



Engine Running Detector Operating instruction

ERD 12V ERD 12V.01 ERD 24V ERD 24V.01

Working explanation

The ERD is designed to work while the vehicle is running, to let the daytime running lamps being turned on during the vhicle gear; this state is controlled by checking the simultaneous presence of two conditions: the vibrations, caused by the engine movement, and the ignition of the engine, represented by the momentary voltage drop caused by the ignition of the engine.

	TRIGGER OUTPUT ACTIVATION		VERSION 12V	VERSION 24V
1	1st CONDITION	VOLTAGE DROP DURING ENGINE CRANK	> 1V	> 2V
2	2nd CONDITION	IF 1st CONDITION IS TRUE DETECTION OF ENGINE VIBRATIONS ON 3 AXES	150Hz ÷ 500Hz	

ERD activation: (the internal relay contacts *close*): condition 1 + condition 2 within 4-5s;

ERD deactivation: (after 15 seconds, the internal relay contacts open)

- OPTION A P/Ns ERD 12V.01, ERD 24V.01 condition 2 OFF: vibrations stop
- 2. <u>OPTION B</u> P/Ns ERD 12V, ERD 24V
 - condition 2 OFF: vibrations stop

P/Ns ERD 12V, ERD 24V

low beam is turned on by the driver (positive signal 56b)

Wiring diagram

P/Ns ERD 12V.01, ERD 24V.01 Version 01 (w/o DRL control)

