away from the steering wheel to select high beam.

The blue warning indicator in the instrument pack will illuminate when high beam is selected.

To cancel high beam, pull the stalk towards the steering wheel.

To flash the headlamps on high beam, pull the stalk towards the steering wheel and release it.

Note: *Do not use high beam where it may dazzle other road users.*

Headlamp courtesy delay

The headlamps can be kept on for a short time after the vehicle is parked. Turn the starter switch off with the lamps master switch in positions **2**, or **3**.

Remove the key from the starter switch and turn the lamps master switch to position **1**. The headlamps will remain illuminated for up to 240 seconds. This time delay is configurable. See **TRIP COMPUTER** (page 115).

The courtesy delay may be cancelled at any time by turning the starter switch to position **I** or **II** or the lamps master switch to positions **1** or **2**.

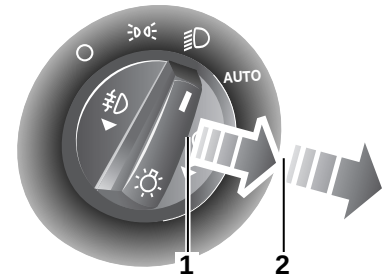
Note: *If Automatic Control Lamps are switched on, the headlamp courtesy delay will operate automatically.*

Automatic control lamps

With the lamps master switch in position **4** and starter switch in position **II**, the side lamps, low beam headlamps and licence plate lamps will illuminate automatically when the ambient light falls below a pre-defined level.

All of the lamps will go out when the ambient light rises above that level.

FRONT FOG LAMPS



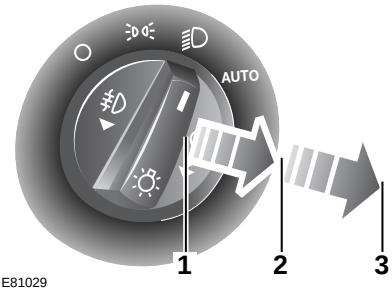
E81028

With the side lamps or low beam headlamps switched on, pull the switch to position **2** to switch on the front fog lamps.


A green warning indicator will illuminate in the instrument pack when the front fog lamps are switched on.

To switch off the fog lamps, return the switch to position **1**.

REAR FOG LAMPS



E81029

With the side lamps or low beam headlamps switched on, pull the switch to position **3** to switch on the rear fog lamps.

If front fog lamps are not fitted, the rear fog lamps illuminate with the switch in position **2**.


An amber warning indicator will illuminate in the instrument pack when the rear fog lamps are switched on.

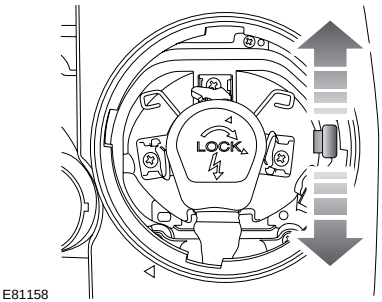
To switch off the fog lamps, return the switch to position **1**.

ADJUSTING THE HEADLAMPS

Headlamp beam adjustment - Xenon

The lever illustrated may be on either side of the headlamp bulb aperture.

When travelling in countries where you must drive on the opposite side of the road, use the lever to alter the beam pattern.

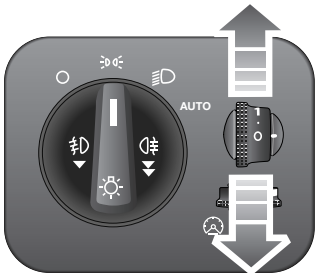


E81158

You will need to remove the headlamp unit. See **REMOVING A HEADLAMP** (page 93). Move the lever down for driving in left-hand drive countries and up for right-hand drive countries.

HEADLAMP LEVELLING

Vehicles with coil suspension have manual headlamp levelling to compensate for uneven loading of the vehicle.

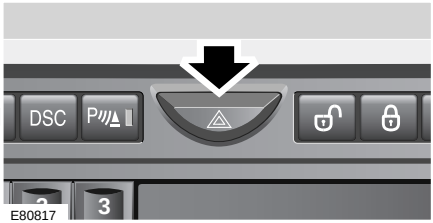


E81502

With the headlamps turned on, rotate the thumbwheel up or down to adjust the vertical aim of the beams.

Switch position	Setting
0	Driver only or driver and front seat passenger.
0.5	All seats occupied in a 5-seat vehicle or all seats in front and third rows for a 7-seat vehicle.
1	All seats occupied in a 7-seat vehicle.
1.5	All seats occupied in a vehicle loaded to its Gross Vehicle Weight.
2	Driver only in a vehicle loaded to its Gross Vehicle Weight.

HAZARD WARNING FLASHERS



Press the switch to operate the hazard warning lamps. All of the direction indicator lamps will flash together.

Use only in an emergency to warn other road users when the stationary vehicle is causing an obstruction, or is in a hazardous situation. Remember to switch off before moving away.

ADAPTIVE FRONT LIGHTING SYSTEM (AFS)

Adaptive front lighting system (AFS) is a lighting system, designed to give the driver improved visibility. It has two main components: A swivelling headlamp unit and a static bending lamp, with a beam set to 45 degrees from the centre line of the vehicle.

The headlamp units can swivel left or right to improve light spread on bends in the road and they operate throughout the vehicle speed range. They also react to braking or acceleration in the vertical plane, to maximise headlamp performance. Additional lighting is supplied by the static bending lamps at speeds between 30 km/h (18 mph) and 70 km/h (44 mph). If the higher speed is exceeded, the static bending lamps will only reactivate when speed reduces to 60 km/h (37 mph). These headlamps broaden the beam of the headlamps when cornering.

The system takes inputs from the vehicle's road speed and steering angle, to determine the amount of horizontal swivel. The amount of swivel is highest at low manoeuvring speeds and movement reduces as speed increases.

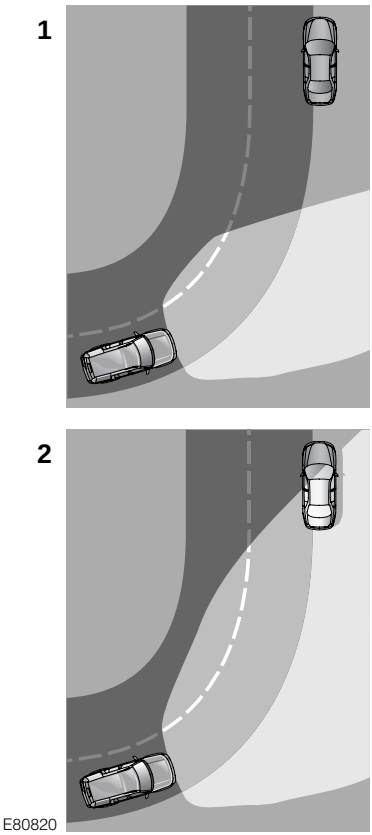
Static bending lights operate when the system detects a steering wheel rotation of 70 degrees or more.

If reverse gear is selected, the lamps return to the central position and the unit's swivelling capability is disabled.



An amber warning indicator will illuminate in the instrument pack if a fault is detected with the AFS. Seek qualified assistance.

The AFS advantage



1. Shows the light spread of a vehicle not fitted with AFS.
2. Shows the light spread of a vehicle fitted with AFS.

Cornering lamps

These lamps broaden the beam of the headlamps when cornering during normal night driving.

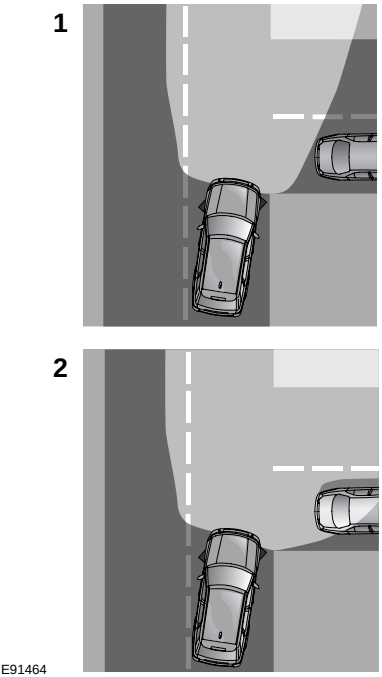
Additional lighting comes from the static bending lamps which have a beam set to 45 degrees outward from the centre line of the vehicle.

The system switches on the lamp, if it has received an input from the vehicle's direction indicator. As the system is ignition-based, the lamps will not stay on even if the vehicle is parked with the direction indicator lever in the operating position.

Only the lamp on the same side as the operating direction indicator comes on.

Operating the direction indicators will also activate the relevant lamp.

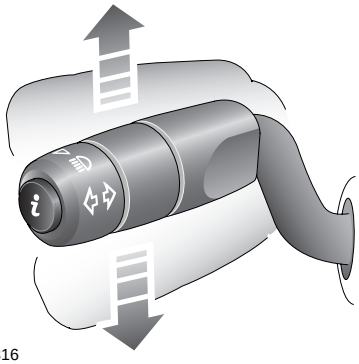
If reverse gear is selected, the lamps return to the central position and the unit's swivelling capability is disabled unless the direction indicators are operating.



E91464

1. Shows the light spread of a vehicle not fitted with cornering lamps.
2. Shows the light spread of a vehicle fitted with cornering lamps.

DIRECTION INDICATORS



E80816

With the starter switch in position **II**, move the lever up or down to operate the direction indicators.

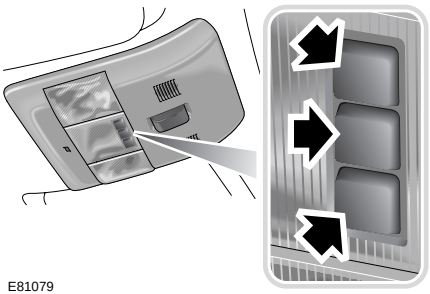
A green left or right warning indicator in the instrument pack will flash when the direction indicator lamps are operating.

When the lever is held momentarily up or down against spring pressure and then released, the indicators will flash three times to indicate a lane change.

This feature can be enabled or disabled by a Land Rover Dealer/Authorised Repairer.

INTERIOR LAMPS

Front interior lamps



E81079

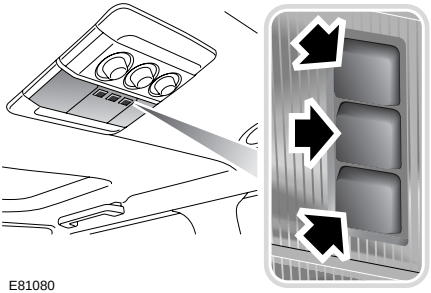
Each lamp can be switched on or off by pressing the switch adjacent to the lamp required.

In automatic mode, the lamps will illuminate automatically when a door is opened.

To enable automatic mode press the centre switch for more than three seconds. The message **INTERIOR LIGHTS AUTOMATIC** will flash in the message centre.

To de-activate the courtesy lamps automatic mode by press the centre switch. The message **INTERIOR LIGHTS OFF** will flash in the message centre.

Rear interior lamps



E81080

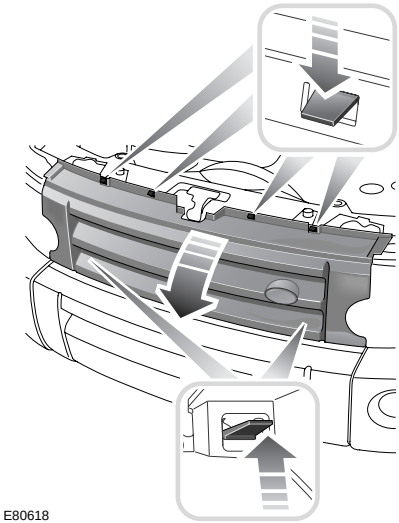
Each lamp can be switched on or off by pressing the switch adjacent to the lamp required.

Instrument pack illumination

The level of illumination can be adjusted using the instrument pack illumination dimmer switch.

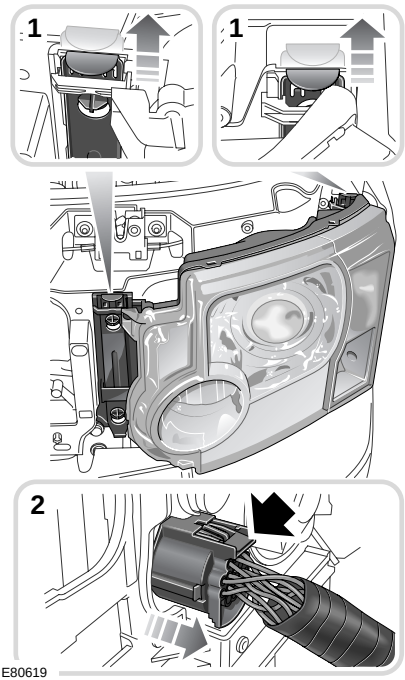
REMOVING A HEADLAMP

Removing the grille



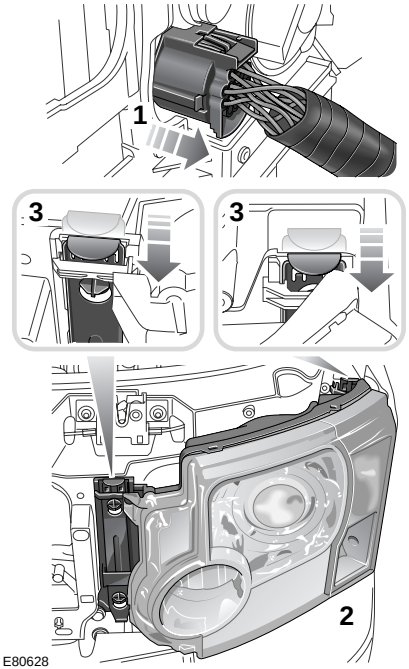
1. Press down on the four upper clips, and up on the lower two clips.
2. Lift the grille clear of the vehicle and place it where it will not become damaged.

Removing the headlamp



1. Carefully lever up the two locking bars.
2. Disconnect the wiring plug from the back of the unit and remove the unit from the vehicle.
3. Place face down on a flat surface covered in a soft material to prevent damage to the unit's lenses.

Refitting the headlamp



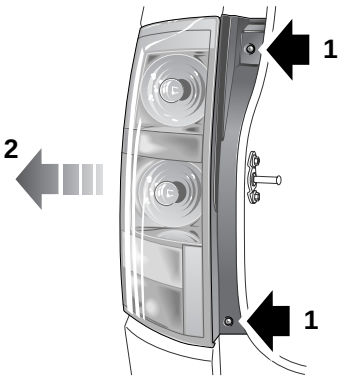
1. Reconnect the wiring plug.
2. Offer up the unit into position.
3. Push down on the two locking bars.

Refitting the grille

1. Refit the grille, aligning the upper and lower clips with their respective slots, and press into place.
2. Ensure the clips have sprung into place securing the grille.

REMOVING A REAR LAMP

It is necessary to completely remove the unit from the vehicle in order to change any of the bulbs.



1. With the tailgate open, remove two screws from the edge of the unit nearer the tailgate aperture.
2. Pull the unit away from the vehicle.
3. Disconnect the wiring multi-plug and remove the unit from the vehicle. Place face down on a flat surface covered in a soft material to prevent damage.
4. To refit the lamp, reverse the removal instructions.

CHANGING A BULB

CAUTION

Always replace bulbs with the correct type and specification. If you are in any doubt contact your 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/Authorised Repairer.*

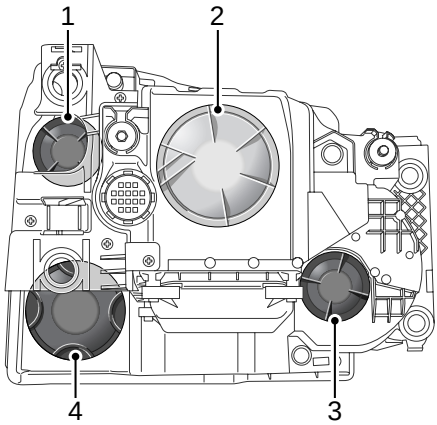
Check the operation of all exterior lamps before you drive the vehicle.

Bulb access

WARNING

Do not attempt to change any bulb with the lighting switched on. If the lighting has just been switched off, give the bulbs time to cool down. Handling them in a hot condition may cause personal injury.

The headlamp unit contains five lamps and it is necessary to completely remove the unit from the vehicle in order to change any of the bulbs. See **REMOVING A HEADLAMP** (page 93).



E80620

1. Direction indicator
2. Low beam/Xenon
3. High beam
4. Side lamp and cornering lamp

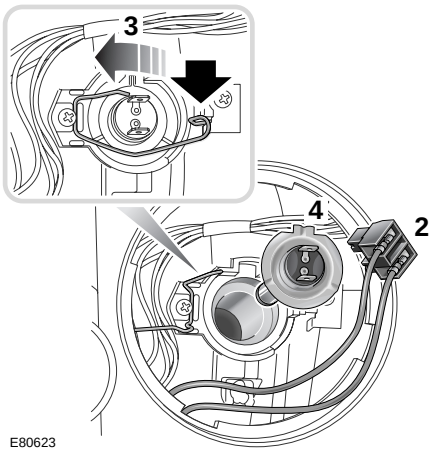
Headlamp bulb (Halogen)

CAUTION

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.

Note: *Low beam illustrated in following procedure.*

1. Twist and lift off the domed cap.



2. Pull off the electrical connector.
3. Release the spring clip holding the bulb in place.
4. Remove bulb.
5. Insert the new bulb and repeat the above procedure in reverse order. When replacing the cap, align the arrowheads on the cap and the body of the unit.

Headlamp bulb (Xenon)

WARNINGS

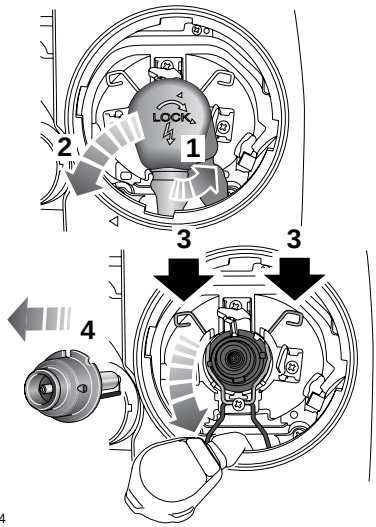
Bi-Xenon lamp units operate at very high temperature. Ensure that the lamp units have cooled before attempting to touch them.

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

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 qualified personnel.

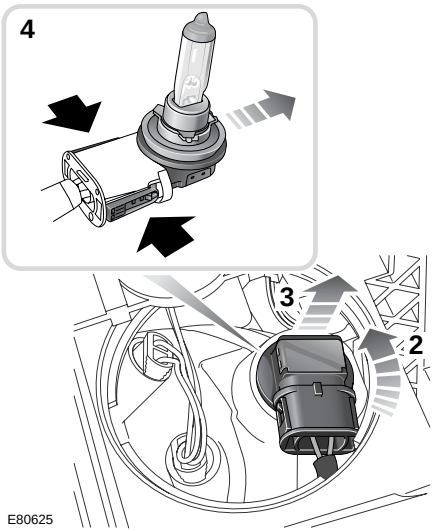
Seek advice about the proper disposal of Xenon lamp units from a Land Rover Dealer/Authorised Repairer or your local authority.



1. Twist and lift off the domed cap.
2. Twist the connector cap counterclockwise to unlock it. Pull clear of the bulb.
3. Release the spring clip holding the bulb in place.
4. Remove bulb.
5. Insert the new bulb and reverse the above procedure. Ensure that the lugs on the cap are in contact with the bulb base.

Cornering bulb

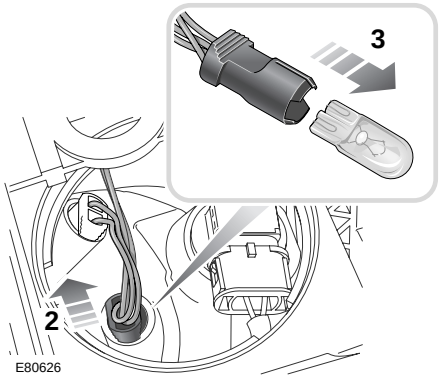
1. Twist and lift off the domed cap.



2. Twist the bulb holder to unlock.
3. Remove bulb complete with electrical connector.
4. To release the bulb, squeeze the two catches, then pull to remove the electrical connector.
5. Insert the new bulb and reverse the above procedure. Align the arrowheads on the cap and the body of the unit.

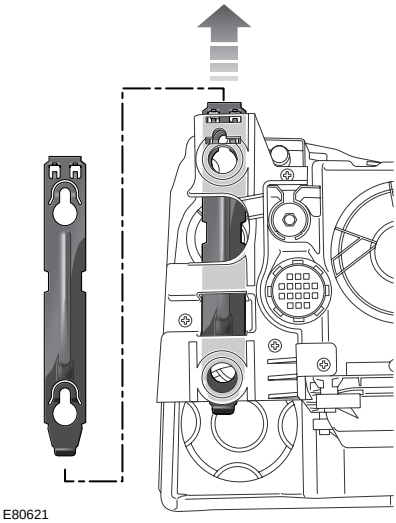
Front side lamp bulb

1. Twist and lift off the domed cap.

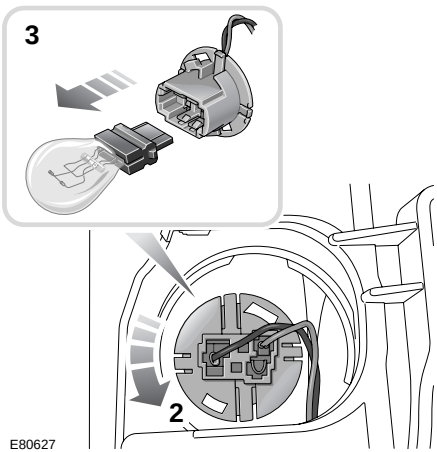


2. Pull out the bulb complete with electrical connector.
3. Pull the bulb out of the electrical connector.
4. Insert the new bulb and reverse the above procedure. Align the arrowheads on the cap and the body of the unit.

Front indicator lamp bulb


E80621

1. Remove the headlamp unit locking bar, and twist and lift off the domed cap.



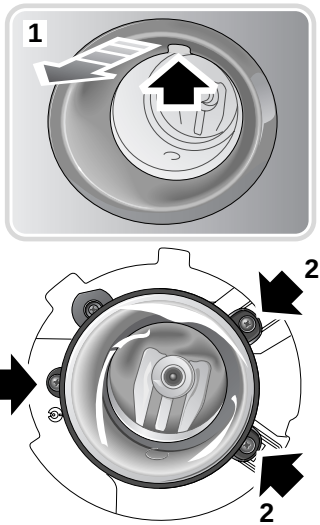
E80627

2. Turn the electrical connector counterclockwise to release it.
3. Pull the bulb out of the electrical connector.
4. Insert the new bulb and reverse the above procedure. Align the arrowheads on the cap and the body of the unit.

Front fog lamp bulb

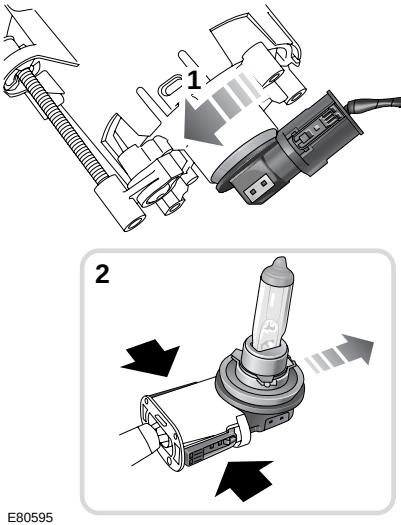
CAUTION

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.



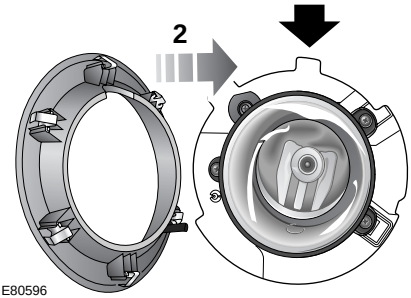
E80594

1. Using the finger slot at the top of the fog lamp surround, pull to remove.
2. Remove the three securing screws to release the lamp unit. Ease the unit out of the front bumper.



E80595

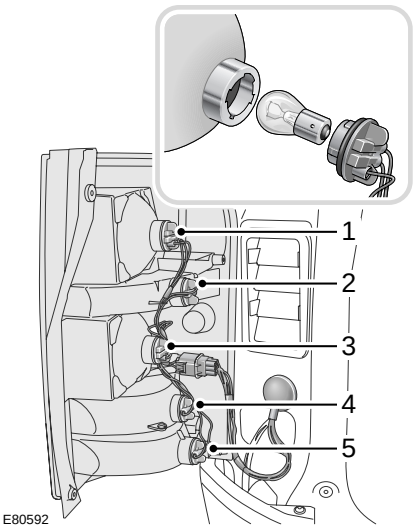
3. Twist the bulb holder counterclockwise to unlock, then pull out the bulb, complete with electrical connector.
4. To release the bulb, depress the two catches (solid arrows in inset), then pull to remove the bulb from the holder.
5. Noting the flat and the tab on the bulb mounting flange. Insert the new bulb.
6. Reverse the above procedure to reassemble.
7. Align fog lamp to front bumper and secure with screws.



E80596

8. Align the spring clip above the finger slot with the upper receiver shape in the bumper and push into place.
9. Push the lower part of fog lamp surround into place, applying some upward pressure.

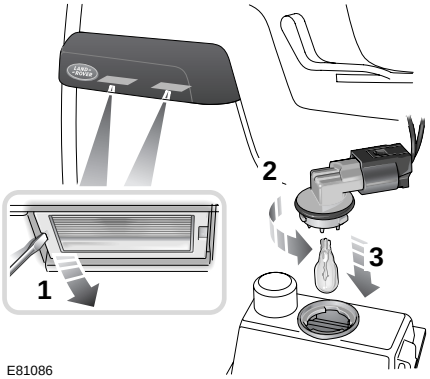
Rear lamp bulb



1. Stop/tail lamp
2. Direction indicator
3. Tail lamp
4. Reversing lamp
5. Rear fog lamp

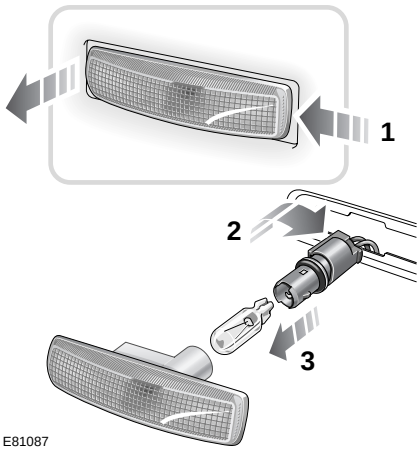
1. Remove the rear lamp. See **REMOVING A REAR LAMP** (page 94).
2. Each bulb is now accessible by twisting off its electrical connection cap.
3. Fit the rear lamp. See **REMOVING A REAR LAMP** (page 94).

Licence plate lamp bulb



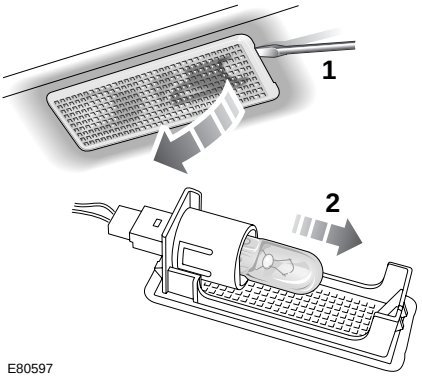
Follow the steps illustrated. Insert a new bulb and refit the components.

Side repeater lamp bulb



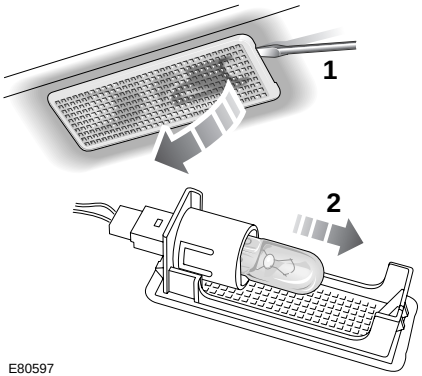
Follow the steps illustrated. Insert a new bulb and refit the components.

Stepwell lamp bulb



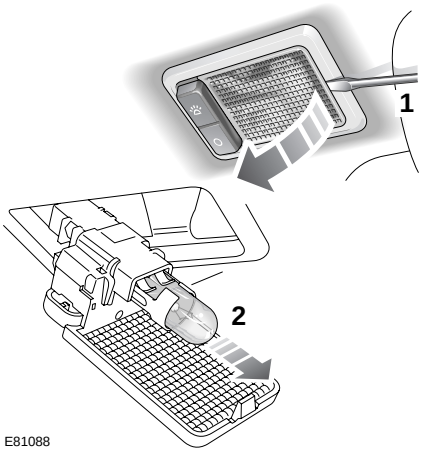
Follow the steps illustrated. Insert a new bulb and refit the components.

Tailgate lamp bulb



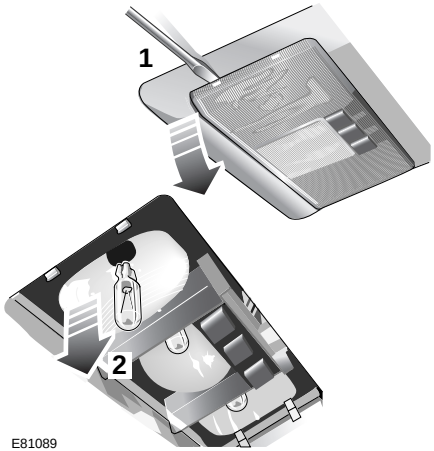
Follow the steps illustrated. Insert a new bulb and refit the components.

Courtesy lamp bulb



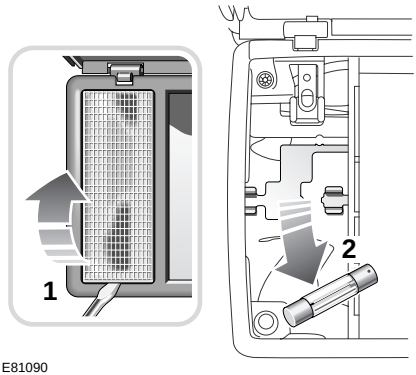
Follow the steps illustrated. Insert a new bulb and refit the components.

Map lamp bulb



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

Vanity mirror lamp bulb



E81090

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

BULB SPECIFICATION CHART

CAUTION

Before attempting to replace a bulb, ensure that both the affected lamp and the vehicle's ignition system are turned off. If the circuit remains live a short circuit can occur which may damage the vehicle's electrical system.

Note: *All bulbs must be rated at 12 volts.*

Bulb	Watts
Headlamps, low and high beam (Halogen)	55 (H7)
Headlamps, low and high beam (Xenon)	55 (D2S)
Cornering lamps (Halogen)	35 (H8)
Front side lamps	W5W
Front direction indicators	S8
Rear direction indicators	P21
Front fog lamps (Halogen)	55 (H11)
Side marker lamps	W5W
Reverse lamps	P21
Rear fog guard lamps	P21
Stop and tail lamps	P21/5
Number plate lamps	W5W
Door or puddle lamps	W5W
Interior lamps	W5W
Luggage or footwell lamps	W5W
Luggage or tailgate lamps	W5W
Glovebox lamp	W5W
Vanity mirror lamp	1.2