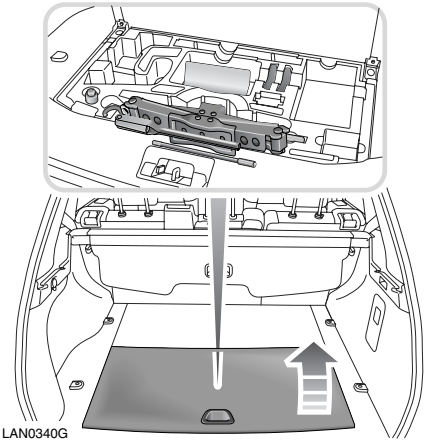
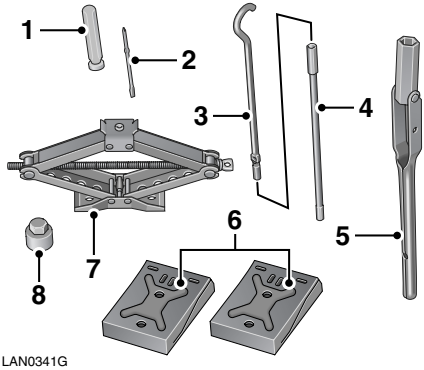
TOOL KIT


LAN0340G

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.*



LAN0341G

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

WARNING

After wheel changing, always secure tools, chocks, jack and replaced wheel in their correct storage positions.

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.

PUNCTURED TYRES

If you have a flat tyre 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

WARNING

Switch on the hazard warning lamps and set the hazard warning triangle a suitable distance behind the vehicle to alert other road users.

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.

Before changing a wheel, ensure that the front wheels are in the straight-ahead position (if possible), apply the parkbrake, select **P** (Park) and select LOW range in the transfer box.

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, 252**.
- NEVER raise the vehicle with passengers inside, or with a caravan or trailer connected!

Tilt sensor

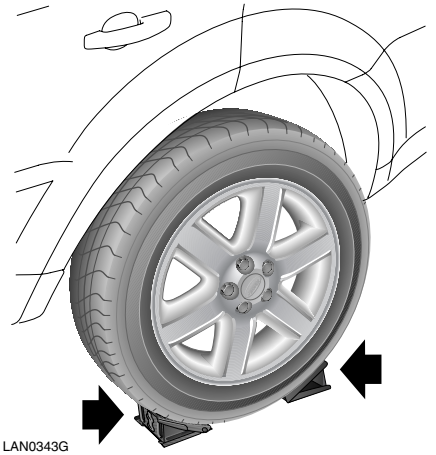
Your vehicle is fitted with a tilt sensor which activates the alarm if the vehicle is tilted fore and aft, or side to side, after it has been locked.

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 control twice within three seconds.

Using wheel chocks

WARNING

As an additional safety precaution, it is necessary to chock the road wheels in two places before raising the vehicle.



LAN0343G

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



LAN0344G

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 tool kit, as shown in **TOOL KIT, 250**.

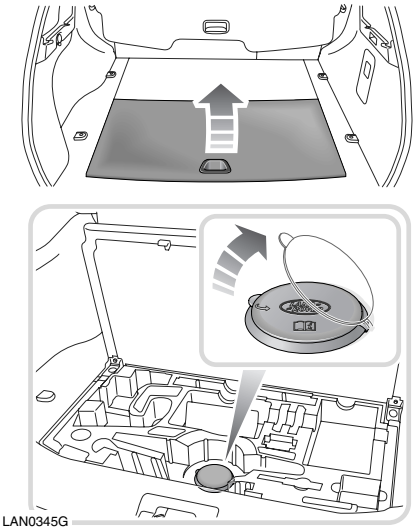
REMOVING THE SPARE WHEEL

WARNING

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

Always remove the spare wheel before jacking up the vehicle.

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.*

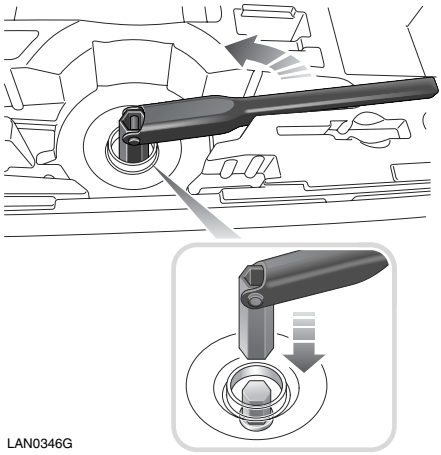


With the tailgate open:

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

   Remove the jack from the tool tray.

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

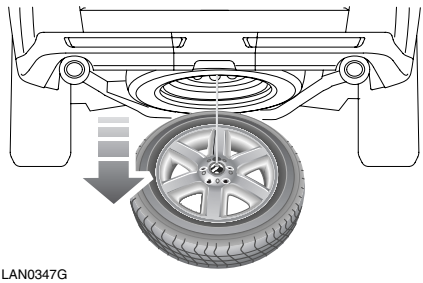


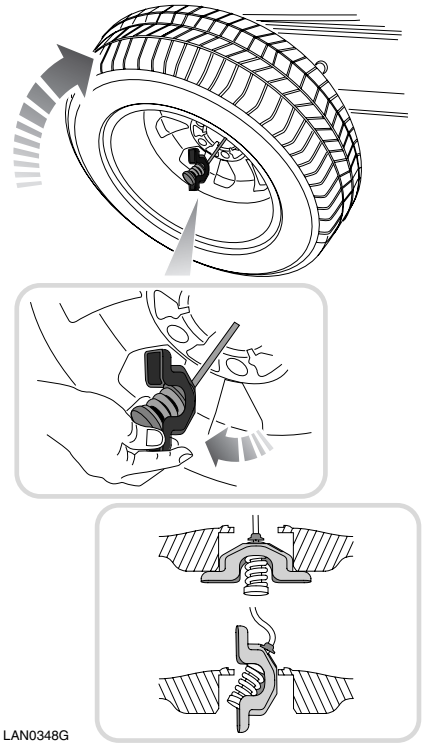
3. Fit the wheel nut brace to the wheel-hoist winch nut and rotate anticlockwise to lower the spare wheel.

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.



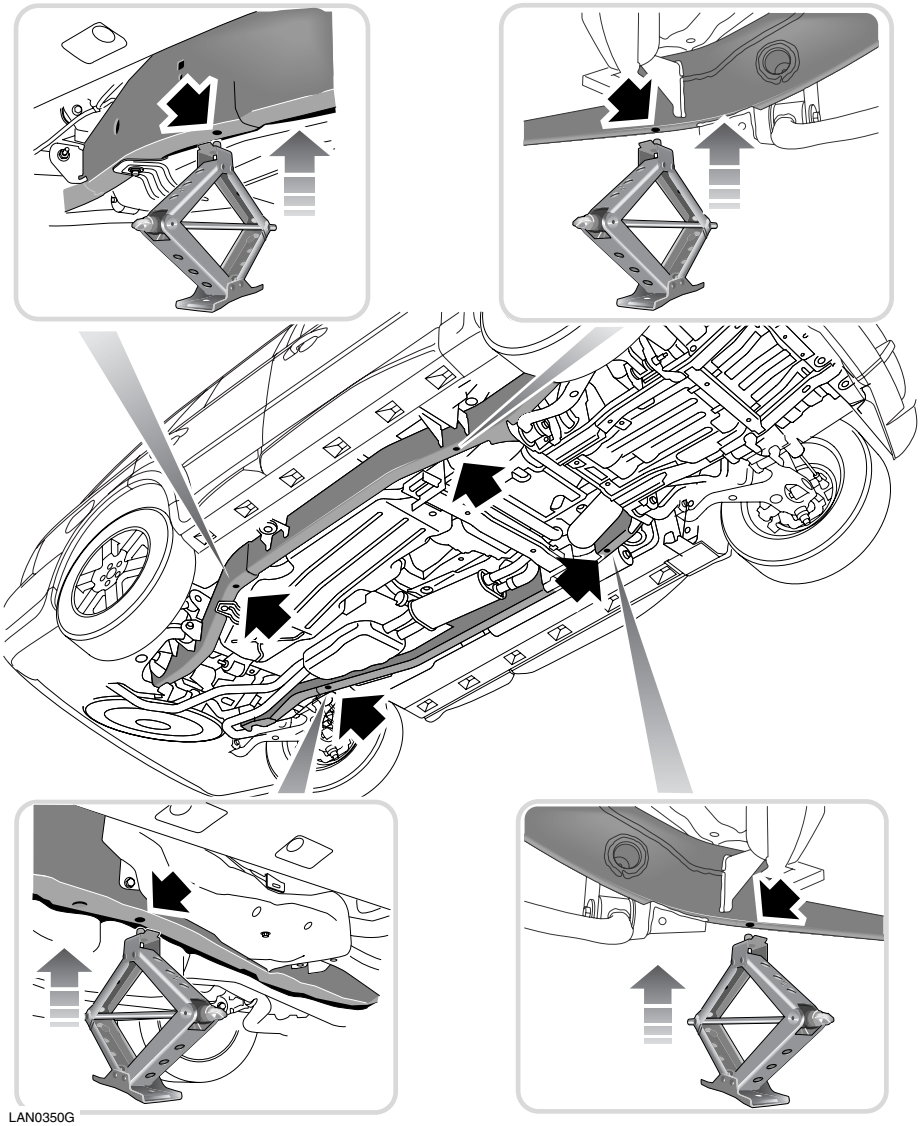


LAN0348G

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



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.**

WARNING

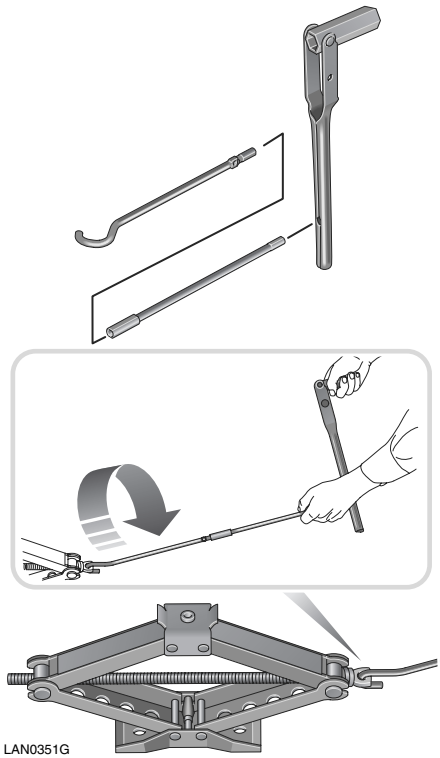
ALWAYS use the complete, two-piece, jack lever throughout to minimise any chance of accidental damage or injury.

WARNING

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

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

Operating the jack



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

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.

Always remove the spare wheel before jacking up the vehicle.

1. Raise the vehicle until the tyre 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 tyre is clear of the ground.

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.

Road wheel nut torque to hub	140 Nm (± 10 Nm)

8. Using a suitable blunt tool, apply light pressure to the rear of the displaced wheel centre cap and remove. Using hand pressure only, fit the centre 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 tyre pressure at the earliest opportunity. See **WHEELS AND TYRES, 290**.

Note: *During jacking, the air suspension system may enter an automatic freeze state. See* ***Suspension freeze, 188****.*

Temporary spare wheel

WARNING

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

- **DRIVE CAUTIOUSLY; the temporary spare wheel tyre is smaller in size and higher in pressure than a regular tyre. It will cause a harsher ride and may have less traction on some road surfaces. If driving off-road on a temporary spare wheel, drive with extra caution.**
- **The temporary spare wheel is for TEMPORARY use only. It MUST be replaced by a normal-sized wheel and tyre as soon as possible.**
- **Only ONE temporary 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 tyre pressure in the temporary spare wheel/tyre should be as detailed on the tyre pressures label. See Tyre pressure and loading label, 239.**
- **The temporary spare wheel has a shorter life than a regular tyre. Replace the tyre with one of the same type and specification.**
- **The use of snow chains is not permitted on a temporary spare wheel.**

Stowing the changed wheel

WARNING

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

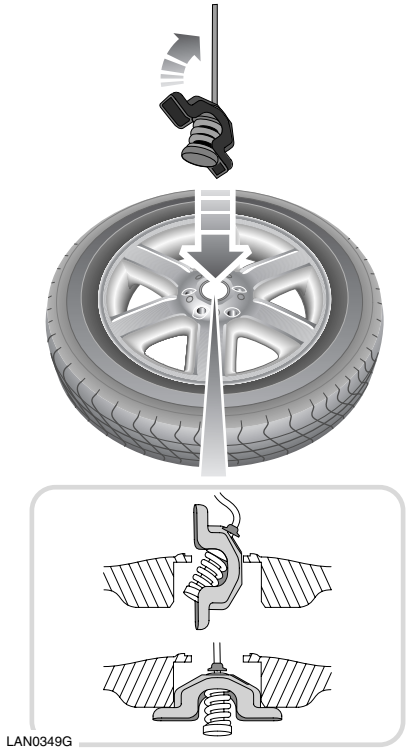
WARNING

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

Caution: DO NOT stow 20 inch wheel and tyre assemblies under the vehicle as this may result in damage to the wheel face.

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 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.
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 stowage location.

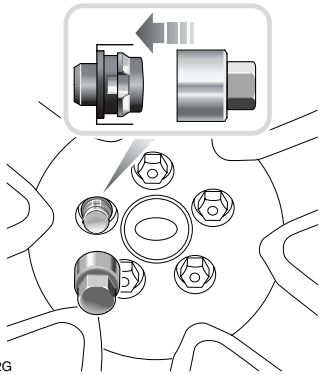


Note: *If, for any reason, the spare wheel is not to be fitted back under the vehicle, the wheel hoist should be rewound as follows.*

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

LOCKING WHEEL NUTS

Vehicles may be equipped with a locking wheel nut on each wheel. These are similar to standard wheel nuts, and can only be removed using the special adaptor provided in the tool kit.



LAN0352G

Note: *A code number is stamped on the side of the side of the locking nut. 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

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.

WARNING

DO NOT use a 24 volt booster start system.

These produce excessive voltage and can damage the vehicles electrical system.

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.

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).

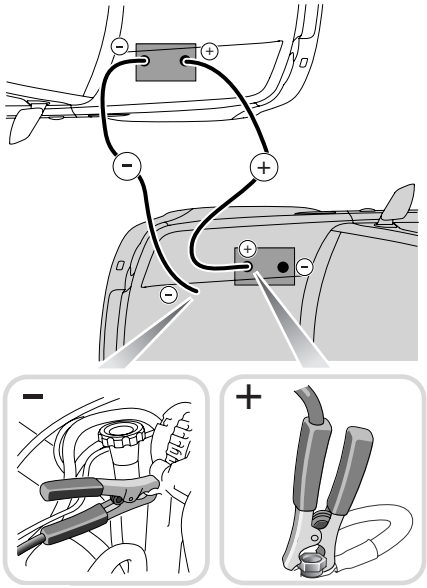
Turn off the starter switch and ALL electrical equipment of BOTH vehicles.

Boosting procedure

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 can lead to a fire or explosion.**



LAN0353G

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 RED booster cable to the positive (+) terminal of the battery or the vehicle's positive (+) connection point.
2. On the disabled vehicle, connect the other end of the RED booster cable to the positive (+) battery terminal.
3. 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.
4. 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 0.5 m (20 in.) from the battery and well away from fuel and brake lines.

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 black cable from the negative (-) connection terminal on the donor vehicle 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 colour coded to help identify their amperage, as follows:

Blade fuse colours

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 colours (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.*

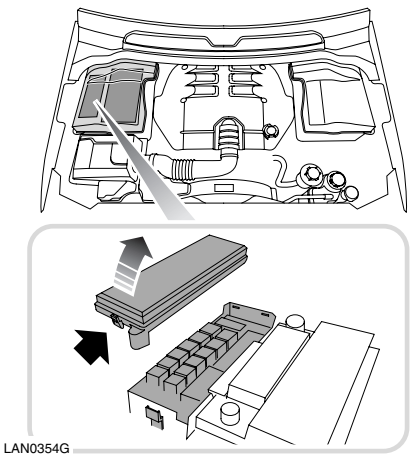
Checking or renewing a fuse

WARNING

To prevent a possible fire or damage to the electrical system, fit only replacement fuses of the same rating and type. Do not replace a blown fuse with a fuse of a higher amperage rating. Always rectify the cause of the failure before replacing a fuse. Seek qualified assistance if necessary.

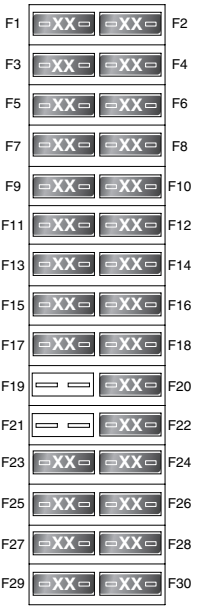
Always turn the starter switch to position **0** and switch off the affected electrical circuit before removing a fuse.

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-bonnet cover will have to be removed. See **UNDER-BONNET COVERS, 218**. The plastic lid of the box is removed by pressing the plastic tabs in.

Engine compartment fuses



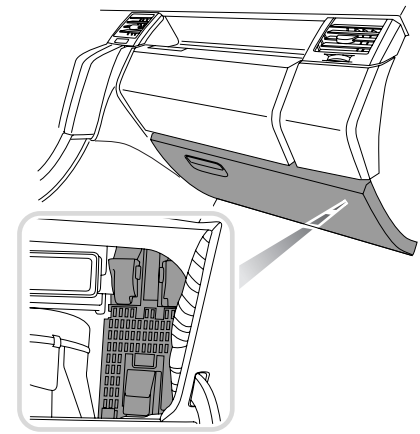
LAN0356G

Note: *Fuse removal tweezers and spare blade fuses are located in the passenger compartment fuse box. See* ***Passenger compartment fuse box, 266****.*

Engine compartment fuse specification

Fuse number	Rating (amps)	Circuit protected
1	25	Fuel pump
2	-	
3	5	Air suspension ECU
4	25	Petrol - V8 Supercharged - supercharger cooling pump
4	25	Diesel - EMS (ECU and fuel pump relay control)
5	10	Petrol - EMS (purge valve, EGR, inlet manifold tune valve), E-Box fan, Adaptive cruise control
5	10	Diesel - Adaptive cruise control
6	15	Petrol - EMS (coils), Diesel - EMS, glow plug relays
7	25	Hevac - front seat heat
8	25	Rear seat heat
9	15	Dynamic response
10	15	Petrol - EMS (throttle motor, MAF), cool fan
10	15	Diesel - cool fan
11	15	Petrol - EMS (rear oxygen sensors)
12	10	Heated washer jets
13	10	Petrol - EMS (ECU, VVT's and fuel pump relay control)
13	10	Diesel - EMS (PCV, VCV)
14	20	Petrol - EMS (front oxygen sensors)
15	30	Heated front screen
16	10	Heated door mirrors
17	15	Petrol - EMS (injectors)
17	15	Diesel - EMS (MAF, EGR), E-Box fan, Dual MAF sensors, MTV
18	30	Heated front screen
19	-	
20	5	Alternator
21		
22	-	
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	20	Diesel - Fuel burning heater
29	30	Front wipers
30	10	Auto transmission ECU

Passenger compartment fuse box

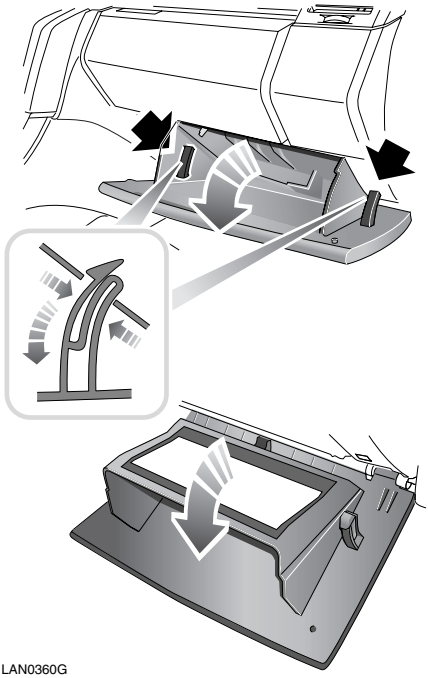


LAN0357G

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 shows the circuits protected, the fuse values and their locations. They are also listed on the following page.



LAN0360G

Fuses

Checking or renewing a fuse

WARNING

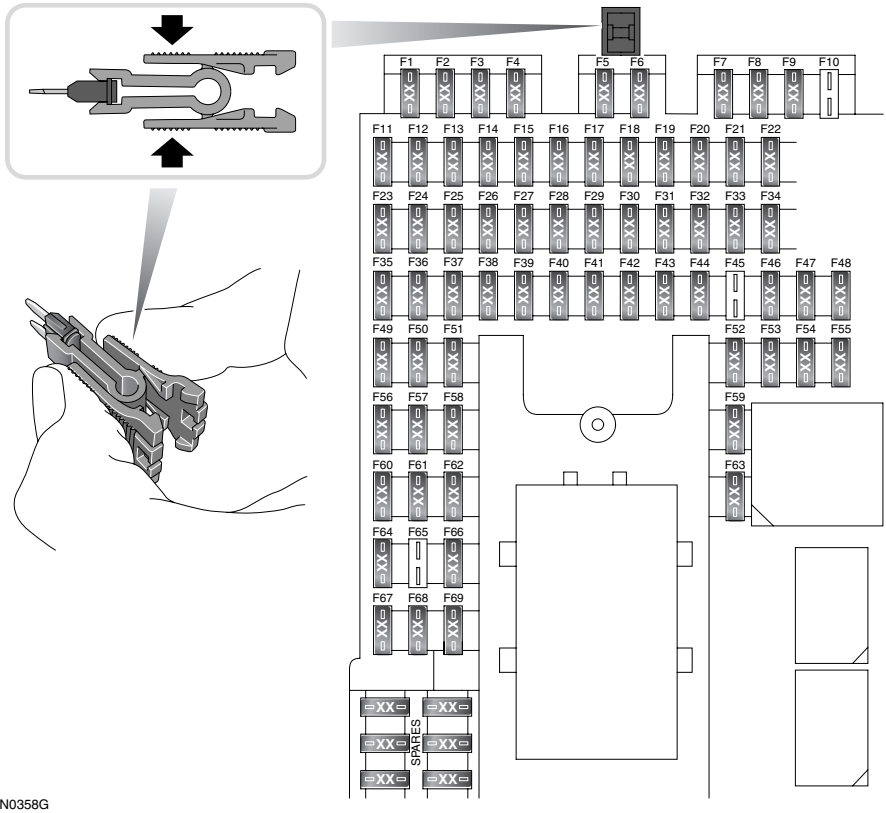
To prevent a possible fire or damage to the electrical system, fit only replacement fuses of the same rating and type. Do not replace a blown fuse with a fuse of a higher amperage rating. Always rectify the cause of the failure before replacing a fuse. Seek qualified assistance if necessary.

Always turn the starter switch to position **0** and switch off the affected electrical circuit before removing a fuse.

Passenger compartment fuses

The fuse removal tweezers are located in the passenger compartment fusebox. 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 Dealer/Authorised Repairer.



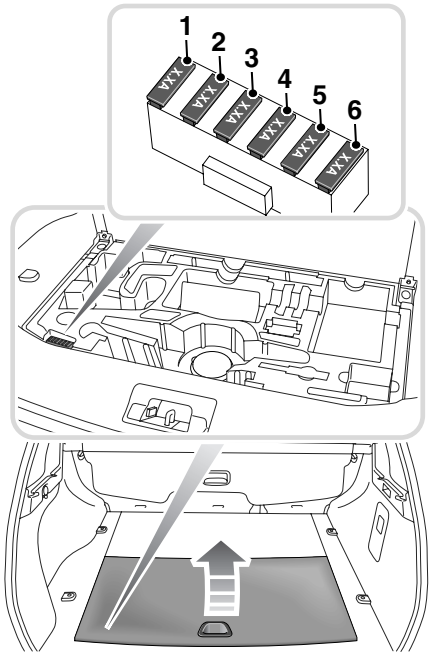
LAN0358G

Passenger compartment 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 side lamps
3	-	
4	10	LH side lamps
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	15	Washer pump
12	15	Horn
13	25	Heated Rear Window
14	10	Tow sidelamp
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	Auxiliary power socket - centre console
20	15	Sunroof
21	25	Passenger window
22	10	Trailer pick-up (starter feed)
23	5	Adaptive cruise control
24	5	Transfer box - centre diff, Terrain Response
25	5	Engine control module
26	5	Battery back-up sounder
27	10	Adaptive front lighting / Headlamp levelling
28	5	Fusebox engine compartment - starter
29	30	Passenger electric seat
30	-	
31	20	Rear LH window
32	15	Rear fog lamps
33	5	Mirror adjust, PRNDS - Auto transmission selector, passenger electric seat, driver non memory electric seat
34	15	

Fuse number	Rating (amps)	Circuit protected
35	5	Air suspension ECU/Speed variable steering
36	5	Park Distance Control, Tyre Pressure Monitoring system
37	5	Dynamic Stability Control
38	15	Front fog lamps
39	5	Instrument pack
40	5	Key in sensor
41	5	Electric parkbrake
42	30	Audio amp
43	10	RF receiver, Tyre Pressure Monitoring system
44	5	PRNDS Auto transmission selector
45	-	
46	30	Driver's electric seat
47	15	Auxiliary power socket - loadspace
48	15	Rear wiper
49	30	CDL (central door locking)
50	10	Electric fuel flap actuator
51	10	Heating/ventilation/air conditioning (HeVAC) ECU
52	5	Telephone, traffic message centre
53	15	Head module, media player, infotainment display, DVD player
54	5	Electric seat - memory, lumbar pump
55	15	Lighter
56	10	Adaptive front lighting (Left hand unit)
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 (ECM) - starter signal
61	10	Adaptive front lighting (Right hand unit)
62	5	Low beam, auto lamps
63	10	Diagnostic socket
64	5	Auto transmission
65	10	Tailgate power striker
66	5	HDC switch, Brake switch, Steering angle sensor/DSC switch
67	5	Auto lamps
68	5	Instrument pack
69	5	Electrochromatic mirror

Tow hitch fuses



LAN0359G

Fuse number	Rating (amps)	Circuit protected
1	7.5	Brake lamp
2	15	Ignition feed
3	15	Battery feed
4	7.5	Rear fog lamps
5	5	Right-hand tail lamp
6	5	License plate and left-hand tail lamp

The supplementary fuse box that protects the tow hitch circuits, is located under the cover in the luggage compartment.

REPLACING BULBS

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.

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

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	W5W
Front direction indicators	S8
Rear direction indicators	P21
Front fog lamps (Halogen)	55 (H11)
Side repeater lamps	W5W
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 Dealer/Authorised Repairer.*

Halogen bulbs

Halogen bulbs are used for high beam, low 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 low/high 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 Dealer/Authorised Repairer or your local disposal authority.

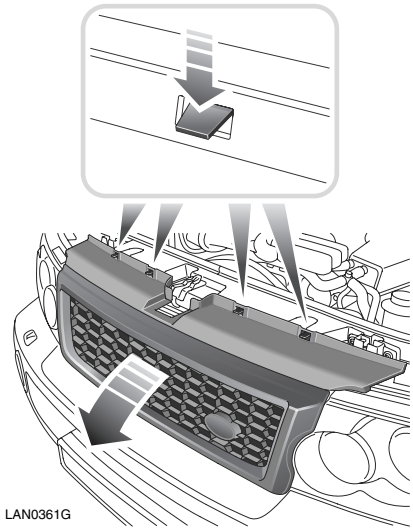
HEADLAMP UNIT

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.

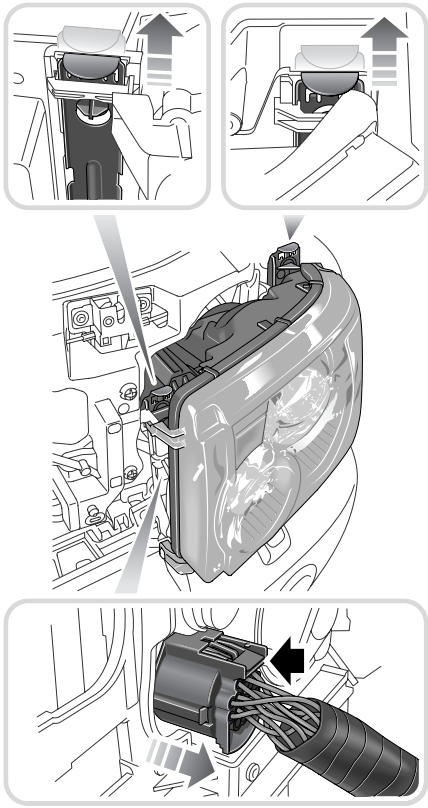
The headlamp unit contains four lamps and it is necessary to completely remove the unit from the vehicle in order to change any of the bulbs.

To remove the headlamp unit



LAN0361G

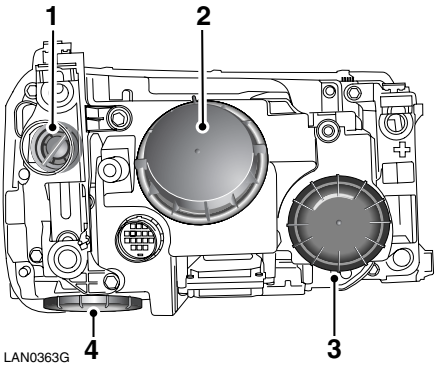
1. Remove the grille by pressing down on the four upper clips securing the grille to the vehicle body. Lift the grille clear of the vehicle and place it where it will not sustain any damage.



LAN0362G

2. Carefully pull 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.

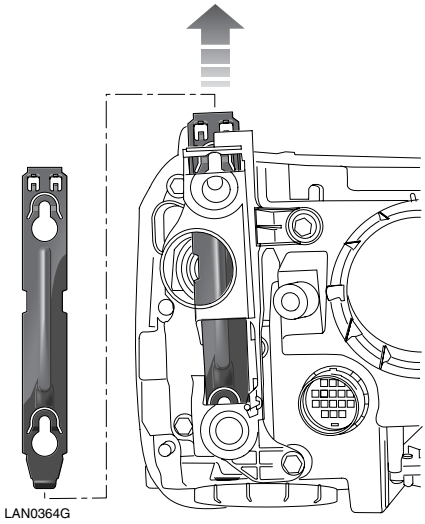
Bulb access



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

1. Direction indicator
2. Low beam/xenon
3. High beam
4. Side lamp and static bending lamp

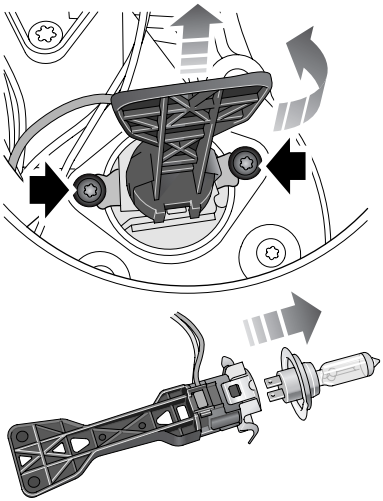
See **Replacement bulbs, 271**.



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

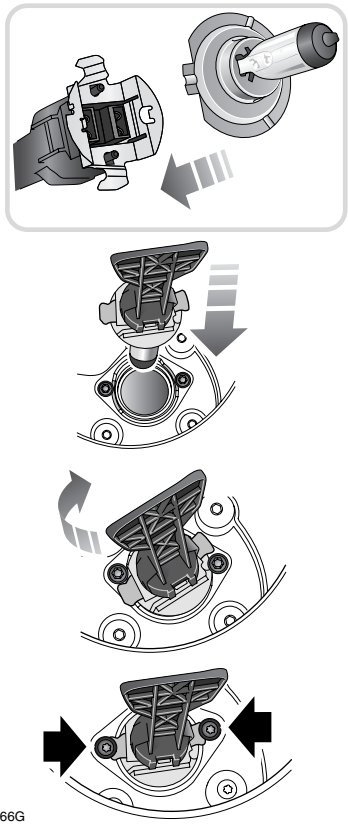
Bulb Replacement

To change a high beam bulb (Halogen only)



LAN0365G

1. Twist and lift off the domed cap.
2. Note the position of the bulb locator extension. Two locking tabs at the sides of the locking ring locate under small bolt heads.
3. Turn the locator extension counter-clockwise and withdraw it, complete with bulb, from the headlamp unit.
4. Prise the bulb from the holder.



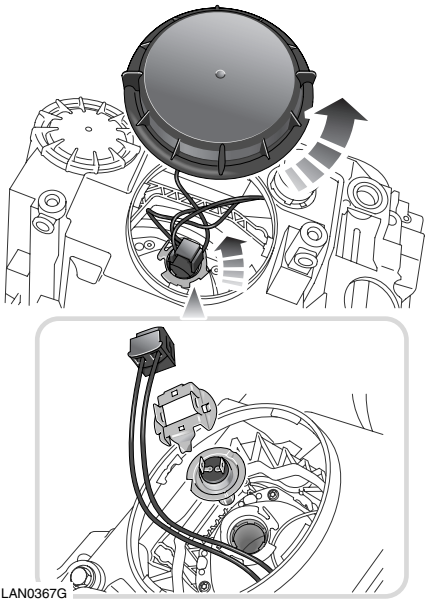
LAN0366G

5. The new bulb will only fit in one position. As you press the new bulb into the electrical connections, squeeze the locking ring so that the two protruding pins locate with the bulb correctly.
6. Replace the bulb holder and locator extension into the headlamp unit and turn clockwise, ensuring the two locking ring tabs locate under the small bolt heads.

See **Replacement bulbs, 271**.

Bulb Replacement

To change low beam bulb (Halogen only)



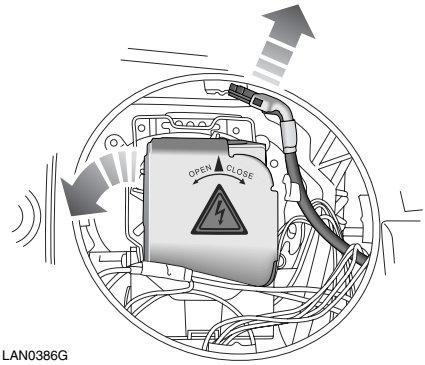
1. Twist and lift off the domed cap.
2. Pull off the electrical connector.
3. Release the spring clip holding the bulb in place and lift out the bulb.
4. Insert the new bulb and repeat the above procedure in reverse order. When replacing the cap, align the arrowheads on the cap and the body of the unit.

See **Replacement bulbs, 271**.

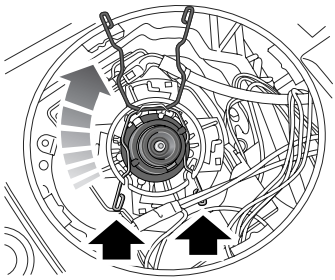
Note: *After the replacement of any high or low beam bulb, the alignment of the headlamps should be checked by a Land Rover Dealer/Authorised Repairer.*

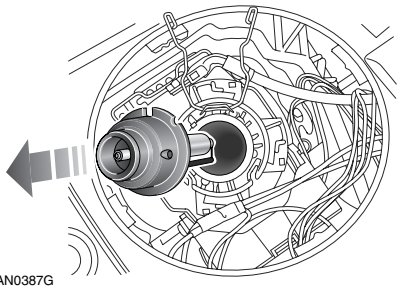
Bulb Replacement

To change a Xenon bulb



LAN0386G





LAN0387G

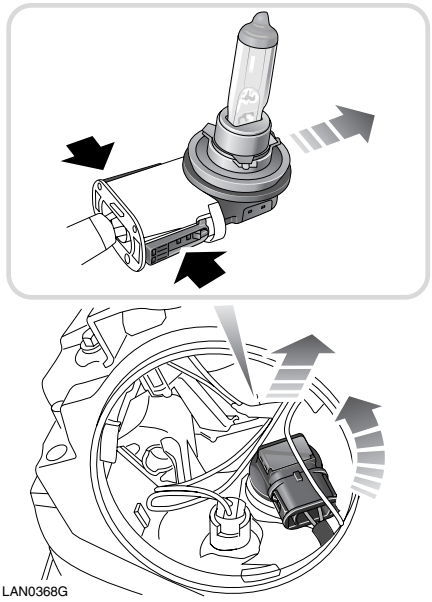
1. Twist and lift off the domed cap.
2. Pull off the electrical connector.
3. Twist the connector cap anti-clockwise to unlock it. Pull clear of the bulb.
4. Release the spring clip holding the bulb in place and lift out the bulb.
5. Insert the new bulb and repeat the above procedure in reverse order.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

See **Replacement bulbs, 271**.

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

Bulb Replacement

To change a static bending bulb

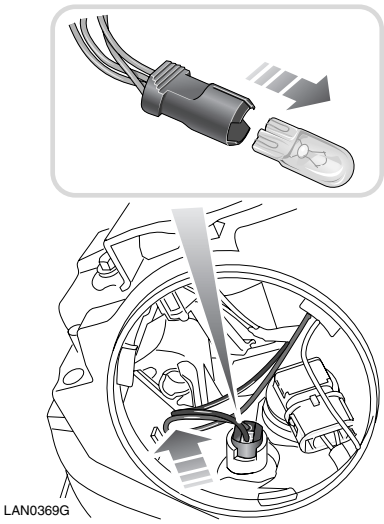


1. Twist and lift off the domed cap.
2. Twist the bulb holder anti-clockwise to unlock, then pull out the bulb complete with electrical connector.
3. To release the bulb, depress the two catches (solid arrows in inset), then pull to remove the bulb from the holder.
4. Insert the new bulb and repeat the above procedure in reverse order.

   See **Replacement bulbs, 271**.

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

To change a front side lamp bulb



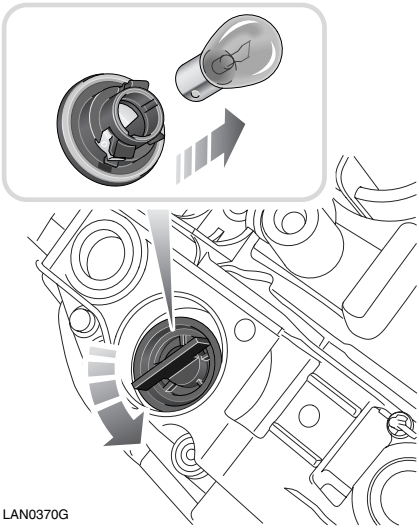
1. Twist and lift off the domed cap.
2. Pull out the bulb complete with electrical connector.
3. Pull the bulb out of the electrical connector.
4. Insert the new bulb and repeat the above procedure in reverse order.

   See **Replacement bulbs, 271**.

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

Bulb Replacement

To change a front indicator lamp bulb



1. Twist and lift off the domed cap.
2. Twist the bulb holder anti-clockwise to unlock, then 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.

   See **Replacement bulbs, 271**.

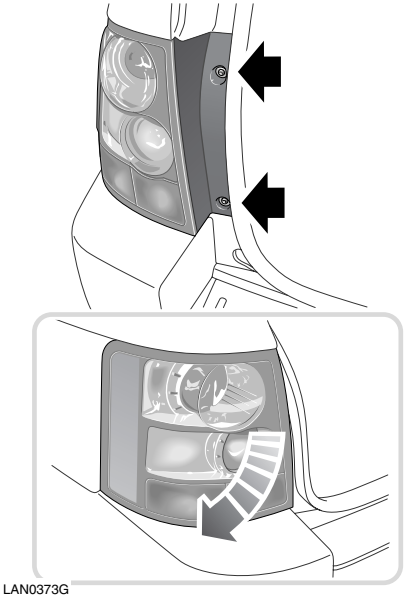
   When replacing the cap, align the arrowheads on the cap and the body of the unit.

To refit the headlamp unit



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

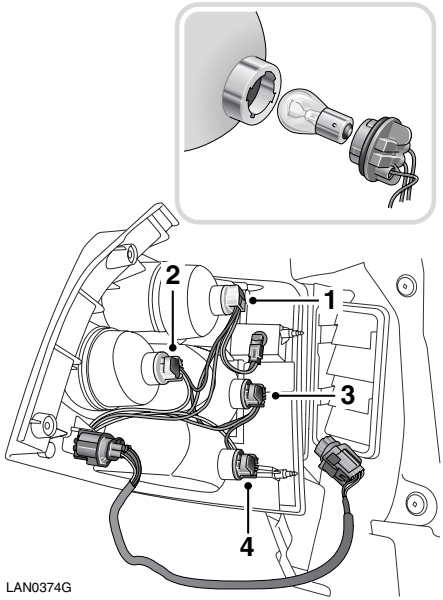
REARLAMP UNIT


LAN0373G

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

Removal of rearlamp unit

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 to the unit's lenses.



LAN0374G

Each bulb is now accessible by twisting off its electrical connection cap. See **Replacement bulbs, 271**.

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

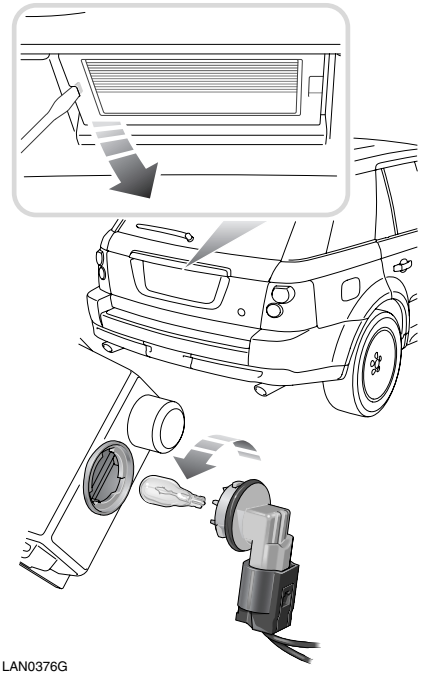
Refitting the rearlamp unit

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

Bulb Replacement

NUMBER PLATE LAMP

To change a number plate lamp bulb



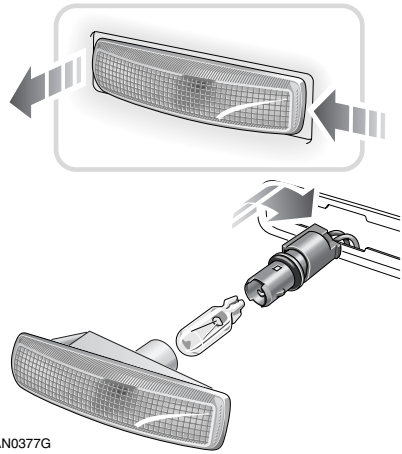
LAN0376G

1. Using a suitable tool, carefully lever the lens from the number plate lamp.
2. Twist the bulb holder anti-clockwise to unlock, then pull out the bulb complete with electrical connector.
3. Pull the bulb to remove it from the connector.
4. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

SIDE REPEATER LAMP

To change a side repeater lamp bulb



LAN0377G

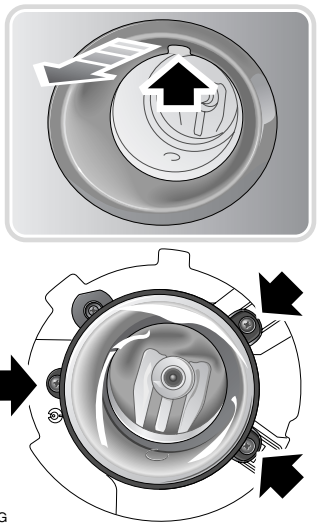
1. Push the lens firmly towards the front of the vehicle and withdraw the lamp unit from the wing.
2. Twist to release the bulb holder from the lens unit, then pull the bulb from its socket.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

FRONT FOG LAMPS

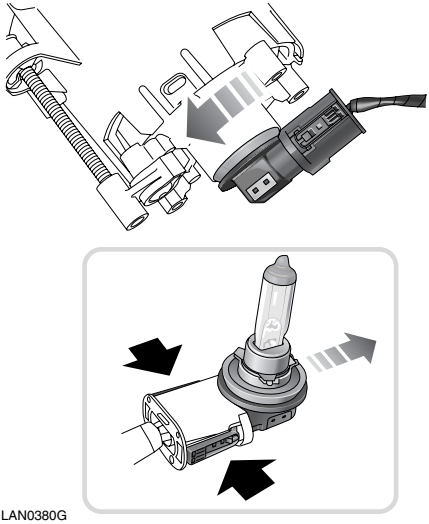
To change a front fog lamp bulb

1. To gain access, use the finger slot at the top of the fog lamp surround and pull it forward to remove.



LAN0378G

2. Remove the three securing screws to release the lamp unit. Ease the unit out of the front bumper.
3. Twist the bulb holder counter-clockwise to unlock, then pull out the bulb complete with electrical connector.

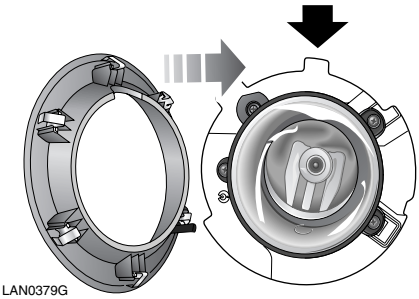


LAN0380G

4. To release the bulb, depress the two catches (solid arrows in inset), then pull to remove the bulb from the holder.
5. 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.*
6. Insert the new bulb and repeat the above procedure in reverse order.

   See **Replacement bulbs, 271**.


LAN0379G

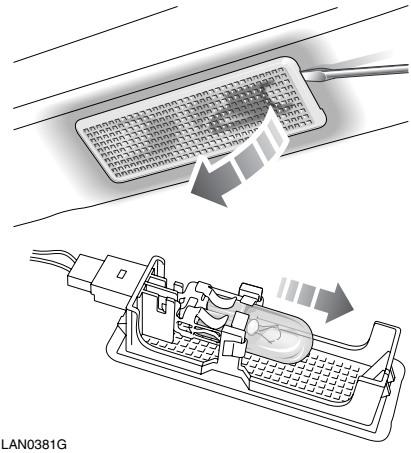
7. The fog lamp surround is uniquely shaped and will only fit in one position.

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

Note: *After the replacement of a fog lamp bulb, the alignment of the lamp should be checked by a Land Rover Dealer/Authorised Repairer.*

DOOR/PUDDLE/FOOTWELL LAMPS

To change a door/puddle/footwell lamp bulb


LAN0381G

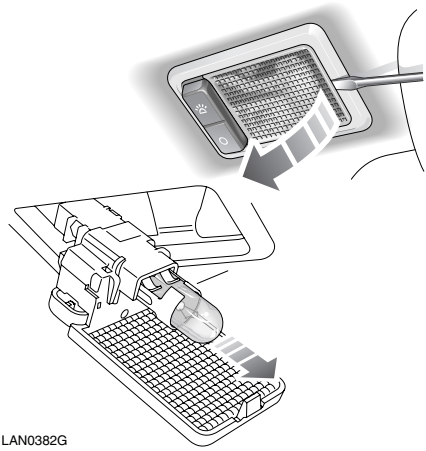
1. With the relevant door open, insert a small flat-bladed screwdriver under the forward edge of the lens to carefully lever the lamp unit out.
2. Pull the bulb out of the electrical connector.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

Bulb Replacement

COURTESY LAMPS

To change a courtesy lamp bulb

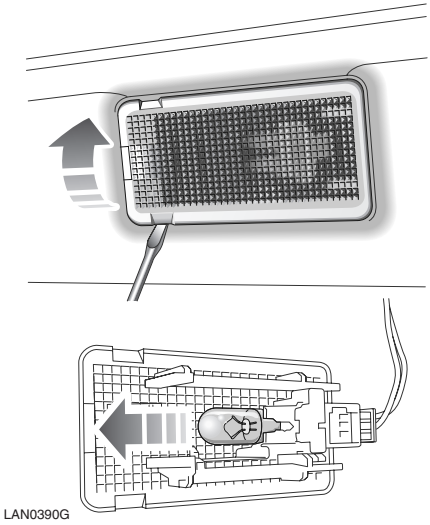


1. Insert a small flat-bladed screwdriver into the indent on the side of the lens and carefully prise the lens from the lamp unit.
2. Pull the bulb out of the electrical connector.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

TAILGATE LAMP

To change a tailgate lamp bulb



1. Insert a small flat-bladed screwdriver under the lens and carefully prise the lens from the lamp unit.
2. Pull the bulb out of the electrical connector.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

Bulb Replacement

MAP LAMP

To change a map lamp bulb



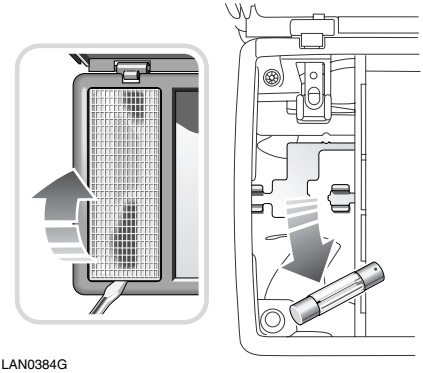
LAN0383G

1. Insert a small flat-bladed screwdriver into the indent on the side of the lens and carefully prise the lens from the lamp unit.
2. Pull the bulb out of the electrical connector.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

VANITY MIRROR LAMP

To change a vanity mirror lamp bulb



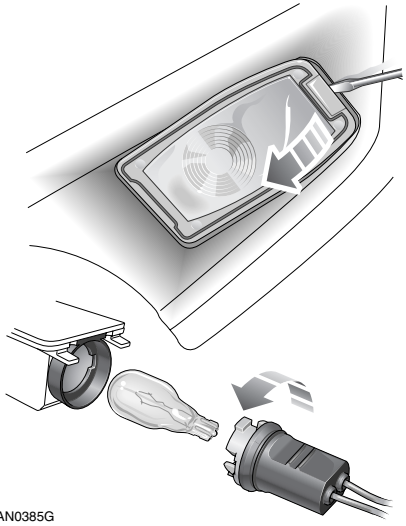
LAN0384G

1. With the vanity mirror cover open, use a small flat-bladed screwdriver to carefully lever the relevant lens from the mirror/lamp unit.
2. Pull the bulb out of the electrical connector.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.

MIRROR DOWNLIGHTER

To change a mirror downlighter bulb



LAN0385G

1. Use a small flat-bladed screwdriver to carefully lever the lens from the mirror/ lamp unit.
2. Twist the bulb holder to reveal the bulb. Pull the bulb out of the electrical connector.
3. Insert a new bulb and refit the components.

See **Replacement bulbs, 271**.