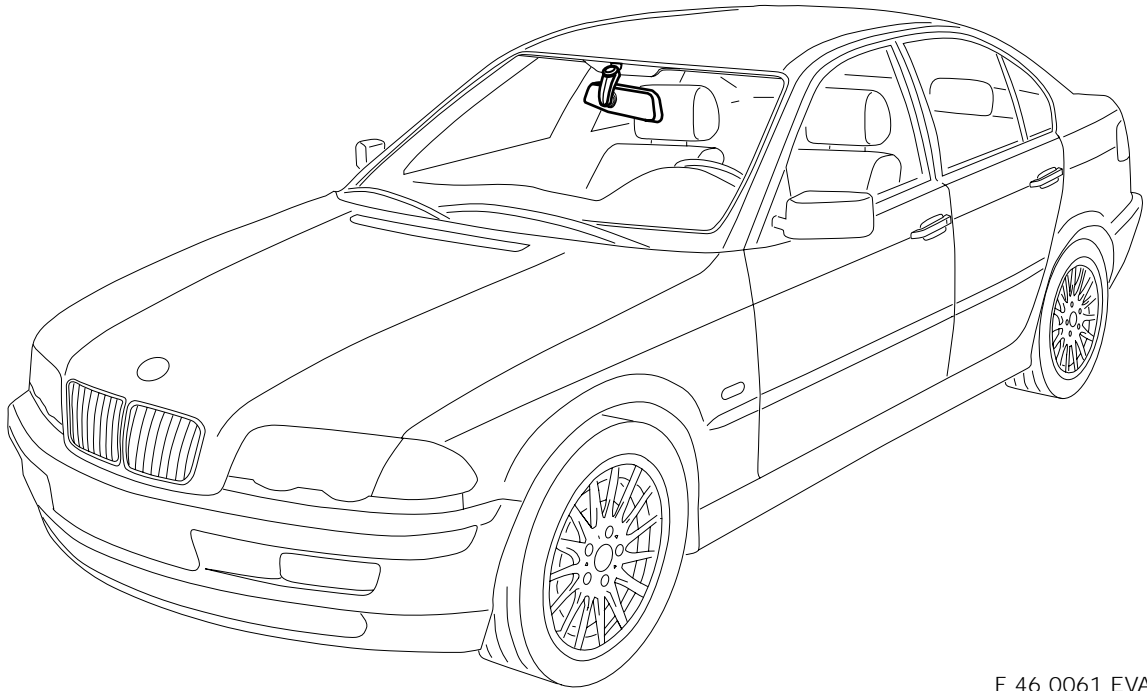




# Teile und Zubehör - Einbauanleitung



F 46 0061 EVA

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**BMW Parts and Accessories - Installation Instruction**  
**Retrofit of inside rear-view mirror with automatic anti-dazzle**  
for BMW 3 Series, saloon (E 46/4)

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Technical knowledge is required.

## 1. Important notes

Installation time at least 2 hours, which can vary according to the condition and fittings of the vehicle.

### Target group

The conversion work with installation kit for inside rear-view mirror with automatic anti-dazzle is to be carried out exclusively by a BMW specialist workshop. It is only here that the appropriately trained technical personnel who have the necessary tools and auxiliary materials are available.

### Safety instructions

BMW accepts no liability for damage which occurs as a result of not following the work sequence and safety instructions. In addition, any warranty claim against BMW AG is extinguished in the event of improper fitting and handling which diverges from the fitting and operating instructions.



Electrical cables should be laid in such a way as to exclude any possibility of them being kinked, chafed or jammed. ◀

### Installation notes

Installation is shown on a left-hand drive model. For right-hand drive models, installation should be carried out in mirror image.

Tightening torques for screw fittings should be observed. For tightening torques required, please refer to the parts information system (TIS).

Should specified pin terminals be assigned, bridges, double crimpings or parallel connections will have to be made.

On no account work with so-called "Scotchlock quick connectors" as these can trigger faults in the on-board electronics.

### Required tools and auxiliary materials

Flat-tip screwdriver

Phillips screwdriver

1/4 inch reversible ratchet

Adapter for socket wrench insert TX 20

1/4 inch Torx socket wrench insert TX 20

Scissors

## Parts overview

<b>Item</b>	<b>Designation</b>	<b>Quantity</b>
<b>a</b>	Supplementary wiring harness	1
<b>b</b>	10-contact connector (black)	1
<b>c</b>	Grommet	1
<b>d</b>	Cable holder	1
<b>e</b>	Cable holder	1
<b>f</b>	Cable holder	1
<b>g</b>	Cable holder	2
<b>h</b>	Fuse 5A	1
<b>i</b>	Mini connector (2-way)	2
<b>j</b>	Cable tie	12
<b>k</b>	Installation instructions	1

## 2. Retrofit of inside rear-view mirror with automatic anti-dazzle

### Note

Observe the safety instructions in Chapter 1.

The customary workshop information provides the basis for accessory installation work.

### 2.1 Preparatory work on the vehicle

Print out error memory.

Disconnect battery.

Dismantle cover to mirror support.

Detach mirror from the base plate.

#### **Vehicles with anti-theft alarm system:**

Pull off the existing black 10-contact connector at the interior rear-view mirror.

#### **Vehicles with electrically-operated slide/tilt sunroof:**

Remove the piping to the opening of the slide/tilt sunroof.

#### **Vehicles with hands-free telephone and/or electrically-operated slide/tilt sunroof:**

Remove panel at front and release plug-in connectors for hands-free telephone and/or electrically-operated slide/tilt sunroof.

Undo screw at the headlining support at front.

Dismantle interior light and release plug-in connector.

Dismantle sun visor on driver's side.

Dismantle support for sun visor on driver's side.

Dismantle grab handle at front and rear on driver's side.

Dismantle sill strip at front and rear on driver's side.

Dismantle trim panel of B-pillar above and below on driver's side.

Dismantle hinged compartment under the steering column.

Dismantle trim panel foot controls.

Dismantle glove box.

Release fuse holder at glove box on front-passenger side from the support.

Dismantle fresh-air louvre left.

Dismantle defroster vent left.

## 2.2 Connection overview of supplementary wiring harness

Item	Package / Designation	Cable colour	Connection point in vehicle	Code designation/ plug-in place
<b>a</b>	<b>Supplementary wiring harness</b>	----	----	----
<b>b</b>	black 10-contact connector	----	at interior rear-view mirror with anti-dazzle	X18246
<b>A1</b>	blade terminal contact	green/white 0.35 mm <sup>2</sup>	to black, 10-contact connector	X18246/3
<b>A2</b>	blade terminal contact	brown/black 0.35 mm <sup>2</sup>	to black, 10-contact connector	X18246/10
<b>A3</b>	blade terminal contact	blue/yellow 0.35 mm <sup>2</sup>	to black, 10-contact connector	X18246/1
<b>A4</b>	joint connector contact	brown/black 0.35 mm <sup>2</sup>	ground post under the steering column	X217
<b>A5</b>	joint connector contact	blue/yellow 0.35 mm <sup>2</sup>	to joint connector in joint connector box at fuse holder in glove box	X428
<b>A6</b>	blade terminal contact	green/white 0.35 mm <sup>2</sup>	fuse holder II, fuse F24	X10016/48

## 2.3 Installation

### Open fold-out page.

#### A

Install supplementary wiring harness (a) along the vehicle wiring harness as follows:

Branch cable **A1-A3** to black, 10-contact connector (b) X18246 at interior rear-view mirror with automatic anti-dazzle.

Branch cable **A4** to ground post (1) X217 under the steering column.

Branch cable **A5** to joint connector X428 in joint connector box (2) at fuse holder (3) X10016 in glove box.

Branch cable **A6** to fuse holder (3) X10016 in glove box.

#### B

Guide branch cable **A4-A6** between the A-pillar and the instrument panel (4) in the direction of the arrow.

#### C

Install the cable loom (5) of branch cables **A4-A6** inside the recess (6) of the fresh air louvre over the body plate (7) in the direction of the footwell.

Should cables have already been installed in this area, the cable loom (5) of branch cables **A4-A6** should be attached by a cable tie (j) (see parts overview) to the existing cable loom at the place where it passes over the body plate (7) and goes into the footwell.



Cables should not interfere with the sphere of activity of the head airbag (8) inside the recess (6) of the fresh air louvre. ◀

#### D

To determine the precise attachment position of the cable holder (d) at the cable loom (9) of branch cables **A1-A3**, measure the required laying length from the recess (10) via the A-pillar right up to the interior rear-view mirror on the base plate. Then attach the cable holder (d) at the determined position with the aid of a piece of fabric adhesive tape (not supplied in the parts kit) to the cable loom (9) of branch cables **A1-A3** and press the cable holder (d) into the recess (10).

In case cables have already been installed in this area, the cable loom (9) of branch cables **A1-A3** should be attached to the existing cable loom where it passes over the instrument panel (12) into the A-pillar using two cable ties (j) (see parts overview).



Cables should not interfere with the sphere of activity of the head airbag (11) when they pass over from the instrument panel (12) into the cable holders along the A-pillar. ◀

#### E

Place cable loom (13) of branch cables **A1-A3** in the cable holders (14) along the A-pillar. The cable holders (e and f) included in the retrofit kit should be attached at the appropriate places to the cable loom (13) using fabric adhesive tape (not included in the parts kit). Having pressed in the cable holders (e and f) the cable loom (13) should then be attached at the notches provided for it.

In case cables have already been installed in this area, the cable loom (13) should be attached to the existing cable loom with the aid of three cable ties (j) (see parts overview).



Cables should not interfere with the sphere of activity of the head airbag when they pass over from the A-pillar into the roof body. ◀

#### F

Pull the roof liner (15) down carefully and at the same time press the cable holders (g) provided in the cable set into the notches designed for them. Then place the cable loom (16) of branch cables **A1-A3** in the cable holders (g). In case cables are already installed in this area, the cable loom (16) of branch cables **A1-A3** should be placed in the existing cable holders (g).

#### G

Guide the cable loom (17) of branch cables **A1-A3** through the support (18) of the roof liner and then through the recess (19). Guide cable loom (17) of branch cables **A1-A3** through the rubber grommet (c).



In vehicles with rain sensor (manufacture date up to 9/98) there is a common cable covering instead of the rubber grommet (c). In this case, the cable loom (17) of branch cables **A1-A3** should be installed through the common cable covering. ◀

#### H

##### Vehicles without anti-theft alarm system:

Take the black, 10-contact connector (b) from the retrofit kit and separate it in order to be able to make the connections of branch cables **A1-A3** for the interior rear-view mirror with automatic anti-dazzle.

**Vehicles with anti-theft alarm system:**

In order to be able to make the following cable connections for the interior rear-view mirror with automatic anti-dazzle, separate the existing black, 10-contact connector (b) and add, in addition to the connections of the anti-theft alarm system, the branch cables **A1-A3**.

**Vehicles with and without anti-theft alarm system:**

Insert branch cables **A1-A3** in the black, 10-contact connector (b) X18246 as follows:

Insert branch cable **A1**, cable colour green/white, in plug-in place **3**.

Insert branch cable **A2**, cable colour brown/black, in plug-in place **10**.

Insert branch cable **A3**, cable colour blue/yellow, in plug-in place **1**.

Then reassemble the black, 10-contact connector (b).

**I**

The cable loom of branch cables **A4-A6** should be attached to an existing cable loom in the area of the footwell with the aid of four cable ties (j) (see parts overview). Then insert branch cable **A4**, cable colour brown black, at ground post (20) X217 under the steering column at a non-assigned plug-in place.



If ground post (20) X217 is entirely assigned, use one of the two mini connectors (i) (2-way) supplied in the parts kit. ◀

**J**

Remove foam covering (21) at the centre console and install cable loom (22) of the branch cables **A5-A6** through the cable duct (23) in the centre console to the fuse holder X10016 on the front passenger side.

**K**

The cable loom of branch cables **A5-A6** should be attached to an existing cable loom in the area of the fuse holder with the aid of two cable ties (j) (see parts overview).

Undo joint connector box (24) at the support (25) of the fuse holder (26) and insert branch cable **A5**, cable colour blue/yellow, in the same-colour joint connector X428.



If in the joint connector box (24) the joint connector X428 is entirely assigned, use one of the two mini connectors (i) (2-way) supplied in the parts kit. ◀

**L**

Insert branch cable **A6**, cable colour green/white, at fuse holder (27) X10016 Pin **48** plug-in place **F24**.

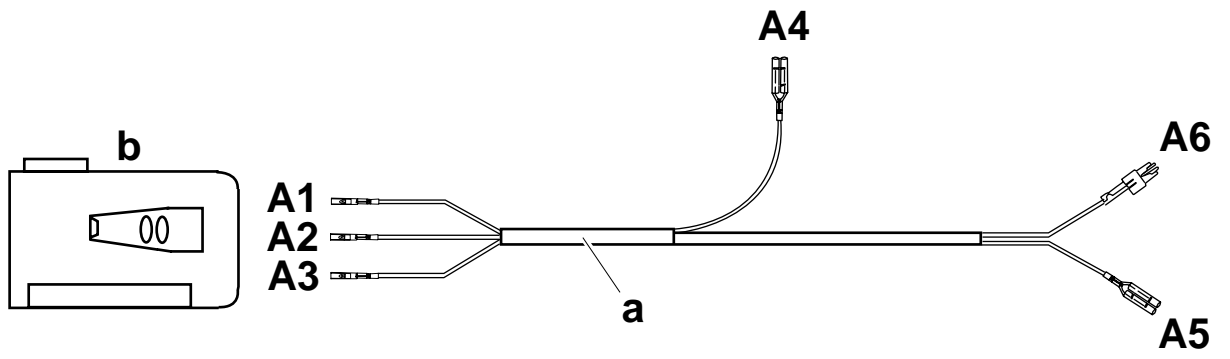


If the vehicle is not equipped with PDC (Park Distance Control), a flat-bladed fuse 5A (h) must be inserted additionally at fuse holder (27), plug-in place **F24**. ◀

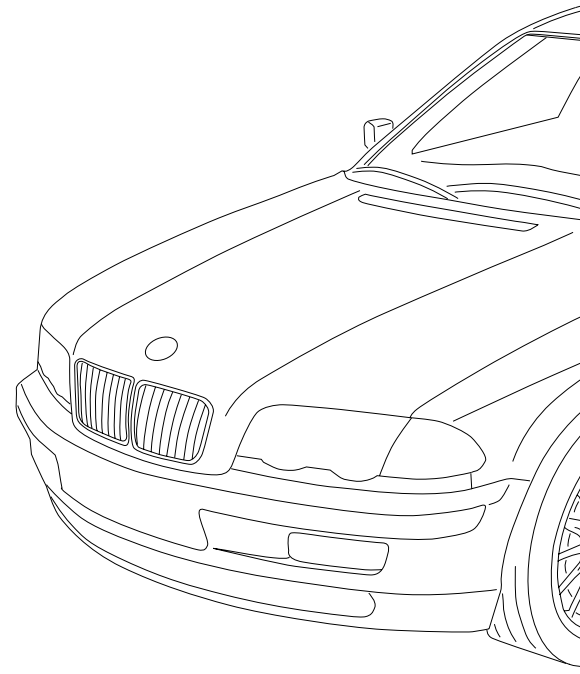
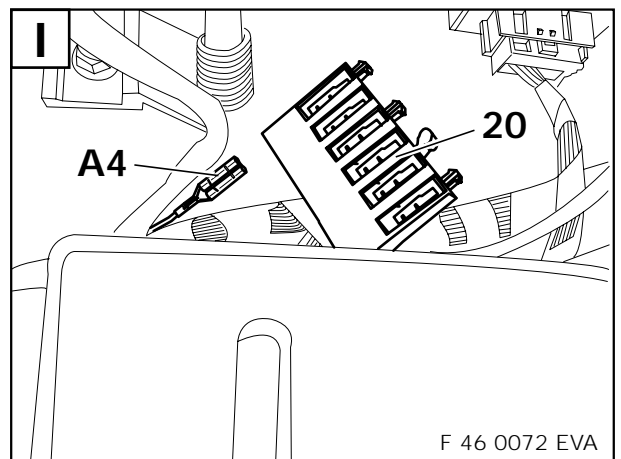
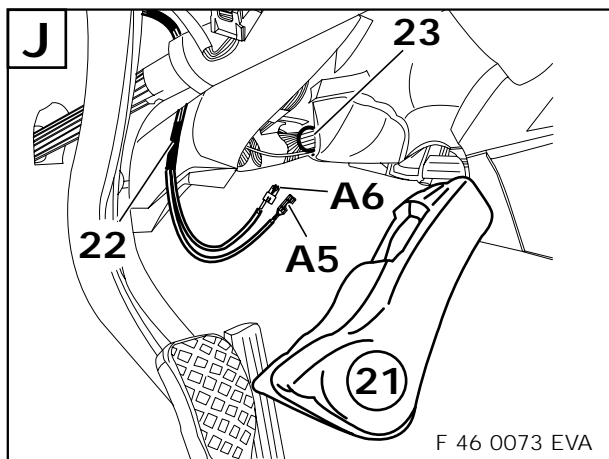
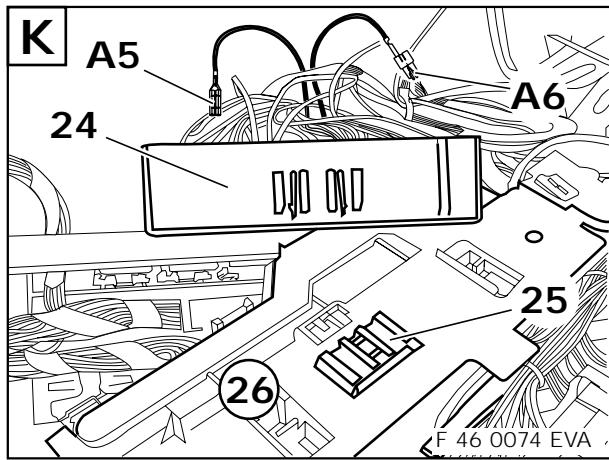
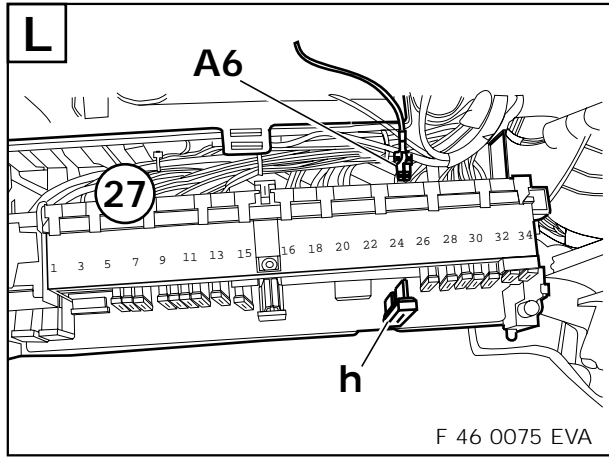
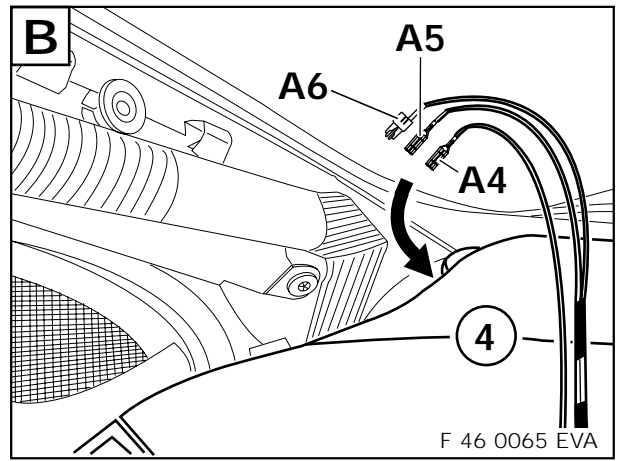
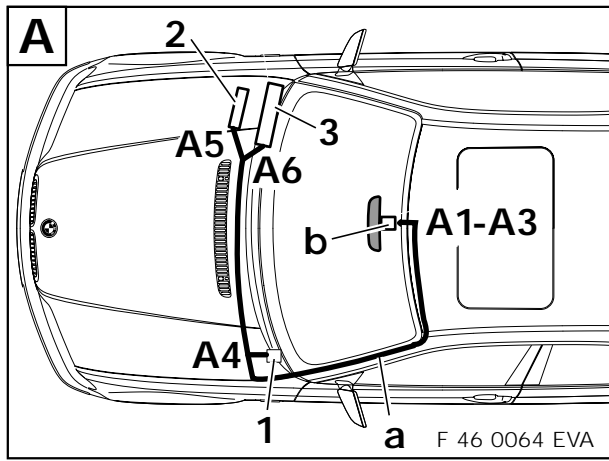
Then put the black, 10-contact connector (b) on to the interior rear-view mirror with automatic anti-dazzle and attach the interior rear-view mirror to the base plate at the windscreen.

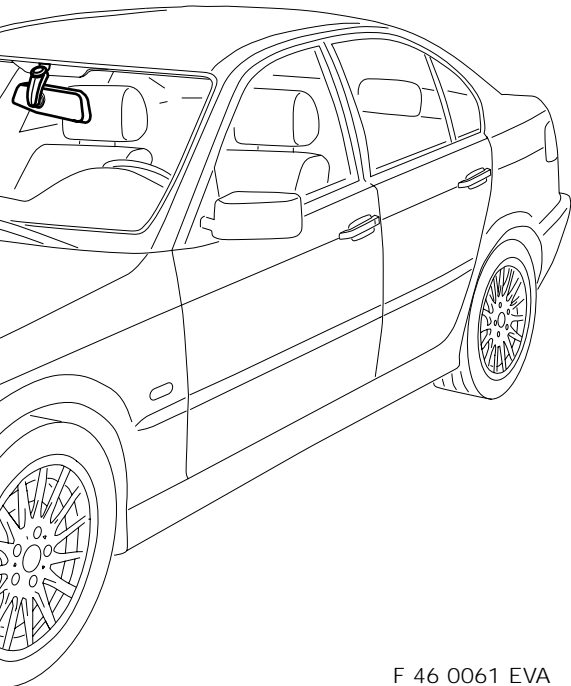
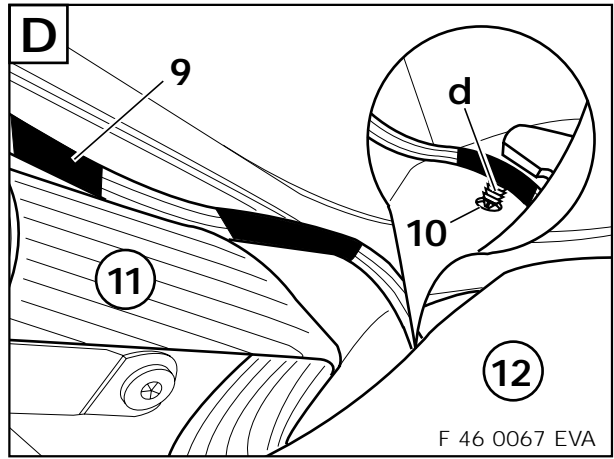
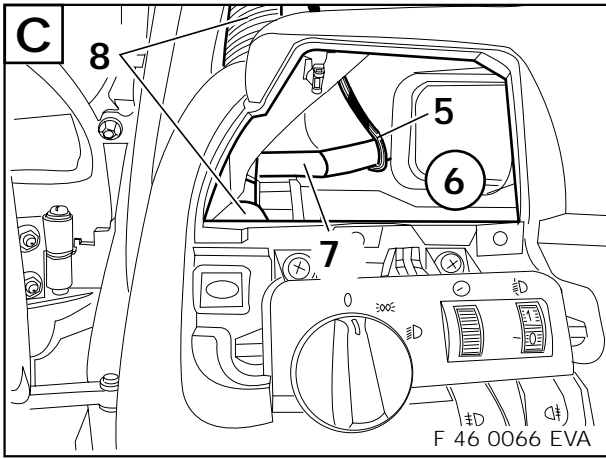
Carry out function test.

Build back all dismantled units in the reverse order of disassembly.

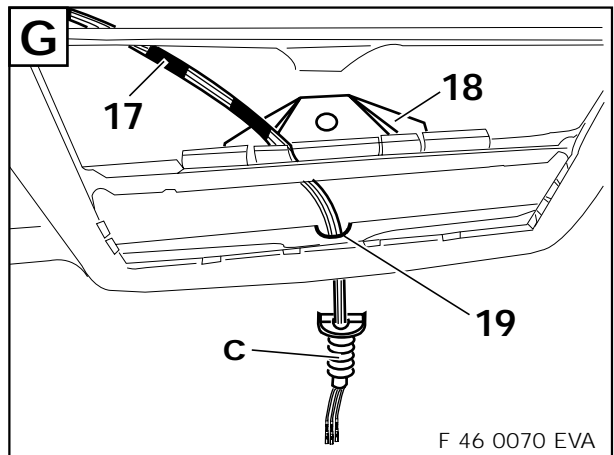
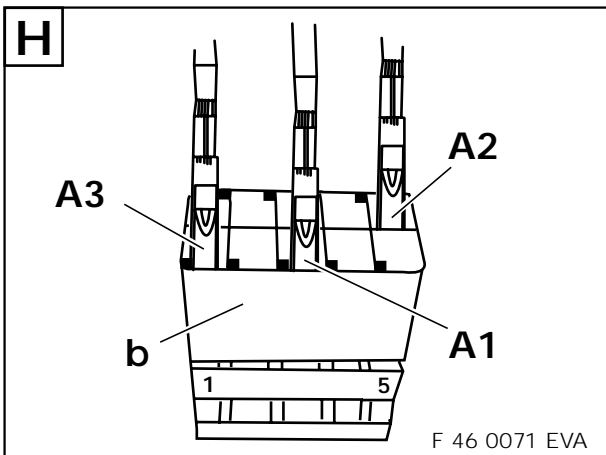
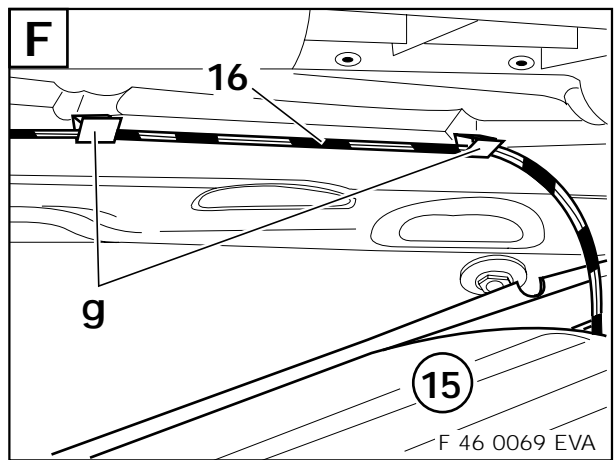
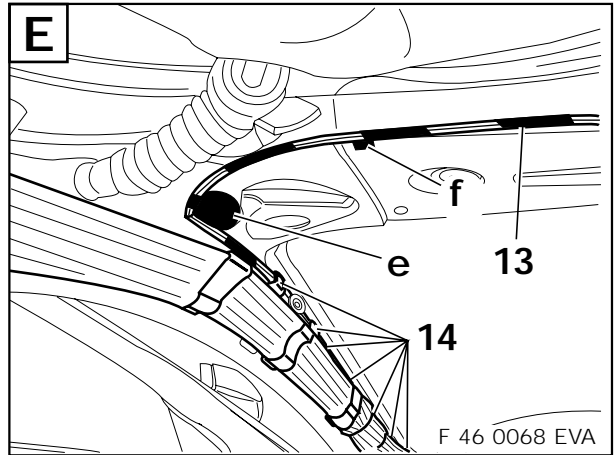


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### 3. Circuit diagram

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A22	anti-dazzle interior rear-view mirror
A47	fuse holder II
X217	VB 31
X428	VB RS
X10016	fuse holder II A47
X18246	connector anti-dazzle interior rear-view mirror

Schaltplan Innenspiegel mit Ablendautomatik

