



MITSUBISHI HEAVY INDUSTRIES MARINE MACHINERY & ENGINE CO., LTD.

MARINE ENGINE DIVISION, DESIGNING AND SERVICE ENGINEERING DEPARTMENT

SERVICE ENGINEERING SECTION

1-1, WADASAKI-CHO 1-CHOME, HYOGO-KU, KOBE 652-8585, JAPAN

TEL. +81-78-672-4083 (direct), e-mail: dsales@mhi-mme.com (parts & engineer order), dserv-eng@mhi-mme.com (technical inquiry)

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Confidential

Subject : Abolition of cylinder oil feed rate at P1 point	Application	Mitsubishi-UEC Diesel Engine
	Type	All UEC
	No.	MSI-1554
General		

Up to this day, on the instruction book of UEC engine, cylinder oil feed rate is shown as the value of P1 rating engine (P1 converted cylinder oil feed rate (q_{P1})). Therefore on actual setting of each engine, the cylinder oil feed rate of instruction book (P1 converted cylinder oil feed rate) is calculated to the feed rate at MCR of each engine (MCR feed rate (q_{A100})). Today, the concept of P1 conversion cylinder oil feed rate is abrogated because of its complexity.

According to the above, hereafter the concept that the feed rate of instruction book is dealt with equal to MCR feed rate ($q_{P1} = q_{A100}$).

But, it does not mean that the feed rate value set on your engine currently under in service is changed to different value with this service information.

Please refer to related service information (MSI-1555) about the guidance of cylinder oil feed rate additionally.

1. The way to know the cylinder oil feed rate setting value.

1) The previous way

- Form the guidance of cylinder oil feed rate on the instruction book, read the feed rate setting value q_{P1} (P1 converted cylinder oil feed rate).
- The ratio of shaft speed of P1 rating engine: $Ne(P1)$ and shaft speed of the engine now used: $Ne(CMCR)$ is multiplied with q_{P1} . The value is the actual feed rate setting value (= MCR feed rate (q_{A100})).

$$q_{A100} \text{ (setting value)} = q_{P1} \times \frac{Ne(P1)}{Ne(CMCR)}$$

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		Checked	<i>T. Nasu</i>	SERVICE ENGINEERING SECTION
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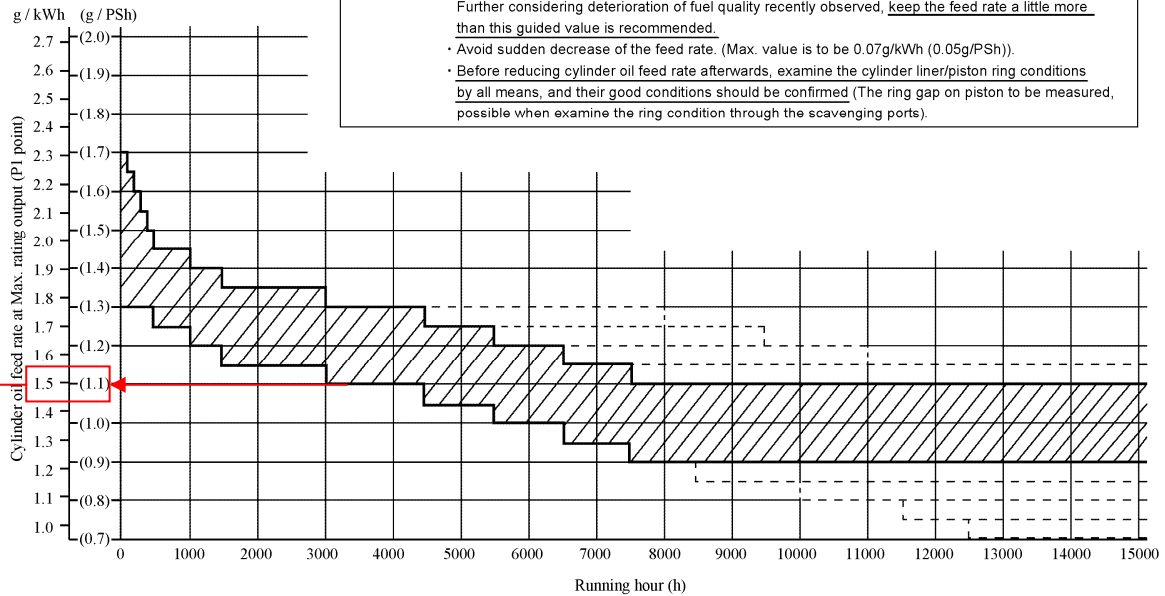
2) The way from hereafter

- Form the guidance of cylinder oil feed rate on the instruction book, read the feed rate setting value q_{P1} (P1 converted cylinder oil feed rate).

- Deal with the above value equal to MCR feed rate and set the lubricator

(Please collect the vertical axis of the guidance of cylinder oil feed rate graph as q_{P1} to q_{A100}).

An example of the guidance



CAUTION

! Thereby, the practical cylinder oil feed rate should be adjusted depending on character of cylinder oil/fuel oil, engine load condition, and actual running condition of cylinder liner and piston ring. Especially pay attention to that engine condition during running-in period has greatly influence on the subsequent running surface condition between cylinder liner and piston ring. Further considering deterioration of fuel quality recently observed, keep the feed rate a little more than this guided value is recommended.

- Avoid sudden decrease of the feed rate. (Max. value is to be 0.07g/kWh (0.05g/PSH)).
- Before reducing cylinder oil feed rate afterwards, examine the cylinder liner/piston ring conditions by all means, and their good conditions should be confirmed (The ring gap on piston to be measured, possible when examine the ring condition through the scavenging ports).

*: About A-ECL ECL-T system, please set this value from ECL operation panel.

Caution



- Cylinder oil feed rate should be decided according to the condition of piston ring and cylinder liner, therefore the feed rate does not have to be changed drastically according to this service information.

- Inspect piston ring and cylinder liner conditions through scavenging ports of all cylinders and after confirming their good conditions, reduce cylinder oil feed rate gradually.

Avoid sudden decrease of the oil feed rate at a time.

[Reduction width]

- For conventional system、SIP、ECL-T system :

Maximum 0.07g/kWh

- For A-ECL system:

1.3 g/kWh or more :Max 0.10 – 0.15 g/kWh

Less than 1.3g/kWh :Max 0.05 – 0.10 g/kWh