



## Safe function check of the direction indicator with LED light sources

The failure of a turn signal has to be indicated visually or acoustically at the dashboard of motor vehicles with approval to drive on public streets. This regulation applies to all ECE countries. A potential turn signal failure has therefore to be monitored, but even then the driver is not released from his checking obligation because of this.

Due to the low power consumption of an LED light source, problems can occur in the function check at various towing vehicles. The low power consumption is evaluated as a failure of the lighting function and then displayed as a malfunction.



### LED control box from ERMAX

In order to remedy this problem, the use of an LED control box from ERMAX is highly recommended. The control box recognises whether lightbulbs or LED lights are used. When LED lights are used, a resistor is turned on for the flashing and stop function. If the power consumption drops below 10 mA (defect of LED light or cable connections), the resistor is turned off and the defect is displayed in the motor vehicle. The LED control box remains passive when lightbulbs are being used.

**In order to guarantee that turn signal failure monitoring is being provided in accordance with the laws of ECE countries, an LED control box has to be installed.**

Inputs	Outlets	Code no.
1 x 15-pin ERMAX bayonet socket	2 x 7-pin AMP 1.5 socket for tail lights 4 x 2-pin Super Seal socket for marker lights	92.0000.1682
2 x 7-pin AMP 1.5 socket	2 x 7-pin AMP 1.5 socket for tail lights 4 x 2-pin Super Seal socket for marker lights	92.0000.1683
1 x 15-pin Ermax bayonet socket	1 x 15-pin Ermax Bayonet socket 2 x 2-pin Super Seal Socket for marker lights	92.0000.6789

The use of resistors that only simulate the power consumption of a lightbulb does not fulfil the legal regulations. If an LED turn signal then has a defect, nothing will be displayed inside the vehicle in this case.