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Service Manual
Wheel loader
L524 – L542 2plus1



LIEBHERR

Preface

- Intended readership** This service manual is addressed to anyone whose task it is to ensure that the machines are ready for everyday use. This especially includes mechanics and workshop staff of Liebherr dealers and branches.
- Contents** The first chapter contains information on safety regulations and on the special tools needed for maintenance and repairs.
- Chapter 2 gives you an overview of all the most important technical data of the machine as a whole and its individual assemblies.
- Next comes the maintenance chapter, with the maintenance and inspection schedule, the testing and adjustment checklists, lubrication charts, description of maintenance tasks, testing and adjustment tasks and specifications of fuel and lubricants.
- The technical description of the machine is in the following chapters, structured according to fifteen function groups. The layout, function and technical data of the groups, components and parts are explained.
- Chapter 19 contains information on troubleshooting, the service code table and a description of the "SCULI" service software.
- Chapter 20 will be gradually updated with the latest options.
- Instructions on use** This manual describes several types and versions of machines. The information generally applies to the types and serial numbers stated at the bottom of the page. The exception to this is information which only applies to specific types and serial numbers, which are stated at the beginning of the section concerned (for example technical data of parts).
- Where possible, the ID numbers of parts and components are stated in the heading.
- This manual is available in German, English, French, Spanish, Italian and Russian.
- Working instructions** Always follow the safety regulations whenever you work on the machine. You will find a reference to this in the "**General Information**" section.
- In order to perform these tasks you need a complete set of basic tools and certain special tools, all in perfect working order. All tasks require absolute cleanliness.
- Replace seals such as O-rings and surface seals during repairs.
- DVD edition** Please note that this manual is not only available in printed form, but is also available as electronic documentation on DVD (Lidos).

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1 General informations

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1.1 Safety regulations

Working on the machine poses safety risks to the operator, driver or maintenance engineers. You can prevent risks and accidents by regularly reading and observing the various safety instructions.

This is especially important for personnel who only occasionally work on the machine, for example, carrying out rigging or maintenance work. The safety regulations listed below, if conscientiously followed, will ensure your own safety and that of others, and will prevent the machine from being damaged.

Whenever tasks which could cause danger to personnel or damage to the machine are described, the necessary safety precautions are explained in this manual.

T These are indicated by the headings **Danger**, **Warning**, **Caution** or **Notice**.

1.1.1 Introduction

1. The symbols below have the following meanings:



DANGER

Denotes an urgent, dangerous situation.

Will result in death or serious injury.

▶ Actions to avert the danger.



WARNING

Denotes a dangerous situation.

Can result in death or serious injury.

▶ Actions to avert the danger.

CAUTION

Risk of personal injury.

Denotes a potentially dangerous situation which can lead to slight injury if not avoided.

▶ Actions to avert the danger.

NOTICE

Risk of damage to the machine.

Denotes actions or circumstances which may result in damage to the machine.

▶ Actions to avert the danger.

Note

Useful information

Denotes information on correctly handling the machine and the lubricants and fuels used.

▶ Actions to implement.

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