

Equipment for turn signal

All turn signals in the Louis range have a valid "E" mark and can therefore be used legal on the road without an additional individual TÜV test centre approval.

Explanation of the certification mark depicted:

E = certification mark recognised throughout Europe with country code (indicates the country in which the turn signal was tested), e.g. E1 for Germany, E3 for Italy, E21 for Portugal etc.
50R = tested for motorcycles and scooters
11 = tested as a front turn signal
12 = tested as a rear turn signal



Legal notices regarding the installation of turn signals:

If the motorcycle was registered according to EC law (almost all vehicles from around 1998), the following provisions apply:

- Distance between the rear turn signals of at least 180mm (inside edge of turn signal lens to inside edge of turn signal lens), height above the carriageway 350 – 1200mm.
- Distance between the front turn signals of at least 240mm (inside edge of turn signal lens to inside edge of turn signal lens), height above the carriageway 350 – 1200mm. If the motorcycle is registered according to German law (older vehicles prior to 1998), please observe the following provisions in accordance with the German Road Traffic Licensing Regulations (StVZO) during installation:
 - Distance between the rear turn signals of at least 240mm (inside edge of turn signal lens to inside edge of turn signal lens)
 - Distance between the front turn signals of at least 340mm (inside edge of turn signal lens to inside edge of turn signal lens), whereby each is 100mm from the headlight (edge to edge)
 - Minimum height above the road/ground 350mm (bottom edge)
 - The flashing frequency (speed) is set at 90 +/- 30 cycles per minute. This means that the turn signals must flash between 60 and 120 times each minute.
 - Bar-end turn signals on vehicles made in 1985 or later do not render the rear turn signals redundant. E-approved bar-end turn signals are only tested for their effect as a front turn signal (lens marked with 11, see above) and must therefore always be complemented by rear turn signals, even on older models.

Installation:

The fastening nuts must not be overtightened, since the thread can twist too far within the plastic, thus damaging the turn signal. Most turn signals have a fine thread (M10 x 1.25) for fastening. If these nuts are lost, a fastening set with Order no. 10033200 is available. In order to mount the turn signals in a wider position where necessary, turn signal stem extensions (e.g. Order no. 10033201) may be fitted. Ensure that your turn signals are installed in a clearly visible position and are not obscured by other parts such as luggage racks, bags or saddlebags. Removing the original turn signals often leaves holes in the fairing elements that are larger than the smaller, new turn signals are able to cover. To solve this problem, we offer vehicle-specific turn signal mount covers as part of our product range (www.louis.eu). If a small gap is visible between the turn signal lens and the turn signal housing, this must face the carriageway so that no rainwater can flow into the turn signal.

Electrical connection:

To make electrical connection particularly easy, we carry specific adaptor cables for a wide range of vehicles in stock. On the one hand, the adaptor cables have a compact connector which fits in the plug-in connection of the original wiring harness and, on the other, the necessary connections for connecting the replacement turn signal. In this way, no further materials whatsoever are required for creating the electrical connections. If you cannot connect using the adaptor cables or this is not desirable, you may find the Japanese connector set with Order no. 10032042 helpful. Make sure the cables are connected correctly. Only use safe connections and no terminal blocks etc. Pinch off the vehicle's battery before installation. Following successful connection, be sure to check that the electrical system is functioning correctly before setting off.

If turn signals are installed which have a lower total wattage than the originals, this normally results in a flashing frequency which is too high. The correct flashing frequency must then be restored using an appropriate flasher or with the aid of resistors (which simulate the missing wattage). LED turn signals have a particularly low wattage (approx. 1-3 W) and, in many cases, can therefore even appear to be permanently lit.

Various universal flasher units are available, as are vehicle-specific flasher units as a simple plug & play solution (go to „My Bike“ at www.louis.eu) and three different sizes of resistor. In the table you can see which flasher units or resistors must be used for the respective change in the wattage of the turn signal compared to the original state.

The original wattage can either be found on the original bulb itself, in the vehicle handbook or on the turn signal lens.

The use of resistors is particularly recommended where the vehicle has a combined relay unit which cannot be replaced (it usually has more than three cable connections available in that case). The resistors are installed in the right and left turn signal circuits respectively or, if necessary, before each turn signal in **parallel connection**. They can be positioned directly before the turn signals or in another position within the right or left turn signal circuit (whether this is at the front or the rear). The resistors with Order numbers 10032089 (7.5 ohms, simulates 19.2 W), 10032063 (8.2 ohms, simulates 17.6 W) and 10032205 (10 ohms, simulates 4.4 W) are already prewired and can be installed particularly easily. In this way, an incorrect connection is no longer a possibility.

The special flasher unit with Order no. 10033844 (operating range of 1 to 30 W) for LED turn signals can only be used if the vehicle is equipped with two turn signal indicator lights. If, on the other hand, there is a common turn signal indicator light for the right and left turn signal circuit, or a hazard warning flasher system or an acoustic turn signal, malfunctions may occur – in these cases, the resistors listed in the table should be used.

LED turn signals only light up if the positive cable (+) and the negative cable (-) are connected correctly. For marking purposes, there are small flags on the cable. If these small flags are not in place, hold the cable to the battery briefly in order to determine the correct polarity prior to the actual connection.

Please consider that, due to the use of electronic flashers, the indicator light no longer provides any indication that a turn signal has malfunctioned. Depending on their operating range, electronic flashers always work with the same frequency.

Detailed instructions regarding a conversion to LED turn signals, using the example of a Kawasaki Z 750, can be found under "Service/Tips for DIY mechanics" at www.louis.eu

Caution:

Resistors heat up during use and therefore must not be installed in the direct vicinity of heat-sensitive components or in closed housings. Depending on the duty cycle of the turn signals, temperatures of 80°C or more may occur during operation.

Which resistors are required for which conversion?

Orig. turn signal f/r	Conversion to	Required resistors...	...or relays
4x 21 Watt	4x 0,4 - 2,6 Watt	4x Order no. 10032089	10033844
4x 21 Watt	4x 2,7 - 5,0 Watt	4x Order no. 10032063	10033844
4x 21 Watt	4x 10 Watt	2x Order no. 10032089	10033806
4x 21 Watt	2x 21 Watt / 2x 10 Watt	2x Order no. 10032205	10033806
4x 21 Watt	2x 21 Watt / 2x 6 Watt	2x Order no. 10032205	10033806
4x 18 Watt	4x 0,4 - 2,2 Watt	4x Order no. 10032063	10033844
4x 18 Watt	4x 2,3 - 5,0 Watt	4x Order no. 10032205	10033844
4x 18 Watt	4x 10 Watt	2x Order no. 10032205	10033806
4x 18 Watt	2x 18 Watt / 2x 10 Watt	not possible	10033806
4x 18 Watt	2x 21 Watt / 2x 6 Watt	not possible	10033806
4x 10 Watt	4x 0,4 - 2,2 Watt	2x Order no. 10032063	10033844
4x 10 Watt	4x 2,3 - 4,0 Watt	2x Order no. 10032205	10033844
4x 10 Watt	2x 10 Watt / 2x 6 Watt	not possible (hazard an attempt)	10033844
4x 10 Watt	2x 21 Watt / 2x 6 Watt	not possible	10033806

Since these are universal products and are not intended just for one particular vehicle, it is important to make sure that they are suitable for your type of motorcycle before you use them for the first time. Always follow the instructions in your vehicle operator's manual and the directions of the vehicle manufacturer. This is essential, as improper use of these products or their unsuitability for a vehicle could impair the safety and/or condition of the vehicle.

Please contact our technics centre via the fax number 00 49 (0)40-734 195-58 resp. by Email: technikcenter@louis.de before using the article for the first time, if you have any questions on the product and/or these instructions. We will be happy to provide you with quick help. In this way, together we guarantee that the product is correctly assembled and used without any problems.