

# YANMAR SERVICE NEWS

Title	Cleaning Agent for Turbine Wheel and Casing of RH..3 Series Turbocharger	No. : 02-2-G-10-025-L Date: Dec.2002
Eng. Model	6N18, 6/8N21, DY25&26, 6N250&260	Use Marine Main & Aux. and Industrial
		Eng. Nos.

The hard carbon deposited on the turbine wheel and casing must be cleaned completely whenever the turbocharger was disassembled for servicing for not causing the turbine wheel to be imbalanced and ensuring a chip clearance between the casing and turbine wheel. It is hard to remove the hard carbon completely by the use of a common cleaning agent, (carbon remover), and it may sometimes corrode the metal parts. For the easy removal of the hard carbon, we have recently developed the following cleaning agent for your use.

## 1. Cleaning Agent: CLEPEARL YF-2 Features

- CLEPEARL YF-2 is a water-soluble liquid cleaning agent.
- The agent is odorless, has no inflammability and does not corrode metals.
- The agent can suitably be used to clean the plaster scale besides the carbon deposit.
- The agent is an alkalescent agent, (pH: Agent A =8.0~10.4; Agent B=7.9~9.9).

### Cautions for Handling:

Wear protection mask, glasses, long-sleeve work clothing, rubber gloves, etc. during work for not inhaling the gas or not causing the agent to touch your eyes and skin.

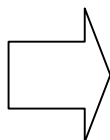
## 2. Cleaning Method

CLEPEARL YF-2 has two agents, A and B.

- 1) Fill fresh water in a container, (water quality equivalent to tap water). Fresh water temperature must be below 80 . (Higher temperatures than this level cause the agent not effective.)
- 2) Pour agents A and B in the container to make 20 vol.% solution respectively. (Refer to Table 1 below.)
- 3) Provide masking to the turbine rotor 's shaft so that it does not be soaked. Soak the item together with the casing in the solution of the container.
- 4) With soaking the parts in the solution, raise the solution temperature to 60~70 once and keep soaking the parts for more than 4 hours at that temperature. (The temperature needs not be kept at that level if it is not possible.) It is better to stir the solution while soaking the parts.
- 5) Lightly brush the parts with a wire brush, blow air to remove water and wipe water off with a waste cloth.

**Table 1. Quantity to be Used. (5kg/Can for Agents A& B Respectively)**

Container capacity(L)	Fresh water (L)	Agent A (Can)	Agent B (Can)	Applicable T/C Models
2 5	1 5	1 (5kg)	1 (5kg)	RH133、RH143
5 0	3 0	2 (10kg)	2 (10kg)	RH163、RH183・RH203



Re-use of agents once used, although dependent on the extent of contamination, is not recommended in principle.

## 3 . Others

This cleaning agent can be used for cleaning carbon on other parts besides the RH..3 Series Turbochargers. For inquiries and ordering, please contact below:

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