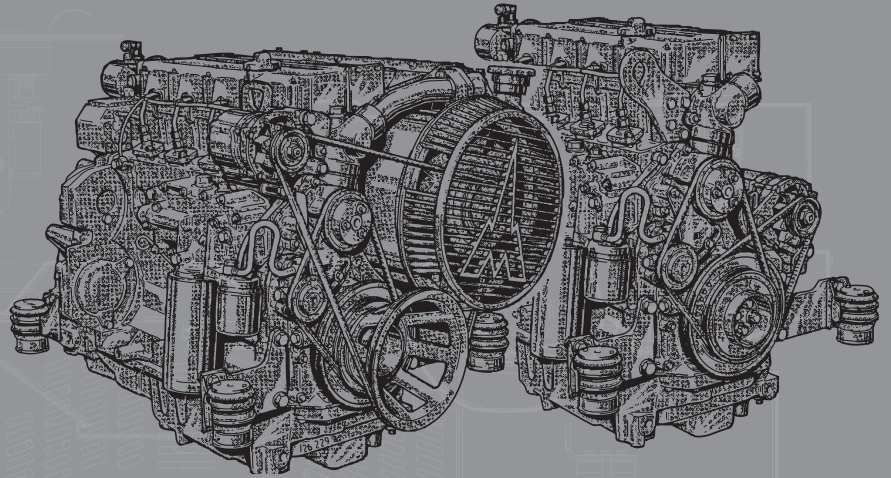


DEUTZ

Operation Manual

1012 & 1013



Document No. 150-7108

1012 & 1013 Operation Manual

Deutz Engines

Publication Date: 04/2006

Foreword

This component manual forms part of the Service Manual for a Breaker Technology (BTI) product.

The information in this document is reprinted by BTI with permission for the sole purpose of supporting BTI products. Although every effort has been made to keep this information current, the information and data in this manual apply at time of publication as stated above.

Instructions in this manual may refer to specific tools, lifting devices, and work methods. BTI does not accept responsibility for personal injury, equipment failure or damage if those specified are not used.

If any information, work method or instruction in this manual is unclear, contact the component manufacturer or the nearest BTI office.



WARNING!

Before attempting any service or maintenance procedure, read the Safety Section of the BTI Service manual for this vehicle.



www.rockbreaker.com

Canada & International

Phone (519) 599-2015 | (866) BTI-PART [284-7278] | Fax: (519) 599-6803
35 Elgin Street | P.O. Box 130 | Thornbury, Ontario, Canada N0H 2P0

Western USA & Mexico

Phone (951) 369-0878 | Fax: (951) 369-8281
3453 Durahart Street | Riverside, CA 92507

Eastern USA

Phone (440) 248-7168 | Fax: (440) 248-8645
30625 Solon Industrial Parkway | Solon, OH 44139

ISO 9001:2008
ISO 14001:2004



Deutz 1012 & 1013 Operation Manual



- Please read and observe the information given in this Operation Manual. This will enable you to avoid accidents, preserve the manufacturer's warranty and maintain the engine in peak operating condition.
- This engine has been built exclusively for the application specified in the scope of supply, as described by the equipment manufacturer and is to be used only for the intended purpose. Any use exceeding that scope is considered to be contrary to the intended purpose. The manufacturer will not assume responsibility for any damage resulting therefrom. The risks involved are to be borne solely by the user.
- Use in accordance with the intended purpose also implies compliance with the conditions laid down by the manufacturer for operation, maintenance and servicing. The engine should only be operated by personnel trained in its use and the hazards involved.
- The relevant accident prevention guidelines and other generally accepted safety and industrial hygiene regulations must be observed.
- When the engine is running, there is a risk of injury through:
 - turning/hot components
 - engines with positive ignition
 - ignition systems (high electrical voltage)
 You must avoid contact at all times!
- Unauthorized engine modifications will invalidate any liability claims against the manufacturer for resultant damage. Manipulations of the injection and regulating system may also influence the performance of the engine, and its emissions. Adherence to legislation on pollution cannot be guaranteed under such conditions.
- Do not change, convert or adjust the cooling air intake area to the blower. The manufacturer shall not be held responsible for any damage which results from such work.
- When carrying out maintenance/repair operations on the engine, the use of DEUTZ original parts is prescribed. These are specially designed for your engine and guarantee perfect operation. Non-compliance results in the expiry of the warranty!
- Maintenance and cleaning of the engine should only be carried out when the engine is switched off and has cooled down. You must ensure that the electrical systems have been switched off and the ignition key has been removed. Accident prevention guidelines concerning electrical systems (e.g. VDE-0100/-0101/-0104/-0105 Electrical protective measures against dangerous touch voltage) are to be observed. When cleaning with fluids, all electrical components are to be covered impermeably.

Engine serial
number:

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Please enter the engine serial number here. This number should be quoted when enquiring about customer service, repairs or spare parts (see Section 2.1).

Technical modifications required to improve our engines are reserved with regard to specification data and other technical information contained in this Operation Manual. No parts of this Manual may be reproduced in any form or by any means without our written approval.

0297 9682 en



Foreword

Dear Customer,

Liquid-cooled Deutz engines are designed for a large number of applications. Consequently, a wide range of variants are offered to meet the requirements of specific cases.

Your engine is appropriately equipped for the installation concerned, which means that not all of the components described in this Operation Manual are necessarily mounted on your engine.

We have endeavoured to highlight any differences so that you will be able to locate the operating and maintenance instructions relevant to your engine quickly and easily.

Please read this Manual before starting your engine, and always observe the operating and maintenance instructions.

We are available to help with any additional enquiries

Sincerely,

DEUTZ AG

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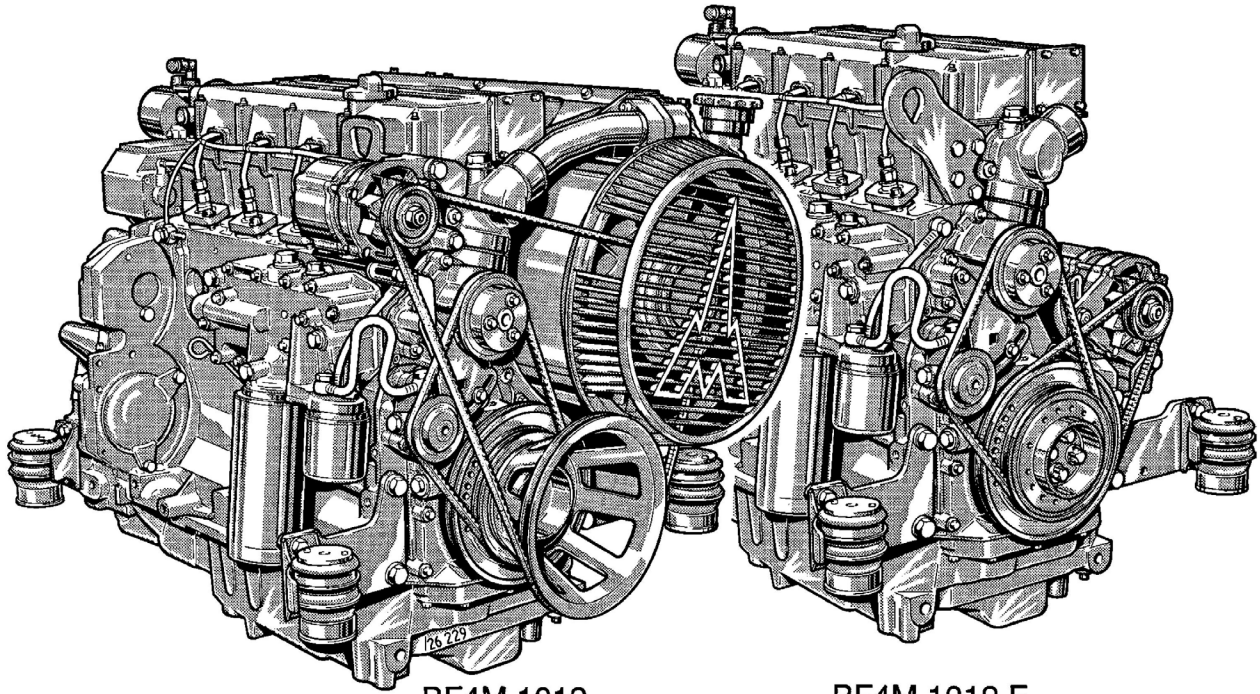
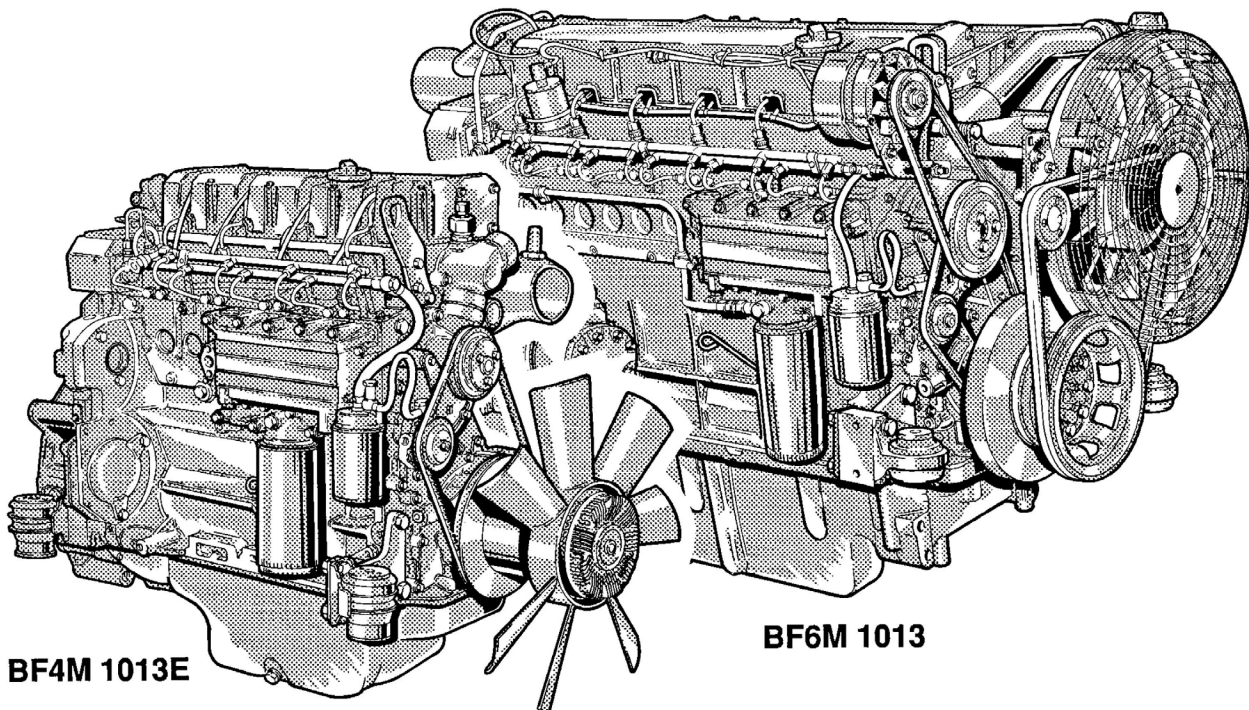
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**BF4M 1012****BF4M 1012 E****BF4M 1013E****BF6M 1013**

1. General

DEUTZ Diesel Engines

are the product of many years of research and development. The resulting know-how, coupled with stringent quality standards, guarantee their long service life, high reliability and low fuel consumption. It goes without saying that DEUTZ Diesel Engines meet the highest standards for environmental protection.

Care and Maintenance

Sound care and maintenance practices will ensure that the engine continues to meet the requirements placed on it. Recommended service intervals must be observed and service and maintenance work carried out conscientiously. Special care should be taken under abnormally demanding operating conditions.

Service

Please contact one of our authorized service representatives in the event of breakdowns or for spare parts inquiries. Our trained specialists will carry out repairs quickly and professionally, using only genuine spare parts. Original parts from DEUTZ AG are always produced in accordance with state-of-the-art technology. Please turn to the end of this manual for further service information.

Beware of Running Engine

Shut the engine down before carrying out maintenance or repair work. Ensure that the engine cannot be accidentally started. Risk of accidents. When the work is complete, be sure to refit any panels and guards that may have been removed. Never fill the fuel tank while the engine is running. Observe industrial safety regulations when running the engine in an enclosed space or underground.

Safety



This symbol is used for all safety warnings. Please follow them carefully. The attention of operating personnel should be drawn to these safety instructions. General safety and accident prevention regulations laid down by law must also be observed.

California

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Asbestos



DEUTZ original parts are asbestos-free.