

Trailer detection without LED sensor

TD-BAS makes it possible to detect trailers with trailer lights using ordinary bulb light technology. As this variant is not capable to detect trailers using LED light technology it is also possible to manually through a menu in the instrument cluster enable/disable the trailer detection function. Below there is a short description of the two cases and how it reacts to the different types of lights.

1. The trailer detection is enabled

If a trailer with bulb lights is connected, the vehicle detects the trailer. A bulb break will be detected and diagnostics displayed in the driver information display. As a connected trailer is identified the system will optimize all functions for this, e.g. Electronic Stability Program (ESP) and I-shift gearbox functions.

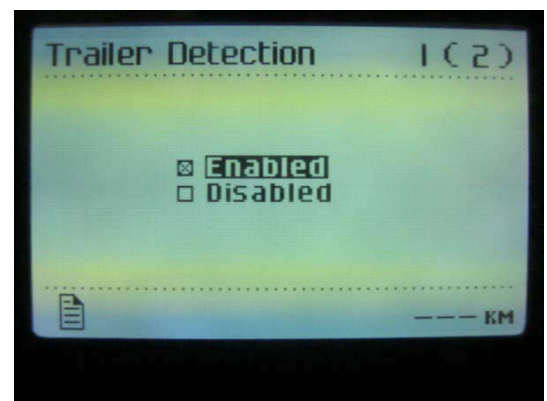
If a trailer with LED lights is connected, it is in most cases not possible for the vehicle to actually detect if a trailer is connected. Thus no lights at all will be available on the trailer as the vehicle does not know that there is a trailer connected to it. Also, as the vehicle does not know that there are any lights no diagnostics will be available when light is broken or if a light is physically disconnected. A secondary consequence is that some of the vehicle systems will now optimize towards a vehicle without trailer, e.g. for ESP and I-shift gearbox.

Note also that if the trailer detection is enabled and a LED light trailer is connected, the vehicle will, as described above, think no trailer is connected. Thus the vehicle will continuously monitor if a trailer is connected. This is done by testing to activate the trailer lights for 150 ms every 2 seconds. As a consequence, if it is a LED light trailer, the trailer lights will flash every 2 seconds. This is done all the time when you have key on and the vehicle speed is less than 5 km/h.

2. The trailer detection is disabled

In this case a connected trailer is ALWAYS the default setting. Thus all lights will be available when requested. This regardless of if it is bulb or LED lights. Diagnostics is available except for "open circuit" as the system can not distinguish between a LED lamp connected or no lamp connected. Also, as the trailer detection is disabled the vehicle will act as there is a trailer connected and consequently optimize all functions towards a vehicle with trailer even if there is no trailer, e.g. ESP and I-shift gearbox functions.

- For trailers with LED lights it is recommended to disable the trailer detection to ensure the best performance of the system.
- For a frequent use of LED light trailers it is recommended to upgrade the vehicle from TD-BAS to TD-LED.



Enable/disable TD-BAS via the driver information display -> Vehicle settings -> Trailer detection -> On/Off

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