



# Zubehör - Einbauanleitung

---

## **On-Board Computer BMW 3 Series E36/5**

# On-Board Computer BMW 3 Series E36/5

Installation time is approx. 3 hours, though this may vary according to the condition of the vehicle and its fittings.

Knowledge of electronics is required.

## Note

Instructions and illustrations are given for left-hand drive models. Certain work steps must be carried out in mirror-image fashion for right-hand drive models.

## Cable layout

In order to prevent electrical interference, always keep to the precise wiring paths in the vehicle.

## Tools and materials required

Phillips screwdriver  
Ratchet with 1/2" drive  
1/2" drive socket, A/F 10 mm, 13 mm  
1/2" extension  
Ring spanner, A/F 7 mm, 10 mm, 13 mm  
Electric torch  
Inspection lamp  
Regular screwdriver  
Wire stripper  
Cable pliers  
Side cutting pliers  
Socket wrench, A/F 8 mm, 10 mm  
Universal knife

## Contents

Chapter

1. Preliminary work
2. Overview of component installation
3. Overview of connections for on-board-computer wiring harness
4. Installing supplementary wiring harness

## 1. Preliminary work

- Print out fault memories of control units.
- Disconnect vehicle battery.
- Remove bottom-left instrument panelling.
- Remove cover under glove compartment.
- Remove glove compartment.
- Remove entrance strips on driver side.
- Remove speaker panelling in bottom-left footwell.
- Remove centre console.
- Remove clock.
- Remove steering wheel.
- Remove steering-column panelling.
- Remove turn-indicator/driving-light switch.

## 2. Overview of component installation

**F 36 62 267 M**

### Legend

1. On-board computer A35
2. Fan connector X11291
3. On-board-computer wiring harness
4. Outside-temperature sensor B21

### Important

The standard-fitted plug-in connections or the AMP connectors included in the cable set must be used when establishing all electrical connections.

It is possible, due to technical modifications, that cable colours at the vehicle wiring harness no longer correspond to those listed in the tables. If this is the case, the listed numbers of the plug-in stations have priority.

## 3. Overview of connections for on-board-computer wiring harness

**F 36 62 268 M**

Item	Designation	Cable colour	Connection point in vehicle
a	Branch for cable connector X12045, black 12-pin connector	-	On-board computer A35 in centre console
b	Branch for earth	brown/orange	Fan connector X10009 behind glove compartment, brown/orange cable
c	Branch for operating switch	brown/red	Natural-coloured 12-pin connector X32, plug-in station No. 10, to connector station at steering column
d	Branch for instrument lighting	grey/red	Fan connector X1019, grey/red cable, in fan-connector box on driver side
e	Branch for speed signal	black/white	Fan connector X188, black/white cable, in fan-connector box on driver side
f	Branch for terminal TXD (diagnosis)	white/violet	Fan connector X183, white/violet cable, in fan-connector box on driver side
g	Branch for terminal RXD (diagnosis)	white/yellow	Fan connector X182, white/yellow cable, in fan-connector box on driver side
h	Branch for terminal Ra	violet/yellow	Fan connector X1182, violet/yellow cable, in fan-connector box on driver side
i	Branch for terminal 30	red/yellow	Fan connector X1067, red/yellow cable, in fan-connector box on driver side
j	Branch for fuel-level sensor	brown/yellow	Black 30-pin connector X13, plug-in station No. 1, in front-left footwell
k	Branch for fan connector X11291	brown/yellow	Brown/yellow cable from vehicle wiring harness in front-left footwell
l	Branch for fuel-level sensor	brown/yellow	Black 30-pin connector X13, plug-in station No. 1, in front-left footwell
m	Branch for TI signal	white/black	Black 25-pin connector X20 at rear left in engine compartment
n	Branch for cable connector X770, yellow 2-pin connector	-	Outside-temperature sensor B21 in front-left brake ventilation duct

### Important

Owing to the continuous revision of the electrical systems of individual models, connector designations (X-designations) of individual connectors are subject to change. The latest edition of the test instructions is therefore required for installing the on-board computer.

## 4. Installing supplementary wiring harness

### F 36 51 128

Remove metal hexagon screws (1) of distribution-box attachment.

### F 36 62 276 M

Remove cover of distribution box.  
Remove Torx screws (2). Pull up upper section (1) of distribution box as far as vehicle wiring harness will allow.

### F 36 51 129

Remove guide element (1) of vehicle wiring harness in direction of arrow in illustration.

### Installation information

In order to avoid moisture penetration, it should be ensured that the guide element (1) is fitted correctly in the distribution box.

### F 36 62 269 M

#### Note

The existing cable connector of the clock must be tied back.

Lay supplementary wiring harness (1) along vehicle wiring harness as shown in illustration:  
from installation point of on-board computer (3) (next to radio) to fan-connector box (2) behind glove compartment, to connector station (4) at steering column, to fan-connector box (6) on left, to connector X13 (5) in front-left footwell, through distribution box to engine connector X20 (7) and to front-left brake ventilation duct (8).

### F 36 62 270 M

**a** Lay branch for cable connector X12045, black 12-pin connector, to installation point of on-board computer A35 (2) (next to radio).  
Connect cable connector X10245 (a) to on-board computer A35 (2) and lock. Install on-board computer A35 (2).

### F 36 62 271 M

**b** Lay branch for earth, brown/orange cable, along vehicle wiring harness to fan-connector box behind glove compartment and plug into fan connector X10009 (1), brown/orange cable.

### F 36 62 272 M

**c** Lay branch for operating switch, brown/red cable, along vehicle wiring harness to natural-coloured 12-pin connector X32 (1) in connector station at steering column and press into plug-in station No. 10.  
Install new turn-indicator/driving-light switch S7 (2), lay connecting cable, and connect plug-in connection X32 (1).

### F 36 62 273 M

Lay branches **d to i** to fan-connector box under instrument panelling on left.

**d** Plug branch for instrument lighting (1), grey/red cable, into fan connector X1019 (2), grey/red cable.

**e** Plug branch for speed signal, black/white cable, into fan connector X188 (2), black/white cable.

**f** Plug branch for terminal TXD (1), white/violet cable, into fan connector X183 (2), white/violet cable.

**g** Plug branch for terminal RXD (1), white/yellow cable, into fan connector X182 (2), white/yellow cable.

**h** Plug branch for terminal Ra (1), violet/yellow cable, into fan connector X1182 (2), violet/yellow cable.

**i** Plug branch for terminal 30 (1), red/yellow cable, into fan connector X1067 (2), red/yellow cable.

### F 36 62 274 M

**j** Lay branch for fuel-level sensor, brown/yellow cable, along vehicle wiring harness to black 30-pin connector X13 (1) in front-left footwell and press into plug-in station No. 1.

**k** Branch for fan connector X11291, brown/yellow cable. Cut through cable (2) (brown/yellow) from vehicle wiring harness (3), take plug-in contacts from installation kit, crimp onto both cable ends and plug into fan connector X11291 (**k**).

**l** Lay branch for fuel-level sensor, brown/yellow cable, along vehicle wiring harness to black 30-pin connector X13 (1) in front-left footwell and press into plug-in station No. 1.

### F 36 62 089

Lay branches **m** and **n** into distribution box.

**m** Lay branch for TI signal, white/black cable, to engine connector X20 (1) at rear left in engine compartment and plug into plug-in station No. 24.

### F 36 62 275 M

Press outside-temperature sensor B21 (1) into existing opening in front-left brake ventilation duct (2).

**n** Lay branch for cable connector X770 through distribution box along vehicle wiring harness to outside-temperature sensor B21 (1) in front-left brake ventilation duct and connect.

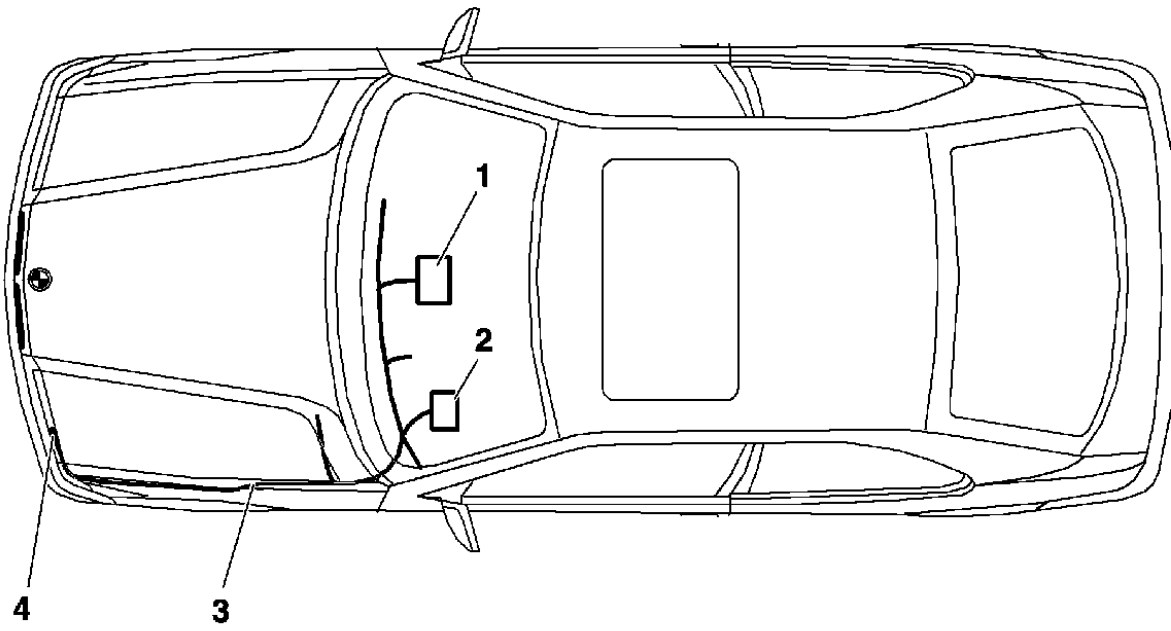
Re-install all removed parts in reverse sequence to disassembly.  
Connect vehicle battery.

### Important

Vehicle data must be programmed in the on-board computer via the diagnosis interface within 36 hours! See coding specifications for information on coding.

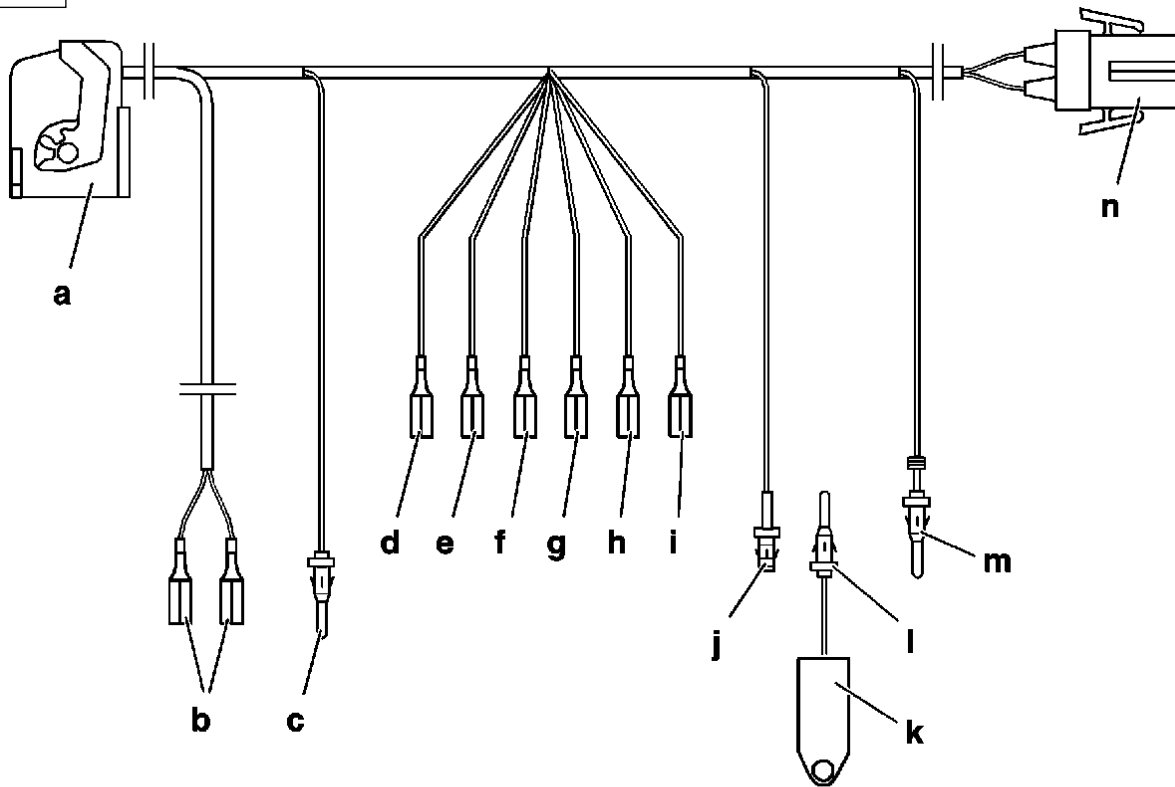
A description of operation of the on-board computer can be found in the Vehicle Owner's Manual. Carry out a test for correct operation.

1



F 36 62 267 M

2



F 36 62 268 M

