

# scheppach HL1800GM Log Splitter Instruction Manual

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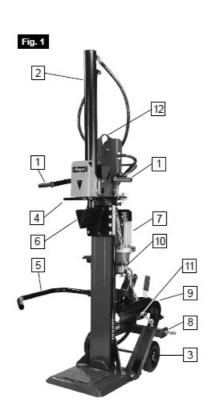
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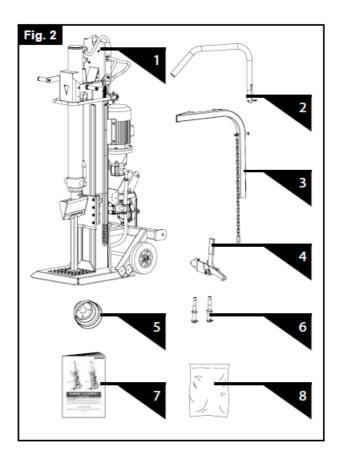


# Log splitter



- 1. Operating lever
- 2. Cylinder
- 3. Wheels
- 4. Return bracket
- 5. Supporting arm

- 6. Splitting blade
- 7. E-motor with switch
- 8. Three-point suspension
- 9. Log lifter
- 10. Chain
- 11. Drive shaft
- 12. Transport lug



- 1. Kindling splitter frame & tractor unit
- 2. Supporting arm
- 3. Log lifter
- 4. Hook
- 5. Drive shaft protective cap
- 6. Three-point suspension bolt
- 7. Operating instructions
- 8. Bag with small parts

Please read the manual before start-up
Wear safety footwear
Wear work gloves
Use safety goggles
Wear a hardhat
Use hearing protection
Authorized personnel only
No smoking in the working area
Do not spill hydraulic oil on the floor
Keep your workspace clean! Untidiness can cause accidents!
If a crane is used, put the lifting belt round the housing. Never lift the firewood splitter by the hand grip.
Dispose of waste oil correctly (waste oil col- lection point on site). Do not dump waste oil in the ground or mix it with waste.
Do not remove or modify protection and safety devices.
Only the operator is allowed in the work area of the machine. Keep other people and animals (minimum distanc e 5 m) at a distance.
Danger of bruising and injury from sharp edges; never touch danger areas when the cleaver is moving.
Caution! Moving machine parts!
Loosen the vent bolt two revolutions, before starting work. Close before transport.
Two work speeds:
Low speed and full splitting power
2. High speed and reduced splitting power
Don't use the log lift, when the automatic reverse is enabled.

# **Technical data**

Item no.		5905502903	5905501915
Drive		Drive shaft + e-motor	Drive shaft + e-motor
Input P1	kW	5,1	6,6
Output P2	kW	4,0	5,5
PTO shaft/motor speed	1/min	540 / 1400	540 / 1400
Operating mode		S6 40 %	S6 40 %
Motor protection		yes	yes
Phase inverter		yes	yes
Dimensions D/W/H	mm	1540x1140x2520	1540x1140x2520
Height with lowered cylinder	mm	1900	1900
Power max.	t	18	25
Forward speed 1 Drive shaft/motor	cm/s	10 / 13,5	13,7 / 17,2
Forward speed 2 Drive shaft/motor	cm/s	4,8 / 5,9	5 / 5,8
Return speed Drive shaft/motor	cm/s	7,8 / 10,6	7,1 / 8,9
Weight	kg	319	371
Oil quantity	I	24	30

# **General notes**

# Note:

In accordance with valid product liability laws, the manufacturer of this machine shall not be responsible for damage to and from this machine which results from:

- Improper care.
- Noncompliance with the Operating Instructions.
- Repairs made by unauthorized persons.
- The installation and use of any parts which are not original replacement parts.
- Improper use and application.
- Failure of the electrical system as a result of noncompliance with the legal and applicable electrical directives and VDE regulations 0100, DIN 57113 / VDE 0113.

**We recommend** that you read through the entire operating instructions before putting the machine into operation. These operating instructions are to assist you in getting to know your machine and utilize its proper applications.

The operating instructions contain important notes on how you work with the machine safely, expertly, and economically, and how you can avoid hazards, save repair costs, reduce downtime and increase the reliability and service life of the machine.

In addition to the safety requirements contained in these operating instructions, you must be careful to observe your country's applicable regulations.

The operating instructions must always be near the machine. Put them in a plastic folder to protect them from dirt and humidity. They must be read by every operator before beginning work and observed conscientiously. Only persons who have been trained in the use of the machine and have been informed of the various dangers may work with the machine.

The required minimum age must be observed.

In addition to the safety requirements in these operating instructions and your country's applicable regulations, you should observe the generally recognized technical rules concerning the operation of woodworking machines.

- After unpacking, check all parts for any transport damage. Inform the supplier immediately of any faults. Later complaints cannot be considered.
- Make sure the delivery is complete.
- Before putting into operation, familiarize yourself with the ma-chine by carefully reading these instructions.
- Only use original accessories, wearing or replacement parts. You can find spare parts at your scheppach dealer.
- When ordering, include our item number and the type and year of construction of the machine. For controls and parts see Fig. 1 to 3.

#### General safety notes

These operating instructions provide places concerning your safety which are marked with this indication: m

**WARNING:** When you use electric machines, always observe the following safety instructions in order to reduce the risk of fire, electric shock, and injuries.

Please read all the instructions before you work with this machine.

- Observe all safety notes and warnings attached to the machine.
- See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.
- Protection and safety devices on the machine may not be re-moved or made useless.
- Check electrical connection leads. Do not use any faulty connection leads.
- Before putting into operation check the correct function of the two-hand control.
- Operating personnel must be at least 18 years of age. Trainees must be at least 16 years of age, but may only
  operate the ma-chine under adult supervision.
- Wear working gloves when working.
- Caution when working: There is a danger to fingers and hands from the splitting tool.
- Use adequate supports when splitting heavy or bulky logs.
- Before starting any conversion, setting, cleaning, maintenance or repair work, always switch off the machine and disconnect the plug from the power supply.
- Connections, repairs, or servicing work on the electrical equipment may only be carried out by an electrician.
- All protection and safety devices must be replaced after completing repair and maintenance procedures.
- The setting at the hydraulic valve and at the operating levers must not be changed. Risk of accident and destruction of the hydraulic components!
- When leaving the work place, switch off the machine and disconnect the plug from the power supply.

- · Ensure adequate lighting.
- If there is a danger, turn the machine off and disconnect the mains plug!

#### Additional safety notes for log splitters

- The log splitter may only be operated by one person
- No other people should be in the work area.
- Wear protective gear like safety goggles or other eye protection, gloves, safety shoes etc. to protect yourself from possible injuries.
- Never split logs containing nails, wire, or other foreign objects.
- Already split wood and wood chips can be dangerous. You can stumble, slip or fall down. Keep the working area tidy.
- While the machine is switched on, never put your hands on moving parts of the machine.
- Only split logs with a maximum length of 1100 mm.
- Only split wood with a minimum diameter of 60 mm and a maxi-mum diameter of 600 mm.
- The wood splitter must not be operated in the transport position.

#### Authorized use

# The log splitter meets the valid EC machine guideline.

- The hydraulic log splitter can only be used in a vertical position. Logs may only be split along the direction of the fiber. Log dimensions are:
  - Short wood 30 cm
  - Metre wood 110 cm
- Never split logs in horizontal position or against the direction of the fiber.
- Observe the safety, working, and maintenance instructions of the manufacturer, as well as the dimensions given in the chapter Technical data.
- The applicable accident prevention regulations as well as all generally recognized safety rules must be adhered to.
- Only persons who have been trained in the use of the machine and have been informed of the various dangers
  may work with the machine and service or repair it. Arbitrary modifications of the machine release the
  manufacturer from any responsibility for resulting damage.
- The machine may only be used with original accessories and original tools of the manufacturer.
- Any other use exceeds authorization. The manufacturer is not responsible for any damages resulting from unauthorized use; risk is the sole responsibility of the operator.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

# **Accident prevention standards**

The machine may only be operated by people who are well familiar with the contents of this manual.

Before use, check the intactness and perfect function of the safety devices.

Before use, make yourself also familiar with the control mechanisms of the machine, following the operating

instructions.

The capacity of the machine indicated may not be surpassed. In no way may the machine be used for any other purposes than splitting firewood.

In agreement with your country's laws, the personnel must wear ad-equate, close-fitting working clothes. Jewelry like watches, rings and necklaces must be taken off. Long hair must be protected by a hair net.

The work place should always be tidy and clean. Tools, accessories and wrenches should lie within reach.

During cleaning or maintenance work, the machine may never be connected to the mains.

It is strictly prohibited to use the machine with the safety devices removed or switched off.

It is strictly prohibited to remove or modify the safety devices.

Before undertaking any maintenance or adjusting work, carefully read

and understand the present operating instructions.

For a good performance of the machine as well as for safety reasons, the plan given herein must be adhered to. In order to prevent accidents, the safety labels must always be kept clean and legible, and they must be strictly observed. Any missing labels must be reordered from the manufacturer and be attached to the correct place.

In case of fire, only fire-fighting powder may be used. Water is not al-lowed to extinct the fire because of the risk of short circuit.

If the fire cannot be extinct immediately, pay attention to leaking liquids.

In case of a longer fire, the oil tank or the pressure lines can explode. Be careful not to get in touch with leaking liquids.

# Dismounting and disposal

The machine does not include any components harmful to health or environment. All the materials can be recycled or decomposed the normal way.

Charge specialized personnel with the disposal that is familiar with the possible risks and with the present manual. When the machine is not used any more and is to be disposed of, proceed as follows:

- Cut off the electric power supply.
- Remove all electric cables and bring them to a specialized public collection facility following your country's regulations.
- Empty the oil tank, fill the oil in a tight bin and bring it to a specialized public collection facility following your country's regulations.
- Take all other machine parts to a scrap collection facility following your country's regulations.
- Be sure every machine part is disposed of following your country's regulations.

# Remaining hazards

The machine has been built using modern technology in accordance with recognized safety rules. Some remaining hazards,

however, may still exist.

- The splitting tool can cause injuries to fingers and hands if the wood is incorrectly guided or supported.
- Thrown pieces can lead to injury if the work piece is not correctly placed or held.
- Injury through electric current if incorrect electric connection leads are used.
- Even when all safety measures are taken, some remaining hazards which are not yet evident may still be present.

 Remaining hazards can be minimized by following the safety instructions as well as the instructions in the chapter Authorized use and in the entire operating manual.

# Transport / storage

# Transport with fork lifts/pallet trucks:

During shipping, the machine is fixed tightly on a pallet with steel straps. The machine is protected with a plastic covering.

To lift the machine from the pallet, several people or technical resources are needed.

Caution: The wood splitter's centre of gravity is high – risk of tilting!

#### Transport with a crane:

During transport using a hook, the transport lug on the upper part of the machine must be used. Never lift the machine on the splitting knife!

# Storing conditions:

The following conditions are required:

- · Dry storing place under roof
- Maximum humidity 80 %
- Temperature range -20 °C to +60 °C

The machine should operate under the following environmental conditions:

minimum maximum recommended

- Temperature 5 C° 40 C° 16 C°
- Humidity X 9 5 % 70 %

If the outside temperature is below 5°C, let the machine run idle for about 5 minutes so the hydraulic system reaches its operating temperature.

#### Setting up

Prepare the work place where the machine is to stand. Create sufficient space in order to allow safe working without disturbance. The machine has been designed for working on a level surface. It must therefore be set up in a stable position on firm ground.

# **Assembly**

#### Attaching the three-point bolts, Fig. 3

Insert the threaded bolts in the designated holes and fix them from the other side with an M22 nut each.

#### Attaching the drive shaft protective cap, Fig. 4

Place the drive shaft protective cap on the protruding threaded receiv-ers at the drive shaft and secure it with both M10 nuts.

#### Attaching the operating handles, Fig. 5

For packaging reasons, you have to attach the left operating handle yourself. You can use the already attached operating handle and

Figure 5 as an example.

Fig. 3

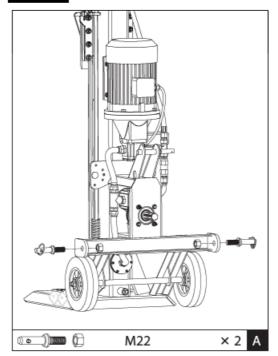


Fig. 4

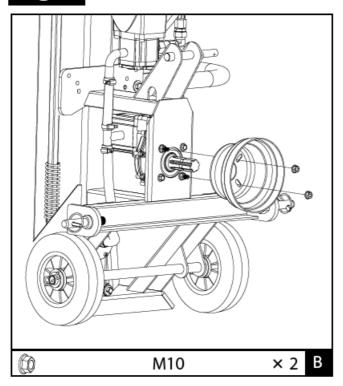


Fig. 5

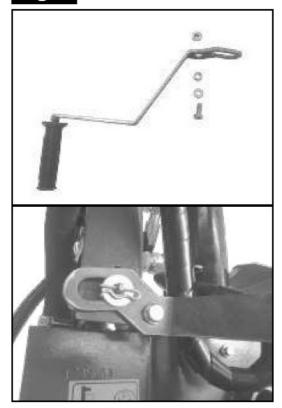
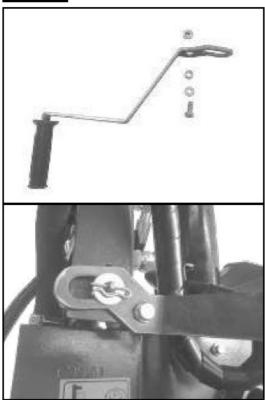
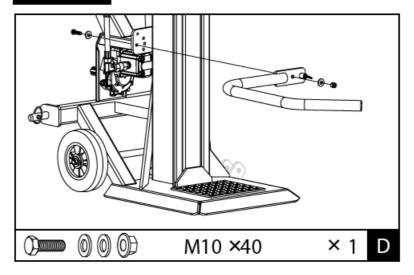


Fig. 5



Attaching the supporting arm, Fig. 6
Secure the supporting arm with a hexagon bolt M10x40, two washers and a nut.

# Fig. 6



# Attaching the hook, Fig. 7

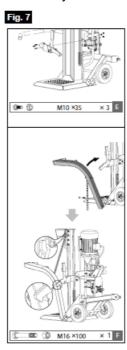
Attach the hook on the frame with 3 hexagon bolts and 3 nuts.

# Attaching the log lifter, Fig. 7

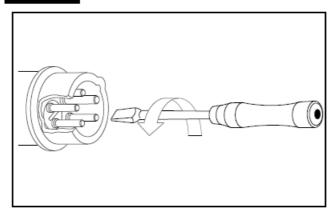
Attach the log lifter on the fixing bracket with 1 hexagon bolt M16x100. Hook the chain onto the splitting blade.

# Putting the splitter into the work position, Fig. 12

Connect the splitter to the mains power. Be aware of the motor's direction of rotation. Lower both control handles until the cylinder engages with the guide. Insert the two L-pins to secure the cylinder on the kindling splitter. Secure the L-pins in the spring tabs. Then bring the splitting blade to the top position and remove the support. You must store the support safely because it is needed every time the splitter is transported.



# Fig. 8





# Commissioning with e-motor

# Make sure the machine is completely and expertly assembled. Check before every use:

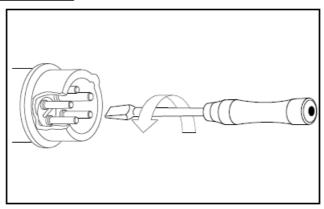
- The connection cables for any defective spots (cracks, cuts etc.).
- The machine for any possible damage.
- The firm seat of all bolts.
- The hydraulic system for leakage.
- The oil level.
- That the guides on the splitting column are lubricated with grease.

Check the running direction of the motor. If the splitting arm is not in the top position, bring the splitting blade in the top position, using the return bracket or handles. If the splitting

arm is already in the top position, activate the splitting mechanism by moving both levers down. This will move the splitting arm down. If the splitting blade does not move despite activation of the handles or return bracket, immediately turn off the machine. Turn the pole reversing unit in the plug-in module (Fig. 8) to change the rotational direction of the motor.

Never let the motor run in the wrong direction! This will inevitably destroy the pump system and no warranty claim can be made.





#### Warning!

Loosen the filling screw (Fig. 16) before commissioning.

Never forget to loosen the filling screw! Otherwise, the air in the

system will constantly be compressed and decompressed with the result that the seals of the hydraulic circuit will be destroyed and the wood splitter can no longer be used. In this case, the seller and the manufacturer will not be liable to warranty services.

# Switching on and off

Press the green button for switching on. Press the red button for switching off. Note: Check the function of the ON/OFF unit before every use by switching on and off once.

Restarting safety in case of current interruption (no-volt release) In case of current failure, inadvertent pulling of the plug, or a defective fuse, the machine is switched off automatically.

For switching on again, press anew the green button of the switch unit.

Machine modifications of any kind are prohibited!

• Before maintenance work or if the riving knife is jammed, disconnect the machine from the mains.

Never leave the machine unsupervised if it is connected to the mains!

# Commissioning with drive shaft

Make sure the machine is completely assembled according to stipulations. Check the following before every use:

- The connection cable for defects (tears, cuts and similar),
- The machine for possible damage,
- · Whether all fixings are tight,
- · The hydraulics for leaks,
- · The oil level and

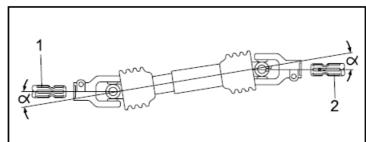
- That the guides on the splitting column are lubricated with grease.
- Before connecting the machine to the three-point linkage of the traction unit, ensure that the traction unit is suitable for the weight of the machine. The weight of the machine can be seen on the manufacturer's rating plate.
- After the traction unit's motor is turned off, connect the drive shaft.
   Exclusively use approved drive shafts and those that are suit-able for use with the wood splitter. Furthermore, the drive shaft must be equipped with all safety devices which must be in a good condition.
- Don't stand close to the drive shaft when it is in operation.
- Ensure that the tractor unit's speed does not exceed the number on the rating plate, max. 540 per min.
- For specific drive shaft instructions, please consult the relevant handbook (supplied with the drive shaft).
- Before maintenance work or if the riving knife is jammed, first disconnect the machine from the tractor unit, after turning off the tractor unit.

# Attaching the splitter to the tractor unit, Fig. 6

- 1. Reverse the tractor unit to the wood splitter. Position the lower support arms close enough to the kindling splitter's fixing pins.
- Activate the tractor unit's parking brake and turn off the motor.Block the back wheels on both sides with wedges or other suitable objects.
- 3. Lower the bottom support arms onto the kindling splitter's fixing pins and secure them with the locking pins.
- 4. Position the top support arm in the bracket and align it with the bracket holes. Insert the hitch pin to lock the top support arm in place.
  - The transmission drive shaft end has a diameter of 34.8 mm and a connection with 6 teeth (Standard Category 1 PTO).
- 5. Push the drive shaft over the drive shaft end on the transmission and tractor unit. Push down the spring pins located on both ends of the drive shaft. Push the drive shaft further over the drive shaft ends until the spring pins jump out and the teeth of the drive shaft end lock.

# Aligning the drive shaft, Fig. 20





Viewed from the top and the side of the shaft, the drive shaft end on the kindling splitter (Fig. 20.1) and the drive shaft end on the tractor unit (Fig. 2) have to be aligned in parallel. The angle of the drive shaft joints ( $\alpha$ ) must be as small as possible.

6. Secure the safety chain of the shaft drive on a fixed part of the kindling splitter and tractor unit to prevent the safety device turning.

Check the running direction of the tractor unit's drive shaft. If the splitting arm is not in the top position, bring the splitting blade in the top position, using the return bracket or handles. If the splitting arm is already in the top position, activate the splitting mechanism by moving both levers down. This will move the splitting arm down. If the splitting blade does not move despite activation of the handles or return bracket, stop the shaft drive and change its direction.

Never let the shaft drive run in the wrong direction! This will inevitably destroy the pump system and no warranty claim can

be made.

# Warning!

Loosen the filling screw (Fig. 16) before commissioning.

Never forget to loosen the filling screw!

Otherwise, the air in the system will constantly be compressed and decompressed with the result that the seals of the hydraulic circuit will be destroyed and the wood splitter can no longer be used. In this case, the seller and the manufacturer will not be

liable to warranty services.

Exclusively use cardan shafts with the CE symbol, declaration of conformity and operating instructions! Read the instructions carefully before use!

Carry out the operations above only when the motor is turned off, the PTO shaft connector is disconnected and the ignition key

has been removed!

# **Transport**

The kindling splitter can easily be transported with the help of the three-point attachment on the tractor unit. Before transporting the kindling splitter, ensure it is in the transport position. To do this, lower the riving knife until it rests on the metal support (Fig. 14). Remove the two L-pins and lower the hydraulic cylin-der so it is in the transport position by pushing both operating handles up or the return bracket down.

When driving, ensure sufficient turning space, e.g. during reversing, parking and at junctions.

Before transporting the kindling splitter, ensure that it is properly at-tached to the tractor unit and that the drive shaft has been dismantled.

Never transport the kindling splitter when the shaft drive is connected.

Ensure that the kindling splitter is raised high enough to avoid obstacles during transport.

# **Functional test**

Carry out a functional test before every use.

Action	Result
Push both han- dles up.	Splitting blade is lowered – to about 20 cm above the tab le.
Push the return bracket down or both handles up.	The splitting blade goes into the selected upper position.
Release both handles.	The splitting blade remains in the selected position.

#### **Operating instructions**

Carefully plan your working environment. Advanced planning of your work will guarantee safety. Position the logs so they can be reached easily. Stack the split wood nearby or load it onto a lorry or other means of transport. Position the kindling splitter on a solid even surface.

If you slightly lubricate the riving knife with grease before commissioning, its service life can be extended. Release

the air from the hydrau-lic system before operating the wood splitter. Loosen the lid of the hydraulic tank with a few turns until air can get in and out. The airflow of the oil tank should be noticeable. Before moving the wood splitter.

Never forget to loosen the filling screw (Fig. 16)!

Otherwise, the air in the system will constantly be compressed and decompressed with the result that the seals of the hydraulic circuit will be destroyed and the wood splitter can no longer be used. In this case, the seller and the manufacturer will not be

liable to warranty services.

Fig. 16



Place a log vertically on the table so that it lies flat and press it against the retention thorns to secure it. Make sure that the riving knife and the table have contact with the full surface of the log ends. Never try to split wood at an angle. Lower the riving knife until the wood is split. By pressing the return bracket down or the handles up, the riving knife

is returned to its initial position.

The splitting power and speed are regulated via a 2-level system.

In general, the lower level is for higher speed and lower splitting pres-sure in order to split conventional wood. (Push both operating levers all the way down.) Very slightly push the operating lever (operation with two hands) up for maximum splitting power and therefore a lower splitting speed for splitting fresh and hard wood. The individual levels can be set easily by slowly moving the operating lever – up or down.

Split the wood with the grain. Do not place wood diagonally for splitting on the kindling splitter. This can be dangerous and

cause severe damage to the machine. Do not remove jammed logs with your hands. Never let other people help you when re-moving jammed logs. Piled up, split wood and wood chips can be dangerous. Never work in an untidy working environment where you can slip, stumble or fall.

# Using the safety arm

The safety arm can be set at different height positions, depending on the length of the wood.

# **Splitting**

- If the outside temperature is below 5°C, let the machine run idle for about 5 minutes so the hydraulic system reaches its operating temperature. Place the log under the splitting blade vertically.
- Caution: The splitting blade is very sharp. Risk of injury!
- When you push both operating levers down, the splitting blade goes down and splits the wood.
- Only ever split logs that have been sawn off straight.
- Split the log vertically.
- Never split it lying down or diagonally to the grain!
- · Wear suitable gloves and safety boots when splitting wood.

- Split very misshapen logs from the edge.
- Caution: During splitting, some logs can be under significant tension and suddenly break.
- Force jammed logs out by applying pressure in the splitting direction or by raising the riving knife. In this case, only push the handles up, do not use the return bracket.

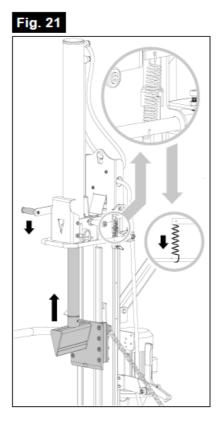
Caution: Risk of injury

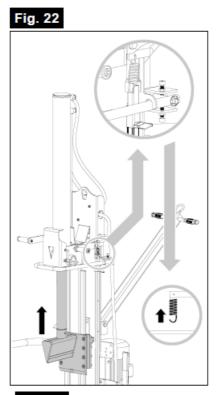
#### Stroke limitation

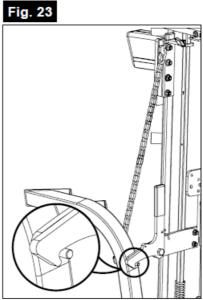
The stroke limitation can be set steplessly. If you have logs of more than 100 cm in length, position the connector right at the top of the rod and lock it with the star grip.

#### **Automatic return**

Do not enable automatic return if the trunk lifter is not in use and is locked into the retaining hook. (Figure 23) When the spring of the return lever is removed (Figure 22), the splitting wedge automatically travels back once both control levers have been released. Hang the springs back in the return bracket (Figure 21), and as soon as you no longer need automatic return, switch off the trunk lifter or the machine.







# Operating the log lifter

# General information about the log lifter:

- For safety reasons, the log lifter chain may only be hung on the splitting blade with the last link.
- Ensure that nobody else is within the working environment of the log lifter.
- Disable the automatic return before using the trunk lifter.

# Operating the log lifter:

- Loosen the log lifter restraining hook so the lifting tube can move freely.
- Move the splitting blade so far down that the log lifter lifting tube lies on the ground.
- In this position, you can roll the log to be split onto the lifting tube.(The log has to be between the two fixing tips.)

- Push the return bracket down or the handles up so the splitting blade moves up. (Caution! Do not stand in the working environment of the log lifter! Risk of injury!)
- Now align the log, push it against the retention thorn and split it (see: Operating instructions).
- Then remove the split wood and move the riving knife and there-fore the log lifter back down.
- Now you can roll a new log onto the log lifter.

#### Resetting the log lifter

This is used as a second guard arm when not using the trunk lifter or when automatic return is enabled. For this, the arm is moved up until it locks in position in the hook.

# Transport position of the log lifter:

• Using your hand, move the log lifter up until it locks in position.

Comply with these notices to ensure quick and safe work.

#### **Electrical connection**

Check electrical connection cables regularly for damage. Ensure that the connecting cable is not attached to the mains when you are checking it.

Electrical connecting cables must correspond to the relevant VDE and DIN regulations. Only use connecting cables with the code H 07 RN. The type designation must be printed on the connecting cable by regulation.

The customer's mains connection must be secured with a fault-current circuit breaker with a rated differential current of max. 30 mA.

#### Faulty electrical connecting cables

Insulation damage often occurs at electrical connecting cables.

#### Causes include:

- Pinch points when connecting cables are run through window or door gaps.
- Kinks resulting from incorrect attachment or laying of the connection cable.
- Cuts resulting from running over the connecting cable.
- Insulation damage resulting from forcefully pulling out of the wall socket.
- · Cracks through aging of insulation.

Such defective electrical connection cables must not be used as the insulation damage makes them extremely hazardous.

# Three-phase motor 400 V/50 Hz

Mains voltageg 400 V/50 Hz.

Mains voltage and extension cables must be 5-lead 3P + N + SL (3/N/PE). Extension leads must have a minimum cross section of 2.5 mm<sup>2</sup> and must not exceed a length of 20 m.

Mains fuse protection is 16 A maximum.

When connecting to the mains or relocating the machine, check the direction of rotation (swap polarity in the wall socket if necessary). Turn pole inverter in the machine socket.

- The product meets the requirements of EN 61000-3-11 and is subject to special connection conditions. This means that use of the product at any freely selectable connection point is not allowed.
- Given unfavorable conditions in the power supply the product can cause the voltage to fluctuate temporarily.
- The product is intended solely for use at connection points that
  - Do not exceed a maximum permitted supply impedance "Z", or
  - Have a continuous current-carrying capacity of the mains of at least 100 A per phase.
- As the user, you are required to ensure, in consultation with your electric power company if necessary, that the connection point at which you wish to operate the product meets one of the two requirements, a) or b), named above.

#### **Maintenance**

Switch off the motor and pull the power supply plug before undertak-ing any converting, maintenance, or cleaning work.

lways pull power plug.

Skilled craftsmen can execute smaller repairs on the machine them-selves.

Repair and maintenance work on the electrical system may only be carried out by an electrician.

All protection and safety devices must be replaced immediately after completing repair and maintenance procedures.

#### We recommend:

• Thoroughly clean the machine after every use!

# Splitting knife

The splitting knife is a wearing part that should be reground or replaced by a new one, if necessary.

# • Two-hand control

The combined supporting and control unit must be kept easy-going. Occasionally grease with a few drops of oil.

# Moving parts

- Keep splitting knife guides clean from dirt, wood chips, bark etc
- Lubricate slide rails with spray oil or grease several times per day. Never work with dry rails.

# Checking the hydraulic oil level

The dipstick (Fig. 16+17) is on the filling screw.

Fig. 16

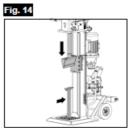


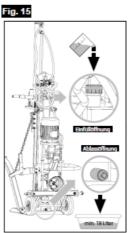
# Changing the oil

First oil change after 50 operating hours, then every 500 operating hours.

# Checking the oil level

Check the oil level regularly and before each use. If the oil level is too low, the oil pump can be damaged. Regularly check the hydraulic connections and screw fittings for leaks and tighten or replace, if applicable. Note: The oil level has to be checked when the splitting blade is retracted. The dipstick is located on the splitting column on the filling screw (Fig. 16+17) and has two notches on it. If the oil level is at the lower notch, then this corresponds to the minimum oil level. If this is the case, you must put in oil immediately. The upper notch shows the maximum oil level. The oil tank is in the splitting column and has been filled by the factory with premium quality hydraulic oil.





# Changing the hydraulic oil, Fig. 15

Position the kindling splitter on a slightly raised surface (e.g. euro pallet). Place a sufficiently large container (at least 18 litres) under the drain plug on the splitting column. Open the drain plug and carefully let the oil run into the container.

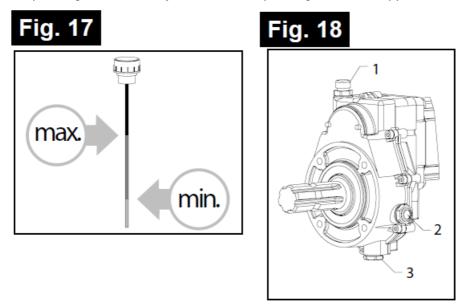
Open the filling screw on the top of the splitting column so the oil can drain more easily. Replace the drain plug and its seal and tighten it. Pour in fresh hydraulic oil (Contents: see Technical data) and check the oil level with the dipstick. After changing the oil, operate the kindling splitter a few times without actually splitting.

**Warning!** Ensure that no debris gets into the oil container. 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:

Q8 Haydn 46 Aral Vitam gf 22 BP Energol HLP-HM 22 Mobil DTE 11 Shell Tellus 22 or oils of same quality.

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

The transmission has been filled with SAE90 transmission oil by the factory. After the first 25 operating hours, drain the transmission oil and replace it as described with new oil. The next oil changes will then need to be carried out every 250 operating hours or every six months, depending on which happens first.



- 1. Disassemble the drive shaft protective cap and place a sufficiently large container under the transmission.
- 2. First open the oil drain plug (Fig. 18.3), then the oil filler opening (Fig. 18.1) and completely drain the oil.
- 3. Close the oil drain plug with a new seal and, using a funnel, pour in new SAE90 transmission oil into the filler opening until the lower edge of the display (Fig. 18.2) is almost covered in oil.

Check the oil level every 8 hours. The oil level is correct when the lower edge of the display (Fig. 18.2) is almost covered in oil.

# Hydraulic system

Before undertaking any maintenance or checking work, the working area must be cleaned. Keep the necessary tools within the reach of your hand. The intervals mentioned herein are based on normal conditions of use. An excessive use of the machine shortens the intervals accordingly. Clean the panels, screens and control levers with a soft cloth. The cloth should be dry or slightly humid with a neutral cleaning agent. Do not use any solvents like alcohol or benzene as they could damage the surfaces.

Store oil and grease outside the reach of unauthorized personnel.

Strictly follow the instructions on the bins. Avoid direct contact with the skin. Rinse well after use.

# Maintenance and repairs

All servicing jobs must be executed by specialized personnel under strict observation of the present operating instructions. Before every work, every possible caution must be taken: Switch off the motor, disconnect the power supply (pull the plug, if necessary).

Attach a board to the machine explaining the reason for being out of order: "Machine out of order due to servicing work: Unauthorized people must not come close to the machine or switch it on."

#### **Service information**

Please note that the following parts of this product are subject to normal or natural wear and that the following parts are therefore also required for use as consumables.

Wear parts\*: splitting knife, splitting cross, splitting extension, splitting fan, splitting wedge, guiding for splitting device, hydraulic oil, gear oil \* Not necessarily included in the scope of delivery!

# **Trouble shooting**

In case of any malfunctions not mentioned here, contact your dealer's after-sales service.

Malfunction	Possible cause	Remedy	Danger class
The hydraulic pump does not start	No electric power	Check cable for electric power	Risk of electric shock.  This job must be done by a service electrician.
	Thermal switch of motor cut off	Engage thermal switch insi de the motor casing again	
The column does not move down	Low oil level	Check oil level and refill	Risk of getting dirty.  This job can be done by the machine operator.
	2-hand control incorrect	Check fixing of lever	Risk of getting cut!
	Dirt in the rails	Clean the column	Thisk of gotting out:
Motor starts but colu mn does not move d own	Wrong turning direction of 3- phase motor	Check turning direction of motor and change	Wrong direction can damag e the pump.

# **Documents / Resources**



scheppach HL1800GM Log Splitter [pdf] Instruction Manual HL1800GM, HL2500GM, HL1800GM Log Splitter, HL1800GM, Log Splitter, Splitter

# References

• 5 scheppach | scheppach

Manuals+,