en **Operator's manual**

Wood grapple

GMH 50

Document ID

	ORIGINAL OPERATOR'S MANUAL
Order number:	12255505
Issued:	2019-09-05
Version:	01
Author:	LHB / Technical Documentation Department

Product ID

Manufacturer:	Liebherr-Hydraulikbagger GmbH
Product type:	Wood grapple GMH 50

Contact

Liebherr-Hydraulikbagger GmbH
Liebherrstraße 12
D – 88457 Kirchdorf/Iller

Damage

Incorrect operation in operating conditions deviating from intended use

– Equip working tool according to operating conditions.

Following operating conditions deviate from intended use:
– Dust intensive applications
– Contaminated areas
– Lower or higher ambient temperatures

Incorrect operation in corrosive environment or with corrosive material

– Regularly clean working tool to remove corrosive materials (for example salt, phosphate, fertiliser).
– Treat metallic surfaces with conservation wax if necessary.
– Derust, prime and repaint damaged and corroded steel parts.
– If working tool is equipped with hydraulic cylinders: Make sure that piston rods of hydraulic cylinders are coated completely with an oil film.
– If piston rods are not coated completely with an oil film: Retract and extend piston rods along the entire stroke.
– If it is not possible to retract and extend the piston rods along the entire stroke: Clean and conserve piston rods.

1.2.3 Disposal

Danger to life

Unapproved disposal of gas containers and pressure vessels

– Before disposal, completely depressurise pressure vessel.
– Before disposal, professionally empty pressure vessel.
– Adhere to safety instructions of pressure vessel manufacturer.

Environmental pollution

Improper disposal of working tool

– Make sure that the individual elements of the working tool are disposed of correctly after the service life.
– Dispose of elements of working tool in line with valid country-specific waste disposal guidelines and relevant valid laws.
– Remove fuels, operating fluids and lubricants from all components before disposal.
– Collect and store fuels, operating fluids and lubricants in suitable containers before disposal.
– Adhere to instructions of relevant manufacturer when disposing of fuels, operating fluids and lubricants.
– Have fuels, operating fluids and lubricants disposed of by old oil recycling point.
– Have metal parts disposed of by metal recycling point.
– Have plastic parts disposed of by plastic recycling point.
– Have rubber parts disposed of by rubber recycling point.
– Have electronic components disposed of by electronics recycling point.

LHB/12255505/01/2019-09-05/en

2 Introduction

2.1 Special tools

2.1.1 Mechanical system of special tool

Designation	Part number	Container size	Use
Loctite 243	8655016	10 ml Bottle	Thread locker
Loctite 648	8655032	10 ml Bottle	Thread locker

Tab. 5: Mechanical system of special tool

LHB/12255505/01/2019-09-05/en

2.3.8 Hydraulic schematic of slewing gear

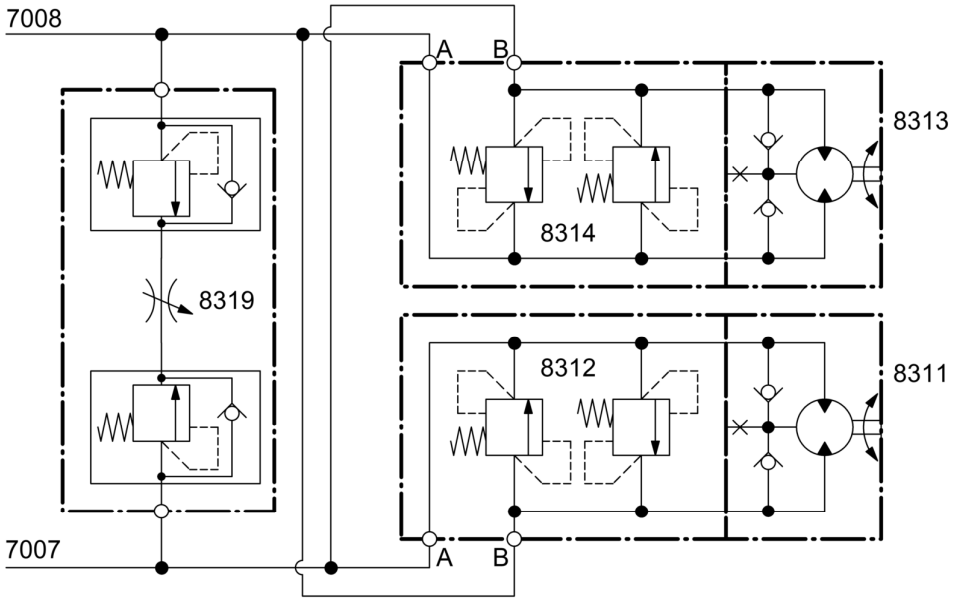

Fig. 19: Hydraulic schematic of slewing gear

7007	Function: Turning slewing gear right	**8312**	Pressure valve	**8319**	Pressure relief valve
7008	Function: Turning slewing gear right	**8313**	Hydraulic motor		
8311	Hydraulic motor	**8314**	Pressure valve		

LHB/12255505/01/2019-09-05/en

Symbol	Meaning
	Gearbox
	Checking oil level
	Lubricating points
	Lubrication
h	Operating hours (interval)
	Observe operator's manual

Tab. 9: Meaning of the symbols on the lubrication chart

LHB/12255505/01/2019-09-05/en

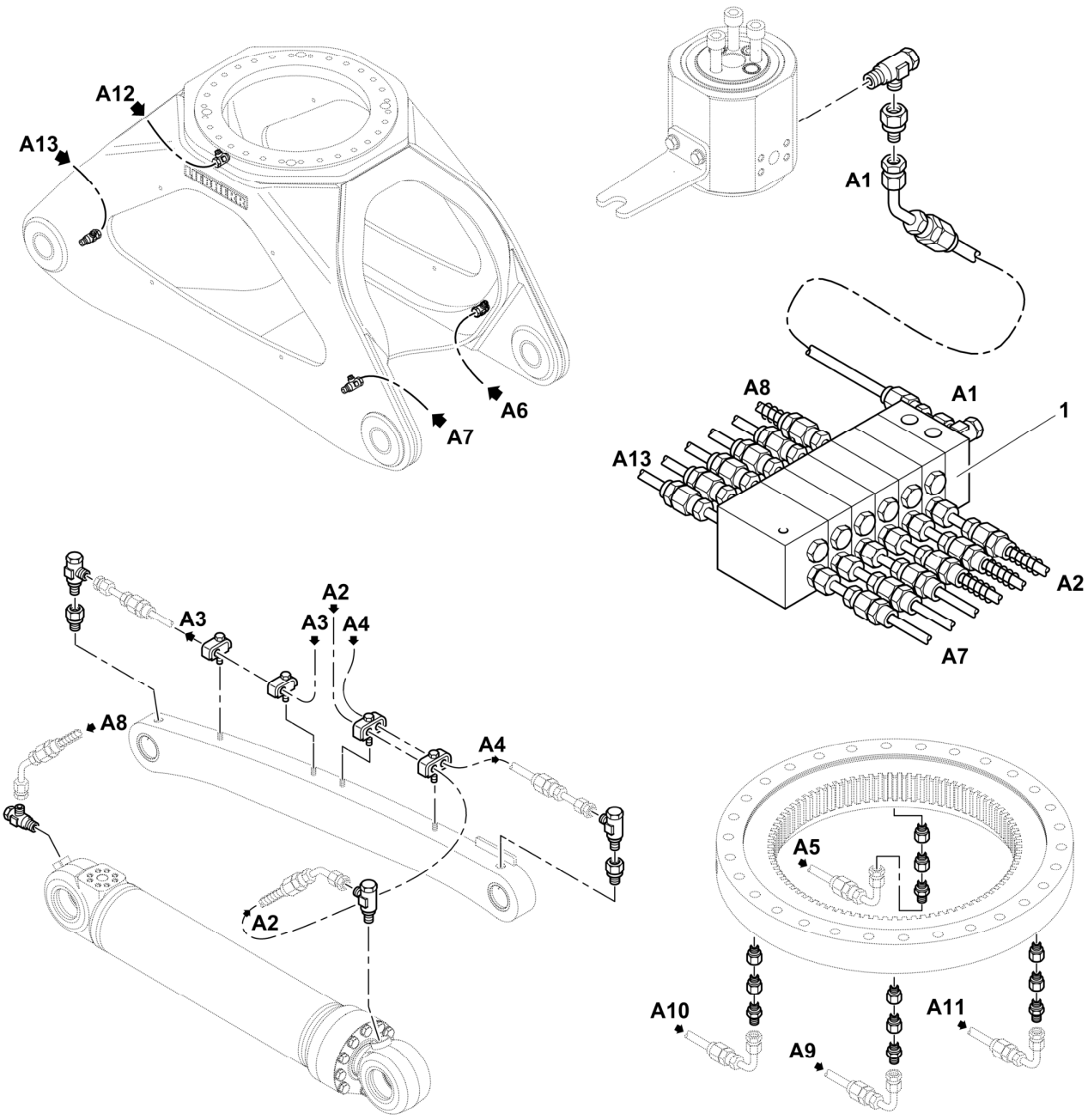

Fig. 35: Overview of lubricating points

1 Secondary distributor of slewing gear

- ▶ Make sure that nuts **1** and thread of clip-on cutting edge **2** are clean and free from grease.
- ▶ Install clip-on cutting edges **2**.
- ▶ Coat nuts **1** with Loctite 243 thread locker.
- ▶ Insert nuts **1** and tighten.

Replacing undercut blades

Make sure that following special tools are available:
- ❑ Loctite 243 thread locker
- ❑ Loctite 648 thread locker

Removing undercut blades

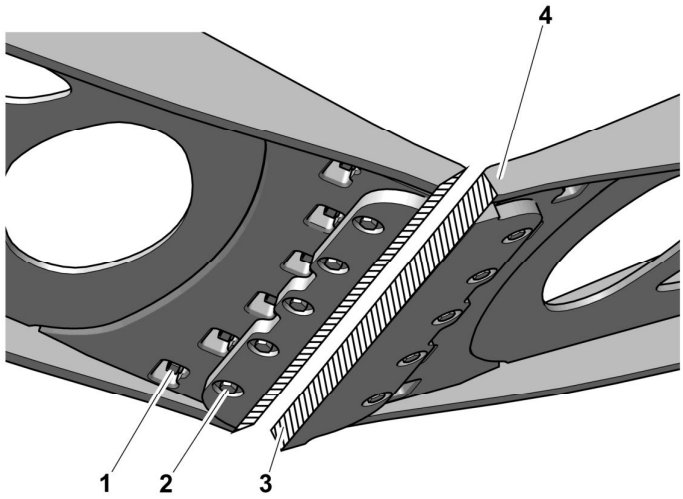

Fig. 45: Removing undercut blades

1	Nut	**3**	Undercut blade
2	Screw	**4**	Grapple end

If undercut blades **3** are worn:
- ▶ Loosen nuts **1** and screws **2**.
- ▶ Check threaded rods on undercut blades **3**, replace threaded rods if necessary. (For more information see: Replacing threaded rods, page 63)
- ▶ Replace undercut blades **3**.
- ▶ Check grapple ends **4**, replace if necessary. (For more information see: Replacing grapple ends, page 62)

LHB/12255505/01/2019-09-05/en