

# SERVICE BULLETIN

**DESCRIPTION**

SERVICE BULLETIN CODE  
**3 2018 0017**

**SUBJECT**

USE OF PARAFFIN HYDROCARBON FUEL (EUROPE EN15940 STANDARD)

**OUTLINE**

\*This Service Bulletin is to inform you that the technical specification of paraffin hydrocarbon fuels such as GTL, CTL, BTL, HVO, etc. is mandated by the Europe EN15940 standard. In Europe, these fuels are being used more and more frequently in the general market. Thus, you are asked to refer to this Service Bulletin concerning their use/non-use on Hitachi machines, and the cautionary points.  
\*GTL (Gas to Liquid), CTL (Coal to Liquid), BTL (Biomass to Liquid), HVO (Hydrotreated Vegetable Oil) ... light diesel substitute

Refer to page 3.

- \* Thoroughly read the safety section in the service manual before starting the work to ensure safe operation. Welding work, if any, should only be done by qualified welders.
- \* After replacing the main hydraulic equipment or engine or after post-assembling the aforementioned as an option, be sure to change and register the post-assembled device serial number on Global e-Service (MMR, HR, MME, G-Claim).

**APPLICABLE MODELS / SERVICE BULLETIN NO. FOR EACH MODEL**

Machine Model(s): ZX110 ~ ZX870 series (all), ZX130W ~ ZX360W series (all)  
Machine Serial Nos.: ZX110 ~ ZX870 series, ZX130W ~ ZX360W series machines that are mounted with ISUZU engine, DEUTZ engine

**STD. LABOR HOURS**

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**EXPENSES AND THE TIME TO BE CHARGED**

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**PARTS**

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DESCRIPTION

Refer to the following page(s).

CHKD		
APPD		

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**DESCRIPTION****1 Paraffin hydrocarbon fuel**

Paraffin hydrocarbon fuels such as GTL (Gas to Liquid), CTL (Coal to Liquid), BTL (Biomass to Liquid), HVO (Hydrotreated Vegetable Oil), etc. are beginning to disseminate the European market. As substitute of light fuels, these fuels are produced by converting natural gas, carbon and other such raw material to fuel through hydrogenation treatment.

In comparison to diesel fuels, these paraffin hydrocarbon fuels have the following characteristics.

- Do not contain other elements such as sulfur.
- Consist of nearly straight chain hydrocarbon only.

The technical fuel-specification is mandated by the EN15940 standard.

EN15940 is only slightly different from EN590, which is mandated by the diesel fuel standard.

- Cetane number is high.
- Density is slightly lower.

Otherwise, the specifications are almost the same.

**2 Cautionary points for the use of paraffin hydrocarbon fuels**

These paraffin hydrocarbon fuels that are currently being sold in the European market can be used by the engine manufacturers with whom Hitachi has an agreement as stated in 2-1 below.

Other than dynamic characteristics and fuel consumption characteristics, the fuels that meet the EN15940 standard have the same product guarantee as normal light fuels.

(As the density is lower than that of EN590 diesel fuels, the dynamic characteristic and fuel consumption might also be lower.)

**2-1 Engine manufacturers that can be used (as of January 2018)**

ISUZU Motors, DEUTZ

**2-2 Modifications in the event of failure occurrence**

If a fuel-related failure occurs even when a fuel that meets the property standard is used, the user might be asked to take the following confirmation measures. Thus, you are asked to seek the approval of the user in advance.

- ① Certification that a fuel that meets the properties standard was being used
- ② Collection of faulty parts and used fuel