

Beamsetter SEG IV C

General points

The development of modern lighting systems proceeds all the time. Progress can be clearly seen with exterior lighting, and headlights in particular. Xenon headlights with "intelligent" light regulation have found their way into premium vehicles, and the first LED headlights are also already on the market. This means it is only logical and necessary that beamsetters should also be developed further. Hella is now introducing a new beamsetter to the market, which stands out thanks to its innovative function and operation. It puts garages in a position to set the beams of old, current and future headlight systems even more easily and efficiently.

Design

The SEG IV C is based on the SEG IV. The roller base, rotatable column and parts of the beamsetter box and the broad-band sight vane have been taken over. The main difference is the camera-based measuring system which evaluates the headlight setting. The broad-band sight vane required for alignment has been equipped with an additional line laser. This makes positioning of the beamsetter in front of the vehicle easier and quicker. The necessary pre-settings, such as tilt angle in percent etc. and the reading off of the values, take place through the central operating and display panel (see Fig. 1).

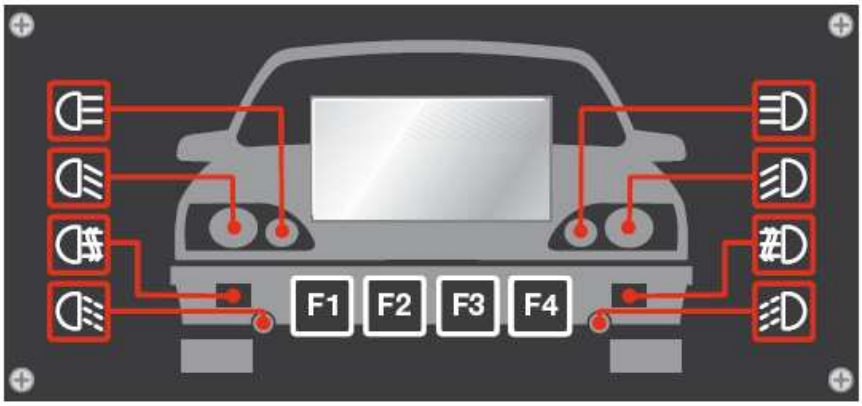

Fig. 1

The operating and display panel is explained below:

Function

In contrast to conventional beamsetters, the SEG IV C is equipped with a camera, a micro-processor and special software. The camera, which is installed in the beamsetter box, films the headlight image. This image is evaluated by the software and represented as a graphic in the display. This graphic shows the current headlight setting for low beam light (see Fig. 2).

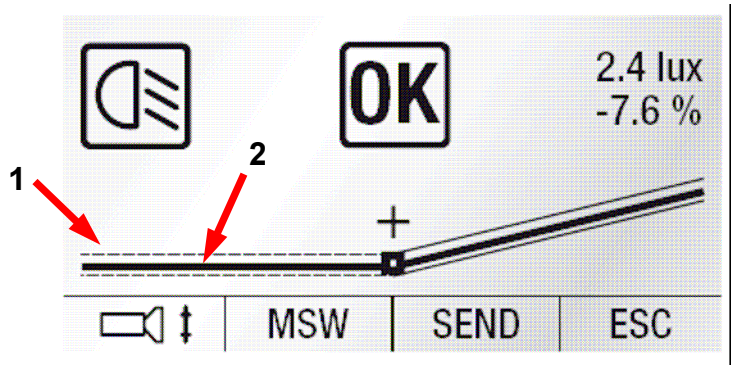

Fig. 2

The reference corridor is in the centre and is represented by a dotted line (see Fig. 2 no. 1). The actual position of the headlight is represented as a thick black line (see Fig. 2 no. 2). In the illustration shown above, the thick black line is exactly between the two reference lines. This means the headlight is set correctly. In addition, the beamsetter is equipped with an "acoustic and optical setting mode" (LED, see Fig. 3), which works as follows:

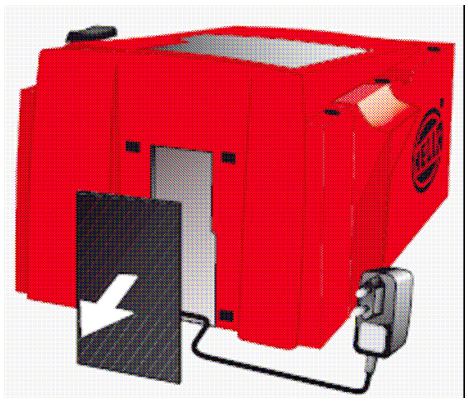

Fig. 4

The further the actual headlight position deviates from the reference position, the more slowly an acoustic signal sounds and the more slowly the LED flashes. As the actual position approaches the reference position, the acoustic signal and the flashing frequency increase. When the actual position reaches the reference position, a continuous acoustic signal is heard and the LED remains lit. If necessary, the acoustic setting mode can be switched off.

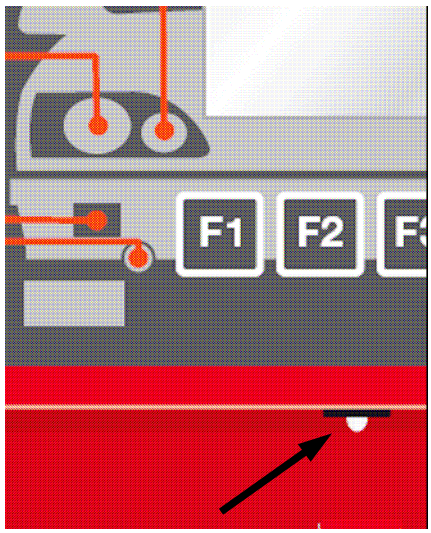

Fig. 3

Fig. 5 - "Battery charging"

The voltage supply for the operating and display panel is provided by a battery which is in the rear part of the beamsetter box. To charge the battery, pull off the black cap (Velcro fastening) and connect the mains plug to the AC socket (100-240 V) (see Fig. 4). The charging process is monitored electronically (see Fig. 5).

A 9V block battery is used for the voltage supply to the line laser (see Fig. 6).

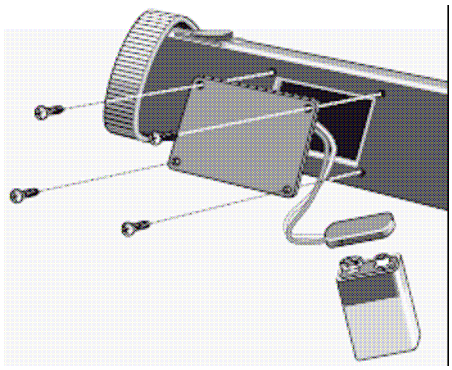

Fig. 6