



scheppach HL650 Hydraulic Log Splitter Instruction Manual

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HL650



Hydraulic Log Splitter

Translation from the original manual

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HL650 Hydraulic Log Splitter



Only for EU countries.

Do not dispose of electric tools together with household waste material! In observance of European directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Dear customer,

we wish you a pleasant and successful working experience with your new scheppach model.

According to the applicable product liability law the manufacturer of this device is not liable for damages which arise on or in connection with this device in case of:

- improper handling,
- non-compliance with the instructions for use,
- repairs by a third party, nonauthorized skilled workers,
- installation and replacement of non-original spare parts,
- improper use,
- failures of the electrical system due to the non-compliance with the electrical specifications and the VDE 0100, DIN 57113 / VDE 0113 regulations

Recommendations:

Read the entire text of the operating instructions prior to the assembly and operation of the device. These operating instructions are intended to make it easier for you to get familiar with your device and utilize its intended possibilities of use.

The operating instructions contain important notes on how to work safely, properly, and economically with your machine and how to avoid dangers, save repair costs, reduce downtime, and increase the reliability and working life of the machine.

In addition to the safety regulations contained herein, you must in any case comply with the applicable regulations

of your country with respect to the operation of the machine.

Put the operating instructions in a clear plastic folder to protect them from dirt and humidity, and store them near the machine. The instructions must be read and carefully observed by each operator prior to starting the work. Only persons who have been trained in the use of the machine and have been informed of the related dangers and risks are allowed to use the machine. The required minimum age must be met.

In addition to the safety notes contained in the present operating instructions and the special regulations of your country, the generally recognized technical rules for the operation of woodworking machines must be observed.



Controls and features, Fig. 1

- 1. = Oil Tank
- 2. = Log Pusher
- 3. = Work Table
- 4. = Wedge
- 5. = Lift Handle
- 6. = Support Leg
- 7. = Switch
- 8. = Motor
- 9. = Transport Wheel
- 10. = Hydraulic Lever
- 11. = Oil Drain Bolt w/ dipstick
- 12. = Venting screw
- 13. = hoist limiting ring

Scope of Delivery	Hydraulic Log Splitter
	Operation Manual
Technical Data	
Dimensions L x W x H mm	950 x 270 x 500
Wood ø max cm	5–25
Wood length max cm	52
No Volt Release	yes
Weight kg	44
Motor	
Motor V/Hz	230/50
Input P1 W	2200
Output P2 W	1700
Rating	S3/40%
Splitting Power t	max. 6,5
Cylinder rise mm	375
Cylinder speed (fast fwd.) cm/sec	3,13
Cylinder speed (return) cm/sec	4,69
Hydraulic fluid capacity l	3,5
Operating pressure bar	225
Motor speed 1/min	2840

Subject to technical changes!

General Notes

- When you unpack the device, check all parts for possible transport damages. In case of complaints, the supplier is to be informed immediately. Complaints received at a later date will not be acknowledged.
- Check the delivery for completeness.
- Read the operating instructions to make yourself familiar with the device prior to using it.
- Only use original scheppach parts for accessories as well as for wearing and spare parts. Spare parts are available from your specialized dealer.
- Specify our part numbers as well as the type and year of construction of the device in your orders.

In these operating instructions, we have marked the places that have to do with your safety with this sign: 



General Safety Rules

- Observe all safety instructions and warnings attached to the machine.
- See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.
- The safety mechanism on the machine may not be removed or disengaged.
- Check all power supplies. Do not use defective lines.
- Before the initial operation check to be sure the two-hand-ed operation is properly functioning.
- Operating personnel must be at least 18 years of age. Trainees must be at least 16 years of age but may only operate the machine under adult supervision.
- Always wear ear protection and work gloves when working.
- Caution when working: There is a danger to fingers and hands from the splitting tool.
- For heavy or cumbersome pieces, use the appropriate working aids for bracing.
- Cleaning, changing, and setting the machine may only be carried out when the motor is switched off. Pull the power supply plug.
- Connection, maintenance, and repair work on the electrical installation my be carried out only by qualified personnel.
- All protection and safety devices must be replaced after completing repair and maintenance procedures.
- When leaving the workplace, switch the motor off and pull the power supply plug.
- Never try to change the two-hand-functionality of your scheppach machine. Thus you increase the risk of accidents.

Proper Use

- The machine meets the currently valid EU machine directive.
- The hydraulic log splitter is designed only for wood in a horizontal position. Wood may only be split while horizontal and in the direction of the grain. Dimensions of wood to be split: maximal 52 cm.
- Never split wood against the grain or while in an upright position.
- The manufacturer's safety, operation, and maintenance instructions as well as the technical data given in the calibrations and dimensions must be adhered to.
- Relevant accident prevention regulations and other generally recognized safety and technical rules must also be adhered to.
- The machine may only be used, maintained, or repaired by trained persons who are familiar with the machine and have been informed about the dangers. Unauthorized modifications of the machine exclude the liability of the manufacturer for damages resulting from the modifications.
- Any other use is considered to be not intended. The manufacturer excludes any liability for resulting damages, the risk is exclusively borne by the user.



Remaining hazards

The machine has been built using modern technology and in accordance with recognized safety rules. Some hazards, however, may still remain.

- The splitting tool poses a danger of injury to fingers and hands by improper feeding or placement of wood.
- The danger of injury from thrown wood due to improper holding or feeding.

- The use of incorrect or damaged main cables can lead to electrical injuries.
- Minimize remaining hazards by following the instructions in “Safety Rules”, “Use only as authorized” and in the entire operating manual.

Transport

Transport forklift/lifting carrier: Upon dispatch, the machine is tightly mounted to a palette with 4 screws. Remove the screws with a fork wrench. To remove the machine from the palette, two persons will be required. The machine may be transported while held in a diagonal position. Use the hand grip and pull gently while the machine stands on its wheels. Your schep each machine can be stored or transported under ambient temperatures between -20° C and +60° C at a max. the humidity of 80 %.

Assembly

For technical reasons of packaging, the supporting leg (6) and the handle (5) must be fitted by the customer.

- Supporting leg — 2 hexagon bolts M6 x 16 with nut
- Handle — 2 hexagon socket screws M6 x 16 with nut Place the device horizontally on the floor, and put the Styropor pad of the packaging underneath the splitting wedge side.

Setup

Prepare the workplace where the machine is to be placed. Ensure sufficient room to allow safe work without malfunctions. The machine is designed to operate on a level surface and must be placed securely on firm, level ground. Please make sure your schepach machine is placed firmly on stable plain ground.



Electrical connections

Regularly check the electrical connection lines for damages. Please make sure that the connection lines are disconnected from the main supply during the check. Electrical connection lines must meet the applicable VDE and DIN regulations and the provisions of the local power supply company. Only use connection lines labeled with H 07 RN. The labeling of the connection cable with the type specification is required.

Damaged electrical connections

Often, insulation damages occur on electrical connection lines. The possible causes are:

- Drag marks if connection lines are led through window or door clearances.
- Kinks due to improper attachment or routing of the connection line.
- Cuts are caused by running over the connection line.
- Insulation damages are caused by pulling the connection line out of the wall socket.
- Fissures are caused by the aging of the insulation.

Such defective electrical connection lines must not be used and are, due to the insulation damages, life-threatening!

Single phase motor 230 V/50 Hz

- The supply voltage must be 220-240 V/50 Hz.
- The mains connection and extension cable must have 3 wires = P+N+SL.-(1/N/PE).
- Extension lines up to a length of 25 m must have a minimum cross-section of 1.5 mm, lines with a length

exceeding 25 m must have a minimum cross section of 2.5 mm²,

- The mains connection is protected with a maximum of 16 A.

Operation

Before operating your scheppach machine, the bleed screw (12) should be loosened by some rotations until air can go in and out of the oil tank smoothly. Failing to loosen the bleed screw will keep the sealed air in the hydraulic system compressed after being decompressed. Such continuous compression/decompression will blow out the seals of the hydraulic system and cause permanent damage to your ship each machine.

Before moving your sche peach machine, make sure the bleed screw is tightened to avoid oil leaking from this point.

Only split plain cut log.

1. Place the log plain onto the work table (3).
2. Your sche ppach machine is equipped with a Two-hands Control System that requires to be operated by both hands of the user – the left-hand controls the Hydraulic Lever (10) while the right-hand controls the pushbutton switch (7).
3. Simultaneously push the pushbutton switch (7) to start the splitting action.

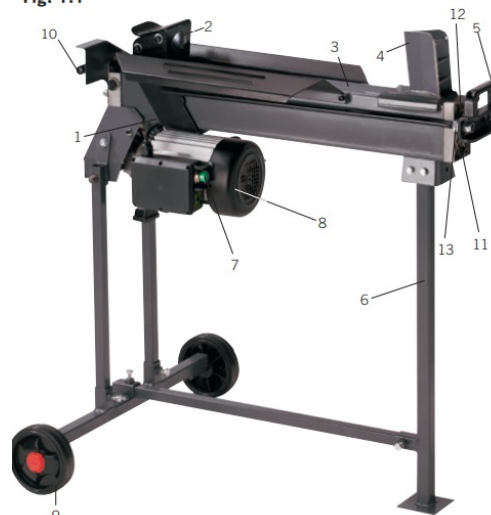
The log splitter will freeze in the absence of either hand. Never force your sche peach machine for more than 5 seconds by keeping pressure on it to split excessively hardwood. After this time interval, the oil under pressure will be overheated and the machine could be damaged. For such an extremely hard log, rotate it by 90° to see whether it can be split in a different direction. In any case, if you are not able to split the log, this means that its hardness exceeds the capacity of the machine and thus should be discarded to protect the log splitter.

Hoist limiting, Fig. 1.1

It is reasonable to limit the hoist of pressure plate 2 for short-splitting material. Thereto press the hydraulics lever 10 and the release button 7 and let the pressure plate 2 moves just in front of the splitting material. Release the release button now and mount the hoist limiting ring 13 to the housing and tighten it. Afterward, you can release the hydraulics lever. The pressure plate will now be resting in the selected position.

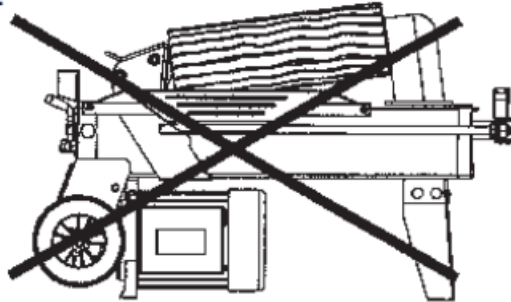
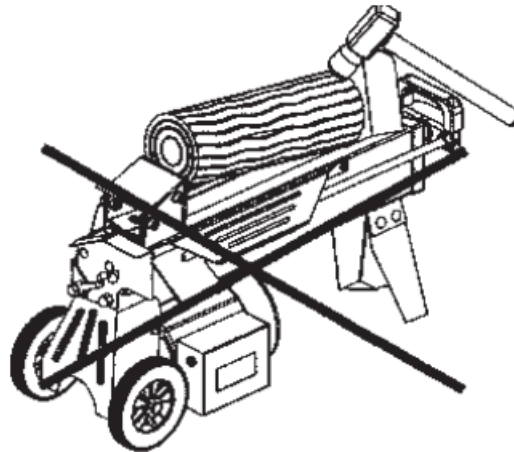


Fig. 1.1



Wrongly placed log, Fig. 2

Always set logs firmly on the log retaining plates and work table. Make sure logs will not twist, rock or slip while being split. Do not force the blade by splitting logs on the upper part. This will break the blade or damage the machine. Do not attempt to split 2 pieces of logs at the same time. One of them may fly up and hit you.

Fig. 2**Fig. 3****Jammed log, Fig. 3, 4**

Do not try to knock the jammed log off. Knocking about will damage the machine or may launch the log and cause an accident.

Fig. 4

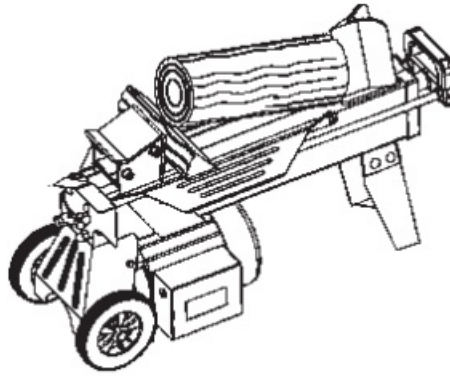


Fig. 5

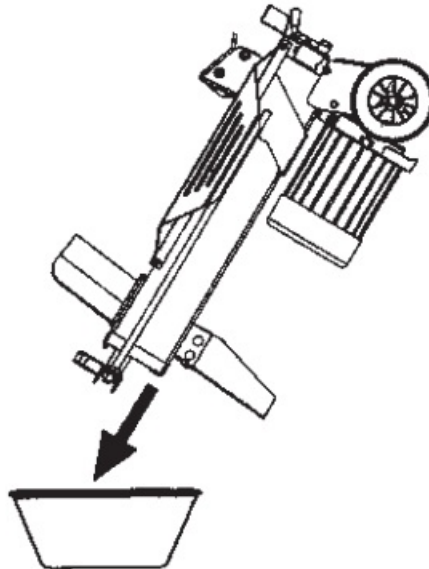
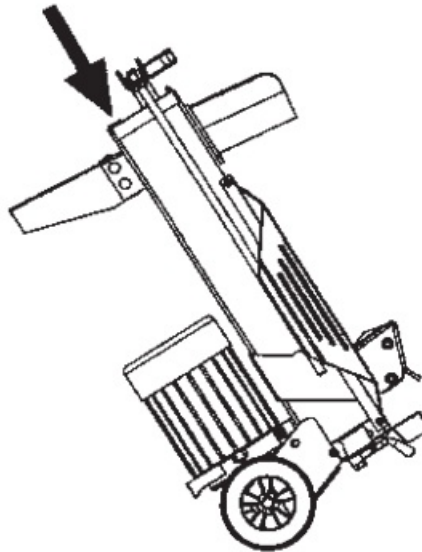


Fig. 6



1. Release both controls.
2. After the log pusher moves back and completely stops at its starting position, insert wedge wood under the jammed log as shown in the figure.
2. Start the log splitter to push the wedge wood under the jammed one.
2. Repeat the above procedure with sharper slope wedge woods until the log is completely freed.

Oil Change

The hydraulic system is a closed system with an oil tank, oil pump, and control valve. Check hydraulic connections and fittings regularly for air tightness. Tighten when necessary. The oil tank has been filled with high-quality oil at the factory.

Replacing hydraulic oil after 150 hours of use

1. Make sure all moving parts stop and the log splitter is unplugged.
2. Unscrew oil drain screw (11) to remove it.
3. Turn the log splitter on the support leg side as shown in fig. 5 over a 4-liter capacity container to drain the hydraulic oil off. Recycle carefully!
4. Turn your sche peach machine on the motor side as shown in Fig. 6 to refill about 3,5 | fresh oil.
5. Clean the surface of the dipstick on the oil drain bolt and put it back into the oil tank while keeping the log splitter vertically. Make sure the level of the refilled oil is just between 2 grooves around the dipstick.
6. Clean the oil drain bolt before threading it back. Make sure it is tightened to avoid leakage before placing the log splitter horizontally. Afterward, start splitting without- actually splitting log several times.

Periodically check oil level. Upon low oil level, oil refilling is required.

Dispose of the used oil in a correct manner at a public collection facility. It is prohibited to drop old oil on the ground or to mix it with waste.

We recommend the following hydraulic oils:

Aral Vitam gf 22
BP Energy HLP-HM 22
Mobil DTE 11
Shell Tellus 22
or oils of the same quality.

Do not use any other types of oil as they would influence the function of the hydraulic cylinder.











Maintenance and Repair

Carry out refitting, setting, and cleaning work only when the motor is switched off. Pull the power plug. An experienced worker can carry out minor repairs on the machine alone. Repair and maintenance work on the electrical system may only be carried out by a qualified electrician. All protective and safety devices must be reattached immediately after completing repair and maintenance work.

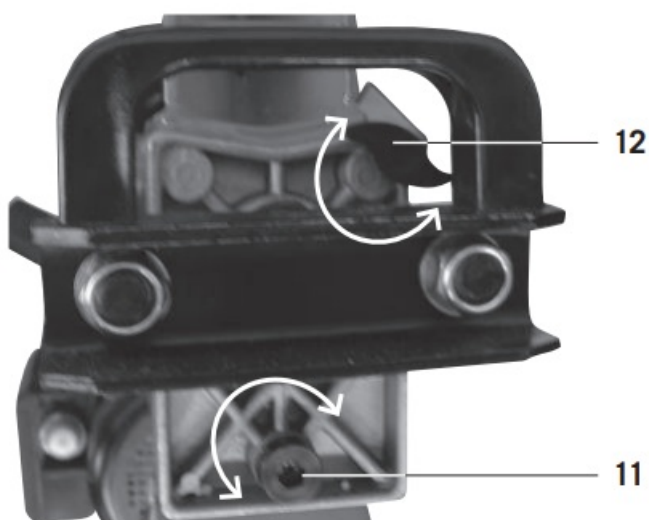
We recommend:

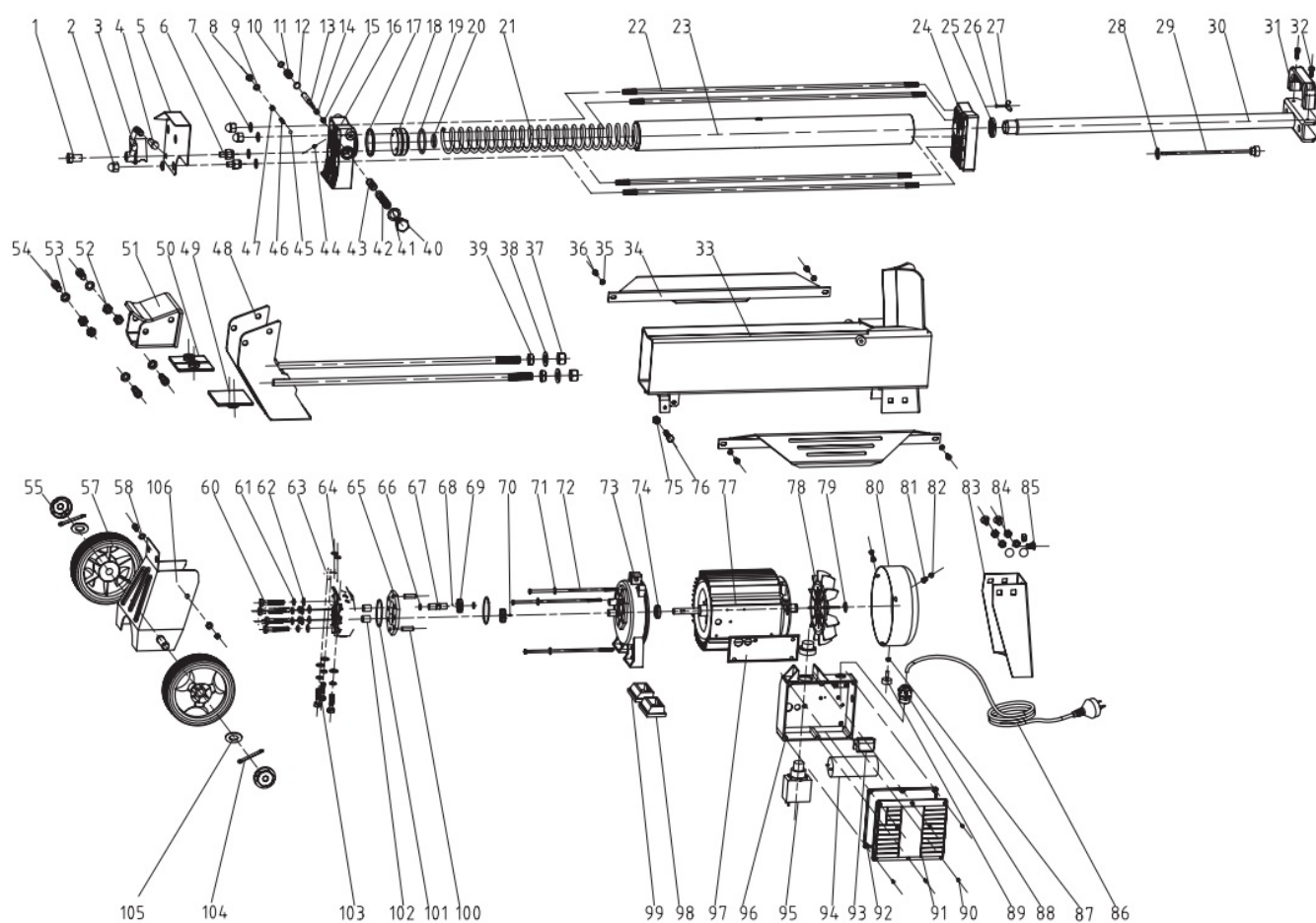
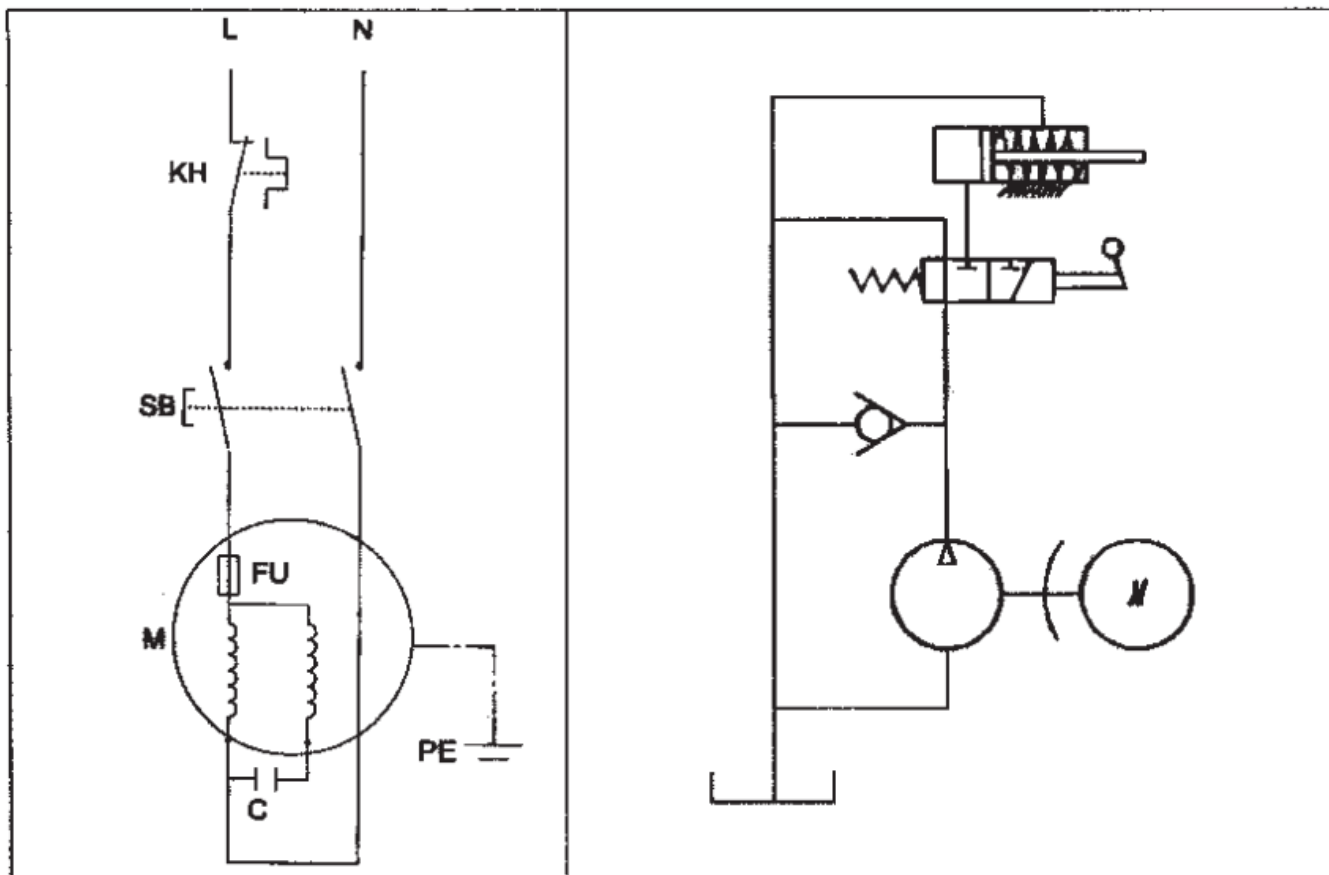
- The splitting wedge is a wearing part that needs to be sharpened or replaced after wear.
- The combined gripping and controlling device must remain smooth running. Lubricate with a few drops of oil when necessary.
- Keep splitting wedge drive clean of dirt, wood shavings, bark, etc.
- Lubricate slide rails with grease.

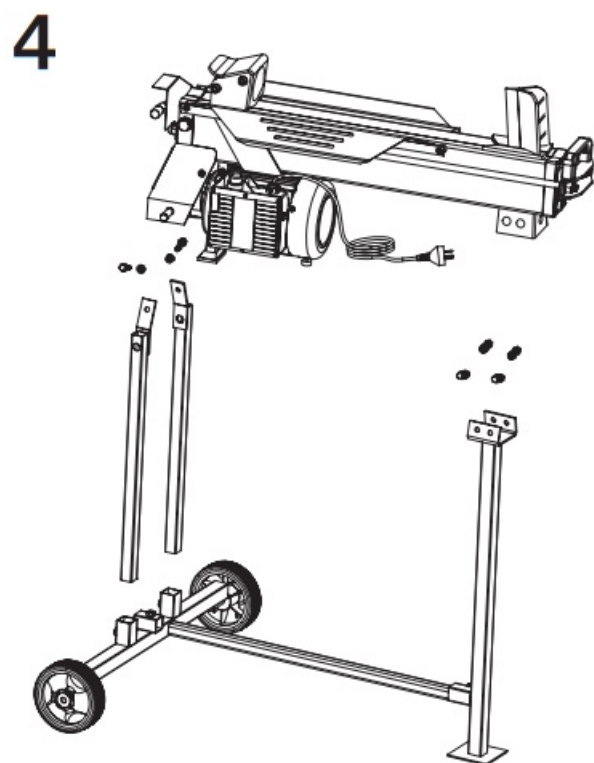
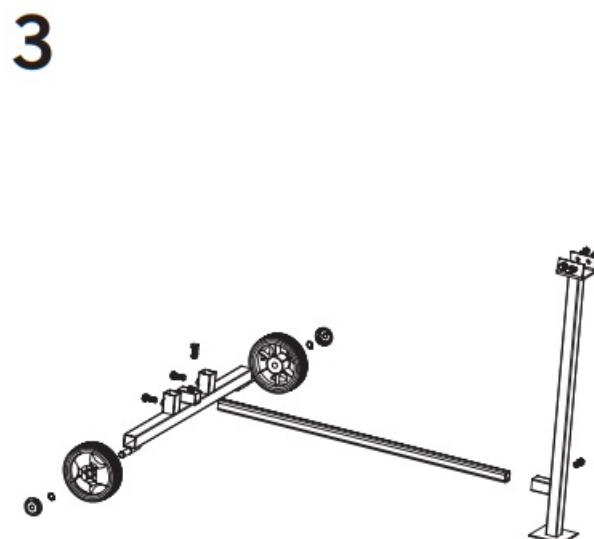
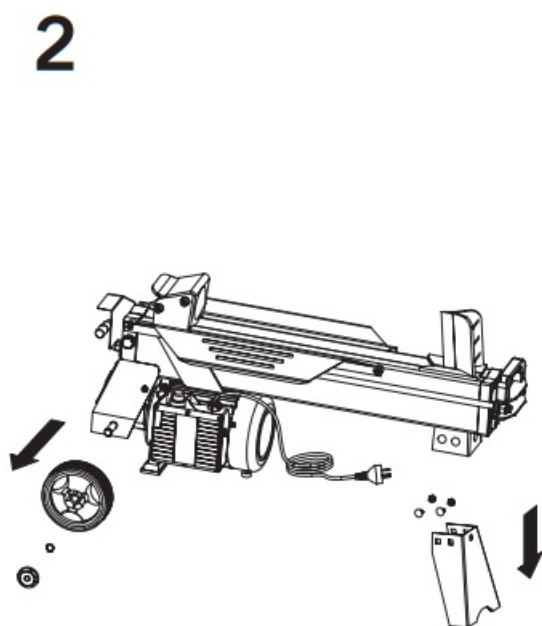
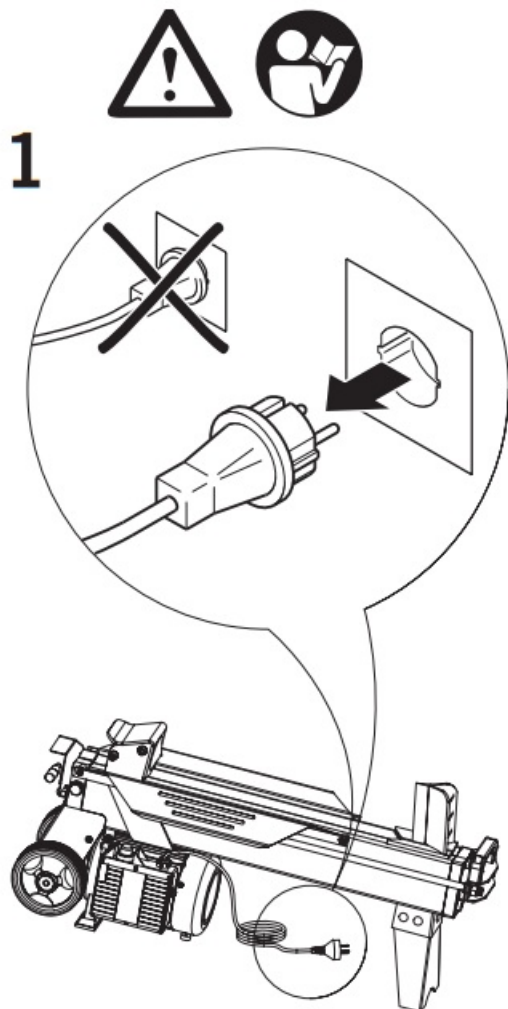
Legend for the symbols attached to the machine

	Wear working shoes and gloves!
	Check the splitter for possible damages before you start working!
	Wear safety glasses!
	Read the operating instructions carefully!
	Please provide for the proper disposal of waste oil!
	Disconnect the mains plug prior to the repair, cleaning, and maintenance of the splitter!
	Do not reach into the machine without any protection!
	Caution! Moving parts!
	Risk of injury!
	Attention! The machine may be operated only by one person! Keep your distance!

Problem	Possible Cause	Remedy
1. Motor stops starting	'Overload protection device disengaged to protect the log splitter from being damaged	Contact a qualified Electrician.
2. Fails to split logs	a)Log is improperly positioned b)Size of the log exceeds the capacity of the machine c)Wedge cutting edge is blunt d)Oil leaks	a)Refer to the "operation" section to perfect log loading b)Reduce log size before operating c)Sharpen cutting edge d)Locate leak(s) and contact your dealer
3. Log pusher moves jerkily, taking unfamiliar noise or vibrating a lot	Lack of hydraulic oil and excessive air in the hydraulic system	Check oil level for possible refilling. Contact your dealer
4. Oil leaks around the cylinder ram or from other points	a)Air sealed in hydraulic system while operating b)Bleed screw is not tightened before moving the log splitter c)Oil drain bolt is not tight d)Hydraulic control valve assembly and/or seal(s) worn	a)Loosen the bleed screw by some rotations before operating the log splitter b)Tighten bleed screw-up before moving the log splitter c)Tighten the oil drain bolt d)Contact your dealer







hereby declares the following conformity under the EU Directive and standards for the following article

Hydraulik-Holzspalter zum Spalten von Holz – HL650

2009/105/EC


X 2006/95/EC
2006/28/EC
2005/32/EC
X 2004/108/EC
2004/22/EC
1999/5/EC
97/23/EC
90/396/EC
X 2011/65/EU

X 2006/42/EC
Annex IV
Notified Body:
Notified Body No.:
Reg. No.:

2000/14/EC_2005/88/EC
Annex V
Annex VI
Noise:
measured LWA
= xx dB(A); guaranteed LWA
= xx dB(A)
Notified Body:
Notified Body No.:

Standard references: EN 60204-1; EN 60335-1; EN 609-1; EN 55014-1; EN 55014-2; EN 61000-3-2; EN 61000-3-3

Ichenhausen, den 12.03.2013


Unterschrift / Markus Bindhammer / Technical Director

Art.-No. 5905206901

Subject to change without notice

Documents registrar: Thomas Huber

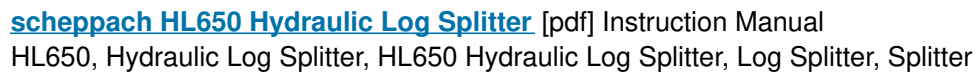
Günzburger Str. 69, D-89335 Ichenhausen

Warranty

Apparent defects must be notified within 8 days from the receipt of the goods. Otherwise, the buyer's rights of claim due to such defects are invalidated. We guarantee for our machines in case of proper treatment for the time of the statutory warranty period from delivery in such a way that we replace any machine part free of charge which provably becomes unusable due to faulty material or defects of fabrication within such period of time. With respect to parts not manufactured by us, we only warrant insofar as we are entitled to warranty claims against the upstream suppliers. The costs for the installation of the new parts shall be borne by the buyer. The cancellation of the sale or the reduction of the purchase price as well as any other claims for damages shall be excluded.

scheppach Fabrikation von Holzbearbeitungsmaschinen GmbH | Günzburger Str. 69 |
D-89335 Ichenhausen | www.scheppach.com

Documents / Resources



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