

Lighting

Electrics

Electronics

Thermal
Management

Sales
Support

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Service

**Our Ideas,
Your Success.**

Light Source

Replacement



***Ideas today for
the cars of tomorrow***

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Explanation of symbols:



= very time-consuming



= time-consuming



= average



= only little work involved



= very little work involved

Replacing light sources does not have to be difficult.

Today's vehicles are becoming more complex all the time. More and more components are being installed in vehicles, particularly under the bonnet.

In extreme cases, this often means there isn't even a hand's width of space between the components in the engine compartment.

This is a particular nuisance when a light source needs to be replaced in the headlight. Having finally found the headlight cover at last, mechanics often have to "screw their way free" to reach it. With some vehicles, a considerable amount of time is needed for this job, since the complete headlight has to be removed to reach the light source. Painful contact with pointed edges etc. is an everyday occurrence.

This manual illustrates the procedure for vehicles where a bit more work is involved. With straightforward, easy to follow working steps and detailed photos, this manual helps make light source replacement easier and more efficient, so that light source replacement remains as simple as possible.

Audi A2 1.4 TDI (model year from 02.00)



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.

First switch the ignition off.



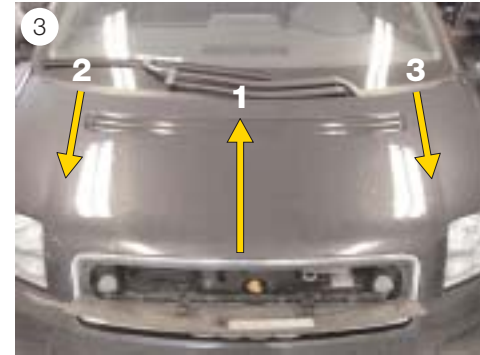
To enter the engine compartment, the bonnet has to be removed.

To do this, proceed as follows:

- Release the service flap from inside the vehicle and tilt it forwards (see Fig. 1).

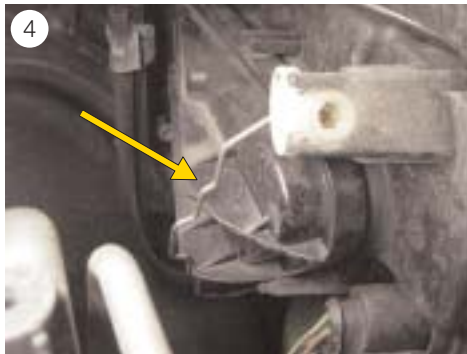


- Turn the buttons to the left as far as they will go and then pull them forwards (see Fig. 2).



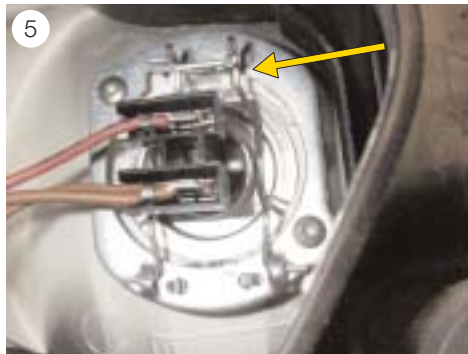
- Lift the bonnet at the front (1), then pull it forwards and out of the rear guides (2) and take it off completely (see Fig. 3).

Since the bulbs (low beam, high beam) are inside the headlights and cannot be seen from behind, we recommend using a mirror for various working steps. This allows you to check that the bulbs have been fitted correctly, for example.

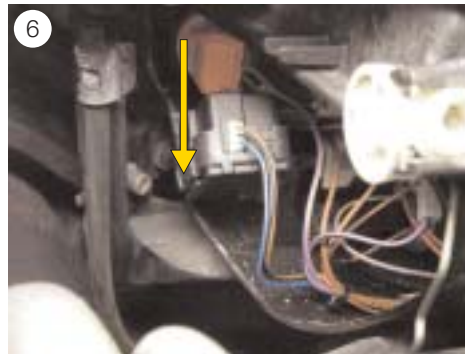


Low beam (passenger side):

- Loosen the fastening clamp from the cover cap and pull this off the rear headlight-housing. Since access is somewhat restricted, a little patience is required. A delicate touch is required for fixing the cap back in place, too.

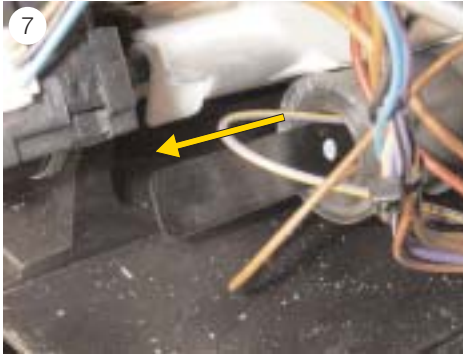


- Loosen the spring-wire clamp and replace the bulb. (see Fig. 5).



High beam (passenger side):

- Preliminary working steps, see low beam.
- To be able to reach the bulb more easily, press the motor of the headlight beam adjustment downwards (see Fig. 6).
- Loosen the spring-wire clamp and replace the bulb.



Parklight (passenger side):

- Preliminary working steps, see low beam.
- Pull the socket base out of the reflector and replace the bulb (see Fig. 7).

Indicator (passenger side):

- Preliminary working steps, see low beam.
- Turn the socket base to the left as far as it will go and remove it from the housing together with the bulb (see Fig. 8).
- Replace the bulb.

Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Audi A3 2.0 TDI PD (model year from 2003)



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.

First switch the ignition off.

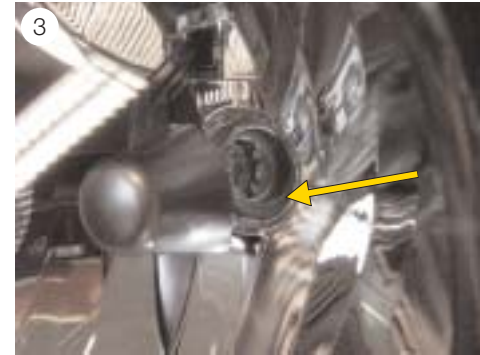


Low beam:

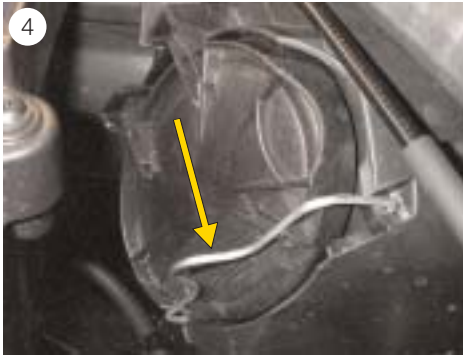
- Push the release lever of the cover cap downwards and remove the cap from the rear headlight-housing (see Fig. 1).



- Press the bulb plug slightly downwards out of the mounting bracket and remove it from the headlight together with the bulb (see Fig. 2).
- Remove the bulb from the plug and replace it.



- When installing the bulb, make sure it is in the correct position. The bulb must be pressed into the mounting bracket as far as it will go. Looking through the headlight glass helps with orientation (see Fig. 3).



High beam:

- Loosen the fastening clamp from the cover cap and pull the cap off the rear headlight-housing (see Fig. 4).



- Press the bulb plug slightly downwards out of the mounting bracket and remove it from the headlight together with the bulb (see Fig. 5).
- Remove the bulb from the plug and replace it.



Parklight:

- To reach the parklight bulb, remove the cover cap and the high-beam bulb as described for high beam.
- Use pointed pliers to pull the bulb socket with bulb still attached out of the reflector and remove from the headlight (see Fig. 6).
- Replace the bulb.



Indicator:

- Unscrew the front screws (Torx 20) of the upper mudguard panelling.
- Push the panelling to one side as far as necessary to reach the bulb.
- Turn the socket base to the left as far as it will go and remove it from the housing together with the bulb (see Fig. 7).
- Replace the bulb.

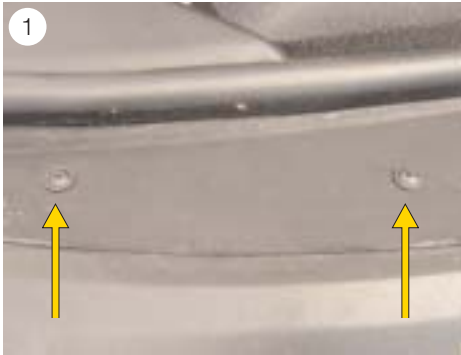
Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Audi A6, 2.4 (model year from 05.04) with xenon light



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.

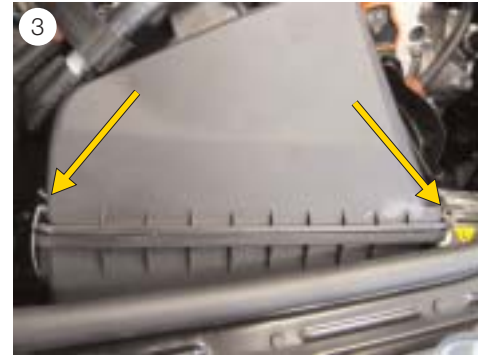


Low beam (driver side):

- Remove the screws from the air intake channel (to the air filter) on the front cross rail (see Fig. 1).
- Pull the intake channel off the air filter box.



- Pull the cover upwards and off.
- Pull the hose clamps off the air filter box (see Fig. 2).
- Loosen the hose clip of the intake hose on the intake neck and the two retaining clips on the air filter box. Remove the intake hose.



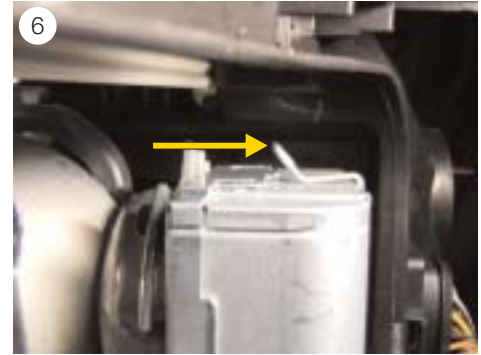
- Loosen the retaining clips on the air filter box (see Fig. 3).
- Remove the front part of the housing with air filter.



- Pull the rubber bolt in the lower part of the air filter box upwards and out (see Fig. 4).



- Pull the rear part of the housing, towards the engine, off the mounting bracket (see Fig. 5) and move it far enough away from the interior wall for the housing cover of the headlight to be reached easily.
- Loosen the locating lugs and take the housing cover off.



- Press the fastening clamp for the supply cable towards the rear (see Fig. 6).



- Turn the headlight ignition module to the left. The cable plug is automatically pushed out of the module (see Fig. 7).
- Pull the ignition module off the xenon bulb.
- Press the spring-wire clamp together and fold it out of the way.
- Replace the xenon bulb.

Parklight, indicator and high beam (driver side):

- "Expose" the headlight as described above.



- Then the respective bulbs can be replaced.

Low beam (passenger side):

- Unscrew the attachment screw from the power-steering oil tank (see Fig. 8).
- Remove the tank from its mounting bracket.
- Remove the headlight-housing cover and replace the bulb as described for the driver side.

Parklight, indicator and high beam (passenger side):

- "Expose" the headlight as described above.
- Then the respective bulbs can be replaced.

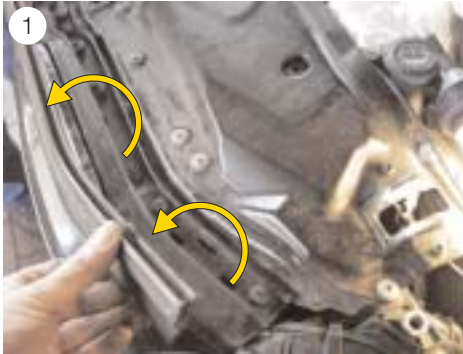
Refit the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Set the xenon headlights with the aid of a diagnostic tester (fault-code readout, basic setting of headlight range adjustment etc.).

**BMW 5-Series (E60) (from model year 07.03)
with xenon light**



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.



Low beam:

- Pull the plastic strip between the headlights upwards and off (see Fig. 1). The strip is a tight fit in the catches. For this reason, a screwdriver should be used to prise the strip out if necessary.
- Remove the Torx screws situated beneath the strip.



- Loosen the lower attachment screws from the headlight without screwing them out completely (see Fig. 2 and 3).





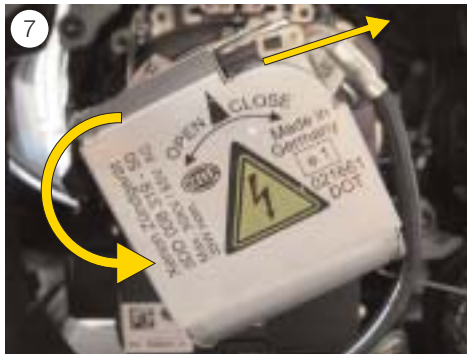
- Remove the upper attachment screws (see Fig. 4).
- Pull the plastic trim between the headlights forwards slightly and carefully remove the headlight from the body.



- Loosen the plug connections. In the case of the "large" plug connection, push the fastening clamp to the left. This releases the plug connection (see Fig. 5).
- Remove the large cover cap from the headlight housing.



- Loosen the fastening clamp on the headlight ignition module (see Fig. 6).



- Then turn the ignition module to the left as far as it will go and remove it from the xenon bulb. The contact plug is automatically pushed out of the ignition module as this is turned (see Fig. 7).
- Loosen the safety clip of the xenon bulb and replace the bulb.



High beam and parklight:

- Remove the headlight as described above.
- Remove the round cover cap.
- Turn the bulb socket base to the left and then remove it from the headlight with the bulb (see Fig. 8).



- Use a screwdriver to push the fastening clamp outwards so that it fits over the locating lug (see Fig. 9). Replace the bulb.

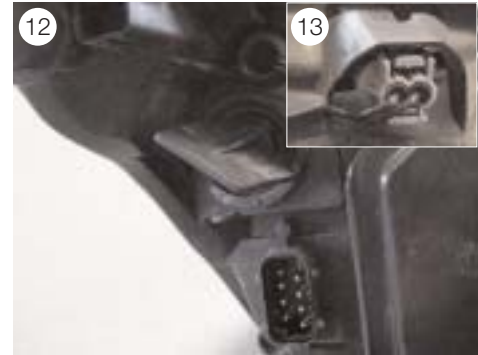


- Turn the parklight reflector to the left (see Fig. 10).
- Reach through the large opening with one hand and pull the reflector towards the rear a little and then upwards and out of the round opening (see Fig. 11).



Side marker and indicator:

- The headlight does not have to be removed for these bulbs to be replaced.
- Turn the indicator socket base to the left as far as it will go and remove it (see Fig. 12).
- Loosen the plug connection on the top of the headlight and remove with the bulb (see Fig. 13).



Refit all the removed parts in a sensible order. Check the lighting system to make sure it is in perfect working order. Check the headlight aim with the aid of diagnostic equipment if necessary (fault-code readout, basic setting of headlight range adjustment etc.).

**Fiat Stilo 1.6
(model year from 10.01)**



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.



**Low beam. high beam. parklight and indicator
(driver side):**

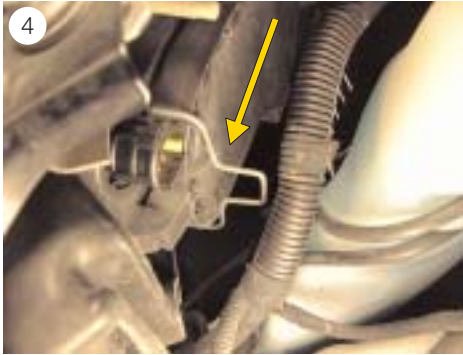
- Screw the fastening nut off the water tank (see Fig. 1).



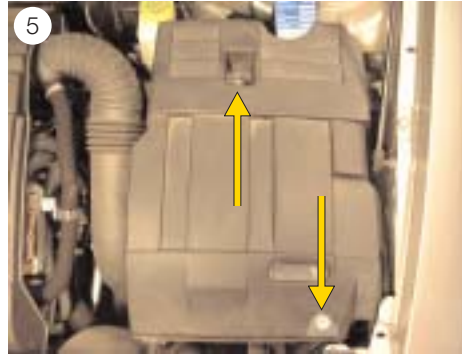
- Pull the water tank off the threaded bolt and push it towards the rear (see Fig. 2).



- Push the lock on the connecting plug sideways (see Fig. 3) and then remove the plug from the headlight.

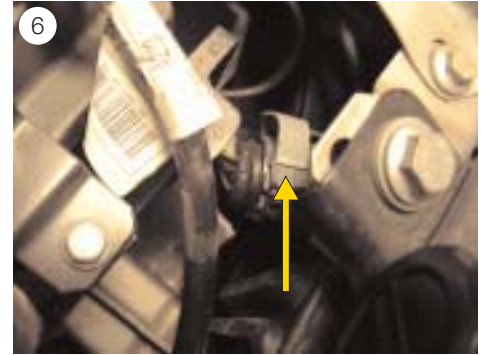


- Push the fastening clamp on the headlight cover sideways (see Fig. 4) and remove the cover.
- The respective bulbs can now be replaced.



Low beam, high beam, parklight and indicator (passenger side):

- Unscrew the fastening screws from the battery cover and then remove these (see Fig. 5).
- Push the lock on the connecting plug sideways (see Fig. 6) and then remove the plug from the headlight.
- Push the fastening clamp on the headlight cover sideways and remove the cover.



- The respective bulbs can now be replaced.
- Refit the removed parts in reverse order. Installation of the headlight cover is somewhat awkward and requires a little patience. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Ford Fiesta 1.4i (model year from 11.01)



Light source replacement

In order to replace the light sources in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.



Low beam and high beam (passenger side):

- Remove the rubber cap from the headlight housing (see Fig. 1).

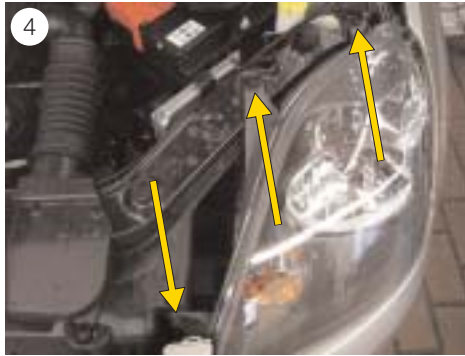


- Loosen the spring-wire clamp and replace the H4 bulb (see Fig. 2).

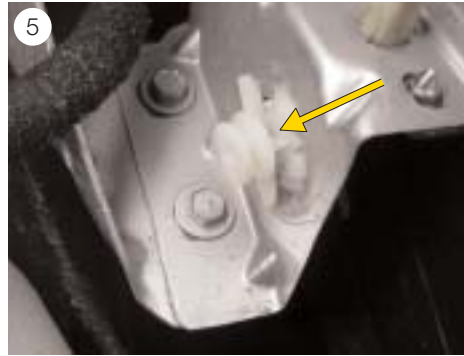


Parklight and indicator (passenger side):

- Loosen the radiator grille fixture (there are catches on the right and left) and then pull it upwards and off (see Fig. 3).



- Unscrew the fastening screws (Torx 30) from the headlight (see Fig. 4).



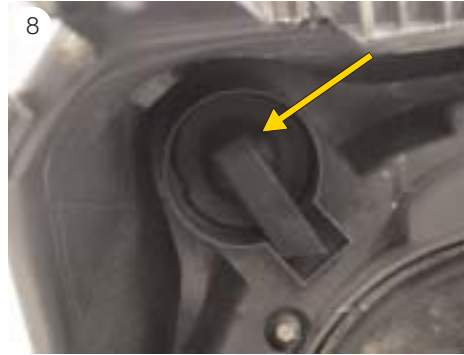
- The headlight now has to be pulled forwards firmly in one go out of the additional guide. This is at the bottom of the headlight (on the wing side) (see Fig. 5).



- Pull the front trim forwards slightly and remove the headlight from the bodywork (see Fig. 6).



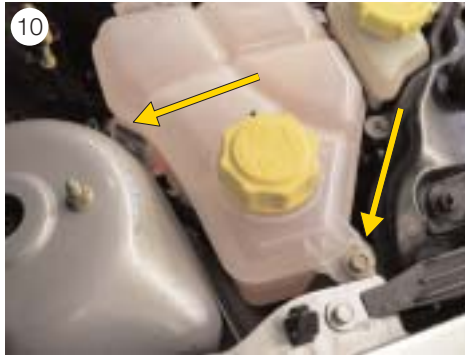
- Loosen the plug connection and pull the plug off the headlight (see Fig. 7).



- Pull the rubber cap off the parklight, remove the socket with bulb from the reflector and replace the bulb (see Fig. 8).



- Turn the indicator socket base to the left as far as it will go and remove it from the headlight together with the bulb. Replace the bulb (see Fig. 9).



Low beam and high beam (driver side):

- Unscrew the fastening screw from the coolant recovery bottle and pull the bottle upwards and out of the guide (see Fig. 10). Place the bottle to one side.
- Replace the bulb as explained for the driver side.

Parklight and indicator (driver side):

- Working steps as explained for the passenger side.

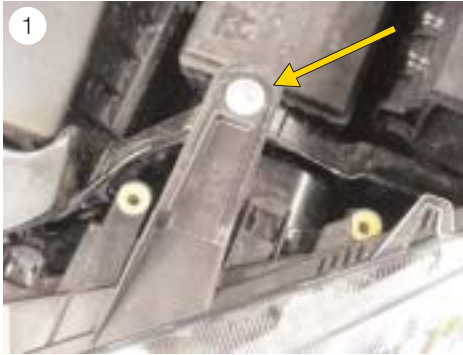
Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Ford Focus C-Max 1.6i (model year from 10.03)



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.



Low beam, high beam and parklight:

- Unscrew the fastening screw (Torx 30) from the headlight (see Fig. 1).



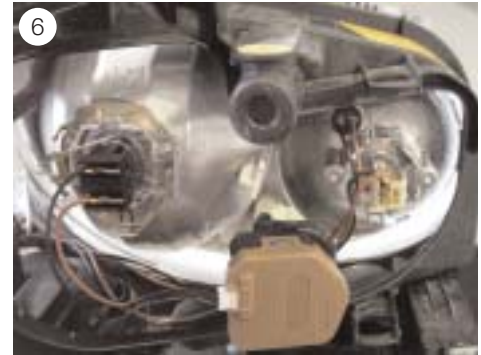
- Reach behind the headlight with one hand. Then pull the headlight forwards firmly in one go and remove it from the bodywork (see Fig. 2).



- Separate the plug connection at the headlight. Use a screwdriver to loosen the catch and then pull the central plug off (see Fig. 3).



■ Press the locating lugs out of their holders on the headlight cover on the top and bottom of the headlight and remove them (see Fig. 4 and 5).



■ The respective bulb can now be replaced (see Fig. 6).

7



Indicator:

- Remove the headlight as described above.
- Turn the bulb socket base anticlockwise as far as it will go and then remove it from the headlight together with the bulb (see Fig. 7).

8



Refit all the removed parts in reverse order. When inserting the headlight make sure that the lower two mounting brackets of the headlight (see Fig. 8) are properly locked in place on the body. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Ford Focus II 1.6i (model year from 11.04)



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.



Low beam, high beam and parklight:

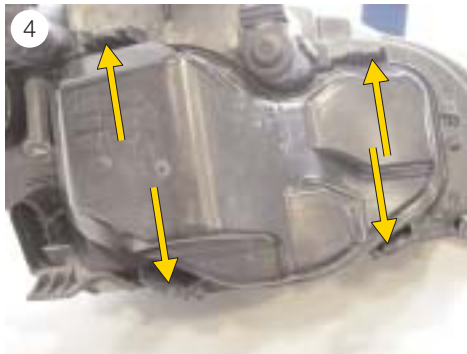
- Unscrew the fastening screw (Torx 30) from the headlight (see Fig. 1).



- Reach behind the headlight with one hand. Then pull the headlight forwards firmly in one go and remove it from the bodywork (see Fig. 2).



- Separate the plug connection at the headlight. Use a screwdriver to loosen the catch and then pull the central plug off (see Fig. 3).



- Press the locating lugs out of the mounting brackets on the headlight cover and remove this (see Fig. 4).



- The respective bulb can now be replaced (see Fig. 5).



Indicator:

- Remove the headlight as described above.
- Turn the bulb socket base anticlockwise as far as it will go and then remove it from the headlight together with the bulb (see Fig. 6).



Refit all the removed parts in reverse order. When inserting the headlight make sure that the lower two mounting brackets of the headlight (see Fig. 7) are properly locked in place on the body.

Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Ford Galaxy 2.3

with xenon light (model year from 01.00)



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows. Since the working steps are almost identical for both sides for this vehicle, they are explained using one side as an example. First switch the ignition off.



Low beam:

- Pull the cover on the left-hand headlight (bulb mark) upwards and out of the mounting bracket (see Fig. 1).



- Loosen the fastening screws (see Fig. 2 and 3).



- A long screwdriver or equivalent ratchet extension is required to reach the screw shown in Fig. 3.



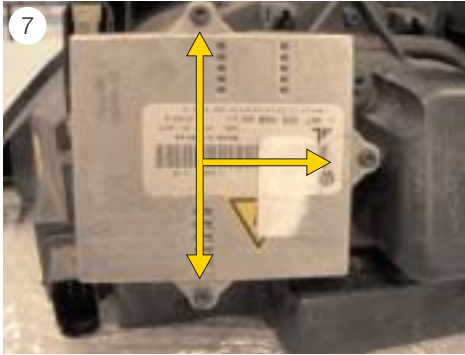
■ Remove the fastening screws (see Fig. 4).



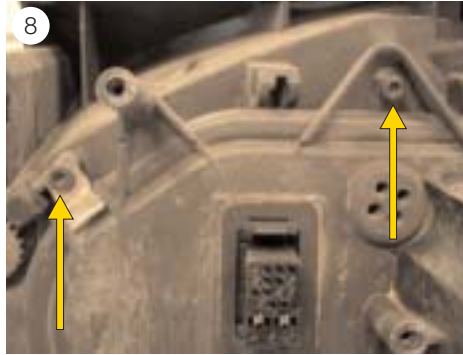
■ Loosen the screws from the plastic grille and remove this (see Fig. 5).



■ Pull the headlights forwards out of the body and pull the central plug off the headlight (see Fig. 6).



■ Remove the screws from the ballast (see Fig. 7).



■ Remove the screws from the headlight cover (see Fig. 8).



■ Turn the headlight ignition module to the left and remove it from the xenon bulb (see Fig. 9).



- Remove the screw attachment of the xenon bulb and replace the bulb (see Fig. 10).

Parklight, indicator and high beam:

- Remove the headlight as described above. The bulbs can then be replaced easily.

Refit the removed parts in reverse order. Check the system to make sure it is in perfect working order. Set the headlights with

the aid of a diagnostic tester (fault-code read-out, basic setting of headlight range adjustment etc.).

Ford Mondeo (model year from 01.00) with xenon light



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows. Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.

First switch the ignition off.

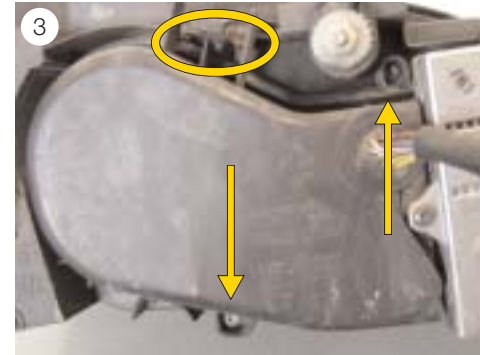


Low beam:

- Remove the bayonet catches and lift the front grille off forwards (see Fig. 1).



- Pull the locking rails (two per headlight) upwards and out (see Fig. 2).
- Pull the headlights forwards and out and pull the central plug off.



- Loosen the catch at the top of the headlight and remove the two Torx screws on the housing cover (see Fig. 3).



- Fold the housing cover downwards (see Fig. 4)



- Turn the headlight ignition module to the left and remove it from the xenon bulb (see Fig. 5).
- Remove the screw attachment of the xenon bulb and replace the xenon bulb (see Fig. 6).



Parklight, indicator and high beam:

- Remove the headlight as described above. The bulbs can then be replaced easily.

Refit the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Set the headlights with the aid of a diagnostic tester (fault-code readout, basic setting of headlight range adjustment etc.).

Honda Accord 2.2 CTDI

(model year from 01.03) with xenon light



Light source replacement

When replacing the light source, proceed as follows. First switch the ignition off.

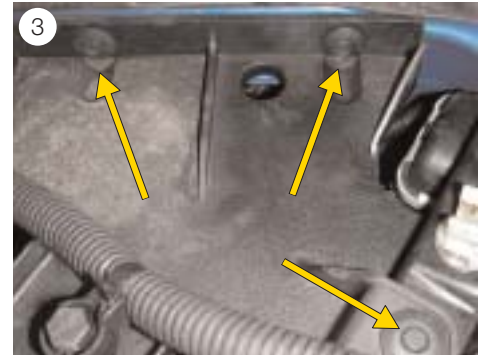


Low beam (passenger side):

- Unscrew the screw from the earth strap (above the headlight) and place it to one side.
- Unscrew the screw (Resis Torx 20) from the cover cap and turn this to the left as far as it will go (see Fig. 1).
- Remove the cap.

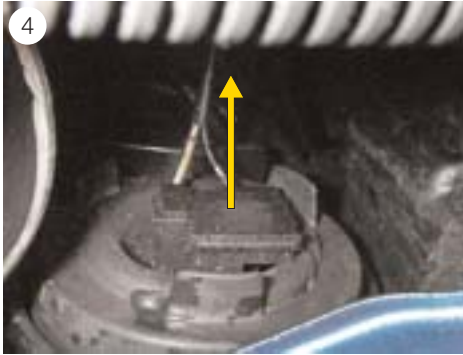


- Turn the headlight ignition module to the left as far as it will go and remove it from the xenon bulb. (see Fig. 2).
- Loosen the spring-wire clamp and replace the xenon bulb.



High beam (passenger side):

- Push the ejector pins of the expansion clips downwards and remove the clips from the cover (see Fig. 3).
- Pull the cover upwards and out.



- Remove the plug from the bulb and remove the rubber cap from the rear headlight-housing (see Fig. 4).
- Take the bulb holder with the bulb out of the reflector.
- Pull the bulb out of the base and replace it.



Indicator (passenger side):

- Remove the cover as described for the high beam.
- To be able to reach the bulb more easily, turn the motor of the headlight beam adjustment to the left as far as it will go. Do not remove the motor, however (see Fig. 5).

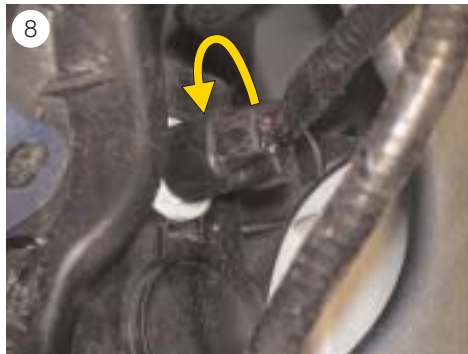


- Pull the plug off the bulb base and turn this to the left as far as it will go (see Fig. 6).
- Take the base with the bulb out of the reflector and replace the bulb.



Parklight (passenger side):

- Loosen the fastening clips of the mud-guard panelling and remove them (see Fig. 7).
- Pull the panelling downwards as far as necessary to reach the parklight bulb.



- Turn the bulb socket to the left as far as it will go and remove it from the headlight (see Fig. 8).
- Replace the bulb.



Low beam (driver side):

- Screw the fastening screw out of the filler neck of the water tank (see Fig. 9).



- Remove the upper part of the filler neck (see Fig. 10) and push the lower part as far back as necessary to reach the cover cap easily.
- Then proceed according to the instructions for the passenger side.



Indicator (driver side):

- To reach the indicator bulb better, loosen the hose clip and turn clockwise through 90° (see Fig. 11).
 - Open the mounting bracket of the hydraulic line and push this towards the rear a little (see Fig. 12).
 - Turn the bulb socket to the left as far as it will go and remove it from the headlight.
- Replace the bulb.



Parklight (driver side):

- See driver side.
- The high beam is straightforward to replace on this side.

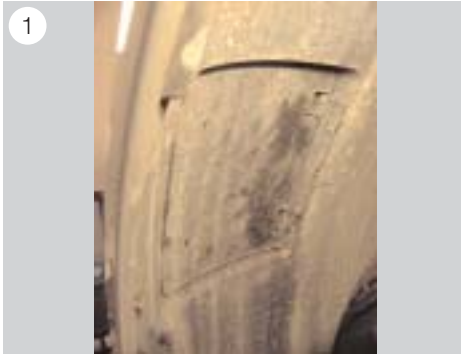
Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting with the aid of diagnostic equipment if necessary (fault-code readout, basic setting of headlight range adjustment etc.).

Opel/Vauxhall Astra 1.6 (model year from 03.04)



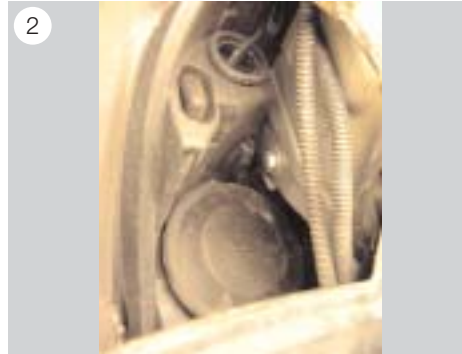
Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.

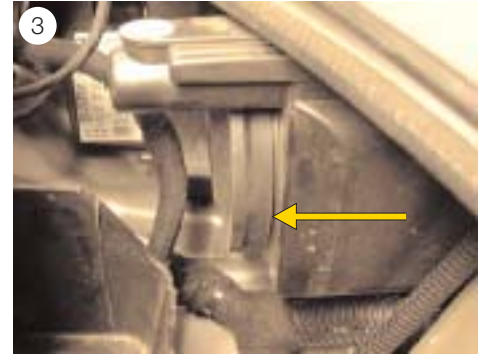


Low beam and indicator (passenger side):

- Remove the service flap in the wheel housing (see Fig. 1).



- Remove the rubber cap from the headlight housing (see Fig. 2). Now the light sources of the parklight and low beam can be replaced.
- Remove the upper cap to replace the indicator bulb.

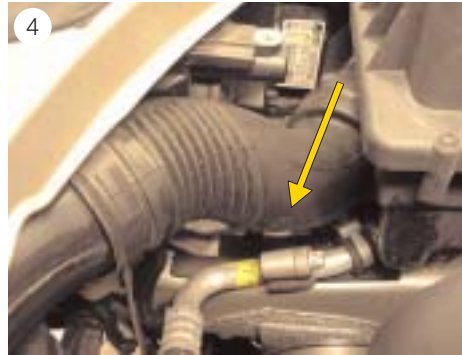


High beam and parklight (passenger side):

- Remove the battery cover.
- Pull the rubber cap off and replace the bulb (see Fig. 3).

Low beam, parklight and indicator (driver side):

- See passenger side.

**High beam (driver side):**

- Pull the intake hose off the air filter housing and push it downwards (see Fig. 4). The rubber cap is now easily accessible (see Fig. 5).
- Remove the cap and replace the bulb.



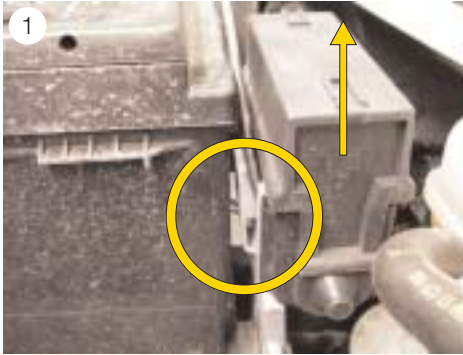
Refit the removed parts in a sensible order. Check the lighting system to make sure it is in perfect working order. Then check the headlight setting and adjust if necessary.

Opel/Vauxhall Meriva 1.6i (model year from 05.03)



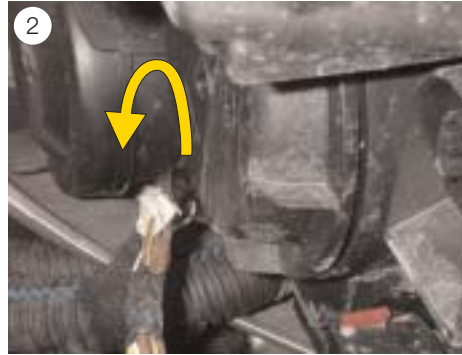
Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.

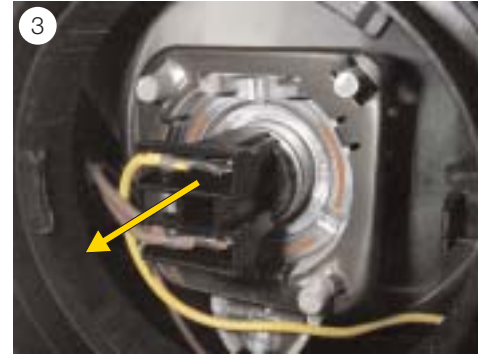


Low beam (passenger side):

- Use a screwdriver to push the locating lug back and lift the relay box upwards and out of the mounting bracket. Put the relay box to one side (see Fig. 1).



- Turn the cover cap to the left as far as it will go and remove it (see Fig. 2).



- Pull the bulb plug and the bulb backwards and out of the bulb socket (see Fig. 3).
- When inserting the new bulb make sure that the bulb base has been pushed into the bulb socket as far as it will go.



High beam and parklight (passenger side):

- Remove the relay box as described above.
- Turn the cover cap to the left as far as it will go and remove it (see Fig. 4).

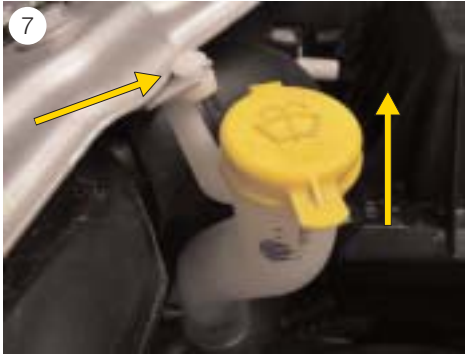


- Loosen the plug connection and spring-wire clamp of the H1 bulb and replace this (see Fig. 5).
- Pull the bulb socket (parklight) with bulb backwards out of the reflector and replace the bulb.



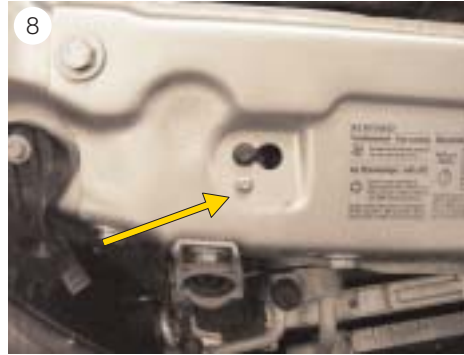
Indicator (passenger side):

- Remove the relay box as described above.
- Turn the bulb socket base to the left as far as it will go and remove it from the headlight together with the bulb. (see Fig. 6).



Low beam (driver side):

- Remove the filler neck of the washer fluid tank. To do this, push the filler neck bracket out of the attachment (see Fig. 7). Then pull the filler neck upwards and off.



- Unscrew the fastening screw (Torx 20) from the air intake channel (see Fig. 8).



- Pull the air intake channel to the right (see Fig. 9).



Remove the air intake channel from the longitudinal holes and then pull it off the air filter box (see Fig. 10).

- The cover cap is now easily accessible.
- Replace the bulb as described for the passenger side.

High beam and parklight (driver side):

- See driver side. The relay box does not have to be removed.



Indicator (driver side):

- Remove the surrounding components as described for the low beam.
- Grasp the socket base (see Fig. 11), turn the bulb socket base to the left as far as it will go and remove it from the headlight together with the bulb.

Refit the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Opel/Vauxhall Omega 2.2 Diesel
(model year from 03.94) with xenon light



Light source replacement

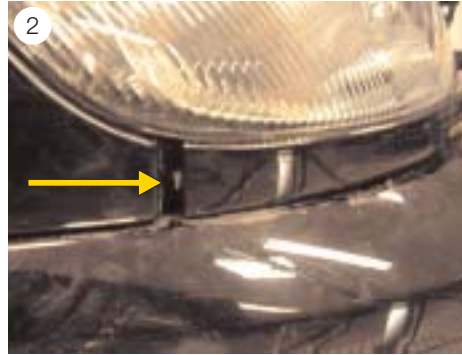
In order to replace the low-beam light source in the above-mentioned vehicle, proceed as follows.

First switch the ignition off.



Low beam (driver side):

- Remove the trim under the headlight. To do this, remove the retaining clip (see Fig. 1).



- Push the trim out carefully forwards (see Fig. 2).

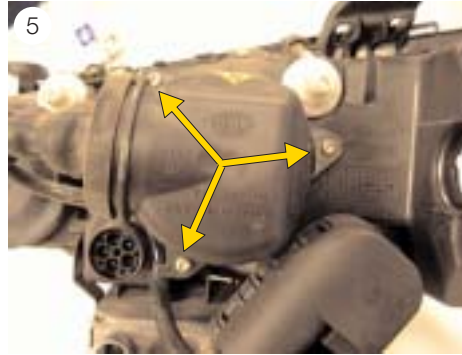


- Unscrew the fastening screws from the headlight (see Fig. 3).

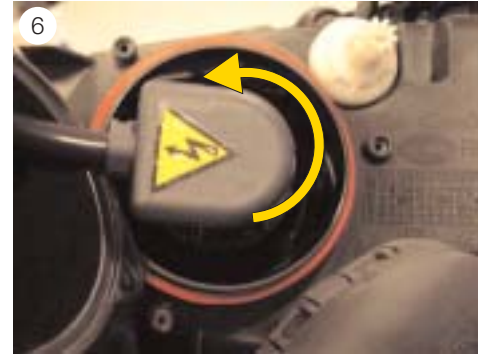


The lower fastening screw is located between the headlight and the front apron (see Fig. 4).

- Remove the headlight and separate all plug connections.



- Unscrew the screws on the cover cap (see Fig. 5) and remove the cap.



- Turn the high-voltage plug to the left and pull it off the xenon lamp (see Fig. 6).
- Replace the low-beam light source.

High beam, parklight and indicator (driver side):

- Remove the headlight as explained above.
- Pull the rubber cap off the indicator and high beam and replace the respective bulbs.
- Turn the indicator bulb base to the left as far as it will go and remove it from the headlight together with the bulb.

Passenger side:

- Working steps as explained for the driver side.

Refit all the parts in a sensible order. Check the lighting system to make sure it is in perfect working order.

Set the xenon headlights with the aid of a diagnostic tester (fault-code readout, basic setting of headlight range adjustment etc.).

Opel/Vauxhall Signum/Vectra V6 CDTI
(from model year 04.02) with xenon light



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
 First switch the ignition off.

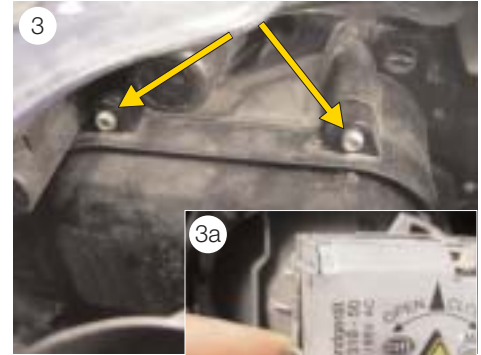


Low beam (passenger side):

- Lift up the battery and fuse box cover and remove it (see Fig. 1).



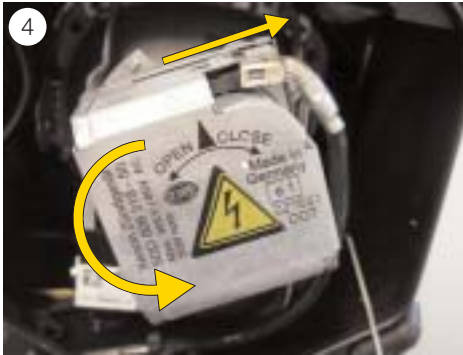
- Loosen the retaining clip from the filler neck and pull the neck upwards and out of the washer fluid tank (see Fig. 2). Move the neck backwards and forwards during this process.
- Unscrew the fastening screws from the headlight-housing cover (Torx 20).



Then fold the cover back as far as possible and pull it upwards and out of the mounting brackets (see Fig. 3).



- Pull the fastening clamp off forwards (see Fig. 3a).



- Turn the headlight ignition module to the left as far as it will go. This movement automatically pushes the power supply cable out of the ignition module (see Fig. 4).
- Pull the ignition module off the xenon bulb.
- Loosen the spring-wire clamp and replace the xenon bulb



Parklight (passenger side):

- Turn the socket base to the left and then remove it from the reflector with the bulb (see Fig. 5, 1).

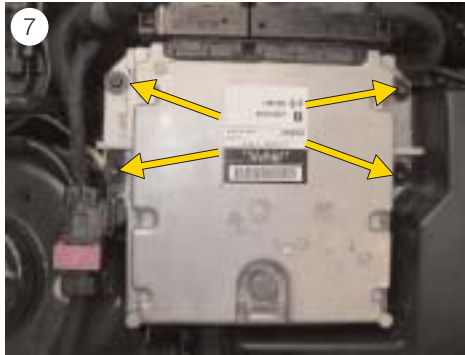
High beam and static bend lighting

(passenger side):

- Unscrew the fastening screws from the headlight-housing cover (Torx 20) (see Fig. 5, 2) and remove the cover.



- Pull the plug off the H1 bulb (left-hand plug connection, see Fig. 6), push the spring-wire clamp back and replace the bulb.
- Pull the plug off the H1 bulb (right-hand plug connection, see Fig. 6), turn the bulb base upwards and remove it from the reflector with the bulb. Replace the bulb.

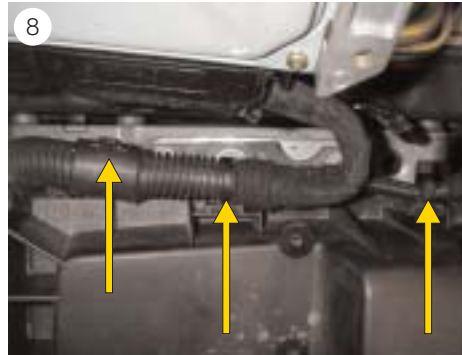


Indicator (passenger side):

- The indicator bulb is a so-called "longlife bulb" and usually lasts as long as the vehicle itself. It cannot be replaced.

Driver side:

- Remove the fastening screws from the engine control unit on the air filter box (see Fig. 7).



- Open or loosen the wiring harness fastening clips (see Fig. 8). Turn the control unit through 180° and place it on the engine.



- Pull the plug connection off the LMM, loosen the outer hose clips and pull the intake hose off (see Fig. 9).



■ Pull off the air hose beneath it, too (see Fig. 10).



■ Pull the air filter box out of the guides (diagonally upwards to the right) (see Fig. 11). This pulls the hose out of the crankcase ventilation at the same time (see Fig. 12).



■ Now all the bulbs can be replaced in the same way as on the passenger side.

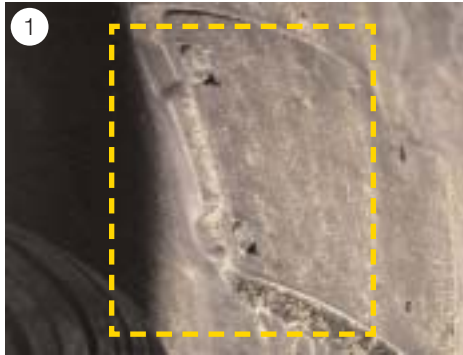
Replace the removed parts in a sensible order. Check the lighting system to make sure it is in perfect working order. Check the headlight aim with the aid of diagnostic equipment if necessary (fault-code readout, basic setting of headlight range adjustment etc.).

Opel/Vauxhall Zafira II 1.6i (model year from 07.05)



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.



Low beam :

- Remove the service flap in the wheel housing (see Fig. 1).



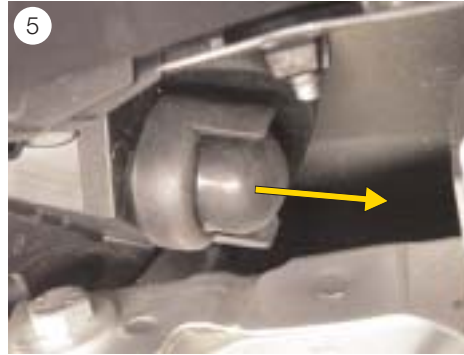
- Separate the plug connection at the headlight.
- To do this, press the fastening clamp to the left and then pull the central plug off (see Fig. 2).



- Pull the rubber cap off the rear headlight-housing.
- Turn the bulb socket to the left and then remove it from the reflector with the bulb (see Fig. 3).



- Use a small screwdriver to bend the fastening clamp as far as necessary until it can be pushed over the locating lug (see Fig. 4).
- Replace the bulb.



Indicator:

- Remove the rubber cap (see Fig. 5).



- Turn the bulb socket to the left and then remove it from the headlight with the bulb (see Fig. 6). Since the socket is a tight fit, flat nose pliers can be used to make removal easier.



High beam and parklight:

- Pull the rubber cap off and replace the respective bulb (see Fig. 7).

Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Renault Espace 2.0 T

(model year from 11.02) with xenon light



Light source replacement

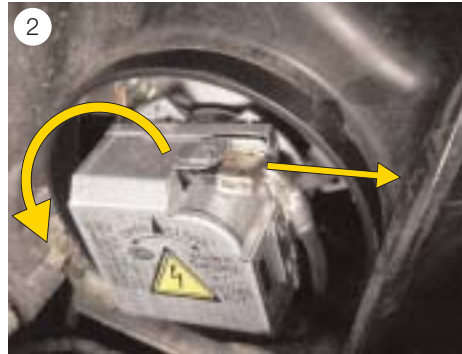
When replacing the light source, proceed as follows.
First switch the ignition off.



Low beam (passenger side):

- Remove the rubber cap from the rear headlight-housing (see Fig. 1).
- Turn the headlight ignition module to the left as far as it will go and remove it from the xenon bulb.

The voltage-supply plug is automatically pushed out when the ignition module is turned (see Fig. 2). When refitting the parts, make sure that the ignition module is fastened to the bulb first before the



voltage-supply plug is inserted into the module.

- Loosen the spring-wire clamp and replace the xenon bulb.

High beam (passenger side):

- Pull the rubber cap off the rear headlight-housing.
- Loosen the spring-wire clamp and replace the bulb.



Parklight (passenger side):

- Access is somewhat restricted, there is little room for installation work.
- Turn the cover cap to the left as far as it will go and remove the cap (see Fig. 3).



- Pull the plug-in base backwards out of the reflector and replace the bulb (see Fig. 4).



Indicator (passenger side):

- Turn the bulb base to the left as far as it will go and remove it from the housing together with the bulb (see Fig. 5).
- Replace the bulb.



Low beam, high beam, parklight and indicator: (driver side):

- Pull the oil reservoir for the power steering upwards and out of the mounting bracket and place it to one side (see Fig. 6).



- Loosen the fasteners of the filler neck (window cleaning system) (see Fig. 7). To do this, push the expansion clip forwards out of the mounting bracket.



- Then pull the upper part of the filler neck upwards and off (see Fig. 8).
- Loosen the wiring harness from the mounting bracket and push it to one side a little to improve access to the rear of the headlight (see Fig. 9).
- See the instructions for the passenger side for all further working steps for light-source replacement.



- Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting with the aid of diagnostic equipment if necessary (fault-code readout, basic setting of headlight range adjustment etc.).

Renault Laguna (K74) 2.2 dci (model year from 05.05) with xenon light



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows. First switch the ignition off.

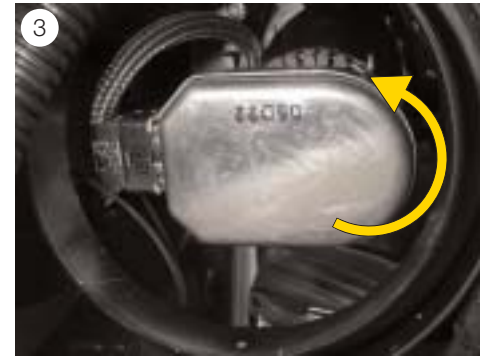


Low beam (driver side):

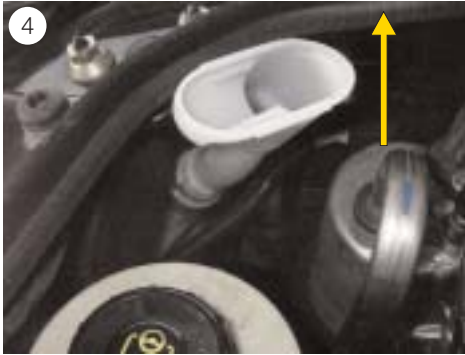
- Turn the fastening clip anticlockwise through 90° and remove the cover. To do this, lift the cover slightly and pull it towards the inside of the engine (see Fig. 1).



- Pull the oil reservoir for the power steering upwards and out of the mounting bracket and place it to one side (see Fig. 2).
- Pull the cover cap off the headlight housing.

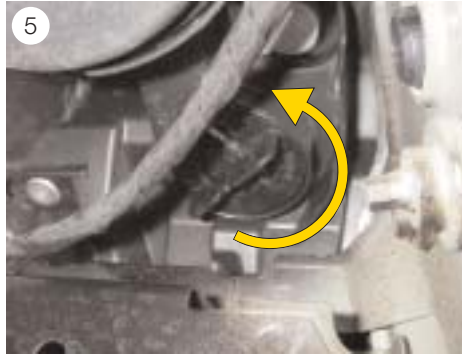


- Turn the headlight ignition module to the left as far as it will go and remove it from the xenon bulb (see Fig. 3).
- Loosen the spring-wire clamp and replace the bulb.



Indicator (driver side):

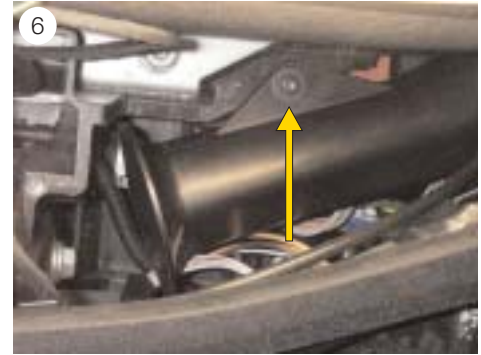
- Pull the filler neck from the supply tank for the window cleaning system upwards and off.
Move the filler neck backwards and forwards slightly during this process (see Fig. 4).



- Turn the indicator socket to the left and remove together with the bulb (see Fig. 5).

High beam and parklight (driver side):

- Take the rubber cap for the high beam light off the headlight-housing.
- The bulbs can now be carefully replaced, using a delicate touch.



Low beam (passenger side):

- Unscrew the fastening screw (Torx 20) from the air intake channel (see Fig. 6).



- The air intake channel comprises two parts and can be separated. Use a screwdriver to press the locating lug (see Fig. 7) down slightly.



At the same time, pull the front part of the air intake channel forwards and take it out of the engine compartment (see Fig. 8)

- Now all the bulbs can be replaced in the same way as on the driver side.

Replace the removed parts in a sensible order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting with the aid of diagnostic equipment if necessary (fault-code readout, basic setting of headlight range adjustment etc.).

Renault Mégane 1.9 dci (model year from 11.02)



Light source replacement

In the case of this vehicle, the operating manual states that the light source can be replaced via a flap in the front wheel housing. This is possible for the low beam if great care is taken. It is impossible to replace the high beam (on the driver side) in this way, however. When replacing the light source, proceed as follows: First switch the ignition off.

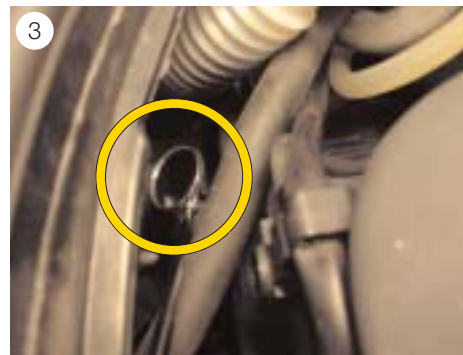


Low beam and high beam (driver side):

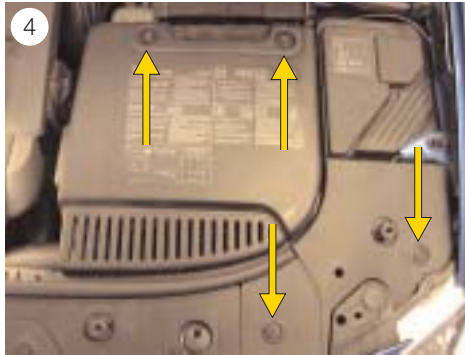
- Loosen the fastening clips (see Fig. 1) and take the cover off.
- Remove the service flap in the wheel housing.



- Reach through the opening with one hand to grasp the headlight-housing cover cap and screw this off (see Fig. 2).
- Replace the bulb.

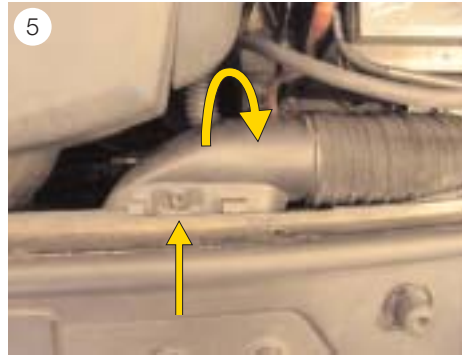


- In the case of the high beam, pull the rubber cap off and replace the light source. Since there is no guaranteed view of the bulb socket, the bulb's installation position should be checked using a small mirror (see Fig. 3).



Low beam and high beam (passenger side):

- Loosen the fastening clips or fastening screws (see Fig. 4) and take the cover off.



- Loosen the fastening clip from the air intake hose and remove this by turning it through 90° (see Fig. 5).
- Pull the other end of the hose off the intake neck.
- Now the rubber cap of the high beam is freely accessible and the light source can be replaced.

Indicator and position light:

- These light sources can be reached on both sides via the service flaps in the wheel housing.

Refit the removed components in a sensible order. Check the lighting system to make sure it is in perfect working order. Then check the headlight setting and adjust if necessary.

Rover 75 Facelift

(model year from 08.01) with xenon light



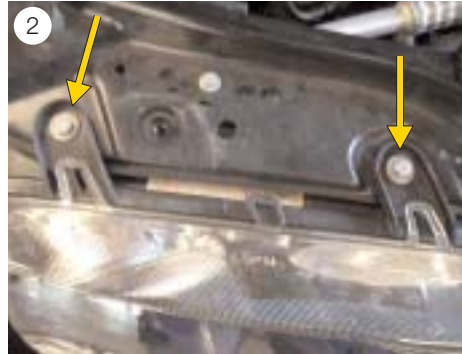
Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows. Since the working steps are almost identical for both sides for this vehicle, they are explained using one side as an example. First switch the ignition off.

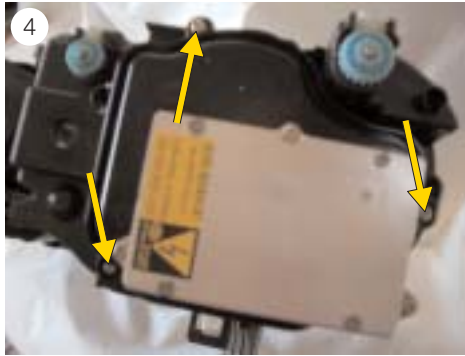


Low beam :

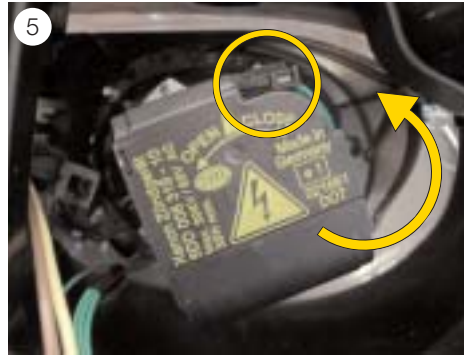
- Remove the fastening screws from the front apron (8 at the top, 10 at the bottom and 2 in each of the wheel housings, see Fig. 1).
- Pull the apron forwards out of the mounting brackets. Place the front apron on something soft → beware of scratches!



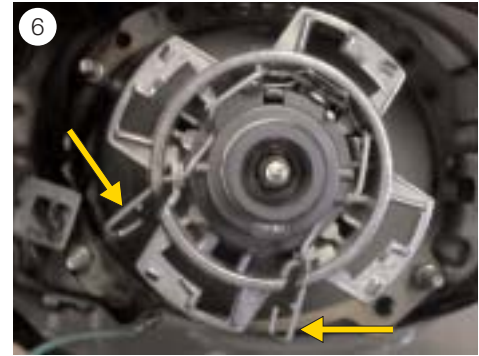
- Loosen the fastening screws from the headlight (see Fig. 2 and 3).
- Pull the central plug off.
- Pull the headlights out forwards.



- Remove the Torx screws from the headlight cover and take this off the headlight (see Fig. 4).



- Turn the ignition module to the left. The cable plug is automatically pushed out of the module (see Fig. 5).
- Pull the ignition module off the xenon bulb.
- Press the spring-wire clamp together and fold it out of the way (see Fig. 6).
- Replace the xenon bulb.



Parklight, indicator and high beam:

- Refit the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Set the headlights with the aid of a diagnostic tester (fault-code readout, basic setting of headlight range adjustment etc.).

Skoda Superb 1.9 TDI (model year from 02.02)



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.



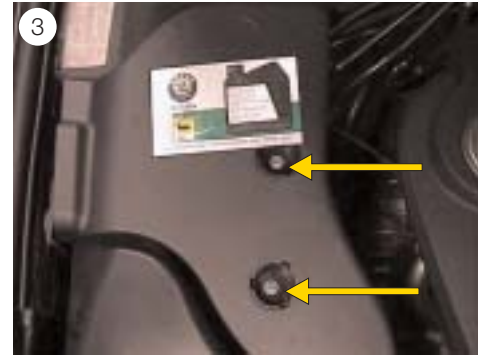
Low beam (passenger side):

- Take the cover off the brake fluid tank. To do this, loosen the mounting brackets under the cover by hand (see Fig. 1)
- Push the locking clamp on the headlight-housing cover upwards and remove the cover.



Low beam (driver side):

- Remove the screws from the air intake channel (see Fig. 2).



- Remove the screw covers and unscrew the screws (see Fig. 3).
- Remove the plastic cover.



- Pull the air channel upwards and off the air filter box (see Fig. 4).



- Remove the fastening screw from the headlight cover (see Fig. 5).
- To reach the headlight-housing cover better, press the air filter box approx. 5 cm to the right and fix it in this position.



- Replace the bulb in the same way as on the passenger side (see Fig. 6).

Parklight, indicator and high beam can be replaced without any problems. Refit the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

Volvo S 40 (from model year 01.04)

V 50 (from model year 04.04)

All vehicles with xenon light



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.

First switch the ignition off.



Low beam :

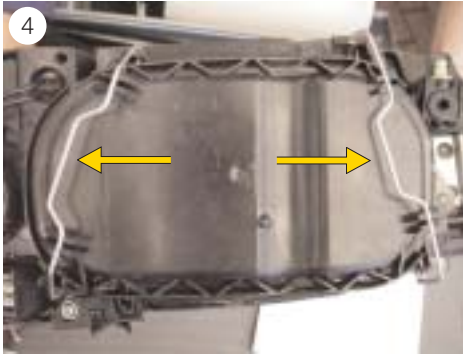
- Pull the headlight attachment rail upwards and out of the mounting bracket (see Fig.1).
- Push the headlight forwards slightly.



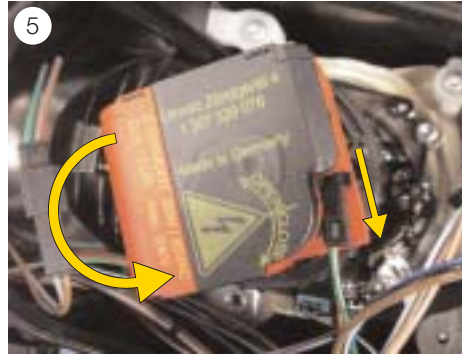
- Pull the headlight sideways out of the guide (see Fig. 2) and remove it from the bodywork.



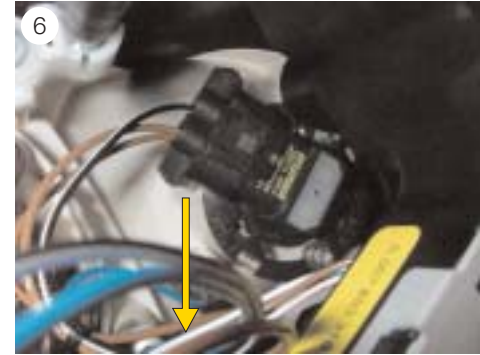
- Pull the central plug off the headlight (see Fig. 3).



- Push the headlight-cover fastening clamp outwards and remove this (see Fig. 4).

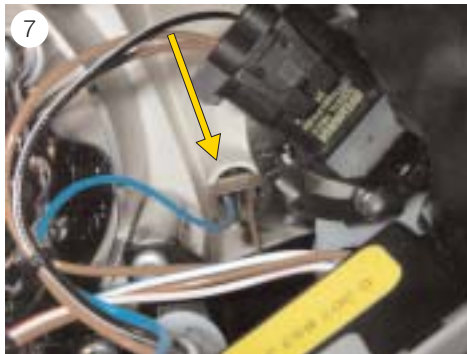


- Turn the headlight ignition module to the left as far as it will go and remove it from the xenon bulb. The contact plug is automatically pushed out of the ignition module as this is turned (see Fig. 5).
- Loosen the spring-wire clamp of the xenon bulb and replace the bulb.



High beam and parklight:

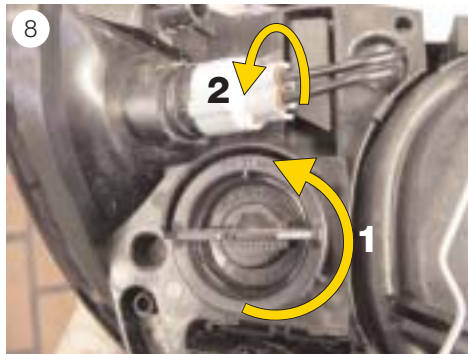
- Remove the headlight as described for the low beam and take the headlight cover off.
- Turn the bulb socket base to the left as far as it will go and remove it from the reflector together with the bulb (see Fig. 6). Separate the plug connection and replace the bulb.



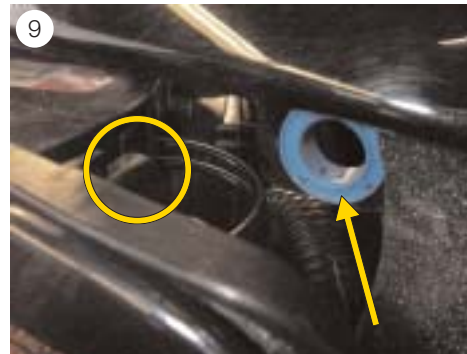
- Pull the parklight socket backwards and out of the reflector (see Fig. 7).

Indicator and side marker light:

- Remove the headlight as described for the low beam.



- Turn the indicator socket base to the left as far as it will go and remove it from the headlight together with the bulb (see Fig. 8, no. 1).
- Push the side marker light bulb socket forwards slightly and then turn it anticlockwise as far as it will go and remove it from the headlight (see Fig. 8, no. 2).



Refit all the removed parts in reverse order. When re-installing the headlight make sure that the guide on the headlight is inserted into the holder (see Fig. 9, blue ring) first before the headlight is pushed completely into the bodywork. Check the lighting system to make sure it is in perfect working order. Check the headlight setting with the aid of diagnostic equipment if necessary (fault-code readout, basic setting of headlight range adjustment etc.).

VW Beetle 1.9 TDI PD (model year from 1998)



Light source replacement

Since the working steps are identical for both sides for this vehicle, they are explained using one side as an example.

First turn the ignition off.

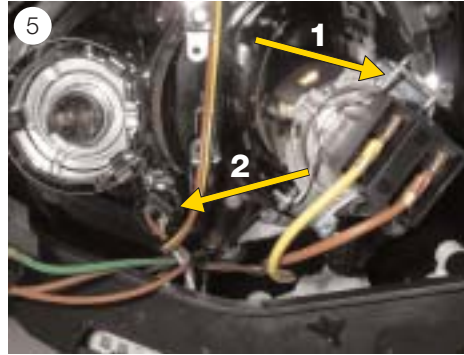


Low beam :

- Unlock the headlight housing. To do this, use a hexagon nut (size 5) to turn the lever to the left slightly until a "clicking" sound can be heard.

The lever is at the lower edge of the headlight (see Fig. 1 and 2).

- Push the clamp of the tab washer downwards (see Fig. 3), at the same time pressing the headlight carefully out of the body from behind.



The tab washer can easily be seen with the headlight removed (see Fig. 4).

On the driver side, a long screwdriver or similar is required to reach the lever.

- Push the fastening clamp of the cover cap upwards and remove the cap from the rear of the headlight housing.
- Remove the plug from the bulb.

- Loosen the spring-wire clamp and replace the bulb (see Fig. 5, no. 1).

High beam:

- Remove the headlight as described above and take the cover cap off.
- Push the mounting brackets back a little using a screwdriver and replace the bulb (see Fig. 6).

Parklight:

- Remove the headlight as described above and take the cover cap off.
- Remove the bulb socket base with the bulb from the reflector and replace the bulb (see Fig. 5, no. 2).



Indicator:

- Use a screwdriver to push the indicator housing forwards out of the bumper (see Fig. 7).



- Turn the bulb socket with plug to the left as far as it will go and remove it from the light housing (see Fig. 8).
- Pull the plug off the bulb and replace this.

Refit all the removed parts in reverse order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

VW Passat (B5) 1.9 TDI
(model year from 11.00- 03.05)



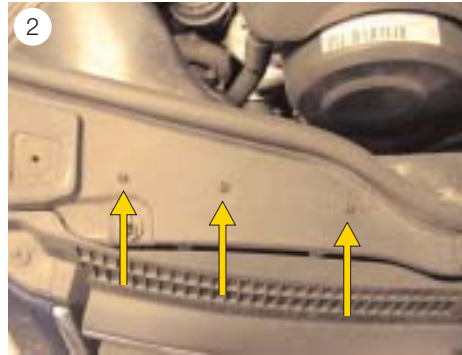
Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.



Low beam, high beam, parklight and indicator
(passenger side):

- Loosen the cover of the brake fluid tank and take it off.
- Pull the cover cap of the respective bulbs off the rear headlight-housing.
- Replace the bulb.

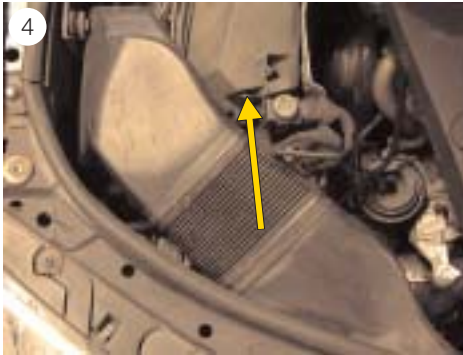


Low beam, high beam, parklight and indicator
(driver side):

- Remove the screws from the air intake channel (see Fig. 2).



- Remove the cover caps from the fastening screws, remove the screws (see Fig. 3) and take the plastic cover off.



- Pull the air channel upwards and off the air filter box (see Fig. 4).



- Remove the fastening screw from the air filter box (see Fig. 5).



- To reach the headlight-housing cover better, press the air filter box approx. 5 cm towards the inside of the engine and fix it in this position (see Fig. 6).
- Replace the bulb as explained for the passenger side.

Replace the removed parts in a sensible order. Check the lighting system to make sure it is in perfect working order. Check the headlight setting and adjust if necessary.

VW Polo (9N) 1.4 TDI (model year from 10.01)



Light source replacement

In order to replace the light source in the above-mentioned vehicle, proceed as follows.
First switch the ignition off.



Low beam (passenger side):

- In order to have more room for mounting work, loosen the battery cover and the fuse holder below it from the fixing lugs and push it a little to the left (see Fig. 1).

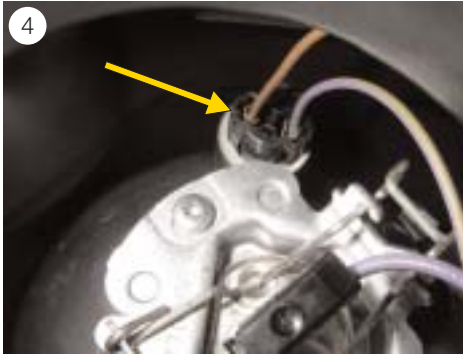


- Pull the rubber cap (low beam) off the headlight-housing.
- Pull the plug connection off the bulb and turn the fastening ring to the left (see Fig. 2).
- Pull the bulb out of the reflector and replace it.



Indicator (passenger side):

- Turn the cover cap to the left and remove it (see Fig. 3).
- Turn the indicator socket base to the left, remove it with the bulb and replace the bulb.



High beam and parklight (passenger side):

- To reach these two bulbs, the battery has to be removed first.
Note the radio code first.
- Pull the rubber cap (high beam, parklight) off the headlight-housing.
- Loosen the spring-wire clamp and plug connection from the high beam bulb and replace the bulb.



Low beam (driver side):

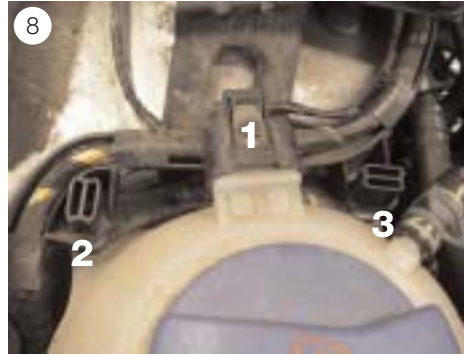
- Grasp the parklight-bulb socket by the connecting plug and pull it out of the reflector (see Fig. 4).
- Unscrew the fastening screw (Torx 40) from the fuel filter (see Fig. 5).



- Bend the fuel filter carefully to one side.
Note! Watch the refrigerant line in vehicles with air conditioner system (see Fig. 6).



- The rubber cap can now be reached by "slim" hands (see Fig. 7). The coolant recovery bottle should be removed for more room to work.



- Loosen the plug connection (see Fig. 8, 1) and pull the cable bridge of the threaded bolts (2 and 3) upwards and off.
- Remove the fastening nuts from the recovery bottle and place this to one side without loosening the hoses

Low beam, parklight and indicator

Replace as described for the passenger side (without removing the battery).

Replace the removed parts in a sensible order. Check the lighting system to make sure it is in working order. Check the headlight setting and adjust if necessary.

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the cars of tomorrow***