

SON hub dynamos are designed for long durability without maintenance. But in case of a defective SON: Only the importer or manufacturer may do service or repair inside the hub. However, often the reason for a fault lies not inside the hub, but in the way the SON was mounted or in other components of the lighting system. **Please check the following points before you send in a part**, or contact the distributor in your country! This way you save time and effort. Please also note the document „Service Headlights“.

Symptom	Please check	What to do?
Bearing play	Warning: the bearings cannot be adjusted! - Is there play more than 0,05 mm axial clearance and 0,02 mm radial clearance (i.e. does the rim move more than 0.2 mm sideways?)	A little play won't cause any problems. When there is more play: Send in wheel or hub to have bearings replaced.
Rough-running or adhesive or grinding sounds	- Is there a sliding of the rim brake or disc brake? - Switch off the headlight, strike the wheel when built in: does the wheel spin as long as it normally does?	If not: repair is needed, please send in wheel or hub
Has been rough-running after frost (frozen)		Repair is needed, please send in wheel or hub
Noise (rattling noise)	- Are there any vibrating parts on the bike? – vibrations may be reinforced by a SON hub dynamo. - Is the hub axle fastened correctly?	Apply a little grease on thread and screw-head and fasten skewer axle at 8 -10 Nm (see installation instructions). If that does not help please contact importer or manufacturer
Klicking sound at low speed (disappears at average speed)	- Is there a headlight Lumotec oval senso plus installed together with the SON? - You can hear that sound only at walking speed – switch at position „senso“ not at position „on“ nor at position „off“.	At position „senso“ at low speed currency is frequently switched on and off again. That causes a little sound within the dynamo which does no harm.
Connectors are loose	- Has anyone tried to adjust the bearings? (this is not possible) - has the hub been frozen?	Send in wheel or hub
No voltage at connectors	- Spin wheel and contact connectors with screw driver. Is there a spark? alternatively: contact connectors with bulb for headlight – but do not spin too fast.	When there is no spark / no glow in bulb: Send in wheel or hub
Headlight bulbs blow frequently	- Is the consumption of bulbs really too high? The rated lifetime of a halogen bulb is 80 -100 hours, fast riders need to calculate 30 to 50 hours. - Is the headlight used with 2.4 Watt bulb and no rear light connected? - Is the overvoltage protection within the headlight defective? See info leaflet „Service Headlights“	In most cases the use of a 3 Watt bulb helps
Bulb of rear light / LED rear light blows frequently	- Is the overvoltage protection within the headlight defective? - For rear lights with bulbs: Is the rear light exposed to heavy shocks?	- Replace headlight / send in headlight for check - Mount LED-type rear light
Slack joint	- Mostly the reason for it lies not within the SON but somewhere else in the outer circuit.	
Headlight does not illuminate	- Is the bulb working? - Disconnect rear light. Does the headlight work now? - Exchange connectors at the SON - Try a different headlight - Is there any voltage at the connectors (see above)?	If exchanging connectors helps one SON connector has mass contact. You may send in SON.
Rear light does not illuminate, headlight works	- Is the rear light defective? - Is the wiring defective? - In case of single wiring: Do headlight and rear light have earth connection? (SON itself has no earth connection!)	
Neither headlight nor rear light illuminate	- Disconnect rear light. Does the headlight work now? If so: - is the rear light defective? - is the cable that leads from headlight to rear light connected to the wrong pole? If not: - see „Headlight does not illuminate“	

Symptom	Please check:	What to do?
Headlight and / or rear light illuminate faintly	<ul style="list-style-type: none"> - Has the bulb of the headlight seasoned? (see below: „standlight of rear light does not work“) - Are the electronics of rear light / headlight defective? - if there is a standlight (in front or back): does the light become brighter after a few minutes? Standlight electronics need additional electrical power, especially when charging; Drop of brightness is normal. 	
Standlight of rear light does not work	<ul style="list-style-type: none"> - Has the bulb of the headlight seasoned? Adjoining windings of the filament may weld about the end of the life cycle of the bulb. This may cause a loss of voltage as heavy, that the capacitor of the standlight will not be charged any more. - Are the electronics of the standlight defective? 	<ul style="list-style-type: none"> - Replace bulb - Try new rear light

Guarantee

For SON and E6 with date of purchase 1 January 2004 or later we issue 5 years of guarantee (for older models 3 years). All other headlights and repairs are under warranty for 2 years. **Please send in a proof of purchase with repair orders during period of guarantee.** For goods sent in without proof of purchase we calculate guarantee periods from date of production onwards.

Processing of SON hub repairs

Old model (with black centre part):

Repairs on SON hub can only be done when spokes are disassembled (except for defective connections with no mechanical problems inside the hub). Therefore please send in those models for repairs disassembled of spokes. In case of doubt please give the distributor in your country a call or contact us.

New model (year of manufacture 2000 or later)

The new model does not need to be disassembled of spokes for repair.

Shipment: Please add a description of the defect.

Please send us the SON hub disassembled of spokes or front wheel (attention: parcel post may charge you for bulky goods). Please send parcel postage paid. We do not accept freepost parcels. In case of guarantee we pay for shipment back to you. For all other repairs we charge for shipment, 5 € within Germany and real costs for shipment abroad.

Duration: The repair normally takes a week plus time for shipment.

Offer of an update: SON hub old model in exchange for SON hub new model

If a customer wishes so we replace a SON old model by a SON new model in case of a repair. We offer a credit note for the return of the old model.

Repair price list

	MRSP in €
SON - repair models before 2000 (building in of stator incl. pressure equalization system, replacement of bearings) send in Son hub disassembled of spokes, please.	40,-
SON - repair of models SON28 and SON20 since 2000 (Mounting of stator with pressure equalization system, replacement of bearings)	
Repair of connectors	15,-
Replacement of bearings (incl. material, if necessary repair of connectors)	20,-
SON check (mechanical and electrical check)	15,-
Disassembly of spokes	8,-

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