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**Service Manual**  
**Wheel loader**  
**L512 - L514 Stereo**



**LIEBHERR**

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# Foreword

**Target group** This Service Manual has been written for those whose job it is to make sure that the machines remain operational on a daily basis. This specifically includes the mechanics and workshop specialists at Liebherr dealers and Liebherr branch offices.

**Contents** In the first chapter you will find information about safety regulations as well as specifications of the special tools needed for maintenance and repair. Chapter 2 provides an overview of all important technical data for the entire machine and the individual assemblies. The following chapter, entitled Maintenance, contains the maintenance and inspection schedule, inspection and setting logs, lubrication schedules and filling quantity tables, a description of maintenance procedures and specifications for prescribed lubricants and fuels. The technical description of the machine in the following chapters is divided into 15 functional groups. The design, function, and technical data for each group, components and parts will be explained. This manual does not contain repair instructions. Repair manuals for individual components are available upon request.

**How to use this manual** This manual describes a variety of types and finished forms. In general, this information applies to the types and serial number groups specified in the footnotes. One exception is that specific type and serial number data are indicated at the beginning of each section (e.g. the technical specifications of the components). Whenever possible, parts and components are supplemented by indication of the identification number in the heading. This manual is available in German, English and French.

**Working instructions** It is imperative that safety regulations be observed with all tasks done on the machine. You will find information on this in the “**General Information**” chapter. A complete set of tools in perfect condition is required for work on the machine, along with any special tools that might be needed. Absolute cleanliness must be observed with all tasks! Sealing material such as O-rings and surface seals should be replaced whenever repairs are carried out.

**CD edition** We would particularly like to draw your attention to the fact that this book is available not only in printed form, but also as an electronic document on CD.

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# 1 General information

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## 1.1 Safety regulations

Working on the machine poses safety risks to the operator, driver or maintenance technicians. You can considerably reduce the risk of accidents by always reading and observing the various safety instructions carefully.

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 in this manual, the necessary safety precautions are explained.

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

### 1.1.1 Introduction

1. The symbols below have the following meaning:



**“Danger”**

Warning that without appropriate precautions, certain operational procedures could result in fatal accidents.



**“Warning”**

Warning that without appropriate precautions, certain operational procedures could result in severe physical injuries.



**“Caution”**

Warning that without appropriate precautions, certain operational procedures could result in minor physical injuries or damage to the machine.

2. **Observance of these instructions does not exempt you of the responsibility of following any additional rules and guidelines that may apply!**

The following should also be observed:

- The safety rules in force at the operating site
- Legally enforceable road traffic regulations
- Guidelines issued by trade associations

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