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Subject : Procedure for setting and decreasing of cylinder lubricating oil feed rate after renewing of a cylinder liner and piston rings	Application	UEC Diesel Engine
	Type	All UEC
	No.	USI-10009E
If necessary		

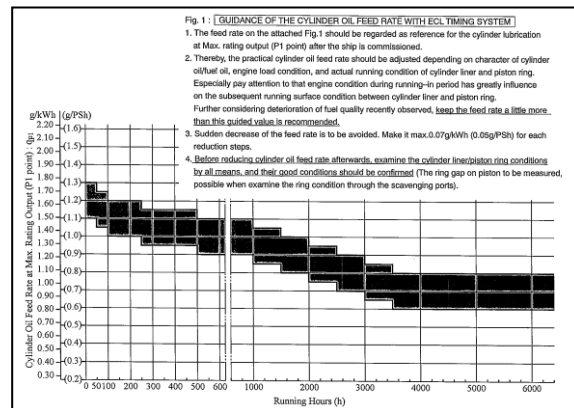
Regarding to the guidance for the cylinder lubricating oil feed rate of the time of replacement of a cylinder liner and piston rings of main engine in service, it is informed the latest information of instruction book. This service information is updated of the instruction book on board. You are kindly requested to replace the instruction book.

1. Charged part of the instruction book

It is indicated that the guidance of the cylinder lubricating oil feed rate in the instruction book.

(For reference)

Instruction book (operating instruction)
Group 053 / Item 02 : Guidance of the
cylinder lubricating oil feed rate



2. Guidance of the cylinder lubricating oil feed rate

(1) The time of the replacing both of cylinder liner and piston rings

Conventional, SIP, ECL-T and ECL-SIP lubrication system ;

⇒ It shall be increased the feed rate to the amount of the running hour 0 (h) indicated on

Fig.1, "Guidance of the cylinder oil feed rate" in Group053/Item02 of Instruction book.

After that, it shall be decreased according to the guidance.

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Plan record	Newly issued 13th Dec. 2017 MSI-1270 (23rd May 2013)	Approved	<i>T. Yamamoto</i>	SERVICE ENGINEERING DEPARTMENT
		Checked	<i>N. Nakashima</i>	ENGINEERING DEPARTMENT
		Designed	<i>T. Fujimoto</i>	DATE OF ISSUE :13th Dec. 2017

(2) The time of the replacing only piston rings (Additional item)

Conventional lubrication system ;

⇒ The present feed rate +30% (Max. 2.3g/kWh (1.7g/PSh))

The decreasing of the feed rate with max. 0.07g/kWh (0.05g/PSh) every 200~300 hours can be carried out till reach the same level of the feed rate set before replacing, and after that it can be carried out according to the instruction book Group053/Item02.

SIP、ECL-T、ECL-SIP lubrication system ;

⇒ The present feed rate+0.27g/kWh (0.2g/PSh) (Max. 1.7g/kWh (1.3g/PSh))

The decreasing of the feed rate with max. 0.07g/kWh (0.05g/PSh) every 200~300 hours can be carried out till reach the same level of the feed rate set before replacing, and after that it can be carried out according to the instruction book Group053/Item02.

(Caution)

- ① Cylinder lubricating oil feed rate guidance for the A-ECL lubrication system is excepted on this service information.
- ② Before decreasing the cylinder lubricating oil feed rate, it shall be confirmed the condition of cylinder liner and piston rings by all means, and it shall be carried out the decreasing when it is good condition only.
- ③ It shall be referd to the instruction book Group025/Item03 attached on the next page for the increasing procedure of the engine speed after replacing the cylinder liner and piston rings.

UEC

 Procedure for Increasing Speed
after Renewing Piston Ring and Cylinder Liner

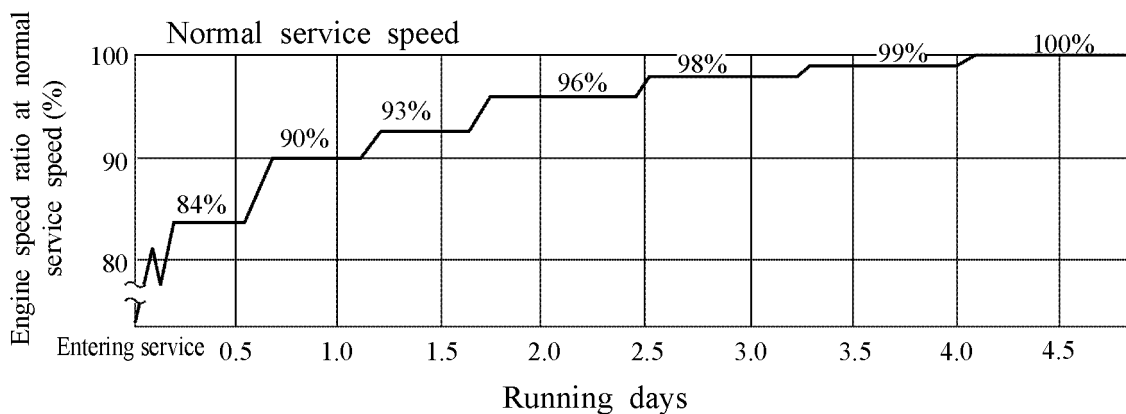
Group 025

Item 03

When an engine is run after renewing the piston ring or the cylinder liner, a running-in period must be given. Referring to the following procedure for increasing speed, increase engine speed step by step. In addition, cylinder oil feed amount of the cylinder in question must be increased.

Procedure for increasing speed :

The procedure is in the same way as a ship is entering maiden voyage (refer to 025-01). Keep paying attention to heat generation, noise, pressure, and temperature of engine various parts while the engine speed is on the increase.



CAUTION

1. This chart will serve as reference for a procedure for increasing speed after renewing the piston ring or the cylinder liner. Therefore, in case of an actual voyage, a decision is to be made in accordance with the conditions of various parts of the engine.
2. The range of critical speed due to torsional vibration shall be passed through as soon as possible.

Procedure for cylinder lubrication :

1. Cylinder oil feed rate of the cylinder in question shall be increased more than before renewing.
2. If cylinder liner and piston ring were replaced, increase to amount of running hour 0 (h) of Fig.1. Guidance of the cylinder oil feed rate of 053-02, and then decrease according to the guidance.
3. If piston ring alone were replaced, increase for +0.2g/PSh more than cylinder oil injection rate before replacement of piston ring (Max. 1.3g/PSh).
After running for 200~300 hours, examine the conditions of cylinder liner and piston ring, when the results are acceptable, the feed rate can be reduced down [max. approx. 0.07 g/kWh (0.05 g/PSh) for a step] to normal value step by step.

NOTE

It is recommended that diesel oil or comparative good quality heavy fuel oil is used for fuel oil.