



BEARSPLITTER M1

USER MANUAL



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01

INTRODUCTION

Thank you for purchasing our product. The machine is manufactured in accordance with applicable European standards and regulations.

These operating instructions provide guidance for safe and proper use and maintenance of the machine.

Anyone responsible for the transport, installation, start-up, operation, and maintenance of the machine must read and understand:

- operating instructions,
- safety regulations,
- and safety instructions in each chapter.

To ensure proper functioning and smooth use of the machine, the operating instructions must be accessible to the operating personnel at all times.

1.1. RESPONSIBILITY FOR DEFECTS

Before using the machine, carefully read these instructions for use!

We do not assume responsibility for malfunctions and damages that result from not following the instructions for use.

Deficiencies must be reported immediately upon discovery. Deficiencies may arise, for example, due to:

- improper use,
- incorrect connections and types of drives that are not part of the delivery package,
- non-use of original spare parts and parts of accessories, modifications that we have not approved in writing.

Wear parts are not considered defects and we are not responsible for them.

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GENERAL SAFETY INSTRUCTIONS

2.1. DETERMINATION OF PURPOSE OF USE

The log splitter is intended exclusively for use in forestry for splitting logs sawn perpendicular to the growth of logs according to these instructions.

Before use, read the instructions carefully and make sure you understand them correctly. Any use outside of this framework is considered non-intentional. The manufacturer does not guarantee any damage that may result from non-intentional use. In this case, the user bears the risk.

Use only original equipment and replacement parts recommended by the manufacturer. Modifications to the log splitter exclude the manufacturer's warranty for damage resulting from them.

2.2. GENERAL SAFETY INSTRUCTIONS BEFORE USE

1. Only persons who are trained, informed of the dangers, and at least 18 years old or as determined by national legislation may use, handle, and maintain the log splitter.
2. Warning and caution labels on the log splitter provide important guidance for safe operation. Follow them for your safety!
3. The log splitter and its flawless operation must be checked before each use, at least once a working day. Deficiencies must be professionally corrected.
4. Personal protective equipment must be used during work.
5. No one may stay between the working machine and the log splitter without the working machine being secured against movement, the working machine engine turned off, and the key removed.
6. There is a risk of injury due to crushing and squeezing in the area of the tractor's hydraulic lift during connection and disconnection.
7. Use the log splitter only when all safety devices are installed, and the working machine is secured against movement!
8. Hydraulic elements are under high pressure.
9. Only one person performs the splitting. It is forbidden to hold other people in the splitting area during splitting.
10. The user is not allowed to change the factory settings.
11. Regularly check the attachment of screws.

2.3. SAFETY WARNING LABELS



Mandatory use of safety equipment.



Read and follow instructions for use.



Caution, danger!



Danger of hand compression.



Do not reach with your hand into the dangerous area.



Staying within the machine's working area is prohibited.

2.4. REMAINING RISKS

Even if you follow all safety regulations and use the machine correctly, there are still some remaining risks:

- 1. Touching rotating parts or tools.
- 2. Injuries caused by workpieces or parts of workpieces flying around.
- 3. Risk of fire due to friction or overheating of components.
- 4. Worsening of hearing when working without ear protection.

Improper handling by humans (such as excessive physical exertion, and mental overload...)

Any machine always has risks, so you must be extremely careful when performing work. The management staff is responsible for safety at work!

2.5. INTENDED USE

The Bearsplitter M1 machine is designed exclusively for splitting logs with a 10-120 cm diameter and a length of 15-108 cm. The machine can only be used for processing logs!

2.6. IMPROPER USE

Any improper or different use than that specified in the "intended use" is strictly prohibited!

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DESCRIPTION

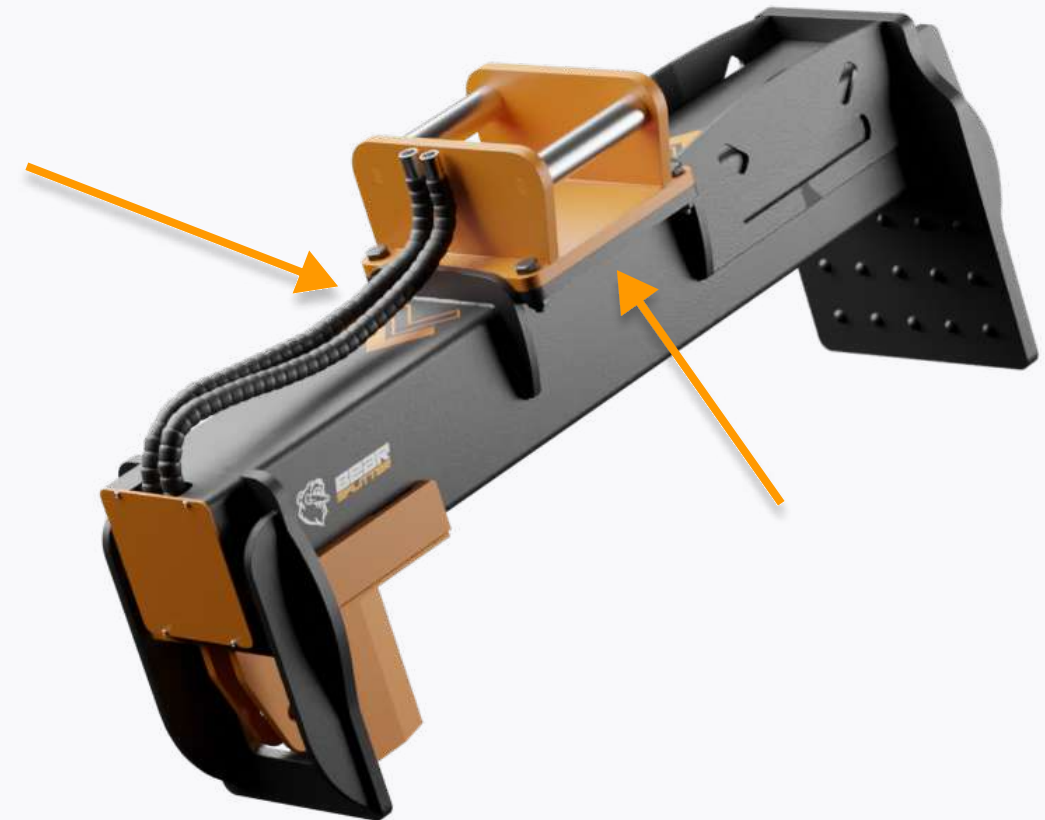
3.1. TECHNICAL SPECIFICATIONS	
Model	Bearsplitter M1
Drive	Hydraulic cylinder
Description	Hydraulic cylinder for a machine with hydraulic cylinder
Splitting force [t]	20
Axe stroke [mm]	1150
Splitting height up to [mm]	1150
Splitting height on the table up to [mm]	1120
Splitting diameter up to [mm]	100 - 1500
Splitting speed [cm/s]	7 (depending on the working machine)
Splitting time/return stroke [s/1050 mm]	13 (depending on the working machine)
The required power of the working machine [kW/HP]	30 HP (weight of the working machine minimum 2 tons)
Weight [kg]	354
Dimensions HxWxD [mm]	580 x 420 x 1545
Oil quantity [L]	6 liters only in the splitter (without the working machine)
Noise level [dB]	0 dB (the noise of the working machine to which the splitter is connected taken into account)

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START-UP INSTRUCTIONS

4.1. CONNECTION TO CONSTRUCTION MACHINE

The construction machine has a quick-change mechanism attached to the working arm, which is used to connect the log splitter to the working machine. The splitter must be in a horizontal position, as shown in the image below.



When approaching the work machine near the log splitter, no one should be located between the splitter and the work machine. There is a risk of injuries such as crushing and shearing in the area of the work machine. During the operation of the log splitter and work machine, no one should remain in this area.

When using the work machine to clamp the quick-change mechanism, which is screwed onto the log splitter, it is necessary to connect two hydraulic hoses to the quick-release couplings on the work machine (the hydraulic hoses are shown in the above picture) after the clamping is completed.

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LOG SPLITTING PROCESS

The log-splitting process is mostly related to the work machine. The log-splitting process is operated on the work machine using a control lever (shown in the image below), which controls two buttons. These two buttons operate the hydraulic cylinder on the log splitter.



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REGULAR INSPECTIONS AND MAINTENANCE OF THE LOG SPLITTER

6.1. PROTECTIVE EQUIPMENT

All protective equipment (covers, protective grilles, etc.) must be present on the machine at all times.

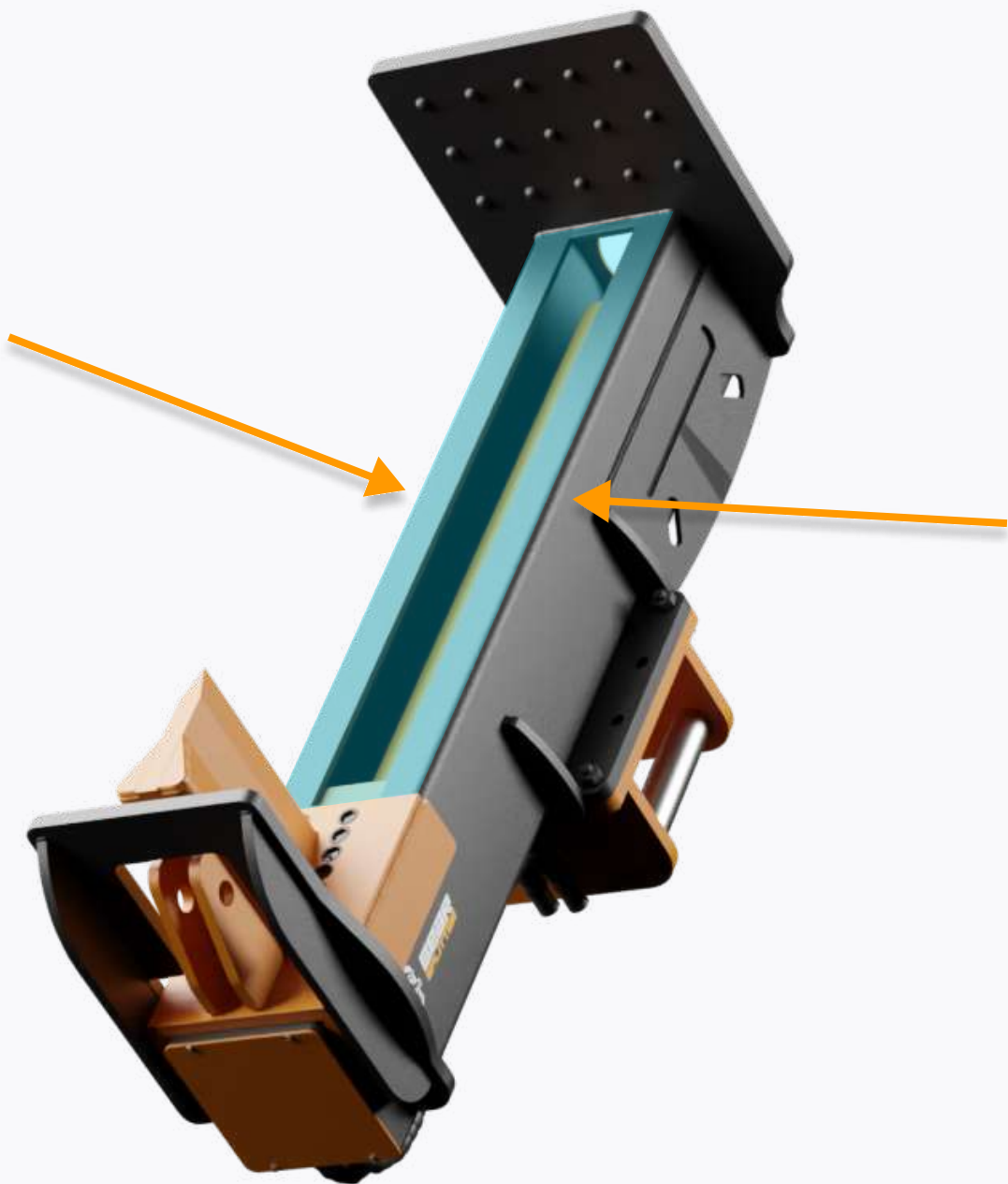
6.2. INSPECTION OF SCREW CONNECTIONS

Check the screw connections after the first ten hours of work and tighten them if necessary. Repeat this inspection every 50 hours of work.

Check the seal of the safety valve for two-hand control of the pusher with the log splitter axe. Changes in settings should only be made by an authorized service technician.

6.3. GREASING WITH GREASE

Apply semi-fluid grease with a brush to the guide column on the entire sliding surface of the log splitter axe every 2 hours of operation (the greasing area is shown in the image below).



6.4. HYDRAULIC HOSES

After the first hour of operation, check that all hydraulic hoses are not leaking and are securely fastened. Check the sealing and fastening of hydraulic hoses every 100 hours of operation. Any damage to the hydraulic hoses must be repaired or replaced immediately.

6.4.1. RECOMMENDED HYDRAULIC OILS	
MANUFACTURER	OIL TYPE
FUCHS	Plantohyd 32S* / RenolinB46 HVI
GENOL	Hydraulic oil 520
ARAL	Vitam VF46
CASTROL	Hyspin AWH-M 46
ESSO	Univis N46
ELF	Hydrelf DS 46
SHELL	Donax TA
OMV	ATF II

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TROUBLESHOOTING



When troubleshooting the machine, it is mandatory to have the machine stopped and powered off.

• Axe does not extend	• Insufficient oil in hydraulic system	• Check oil level in working machine
• Hydraulic oil is too hot	• Insufficient oil in hydraulic system	• Check oil level in working machine
	• Decreased quality of hydraulic oil	• Replace hydraulic oil
• Drop in machine performance	• Hydraulic oil is too hot	• Refer to "Hydraulic oil is too hot"
	• Insufficient oil in hydraulic system	• Check oil level in working machine
• Splitting tool is blocked	• Worn guiding/sliding plates	• Replace guiding/sliding plates and lubricate
	• Hardwood log	• Start splitting the wood at the edge
• Hydraulic valve is leaking	• Worn sealing ring	• Replace sealing rings
	• Loose piston guide	• Tighten piston guide
	• Damaged piston	• Replace piston



Waste disposal must be carried out in accordance with the relevant national regulations or guidelines! Materials that can be recycled should be stored separately and in a suitable condition for further processing!

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SERVICE

We provide service and necessary spare parts and additional equipment for the product for at least five years after the end of its serial production, in accordance with applicable national regulations or guidelines. For ordering spare parts for the machine, please contact your local dealer directly.

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DECLARATION OF CONFORMITY - EC

We declare that the machine listed below is designed and manufactured in accordance with the essential health and safety requirements of the EC Machinery Directive 2006/42/EC.

In addition, the machine complies with the EC Low Voltage Directive 2006/95/EC and the EC Electromagnetic Compatibility Directive 2004/108/EC.

This declaration ceases to be valid if changes are made to the machine without our consent. Log splitter - Bearsplitter M1

The following standards are used to implement the health and safety measures specified in the EC Directives:

- EN ISO 12100 General principles for designing machinery
- EN ISO 4254-1 Agricultural machinery - Safety - General requirements
- EN 13857 Safety distances for upper and lower limbs
- EN 349 Minimum gaps to avoid crushing of parts of the human body
- EN 60204-1 Electrical equipment of machines
- EN 609-1 Safety of log splitters
- EN 574 Two-handed control
- EN 4413 General safety requirements - Hydraulics

Internal measures ensure that serial devices always comply with the requirements of current EC directives and applicable standards.

The name and address of the person who is the signatory of the above EC Declaration of Conformity and authorized to compile technical documentation follow.



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