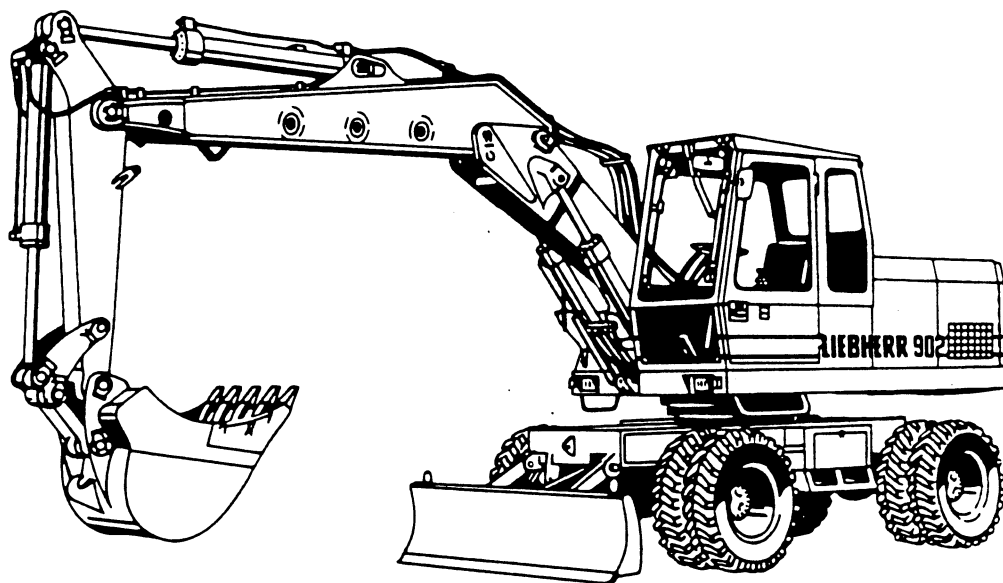


Operation and Maintenance Manual

A 902

from Serial No. on 2001



A 902 englisch, Serie 2001, 8.88

Id.Nr. 8716788

INTRODUCTION

This manual has been prepared to acquaint you with the operation and maintenance of your **LIEBHERR** machine. It contains important safety information, as well as valuable reference data such as capacities and tightening torques. Unless specific values are given, all threaded connections should be tightened according to the torque charts.

The descriptions in this manual are brief and precise. They are supported by photographs and drawings. All information is intended to simplify maintenance procedures.

WE URGE YOU TO READ THIS MANUAL CAREFULLY. Correct maintenance procedures will give the machine a long service life. Before starting a job, you must read the applicable section of the manual and know the maintenance procedure to be performed. It is essential to keep the machine, parts, tools and your working area clean and orderly. Following the recommendations in this manual will help make your **LIEBHERR** equipment profitable, safe and trouble-free.

To determine service intervals, use the hour meter. However, calendar intervals (daily, weekly, etc.) sometimes provide a more convenient method of scheduling required maintenance.

Under severe conditions such as extremely high or low temperatures, dusty or wet job sites, etc., more frequent maintenance than indicated by the schedule may be necessary.

Some drawings and photographs in this manual may show details which are different from your machine. Improvements in design may cause changes in your machine not reflected in this manual. All manuals are reviewed and updated periodically to include such design changes.

Should you have any questions regarding the information in this manual or your **LIEBHERR** machine, please contact your **LIEBHERR** dealer. He knows your equipment best and is interested in your complete satisfaction.

IMPORTANT SAFETY INFORMATION

Safety notes such as **DANGER**, **WARNING** and **CAUTION** are used throughout this manual to emphasize important or critical instructions. In this manual, **DANGER**, **WARNING** and **CAUTION** are defined as follows:



DANGER -

Denotes an extreme intrinsic hazard which would result in a high probability of death or serious injury if proper precautions are not taken.



WARNING -

Denotes a hazard which could result in injury or death if proper precautions are not taken.



CAUTION -

Denotes a reminder of safety practices or directs attention to unsafe practices if proper precautions are not taken.

The word **IMPORTANT** denotes a procedure which, if not followed, could cause damage to the machine or any of its components.

READ, UNDERSTAND AND OBSERVE ALL SAFETY NOTES, PRECAUTIONS AND REGULATIONS.

DO NOT operate or perform maintenance on this machine until you have read this manual.

This manual and the Safety Manual should remain with the machine as a maintenance and safety guide. Please contact your **LIEBHERR** dealer for additional copies.

Preventive maintenance is important to the safe and reliable operation of this machine. This manual outlines recommendations and methods.

Improper operation, lubrication or maintenance of this machine can be dangerous and result in bodily injury or death.

Your **LIEBHERR** machine is equipped with safety decals to identify specific hazards, as well as instruction decals to aid in the operation and maintenance of the machine.

ALWAYS replace missing and unreadable safety and instruction decals immediately.

It is impossible for **LIEBHERR** to anticipate every circumstance that might involve a hazard. The **DANGER**, **WARNING** and **CAUTION** notes in this manual, therefore, are not all-inclusive. If a procedure not specifically mentioned by **LIEBHERR** is used, you must satisfy yourself that it is safe for you and others. Also make sure that the machine is not damaged or made unsafe by the procedures you choose.

Obviously, the manufacturer has no direct control over machine application, operation or maintenance. This leaves it up to you - operator or mechanic - to use good safety practices.

A good way to start is to read this manual. It was written and illustrated by a group of people which has a great deal of heavy equipment experience. Read what they have to say.

We, and the people you work with, depend on you to operate and maintain this machine as safely as you can.

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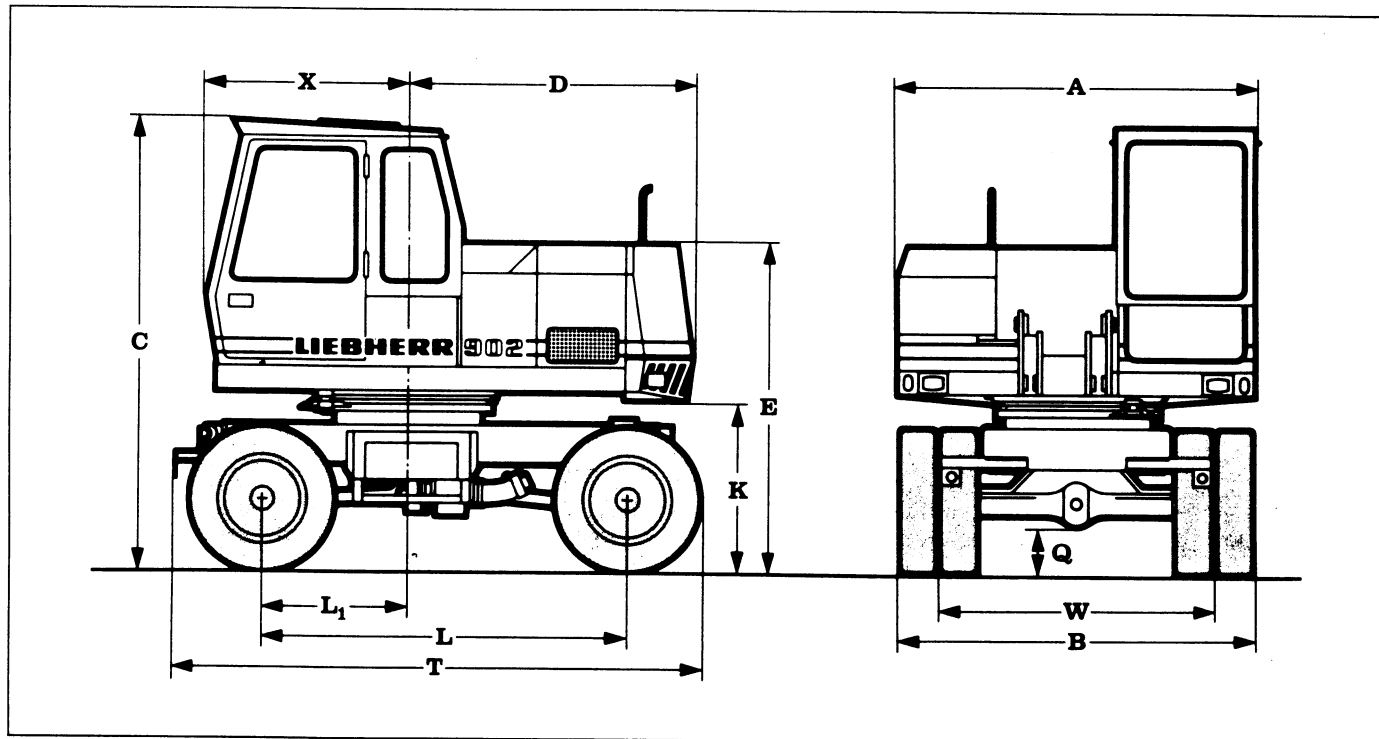
ELECTRICAL SCHEMATIC**LUBRICATION CHART**

Technical Data

Hydraulic Excavator

A 902

Basic machine



Dimensions (equipped with 10.00-20 tires)		ft-in	/mm		ft-in	/mm	
A	Width of machinery deck	8'	0"/2440	L	Wheel base	8'	2"/2500
B	Width of undercarriage	8'	2"/2496	L ₁	Distance machine center - rear axle	3'	3"/1000
C	Height of basic machine	10'	3"/3118	Q	Ground clearance	1'	2"/343
D	Tail reach	7'	1"/2160	T	Length of undercarriage	12'	4"/3752
	Tail swing	7'	4"/2250	W	Tread width	6'	3"/1915
E	Height without cab	7'	5"/2263	X	Axis of rotation to front of cab	4'	6"/1372
K	Clearance under counterweight	4'	0"/1203				

To order

- Basic machine with LIEBHERR Diesel engine for DEUTZ Diesel engine
- DEUTZ Diesel engine F 5 L 912
- Tires - as applicable
 - 8 tires 9.00-20
 - 8 tires 10.00-20
 - 4 high flotation 18.00-19,5

Id. No.

9130783
9132278
9133710

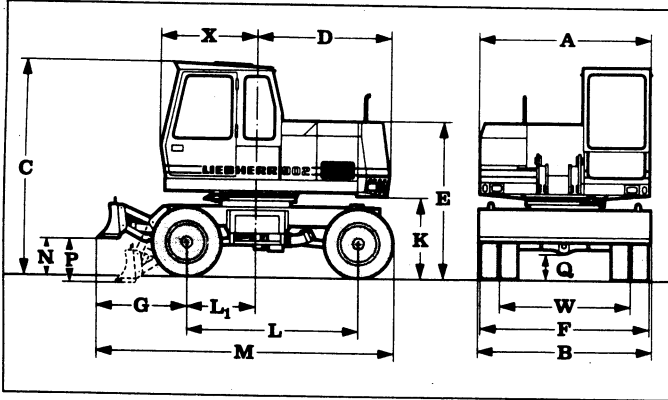
Operating Weight

Operating weight includes basic machine with two-piece boom 11'2"/3400 mm stick 5'3"/1600 mm and bucket		
without stabilization		28,445 lb/12900 kg
with dozer blade		29,990 lb/13600 kg
with rear outriggers		30,650 lb/13900 kg
with front and rear outriggers		34,400 lb/15600 kg

Optional Chassis

A902

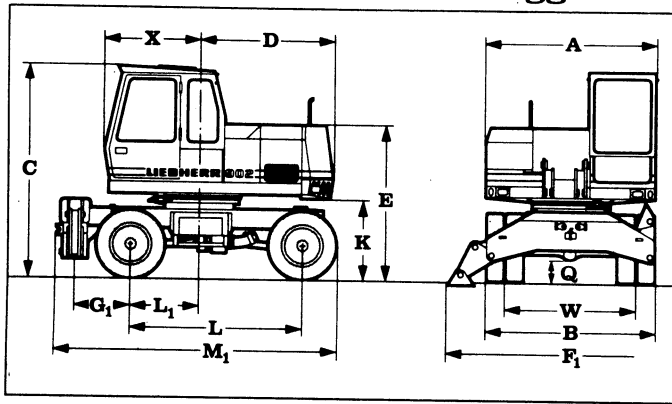
Basic machine with rear dozer blade



To order

- | | | |
|---|------------|---------|
| ● Basic machine with LIEBHERR Diesel engine | Id. No. | 9130783 |
| ● for DEUTZ Diesel engine | | 9132278 |
| ● DEUTZ Diesel engine F 5 L 912 | | 9133710 |
| ● Tires - as applicable | | |
| 8 tires | 9.00-20 | |
| 8 tires | 10.00-20 | |
| 4 high flotation | 18.00-19,5 | |
| ● rear dozer blade | | 9166377 |

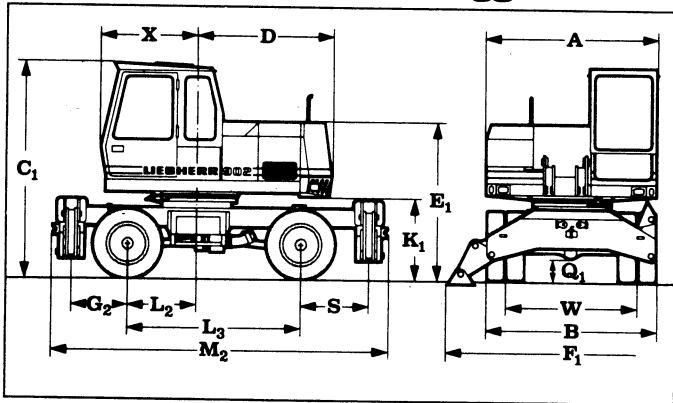
Basic machine with rear outriggers



To order

- | | | |
|---|------------|---------|
| ● Basic machine with LIEBHERR Diesel engine | Id. No. | 9130783 |
| ● for DEUTZ Diesel engine | | 9132278 |
| ● DEUTZ Diesel engine F 5 L 912 | | 9133710 |
| ● Tires - as applicable | | |
| 8 tires | 9.00-20 | |
| 8 tires | 10.00-20 | |
| 4 high flotation | 18.00-19,5 | |
| ● rear outriggers | | |

Basic machine with 4 outriggers



To order

- | | | |
|---|------------|---------|
| ● Basic machine with LIEBHERR Diesel engine | Id. No. | 9147630 |
| ● for DEUTZ Diesel engine | | 9132279 |
| ● DEUTZ Diesel engine F 5 L 912 | | 9133710 |
| ● Tires - as applicable | | |
| 8 tires | 9.00-20 | |
| 8 tires | 10.00-20 | |
| 4 high flotation | 18.00-19,5 | |

Dimensions

	(equipped with 10.00-20 tires)	ft-in	/mm
A	Width of machinery deck	8'	0"/2440
B	Width of undercarriage	8'	2"/2496
C	Height of basic machine	10'	3"/3118
C ₁	Height with 4 outriggers	10'	4"/3138
D	Tail reach	7'	1"/2160
	Tail swing	7'	4"/2250
E	Height without cab	7'	5"/2263
E ₁	Height with 4 outriggers	7'	6"/2283
F	Width over dozer blade	8'	0"/2440
F ₁	Width over outriggers	11'	9"/3593
G	Distance rear axle - dozer blade	4'	1"/1250
G ₁	Distance rear axle - outriggers	2'	7"/ 800
G ₂	Distance rear axle - outriggers on basic machine with 4 outriggers		
K	Clearance under counterweight	2'	8"/ 820
K ₁	Clearance under counterweight on basic machine with 4 outriggers	3'	11"/1203
		4'	0"/1223

	ft-in	/mm	
L	Wheel base	8'	2"/2500
L ₁	Distance machine center - rear axle	3'	3"/1000
L ₂	Wheel base on basic machine with 4 outriggers		
L ₃	Distance machine center - rear axle on basic machine with 4 outriggers	8'	6"/2600
M	Length of undercarriage with dozer blade	14'	5"/4392
M ₁	Length of undercarriage with rear outriggers	13'	10"/4219
M ₂	Length of undercarriage with 4 outriggers	16'	3"/4944
N	Clearance under dozer blade	1'	10"/ 570
P	Total blade lift	2'	2"/ 668
Q	Ground clearance	1'	2"/ 343
Q ₁	Ground clearance of basic machine with 4 outriggers	1'	1"/ 335
S	Distance front axle - outriggers	3'	2"/ 970
W	Tread width	6'	3"/1915
X	Axis of rotation to front of cab	4'	6"/1372