

Lighting

Electrics

Electronics

Thermal
Management

Sales
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Technical
Service

**Our Ideas,
Your Success.**



*Ideas today for
the cars of tomorrow*


Table of contents

Audi A3 2.0 TDI PD (model year from 2003)	4–6	Ford Fiesta 1.4i (model year from 11.01)	23–26	Renault Laguna (K74) (model year from 05.05) 2.2 dci with Xenon light	43–45
Audi A6, 2.4 (model year from 05.04) with Xenon light	7–9	Ford Focus II 1.6i (model year from 11.04)	27–29	Renault Modus all engines	46–48
BMW 3-Series (E91, E92) 330d with Xenon light	10–12	Honda Jazz all engines	30–31	VW Beetle 1.9 TDI PD	49–51
BMW 5-Series (E60) with Xenon light	13–16	Mercedes-Benz A-Class all engines (W168)	32–33	VW Passat (B5) 1.9 TDI	52–53
BMW X3 (E83) 2.0L Diesel	17–18	Opel Signum/Vectra V6 CDTI with Xenon light	34–37	VW Polo (9N) 1.4 TDI	54–56
BMW Z4 (E85) 2.2L petrol with Xenon light	19–20	Opel Zafira II 1.6i (model year from 07.05)	38–40	Notes	57–59
Citroën C1 Peugeot 107 all engines	21–22	Renault Espace IV all engines	41–42		

Explanation of symbols:

 = very complicated

 = complicated

 = medium complexity

 = quite easy

 = very easy

Light source replacement does not have to be difficult.

Today's cars are becoming more and more complex all the time. More and more components have to be packed into vehicles. In extreme cases, this means there is hardly any room between the components in the engine compartment. This is particularly annoying when a headlight light source has to be replaced. Once you have actually located the headlight cover, you often have to "screw your way through" to it. This takes up a considerable amount of time in some vehicles, since the complete headlight has to be removed first in order to get to the light source. Painful experience with sharp edges and burrs are day-to-day occurrences here.

This handbook includes vehicles where light source replacement requires more than a little work. Thanks to comprehensive explanations and detailed photos, this handbook helps make light source replacement simpler and more efficient. Making light source replacement easy.

Audi A3 2.0 TDI PD (model year from 2003)



Type of light: low beam

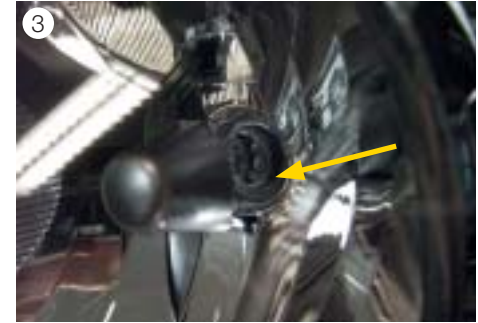
- Push the release lever for the cover cap downwards and remove the cap from the back of the headlight housing (see Fig. 1).

Light source replacement

Since the work steps are identical for both sides for this vehicle, they are described only for one side. First, switch the ignition off.



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



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

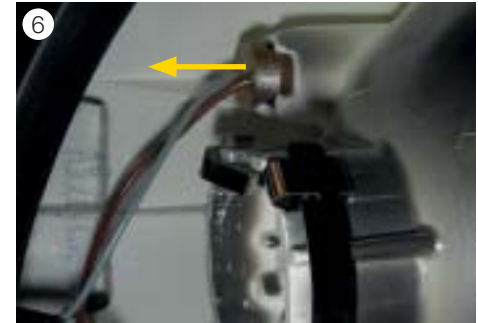


Type of light: high beam

- Loosen the fastening clamp from the cover cap and pull the cap off the back of the 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).
- Pull the bulb off the plug and replace it.



Type of light: parking light

- To reach the parking light bulb, the cover cap and the high beam bulb have to be removed as described for the high beam.
- Use pointed pliers to pull the bulb socket with bulb out of the reflector and remove it from the headlight (see Fig. 6).
- Replace the bulb.



Type of light: indicator

- Unscrew the front screws (Torx 20) of the upper mudguard panelling.
- Push the panelling as far as necessary to one side to reach the bulb.
- Turn the bulb socket anticlockwise 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 perfect working order. Check headlight aiming and correct if necessary.

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



Light source replacement

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



Type of light: low beam (passenger side)

- Remove the screws from the air intake channel (to the air filter) on the front cross-member.
- Pull the intake channel off the air filter box.



- Pull the engine cover upwards and off.
- Pull the hose clamps off the air filter box (see Fig. 2).
- Loosen the hose clip of the intake hose at the intake muff 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 headlight housing cover to be reached easily.
- Loosen the locating lugs and remove the housing cover.



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



- Turn the ignition module anticlockwise. 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.



Type of light: parking, indicator and high beam (driver side/passenger side)

- “Expose” the headlight as described above.
- Then the respective bulb can be replaced.

Type of light: low beam (driver side)

- Unscrew the attachment screw from the power-steering oil tank (see Fig. 8).

- Remove the tank from the bracket.
- Remove the headlight housing cover and replace the bulb as described for the passenger side.

Re-install the removed parts in reverse order. Check the lighting system to make sure it is perfect working order. Adjust the Xenon headlight with the aid of a diagnosis tester (read out fault code, basic adjustment of headlight levelling etc.).

BMW 3-Series (E91, E92) 330d with Xenon light



Type of light: low and high beam (driver side/passenger side)

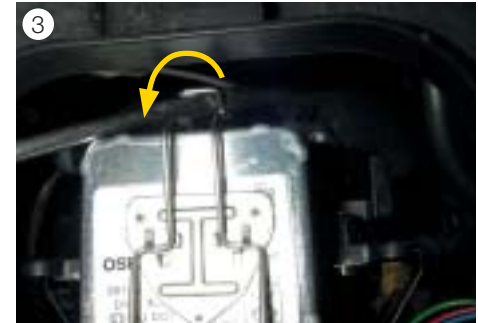
- Remove the complete inner trim of the wing (6 screws size 8). To make removal easier, raise the vehicle and screw the respective wheel off if necessary.

Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



- Loosen the upper locking mechanism by hand and use a screwdriver to loosen the lower locking mechanism and pull the cap off to the rear (see Fig. 1).
- Pull the ignition module plug downwards and off (see Fig. 2).



- Use a screwdriver to pull the attachment clip off the rear of the ignition module (see Fig. 3).
- Pull the ignition module backwards out of the reflector.
- Pull the high beam bulb with plug backwards out of the reflector.



Type of light: position light

- Use a screwdriver to loosen the cover cap and pull it off to the rear (see Fig. 4).



- Unscrew both the screws (Torx 20) and pull the small reflector completely off backwards (see Fig. 5 and 6).



- Pull the plug off the bulb.
The bulb and the reflector form one unit and can only be replaced completely. This component can currently only be purchased from BMW as a genuine spare part.



Type of light: indicator

- The indicator can be replaced via a cover cap in the wing panelling. Raise the vehicle for better accessibility.
- Turn the bayonet catches anticlockwise and loosen them (see Fig. 7).



- Take the cover out of the wing.
- Turn the bulb socket anticlockwise and remove it from the reflector together with the bulb (see Fig. 8).

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.

BMW 5-Series (E60) with Xenon light



Light source replacement

Since the work steps are identical for both sides for this vehicle, they are described only for one side.



Type of light: low beam

- Pull the plastic strip between the headlights upwards and off (see Fig. 1). The strip is quite tight in the mounts. For this reason, use a screwdriver to prise it loose if necessary.
- Remove the Torx screws underneath the strip.
- Loosen the lower fastening screws from the headlight, but do not unscrew them completely (see Fig. 2 and 3).



- Unscrew the upper fastening screws (see Fig. 4).
- Pull the plastic trim between the headlights forwards slightly and use a fine touch to 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 to release the plug connection (see Fig. 5).
- Remove the large cover cap from the headlight housing.



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

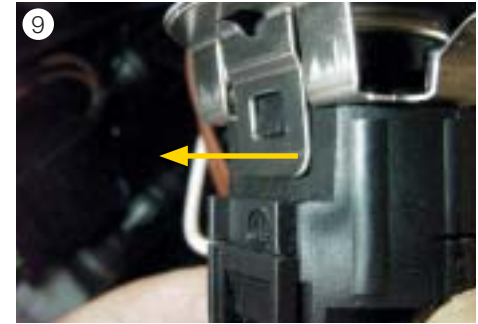


- Then turn the ignition module anticlockwise as far as it will go and pull it off the Xenon bulb. As the ignition module is turned, the contact plug is automatically pushed out of it (see Fig. 7).
- Loosen the safety clip of the Xenon bulb and replace the bulb.



Type of light: high beam and parking light

- Remove the headlight as described above.
- Take the round cover cap off.
- Turn the bulb socket base anticlockwise and remove it from the headlight together 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.



10

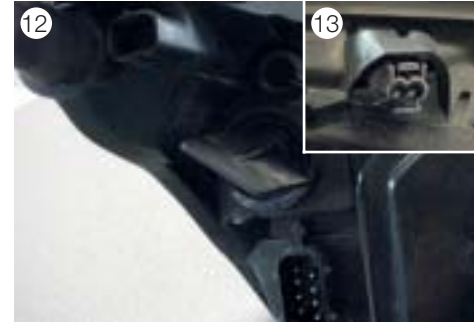
- Turn the parking light reflector anticlockwise (see Fig. 10).
- Reach through the large opening to pull the reflector backwards slightly, then pull it up and out of the round opening (see Fig. 11).



11

Type of light: side marker and indicator

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



12

13

Refit all the removed parts in sensible order. Check the lighting system to make sure it is perfect working order. Check headlight aiming and correct it with the aid of a diagnosis tester if necessary (read out fault code, basic adjustment of headlight levelling etc.).

BMW X3 (E83) 2.0L Diesel



Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



Type of light: low beam, high beam and position light (passenger side)

- Unscrew the washer water tank screw (size 10) (see Fig. 1).
- Pull the washer water tank upwards and out of the bracket and set it down a bit further away.
- There are 2 cover caps on the rear of the headlight housing. The outer one is for the low beam, the inner one for the high beam and position light.

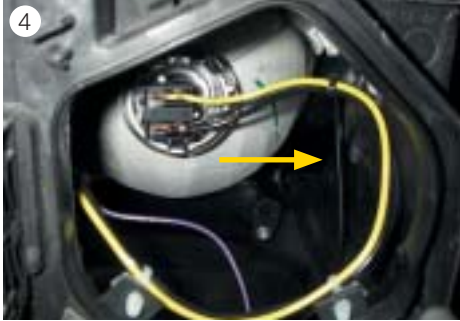


- Push the “locating lug” of the respective cap upwards using a screwdriver and pull the cap off towards the rear (see Fig. 3).
- Pull the bulb with plug backwards out of the reflector (see Fig. 4).
- Pull the bulb off the plug and replace it.



Type of light: low beam, high beam and position light (driver side)

- Replacement is identical, the only difference is that the water tank etc. does not have to be removed first.



Type of light: indicator

- The washer water tank must be removed in this case, too.
- Push the “locating lug” of the cap downwards and pull the cap off towards the rear.

- Turn the bayonet base anticlockwise and pull out of the reflector.
- Replace the bulb.

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.

BMW Z4 (E85) 2.2L petrol with Xenon light



Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



Type of light: low beam, high beam and position light (driver side/passenger side)

- Replacement is via a flap on the inside of the wing (see Fig. 1). Raise the vehicle to improve accessibility and screw the respective wheel off if necessary.
- Turn the bayonet catches anticlockwise and loosen them (see Fig. 2).
- Take the cover out of the wing.
- Pull the metal hoop clamping bracket forwards slightly out of the bracket first, then upwards and out of the way (see Fig. 3).
- Swing the cover cap out backwards and take it out of the guides.
- Turn the ignition module anticlockwise. As the ignition module is turned, the supply voltage plug is automatically pushed out of it (see Fig. 4).

Caution! Make sure you fit the components back together in the right order. Fix the module in place first and then press the plug into the module. Refer in this context to the TI “Replacing the Xenon bulb with 4th generation ballasts”.



- Pull the ignition module off the Xenon bulb. Release the spring-wire clamp and replace the bulb.
- Turn the high beam bulb socket base anticlockwise and remove it from the reflector together with the bulb.
- Pull the position light socket base under the high beam bulb backwards out of the reflector.



Type of light: indicator

- Pull the indicator light socket base backwards out of the reflector. This is on the right in the headlight (behind the trim, yellow circle, see Fig. 5).

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.

Citroën C1 Peugeot 107 all engines



Type of light: position, stoplight, indicator, fog and reversing light (rear light)

- Unscrew the fastening screws at the top and bottom of the rear lamp (size 10, see Fig. 1).

Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



- The lamp is fixed to the body in two spots by ball elements (see Fig. 2).

- **Caution! Do not use a screwdriver for this.**
If there is too little pressure area or contact area, parts may break out of the light.



- Press a rubber wedge carefully between body and lamp until the ball elements become loose from their brackets (see Fig. 3).



- Release the contact plug and remove it.
- Release the locking mechanism on the cover cap and take the cap off the light (see Fig. 4).
- Replace the respective bulb in the bulb carrier.

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

Ford Fiesta 1.4i (model year from 11.01)



Light source replacement

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



Type of light: low and high beam (driver side)

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

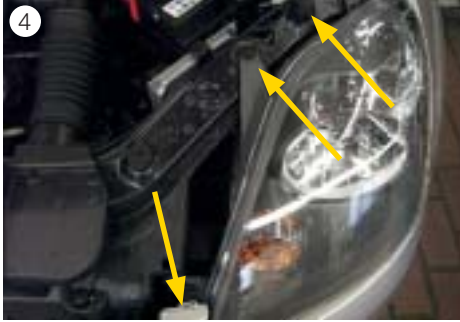


- Loosen the spring-wire clamp and replace the H4 bulb (see Fig. 2).



Type of light: parking and indicator (driver side/passenger side)

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



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



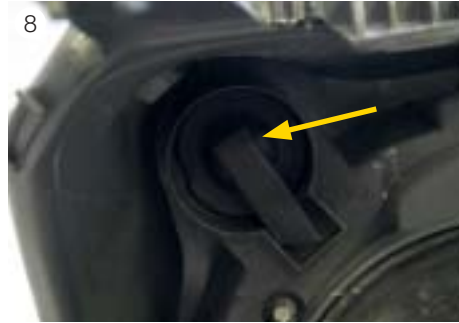
- The headlight now has to be pulled forwards sharply to release it from an additional guide. This is on the bottom (wing side) of the headlight (see Fig. 5).



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



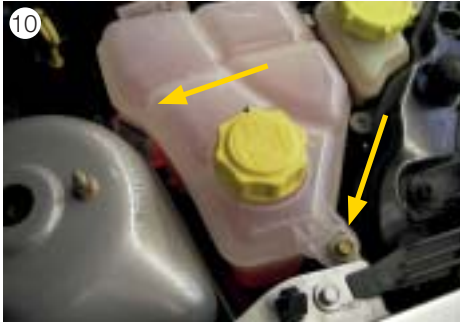
- Loosen the plug connection and pull the plug off the headlight (see Fig. 7).



- Pull the rubber cap off the parking light, take the socket with the bulb out of the reflector and replace the bulb (see Fig. 8).



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



**Type of light: low and high beam
(passenger side)**

- Unscrew the fastening screw on the coolant surge tank and pull the tank upwards and out of the guide (see Fig. 10). Place the container a little to one side.
- Replace the bulb in the same way as on the driver side.

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

Ford Focus II 1.6i (model year from 11.04)



Light source replacement

Since the work steps are identical for both sides for this vehicle, they are described only for one side.



Type of light: low beam, high beam and parking light

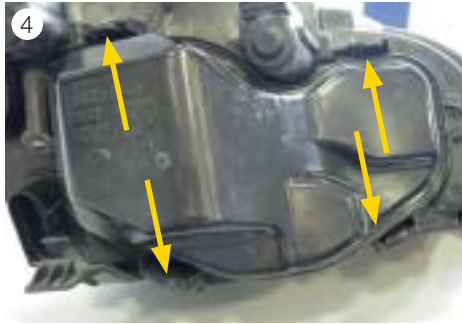
- Unscrew the fastening screw (Torx 30) on the headlight (see Fig. 1).



- Reach behind the headlight with one hand. Then pull the headlight forwards sharply and remove it from the body (see Fig. 2).



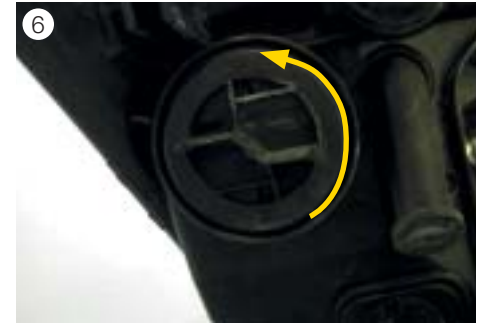
- Disconnect the plug connection at the headlight. Use a screwdriver to loosen the locking mechanism and then pull the central plug off (see Fig. 3).



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



- Now the respective bulb can be replaced (see Fig. 5).



Type of light: indicator

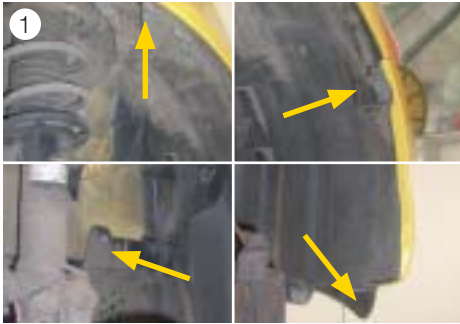
- Remove the headlight as described above.
- Turn the bulb socket anticlockwise as far as it will go and then remove it from the headlight together with the bulb (see Fig. 6).



Refit all the removed parts in reverse order. When inserting the headlight make sure that the bottom two headlight brackets (see Fig. 7) have been locked in place properly on the body again.

Check the lighting system to make sure it is perfect working order. Check headlight aiming and correct if necessary.

Honda Jazz all engines



Type of light: low and high beam (driver side/passenger side)

- Remove the front inner trim of the wing (expanding rivets, see Fig. 1). To make removal easier, raise the vehicle and screw the respective wheel off if necessary.
- Pull the plug off the H4 bulb (see Fig. 2).

Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



- Then pull the all-round rubber seal off the headlight housing (see Fig. 2).
- Loosen the spring-wire clamp and take the bulb out of the reflector (see Fig. 3).



Type of light: position light

- Remove the front inner trim of the wing (expanding rivets, see Fig. 1). To make removal easier, raise the vehicle and screw the respective wheel off if necessary.
- Turn the bulb socket anticlockwise (plug can remain connected) and pull it out of the reflector (see Fig. 4).



Type of light: indicator

- Replacement of the indicator is straightforward and is carried out with the bonnet opened.

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.

Mercedes-Benz A-Class (W168) all engines



Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



Type of light: low and high beam (driver side/passenger side)

- Replacement is via a flap on the inside of the wing.
Raise the vehicle to improve accessibility.

- Turn the bayonet catches anticlockwise and loosen them (see Fig. 1).
- Take the cover out of the wing.
- Loosen the locking mechanism on the cover cap. To do this, press the lever to the right (see Fig. 2).

- Take the cap out of the guides (see Fig. 3).
- Loosen the plug connection and spring-wire clamp and replace this (see Fig. 4).



Type of light: indicator and position light

- Replacement of the indicator and position light is straightforward and is carried out with the bonnet opened.

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.

Opel Signum / Vectra V6 CDTI with Xenon light

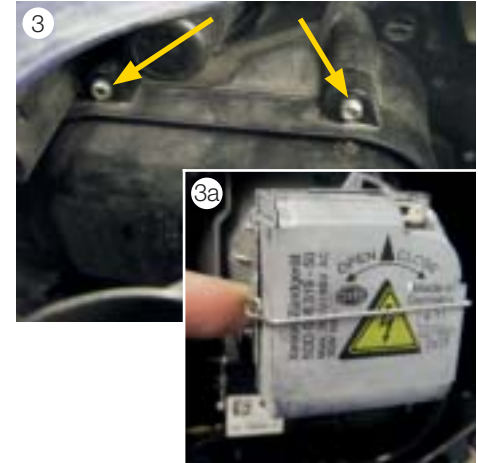


Type of light: low beam (driver side)

- Open the battery and fuse box covers and take them off (see Fig. 1).
- Loosen the retaining clip from the filler neck and pull the neck upwards and out of the water tank (see Fig. 2). Turn the neck backwards and forwards slightly during this.

Light source replacement

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



- Unscrew the fastening screws (Torx 20) on the headlight housing cover. Then fold the cover back as far as possible and pull it up and out of the brackets (see Fig. 3).

- Pull the safety clamp off to the front (see Fig. 3a).



- Turn the ignition module anticlockwise as far as it will go. As the ignition module is turned, the supply voltage cable is automatically pushed out of it (see Fig. 4).
- Pull the ignition module off the Xenon bulb.
- Loosen the spring-wire clamp and replace the Xenon bulb.



Type of light: parking light (driver side)

- Turn the socket base anticlockwise and then remove it from the reflector together with the bulb (see Fig. 5, no. 1).

Type of light: high beam and static bend lighting (driver side)

- Unscrew the fastening screws (Torx 20) on the headlight housing cover (see Fig. 5, no. 2) and remove the cover.



- Pull the H11 bulb plug off (left plug connection, see Fig. 6), push the spring-wire clamp back and replace the bulb.
- Pull the H11 bulb plug off (right plug connection, see Fig. 6), turn the bulb base upwards and remove it from the reflector with the bulb.



Type of light: indicator (driver side)

- The indicator bulb is a so-called “Longlife bulb” and usually lasts a vehicle lifetime. It cannot be replaced.

Type of light: indicator (passenger side)

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



- Open or loosen the fastening clamps on the harness (see Fig. 8). Turn the control unit through 180° and set it down on the engine.



- Pull the plug connection off the mass air flow meter, loosen the outer hose clamp and pull the intake air hose off (see Fig. 9).



- Remove the air hose underneath as well (see Fig. 10).



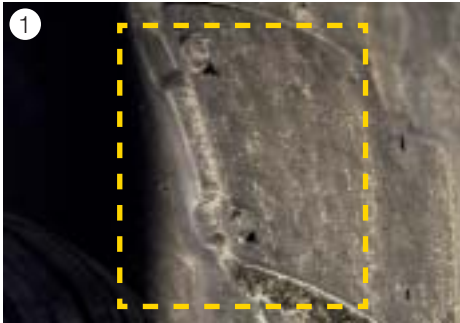
- Pull the air filter box (diagonally upwards) out of the guides (see Fig. 11). During this, the hose will also be pulled off the crankcase breather (see Fig. 12).



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

Refit all the removed parts in sensible order. Check the lighting system to make sure it is perfect working order. Check headlight aiming and correct it with the aid of a diagnosis tester if necessary (read out fault code, basic adjustment of headlight levelling etc.).

Opel Zafira II 1.6i (model year from 07.05)



Type of light: low beam

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

Light source replacement

Since the work steps are identical for both sides for this vehicle, they are described only for one side.



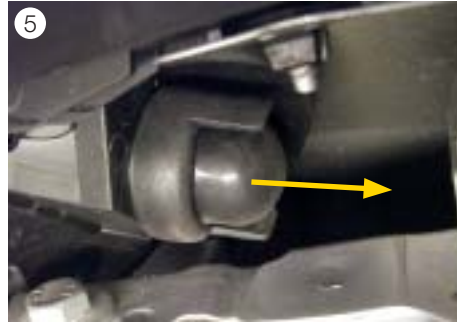
- Disconnect the plug connection at the headlight. To do this, press the safety clamp to the left and then pull the central plug off (see Fig. 2).



- Remove the rubber cap from the back of the headlight housing.
- Turn the bulb socket anticlockwise and remove it from the reflector together with the bulb (see Fig. 3).



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



Type of light: indicator

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



- Turn the bulb socket anticlockwise and remove it from the headlight together with the bulb (see Fig. 6). Since the socket is quite tight, flat-nosed pliers may be used to help lever it out.



Type of light: high beam and parking light

- Remove the rubber cap 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 perfect working order. Check headlight aiming and correct if necessary.

Renault Espace IV all engines

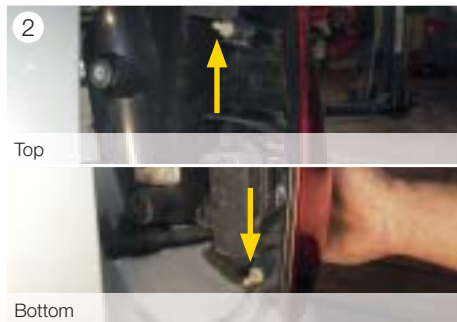


Type of light: position, stoplight, indicator, fog and reversing light (rear light)

- Unscrew the fastening screws of the rear lamp (see Fig. 1).

Light source replacement

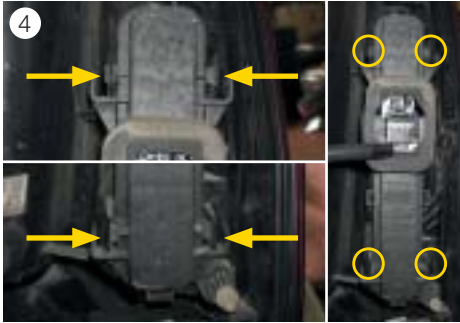
Light sources are replaced as described below.
First, switch the ignition off.



- The lamp is fixed to the body in two spots by ball elements (see Fig. 2).



- Press a rubber wedge carefully between body and lamp until the ball elements become loose from their brackets (see Fig. 3).
Caution! Do not use a screwdriver for this. If there is too little pressure area or contact area, parts may break out of the light.



- Release the four locking mechanisms so that the bulb carrier can be removed from the light (see Fig. 4).



- Replace the respective bulb in the bulb carrier (see Fig. 5, turned through 90°).

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

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



Light source replacement

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



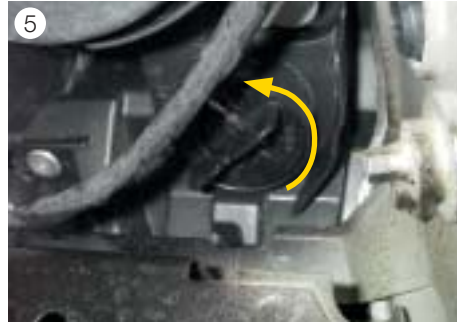
Type of light: low beam (passenger side)

- Turn the fastening clip anticlockwise through 90° and remove the cover. To do this, lift the cover slightly and pull it towards the engine interior (see Fig. 1).
- Pull the power-steering oil tank upwards and out of its bracket and place it to one side (see Fig. 2).
- Remove the cover cap from the headlight housing.
- Turn the ignition module anticlockwise as far as it will go and pull it off the Xenon bulb (see Fig. 3).
- Loosen the spring-wire clamp and replace the bulb.



Type of light: indicator (passenger side)

- Pull the filler neck of the windscreen washer system up and off. Move the neck backwards and forwards slightly during this (see Fig. 4).
- Turn the indicator socket anticlockwise and remove it from the reflector together with the bulb (see Fig. 5).



Type of light: high beam and parking light (passenger side)

- Remove the rubber cap of the high beam light from the headlight housing.
- The bulbs can now be carefully replaced, using a “fine touch”.



Type of light: low beam (passenger side)

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



- The intake channel is made up of two parts and can be taken apart. Push the locating lug (see Fig. 7) down slightly using a screwdriver.



- At the same time, pull the front part of the intake channel forwards and lift it up and out of the engine compartment (see Fig. 8).
- Now the bulbs can be removed as described for the passenger side.

Re-install the removed parts in sensible order. Check the lighting system to make sure it is perfect working order. Check headlight aiming and correct it with the aid of a diagnosis tester if necessary (read out fault code, basic adjustment of headlight levelling etc.).

Renault Modus all engines



Type of light: low and high beam (driver side/passenger side)

- Remove the front fastening screws of the wing inner trim (Torx 20 screws, see Fig. 1). To make removal easier, raise the vehicle and screw the respective wheel off if necessary.

Light source replacement

Light sources are replaced as described below.
First, switch the ignition off.



- Remove the underbody panelling (size 10, see Fig. 2).



- To remove the front apron, remove the upper fastening screws (4 units) (see Fig. 3).



- Unscrew the fastening screws (size 10) at the ends of the front apron (see Fig. 4).



- Pull the front apron off to the front (see Fig. 5).



- Remove the fastening screws (3 units size 10) from the headlight (see Fig. 6) and pull this forward a little out of the body. Optionally, the plug connections can be disconnected to take the headlight out completely.



- Turn the respective cover cap anticlockwise and remove it.
- With the high beam light (upper reflector), loosen the spring-wire clamp and replace the bulb (see Fig. 7).
- With the low beam light, pull the bulb with plug backwards out of the reflector (see Fig. 8).



Type of light: position light

- To loosen the front apron, remove the upper fastening screws (4 units) (see Fig. 3).
- Carefully pull the front apron forwards until the bulb socket is visible and can be reached by hand (see Fig. 9).
- Turn the bulb socket anticlockwise and remove it from the reflector together with the bulb.



Type of light: indicator

- Replacement of the indicator is straightforward and is carried out with the bonnet opened.

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.

VW Beetle 1.9 TDI PD



Light source replacement

Since the work steps are identical for both sides for this vehicle, they are described only for one side. First, switch the ignition off.

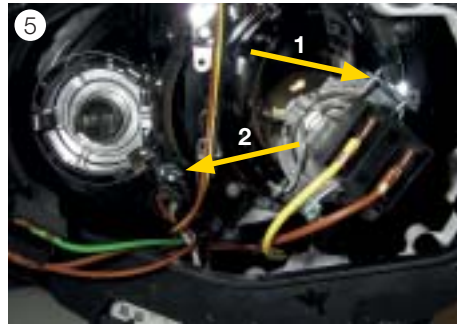


Type of light: low beam

- Release the headlight housing. To do this, turn the lever clockwise slightly using a hexagon nut (size 5) until you hear a “clicking” sound. The lever is located at the lower edge of the headlight (see Figs. 1 and 2).
- Push the clamp of the tab washer downwards (see Fig. 3) and push the headlight carefully out of the body from behind.



- The tab washer can easily be seen on the removed headlight (see Fig. 4). On the driver side, a long screwdriver or similar is required to reach the lever.
- Push the tab washer of the cover cap upwards and remove the cap from the back of the headlight housing.
- Pull the plug off the bulb.



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

Type of light: high beam

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



Type of light: parking light

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



Type of light: indicator

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



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

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

VW Passat (B5) 1.9 TDI

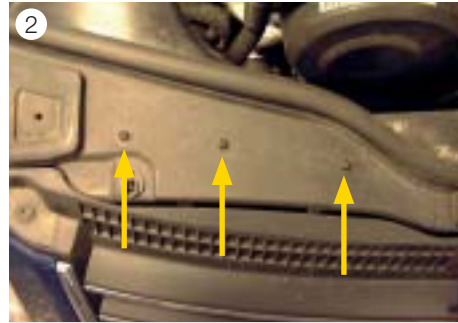


Type of light: low beam, high beam, parking light and indicator (driver side)

- Loosen and remove the cover from the brake fluid tank (see Fig. 1).
- Remove the cover cap of the respective bulb from the back of the headlight housing.

Light source replacement

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



Type of light: low beam, high beam, parking light and indicator (passenger side)

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



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



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



- Unscrew the fastening screw of the air filter box (see Fig. 5).



- To reach the headlight housing cap better, push the air filter box about 5 cm towards the engine interior and fix it in this position (see Fig. 6).
- Replace the respective bulb in the same way as on the driver side.

Re-install the removed parts in sensible order. Check the system to make sure it is perfect working order. Check the headlight and correct if necessary.

VW Polo (9N) 1.4 TDI



Type of light: low beam (driver side)

- To gain a bit of space for installation, loosen the battery box and the fuse holder underneath it from the fastening plates and push it slightly to the left (see Fig. 1).

Light source replacement

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

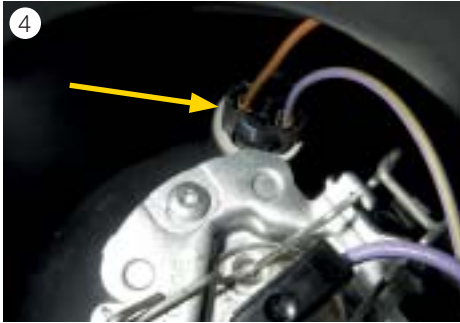


- Remove the rubber cap (low beam light) from the headlight housing.
- Pull the plug connection off the bulb and turn the fastening ring anticlockwise (see Fig. 2).
- Pull the bulb out of the reflector and replace it.



Type of light: indicator (driver side)

- Turn the cover cap anticlockwise and remove it (see Fig. 3).
- Turn the indicator bulb socket anticlockwise and remove it together with the bulb. Replace this.



Type of light: high beam and parking light (driver side)

- To reach these two bulbs, the battery has to be removed first. Note the radio code before you do this.
- Remove the rubber cap (high beam and parking light) from the headlight housing.
- Loosen the spring-wire clamp and plug connection from the high beam bulb and replace the bulb.



- Pull the parking light socket out of the reflector by the connection plug (see Fig. 4).

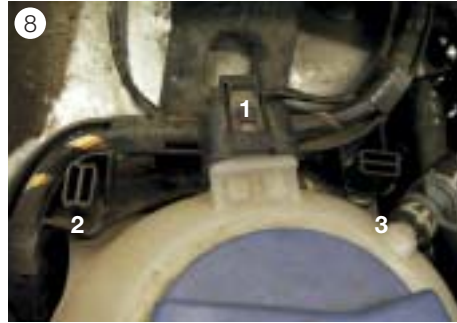


Type of light: low beam (passenger side)

- Unscrew the fastening screw (Torx 40) of the fuel filter (see Fig. 5).
- Bend the fuel filter carefully to one side. Caution! If vehicles have air conditioning, watch the refrigerant line (see Fig. 6).



- The rubber cap can now be reached by “slim” hands (see Fig. 7). The coolant surge tank should be removed to improve the space situation.

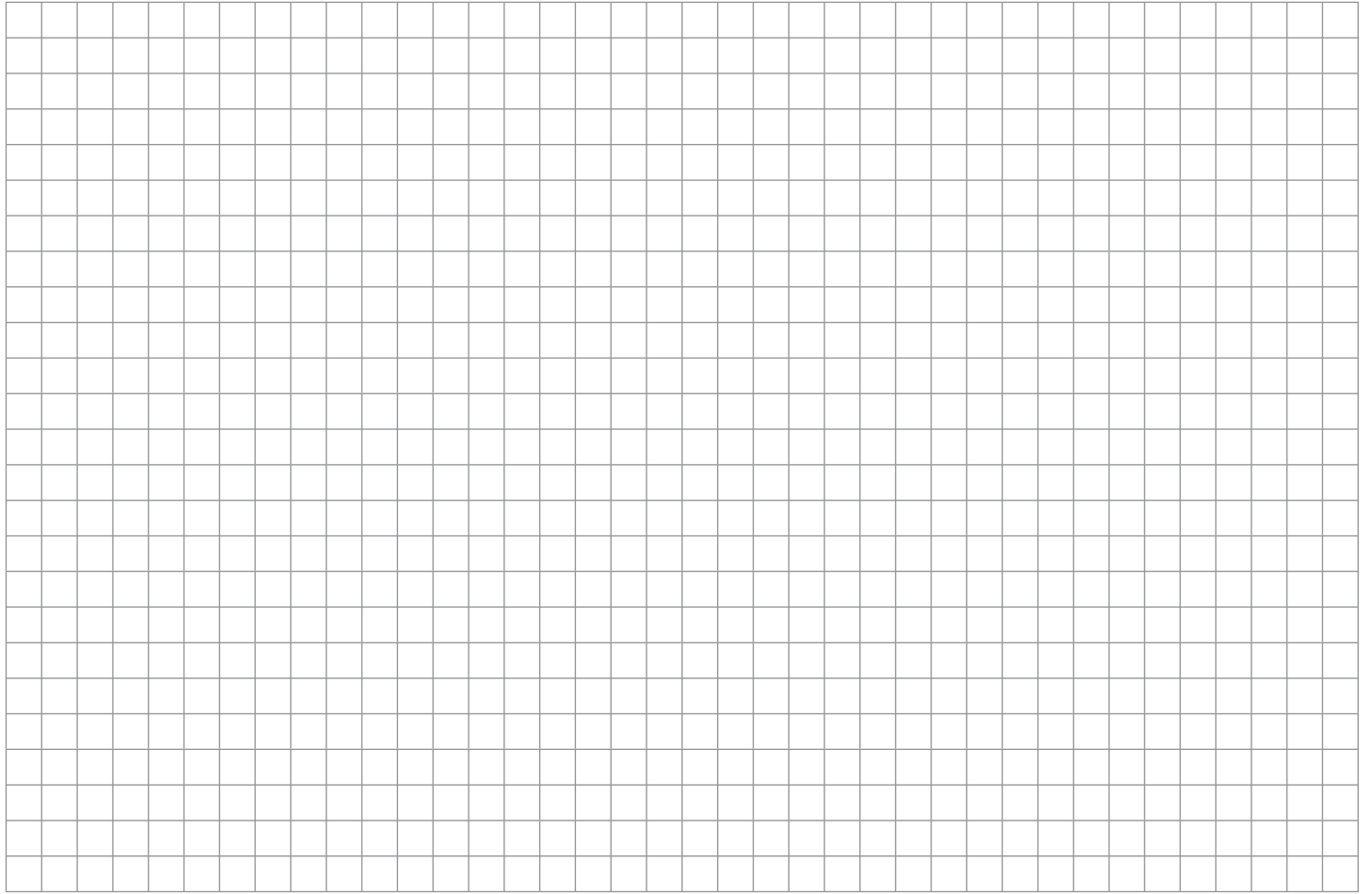


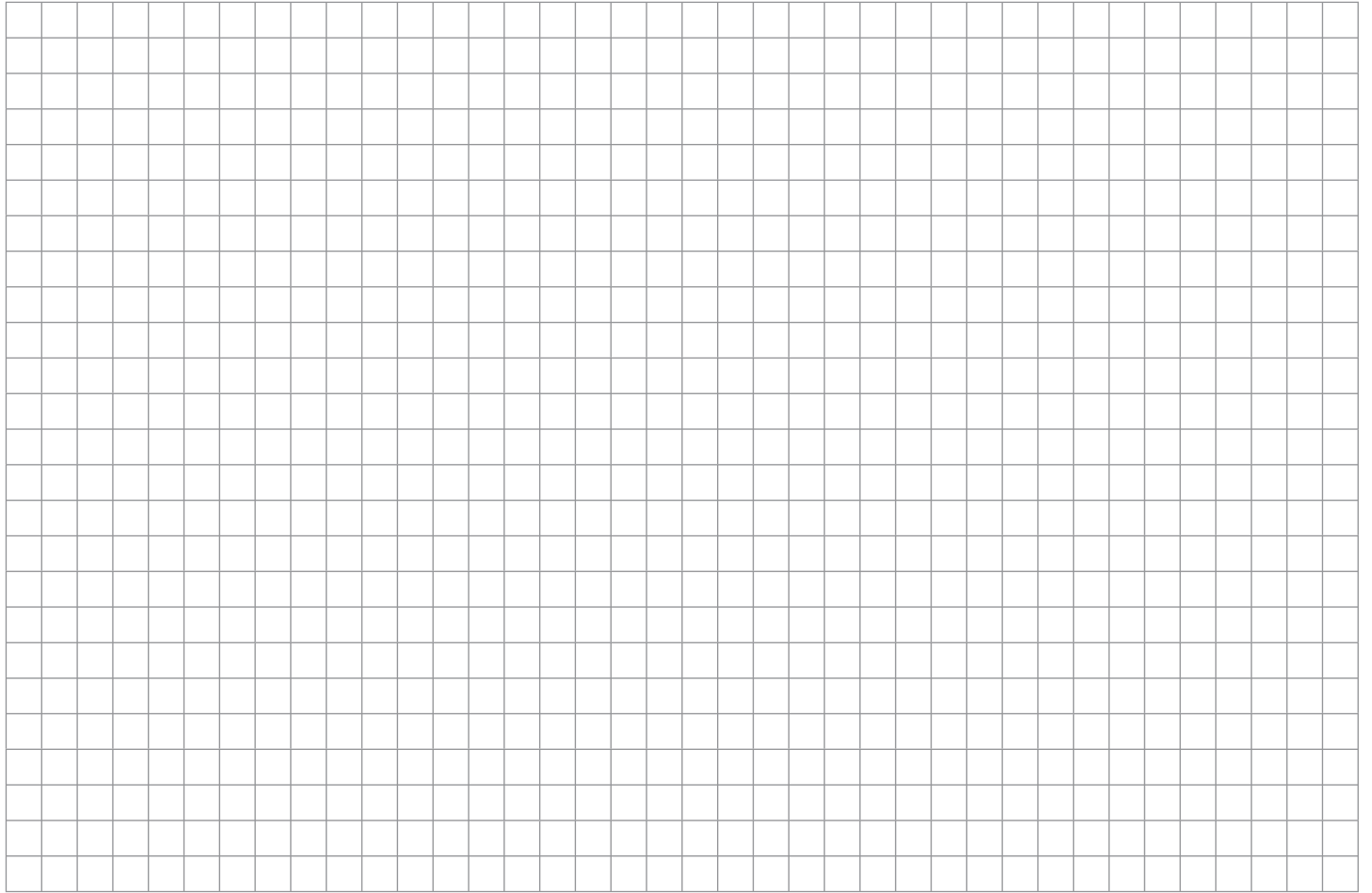
- Loosen the plug connection (see Fig. 8, no. 1) and pull the cable bridge of the threaded bolt (2 and 3) upwards and off.
- Remove the fastening nuts from the surge tank and place this to one side without loosening the hoses.

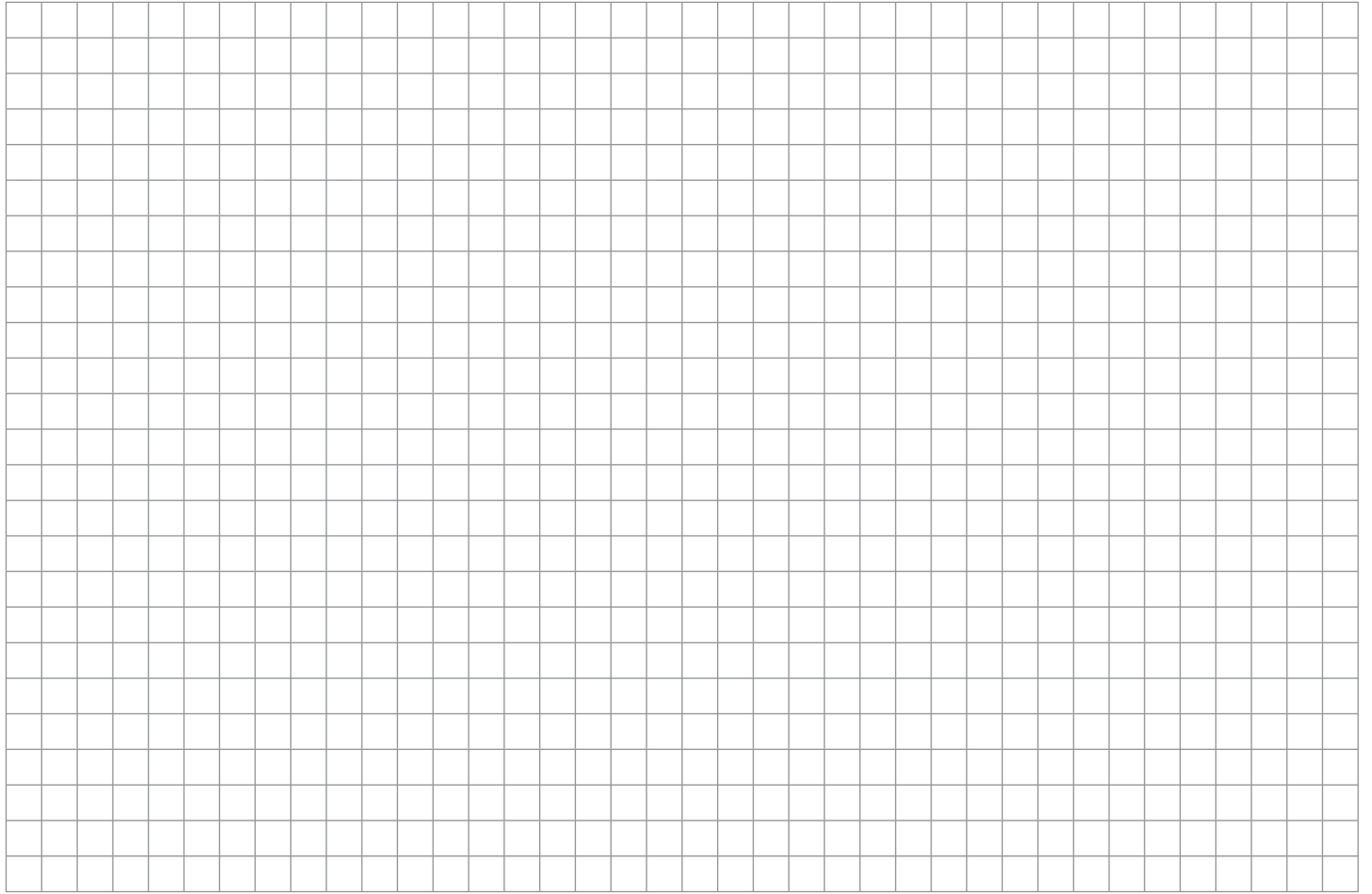
Type of light: low beam, high beam, and indicator

Replace as described on the driver side (without removing the battery).

Refit all the removed parts in sensible order. Check the lighting system to make sure it is working. Check headlight aiming and correct if necessary.







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