

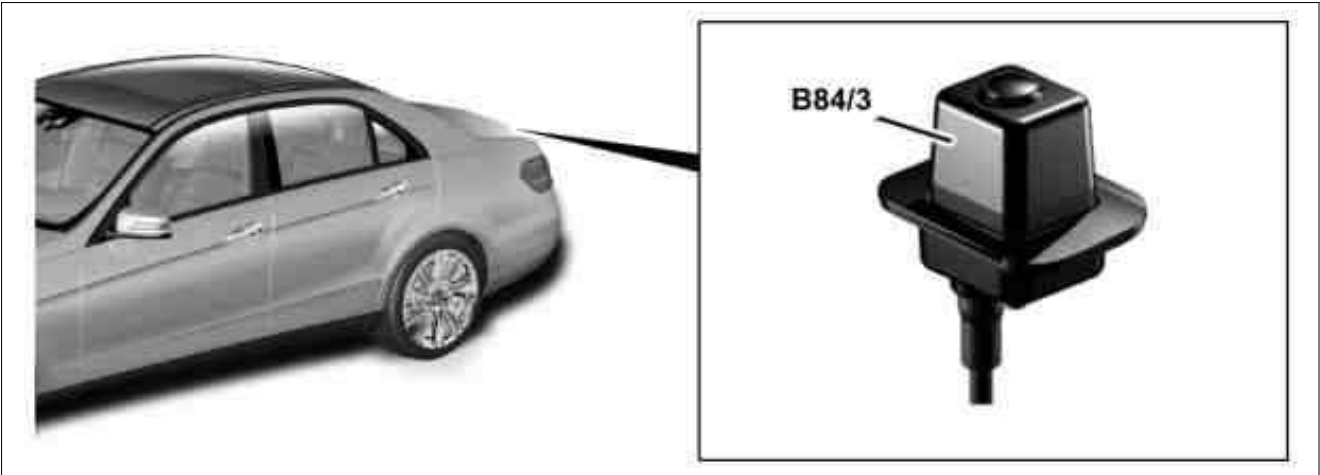
Document title Reversing camera component description

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MODEL 212
as of model year 2014
with CODE 218 (Rear view camera)

Illustration shows model 212.0 up to 28.02.2013

B84/3 Backup camera



P54.65-3538-04

Task
The backup camera does the following:

- **Records surrounding area to the rear of the vehicle**

Records surrounding area to the rear of the vehicle
The reversing camera is an optical parking aid. Its tasks include the capturing of pictures of the area to the rear of the vehicle, the generation of dynamic guide lines and the sending of the video picture to the COMAND controller unit (A40/3). The pictures captured by the reversing camera are processed and electronically corrected accordingly by the integrated control unit before being displayed in the audio/COMAND display (A40/8). The reversing camera is supplied with voltage by the rear SAM control unit with fuse and relay module (N10/2).

Reading in of signals
The reversing camera reads in, for example, the following information via chassis CAN 2 (CAN E2):

- Circuit 15 status
- Status of reverse gear
- Reversing camera status
- Vehicle speed displayed by instrument cluster (A1)
- Signals from steering angle sensor (N49)

Output of signals
The signals are sent over the following connection:

- **Direct line**
- **Chassis CAN 2**

Direct line
Vehicles up to 01.03.2015:
The reversing camera sends the picture data as Color Video Baseband Signal (CVBS) over an analog video interface to the COMAND controller unit.

Location
The reversing camera is above the license plate in the handle strip of the trunk lid (model 212.0/1) or of the liftgate (model 212.2).

- **Reading in of signals**
- **Evaluation of input factors**
- **Output of signals**

i The reversing camera is automatically calibrated by the integrated control unit.

- Status of backup lamp switch (S16/2)
 - Signals from left front axle rpm sensor (L6/1)
 - Signals from right front axle rpm sensor (L6/2)
 - Signals from left rear axle rpm sensor (L6/3)
 - Signals from right rear axle rpm sensor (L6/4)
 - Status of trailer recognition (with CODE 550 (Trailer hitch))
- The functions that use these signals are described in the individual function descriptions (see block diagram or function schematic).

Evaluation of input factors
The input factors that have been read in are evaluated by the integrated microprocessor and the relevant components are then actuated.

Vehicles as of 02.03.2015:
The reversing camera sends the image data to the COMAND controller unit via a low voltage differential signaling (LVDS) line.
Chassis CAN 2
The reversing camera also sends the following signals over chassis CAN 2:

- Request for picture output in Audio/COMAND display
- Reversing camera status

The functions that use these signals are described in the individual function descriptions (see block diagram or function schematic).

Body
The reversing camera is a color picture camera with a wide-angle lens (angle of vision > 130°) and integrated control unit.