



Fitting Instructions for micro 1000 (rear direction indicator)

WARNING! Before fitting, please read these instructions thoroughly!

WARNING! If you are uncertain about correct fitting or the electric connections, please seek professional help as only correct fitting will ensure permanent attachment. Incorrect fitting can lead to accidents. For this reason you should check that the flasher is attached securely before every journey; if necessary fix the flasher again properly and align it again straight away.

Incorrect electrical connection can lead to short circuiting (cable fire) or damage to other electronic components.

WARNING! The micro 1000 is designed only as a rear direction indicator for motorcycles and this design is unsuitable for any other purpose.. Any use other than that given, e.g. as a front direction indicator, is not permissible; it can be dangerous and can lead to serious damage or accidents.

WARNING! Only ever use original parts and in particular the original bulb must only be replaced with a bulb of the same specification (H6W)! This is essential for the flasher to work properly and safety. In the event of loss or damage you can obtain spares including the special bulb in stores or direct from the Kellermann company (tel.: +49 (0)241 938080).

WARNING! For your safety we have selected a powerful halogen bulb for the micro 1000. The micro 1000 may therefore get hot when operated for extended periods (more than 10 minutes). Contact with bare skin or heat sensitive objects must absolutely be avoided as it could lead to injury or damage.

WARNING! Incorrect fitting invalidates the vehicle's type approval and insurance and increases the risk of an accident.

INTRODUCTION

The micro 1000 LED is E-tested and approved as a rear direction indicator for motorcycles. This is documented by the approval number 12 (E13) 50R 000679 stamped on the flasher lens. That means you may use this flasher in place of the original indicators without having it entered in the vehicle papers and without technical examination. You do not need to carry any special documentation with you.

FITTING

WARNING! Before fitting, ensure the motorcycle is standing securely as a falling motorcycle could cause injury and damage to the motorcycle.

Turn off the engine and disconnect the battery. Cut the wire between the flasher and the connector (about 50 mm / 2 inches from the connector) and then remove the original flasher. Fit the micro 1000 in the place of the original flashers or drill a hole of 8.5 mm diameter for fitting the micro 1000. Take care to keep the following distances:

The distance between the inner edges of the lit areas of the flashers must be at least 90 mm from a vertical line through the centre of the motorcycle when viewed from the rear.

The lower edges of the lit areas of the flashers on motorcycles must be at least 350 mm from the road. Should a sidecar be attached, flashers for that side must be fitted to the outside of the sidecar.

If necessary use spacers (available as accessories in 25 mm and 40 mm lengths) to achieve these distances.

Now connect the micro 1000 to the electrics. Connect the black micro 1000 wire to the earth wire of the flasher being replaced and the grey wire to the plus lead.

First remove the insulation from the ends of the wires for about 1 cm and twist the wires to be joined together.

Push the twisted ends into one of the connector sleeves and squeeze the sleeve firmly together with suitable pliers. Tuck the wire away and reconnect the motorcycle battery. Check that all the flashers on the vehicle are working properly. Should the flash rate increase to faster than permissible (some original flasher relays are set for 21 W bulbs) we suggest the following solution:

WARNING: When a bulb fails the speed of flash increases automatically to warn the rider of the fault; both solutions described here will probably cause this function not to work. Check the function of the flashers regularly!

1.Solution: change the existing flasher relay to one which is not load dependent.

2.Solution: Use 10 ohm power resistors with a rating of at least 15 watts for each micro 1000. Power resistors can be obtained from us (Part No.: 123.950) or in most electronics stores. It must be connected in parallel with the flasher. The

resistor's wires must be connected to the two wires which are each in a connector sleeve.

Then insulate the electric connectors so as to avoid a short circuit. We advise tying the resistors direct to the frame, e.g. with cable ties, since the heat is dissipated particularly well there.

WARNING! The power resistor uses about 15 watts power and so will get warm while flashing. Ensure that the heat will not damage any components.

ADJUSTING THE FLASHER:

Always adjust the flasher so that it lights horizontally forwards or backwards in the direction of travel.

WARNING! Adjusting the micro 1000 is essential for road safety and is a constituent part of the type approval. An incorrectly adjusted flasher may not be visible to other drivers or pedestrians and so cause an accident.

CHANGING THE BULB

Should the micro 1000's bulb fail, do the following: Turn off the engine. Before changing the bulb, ensure the motorcycle is standing safely as a falling motorcycle could cause injury and damage to the motorcycle.

There is a notch on the domed side of the flasher housing into which you can put a small object such as a needle to get to the snap-in catch of the flasher lens. Push the catch spring towards the flasher lens with the needle. The lens is unlocked and can be removed. Next, remove the rubber seal and then the halogen bulb complete with its socket.

Hold the socket firmly and remove the bulb from it by turning it briefly anti-clockwise. Put the new H6W rated bulb into the socket. If possible do not touch the bulb glass with bare fingers but with a handkerchief as grease or fat on the glass can reduce the bulb's life drastically.

Now use light pressure to push the socket and bulb back into the housing, taking care not to pinch the wire. While pushing the socket in, pull gently on the wire from outside. Now replace the rubber seal. Take particular care that it is located correctly since incorrect location could lead to leaking.

Now place the rigid lug of the flasher lens into the notch of the housing. Keep the flasher lens at a slight angle while doing this. Now push the flasher lens into the main part of the housing until you can feel and hear the holding spring click. Check that the flasher is working properly and is correctly aligned.

There are a number of files you can download from our website at www.kellermann-online.com. There you will also find information on our extensive range of spare parts and accessories.

Should you have any suggestions or questions you are welcome to contact us by e-mail (info@kellermann-online.com) or by telephone (+49 (0)241 938080).