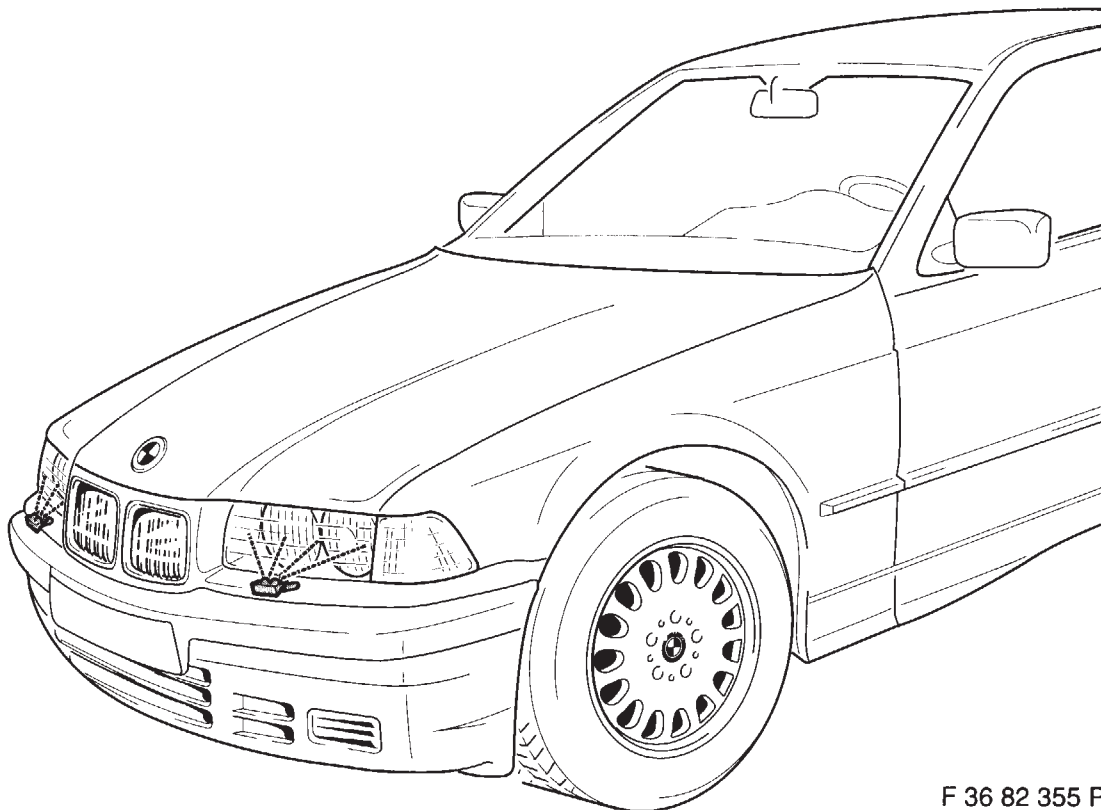




# Zubehör - Einbauanleitung



F 36 82 355 P

## Installation Instructions

Headlight Cleaning System  
BMW 3 Series E36

# Headlight Cleaning System

## BMW 3 Series E36

Technical knowledge is required.  
Installation Time: approx. 1.5 - 2 hours, depending on the condition and level of equipment of the vehicle.

### Attention

The installation is described for the left-hand drive model. Certain work steps must be carried out in mirror-image fashion for the right-hand drive model.

Remove all drillings thoroughly, burr drilled edges, and coat with anti-corrosion paint.

When laying cable in the vehicle, make sure that it has no kinks and is not damaged in any way.

### Tools and Materials Required

Screwdriver for slotted screws  
Phillips screwdriver  
Open-end spanner, 10 mm  
1/2" reversible ratchet  
1/2" extension  
1/2" drive socket, A/F 13 mm, 10 mm and 8 mm  
1/2" torque wrench  
Power drill

6 mm drill bit  
Triangular file  
Anti-corrosion paint

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### 1. Necessary Preliminary Tasks

1. Print out fault memory
2. Disconnect battery
3. Remove battery
4. Remove glove compartment
5. Remove front bumper

## 2. Supplementary Wiring Harness/Overview

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Cable Colours: GN = Green GE = Yellow ...

### Terminal Connections

Pos.	Type/Description	Wire Colour	Connection in car	Connec.point
A	Socket contact	ye	in 12-pin light switch socket E36/2, /4, /C in 12-pin light switch socket E36/5	X503 /4 X18337 /10
B	Socket housing	–	on pressed-out socket contact/light switch	–
B1	1-pin plug	ye	Connection to B	X503
C	Plug contact	gr	in 12-pin plug of ignition starter switch	X33 /7
D	Plug housing	–	on pressed-out plug contact of ignition starter switch	–
D1	1-pin socket	gr	Connection to D	X33
E	Plug contact	gr/bk	in 8-pin windscreen wiper switch plug	X295 /5
F	Plug housing	–	on pressed-out plug contact/windscreen wiper plug	–
F1	1-pin socket	gr/bk	Connection to F	X295
G	Fan connector	br	to fan connector under glove compartment	X218
H	26-pin plug	–	in control module under glove compartment	X259
I	Relay socket	–	to fan connector under glove compartment	X62
J	Flat socket	bk	in relay socket I	X62 /6
K	Fuse carrier	–	on right-hand impact absorber cup in engine compartment	A47
L	Cable lug	br	on right-hand impact absorber cup, earth support point	X166
M	2-pin angle socket	–	on headlight cleaning pump	X123

### F 36 82 357 P

The supplementary wiring harness (1) points of installation are: to the headlight cleaning pump (2); to the fuse carrier (3); to the earth support point in the engine compartment (4); under the glove compartment (5); under the steering column (6); and to the light switch (7).

## 3. Laying the Supplementary Wiring Harness

### F 36 62 235

Remove the protective cap (2).  
Remove the Phillips screws (1). Remove the panelling (3) in the direction indicated by the arrow. Remove the left-hand footwell panelling.

**Note**

Connections A - F are to be laid from the glove compartment, past the air conditioning box, up to the steering column.

**F 36 63 078**

Remove the Phillips screws (1) and carefully lever out the cover (2).

**F 36 63 079**

Loosen the screw plug (1) and take out the light switch (2) with cover (3).

**F 36 82 358 P**

Press the socket contact (1) out of the 12-pin socket (2) at plug-in station 4 and insert it in the socket housing (B). Insert connection (A) into plug-in station 4 of the 12-pin socket and join connection (B1) with (B).

**Note**

See Terminal Connections for E36/5.

**F 36 82 359 P**

Disconnect plugs (1, 2). Press plug contact (3) out of the 12-pin plug (2) at plug-in station 7 and insert into plug housing (D). Insert connection (C) into plug-in station 7 of the 12-pin plug (2) and join connection (D1) with (D). Press plug contact (4) out of the 8-pin plug (1) at plug-in station 5 and insert into plug housing (F). Press connection (E) into plug-in station 5 of the 8-pin plug (1) and join connection (F1) with (F).

**F 36 82 360 P**

Lay the relay socket (I) to the fan connector box (1), but do not connect yet. Plug connection (G) into the fan connector of the same colour. Lay connection (H) behind the device carrier and connect it to the control module (2).

**F 36 82 361 P**

Remove the hexagon screw (1) and the plastic nut (2). Push the ABS control unit (3) on the right-hand side of the car down below the dashboard.

**F 36 82 362 P**

Mark the measurements and mark with centre punch. Drill boreholes with a 6 mm twisted drill bit and insert the bracket (1).

Measurement A =	35 mm
Measurement B =	80 mm
Measurement C =	155 mm

**F 36 82 363 P**

Lay the supplementary wiring harness (1) alongside the standard wiring harness. Lay connection (M) towards the headlight cleaning pump. Position the fuse carrier (K) and secure connection (L) at the earth support point with the hexagon screw (2). Lay connection (J) through the revolving sleeve (3) towards the relay socket (I) at the fan connector box.

**Note**

Insert a 15 A fuse in the fuse carrier (K).

**F 36 82 364 P**

Lay connection (J) towards relay socket (I) and press into plug-in station 6. Secure the relay socket (I) to the fan connector box and attach the enclosed relay.

## 4. Installing the Headlight Washer Spray Jets

**F 36 63 106**

Take out the drilling templates and drill the right and left-hand boreholes with a diameter of 22 mm; burr the boreholes.

A = 182 mm      B = 16 mm      C = Ø 22 mm

**F 36 63 107**

File out the marked recesses with a triangular file.

D =	10 mm
E =	27 mm

**F 36 63 108**

Clip the guide (1) into the front plate.

**Note**

The guides have the following marks:

R =	right
L =	left

**F 36 63 109**

Remove the hexagon screw (1) and tightly screw in the hose guide (2).

**F 36 63 110**

Press the split nut (1) into the shock absorber support (2).

**F 36 63 111**

Secure the bracket (1) with hexagon screws (2).

**F 36 63 112**

Secure the telescopic component (1) to the bracket (3) with hexagon screws (2).

**F 36 63 113**

Connect the spray jet (1) to the telescopic component (2). By loosening the screws (3, 4), adjust the telescopic component (2) in such a way that the spray jet (1) is flush to the front plate.

## 5. Laying the Hose Line

**F 36 63 114**

Attach the hose line (1) to the left-hand side of the telescopic component (2) and secure it with a hose clip (3).

Length of hose: approx. 1300 mm

**F 36 63 115**

Lay the hose (1) to the right via the hose guide (2) and secure it with cable straps (3).

**F 36 63 116**

Attach hoses (1, 2, 3) to the distributor piece (4) and secure with hose clips (5). Attach hose (2) to the right-hand side of the telescopic component (6) and hose (3) to the headlight cleaning system pump (7). Secure the hoses with hose clips (5) and lay them towards the fluid container.

**Note**

Lengths of Hoses:

Hose 2 approx. 280 mm

Hose 3 approx. 330 mm

Hose 1 approx. 1300 mm

## 6. Installing the Fluid Container for the Headlight Cleaning System

**F 36 63 117**

Remove the slotted screw (1), pull off the pump (3) and the seal (4), and take out the existing container (2) in the direction indicated by the arrow.

**Installation Note**

The pump supplied as standard remains in use.

**Note**

If the vehicle is equipped with a level sensor, build it into the new fluid container.

**F 36 63 118**

Insert the sieve (2) in the fluid container (1) and secure the lid (3). Stick on the spacer element (4) and press in the rubber seal (5), as well as the rubber seal taken from the existing fluid container (6).

**F 36 82 365 P**

Press the hose from the existing windscreen washing system (1) into the guide of the fluid container (5). Remove hose (1) and hose clip (4) from the connection point of the windscreen washing system pump (2) and mount the angle piece (3) in such a way as to prevent kinks in the hose. Attach the hose clip (4). Press the pump (2) and the washer pump (6) into the fluid container (5) and fit the plugs (8, M). Secure the container (5) with the slotted screw (7).

**7. Function Check**

Fill the fluid container with a suitable cleaning fluid that corresponds to the manufacturer's recommendation.

**F 36 82 366 P**

Switch on the ignition. Switch on the dipped headlights. Push the windscreen wiper switch (1) towards the steering wheel. The pump for the headlight cleaning system should now be activated for approx. 1 second.

**F 36 63 135**

Adjust the headlight cleaning spray jets as shown in the above illustration.

**Note**

Point of impact shown in run-in state.

