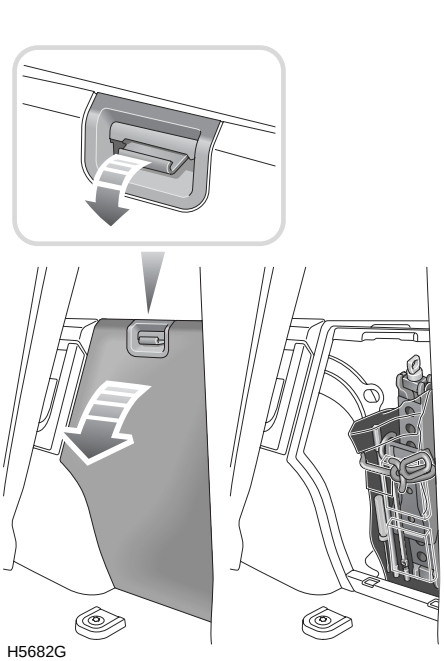
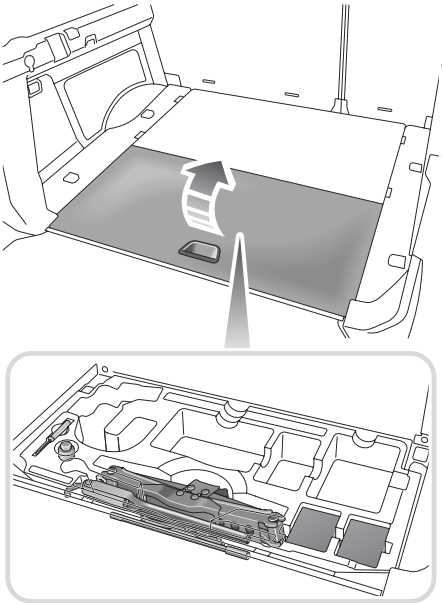
TOOL KIT



H5682G

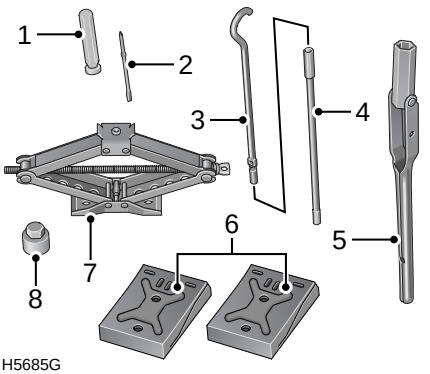
On seven-seater vehicles, the wheel change tool kit is stowed behind an access cover in the rear loadspace area.



H5683G

On five-seater vehicles, the tool tray is located under a lift-up panel set in the loadspace floor.

Note: *Take careful note of the stowage position of each of the tools as it is important to return them to their correct position after use.*



H5685G

The tool kit consists of

1. Screwdriver handle
2. Screwdriver blade
3. Jack screw rotating hook
4. Extension piece
5. Wheel nut brace
6. Wheel chocks
7. Wheel change jack
8. Locking wheel nut key*

Care of the jack

Examine the jack occasionally, clean and grease the moving parts, particularly the screw thread, to prevent corrosion.

To avoid contamination, the jack should always be stowed in its fully closed position.

WARNING

After wheel changing, always secure tools, chocks, jack and replaced wheel in their correct storage positions. Such objects if not properly stowed can become flying missiles in a crash or rollover, potentially causing injury or death.

PUNCTURED TIRES

If you have a flat tire while driving:

- Do not brake heavily.
- Gradually decrease the vehicle's speed.
- Hold the steering wheel firmly.
- Slowly move to a safe and suitable place at the side of the road.

Wheel Changing Safety

If possible, choose a safe place to stop away from the main road. Always ask your passengers to get out of the vehicle and wait in a safe area away from other traffic.

Note: *Switch on the hazard warning lights to alert other road users.*

Before changing a wheel, ensure that the front wheels are in the straight-ahead position (if possible), apply the handbrake, select 'P' (Park) and select LOW range in the transfer box. Raise the air suspension to the off-road position.

Turn off the starter switch, remove the key and engage the steering lock. Observe the following precautions:

- Ensure that the jack will be positioned on firm, level ground; NEVER on soft ground, or over metal gratings or manhole covers. DO NOT place additional material between the jack and the ground; this may jeopardise the safety of the jacking operation.
- Chock the wheel(s), see **Using wheel chocks, 277**.
- NEVER raise the vehicle with passengers inside, or with a caravan or trailer connected!

Tilt Sensor*

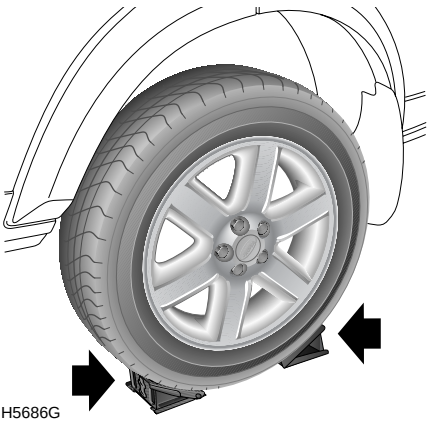
Your vehicle is fitted with a tilt sensor which activates the alarm if the vehicle is tilted fore and aft, or side to side, after it has been locked.

If you wish to have the doors locked while jacking up the vehicle, for any reason, lock the doors by pressing the lock button on the remote handset twice within three seconds.

Using wheel chocks

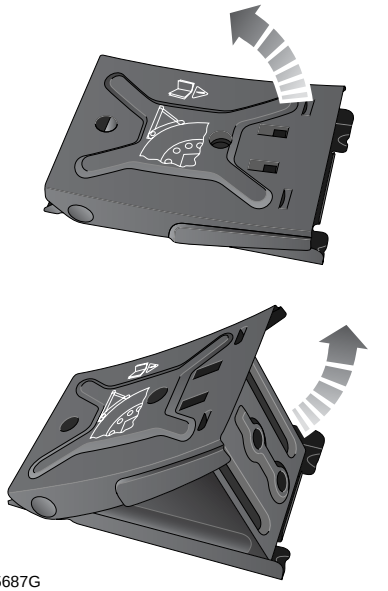
WARNING

Before raising the vehicle, it is ESSENTIAL to chock the road wheels in two places: the parkbrake acts on the transmission, not on the rear wheels, and therefore may not hold the vehicle when raised.



H5686G

If possible, position the vehicle on level ground, chocking both sides of the wheel diagonally opposite the one to be removed.



H5687G

If jacking the vehicle on a slope is unavoidable, place the chocks on the downhill side of the two opposite wheels.

The wheel chocks are stowed in the toolkit, as shown in **TOOL KIT, 275**.

REMOVING THE SPARE WHEEL

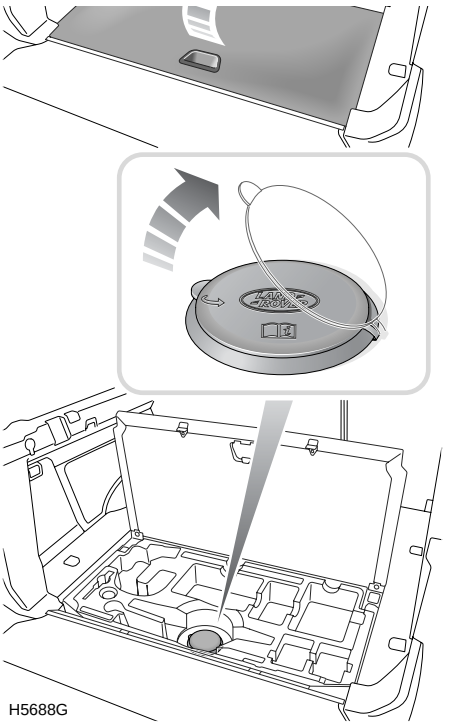
Spare wheel

Always remove the spare wheel before jacking up the vehicle.

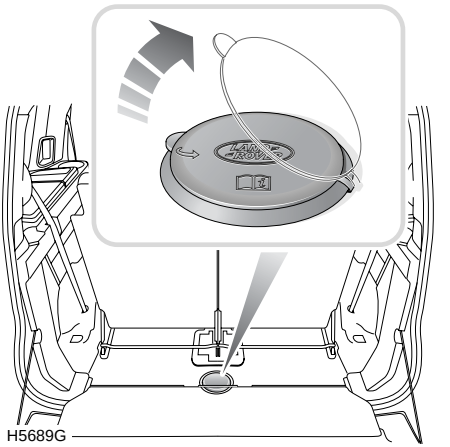
WARNING

The wheels are extremely heavy. Take care when manoeuvring the spare wheel.

Note: *Before removing the spare wheel from the vehicle, take a look at the position that the spare wheel is stowed in, as you will need to check that the wheel about to be removed from the vehicle is returned to the correct storage position.*



Spare wheel access - five-seat vehicle



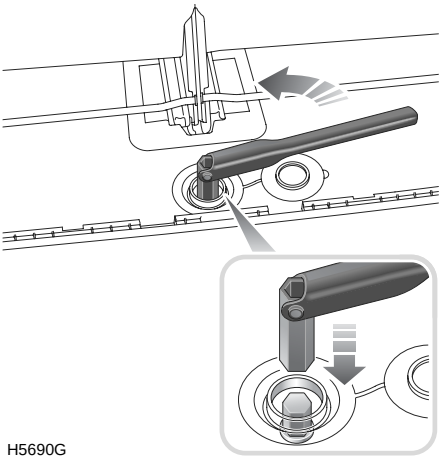
Spare wheel access - seven-seat vehicle

With the tailgate open:

1. Lift open the spare wheel mechanism access hatch in the rear loadspace.

   On 5-seat vehicles, remove the jack from the tool tray.

2. Tilt up the circular locking cap covering the spare-wheel storage nut.



H5690G

3. Fit the wheel nut brace to the wheel-hoist winch nut and rotate anticlockwise to lower the spare wheel.

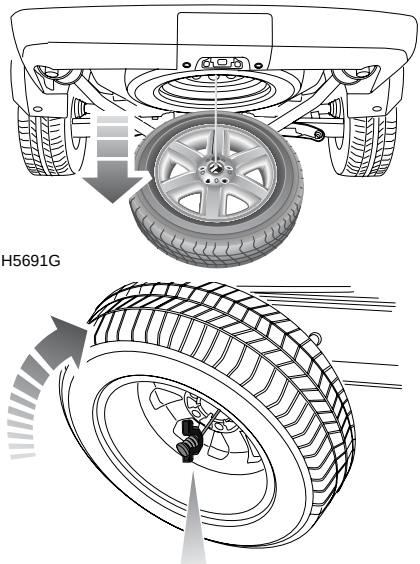
Caution: The mechanism has been designed for use with the wheel nut brace. DO NOT use power tools on the wheel-hoist winch.

When the wheel has reached the ground, continue to wind the handle until the cable is slack.

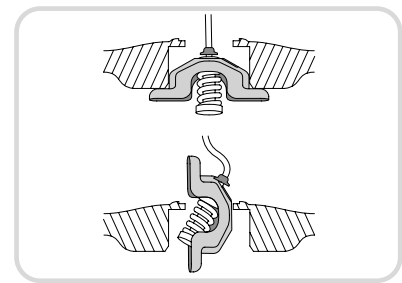
Do not attempt to turn the winch beyond the physical stop.

Note: *In 7-seat vehicles, the wheel-hoist nut is quite close to the back of the rear seats when they are in the upright position.*

To cater for this, fit the wheel nut brace to the wheel-hoist nut, turn it as far as possible in the desired direction and then flip the handle over the top of the nut to the other side and continue to turn it.



H5691G

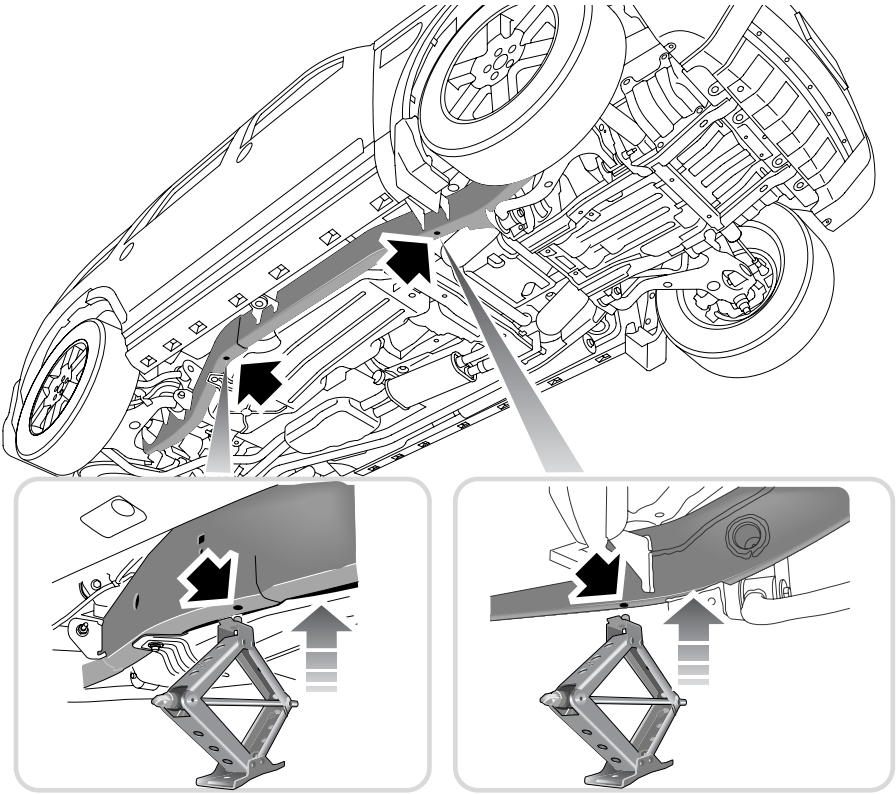


H5909G

4. Hold the cable and tilt the lifting lug until it can be lifted through the hole in the wheel, as shown above.

CHANGING A WHEEL

Positioning the jack - right-hand side



H5693G

Note: *Before positioning the jack under the vehicle, ensure that the air suspension is set to Off-road height.*

WARNING

NEVER work beneath the vehicle with the jack as the only means of support. The jack is designed for wheel changing only.

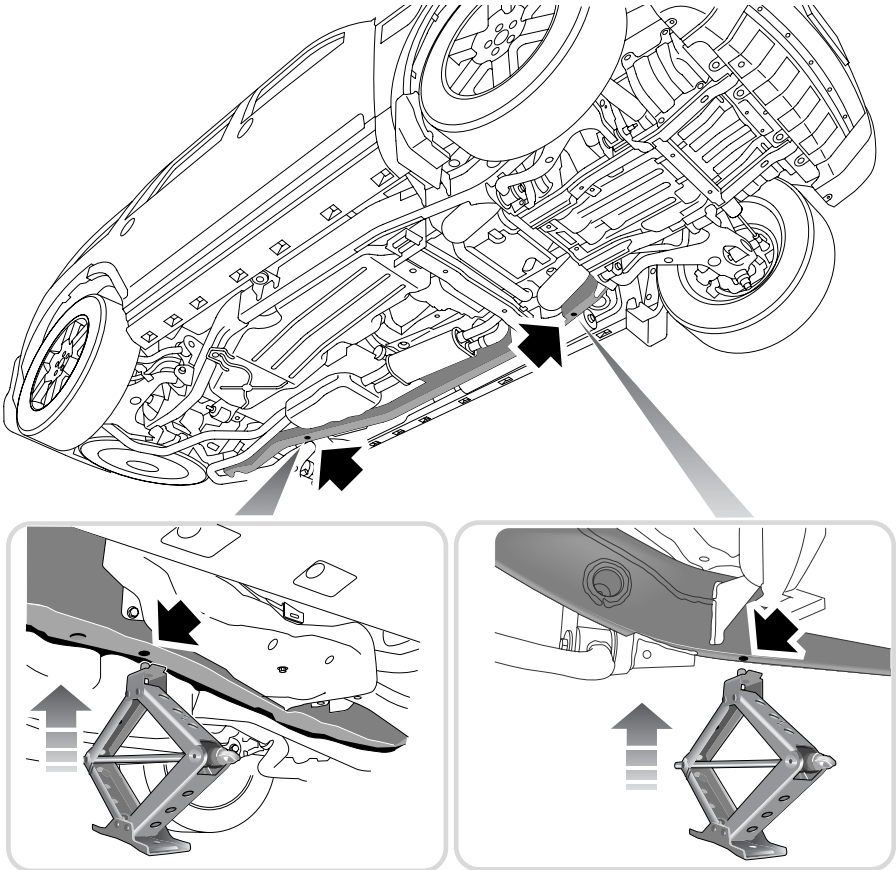
Always remove the spare wheel before jacking up the vehicle.

WARNING

ALWAYS:

- **Place the jack on firm level ground.**
- **Position the jack from the side of the vehicle, in line with the appropriate jacking point.**
- **Raise the jack so that the pin in the head of the jack engages with a hole in the chassis rail at the points shown in the illustrations.**

Positioning the jack - left-hand side



H5694G

WARNING

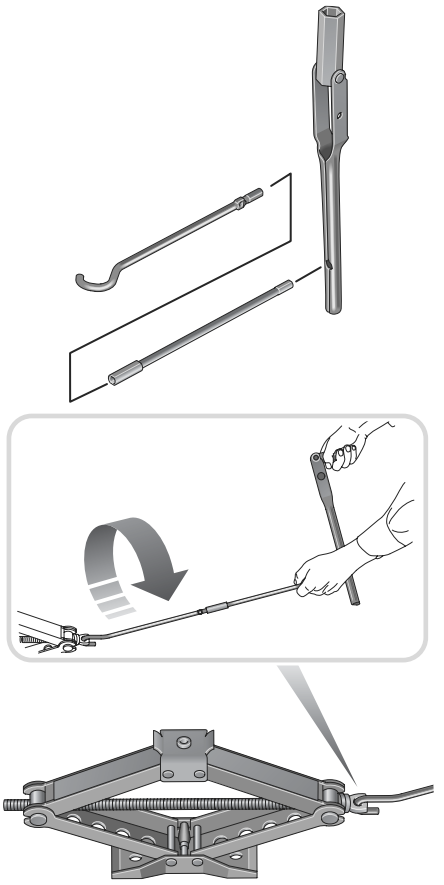
ONLY jack the vehicle using the jack location points described, or damage to the vehicle could occur.

Always position the jack from the side of the vehicle, approximately in line with the appropriate jacking point. Ensure the jack is positioned on firm, level ground.

WARNING

ONLY jack the vehicle using the jack location points described, or damage to the vehicle may occur.

Operating the jack



H5695G

Before raising the vehicle, use the wheel nut brace to slacken the wheel nuts half a turn anticlockwise.

Attach the jack cranking lever to the jack. Fit the wheel nut brace onto the end of the cranking lever.

Turn the jack lever clockwise to raise the jack cradle until it engages with the jacking point. Ensure that the base of the jack is in full contact with the road surface.

Changing a wheel

Always remove the spare wheel before jacking up the vehicle.

1. Raise the vehicle until the tire is clear of the ground.
2. Remove the wheel nuts and place to one side to prevent them from being lost.
3. Remove the road wheel.

   Note: *DO NOT damage the style surface of the wheel by placing it face down on the road.*
4. On alloy wheels, use an approved anti-seize compound to treat the wheel mounting bore. This will minimise any tendency for adhesion between the wheel and the bore.

   Ensure that no compound comes into contact with the brake components or the flat mounting surfaces of the wheel.

   If, due to an emergency situation, this treatment is not practicable; refit the spare wheel for the time being, but remove and treat the wheel at the earliest opportunity.
5. Fit the spare wheel with the valve stem outwards and lightly tighten the wheel nuts, ensuring they are firmly seated. DO NOT fully tighten whilst the tire is clear of the ground. See **Directional tires*, 257**.

WARNING

When fitting a wheel, ensure that the mating faces of the hub and wheel are clean and free from rust or anti-seize compound - any accumulation of dirt or rust could cause the wheel nuts to become loose.

6. Ensure that the space under and around the vehicle is free from obstructions then lower the vehicle and remove the jack and wheel chocks.
7. Fully tighten the wheel nuts in an alternating pattern until all are tightened. DO NOT OVERTIGHTEN by using foot pressure or extension bars on the wheel nut brace, as this could overstress the wheel nuts. Check the wheel nut torque at the earliest opportunity (see **WHEELS & TIRES, 317**).
8. Using a suitable blunt tool, apply light pressure to the rear of the displaced wheel center cap and remove. Using hand pressure only, fit the center cap into the newly fitted wheel. Return tools, chocks, jack and the displaced wheel to their correct storage positions.
9. REMEMBER to change to 'H' (HIGH range) before driving.
10. Finally, check the tire pressure at the earliest opportunity (see **WHEELS & TIRES, 317**).

Note: *During jacking, the air suspension system may enter an automatic 'freeze' state, see* ***Suspension Freeze, 198****.*

Compact spare wheel*

WARNING

The following precautions must be observed when the compact spare wheel is in use:

- **The compact spare wheel is for TEMPORARYuse only. It MUST be replaced by a normal-sized wheel and tire as soon as possible.**
- **Only ONE compact spare wheel is to be used on the vehicle at any one time.**
- **DO NOT drive at a speed exceeding 80 km/h (50 mph).**
- **The tire pressure in the compact spare wheel/tire should be as detailed in the tire pressures table, see WHEELS & TIRES, 317.**
- **The compact spare wheel has a shorter life than a regular tire. Replace the tire with one of the same type and specification.**
- **The use of snow chains is not permitted on a compact spare wheel.**
- **DRIVE CAUTIOUSLY; the compact spare wheel tire is smaller in size and higher in pressure than a regular tire. It will cause a harsher ride and may have less traction on some road surfaces. If driving off-road on a compact spare wheel, drive with extra caution.**

Restowing the changed wheel

WARNING

DO NOT restow the wheel while the vehicle is still raised on the jack.

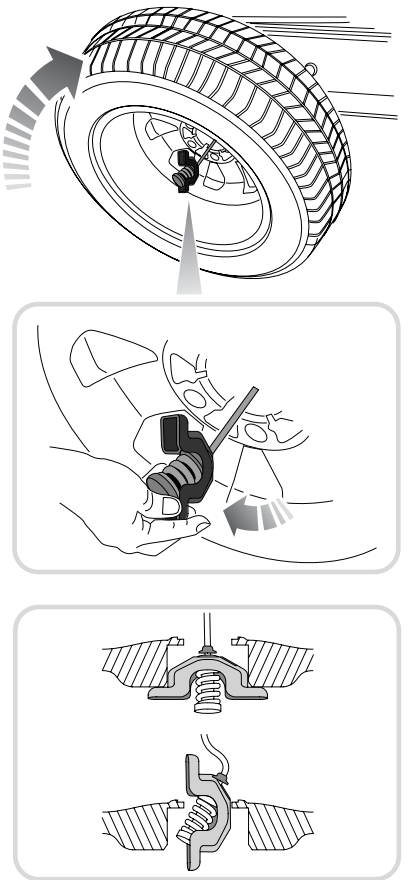
1. Place the wheel under the rear of the vehicle with its style surface uppermost.
2. Place the lifting lug through the wheel aperture and locate it in position.
3. Winch up the wheel using the wheel-hoist mechanism.

   The mechanism has been designed for use with the wheel nut brace. DO NOT use power tools on the wheel-hoist winch.
4. Continue to wind up until the mechanism 'clutches out'. This is confirmed by a clear physical feedback from the wheel nut brace and an audible noise.
5. Check that the spare wheel has returned to the same position as the spare wheel as previously noted. If in any doubt, unwind the winch slightly and repeat the previous step.

WARNING

The wheel must be securely retained in its correct position by the winch mechanism or it could become loose.

6. Replace the circular locking cap over the wheel-hoist nut. As the underside of this cap is exposed to the same conditions as the underside of the vehicle, ensure that it is firmly in place.
7. Place the tools back into their storage location. For a 7-seat vehicle, ensure that the tool straps are re-attached around the tool kit.



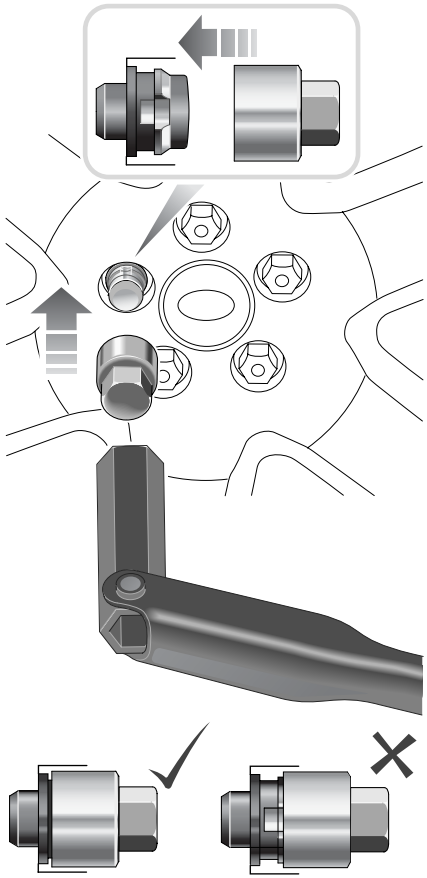
H5909G

Note: *If, for any reason, the spare wheel is not to be fitted back under the vehicle, the wheel hoist should be rewound as follows:*

Position the lifting lug level on the cable and wind up the wheel hoist until it 'clutches out'.

LOCKING WHEEL NUTS

Vehicles may be equipped with a locking wheel nut on each wheel. They can only be removed using the special adaptor provided in the tool kit.



H5696G

Note: *A code number is stamped on the underside of the adaptor. Ensure the number is recorded on the Security Information card supplied with the literature pack. Quote this number if a replacement is required. DO NOT keep the Security Information card in the vehicle.*

Insert the adaptor firmly onto the locking wheel nut.

Using the wheel nut brace, unscrew the wheel nut and adaptor.

Be sure to return the locking wheel nut adaptor to the correct storage position.

STARTING AN ENGINE WITH A DISCHARGED BATTERY

Caution: DO NOT push or tow start.

Using Booster Cables

Using booster cables (jump leads) from a donor battery, or a battery fitted to a donor vehicle, is the only approved method of starting a vehicle with a discharged battery.

WARNING

Always wear eye protection when working around batteries.

During normal operation batteries emit explosive hydrogen gas - ensure sparks and naked lights are kept away from the engine compartment.

DO NOT attempt to start the vehicle if the electrolyte in the battery is suspected of being frozen.

Make sure BOTH batteries are of the same voltage (12 volts), and that the booster cables have insulated clamps and are approved for use with 12 volt batteries.

DO NOT disconnect the discharged battery.

DO NOT connect positive (+) terminals to negative (-) terminals, and ensure booster cables are kept away from any moving parts in the engine compartment.

Take care when working near rotating parts of the engine.

Boosting from Another Vehicle

If a donor vehicle is to be used, both vehicles should be parked with their battery locations adjacent to each other. Ensure that the two vehicles do not touch.

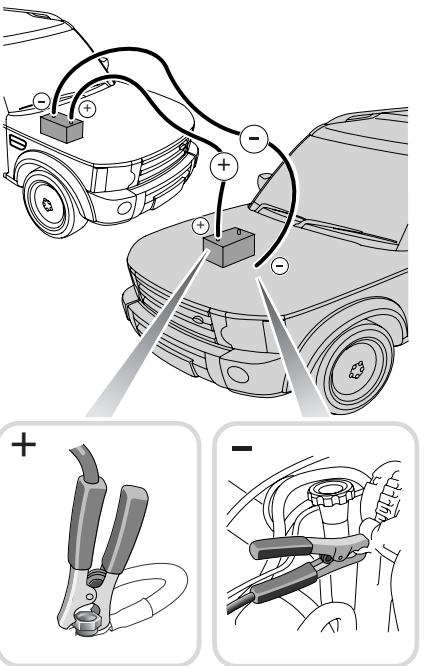
Apply the handbrakes and ensure that the transmission of both vehicles is set in neutral ('P' or Park for vehicles with automatic transmission).

Turn off the starter switch and ALL electrical equipment of BOTH vehicles.

WARNING

DO NOT use a 24 Volt booster start system. These can produce excessive voltages and can damage the vehicle's electrical systems.

Boosting Procedure



H5697L

Emergency Starting

Always adopt the following procedure, ensuring the cables are connected in the order shown below:

1. On the donor vehicle, connect one end of the BLACK booster cable to the negative (-) terminal of the battery or the vehicle's negative (-) connection point.
2. On the disabled vehicle, connect the other end of the BLACK booster cable to a good earth point (e.g. an engine mounting or other unpainted metal surface) at least 0.5m (20 in.) from the battery and well away from fuel and brake lines.
3. On the donor vehicle, connect one end of the RED booster cable to the positive (+) terminal of the battery or the vehicle's positive (+) connection point.
4. On the disabled vehicle, connect the other end of the RED booster cable to the positive (+) battery terminal.

WARNING

For safety reasons:

- **DO NOT connect the BLACK cable to the negative terminal of the discharged battery - if in doubt, seek qualified assistance.**
- **ENSURE that each connection is securely made and that there is no risk of the clips accidentally slipping or being pulled from the battery terminals - this could cause sparking, which could lead to fire or explosion.**

Check that the cables are clear of any moving parts of both engines, then start the engine of the donor vehicle and allow it to idle for a few minutes.

Now start the vehicle with the discharged battery. Once both engines are running normally, allow them to idle for two minutes before switching off the donor vehicle engine.

DO NOT switch on any electrical circuits on the previously disabled vehicle until AFTER the booster cables have been removed.

Disconnecting the booster cables must be an EXACT reversal of the procedure used to connect them, i.e. disconnect the RED cable from the positive (+) battery terminal on the boosted battery FIRST.

FUSES

Fuses are simple circuit devices which protect electrical equipment against the effects of excess current.

A 'blown' fuse is indicated when the electrical equipment it protects becomes inoperative.

Fuses are color coded to help identify their amperage, as follows:

Blade fuse colors

VIOLET	3 amp
TAN	5 amp
BROWN	7.5 amp
RED	10 amp
BLUE	15 amp
YELLOW	20 amp
WHITE	25 amp
GREEN	30 amp

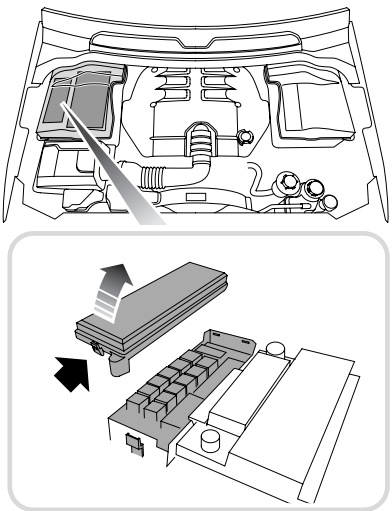
Cartridge fuse colors (engine bay only)

BLUE	20 amp
PINK	30 amp
GREEN	40 amp
RED	50 amp
YELLOW	60 amp

Note: *Owners are advised against removing or replacing the relays (identified as R1-R19 on the relays) and fusible links (identified as FL1-FL20 on the fusible links). Failure of any of these items should be investigated by a qualified technician.*

Engine Compartment Fuse Box

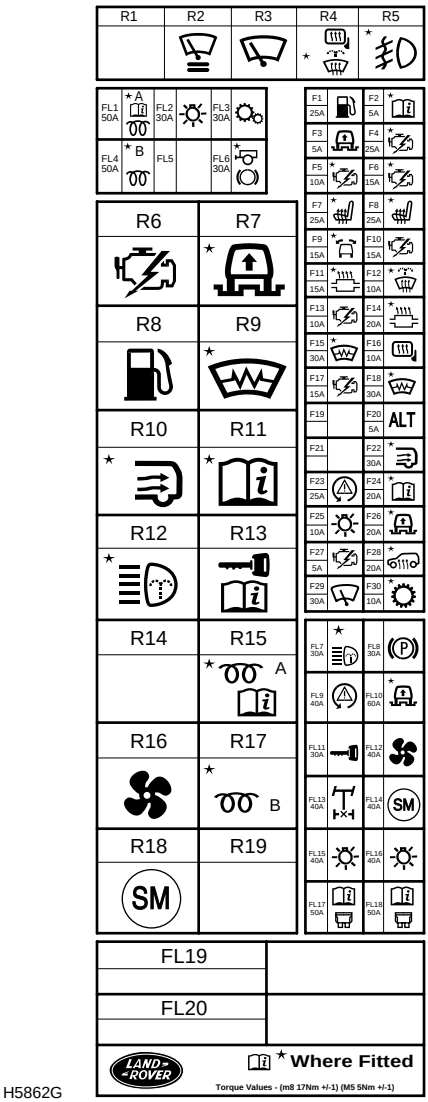
The engine compartment fuse box is located at the rear of the engine bay. To view the fuse box, the under-hood cover will have to be removed, see **REMOVING UNDER-HOOD COVERS, 239**. The plastic lid of the box is removed by pressing the plastic tabs in.



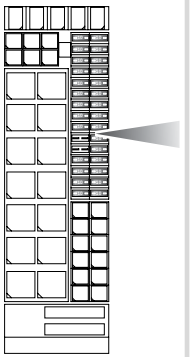
H5701L

Fuses

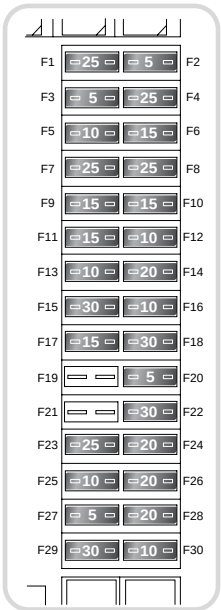
Engine Compartment Fuses



H5862G



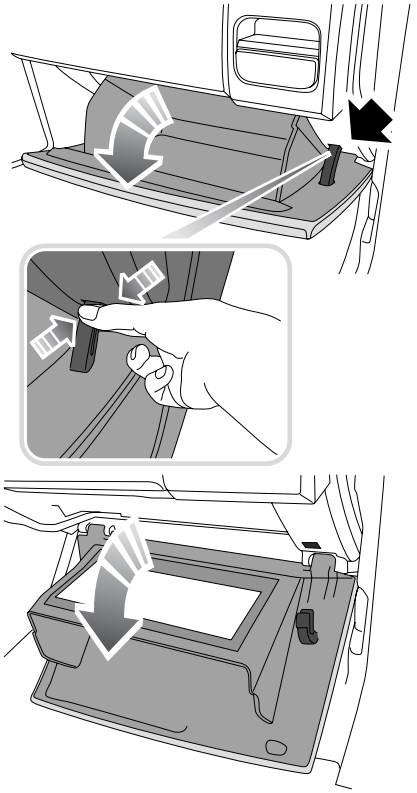
H5704G



Fuse specification

Fuse number	Rating (amps)	Circuit protected
1	25	Fuel pump
2	5	Pump leak detection
3	5	Air suspension ECU
4	-	
5	10	Petrol EMS (purge valve, EGR, inlet manifold tune valve), E-box fan
6	15	Petrol EMS (coils)
7	25	Hevac - front seat heat
8	25	Rear seat heat
9	15	Active roll control
10	15	Petrol EMS (throttle motor, MAF), cool fan
11	15	Petrol EMS (rear oxygen sensors)
12	10	Heated wash jets
13	10	Petrol EMS (ECU, VVTs and fuel pump relay control)
14	20	Petrol EMS (front oxygen sensors)
15	30	Heated front windshield
16	10	Heated door mirrors
17	15	Petrol EMS (injectors)
18	30	Heated front windshield
19	15	
20	5	Alternator
21	-	Spare
22	30	Rear blower
23	25	Dynamic Stability Control system
24	20	Petrol brake boost pump
25	10	Lighting switch
26	20	Air suspension ECU
27	5	Engine control module (EMS)
28	-	
29	30	Front wipers
30	10	Auto transmission ECU

Passenger Compartment Fuse Box



H5924L

The passenger compartment fuse box is fitted behind the glovebox. To access the fuses, open the glovebox to the service position.

This is done by opening the glovebox normally and then pinching the top of the support stays located either side of the hopper. This allows the glovebox to be lowered into the footwell.

A label on the rear of the glovebox hopper shows the circuits protected, the fuse values and their locations. They are also listed on the following page.

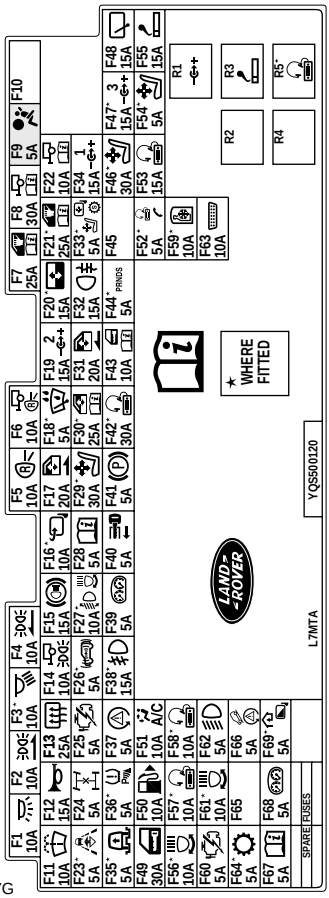
Checking or renewing a fuse

Always turn the starter switch to position 'O' and switch off the affected electrical circuit before removing a fuse.

WARNING

Fit only replacement fuses of the same rating and type. Always rectify the cause of the failure before replacing a fuse. Incorrect fuse ratings may overload a system and cause a fire or malfunction. Seek qualified assistance if necessary.

Glovebox label



H5707G

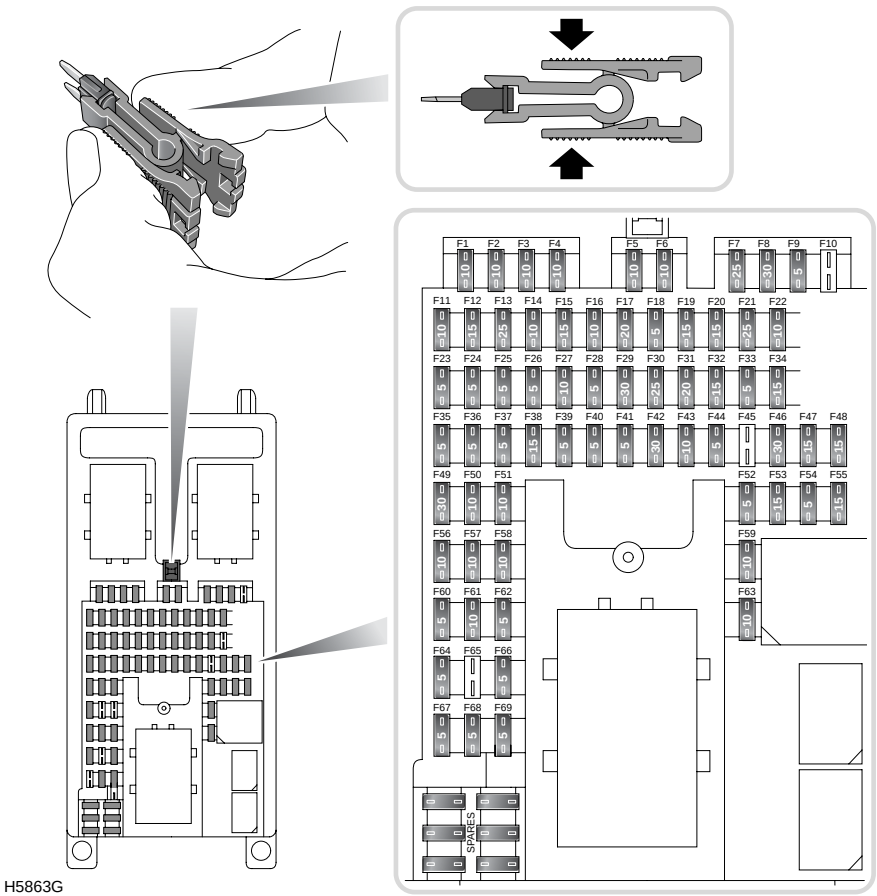
The label on the rear of the glovebox hopper shows the circuits protected, the fuse values, and their locations.

Fuses

Passenger Compartment Fuses

The fuse removal tweezers are located in the passenger compartment fuse box. Place the tweezers onto the head of the suspect fuse (as shown), squeeze the middle (arrowed) and pull to remove. A break in the wire inside the fuse indicates that the fuse has 'blown' and must be replaced.

Always replace a fuse with another of the same value, however, if the replacement fuse blows immediately the circuit MUST be checked by a qualified Land Rover Retailer.



H5863G

Fuses

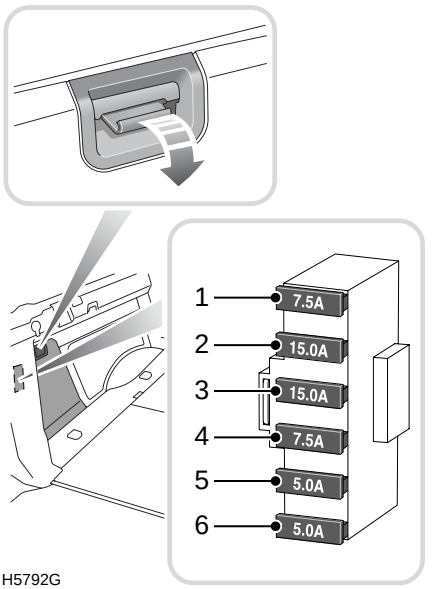
Fuse specification

Fuse number	Rating (amps)	Circuit protected
1	10	Interior lamps - glovebox lamp, vanity mirror lamp, map lamps, switchable roof lamps
2	10	RH sidelamps
3	10	Theater lamps
4	10	LH sidelamps
5	10	Reverse lamps
6	10	Tow reverse lamp
7	25	Driver's window
8	30	Trailer pick-up (battery feed)
9	5	SRS
10	-	-
11	10	Washer pump
12	15	Horn
13	25	Heated rear window
14	10	Tow side lamp
15	15	Brake lamps, Brake switch
16	10	Powerfold mirror
17	20	Rear RH window
18	5	Rain sensor, ambient light sensor (auto lamps)
19	15	Socket accessory - Row 2
20	15	Sunroof
21	25	Passenger window
22	10	Trailer pick-up (ignition feed)
23	-	-
24	5	Transfer box - center diff, Terrain Response
25	5	Engine control module (EMS)
26	5	Battery back-up sounder
27	10	Adaptive front lighting / Headlamp levelling
28	5	Fuse box engine compartment - ignition
29	30	Passenger electric seat
30	25	-
31	20	Rear LH window
32	15	Rear fog lamps
33	5	Mirror adjust, PRNDS - Auto transmission selector, passenger electric seat
34	15	Socket accessory - row 1

Fuse number	Rating (amps)	Circuit protected
35	5	Air suspension ECU
36	5	Tire pressure monitoring/Park Distance Control
37	5	Dynamic Stability Control
38	15	Front fog lamps
39	5	Instrument pack
40	5	Key in sense
41	5	Electric park brake
42	30	Audio amp
43	10	RF receiver, tire pressure monitoring
44	5	PRNDS Auto transmission selector
45	-	-
46	30	Driver electric seat
47	15	Socket accessory - Row 3
48	15	Rear wiper
49	30	Central door locking
50	10	Electric fuel flap actuator
51	10	HEVAC ECU
52	5	Telephone, traffic message center
53	15	Media player, head module, DVD player
54	5	Electric seat - memory
55	15	Cigar lighter
56	10	Adaptive front lighting
57	10	Rear seat entertainment module
58	10	Telephone, infotainment display, multi-media module, TV tuner
59	10	Cubby box cooler
60	5	Engine control module (EMS) - starter signal
61	10	Adaptive front lighting
62	5	Low beam, auto lamps
63	10	Diagnostic socket
64	5	Auto transmission
65	-	-
66	5	HDC switch, Brake switch, Steering angle sensor/DSC switch
67	5	Auto lamps
68	5	Instrument pack
69	5	Electrochromatic mirror, Homelink

Fuses

Tow hitch fuses



H5792G

1. Brake lamp	7.5 amp
2. Ignition feed	15 amp
3. Battery feed	15 amp
4. Rear fog lamps	7.5 amp
5. Right-hand tail lamp	5 amp
6. Number plate and left-hand tail lamp	5 amp

The supplementary fuse box that protects the tow hitch circuits, is located behind the left-hand panel in the luggage compartment.

REPLACING BULBS

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

Caution: Before replacing a bulb, always switch off the starter switch and appropriate lighting switch to prevent any possibility of a short circuit. Only replace bulbs with the same type and specification.

Replacement bulbs

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	W3W
Front direction indicators	S8
Rear direction indicators	P21
Front fog lamps (Halogen)	55 (H11)
Side marker lamps	W3W
Reverse lamps	P21
Rear fog guard lamps	P21
Stop/tail lamps	P21/5
Number plate lamps	W5W
Door/puddle lamps	W5W
Interior lamps	W5W
Luggage/footwell lamps	W5W
Luggage/tailgate lamps	W5W
Glovebox lamp	W5W
Vanity mirror lamp	1.2

Note: *In certain territories it is a legal requirement to carry spare bulbs, in case of bulb failure. A replacement bulb kit is available as an approved accessory from your Land Rover Retailer.*

Halogen bulbs

Halogen bulbs are used for main beam, dipped beam and front fog lamps. 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.

Xenon lamp units*

WARNING

- **Used Xenon lamp units contain mercury, which is hazardous and can be injurious to health.**
- **A very high voltage is required to ignite the gas and metal vapour used to power Xenon lamps. Contact with this voltage could cause very serious injury.**
- **Replacement or maintenance of Xenon lamps should be carried out only by qualified personnel.**

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

The operational life of a Xenon lamp is significantly longer than that of a conventional or Halogen bulb.

Seek advice about the proper disposal of Xenon lamp units from a Land Rover Retailer or your local authority.

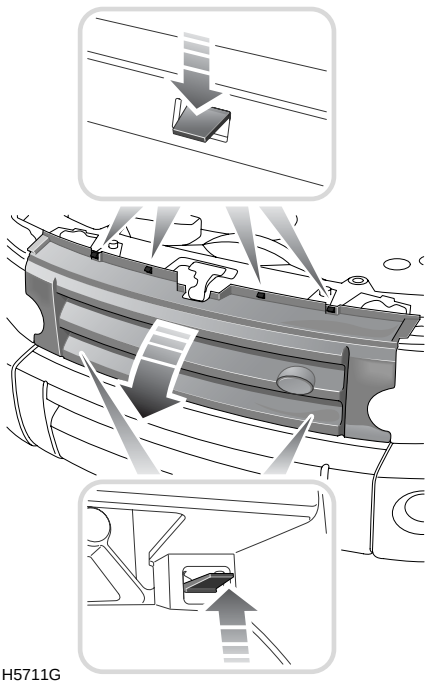
HEADLAMP UNIT

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.

WARNING

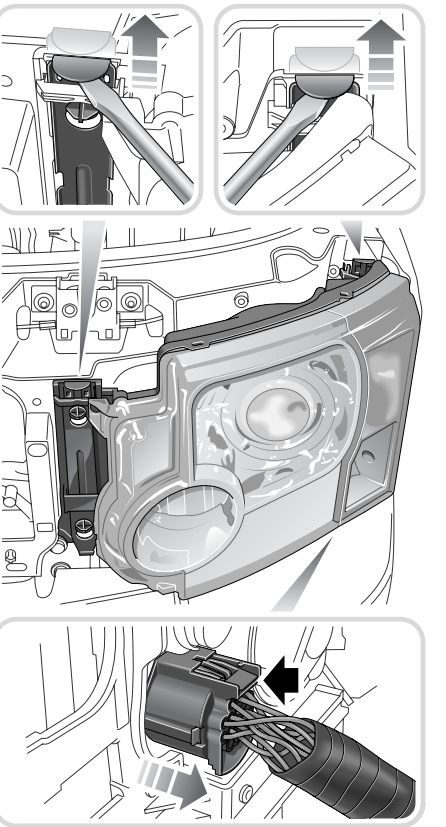
Do not attempt to change any bulb with the lighting switched on. If the lighting has just been switched off, give the bulbs time to cool down. Handling them in a hot condition could cause personal injury.

Removal of headlamp unit



H5711G

1. Remove the grille by pressing down on the top four clips, and up on the bottom two, securing the grille to the vehicle body. Lift the grille clear of the vehicle and place it where it will not sustain any damage.

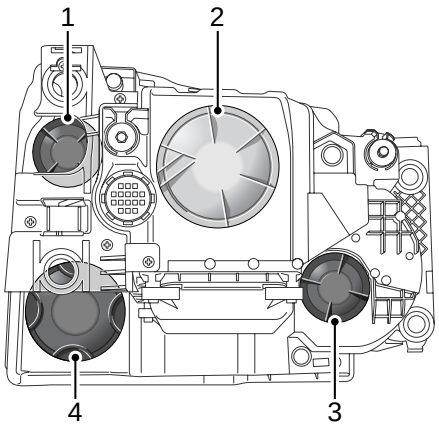


H5712G

2. Carefully lever up the two locking bars.
3. Disconnect the wiring plug from the back of the unit and remove the unit from the vehicle. Place face down on a flat surface covered in a soft material to prevent damage to the unit's lenses.
4. Replace the grille by aligning the upper and lower clips with their respective slots, and pressing into place. Ensure that the clips have 'sprung' into place securing the grille.

Bulb Replacement

Bulb access

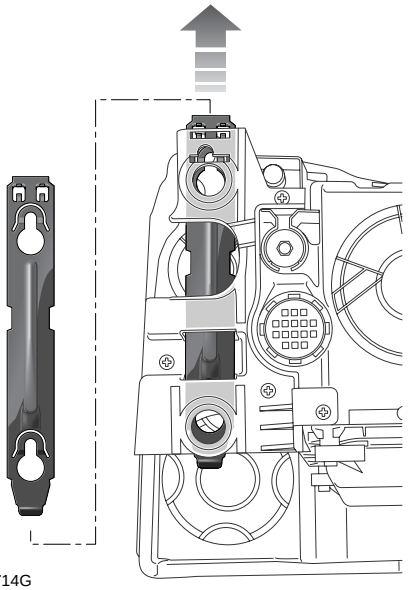


H5713G

The five bulbs within the headlamp unit, accessible under domed caps are:

1. Direction indicator
2. Dipped beam/xenon
3. Main beam
4. Side lamp and cornering lamp*/static bending lamp

See **Replacement bulbs, 297**.

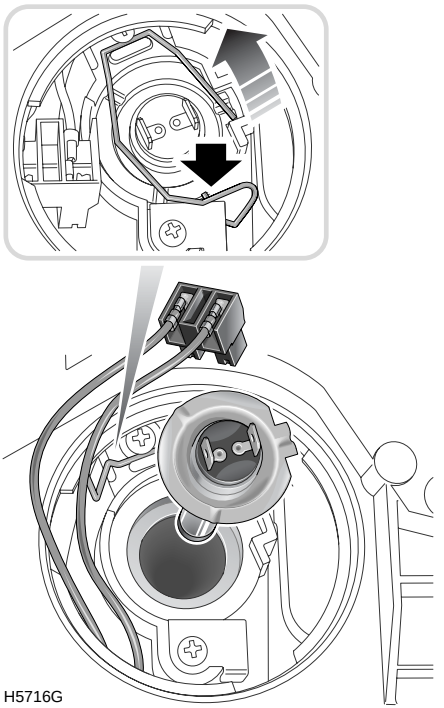


H5714G

Note: *To access the direction indicator, the headlamp unit locking slide must be completely removed from the unit.*

Bulb Replacement

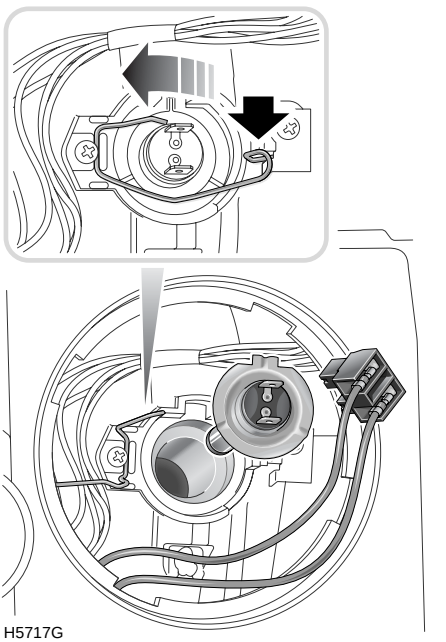
To change a main or dipped beam bulb (Halogen only)



Main beam

1. Twist and lift off the domed cap.
2. Pull off the electrical connector.
3. Release the spring clip holding the bulb in place and lift out the bulb.
4. 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.

Note: *After the replacement of any main or dipped beam bulb, the alignment of the headlamps should be checked by a Land Rover Retailer.*



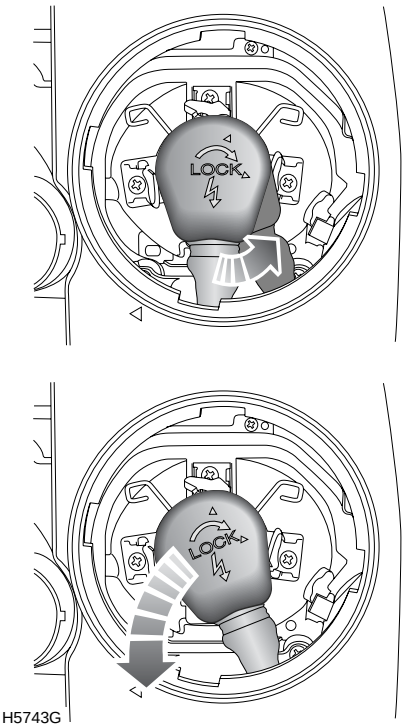
Dipped beam

1. Twist and lift off the domed cap.
2. Pull off the electrical connector.
3. Release the spring clip holding the bulb in place and lift out the bulb.
4. 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.

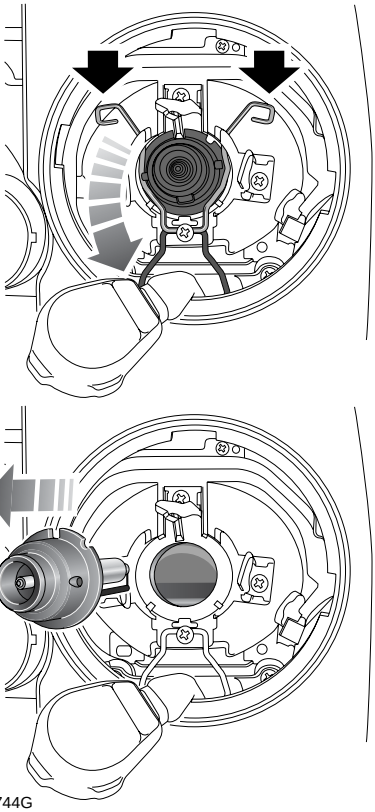
Note: *After the replacement of any main or dipped beam bulb, the alignment of the headlamps should be checked by a Land Rover Retailer.*

Bulb Replacement

To change a xenon bulb



H5743G



H5744G

WARNING

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

High voltage is required to power Xenon lamps. Contact with this voltage could cause very serious injury.

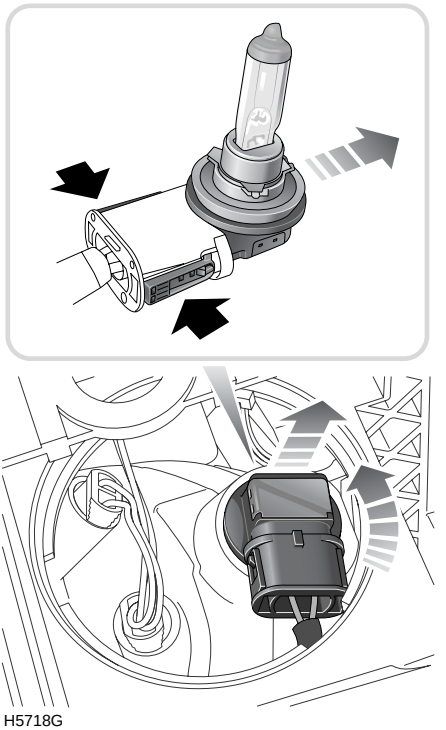
Used Xenon lamp units contain mercury, which is hazardous and can be injurious to health.

1. Twist and lift off the domed cap.
2. Twist the connector cap anticlockwise to unlock it. Pull clear of the bulb.
3. Release the spring clip holding the bulb in place and lift out the bulb.
4. Insert the new bulb and repeat the above procedure in reverse order. When replacing the cap, ensure that the lugs are in contact with the bulb base.

Note: *After the replacement of any main or dipped beam bulb, the alignment of the headlamps should be checked by a Land Rover Retailer.*

Bulb Replacement

Changing a cornering lamp bulb*

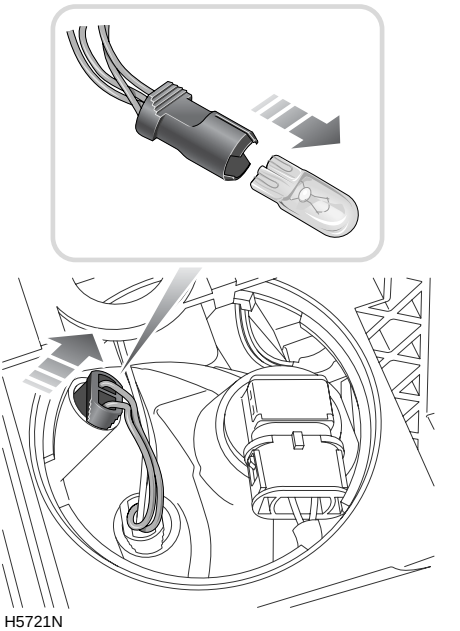


H5718G

1. Twist and lift off the domed cap.
2. Pull out the bulb complete with electrical connector.
3. To release the bulb, squeeze the sides of the electrical connector.
4. 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.

Changing a front side markerlamp bulb



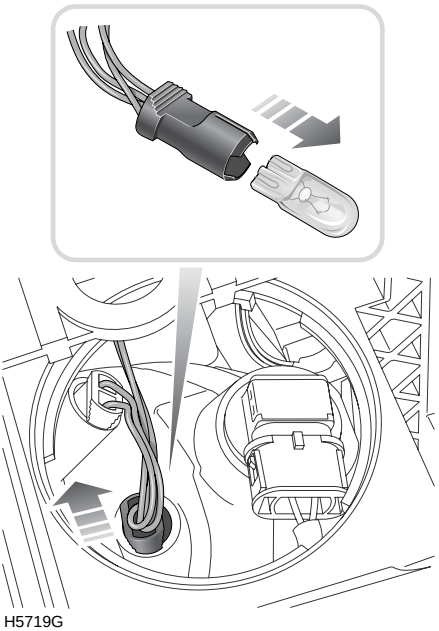
H5721N

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 repeat the above procedure in reverse order.

   When replacing the cap, align the arrowheads on the cap and the body of the unit.

Bulb Replacement

Changing a front side lamp bulb

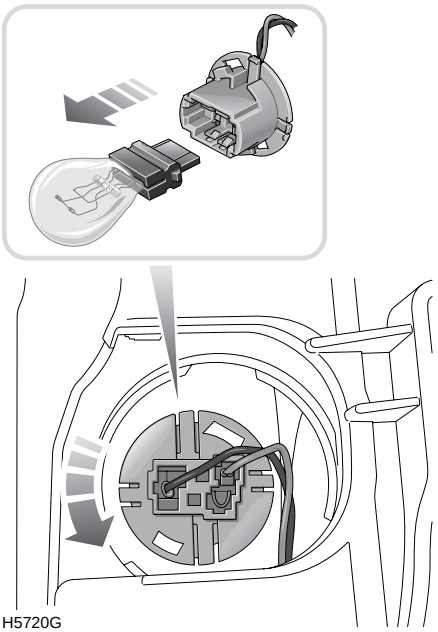


H5719G

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 repeat the above procedure in reverse order.

   When replacing the cap, align the arrowheads on the cap and the body of the unit.

Changing a front indicator lamp bulb

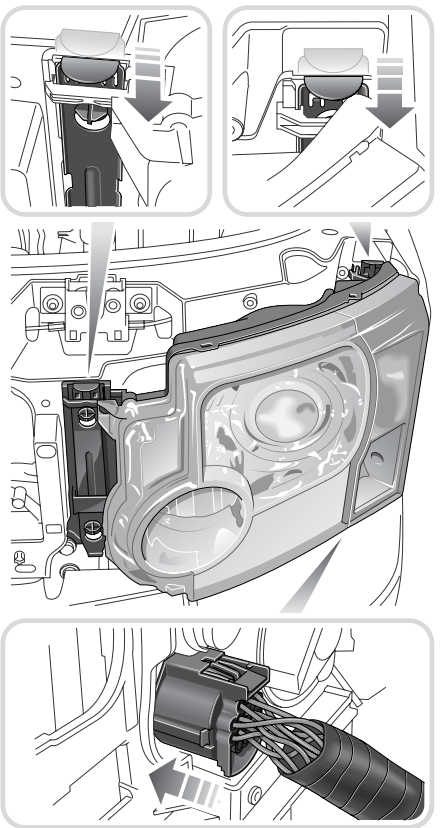


H5720G

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 repeat the above procedure in reverse order.

   When replacing the cap, align the arrowheads on the cap and the body of the unit.

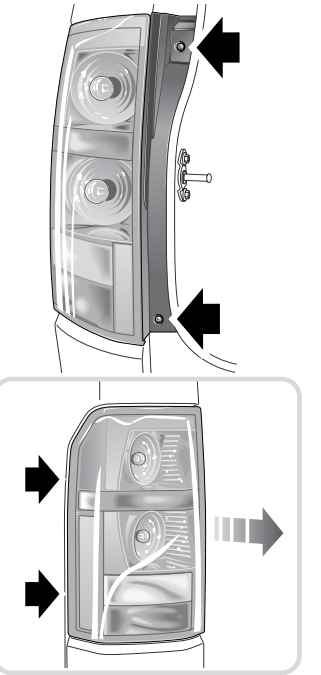
Refitting the headlamp unit



H5722G

1. Reconnect the wiring plug.
2. Offer up the unit into position.
3. Push down on the two locking slides.
4. Refit the grille.

REAR LAMP UNIT



H5723G

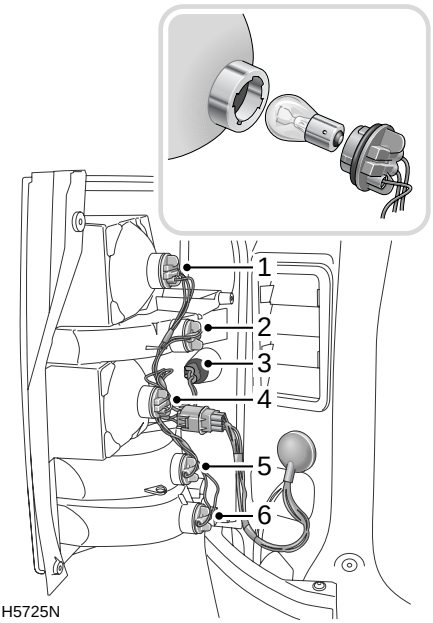
Note: *If accessory lamp guards are fitted, refer to the separate accessory user instructions for removal.*

The rear lamp unit contains five lamps and it is necessary to completely remove the unit from the vehicle in order to change any of the bulbs.

Removal of rear lamp unit

1. With the tailgate open, remove two screws from the edge of the unit nearer the rear door 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 to the unit's lenses.



Each bulb is now accessible by twisting off its electrical connection cap. See **Replacement bulbs, 297**.

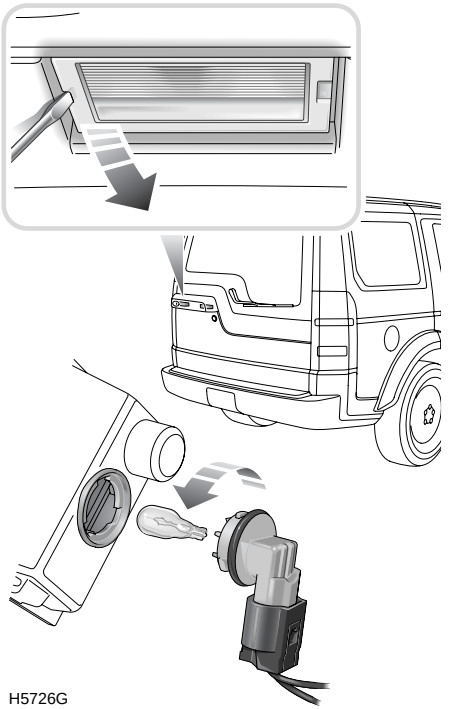
1. Stop/tail lamp
2. Direction indicator
3. Side marker lamp
4. Tail lamp
5. Reversing lamp
6. Rear fog guard lamp

Note: *Tail lamp (4) uses the same twin-filament bulb as stop/tail lamp (1).*

Refitting the rear lamp unit

1. Reconnect the electrical multi-plug.
2. Locate the unit's two studs in the sockets at the left-hand side of the mounting face.
3. Insert and tighten the two screws on the right-hand side of the unit.
4. Check that all of the bulbs work.

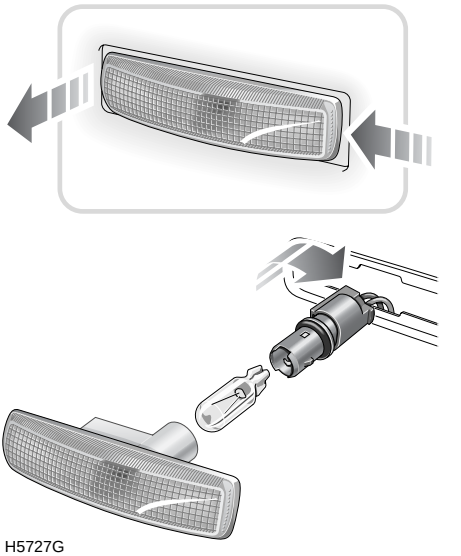
NUMBER PLATE LAMPS



H5726G

With the upper tailgate open and using a suitable tool, lever the lens from the tailgate (see inset). Pull the bulb to remove.

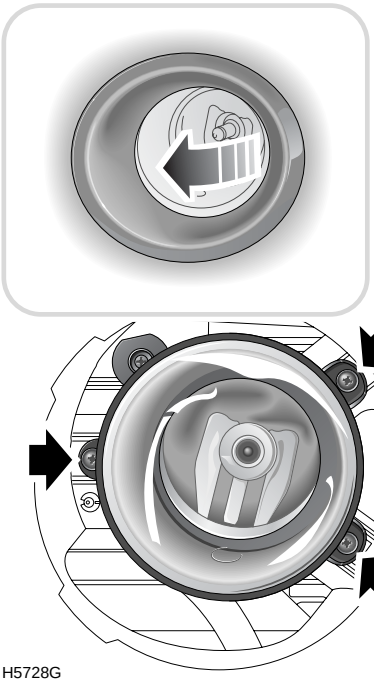
SIDE MARKER LAMP



H5727G

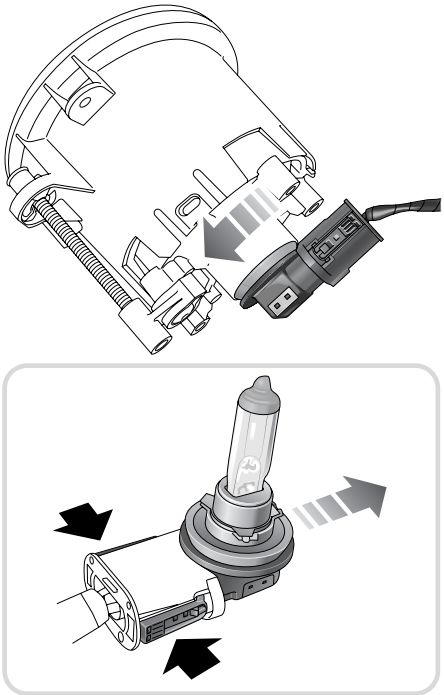
Push the lens firmly towards the front of the vehicle and withdraw the lamp unit from the wing. Twist to release the bulb holder from the lens unit, then pull the bulb from its socket.

FRONT FOG LAMPS



H5728G

To access the bulb; using a suitable tool, lever the fog lamp surround panel out of the front bumper. Remove the three securing screws to release the lamp unit. Ease the unit out of the front bumper.



H5729G

Twist and pull to remove the bulb holder from the lens assembly then depress the two catches (solid arrows in upper inset) and pull the bulb from the holder to remove.

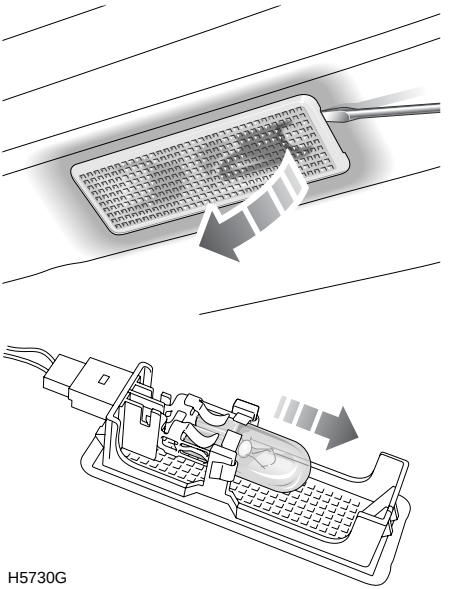
Before fitting the replacement bulb, note the 'flat' and the tab on the otherwise circular shape of the bulb mounting flange. The tab acts as a key to enable correct positioning of the bulb in the bulb holder.

Note: *Do not touch the bulb glass with your fingers. If necessary, clean the bulb with methylated spirits.*

After the replacement of a fog lamp bulb, the alignment of the lamp should be checked by a Land Rover Retailer.

Bulb Replacement

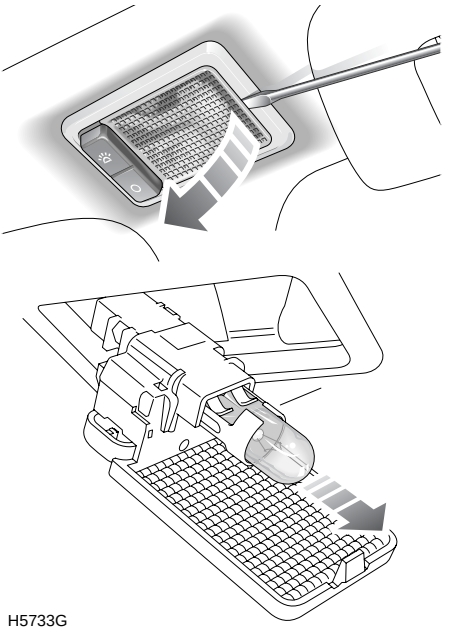
DOOR/PUDDLE/FOOTWELL LAMPS*



H5730G

With the relevant door open, insert a small flat-bladed screwdriver under the forward edge of the lens. to lever the lamp unit out of the door. Pull the bulb to remove.

COURTESY LAMPS*

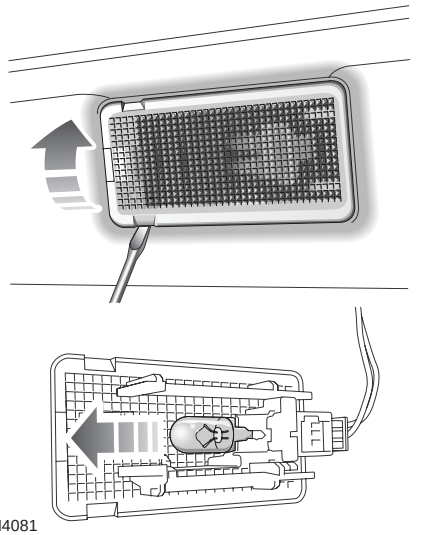


H5733G

Insert a small flat-bladed screwdriver into the indent on the side of the lens and carefully prise the lens from the lamp unit.

Pull the bulb to remove.

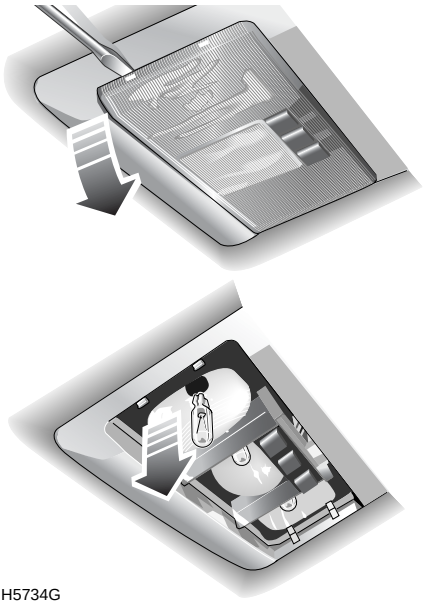
TAILGATE LAMP



H4081

Insert a small flat-bladed screwdriver under the lens and carefully prise the lens from the lamp unit. Pull the bulb to remove.

MAP LAMP

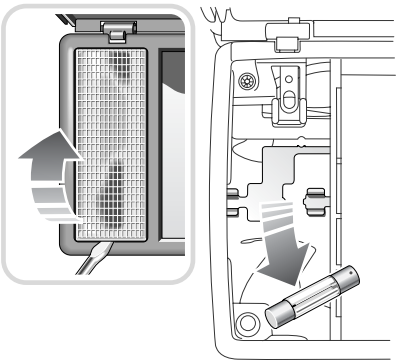


H5734G

Insert a small flat-bladed screwdriver into the indent on the side of the lens and prise the lens from the lamp unit. Pull the bulb out to remove it.

Bulb Replacement

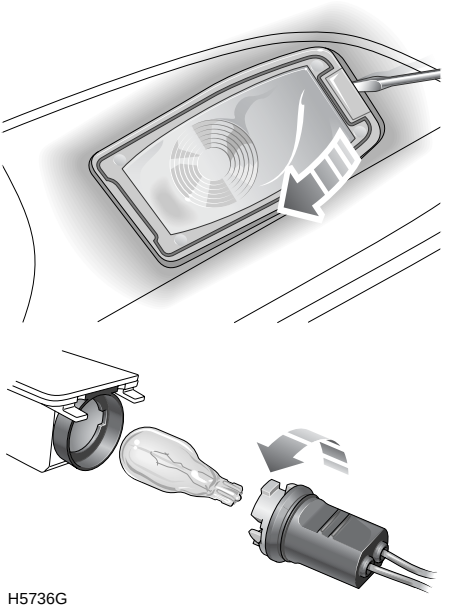
VANITY MIRROR LAMP*



H5735G

With the vanity mirror cover open, use a small flat-bladed screwdriver to lever the relevant lens from the mirror/lamp unit. Pull the bulb to remove.

MIRROR DOWNLIGHTER



H5736G

Use a small flat-bladed screwdriver to lever the lens from the mirror/lamp unit. Twist the bulb holder to reveal the bulb.