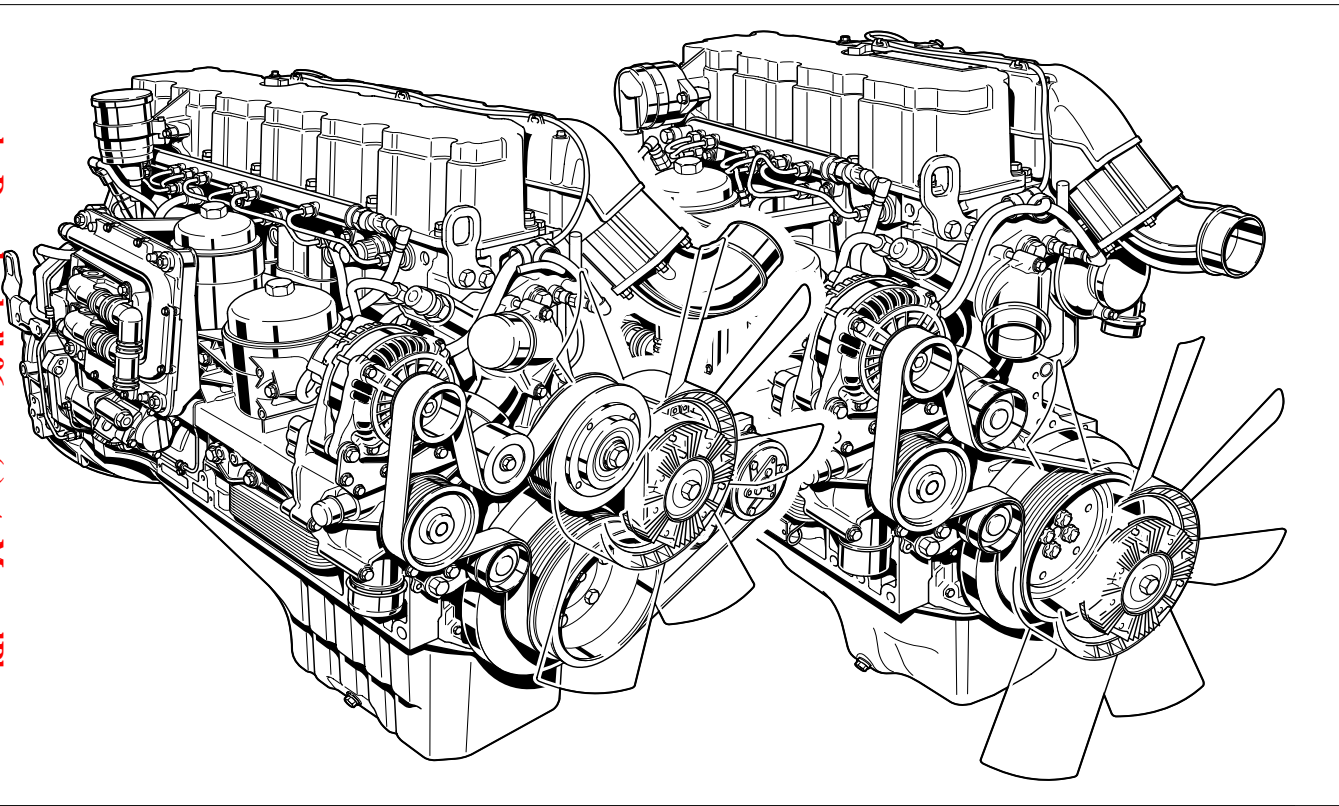


Instruction Manual

TCD 2012 L04/06 4V

TCD 2013 L04/06 4V





Read and observe the information in this instruction manual. You will avoid accidents, retain the manufacturer's warranty and have a fully functional, ready to use engine at your disposal.

- This engine is exclusively for the purpose according to the scope of delivery - defined and built by the equipment manufacturer (use for the intended purpose) Any use above and beyond this is considered improper use. The manufacturer will not be liable for damages resulting from this. The user will bear the sole risk in this case.
- Use for the intended purpose also includes observance of the operating, maintenance and repair instructions specified by the manufacturer. The engine may only be used, maintained and repaired by persons who are familiar with it and instructed in the dangers.

- The pertinent rules for the prevention of accidents and other generally recognised safety and industrial medicine rules must be observed.
- When the engine is running there is a danger of injury caused by:
 - rotating / hot components
 - engines with extraneous ignition
 - ignition systems (high electrical voltage)Contact must be avoided!
- The manufacturer will not be liable for damages resulting from unauthorised modification to the engine.
Equally, manipulations to the injection and control system can affect the engine's performance and the exhaust characteristics. Compliance with environmental regulations will no longer be guaranteed in this case.
- Do not alter, obstruct or block the area of the cool air supply to the fan.
The manufacturer will accept no liability for damages resulting from this.
- Only DEUTZ original parts may be used when carrying out maintenance/repair work on the engine. These have been designed especially for your engine and ensure a trouble-free operation.
Failure to observe this will lead to voiding of the warranty!

- Maintenance/cleaning work on the engine may only be carried out when the engine is not running and has cooled down.
When doing this, make sure that the electrical system is switched off (remove ignition key). The specifications for accident prevention with electrical systems (e.g. VDE-0100/-0101/-0104/-0105 Electrical protective measures against dangerous touch voltages) must be observed.
Cover all electrical components tightly when cleaning with liquids.
- Do not work on the fuel system while the engine is running - **Danger to life.**
 - Wait (1 minute) for the engine to come to a standstill (pressure release), as system is under high pressure: there is a - **Danger to life.**During the first trial run do not stand in the danger area of the engine (danger due to high pressure of leaks) - **Danger to life.**
 - In case of leaks immediately contact the workshop.
 - When working on the fuel system ensure that the engine is not unintentionally started during repairs. **Danger to life.**

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Engine number:

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Please enter the engine number here. This will simplify the handling of customer service, repair and spare parts queries (see Section 2.1).

Illustrations and data in this instruction manual are subject to technical changes in the course of improvements to the engines. Reprinting and reproductions of any kind, even in part, require our written permission.



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Foreword

Dear customer,

The liquid-cooled engines made by DEUTZ are developed for a wide variety of applications. An extensive range of variants ensures that the respective special requirements are met.

Your engine is equipped according to the installation, i.e. not all the parts and components described in this instruction manual are installed on your engine.

We have done our best to clearly identify the differences, so that you can easily find the operating, maintenance and repair instructions relevant to your engine.

Please read these instructions before you start your engine and observe the operating and maintenance instructions.

We are at your service for any questions you may have in this matter.

Your

DEUTZAG

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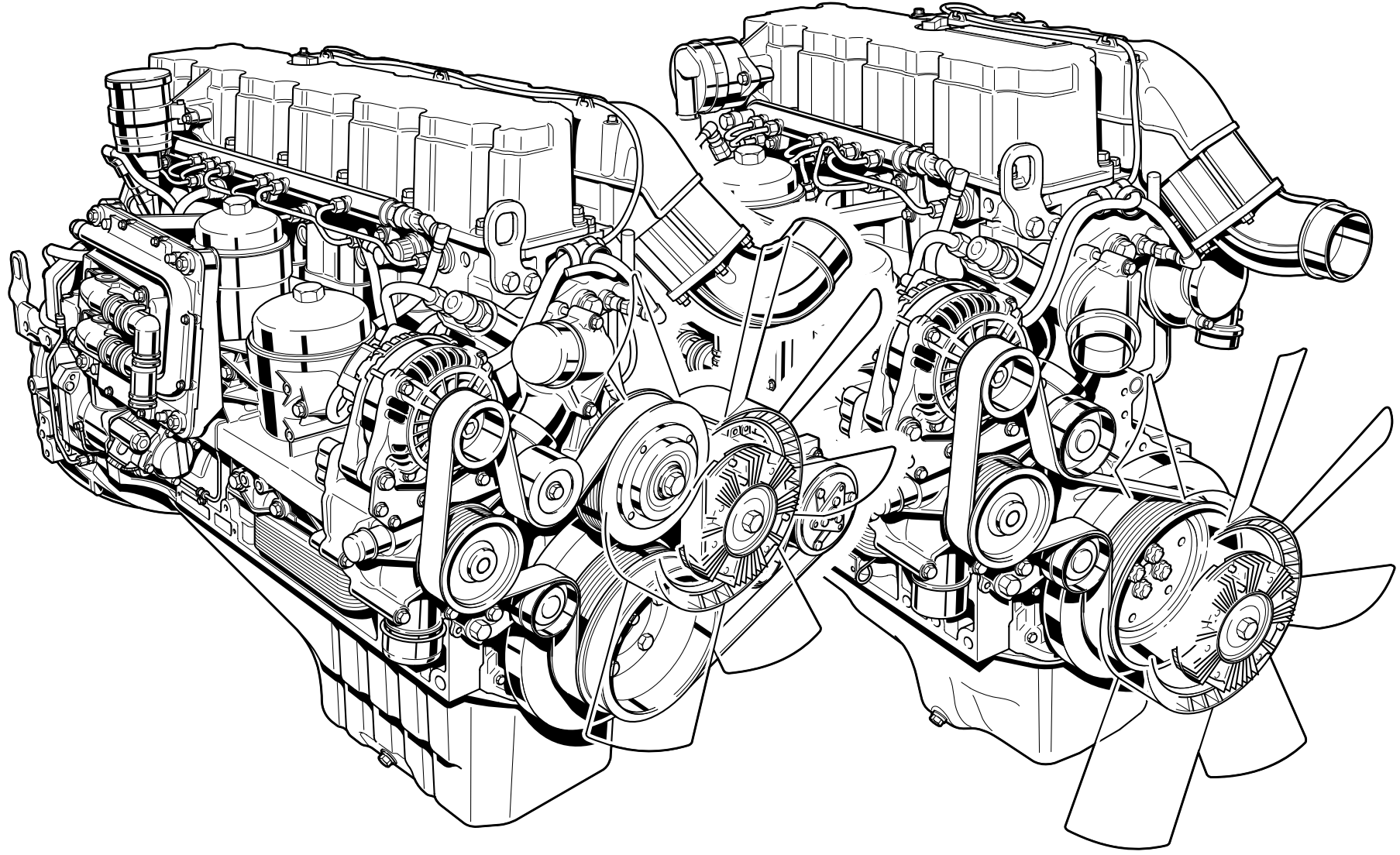
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DEUTZ engines

are the product of years of research and development. The profound know-how gained in connection with high quality requirements is the guarantee for manufacturing of engines with a long life, high reliability and low fuel consumption. Naturally the high requirements for protection of the environment are also met.

Take care when the engine is running

Only carry out maintenance work or repairs with the engine switched off. Ensure that the engine cannot be started unintentionally - danger of accidents!
Re-install any removed protective equipment upon completion of the work.
Observe industrial safety regulations when operating the engine in enclosed spaces or underground.
When working on the running engine, work clothing must be close fitting.
Only re-fuel with the engine switched off.

Maintenance and care

are decisive for whether the engine satisfactorily meets the demands put on it. Compliance with the prescribed maintenance times and the careful execution of maintenance and care work are therefore essential. Difficult operating conditions deviating from normal operation must be observed especially.

Danger



This symbol is used for all safety instructions which, if not observed, present a direct danger to life and limb for the person involved. Observe these carefully. Also pass on the safety instructions to your operating personnel. Furthermore, the legislation for „general regulations for safety and the prevention of accidents“ must be observed.

Service

Please consult one of our service representatives responsible for operating faults and spare parts questions. Our trained specialist personnel ensures fast, professional repairs using original parts in the event of damage.
The Technical Circulars listed in this operating manual are obtainable from your DEUTZ partner.
Please turn to the end of this manual for further service information.

Warning



Danger for component/engine. Failure to comply can lead to destruction of the component/engine. Must be observed.

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