# HYDRAULIC WOOD SPLITTER

*original operating instructions*

## HB-8N

***IMPORTANT NOTE!***
***Wood splitters with 8t splitting force are mainly used in private areas. For ecological reasons, always place the hydraulic wood splitter on a solid, dense surface to prevent contamination of the surface.***

***ATTENTION! The machine is delivered without engine oil and without fuel!***

***ATTENTION! The vent screw on the oil filler neck must always be unscrewed before the machine is put into operation. This allows the hydraulic tank to be ventilated.***

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Both the model number and the serial number can be found on the rating plate on the machine. You should keep both numbers in a safe place for future reference. This manual explains the functions and uses of the machine.

## FOR YOUR SAFETY

**Before commissioning, read the operating instructions, safety and Warnings must be observed!**

# overview

# 1. Foreword

***Before assembly and before commissioning, read the entire text of the operating instructions. Use these instructions to familiarize yourself with the machine, its correct use and the safety instructions.***

**1.1 Information on the operating instructions**

This operating manual provides important information on how to use the HB-8N hydraulic log splitter. The prerequisite for safe work is correct compliance with all safety instructions and handling instructions. In addition, the safety instructions for the area of application of the machine must be observed. applicable local Accident prevention regulations and safety and general regulations must be observed.

See also "Engine Operating Instructions" for the engine.

## 1.2 Limitation of Liability

We have endeavoured to provide you with as much information as possible about accident prevention when operating the machine, but we accept no liability for incomplete information on the danger points and sources listed.

The manufacturer assumes no liability for damages resulting from:

- Failure to follow the operating instructions
- Improper use of the machine
- Improper assembly, commissioning, operation and maintenance of the machine
- Operating the machine with defective safety devices or not properly installed or non-functional security and protective devices
- Failure to observe the instructions in the operating manual regarding transport, storage, function, operation, maintenance and care of the machine
- Unauthorized structural changes to the machine
- Defective surveillance from machine parts, the one wear and tear subject to
- Improperly performed repairs
- disasters through foreign body influence and force majeure

*IMPORTANT NOTE!*

*When delivered, the machine's engine contains no engine oil or fuel.*

## 1.3 Designation of machine

The Designation machine replaced the Trade name of the item to which this operating manual refers - see cover page.

## 1.4 Copyright

All documents are protected by copyright. The distribution and reproduction of documents, even in part, as well as communication of the content to third parties is not permitted unless expressly agreed.

## 1.5 Reservations

Information on technical data, dimensions and illustrations of the machine, as well as changes to safety standards, are subject to further development and are therefore not binding for delivery in every case.

Subject to printing and wording errors.

## 2. Intended use

use

The machine – hydraulic log splitter HB-8N – is only suitable for splitting wood with a maximum length of 550 mm. Wood may only be split standing up in the direction of the grain.

The machine is designed to be operated by one person only. Two or more people must never work on one machine.

The machine must not be used without the storage table and the splitting table.

When splitting, it is important to ensure that the wood to be split rests on the checkered plate of the splitting table.

The machine may only be used for processing wood.

The security, work and maintenance The manufacturer's instructions and the dimensions specified in the technical data must be observed.

Any other use is improper. Improper use, modifications to the machine or the use of parts that have not been tested and approved by the manufacturer can result in unforeseeable damage!

**WARNING!**

**Possible misuse**
– Safety devices are dismantled may not bypassed.
– Use of non-approved accessories.
– The machine must not be used for commercial purposes.

***Persons who are not familiar with the operating instructions, children, young people and persons under the influence of alcohol, drugs or medication are not permitted to operate the machine.***

## 3. Technical Description

The hydraulic log splitter is a portable machine tool and can only be used for stationary operation.

The pieces of wood are split using a splitting wedge. The splitting tool is driven hydraulically. The hydraulic system is powered by a petrol engine.

The machine is operated using a two-hand control. As soon as the operating levers of the two-hand control are pressed down at the same time, the splitting wedge moves down. If the operating levers are released, the splitting wedge returns to its starting position. If only one operating lever is released, the splitting wedge remains stationary.

The wood is placed on the checkered plate of the splitting table. As you work, the splitting wedge presses down into the wood and splits it.

Handle and wheels allow for convenient transport.

A manual starter (reverse starter) serves as the starting device for the gasoline engine.

## 4. Environment

Please recycle waste and do not dispose of it as garbage. All tools, hoses and packaging must be sorted, taken to the local recycling center and

to be disposed of in an environmentally friendly manner.

The site of use must be protected against contamination by leaking operating materials. Used or remaining operating materials must be recycled in accordance with the environmental protection regulations applicable at the site of use.

**Please contact your local waste disposal authority for Possibilities one environmentally friendly and factual fair disposal.**

# 5. Security

This section provides a comprehensive overview of all important safety aspects for adequate protection of the operator as well as for safe and trouble-free operation.

Failure to follow the instructions and safety information contained in this manual may result in significant hazards.

## 5.1 Warnings

Warnings are marked with symbols in this operating manual. The safety instructions are introduced by signal words that express the extent of the danger.

The instructions must be strictly followed to avoid accidents, personal injury and property damage.

**DANGER!**

**Failure to follow these instructions may result in serious danger to life or death.**

**WARNING!**

**Failure to follow these instructions may result in death or serious injury.**

**CAUTION!**

**Failure to follow these instructions may result in minor to moderate injury.**

*IMPORTANT NOTE!*

*Failure to follow these instructions may result in damage to the engine or other property.*

## 5.2 Safety instructions

**WARNING!**

**Familiarize yourself with the machine. Proper training is a prerequisite for working safely with this machine. Incorrect operation or operation by untrained personnel can be dangerous.**

Read the operating instructions for this machine carefully and observe the labels on the machine. Familiarize yourself with the application and limitations as well as the specific potential hazards associated with it.

Also, familiarize yourself with the controls and how to use them properly. Learn how to stop the machine and turn it off quickly. Inexperienced operators must be instructed by personnel who are familiar with the machine. Only then may they operate the machine.

In addition to the occupational safety instructions in this operating manual, the safety, accident prevention and environmental protection regulations applicable to the area of application of the machine, as well as the road traffic regulations, must be observed.

**responsibility of the operator** The operator must make the operating manual available and ensure that the operator has read and understood it. The operating manual must be handed over. In addition, the operator must train the staff at regular intervals and inform them about the dangers involved in using the machine.

Des further is the operator for that responsible for ensuring that the machine is always in technically perfect condition.

**operator's responsibility**
Only trained persons may start, operate and switch off the machine. The operator must be trained in the correct operation of the machine and be familiar with the necessary safety devices trusted be. Insufficiently informed operators can

and endanger other persons through improper use.

First-time users should seek instruction from the seller to familiarize themselves with the characteristics of the machine, its intended use and the necessary safety devices.

**operating personnel**

**WARNING!**

**Persons who are not familiar with the operating instructions, children, young people under the age of 18 and people under the influence of alcohol, drugs or medication are not permitted to operate the machine. Young people aged 16 and over may use the machine as part of a training course and under the supervision of a trained person.**

**The machine is designed to be operated by one person only! Two or more people must never operate and load the machine.**

It is forbidden for children or other people to be in the work area during splitting. Also watch out for animals.

The machine may only be operated outdoors and not in enclosed spaces.

The operator is liable for all damage to third parties and their property.

**work area**

Working with the machine requires a high level of attention.

– Good visibility and lighting conditions must be ensured at the workplace.**Poor lighting can significantly increase the risk of injury!**
– A level and stable area with sufficient freedom of movement is required for working.
– Do not leave split wood in the work area, **Danger of tripping!**
– In bad weather and on uneven terrain, constant attention must be paid to ensuring safe footing**, Danger of slipping!**

The workplace around the log splitter and the traffic routes required for the delivery and removal of the wood must be designed and maintained in such a way that safe working is possible.

**Operation**

Never operate a damaged machine!

Only work when you are in good physical condition.

Carry out all work calmly and carefully.

Never leave the machine running unattended.

The machine is equipped with a mechanical two-hand control.**The two-hand control must be checked before each operation.**

Do not reach into the running machine during the functional test of the splitting stroke.

Never work without protective devices. The effectiveness of the safety and protective devices must not be unduly influenced or eliminated.

The drive must be switched off immediately if there are noticeable changes in the behavior of the machine.

factory settings (e.g. hydraulic valve, control lever) must not be modified.

Check the screw connections and the oil level regularly.

**WARNING!**

**Hydraulic fluids under pressure can be dangerous!**

Always ensure that the hose line:
– is not damaged or worn;
– has been correctly assembled or installed.

Avoid injuries.
- Never under Pressure standing touch hydraulic hoses or hose lines.

– Never look for leaks with your bare hands; wear safety glasses and protective clothing!
– Never check hose lines in hazardous areas or in areas where machines are running.

– Always remember that certain hydraulic fluids are highly flammable.

Should She under Pressure standing
If you get hydraulic fluid under the skin (injection), seek medical attention immediately.

**end of work**
When carrying out repair or maintenance work, as well as when leaving the workplace, always switch off the engine and remove the spark plug connector.

### 5.3 Personal protective equipment (PPE)

When handling the machine, it is essential to wear personal protective equipment (PPE) to minimize risks to the operator. The following protective measures must be observed:

- Tight-fitting **work clothes** that does not hinder movement. It is primarily used to protect against being caught by moving parts.
- **soundproofing agents** such as hearing protection, earmuffs, etc. to protect against hearing damage. **ATTENTION! Noise can be harmful to health. If the permissible noise level of 80 dB(A) is exceeded, hearing protection must be worn.**
- **face mask** for the Protection before Respiratory diseases to retain fine dust or particles.
- **safety glasses with side protection** to protect the eyes from dust or splinters.
- **work gloves** made of sturdy leather to protect against sharp edges, splinters or excessive vibration.
- **safety shoes or boots** with Steel caps to protect against uneven, sharp-edged substrates or falling objects. The Safety footwear also ensures a safe footing.

- **protective helmet** to protect the head from falling parts and swinging loads. It can also protect against injuries in confined situations.

### 5.4 Safe handling of operating materials/ refueling

**DANGER!**

**Internal combustion engines pose a particular danger during operation and when refueling. Read and observe the warnings in the engine's operating manual and the safety instructions in this manual.**

Do not start or run the engine indoors, in a garage or in a confined space. The engine's exhaust fumes contain poisonous carbon monoxide. Being in an environment containing carbon monoxide can lead to unconsciousness and death.

Before refueling, switch off the engine and let it cool down.

Smoking and any open fire are not permitted.

**The fuels can solvent-like substances Avoid skin and eye contact with petroleum products. Wear gloves when refueling.**

When refueling, be careful not to spill fuel or oil or get it on your clothing. If fuel or oil is spilled, clean the machine immediately. If fuel gets on your clothing, change your clothes immediately.

**Make sure that no fuel or oil gets into the ground (environmental protection!). Use a suitable base.**

Carefully loosen the tank cap so that the existing pressure in the tank can slowly be released.

Check the fuel lines, tank cap and tank for leaks or cracks. The machine must not be operated if there is such damage.

Close the tank cap properly after refueling.

To start the machine, change location (at least 3 meters away from the refueling area).

Fuels cannot be stored indefinitely. Only buy as much as you plan to use in a few months. Do not use old fuel!

Transport and store fuel and oil only in approved and marked canisters.

Do not transport or store fuel and oil near flammable or easily combustible materials, sparks or open flames.

Never operate a machine with a damaged ignition cable and spark plug cap. **Danger of sparking!**

fuels and oils are according to Safety regulations must be kept out of the reach of children.

## 5.5 Service/Security

**WARNING!**

**Repair, setup, maintenance and cleaning work, as well as transporting the machine, should only be carried out when the drive is switched off and the tools are at a standstill. In the event of a malfunction, the drive must always be switched off and the spark plug connector removed.**

Do not service, clean or adjust the machine while it is running. Moving parts can cause serious injury.

On machines with petrol engines before maintenance, cleaning and repair work
Pull the spark plug connector and unscrew the spark plug to prevent accidental starting.

Do not run the machine without an air filter and a silencer.

Check nuts and bolts regularly to ensure they are tight and tighten if necessary.

defeat protective devices and
If work tools show signs of wear, they must be checked regularly and replaced if necessary.

The machine must be operated with low noise and emissions. Only operate the engine under the *"Technical Data"* run with certain information.

The stickers on the machine warn of dangers. The machine must always be kept clean and any damaged stickers and markings must be replaced immediately.

Do not use fuels or other flammable solvents to clean machine parts.**Danger of explosion!**

Do not use a high-pressure cleaner to clean the machine. Water penetrating the machine may damage it.

Keep moisture away from live parts. This can lead to a short circuit.

Always keep the machine clean and clean it after each use. Always keep the machine controls dry and free of resin, oil and grease.

Control elements, such as control levers, etc., must not be improperly locked, manipulated or modified.

Do not stack flammable materials near the motor housing. The hot machine housing can cause a fire.

Clean the engine cooling fins of any dirt.

tank cap regularly on tightness check.

Only use original LUMAG spare parts and accessories. The use of other spare parts and accessories increases the risk of accidents. We accept no liability for any resulting damage.

## 5.6 Electrical system

People wearing a pacemaker must not touch the live parts of the ignition system when the engine is running.

### 5.7 Residual risks and protective measures

**WARNING!**

**Disabling, modifying, blocking, dismantling, converting or attaching any parts to the machine's safety and protective devices is strictly prohibited and failure to do so may result in serious or life-threatening injuries.**

*Mechanical residual hazards*

**squeezing, shearing**

Risk of injury (crushing or severing) to body parts when lowering the splitting knife or when the material to be split is guided or positioned improperly.
→ Basically the two-hand control
Do not reach into the splitting process. Never have two people work on the machine. Risk of injury from jammed split material.
→ If the wood is jammed, only knock it out. The wood is under a lot of tension when you try to remove it, and your fingers could get crushed in the crack.
→ Be careful of falling wood, it can injure your feet.
→ Pay attention to people nearby!

**injuries in general**

When working with dry wood, a sudden split can cause serious injuries. Pieces of wood can fall out during the splitting process and injure your feet.

→ Do not interfere with the splitting process.

→ Maintain sufficient safety distance.
→ Operate the machine calmly and carefully.
→ When handling the machine, it is essential to wear personal protective equipment (PPE).

*neglect of ergonomic principles* **careless use personal protective equipment (PPE)**
negligent use or omission personal protective equipment can result in serious injury.
→ Wear prescribed protective equipment.

**Insufficient local lighting**
Poor lighting poses a high safety risk.

→ Always ensure adequate lighting at the workplace.

**Human behavior, misconduct**
→ Always concentrate fully when doing any work. Residual risk can never be ruled out.

*Electrical Residual Hazards*
**Electrical contact**
Touching the spark plug connector while the engine is running may result in an electric shock.
→ Never touch the spark plug connector or spark plug while the engine is running.

*Thermal residual hazards*
**burns, chilblains**
Touching hot surfaces can cause burns.

→ Allow the engine to cool down. Always ensure that the engine is adequately ventilated.

*danger from noise*
**hearing loss**
Prolonged, unprotected work with the machine can lead to hearing damage.
→ Always wear hearing protection.

*Hazards from materials and other substances*
**contact, inhalation**
Thrown objects or liquids can cause health damage.
→ When splitting, mechanical particles can injure your eyes. Always wear protective goggles!
→ Hydraulic oils are poisonous. If you inhale mist or fumes, supply fresh air. If eye contact occurs, rinse thoroughly (at least 10 minutes) with Rinse with water, then consult an ophthalmologist.

**fire, explosion**
Risk of fire and slipping due to leaked hydraulic fluid.
→ Smoking, fire and open flames are prohibited during operation!
→ Spilled liquid immediately with Remove oil binding agents and dispose of them properly.

*Other hazards*
**Slipping, tripping or falling of persons** On unstable and uneven surfaces, you may be injured by tripping.
→ Be aware of obstacles in the work area. Always ensure you have a secure footing and wear safety shoes.

**5.8 Behavior in an emergency**
If an accident occurs, initiate the necessary first aid measures and request qualified medical assistance as quickly as possible.

When requesting assistance, please provide the following information:

– where it happened
– what happened
– how many injured
– what type of injury
– who reports!

# 6. Warning and information symbols used

Symbols are provided on the machine to provide important information about the product and instructions for use.

**DANGER!**
**This is about your safety.**The symbol indicates a danger, warning or caution.

Please read these instructions completely before using the machine.

Wear safety shoes.

Wear protective gloves.

Wear eye protection.

Wear hearing protection.

**risk of carbon monoxide poisoning** when using the machine in enclosed or poorly ventilated rooms.

The Stay in one carbon monoxide-containing environment can lead to unconsciousness and death.**Do not run the log splitter/engine in an enclosed area.**

Keep the machine away from heat, sparks and flames. Do not smoke near the log splitter.


Petrol is extremely flammable and explosive. Before refueling, turn off the engine and let it cool down. Wood splitter on overflowing Check for fuel or gasoline leaks.


Use unleaded fuel RON95 or higher.

The machine may only be operated by one person.

Never remove or tamper with any protective or safety devices.

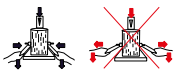
Keep hands and feet away from moving parts.

Dispose of used oil in an environmentally friendly manner.

If a crane is used, place lifting straps around the splitting frame. Never lift the machine by the transport handle.

Keep bystanders away from the work area.

**Caution! moving machine parts.** Avoid you injuries, the because of the movements des splitting knife.



Before using the device, familiarise yourself with the two-handed operation! (Read the manual carefully.)

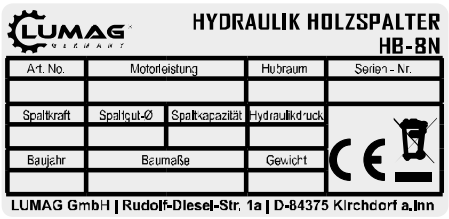

**Danger of cutting and crushing!** Never touch dangerous areas when the splitting knife is moving.

**Warning of hot surfaces. Danger of burns!**
Do not touch hot engine parts. These remain hot for a short time even after the machine has been switched off.

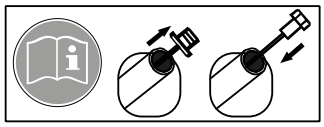
**Attention, risk of tripping!** In the work areaon enough Pay attention to free space. Clutter can lead to accidents.

**Warning!**Fluid under high pressure (hydraulic oil, grease or fuel) can easily splash onto clothing or skin and cause serious injuries!

Before cleaning, maintenance and Repair work: Switch off the engine and disconnect the spark plug connector.




**nameplate**
Equipped with model name, year of manufacture and serial number. Please always state this information when ordering spare parts or for service information.



The transport cap must be replaced by the self-venting screw with oil dipstick before commissioning (see “Commissioning”)

fuel tap open ON
fuel tap closed OFF

choke


Engine switched off OFF
Engine switched on ON


Speed level MIN. Speed level MAX.

# 7. Part designation

## 7.1 Hydraulic log splitter

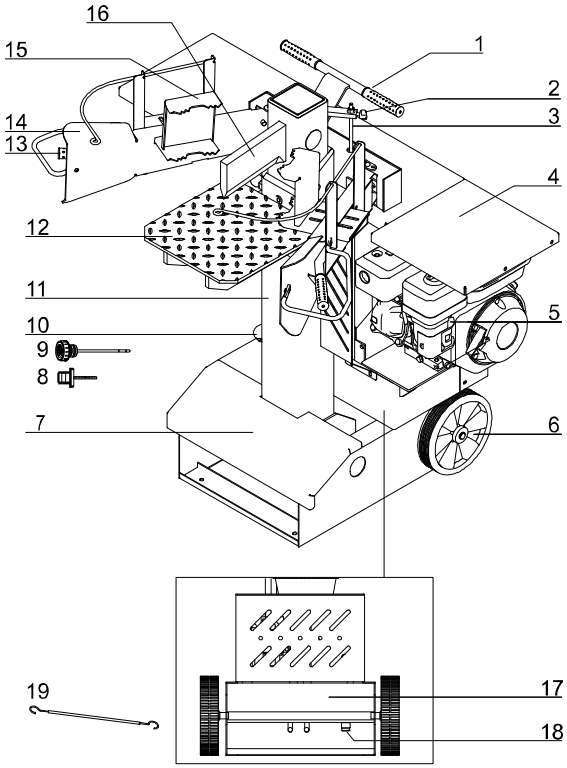



*Fig. 1 Part name wood splitter*

1 carrying handle
2 stroke limiter
3 lifting rod
4 storage table
5 drive unit (petrol engine)
6 transport wheel
7 stand
8 transport lock
9 vent screw with oil dipstick
10 Filler neck for hydraulic oil 11
Splitting column
12 splitting table (work table)
13 Operating lever (two-hand control) 14
Protective device on the operating lever 15
Holding claw
16 splitting knives
17 hydraulic oil tank
18 Drain plug for hydraulic oil 19
Tension rubber

## 7.2 gasoline engine

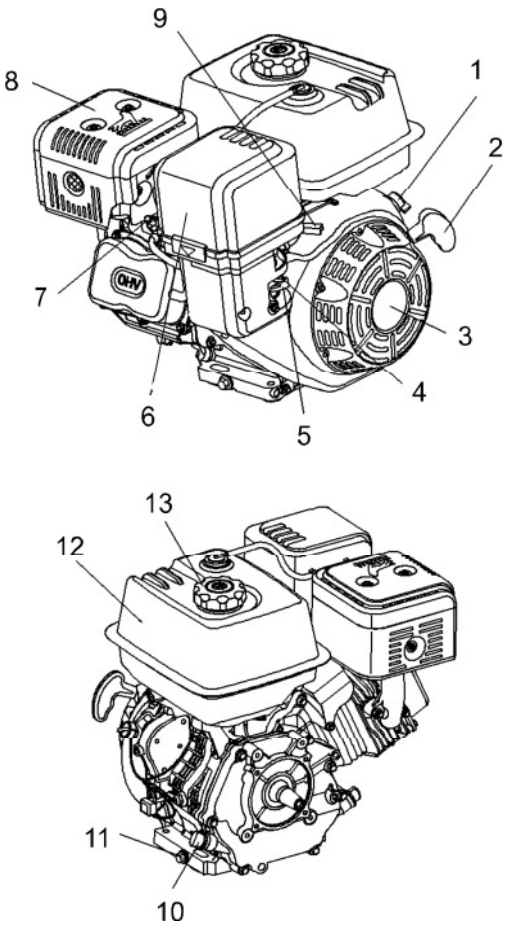



*Fig. 2 part name gasoline engine*

1 engine switch
2 hand starter handle/starter
3 rope recoil starter
4 choke
5 fuel tap
6 air filter
7 Spark plug connector/spark
8 plug muffler/exhaust
9 throttle
10 dipstick
11 engine oil drain plug
12 fuel tank
13 fuel tank cap

### 7.2.1 Functions

**Engine switch OFF/ON START (1)**

Is in dangerous situations a fast
If you need to turn off the engine, turn the engine switch to "OFF". The engine will be turned off (ignition short-circuited).

**recoil starter, hand starter handle/starter rope (3 + 2)**

The starter is designed as a magneto ignition with spring return. Incorrect handling of the recoil starter can damage the starter. Never wrap the recoil starter rope around your hand.

**choke (4)**

The choke lever opens and closes the carburetor choke valve. The choke lever is only used to start a cold engine.

**fuel tap (5)**

The fuel tap opens and closes the connection between the tank and the carburetor.

**air filter (6)**

The air filter consists of a foam pre-filter and a paper filter insert. It is located under the cover. A dirty air filter is noticeable by the engine running poorly and black smoke.

**silencer/exhaust (8)**

The engine exhaust becomes warm when the engine is running. Avoid touching the muffler when it is hot.**Caution: risk of burns!**

**Spark plug connector/spark plug (7)**

The engine's spark plug is located under the spark plug connector. When making adjustments and maintenance work, She always the Spark plug connector from the spark plug.

**dipstick (10)**

The engine oil is filled into the dipstick holder. The dipstick must NOT be screwed down to check the oil level.

**engine oil drain plug (11)**

The engine oil drain plug is located on the side of the engine.

**fuel tank (12)**

The fuel tank has a capacity of 3.6 liters.

# 8. Technical data

| model number | HB-8N |
|---|---|
| drive | 1-cylinder 4-stroke OHV gasoline engine air-cooled |
| displacement | 196cm³ |
| engine power | 4.1 kW at 3600 rpm |
| fuel | unleaded gasoline |
| tank volume | 3.6 liters |
| engine oil | SAE 10W-30 or 10W-40 |
| engine oil filling quantity | ~ 0.6 liters |
| starting system | hand start |
| splitting force | 8t |
| gap length max. | 25~ 55 cm |
| gap diameter max. | 8~ 35 cm |
| hydraulic pressure | 28.0 MPa |
| hydraulic oil capacity | 4.0 L (HLP46) |
| working speed | approx. 5.2 cm/s |
| return speed | approx. 1.5 cm/s |
| sound pressure level $L_{PA}$ | 96.0 dB(A)* |
| sound power level $L_{WA}$ | 112 dB(A)* |
| hand-arm vibration | below 2.5 m/s$_2$ |
| construction dimensions (installation dimensions) | L / 112 cm<br>W / 84 cm<br>H / 151 cm |
| Weight | 121 kg |

* The values given are emission values and do not necessarily represent safe workplace values. Although there is a correlation between emission and immission levels, it cannot be reliably deduced from this whether or not additional precautionary measures are necessary. Factors that influence the actual immission level at the workplace include the nature of the work area and other noise sources, ie the number of machines and other adjacent work processes. The permissible workplace values can also vary from country to country. However, this information is intended to enable the user to make a better assessment of hazards and risks.

Factor of measurement uncertainty K=3 dB (A)

The dimensions and weights given are approximate values and apply to the basic equipment.

**application conditions**

This log splitter is designed to operate at an ambient temperature between +5°C and 40°C and at altitudes of up to 1000 m above sea level. The humidity should be below 50% at 40°C. Storage or transport can take place at temperatures between -25°C and 55°C.

# 9. Scope of delivery

After unpacking, check the contents of the box or transport box for

- completeness and
- possible transport damage.

Report any complaints to the dealer or manufacturer immediately. Complaints made later will not be accepted.

The machine is delivered partially disassembled. The assembly work in section 10 must be observed.

If you have any questions or problems with the machine, please contact us. You can reach us by email:

info@lumag-maschinen.de or by phone at +49 8571/92 556-0.

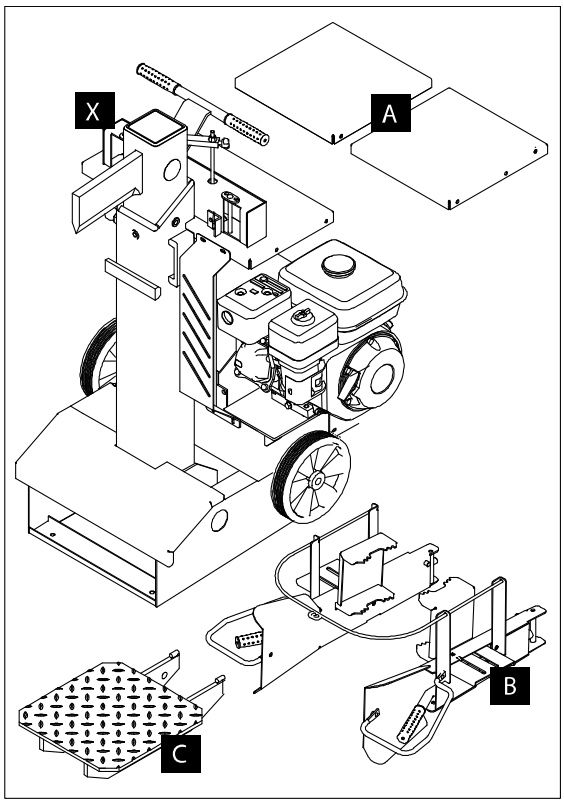



*Fig. 3* *scope of delivery*

Hydraulic log splitter with drive unit (X)
Storage tables (RE/LI) (A)
Operating lever (RE/LI) with protective device and retaining claw (B)
splitting table (C)

## 10th assembly

The machine is partially pre-assembled. However, a few steps still need to be taken to make the machine ready for use.

The tools required for assembly are not included in delivery.

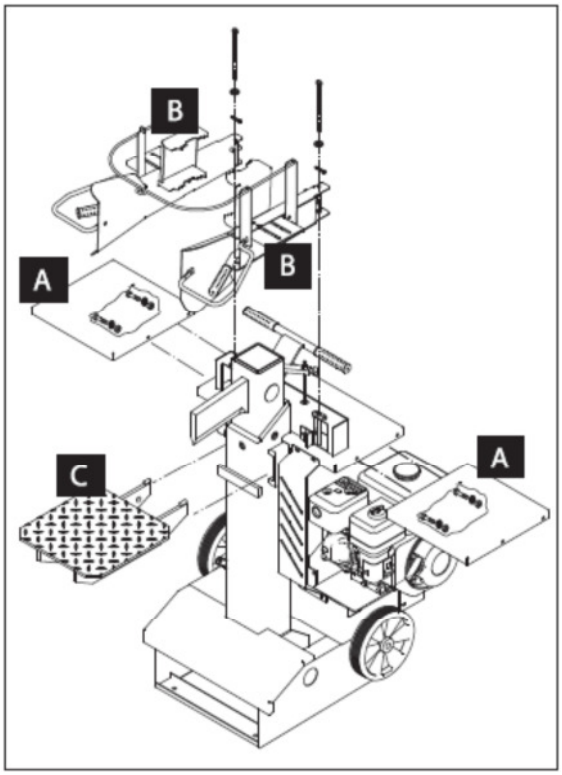



*Fig. 4 assembly steps*

### 10.1 Mount storage tables (RE/LI)
(Figure A)

Mount the storage tables on the left and right of the machine frame as shown.

1. Position the storage table on the bracket as shown in Fig. A and align it with the holes.

2. Secure the storage table using the two hexagon screws M8x20 (SW13), washers and nuts.

Assemble the other storage table in the same way.

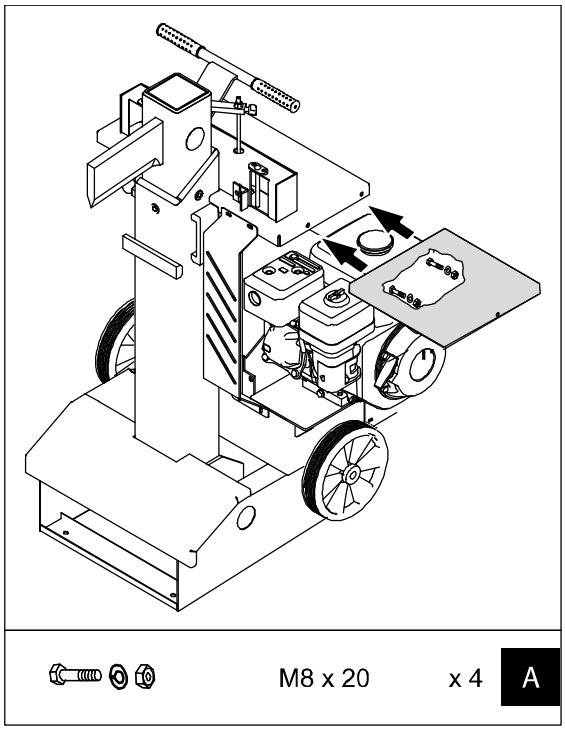


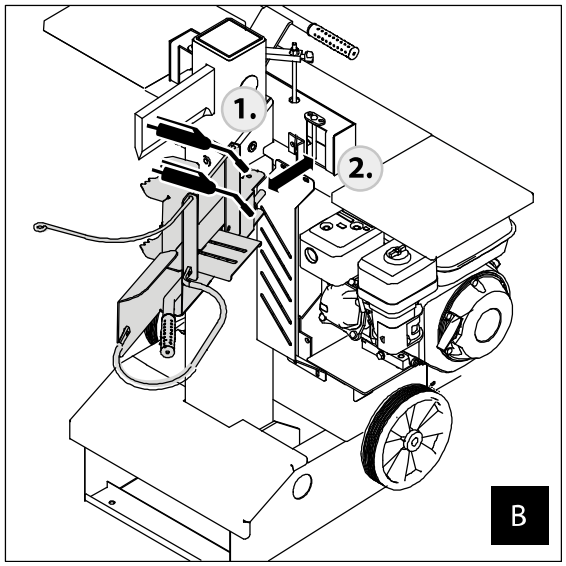

*Fig. 5 Installing the storage tables*

### 10.2 Mount the control lever (R/L)
(Figure B)

Mount the operating lever with protective device on the left and right of the machine frame as shown. When mounting, make sure that you attach the levers so that the retaining claws point inwards.

1. Apply a thin layer of grease to the metal tabs on the top and bottom of the operating levers.
2. Insert the operating lever and insert the pipe into the recess of the cross connection.
3. Insert the retaining bolt in front of the cross connection.
4. Secure the retaining bolt on the underside of the operating lever with the washer and cotter pin.

Mount the other control lever in the same way.



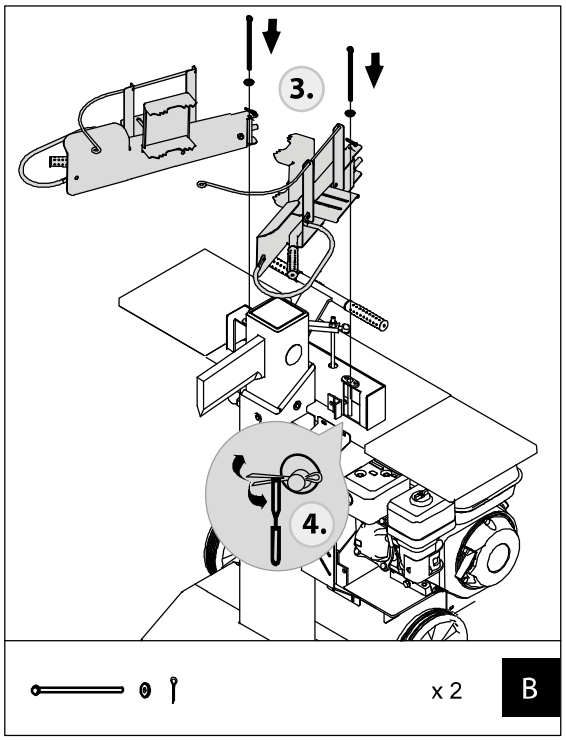




*Fig. 6 Installing the control lever*

## 10.3 Install the splitting table (Figure C)

Attach the splitting table to the splitting frame as shown. To do this, the splitting table is hooked on one side and secured on the other side. When viewing this, assume that you are standing in front of the log splitter.

1. Place the splitting table on the crossbeam (a) and hook it into the holder (b) provided on the right and left of the splitting frame.
2. Secure the splitting table on the left side using the locking mechanism (c). The locking mechanism engages in the hole in the work table.

**DANGER!**

**Pay attention to the table position! The splitting table must always rest on the crossbeam (a).**

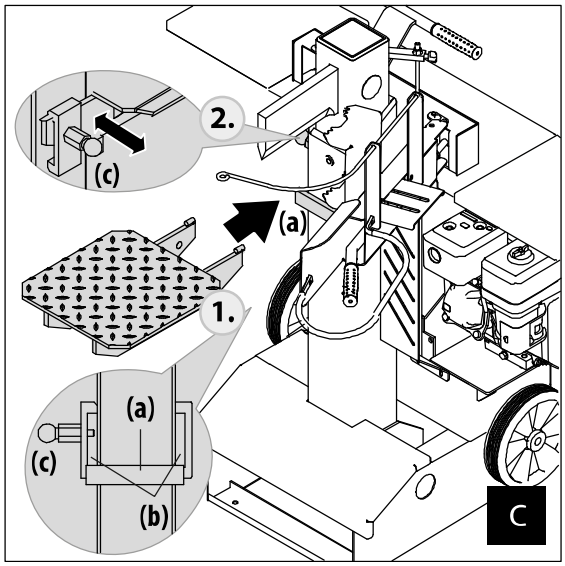



*Fig. 7 Installing the splitting table*

# 11. Transport and storage

*IMPORTANT NOTE!*

*It is best to transport the log splitter upright; if the machine is lying on its side, hydraulic oil will immediately leak out.*

## 11.1. Safety instructions for transport

**WARNING!**

**Danger to life from falling load!**

Falling loads or parts thereof can kill people.

– Never stand under a suspended load.
– Do not enter the swivel range of lifting equipment during operation.
– Always wear a protective helmet when working with cranes.

**WARNING!**

**risk of injury through swinging transport goods!**

Goods being transported with an off-center center of gravity can swing out of control when lifted and seriously injure people nearby.
– Before lifting goods, leave the swivel range of lifting equipment as far as possible.

– Observe transport instructions and symbols on the goods being transported.
– Always wear a protective helmet when working with cranes.

**DANGER!**

**Damage due to improper transport!**

Improper transport can cause significant damage to the goods being transported and to objects nearby.
– Always exercise the utmost care and caution when loading, unloading and transporting goods within the company.
– Observe instructions and symbols on the packaging.
– Always remove the transport lock only during assembly.

**staff**

– Transport work without the aid of lifting or conveying equipment that requires supervision may only be carried out by trained personnel appointed by the operator.

– Transport work with the assistance of lifting or conveying equipment that requires monitoring may only be carried out by trained, authorized and qualified personnel appointed by the operator.

**Personal protective equipment (PPE)**

– Always wear the following during all transport work:
  ► protective work clothing
  ► protective gloves
  ► Non-slip safety shoes

– During all transport work using lifting or industrial trucks such as pulleys, cranes, forklifts, additionally carry
  ► industrial safety helmet

## 11.2. Transport and storage

The log splitter is packaged safely and in an environmentally friendly manner for the expected transport conditions. The packaging protects the components from damage and corrosion until assembly begins.

– Only remove packaging and transport safety devices before assembly.

– Dispose of packaging material in accordance with applicable local regulations.

**The machine is bulky and very heavy. Appropriate preparation is essential.**

**To lift it off the pallet, several people or technical aids are required.**

**pallet transport with industrial truck**

Goods on pallets can be transported with an industrial truck, e.g. forklift truck, under the following conditions:
– The industrial truck must be designed for the transport weight.
– The operator must be authorized to operate the industrial truck.
– Insert the forklift truck with the forks between or under the bars of the pallet until the forks protrude on the opposite side.

– Secure the pallet with the goods to be transported with tensioning straps so that the pallet with the goods to be transported cannot tip over; if necessary, correct the center of gravity. It is also important to ensure that the tensioning straps are of sufficient size.
– Lifting the transported goods and for the destination.

**Transporting goods with lifting equipment**

Goods can be transported directly with a lifting device under the following conditions:

– The lifting gear must be designed for the transport weight.
– The operator must be authorized to operate the lifting equipment.
– Ropes, straps or multi-point slings may only be used on the upper part of the machine (housing).**Never lift by the splitting knife or carrying handle!**
– Slowly lift the load and check that it is hanging vertically; if necessary, correct the centre of gravity using the lifting gear.

– Transport the goods to their destination.

**transport to the place of deployment**

Before moving the machine to a new location or transporting it, lower the splitting knife all the way down.

**WARNING!**

**For motor-driven machines: Machines with petrol engines may only be tilted (max. 20°) for transport, but not turned over any further, as engine oil can get into the air filter. This can put the engine out of operation.**

The log splitter can be transported very easily. An axle with two wheels is attached to the rear. A transport handle is located at the top of the splitting column.

1. Switch on the drive and move the splitting knife all the way down.
2. Switch off the drive.
3. Screw the transport cap (8) onto the filler neck for the hydraulic oil (10) to prevent Oil can leak out.

   **Check again, whether the Transport lock (8) is tight!**

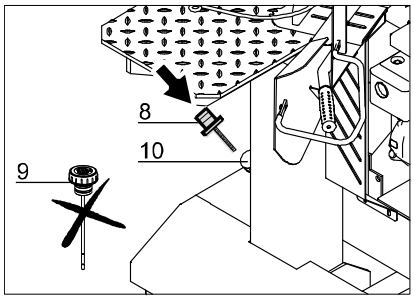



*Fig. 8 Transport lock*

4. To ensure that the two operating levers cannot swing around accidentally during transport, they must be tied together at the front with the tensioning rubber (19).

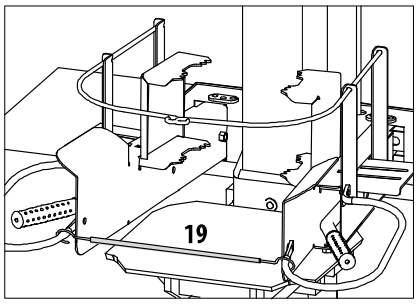



*Fig. 9 Tensioning rubber*

5. To transport the log splitter, use the transport handle to tilt it slightly backwards until the wheels touch the ground. Hold the machine firmly by the transport handle while moving it to prevent the splitter from tipping back.

**CAUTION!**

**The machine may only be transported with the splitting knife lowered.**

**Height in transport position: 108 cm**

**storage conditions**

Place or store the log splitter in a safe, dry and lockable room out of the reach of children. The machine must not be stored outdoors.

Storage temperature: +5°C to +45°C Max. humidity: 60%

Before long-term storage, the machine must be thoroughly cleaned and lubricated.

Store operating materials only in approved,and marked canisters. Do not make operating materials accessible to children.

## 12th lineup

**WARNING!**

**The machine must be installed on a firm and level surface.**

The workplace must be designed and maintained in such a way that safe working is possible.

Organize your workspace. Plan work in advance to save time and effort.

When transporting the machine to and from the site, it is necessary that the paths are clear of tripping hazards. The workplace must be adequately lit.

It is important to ensure that there is sufficient freedom of movement for working.

The machine must be placed directly on the floor. No wooden boards, flat iron, etc. may be placed underneath it.

**WARNING!**

**The work area must be kept free of wood scraps and obstacles (tripping hazards). Slippery and smooth areas must be blunted. Never reach into the splitting area when the splitting knife is moving!**

**DANGER!**

**Do not set up or operate the machine near natural gas, gasoline gutters or other easily flammable materials.**

## 13. Hydraulics

### Note on hydraulics

The hydraulic oil tank is located at the base of the log splitter. The oil tank is filled with hydraulic oil at the factory.

**The transport cap (8) on the oil filler neck must be replaced with the vent screw with oil dipstick (9) before splitting. Do not replace the transport cap until work is finished to avoid unnecessary oil loss during transport.**

*IMPORTANT NOTE!*

*At low temperatures – below 5°C – the oil in the hydraulic system is still very viscous. Immediate operation (splitting) at such temperatures can cause damage to the hydraulic system. Therefore, at low temperatures the splitter should be operated at idle for a while so that the hydraulic oil can warm up.*

If the oil is moved, as in hydraulic machines, there is a risk of oil leakage.

The control valve is adjusted at the manufacturer's factory. No further adjustments are required.

– Make sure that the machine and the work area are clean and free of oil stains.**Risk of slipping and fire!**
– Check regularly whether there is enough hydraulic oil in the tank.*See ... / MAINTENANCE AND REPAIR WORK, Oil change (17.1)*

**Hydraulic oil filling quantity:**

**max. 4 liters (viscosity class HLP46)**

**To prevent pressure from building up in the hydraulic oil tank:**

The vent screw with dipstick notched and O-ring on the hydraulic oil tank is self-venting so that air can escape during operation.

**ATTENTION! If the machine is not transported upright, oil can leak through the vent screw and escape.**

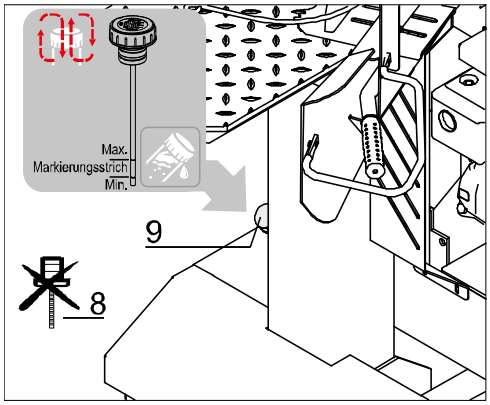



*Fig. 10 Bleed screw*

# 14. Drive types

### 14.1 Gasoline engine

The machine is powered by a petrol engine. For information on starting and switching off the petrol engine, please refer to the engine operating instructions or the following pages of this manual (Section 14.3 / 14.4).

*IMPORTANT NOTE!*

*When delivered, the machine's engine does not contain any engine oil or fuel. Fill the drive motor as described under "FUELLING".*

### 14.2. Refueling

**WARNING!**

**You may only carry out the work described in this chapter after you have read and understood the safety instructions. It concerns your personal safety.**

### 14.2.1 Filling engine oil

*IMPORTANT NOTE!*

*The engine oil must be topped up before the first use! Incorrect oil filling can lead to irreparable damage to the engine. In this case, the seller and manufacturer will not provide any warranty.*

– Place the machine on a level surface and place it on a stable surface so that the motor is horizontal.
– Commercially available engine oil with the **specification SAE 10W-30 or 10W-40**use.
– Correct oil level is between upper and lower levels.

**Check engine oil level**

Turn off the engine and let it cool down.

1. Unscrew the dipstick.

[1]*This self-venting vent screw is used in oil containers/tanks that need to be vented.*

2. Wipe the dipstick with a clean cloth and reinsert it, do not screw it in.

3.Pull out the dipstick again and read the oil level; if necessary, fill engine oil up to the lower edge of the oil filler opening.*Use a funnel!*
4. Tighten the dipstick.

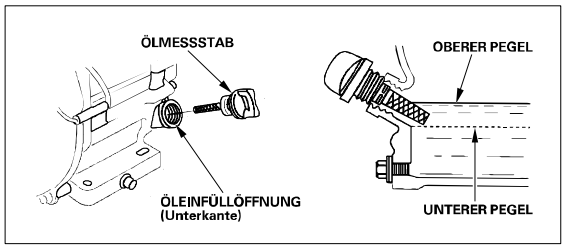



*Fig. 11 refill engine oil*

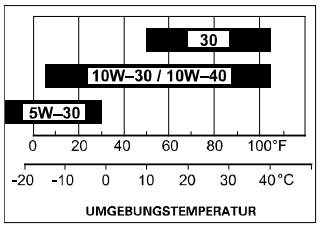



*Fig. 12 Engine oil viscosity*

**Capacity: approx. 0.6 liters**Do not overfill!

**DANGER!**
When the engine is running, the oil filler plug must always be firmly seated in the filler neck!

## 14.2.2 Refueling

**DANGER!**

**health and risk of explosion through Combustion engine. Be careful when handling fuel!**

The engine's exhaust gases contain poisonous carbon monoxide. Being in an environment containing carbon monoxide can lead to unconsciousness and death. Do not run the engine in an enclosed space.

Before operating the machine, read the operating instructions and the engine manual.

Keep the engine away from heat, sparks and flames. Do not smoke near the machine!

Petrol is extremely flammable and explosive. Before refueling, turn off the engine and let it cool down.

This engine requires only regular unleaded gasoline with a research octane rating of 95. Use only fresh, clean fuel. Water or impurities in the gasoline will damage the fuel system.

**When refilling fuel, please note:**

– Switch off the engine and allow it to cool for at least 10 minutes before removing the fuel tank cap.
– Keep the engine away from heat, sparks and flames.
– Fill fuel outdoors or in a well-ventilated area to dissipate fumes.
– Keep gasoline away from sparks, open flames, pilot lights, heat sources and other sources of ignition.
– Do not spill fuel, use suitable filling aids.

– If fuel is spilled, wait until the vapors have dissipated before starting the engine.

**refueling**

1. Turn the fuel tap to OFF.
2. Clean the area around the fuel tank cap of dirt and foreign objects.
3. Unscrew the tank cap.
4. Fuel tank with**gasoline (RON95)**To allow room for the gasoline to expand, do not fill beyond the bottom edge of the fuel filler neck.
5. Screw the tank cap tightly onto the tank neck.
6. Wipe up any spilled gasoline immediately.

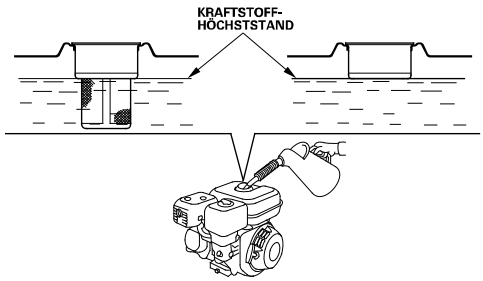



*Fig. 13 Fuel*

**Tank volume: approx. 3.6 liters**Do not overfill!

### 14.2.3 Storing fuel

Fuels can only be stored for a limited time; they age. Fuels or fuel mixtures that have been out of date can lead to starting problems. Only store as much fuel as you will use in a month.

Only store fuel in containers specifically approved for this purpose. Store fuel containers in a dry and safe place.

Store fuel containers out of the reach of children.

### 14.3. Start the engine

1. Set the fuel tap (5) to the “ON” position.
2. Incold engine Turn the choke lever (4) to the left to “CLOSE”.warm engine Leave the choke lever (4) set to the right to “OPEN”.
3. Push the throttle lever (9) slightly to the left, 1/3 in the direction of “RABBIT”.
4. Set the engine switch (1) to “ON”.
5. Slowly pull the manual starter handle (2) out of the recoil starter until you feel resistance, then pull it with a quick but gentle movement and slowly pull it back again. The engine starts.

   **CAUTION! Do not pull the starter rope all the way out and do not let the starter handle hit the engine.**

6. If the choke lever (4) was set to “CLOSE” to start the engine, gradually return it to “OPEN” while the engine warms up.
7. To operate, open the throttle lever (9) completely, ie slowly move it towards “RABBIT”.

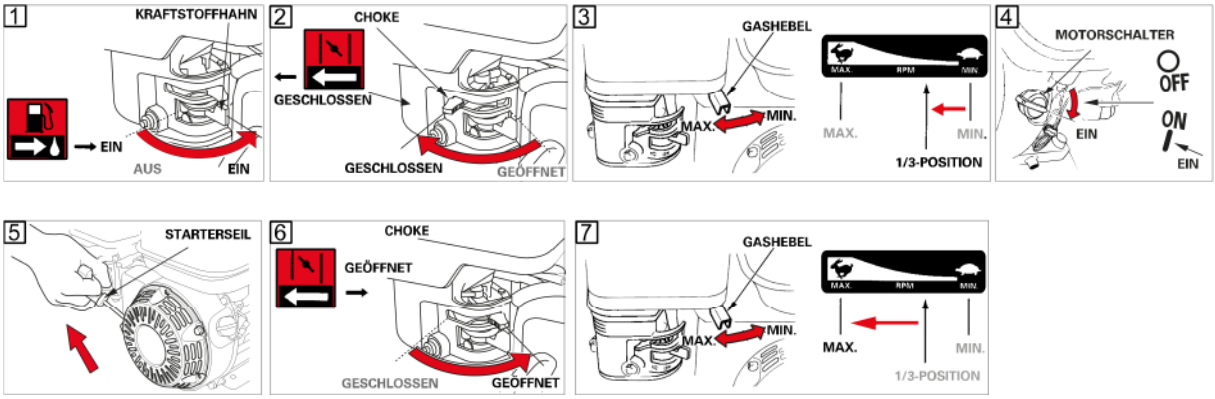



*Fig. 14 Starting the engine*

### 14.4. Turn off the engine

1. Push the throttle lever (9) into the idle position “MIN.” in the “turtle” direction.
2. Set the engine switch (1) to “OFF”.
3. Then turn the fuel tap (5) to the left to the “OFF” position to close it.

When leaving the machine, remove the spark plug connector (7) = protection against unauthorized use!

**CAUTION! Never move the choke lever to “CLOSE” to stop the engine. This can cause backfiring or engine damage.**

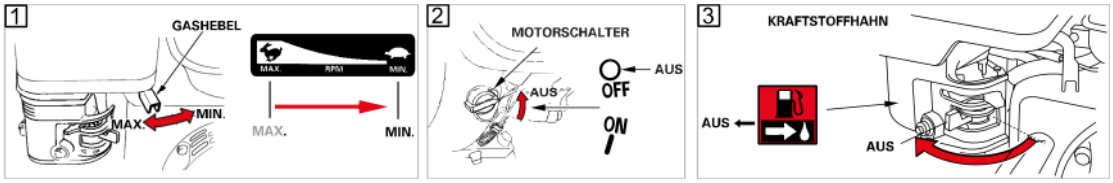



*Fig. 15 Turning off the engine*

# 15. Commissioning

***Only operate the machine when it is in a stable position. Pay particular attention to ensure that the floor does not give way under the heavy load of the machine. Always ensure that the machine is in an upright position when working.***

***Do not work alone; someone must be nearby (within calling distance) in case of emergencies.***

**WARNING!**

**During the splitting process and the return stroke of the splitting knife, the wood must not be held by helpers, otherwise there is a high risk of injury!**

**Perform a visual inspection**

Before each use, the machine must be checked for external damage.

The hydraulic hoses and connection points on the hydraulic system must be checked to identify and eliminate any leaks.

All safety devices must be fitted to the machine. They must not be removed or rendered unusable.

Before starting work, check that the control lever moves smoothly and functions properly.

Keep handles dry and clean.

The two storage tables and the splitting table must always be firmly and securely attached to the splitter.

If any faults or defects occur, the machine must not be put into operation until they have been rectified.

**ATTENTION! When carrying out any work on the machine, always wear appropriate protective equipment and switch off the drive.**

## 15.1 Work preparation

**Recommended size of the split material**

| ACTION | HB-8N |
|---|---|
| gap length max. | 25~ 55 cm |
| gap diameter max. | 8~ 35 cm |

*IMPORTANT NOTE!*

*The diameter of the split material is only a guideline. The possible splitting performance depends on the type of wood, its length, growth and the number of branches it contains.*

**Install vent screw with oil dipstick**

The transport cap on the filler neck for the hydraulic oil must be replaced with the vent screw with oil dipstick before splitting.

Do not replace the transport cap until work is finished to avoid unnecessary oil loss during transport.

**Check hydraulic oil level**

Check the hydraulic oil level regularly and top up with hydraulic oil HLP46 if necessary (max. filling quantity 4 liters). Make sure that no dirt, wood chips, etc. get into the oil tank.

**refilling engine oil and fuel**

Before each application:

– Check the oil level and, if necessary, top up with oil for 4-stroke engines of type SAE 10W-30. (Filling quantity approx. 0.6 liters)

– check whether there is enough petrol in the fuel tank and refill if necessary. (Filling quantity approx. 3.6 litres)

**Lubricate the splitting knife guide**

Apply a thin layer of lubricant to the sliding surfaces of the splitting column before operation to extend the service life of the sliding jaws.

**Check two-hand control**

The machine is equipped with a mechanical two-hand control. This ensures that the operator cannot reach into the splitting area when working with the machine.

The two-hand control must be checked before each use.

First – after starting the engine – pay attention to the movement of the splitting knife.**ATTENTION! The splitting knife moves upwards automatically.**

*IMPORTANT NOTE!*

*With it the Tension always on one remains at a sufficient level, before starting the engine, press and hold one of the control levers down (1.) and start the engine (2.). Then release the control lever (3.).*

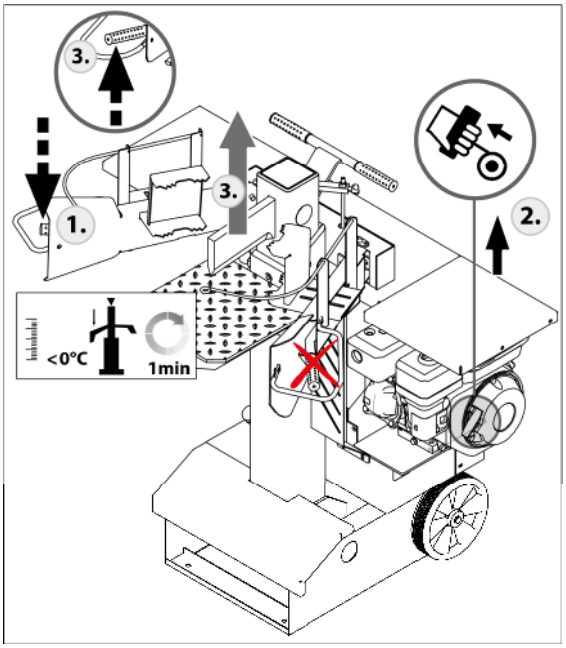



*Fig. 16 START recommendation*

To start the splitting process, both control levers must be pushed down. The splitting knife moves downwards.

When you release a control lever, the splitting process stops. The splitting knife must remain in its position and must not return to its original position.

When you release both control levers, the splitting knife returns to its original position (upwards). If only one control lever is operated, the splitting knife must not move downwards.

When you release the control levers, they must automatically return to their original position.

| ACTION | RESULT |
|---|---|
| Both control levers simultaneously after press below... | Splitting knife moves below – up to approx. 5 cm – above the work table. |
| When you release a of the two control lever... | Splitting knife remains in the current position. |
| Both control levers release... | splitting knife moves automatically in his back to the starting position. |

# 16. Operation

*IMPORTANT NOTE!*

*At outside temperatures below 5°C, the hydraulic oil is viscous. To avoid damage to the hydraulic system, the machine must be run idle for at least 5 minutes at such temperatures so that the hydraulic system reaches its operating temperature. Otherwise, perfect splitting operation cannot be guaranteed.*

## 16.1 Columns

**WARNING!**

**Never reach into the splitting area when the splitting knife is moving. In an emergency, release both control levers.**

When splitting, always use the wood holding device (operating lever with protective device / holding claw) use.

1. Start the machine's engine. The splitting blade moves up automatically. Wait a few seconds for the engine to reach its final speed and for the pressure to build up in the hydraulic pump.

*IMPORTANT NOTE!*

*With it the Tension always on one sufficient level, press one of the control levers down and hold it down before switching on the engine (1.) and start the engine (2.). Then release the control lever (3.).*

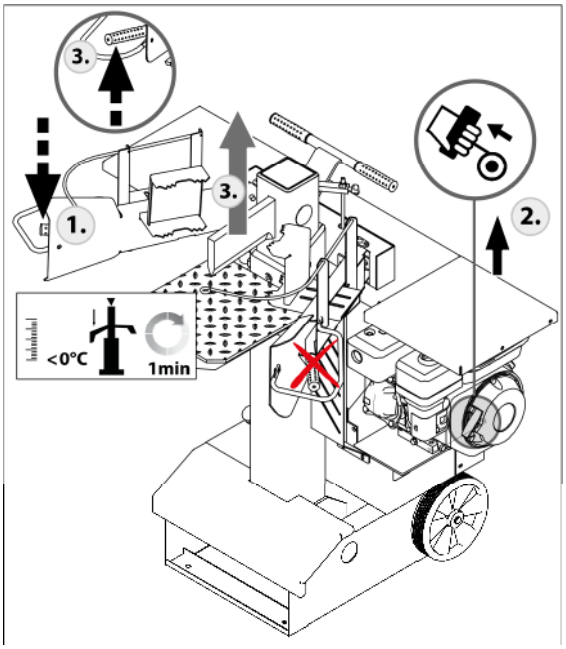



*Fig. 17 START recommendation*

2. Place the material to be split standing upright on the splitting table between the two operating levers, under the splitting knife.

3. Adjust both operating levers and the holding claws depending on the diameter of the material to be split and press them inwards. This will fix the wood in place.

4. To start the splitting process, press both control levers down at the same time. This sets the splitting knife in motion.

   Both control levers must remain pressed during the entire splitting process.

   If the splitting process is to be interrupted, one of the two operating levers must be released. The splitting knife remains in its current position.

5. Once the splitting process is finished, both operating levers must be released so that the splitting knife can move upwards again.

   The split wood may only be removed from the splitting table when the splitting knife is back in its original position.

6. Before the next splitting process, clean the splitting table of wood residues and chips.

7. When leaving the machine, switch off the engine and remove the spark plug connector.

**WARNING!**

**No other persons are allowed to be in the working area of the machine.**

## 16.2 Adjusting the gap length

The machine is set to its maximum splitting length upon delivery.

When the engine is started, the splitting blade automatically moves to the maximum total stroke height. However, if you want to split wood whose height is less than the total stroke, the stroke can be limited.

The lifting height can be adjusted continuously.

**stroke limiter**

1. Move the splitting knife to the desired height and switch off the motor. One control lever must remain pressed so that the splitting wedge cannot move back up again.
2. Loosen the clamping screw (1) behind the splitting column.
3. Pull out the lifting rod (2) as far as possible. The further the lifting rod is pulled out, the smaller the gap height becomes.

4. Fix the lifting rod with the screw to the desired Height clamp.
   Tighten the clamping screw firmly.
5. Switch the machine on again. The splitting knife can no longer be extended to its maximum splitting length as it is limited by the lifting rod.

When resetting the maximum splitting length, the clamping screw must be loosened. The splitting knife can then extend to its maximum length. Then tighten the clamping screw again.

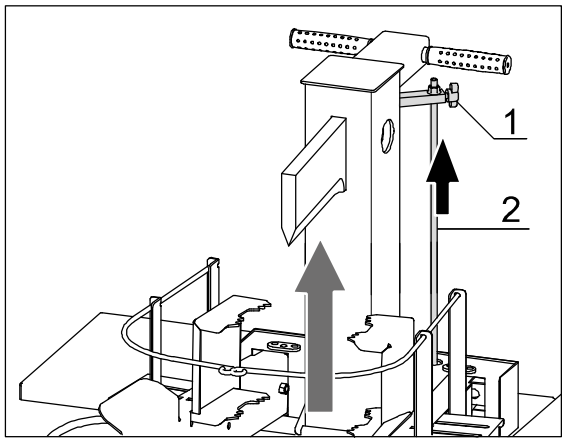



*Fig. 18 Stroke limitation*

#### 16.3 Releasing jammed pieces of wood

It can happen that the material to be split is not split completely and the splitting knife takes the wood upwards when it is raised.

1. Allow the splitting knife to return to its original position.
2. Turn off the drive.
3. Now the wood has to be knocked down. A hammer can be used for this.

**WARNING!**

**Do not remove jammed logs with your hands! Never let other people help you remove jammed pieces of wood.**

### 16.4 Notes on splitting

The split material must have a flat cutting surface that is perpendicular to the splitting direction.

The support surface (splitting table) of the machine must be clean. Any leftover wood from previously split wood must be removed.

It is essential to ensure that the log is held vertically under the splitting knife, otherwise there is a risk of injury from slipping split material!

The split material must not be held by another person, but only with the wood holding device.

**The operator must perform the splitting process with both hands.**Never reach into the splitting area when the splitting wedge is moving!

**ATTENTION! Wood can split, only use delimbed wood for splitting.**

The logs must be split lengthwise. Never split them lying down or across the grain!

If the wood is extremely overgrown, split the logs from the edge.

Wear suitable gloves and safety shoes when splitting wood.

**ATTENTION! Certain types of wood can become under great tension when splitting and can suddenly break.**

**CAUTION!**

**columns She no Fresh wood! dry, Seasoned wood is easier to split and will not wedge – as often happens with fresh wood**

**WARNING!**

**Split the log in the direction of the grain! Only split logs that have been sawn straight. The logs should lie flat on the base plate.**

### 16.5 End columns

1. Move the splitting knife downwards.
2. Release one of the control levers.
3. Set the petrol engine to idle and let it run for a few minutes to allow the engine to cool down.
4. Turn off the engine.
5. Disconnect the spark plug connector.
6. Tilt the machine slightly backwards using the transport handles and roll it on the wheels to the desired location.

## 17th inspection work

**Before carrying out any inspection work on the machine:**

- Switch off the drive and secure it against restarting and unauthorized operation.
- For petrol engines, remove the spark plug connector.
- Clean the machine of wood residues, chips and other dirt.

### 17.1 Screw connections

After the first hour of operation, check that all screws and nuts are tight and tighten if necessary. Thereafter, regularly tighten and check all screws and nuts.

Replace lost screw connections.

All hydraulic fittings and - Check hoses for leaks and tight fit.

### 17.2 Splitting knife guide

Grease the guide of the splitting column (apply grease with a brush). Never use oil as this can destroy the sliding jaws (wearing part).

### 17.3 Two-hand operation

Check that the operating levers move smoothly and re-lubricate if necessary.

### 17.4 splitting knife

The splitting knife is a wearing part. splitting knife regularly with a file regrinding.

Occasionally grease the splitting knife.

### 17.5 Hydraulic oil level

Check the oil level regularly using the dipstick. Never operate the machine without oil or with too little oil. Check the oil level with the splitting knife retracted.

### 17.6 Lubricate all moving parts as required.

## 18. Maintenance and maintenance work

**Before any maintenance or repair work on the machine:**

- Switch off the drive and secure it against restarting and unauthorized operation.
- For petrol engines, remove the spark plug connector.
- Clean the machine of wood residues, chips and other dirt.

Never leave the machine running unattended.

Never work without protective devices. Refit all protective devices after maintenance work.

Only use original LUMAG spare parts. Other parts can cause unforeseeable damage and injuries.

Work on the electrical equipment may only be carried out by qualified electricians.

### 18.1 Hydraulic oil change

The hydraulic system is a closed system with an oil tank, oil pump and control valve. Never operate the machine without oil or with too little oil. If air gets into the circuit due to a lack of oil, the hydraulic pump can be damaged.

hydraulic oil is skin-damaging: **protective gloves wear or Use skin protection products.**

**Drained operating materials must be collected and stored in suitable containers. They must be disposed of in accordance with the applicable environmental protection regulations.**

Check the hydraulic oil level regularly.

No dirt or deposits may enter the oil tank. Even slight contamination can cause significant damage to the hydraulic system.

The drain plug is located on the bottom of the oil tank. The filler plug is located on the top right of the tank.

**The first oil change should be carried out after approximately 25-30 operating hours. After that, the hydraulic oil should be changed approximately every 50 operating hours or once a year.**

**We recommend the hydraulic oil HLP 46.**

The following hydraulic oils or equivalent oils of viscosity class HLP 46 are recommended for the hydraulic transmission system:

**SHELL Tellus 22-46, Esso Nuto H46, DEA HD B46**

*IMPORTANT NOTE!*

*Retract the splitting blade before changing the oil.*

1. Place a container with sufficient capacity of at least 8.0 liters under the tank drain plug. The plug is located on the bottom of the tank.
2. Unscrew the dipstick and open the drain plug on the bottom of the tank. Do not forget to screw the drain plug back in before filling with new hydraulic oil!
3. The capacity of the tank is approx. 4.0 liters. Depending on the model, use the dipstick on the vent screw as a guide.
4. Screw the dipstick back in, don't forget the sealing ring!
5. Collect used oil and dispose of it in an environmentally friendly manner.
6. Leaked or spilled hydraulic oil must be wiped up or bound with suitable binding agents.
7. After an oil change, operate the machine three to four times at idle speed to allow air to escape from the hydraulic circuit.

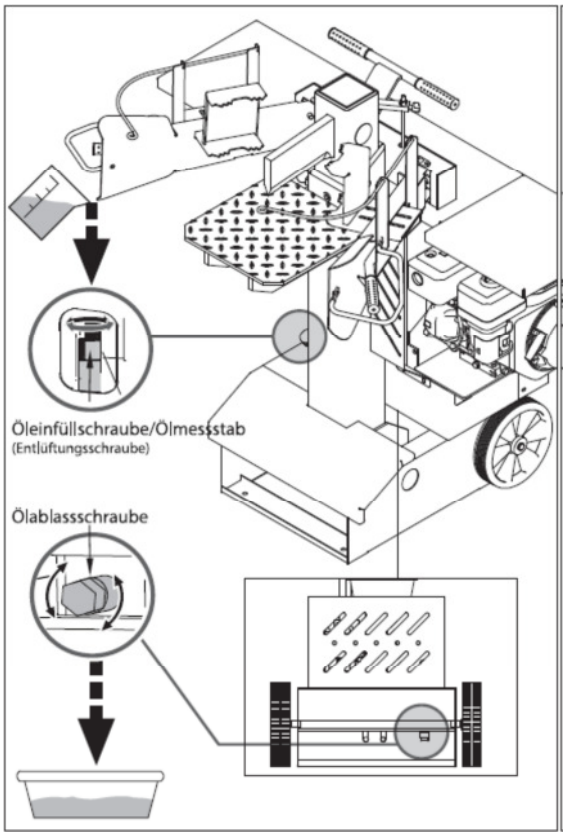



*Fig. 19 Hydraulic oil change*

*IMPORTANT NOTE!*

*The hydraulic oil level on the dipstick must be between the upper mark (Max.) and the lower mark (Min.). If this is not the case, add hydraulic oil.*

Too little oil can damage the oil pump and lead to excessive temperatures in the hydraulic system.

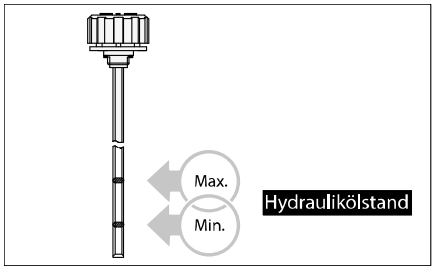



*Fig. 20 Oil level check*

**WARNING!**

**The hydraulic oil is under pressure!**

**There is therefore a risk of injury from leaking hydraulic oil. The hydraulic hoses must be checked visually on a regular basis.**

**A change will be made as necessary, but no later than after 5 years.**

*CONTROL WORK under point 17.1 must be observed.*

#### 18.2 Guides of the splitting column

If the splitting column has too much play in relation to the column guide due to wear of the sliding jaws, the sliding jaws (a) must be replaced.

*CONTROL WORK under point 17.2 must be observed.*

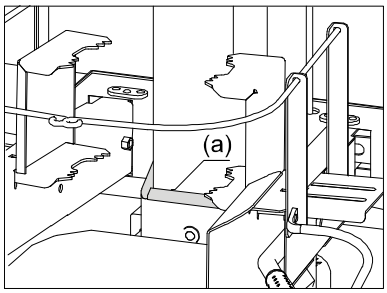



*Fig. 21 Sliding jaws*

#### 18.3 Grinding the splitting knife

The log splitter is equipped with a reinforced splitting blade. After long periods of use and if necessary, you can sharpen the splitting blade with a fine-toothed file or remove all edges or flat spots.

*CONTROL WORK under point 17.4 must be observed.*

### 18.4 Cleaning

Clean the machine regularly to ensure optimal functioning.

### 18.5 Storage

After completion of the work, the machine should be thoroughly cleaned and lubricated.

Store the machine under a tarpaulin in a dry, covered place. Strong sunlight can damage the surface of the hydraulic hoses, which can lead to premature wear and therefore replacement.

### 18.6 Wear parts

wearing parts How sliding guides or splitting knife are from the warranty claim excluded, but can be requested through your dealer.

– sliding blocks
– Hydraulic hoses (must be replaced every 4-5 years)
– Hydraulic oil (must be replaced approximately every 50 operating hours or once a year)

#### 18.7 gasoline engine

For maintenance work to be carried out, please refer to the engine operating instructions or the following pages of this manual.

#### 18.7.1 Cleaning/changing the air filter

Frequent cleaning of the air filter (6) prevents carburetor malfunctions. If the engine starts to smoke and the engine power decreases, this is a sign that the filter is clogged.

**Clean the air filter approximately every 50 operating hours. In particularly dusty conditions, clean more often, approximately every 10 operating hours**.

**WARNING!**

**NEVER use gasoline or low flash point cleaning solvents to clean the air cleaner element. A fire or explosion could result.**

**Clean air filter, change filter elements**

1. Unscrew the wing nut and remove the cover.
2. Unscrew the wing nut and remove the air filter element.
3. Carefully remove the foam filter from the paper filter. Check both parts for damage. Replace any damaged inserts.
4. Clean air filter element if reusing.

**foam filter insert**Clean in warm water and a mild soap solution. Rinse thoroughly with clean water and allow to dry well.

**paper filter insert**Tap on a hard surface to remove dirt.

You can also clean the filter with compressed air (not more than 2.07 bar).

5. Clean the air filter mounting plate and gasket with a damp cloth. Make sure that no dirt gets into the line to the carburetor.

6. Place the foam filter on the paper filter and reinstall the filter element. Make sure that the seal is installed under the air filter.

7. Tighten the wing nut.
8. Replace the cover and tighten it with the wing nut.

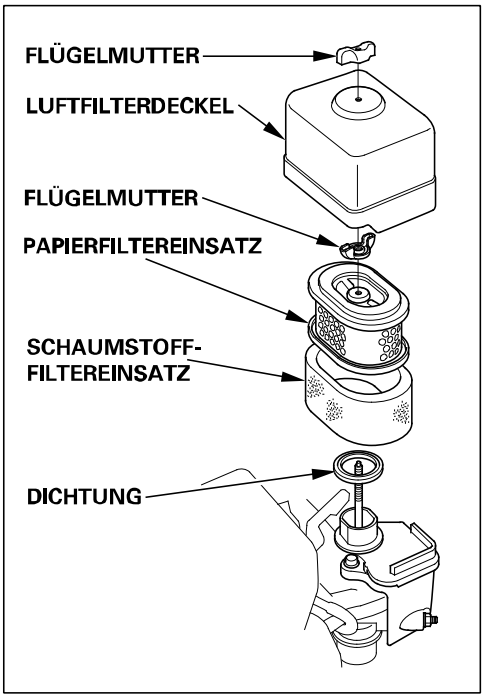



*Fig. 22 air filter*

**Change the air filter regularly.**

*IMPORTANT NOTE!*

*Never run the engine without an air filter element or with a damaged one. This will allow dirt to enter the engine, which can cause serious engine damage. In this case, the seller and manufacturer will not provide any warranty.*

### 18.7.2 Checking/replacing the spark plug

**Do not touch the spark plug or the spark plug connector when the engine is running. Wear protective gloves!**

**Hot surface!**
**The engine contains parts with hot surfaces, How muffler or cooling fins. Wait until the engine has cooled down before performing any work on the engine.**

Check the spark plug (7) and the gap between the electrodes regularly.

**Check, clean and replace spark plug**

1. Allow the engine to cool down.
2. Remove the spark plug cap from the spark plug and remove any dirt in the spark plug area.
3. Unscrew the spark plug with the spark plug wrench and check it.
4. Check the insulator. If there is any damage such as cracks or splinters, replace the spark plug.
5. Clean the spark plug electrodes with a wire brush.
6. Check the electrode gap and adjust if necessary. The electrode gap must be 0.7 - 0.8 mm.
7. Carefully screw in the spark plug by hand and tighten it with the spark plug wrench.
8. Place the spark plug connector onto the spark plug.

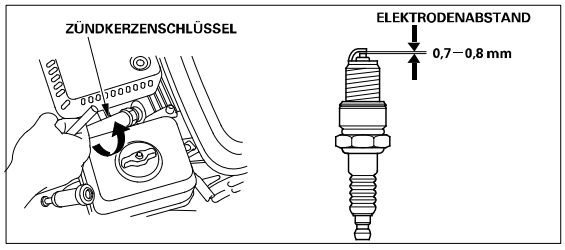



*Fig. 23 spark plug*

*IMPORTANT NOTE!*

*A loose spark plug can overheat and damage the engine. And over-tightening the spark plug can damage the threads in the cylinder head.*

*guideline:*
*> Used spark plug: 1/8 - 1/4 turn*
*> New spark plug: 1/2 turn*

**Replace the spark plug:**

– every 100 operating hours or every season
– if the insulator is damaged
– with large electrode gap
– for heavily soiled or oily electrodes

## 18.7.3 Muffler/Exhaust

Check the muffler (8) regularly. Clean the outlet opening.

### 18.7.4 Engine oil change

Cold engine oil is viscous and difficult to change. For a smooth oil change, the engine should be warmed up. However, it does not have to be hot, otherwise you risk serious burns if you touch it. Warm oil drains quickly and completely.

**Make sure that no engine oil gets into the ground reached. Suitable base use. operating materials are to be disposed of as hazardous waste dispose of it, even if only small quantities are involved.**

**The Engine oil is after the first 20 operating hours, then only every 100 operating hours or every season.**

*IMPORTANT NOTE!*

*Two people are required to change the engine oil.*

1. Unscrew the oil drain plug (12).
2. Unscrew the oil dipstick (10).
3. Hold a suitable container (at least 1.5 liters) under the oil drain plug.
4. A second person tilts the machine so that the oil can drain.
5. Thoroughly clean the area around the oil outlet.
6. Screw the oil drain plug back in. Slowly fill in engine oil (approx. 0.6 liters).*See ... / DRIVE TYPES, refueling (14.2)*
8. Screw in the dipstick firmly.
9. Oil residues or contamination remove.
10. Dispose of engine oil in accordance with local regulations.

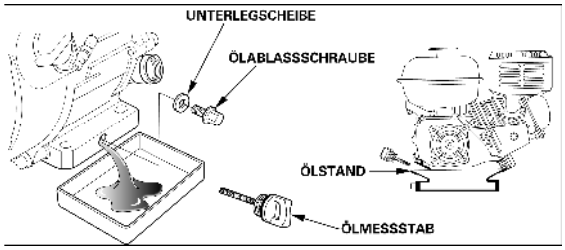



*Fig. 24 Engine oil change*

### 18.8 Maintenance plan

| intervals | Before everyone Operation | After everyone Operation | After the first 20 Bh* | All 50 Bra* | All 100 Bra* | At Requirement | Every season |
|---|---|---|---|---|---|---|---|
| machine control | ■ | | | | | | |
| fuel and engine oil level control | ■ | | | | | | |
| change engine oil | | | ■ | | ■ | | |
| change fuel | | | | | | | ■ |
| air filter ...check | ■ | | | | | | |
| ...clean | | | | ■ | | | |
| ...exchange | | | | | | ■ | |
| spark plug ...set | | | | | ■ | | |
| ...change | | | | | | | ■ |
| hydraulic oil level ...check | ■1) | | | | | | |
| hydraulic oil ...change | | | | ■2) | | | |
| hydraulic hoses and connections for tightness and firm seat check | ■3) | | | | | | |
| cleaning the machine | | ■ | | | | | |

* Bh = operating hours

1) at least every 5 hours
2) or once a year
3) replace every 4 – 5 years

# 19. Disposal

When the machine is no longer serviceable and is to be scrapped, it must be deactivated and dismantled, that is, it must be brought to a condition where it can no longer be used for the purposes for which it was designed.

Disposal of the machine must be carried out by trained personnel. The machine may only be disposed of via the designated and approved methods.

## 19.1 Decommissioning

Disused machines must be taken out of service immediately and professionally in order to avoid later misuse and endangerment of persons or the environment.

Drain all environmentally hazardous operating materials from the old device and dispose of them in an environmentally friendly manner. Oil residues must never be discharged into the soil or wastewater.

Block every moving part of the machine and dismantle the machine into its individual parts. Hand over machine components to controlled disposal sites.

Remove rubber and plastic parts from the machine and take them to a designated collection point.

## 19.2 Disposal of electrical equipment

Electrical components are classified as hazardous waste and must be disposed of separately from the machine. In the event of a fire in the electrical system of the device, extinguishing agents approved for this purpose must be used (e.g. powder extinguishers).

## 19.3 Disposal of lubricants

The disposal instructions are in the product-specific data sheets. If necessary, ask your lubricant manufacturer.

# 20. Hydraulic diagram

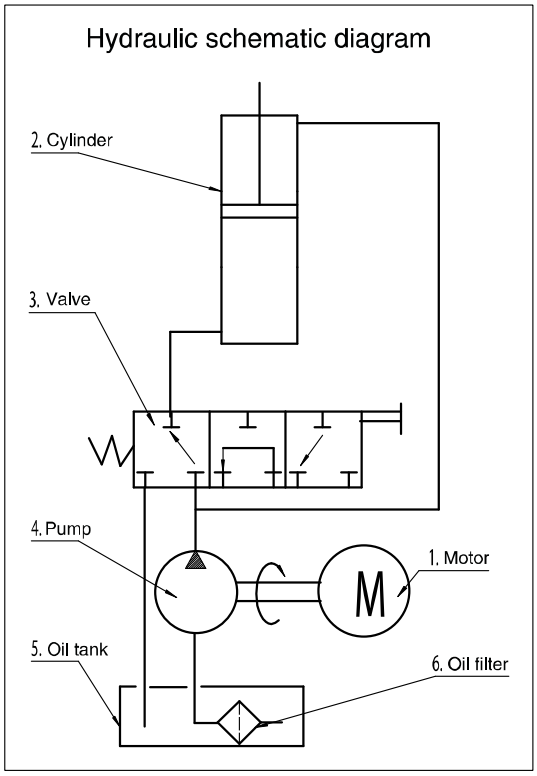



*Fig. 25 hydraulic diagram*

# 21. Troubleshooting

**WARNING!**

**Any faults in the machine or engine that require major intervention should always be repaired by your LUMAG workshop or an authorized specialist workshop. Improper intervention will void the warranty.**

| PROBLEM | POSSIBLE CAUSE | PROPOSED REMEDY |
|---|---|---|
| Engine cannot be started | fuel tank is empty | refill fuel |
| | Recoil starter is defective | Repair or replace recoil starter |
| | Too little oil pressure | refill engine oil |
| | No ignition spark | Clean or replace spark plug |
| | Cold engine and choke set to OPEN | Set the choke to the CLOSE position |
| | fuel tap in OFF position | Move the fuel tap to the opening position IN |
| Engine can be difficult to start or runs poorly | Too rich fuel mixture | Set the choke to OPEN position |
| | carburetor incorrectly adjusted | Attitude through authorized professional have it done |
| | Faulty spark plug, dirty or incorrectly adjusted | Clean, adjust or replace spark plug |
| Engine gets too hot | Too little engine oil | refill engine oil |
| | cooling air system restricted | Clean the fan grille and internal cooling fins |
| | air filter dirty | Clean the air filter |
| | carburetor not adjusted correctly | Have the carburetor adjusted by an authorized specialist |
| Engine brings to low performance | air filter dirty | Clean filter element, replace if necessary |
| | machine is overloaded | material supply reduce, max. gap diameter observe |
| hydraulic lines get very hot | Too little oil in the hydraulic system | refill oil |
| | Hydraulic oil is of inferior quality | oil change |
| | pump damaged | Replace pump |
| | Control valve was adjusted | Have the control valve readjusted by a specialist workshop |
| splitting knife moves not off or on | Control levers are mounted too loosely | Check the fastening of the control levers |
| | Too little hydraulic oil in the hydraulic system | refill hydraulic oil |
| | wood residues between splitting wedge and splitting wedge guide | Clean |
| splitting knife blocked | knotty wood | splitting wood from the trunk |
| | trunk diameter is too large | remove the trunk |
| splitting knife runs backwards | Air in the hydraulic circuit | Run the splitter idle for 5 minutes |
| | Too little oil in the hydraulic system | refill hydraulic oil |
| | wood residues between splitting wedge and splitting wedge guide | Clean |
| Wood splitter brings no performance | Too little oil in the hydraulic system | refill hydraulic oil |
| | Hydraulic oil is contaminated | Oil is no longer functional and must be replaced. Oil change! |
| | Control valve was adjusted | Have the control valve readjusted by a specialist workshop |
| | pump defective | Replace pump |
| | Cylinder seal set is worn or damaged | Change the seal kit |

# 22. Warranty/Guarantee/ Customer Service

**WARRANTY**
On the device becomes the legal warranty period given. performers Defects that can be proven to be due to material or assembly errors must be reported to the seller immediately. Proof of purchase of the device must be provided by presenting the invoice and receipt when making a warranty claim.

The warranty is excluded with regard to the parts if defects are caused by natural wear, temperature, weather influences, as well as by defects resulting from negligent assembly, defective connection, false fuel/fuel mixture, setup, operation, maintenance, lubrication or violence.

Furthermore, no warranty is provided for damage caused by unsuitable or improper use of the machine, such as improper modifications or repair work carried out by the owner or third parties, or by intentional overloading of the machine.

Wear parts with a limited service life (e.g. V-belts, clutch, throttle cable, spark plug, air filter, battery, blades, hoses, wheels, tools and other aids), as well as all setting and adjustment work are excluded from the warranty.

**GUARANTEE**
LUMAG guarantees impeccable quality and, without prejudice to the statutory warranty, provides a guarantee in the event of material or manufacturing defects. The guarantee for LUMAG products is 24 months for exclusively private use, and 12 months for commercial or professional use or rental, from the date of delivery.

The buyer must always prove warranty claims by means of the original purchase receipt. A copy of this must be enclosed with the warranty application. The buyer's address and machine type must be clearly identifiable for professional or commercial use. Without the original purchase receipt we can only carry out the repair for a fee.

Please do not send any devices back to us without a SERVICE NUMBER that you have received from our service department. If we receive devices unsolicited, we cannot accept and process them. To request a SERVICE NUMBER, please contact our service team at:

info@lumag-maschinen.de

Please clearly label the shipping box with the SERVICE NUMBER to ensure quick identification.

Warranty work is carried out exclusively by our LUMAG service workshop. Defects that occur within the warranty period due to material or manufacturing defects must be remedied by repair if they have occurred despite proper use and care of the device. We reserve the right to make two repairs if the same defect occurs. If repair fails or is impossible, the device can be exchanged for an equivalent device. If the exchange is also unsuccessful or impossible, the device can be exchanged.

Normal Wear and tear, natural aging, Improper use, as well as cleaning, maintenance and adjustment work are generally not covered by the guarantee (e.g. cutting device, air and fuel filters, spark plug and recoil starter, drive belt and the like). Due to operation and use, some components are subject to normal wear and tear, even when used as intended, and must be replaced in good time if necessary.

**CUSTOMER SERVICE**
If you have any technical questions, information about our products or would like to order spare parts, our service team is available as follows:

| | |
|---|---|
| Service time: | Monday to Thursday from 7:30 a.m. to 12 p.m. and 1 p.m. to 5 p.m.<br>Friday from 7:30 am to 12:30 pm |
| Phone: | + 49 / 8571/92 556-0 |
| Fax: | + 49 / 8571/92 556-19 |
| E-mail: | info@lumag-maschinen.de |

# 23. CE declaration of conformity

In accordance with the provisions of the EC directives

Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU

explains the company

LUMAG GmbH
Rudolf-Diesel-Straße 1a
D-84375 Kirchdorf a.Inn
Phone: +49 8571 / 92 556-0
Fax: +49 8571 / 92 556-19

that the product

| | |
|---|---|
| Designation: | PETROL hydraulic log splitter |
| Type designation: | HB-8N |

meets the essential protection requirements of the above-mentioned EC directives. Conformity is based on the following standards:

*EN 609-1:2017*
*Agricultural and forestry machinery - Safety of wood splitting machines - Part 1: Wedge splitting machines*

*EN ISO 14982:2009*
*Agricultural and forestry machinery - Electromagnetic compatibility - Test methods and assessment criteria*

Person authorized to compile the technical documentation: Gabriele Denk

The declaration of conformity refers only to the machinery in the condition in which it was placed on the market; it does not take into account any parts and/or interventions subsequently fitted by the end user.

Kirchdorf, November 26, 2018 Christopher Weißenhorner, Managing Director

Place, date

Distributor, Authorized Representative Signature

## 24. Components HB-8N

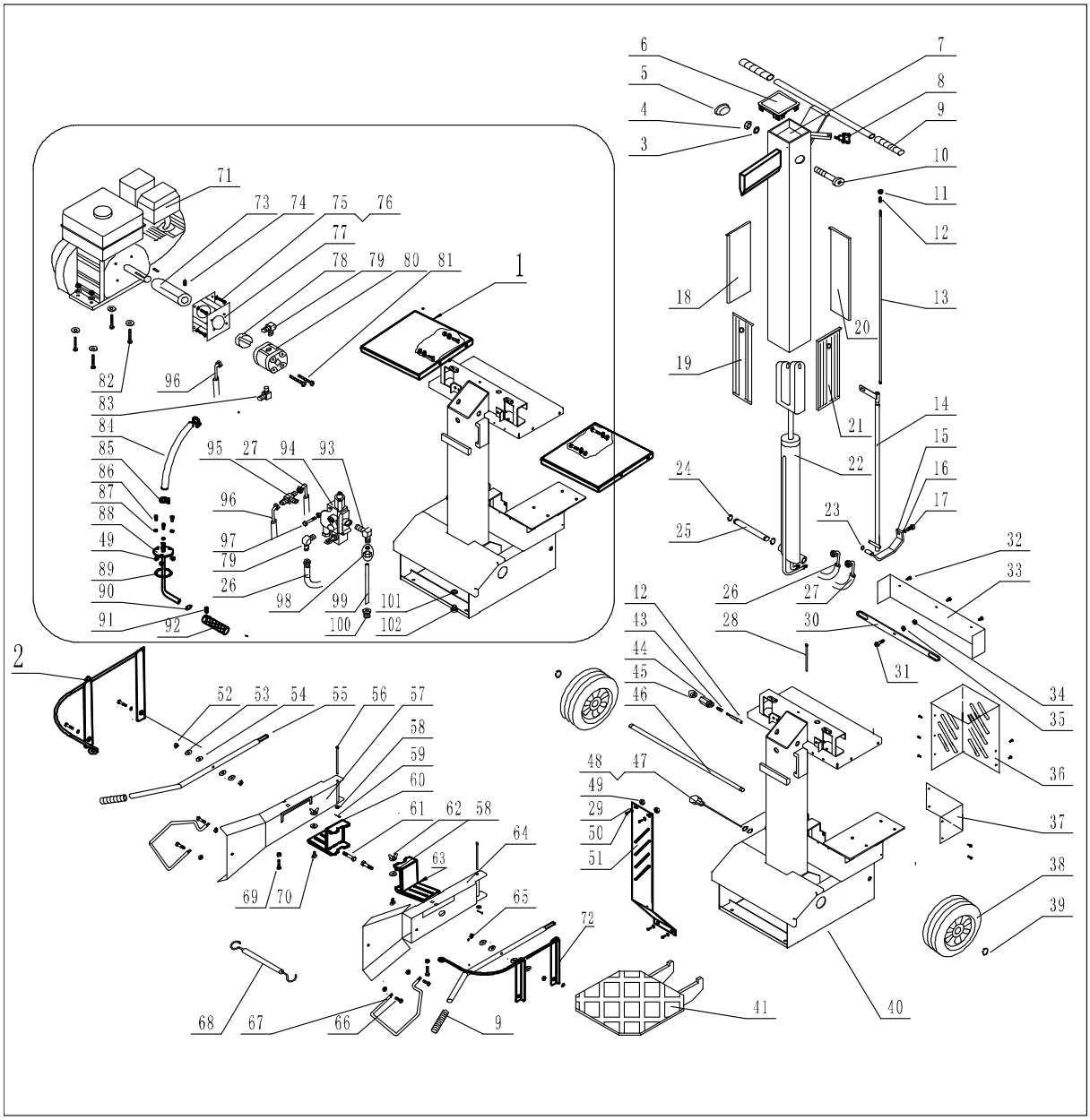



*Fig. 26 Components*

**WARNING!**

**All repairs to the machine must be carried out by authorized specialist personnel. Have any necessary engine and electrical work carried out only by an authorized specialist.**

## NOTES

Subject to change!

Version HB8N (01.19 D)

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LUMAG specialist dealer
can be found at: www.lumag-maschinen.de

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