

# **Workshop Manual for V8.510, V8.540 & TV8.540 Diesel Engines**

(For V8.510 engines, commencing engine number 510U2000)

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This publication is written for world wide use. In territories where legal requirements govern engine smoke emission, noise, safety factors etc., then all instructions, data and dimensions given must be applied in such a way that, after servicing (preventive maintenance) or repairing the engine, it does not contravene the local regulations when in use.

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## FOREWORD

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This manual is designed to be of assistance to all personnel involved with the maintenance and overhaul of Perkins V8.510, V8.540 and TV8.540 engines, the information applying to all three types of engine unless specified otherwise. It does not deal with V8.510 engines built before engine numbered 510U2000.

In some instances different procedures have to be adopted depending upon the type of fuel injection pump fitted. The pump type fitted to a particular engine can be ascertained by reference to Section N.

Engines built for Massey Ferguson applications are designated AV8.510, AV8.540 and ATV8.540 and where the information differs for these particular engines, it is specified.

Overhaul of the engine or components should only be carried out by skilled personnel. To assist in overhauling the engine, the manufacturing dimensions and in some instances the wear limits are given in Section B.

When fitting setscrews into "through" holes into the interior of the engine, a suitable sealant should be used.

When left or right hand bank or side is referred to in this manual, this denotes the side looking towards the front of the engine from the rear or gearbox end, unless specified otherwise.

This publication is produced by the Technical Publications Department of Perkins Power Sales and Service Limited, and every endeavour is made to ensure that the information contained in this manual is correct at the date of publication but due to continuous developments the manufacturers reserve the right to alter this specification without notice.

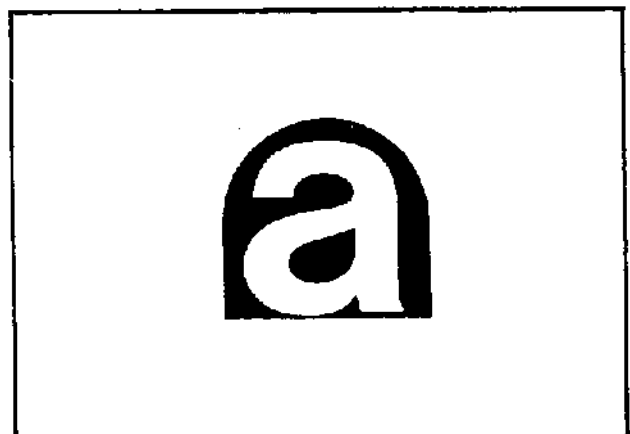
### ASBESTOS JOINTS

Some joints and gaskets contain compressed asbestos fibres in a rubber compound or in a metal outer cover. The "white" asbestos (Chrysotile) which is used is a safer type of asbestos and the risk of damage to health is extremely small.

The risk of asbestos from joints occurs at their edges or if a joint is damaged when a component is removed or if a joint is removed by abrasion.

To ensure that the risk is kept to a minimum, the procedures given below must be applied when an engine which has asbestos joints is dismantled or assembled.

- Work in an area with good ventilation
- Do not smoke
- Use a hand scraper to remove the joints - do not use a rotary wire brush
- Ensure that the joint to be removed is wet with oil or water to contain loose particles
- Spray all asbestos debris with water and put it in a closed container which can be sealed for safe disposal



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