

# INSTALLATION & USER MANUAL

**SEARCHLIGHTS HALOGEN SL 40 R5** 





## **Technical Manual for Halogen searchlight**

- □ SL 40 R5 SH260 250W
- □ SL 40 R5 SH310 1000W
- □ SL 40 R5 SH470 2000W
  - □ 1 x 24 VDC
  - □ 1 x 115 VAC 50/60 Hz
  - □ 1 x 230 VAC 50/60 Hz

This manual refers to product:					
Serial no.:					
Controlled by:					
Date:					
Date:					

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## Introduction:

For more than 90 years,

Norselight have designed and manufactured lighting products for marine vessels.

Through ongoing customer focused product development, Norselight continue to deliver quality products as demanded both at sea and on the rugged coastlines of Norway.

This commitment to quality and expertise provides the foundation for Norselight to be possibly the world's leading supplier of maritime lighting.

However, in order to stay in front, Norselight would very much appreciate all comments that you may have regarding our quality products or services.

#### **Customer Service:**

The Customer Service department of **GLAMOX Production GmbH & Co. KG** will be pleased to help you when ordering spare parts, for maintenance and repair work as well as in case of problems and questions.

Manufacturer:

**GLAMOX Production GmbH & Co. KG** 

Glasower Weg 5 17166 Teterow Germany Service contact:

**GLAMOX Marine und Offshore GmbH** 

Tel.: +49 421 48 93-0 E-Mail: <u>info@aquasignal.de</u> Internet: <u>www.glamox.com/gmo</u>

We would also like to use this opportunity to thank you for choosing Norselight.

## 1.0 General description:

#### Searchlight

The SL40 R5 searchlights SH 260, SH 310 and SH 470 are made from seawater resistant aluminium, welded and finished with white powder coat.

- The forks are made of stainless steel.
- The lamp housing contains one lamp, glass-reflector, hardened frontglass, and a focus-motor for adjustment of the light beam.
- The motor housing contains a complete gear with motors for horizontal and vertical movement, a thermostat driven heating element and the electronic control system.

#### Note:

These searchlights are intended exclusively for use on watercraft / ships.

They are therefore subject to special regulations which differ significantly from the relevant EU regulations and standards.

For use in Inland applications, additional EU directives may apply, which must then be observed for compliance.

#### **Main Operation Panel**

it contains the following functions:

- Lamp On/Off
- Joystick for horizontal and vertical movement
- Buttons for speed adjustment, horizontal and vertical movement.
- Focus +/- (light beam adjustment)
- Designed for console or bulkhead mounting





## 1.1 Options

- Other RAL colours
- Upside down mounting
  Pedestal standard and custom sizes
  Morse shutter
- Special cable glands on request

## 2.0 Technical data and dimensions

## **General specifications searchlight unit:**

Technical spec. for all SH models			
IP Classification	56		
Maximum ambient temperature	50 °C		
Minimum ambient temperature	-40 °C		
Horizontal movement	360°		
Vertical movement	+-27,5°		
Colour	RAL9016		
Forks	Stainless steel		

Article no.	Model	Watt	Voltage
500105941	500105941 SL 40 R5 SH260 24VDC 250W CF		24 VDC
500106940	SL 40 R5 SH310 230V 1000W C	1000	230 VAC 50/60 Hz
500126940	SL 40 R5 SH310 115V 1000W C	1000	115 VAC 50/60Hz
500107240	SL 40 R5 SH470 230V 2000W C	2000	230 VAC 50/60 Hz
500127240	SL 40 R5 SH470 115V 2000W C	2000	115 VAC 50/60Hz
500107241	SL 40 R5 SH470 230V 2000W CF	2000	230 VAC 50/60 Hz
500127241	SL 40 R5 SH470 115V 2000W CF	2000	115 VAC 50/60 Hz

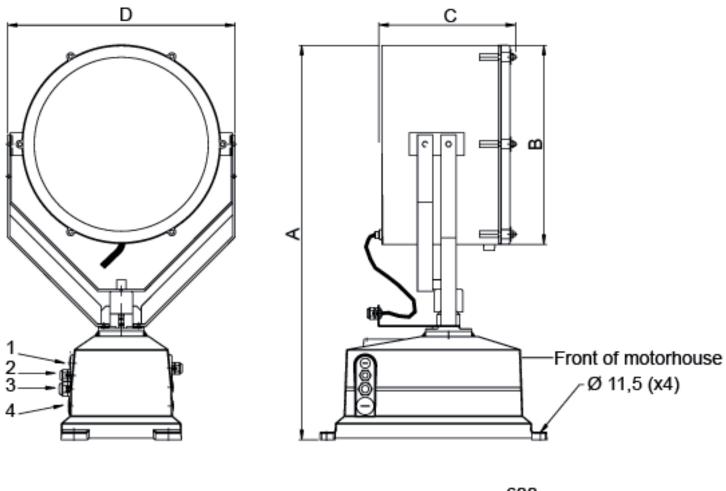
Technical spec.main panel				
IP Classification	65 (front)			
Maximum ambient temperature	50 °C			
Minimum ambient temperature	-20 °C			
Connection terminal	12x max 1,5mm2			
Dimensions	96x96x45			
Power consumption	0			



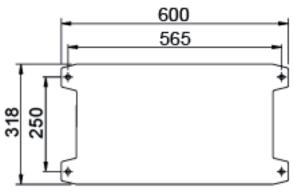


## 2.1 Overall searchlight dimensions & electrical cable dimensions

#### SH 310-SH470:



DATA TYPE	А	В	С	D
SH260 R5	835	330	260	423
SH 310 R5	890	380	330	470
SH 470 R5	1040	525	360	615

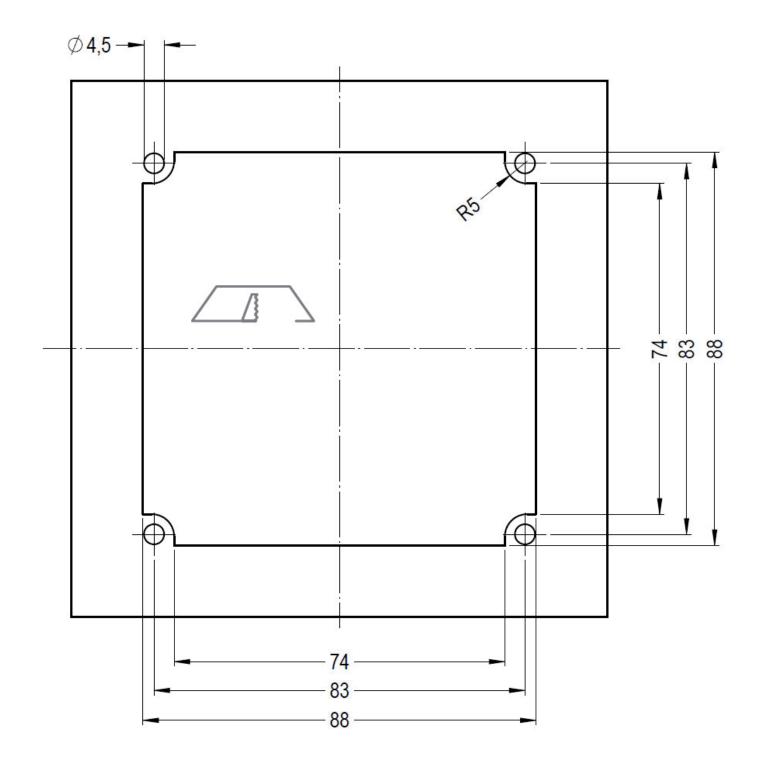


Common for all R5 models

Entry	1	2	3	4
Cable gland	M20	M20	M25	M32
Cable Ø min/max	0	6-13mm	9-17mm	0
Cable entry	Blind cover	Panel	Mains	Blind cover

## 2.2 Cut/out main/slave panel

Hole dimensions for installing main panel:





### 3.0 Electric installation

Note: Disconnect the power when working on the equipment!

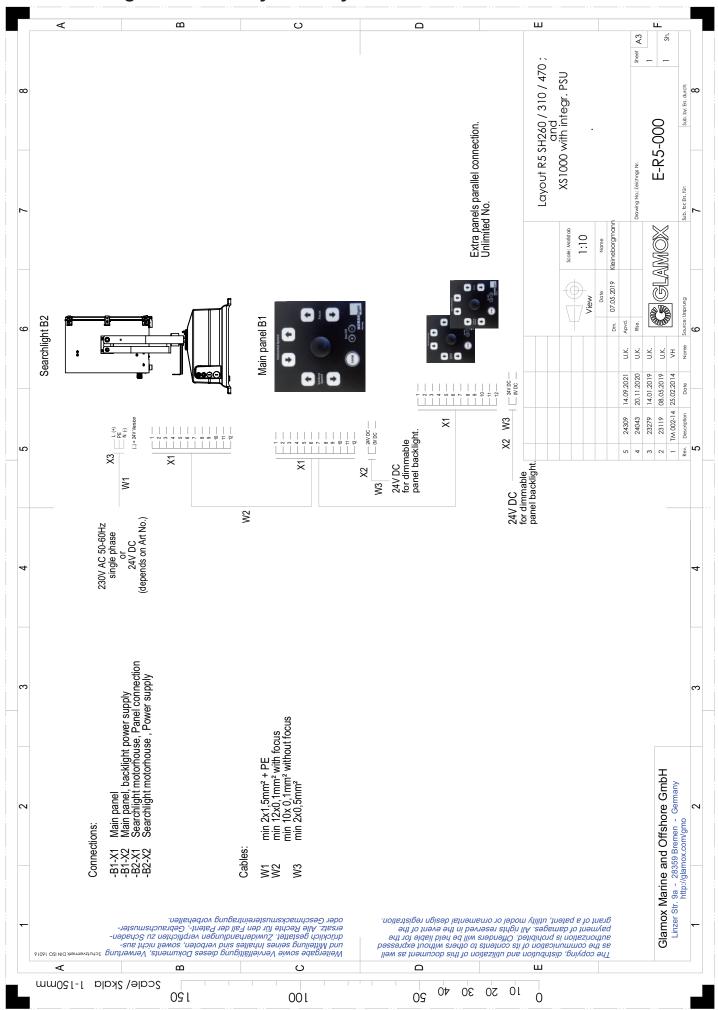


All searchlight system equipment MUST BE connected to ground/earth!

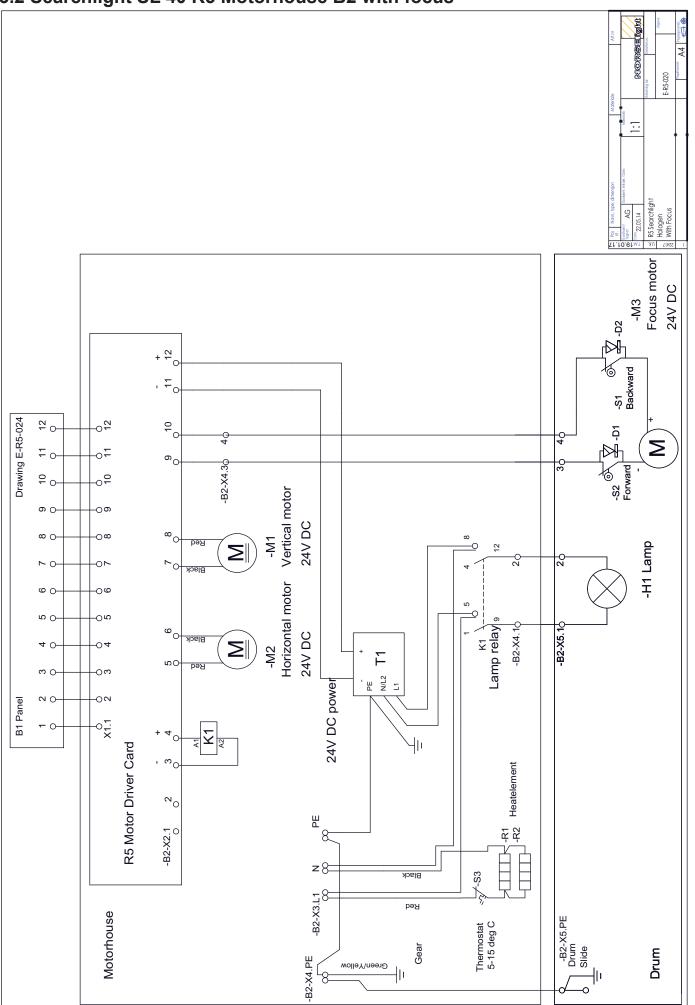
The main operation panel requires 24V DC connected in series with a 3A slow fuse to the positive (+) conductor.

Depending on the searchlight model it requires 24V DC, 115V AC or 230V AC.

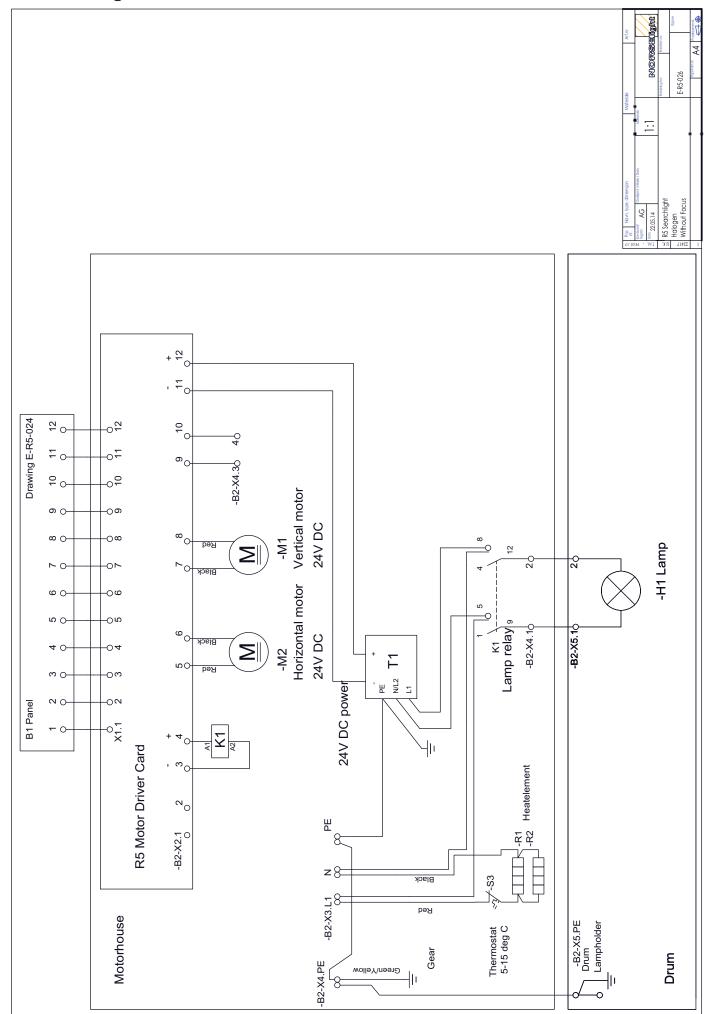
### 3.1 Searchlight SL 40 R5 System Layout



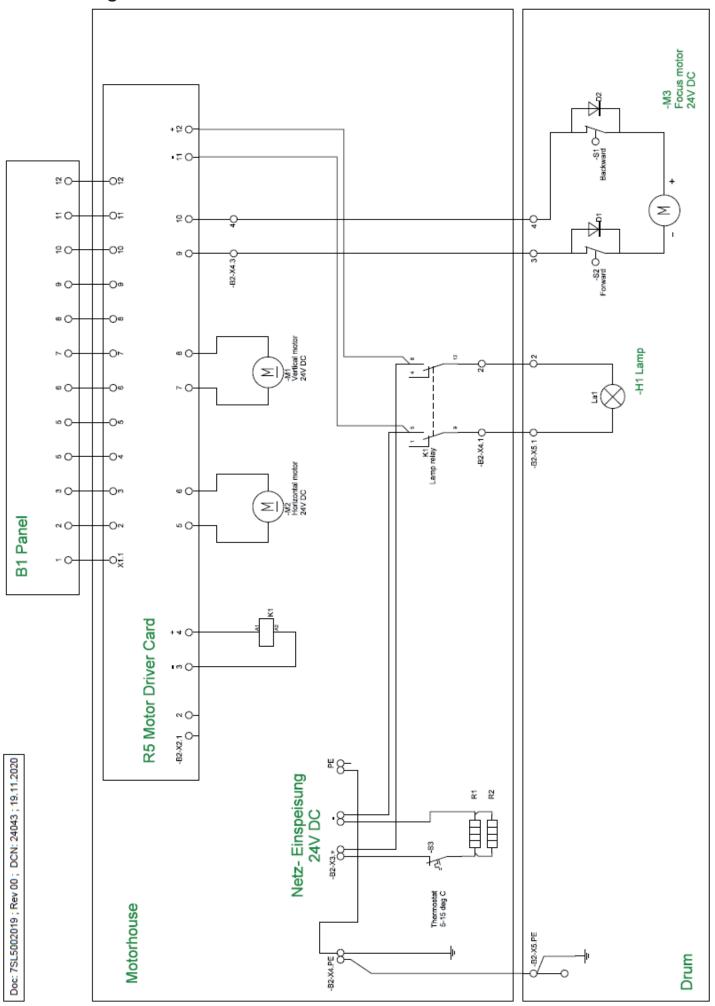
## 3.2 Searchlight SL 40 R5 Motorhouse B2 with focus



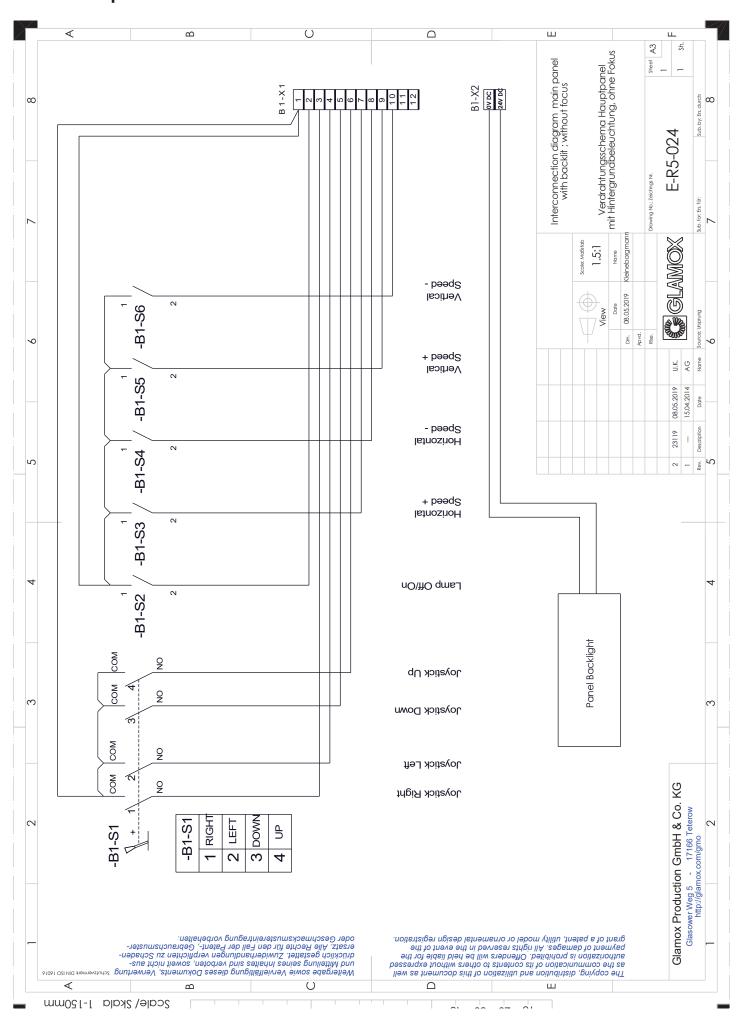
## 3.3 Searchlight without focus

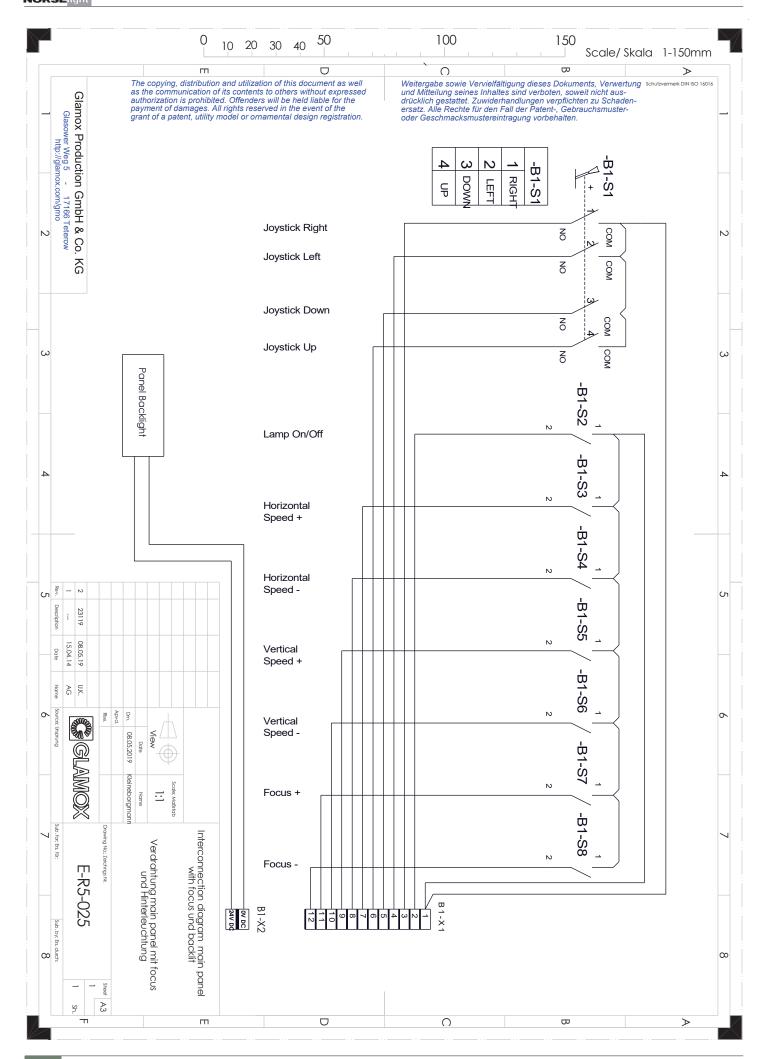


## 3.4 Searchlight 24V DC with focus



#### 3.5 Main panel with focus





#### 4.0 Maintenance

The guarantee is only valid against production faults. It do not cover damage caused by transportation, damage due to disregard of this technical Manual or adverse external effects. Guarantee regarding the bulb, please look at the guarantee papers following the bulb. This must be filled in and returned to **GLAMOX Production GmbH & Co. KG**.



Before installation, maintenance and repair work (also cleaning), disconnect searchlight from power supply and secure against reactivation by third parties. Servicing and maintenance work may only be carried out by qualified and electrically skilled personnel.



Use safety equipment, face cover and gloves all times! Do not clean the searchlight with the high pressure!

General Searchlight Maintenace

Recommended intervals not exceeding:

#### 6 months:

Visual inspection of gasket and glands

Control of all screws and nut connections.

Check the level of grease and refill when needed in glider for lamp holder.

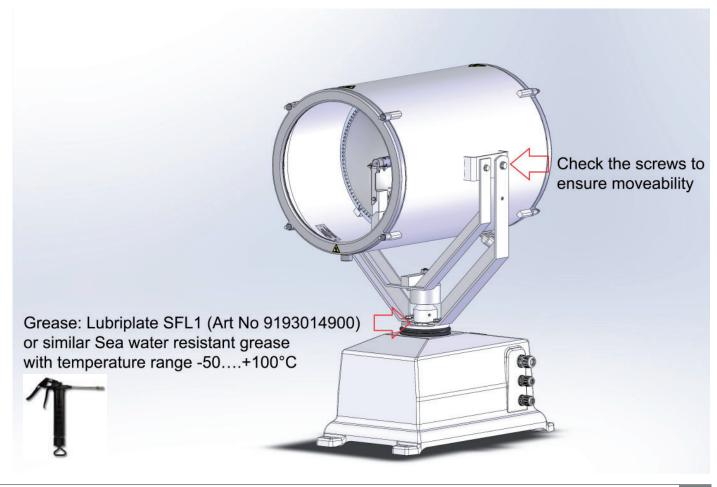
Reflector and front glass to be cleaned with a soft cloth and ethanol or simular.

#### 1 year:

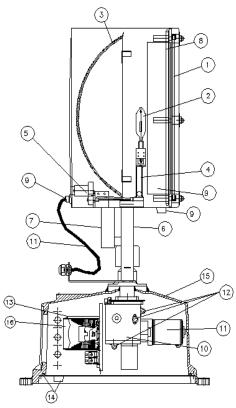
Fill up the grease-niple on the top of the motorhus with a grease-gun.

#### 3 year:

Tighten all terminal strips in the searchlight junction box.



## **4.1 Spare Parts List**



Pos	Spare KIT	SH260 CF	SH310 C	SH470 C	SH470 CF
1	Front ring complete	1009174	1009175	10	09149
2	Lamp 24V 250W	1009206		•	
	Lamp 115V 1000W		1009310		N/A
	Lamp 230V 1000W		1009203		N/A
	Lamp 115V 2000W		N/A	10	09311
	Lamp 230V 2000W		N/A	10	09202
3	Reflector complete	1009176	1009177	10	09108
4	Lamp Holder Complete 24V / 250W	on request			
	Lamp Holder Complete 230V/ 1000W		1009270		N/A
	Lamp Holder Complete without focus 230V / 2000W		N/A	1009147	N/A
	Lamp Holder Complete with focus 230V / 2000W				on request
5	Focus unit Complete	on request	N/A		
6	Forks	1009316	2008161	1009313	
7	Manouver Fork	1009379	2008160	1009381	
8	Seal KIT drum	1009274	1009275	1009277	
9	Anti dazzling screen complete	1009132	1009132	1009133	
10	Gear complete	on request	1009679		
11	Motor Hor / Vert	1009224	1009224		
12	Heat element 24V	1009431			
	Heat element 230V		1009433		
	Heat element 115V		1009432		
13	Transistor-module		1009680		
14	Seal KIT Motor house		1009375		
15	Motorhouse complete	on request	1009681		
16	Power supply motorhouse 115V / 230V	N/A	1009628		

#### 4.2 Lamp replacement



Warning: Risk of electric shock

Turn off the power supply before changing the lamp!

#### Open the frontglass:

- SH260 and SH310 model, pull the lamp up, replace in reverse order
- SH470 model, open the spring on the lampholder, pull the lamp up, replace in reverse order

#### Safety

The lamp is hot, wait with change until it has cooled down.

#### 4.3 Troubleshooting

Searchlight dont move on horizontal or vertical: Cables to the motors can be switched for testing. If the problem remains, change the gear. If the problem moves, change the transistor module

The light does not turn on.

Change the lamp

Check that the relay for the lamp turn On. (green LED indicator inside the motorhouse) If the green LED is On change the lamp.

If the green does not turn On when pushing the lamp button on the panel.

Check the indicator on the Motor Driver Card. If it is on change the lamp.

If it is not On check the wiring between the panel and searchlight.

Focus does not work:
Check that limitswitches is working

## 5.0 Warranty

The warranty does not cover damage due to disregard of specified operating parameters. Claimhandling: Contact your sales-office, see page 4.

The lamp must be sent back in its original box together with the guarantee card.

The Supplier shall in a period of two (2) year following the date on which the risk in the Products passed to the Purchaser, be liable for defects in the delivered Products.

The Supplier's liability for defects is limited to defects that the Purchaser can prove existed at the date the risk in the Products passed to the Purchaser.

The Purchaser shall notify the Supplier in writing of any defects in the Products that could have been detected upon inspection of the Products at receipt, immediately, and no later than 30 days following the receipt. Should the Purchaser fail to provide the Supplier with such notification, the Supplier shall be discharged of any liability for defects in the Products that reasonably could have been detected by such inspection at receipt.

The Supplier shall not be liable for any defects in the Products caused by incorrect or negligent use or storing of the Products, faulty assembly and/or faulty installation, including defects resulting from faulty modification work or repair of the Products initiated by the Purchaser or third parties without the prior written approval of the Supplier. Further, the Supplier shall not be liable for defects in the Products caused by natural wear and tear.

The Supplier shall, at its own choice, either repair or replace the defective Products.

The Supplier shall be given reasonable time and opportunity for such repair or replacement and any denial of the same by the Purchaser shall discharge the Supplier from his liability.

In so far as the Purchaser's notification of defects proves justified the Supplier will cover necessary costs related to the repair work or replacement of products leading to a restoration of the defective Products.

The Purchaser shall not be entitled to return the Products to the Supplier unless the Supplier has provided his prior written approval thereto.

If the repair or replacement of defective Products is unsuccessful or can not be effected within agreed deadlines, the Purchaser shall be entitled to cancel the contract whereby the Supplier shall credit the Purchaser for the payments that have already been made for the Products (if any).