



Hella Rear View Camera System-

General

The system camera is based on a module which was developed by Hella for use in the original-equipment sector and which is used in the case of the Chrysler Pacifica. A housing has now been developed for this camera which allows easy and universal surface or flush-mounting. The monitor included in the system also comes from an original-equipment application, meaning that both components meet the high quality requirements of car manufacturers.

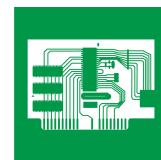
Design and function

The optical performance can be seen in particular in the extremely large image angle of 120° horizontal and 93° vertical. With flexible mounting positions, this means that the driver is able to see both outside edges and therefore the entire width of the vehicle, and at the same time the horizon as well, which makes orientation considerably easier. The camera does not need any further electronics, which is necessary in the case of other cameras to convert the image signals into a usable video signal. As a result, installation is significantly easier. Nevertheless, the camera has very compact dimensions, which makes it easier to find a suitable surface or flush-mounting location.

As early as 0.2 seconds after power is supplied, the camera transmits the first usable image, which is stabilized to the greatest extent possible. After a total of 1.5 seconds, a completely stabilized NTSC image signal is available. The monitor is able to process both NTSC signals and PAL signals and has a screen-diagonal size of 12.6 cm (5 inches).

Through the use of a special plug, which also meets the requirements of the automotive industry, and which is also vibration-resistant, waterproof and dustproof, the wiring of the system is simplified as well.

Hella offers both the camera individually and a complete set.



The rear view camera (5BD 166 175-001, see Fig. 1) includes the following components:

- Rear view camera, 12 V, incl. holding bracket
- Installation material (screws, rubber grommet)
- Plug-housing for creating individual wiring
- Connection diagram
- Installation instructions

The system (5BD 009 690-001, see Fig. 2) consists of the following components:

- Rear view camera, 12 V, (part no. 5BD 166 175-001), incl. holding bracket and rubber grommet for fitting the lens in attachment parts
- 10-metre harness
- 5-inch LCD display incl. holder
- Installation material
- Installation instructions

Technical data

Rated voltage: 12 V

Temperature ranges: Camera -40 °C to +85 °C
Monitor -20 °C to +85 °C

Image angle of the camera: 120° horizontal/93° vertical

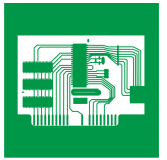
Minimum dimensions: 56 x 47 x 38 mm (W x H x D, incl. holding bracket)

High-quality, digital image capture: 1/3-inch colour CMOS with 250,000 pixels.

Output image signal of the camera: NTSC

Input image signal of the monitor: NTSC and PAL (automatic change-over)

High night-vision performance: As a rule, even at night, with the high infrared sensitivity of the camera, the rear lighting is sufficient



to present an image.

Flexible switching:

Can be activated automatically when reverse gear is engaged. The monitor switches on automatically as soon as an image signal is received.



Fig. 1



Fig. 2