

# Technical Bulletin

February 2019

## ACG series screw pump: instructions to secure a long lifetime

Auramarine Lifecycle Services has noticed an increased number of ball bearing issues related to screw type ACG series fuel oil pump. The **ball bearing** inside the pump is a part subject to wear and needs regular maintenance. We want to emphasize the **importance of maintenance** as described in this document.

The recommended maintenance interval depends on the pump's size, rotation speed, mounting position and certain operation conditions such as ambient temperature and characteristics of the pumped media.

### Indications of a present or progressive ball bearing defect

Having the possibility to compare identical pumps in operation (running vs. standby pump) may help to identify early signs of a ball bearing defect. The symptoms are abnormal vibration or abnormal noise, detected without or with stethoscope.

### Working procedures

In all service and maintenance, please follow the component-specific working procedures and instructions, as well as the specific instructions for disassembly and reassembly. The instructions can be found in the Auramarine fuel supply system Instruction Manual, Section Component Manuals, Position prefix D00X. For further instructions, please contact us.

### Spare part kits

Spare part kits are available as Minor and Major kits, depending on the required scope of service.

To find out the right scope for your needs, please contact [after.sales@auramarine.com](mailto:after.sales@auramarine.com).

### How to identify an ACG series pump?



See the name plate of the pump.

It states:

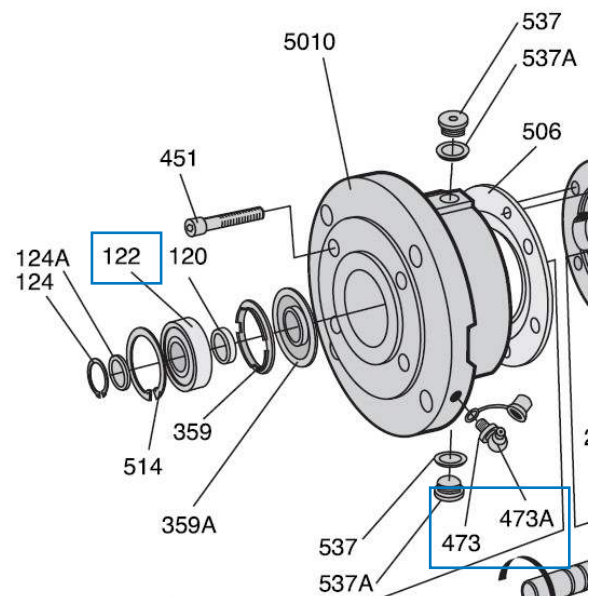
Type: **ACG**

Rotor diameter: **045/052/060/070**

Part no 122: ball bearing

Part no 473: grease nipple

Part no 473A: grease nipple cover



Maintenance intervals for ball bearing of the rotor

1. Rules for manual lubrication of the ball bearing

- timing: after one hour from initial start-up (in case of spare part replacement)
- regular lubrication according to table below
- do not exceed recommended amount of grease

2. Rules for ball bearing replacement frequency

- during routine overhaul; overhaul interval must not exceed 3 years
- whenever the ball bearing is removed from the assembly, e.g. for shaft seal replacement

Temp max [°C]	Pump sizes 045 and 052						Pump sizes 060 and 070					
	Speed, r/min						Speed, r/min					
	3500*	2900	1750	1450	1150	950	3500*	2900	1750	1450	1150	950
155	325	375	525	575	625	750	300	325	475	500	575	650

\*) at rotation speed > 3 500 r/min special instructions are given by IMO AB.

Table 1: Lubrication intervals in operation hours

Lubrication grease specification in temperature range to 155°C

Mobilith SHC 460 or similar that meets or exceeds the requirements of:

Standard: DIN 51825: (2004-06)  
Approval: KPHC 1-2N-40

Pump size	045	052	060	070
Grease amount (g)	4	6	7	9

For recommended grease quantity, please see table 2.

Table 2: Quantity of applied grease per pump size

Lifecycle services support

Please contact Auramarine Lifecycle Services at [after.sales@auramarine.com](mailto:after.sales@auramarine.com) for technical support, spare part availability and recommendations.

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