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CHAPTER 01 - GENERAL

FOREWORD

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This **Technical Handbook (THB)** has been written with **the servicing mechanic** in mind and contains important information required to carry out repair and servicing procedures.

Read through the **Technical Handbook**, but also the **Operating Instructions** for the **Wheel Loader** before commencing any servicing or repair work. The **Technical Handbook**, as well as the **Operating Instructions** and **Spare Parts List** should be used as a source of reference and assistance - even when the user is well acquainted with the range of the Wheel Loaders.

Using the Technical Handbook allows the experienced mechanic to carry out repair work in a correct manner.

Using the Technical Handbook

The Technical Handbook is divided into main and sub-groups that deal with the machine as actually delivered. Any auxiliary attachments or optional upgrading introduced later are not described.

The main table of contents allows to find the required information quickly.

For the sake of clarity, the illustrations have been simplified and can therefore differ slightly from the actual appearance of the machine.

Servicing and repair

Servicing and repair work should be carried out as soon as possible. This keeps overall servicing & repair costs to a minimum and increases the availability of the Wheel Loader.

During servicing and repair work, always follow the instructions contained in the Technical Handbook and Operating instructions.

The **After Sales Service** is always available for assistance and advice.

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FUNDAMENTAL SAFETY INSTRUCTIONS

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Warnings and symbols

The following signs are used in the manual to designate instructions of particular importance:



Precautionary rules and measures designed to protect the machine operator and other persons from life-threatening danger or injuries and to prevent extensive damage.



Information and precautionary measures designed to prevent damage to the machine or other property.

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Danger in the event of nonobservance of the safety instructions



This wheel loader has been built in accordance with state-of-the-art standards and the recognized safety rules.

However, operating the machine if a fault is suspected or has occurred, or carrying out repair work inexpertly may

- **endanger the lives of persons in contact with it**
- **damage the machine and other property.**

The wheel loader must be stopped immediately on any damage being suspected or occurring to ensure that the safety of the operator, of other persons at the place of use or of other material property is not compromised.

All components are carefully co-ordinated. Trouble-free operation and a long service life can only be achieved with original spare parts.

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Organizational measures

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The operating instructions must always be at hand at the place of use of the machine, e.g. by stowing them in the tool compartment or tool-box provided for such purpose.

In addition to the operating instructions, observe and instruct the user in all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection.

These compulsory regulations may also deal with the handling of hazardous substances, issuing and/or wearing of personal protective equipment or traffic regulations.

The operating instructions must be supplemented by instructions covering the duties involved in supervising and notifying special organizational features, such as job organization, working sequences or the personnel entrusted with the work.

Personnel entrusted with work on the machine must have read the operating instructions and in particular the chapter on safety before beginning work. Reading the instructions after work has begun is too late. This applies especially to persons working only occasionally on the machine, e.g. during setting up or maintenance.

Check - at least from time to time - whether the personnel is carrying out the work in compliance with the operating instructions and paying attention to risks and safety factors.

For reasons of security, long hair must be tied back or otherwise secured, garments must be close-fitting and no jewellery, such as rings, may be worn. Injury may result from being caught up in the machinery or from rings catching on moving parts.

Use protective equipment wherever required by the circumstances or by law.

Observe all safety instructions and warnings attached to the machine.

See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.

In the event of safety-relevant modifications or changes in the behaviour of the machine during operation, stop the machine immediately and report the malfunction to the competent authority/person.

Never make any modifications, additions or conversions which might affect safety without the supplier's approval. This also applies to the installation and adjustment of safety devices and valves as well as to welding work on load-bearing elements.

Spare parts must comply with the technical requirements specified by the manufacturer. Spare parts from original equipment manufacturers can be relied to do so.

Replace hydraulic hoses within stipulated and appropriate intervals, even if no safety-relevant defects have been detected.

Adhere to prescribed intervals or those specified in the operating instructions for routine checks and inspections.

For the execution of maintenance work, tools and workshop equipment adapted to the task on hand are absolutely indispensable.

The personnel must be familiar with the location and operation of fire extinguishers.

Observe all fire-warning and fire-fighting procedures.