

# Installation Instructions

## SON Rear Light for Mudguard

The 6V-3W hub dynamo-powered SON rear light (K 920) is made for use with a 6V-2.4 W-LED-headlight or 6 Volt DC supply. It has standlight feature but not a built-in reflector. Please observe the legal regulations in your country!

The rear lights No. 69316, 69335, 69326, 69345 are designed for high mounting position on bicycles without carriers. The mounting position must be chosen in a way that the lighting direction (in line with the housing) is horizontal or slightly upwards. This is the case at approx. 23 ° to 25 ° behind the plumb line (see fig. 1).

Two versions are available for narrow profiles (ø 40 to 50 mm) and wide profiles (ø 50 to 60 mm). They are fixed with either a central bolt M4 plus washer (for metal mudguard that fits well) or a countersunk bolt plus shim (for plastic mudguards). The spacer transfers the tension force of the screw to a larger surface so that the rear light is locked against rotation. For a wider mudguard diameter slightly bend the shim, possibly in a vice. If necessary, use a thin rubbersheet as an interlayer between the rear light and the mudguard.

Drill the hole for the cable 9 mm to the left of the fixing hole in the center. (Between the 2 holes each 5 mm in diameter a space of 4 mm in width has to remain, see fig. 2 The shim can be used for marking or as a template.

Lead the connection cable through the cable bore and to the head light. Ideal are mudguards with a wire duct or a fold which accommodate the cable. At critical spots protect the cable with shrink tube or the like. As the cable is firmly soldered and potted into the rear light housing, it can not be replaced. Do not cut the cable when disassembling!

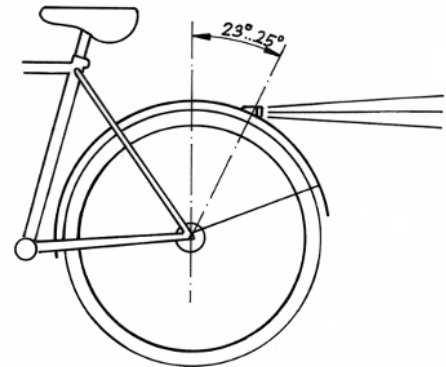


fig 1:

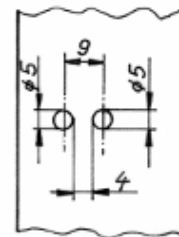


fig 2:

Edelux headlights are connected with a female spade connector and a ring terminal (see fig. 3). Headlights of other makes are often connected with 2 female spade connectors (see fig. 4). There is no ground connection on the housing so there is no need to observe polarity.

fig 3: Connection to the Edelux headlight


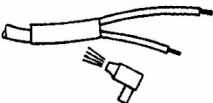
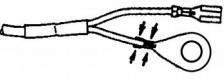
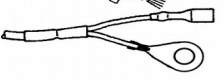

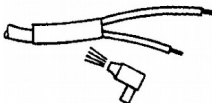
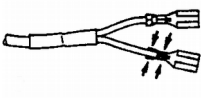
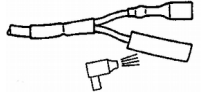
	<ul style="list-style-type: none"> <li>- Cut the cable to a suitable length.</li> <li>- Carefully strip back about 6 cm of sleeving from the cable.</li> <li>- Twist the underlying wires together.</li> </ul>
	<ul style="list-style-type: none"> <li>- Strip the inner conductor to about 5 mm long.</li> <li>- Heat the thin 32 mm piece of shrink tube with a low flame or a hot air gun onto the outer conductor. Cut the non-insulated end of conductor to 5 mm.</li> <li>- Shrink a fat piece of shrink tube onto the split.</li> </ul>
	<ul style="list-style-type: none"> <li>- Fit a small female spade connector using a crimp tool or pliers to the longer wire and a ring terminal to the shorter wire. Make sure that one pair of claws grips the insulation, the other pair of claws grips the conductor.</li> </ul>
	<ul style="list-style-type: none"> <li>- Shrink a thin short piece of shrink tube onto the small connector avoiding short circuiting the housing.</li> <li>- Lightly grease the cable shoe.</li> </ul>

fig 4: Connection to headlights of other makes of headlights

	<ul style="list-style-type: none"> <li>- Cut the cable to a suitable length.</li> <li>- Carefully strip back about 4 cm of sleeving from the cable.</li> <li>- Twist the underlying wires.</li> </ul>
	<ul style="list-style-type: none"> <li>- Strip the inner conductor to about 5 mm long.</li> <li>- Heat the thin 32 mm piece of shrink tube with a low flame or a hot air gun onto the outer conductor.</li> <li>- Shrink a fat piece of shrink tube onto the split.</li> </ul>
	<ul style="list-style-type: none"> <li>- Fit the plug using a crimp tool or pliers to secure both the insulation and the cables. The first pair of claws must grip the insulation (in case of doubt solder additionally).</li> </ul>
	<ul style="list-style-type: none"> <li>- Slide female spade connectors over the wire ends. The large pair of claws must grip the insulation.</li> <li>- Use crimp tool or pliers to crimp both pairs of claws.</li> </ul>