

Horizontal Log Splitter



Original manual copyright by Binderberger GmbH



Please read the manual carefully before
commissioning the machine!

This manual is valid for:

Model	Article number
GI20 Z Three-point hitch	GI-M20-1
GI20 E Three-point hitch	GI-M20-2
GI20 EZ Three-point hitch	GI-M20-3
GI20 Z with chassis	GI-M20-4
GI20 E with chassis	GI-M20-5
GI20 EZ with chassis	GI-M20-6
GI27 Z Three-point hitch	GI-M27-1
GI27 E Three-point hitch	GI-M27-2
GI27 EZ Three-point hitch	GI-M27-3
GI27 Z with chassis	GI-M27-4
GI27 E with chassis	GI-M27-5
GI27 EZ with chassis	GI-M27-6
GI33 Z Three-point hitch	GI-M33-1
GI33 E Three-point hitch	GI-M33-2
GI33 EZ Three-point hitch	GI-M33-3
GI33 Z with chassis	GI-M33-4
GI33 E with chassis	GI-M33-5
GI33 EZ with chassis	GI-M33-6
GI40 Z with chassis	GI-M40-1
GI40 E with chassis	GI-M40-2
GI40 EZ with chassis	GI-M40-3
GI40 D with chassis	GI-M40-4

Version of this manual:

7.0

Date created:

2020-11

Table of Contents

1	EC Declaration of Conformity	6
2	Safety instructions	7
2.1	Explanation of symbols	7
2.2	Pictograms and their meaning.....	8
2.3	General safety instructions.....	10
2.4	Intended use	10
2.5	Operator requirements.....	10
2.6	Alterations to the machine	11
3	Machine description	12
3.1	Functionality	12
3.2	Overview	12
3.3	Parts explanation	15
3.4	Technical Data.....	16
4	Transportation	19
4.1	Safety instructions during transport.....	19
4.2	Transport journeys and journeys on public streets.....	19
4.2.1	Transport of the splitter with chassis.....	19
4.2.2	Transport of the splitters with 3-point securing	20
4.3	Turn off	20
5	Set up of the machine.....	21
5.1	Safety instructions for installation of the machine	21
5.2	Electrical supply (Giant E and Giant E-Z).....	23
5.3	Controlling the rotation direction of the motors.....	24
5.4	Connection of the PTO shaft (Giant Z and Giant E-Z)	24

- 5.5 Unlocking the log lifter 25
 - 5.5.1 Log lifter with bracket 25
 - 5.5.2 Log lifter with hook..... 26
- 5.6 Woodtray (3) folding downwards..... 26
- 5.7 Extend the cylinders 27
- 5.8 Blade (2) adjustment: 27
- 6 Operation 28
 - 6.1 Safety instructions during operation 28
 - 6.2 Important instructions during operation..... 30
 - 6.3 Functionality of the two-hand safety operation..... 32
 - 6.4 The splitting process 32
 - 6.5 The splitting process with the radio-controlled giant: 33
 - 6.6 The splitting process with the radio-controlled giant (2): 34
 - 6.7 The Splitting process with the Giant 40:..... 34
 - 6.8 Changing the Giant 20/27/33 split blades 35
 - 6.9 Changing the Giant 40 splitting wedge (2) 35
 - 6.10 Working with a cable winch (optional)..... 36
- 7 Shutdown 37
 - 7.1 Safety instructions for the shutdown procedure 37
 - 7.2 Locking the log lifter 38
 - 7.2.1 Log lifter with bracket 38
 - 7.2.2 Log lifter with hook..... 39
 - 7.3 Retracting the cylinders 39
- 8 Maintenance 40
 - 8.1 Safety instructions during maintenance..... 40

8.2	Important instructions during maintenance	42
8.3	General instructions.....	43
8.3.1	For electric drives	43
8.3.2	For PTO shaft machines.....	43
8.3.3	For tractor drives	43
8.4	Instructions for working on electrical equipment	43
8.5	Instructions for working on hydraulic equipment	43
8.6	Duties before finishing work task	44
9	Servicing.....	45
9.1	Safety instructions during the servicing	45
9.2	Cleaning	46
9.3	Change the hydraulic oil	47
9.4	Changing the oil filters	48
9.5	Tyres (Giant with chassis)	48
9.6	Checking the cable of the cable winch (optional).....	48
9.7	Battery (with diesel motor drive)	48
9.8	Electrical installations:	49
9.9	Changing the hydraulic hoses	49
9.10	Service schedule	49
10	Assistance with Malfunctions	50
10.1	Safety instructions	50
10.2	Troubleshooting.....	51
11	Guarantee and Warranty	52
12	Conduct when dealing with accidents	53

1 EC Declaration of Conformity

We hereby declare that the machine, in its different technical implementations, corresponds to the regulations of the Machinery Directive 2006/42/EC, the EN609-1 and any additionally related standards.

Each of the respectively included safety regulations and manuals are applicable to these machines.

The machines may not be altered. In the case of an alteration to the machine that is not verified by us, this declaration is rendered invalid.

Operation without the appropriate safety devices is not permitted, as the lack of safety devices would no longer comply with the CE directives and would additionally increase the risk of injury.

The name and address of the person who is authorised to compile the technical documentation is as follows:

CEO Karl Binderberger
Binderberger Maschinenbau GmbH
Fillmannsbach 9
AT-5144 St. Georgen am Fillmannsbach


St. Georgen am Fill., 20.05.2015
Place, Date



Signature


2 Safety instructions


2.1 Explanation of symbols

Please pay attention to the meaning of the following symbolic explanations. They are divided into levels of risk and classified in accordance with ISO 3864- 2

DANGER	
	<p><i>Indicates an immediate threat of danger. If the information is not followed, death or serious bodily injury (invalidity) is the result.</i></p>

WARNING	
	<p><i>Indicates a potentially dangerous situation. If the information is not followed, death or serious bodily injury (disability) is the result.</i></p>

CAUTION	
	<p><i>Indicates a potentially dangerous situation. If the information is not followed, material damage as well as minor or moderate physical injuries are the result.</i></p>

NOTICE	
	<p><i>Indicates general instructions, useful operator instructions and working recommendations that have no influence on the safety and health of personnel.</i></p>

2.2 Pictograms and their meaning

	<p>Read the operating instructions carefully before starting up!</p> <p>Ear protection and safety glasses are to be worn during operation!</p> <p>Safety shoes (with steel cap) are to be worn during the operation!</p> <p>Gloves are to be worn during the operation The machine may only be operated by one person.</p> <p>Hot surfaces warning Rotating parts warning</p> <p>Intake warning danger</p>
	<p>Switch the machine off before servicing and secure against restarting.</p> <p>The machine may only be serviced by one person</p> <p>Allow the machine to cool down before servicing</p>
	<p>Risk of injury through tripping</p>

	<p>Risk of injury through slipping</p>
	<p>Lubrication points</p>
	<p>Tighten the handwheel bolts before starting work</p>
	<p>Load hook used</p>

2.3 General safety instructions

The machine may only be operated by people who are trained, instructed and authorised for its use. These people must know the operating instructions and act in accordance with them. The respective competences of the operating personnel are clearly defined.

Operating personnel undergoing training may only initially work with the machine under the supervision of an experienced person. The completed and successful instruction is to be confirmed in writing.

2.4 Intended use

The Giant Pro is exclusively intended for the splitting of logs.

All other forms of usage do not comply with the intended use. The manufacturer is not responsible for any personal injury or material damage that originates from non-compliant usage, but rather the operator of the machine is!

The reading of this manual as well as the observance of all instructions contained within it, particularly the safety instructions, also comply with the intended use. Also included is the fact that all inspection and servicing work is to be conducted in the prescribed time intervals.

2.5 Operator requirements

No special knowledge of mechanical engineering or electrical engineering is necessary for the operation of the machine. Nevertheless, the operator must be at least 18 years old. Before the machine is operated for the first time, the user must be trained by the operator of the machine and instructed accordingly. Protective shoes and close-fitting clothing are to be worn during the operation of the machine. In instances where - servicing works is to be carried out, the operator must possess the necessary technical expertise.

2.6 Alterations to the machine

For safety reasons, no unauthorised alterations may be conducted on the machine, this is also valid for welding work on load-bearing parts. All planned alterations must be approved in writing by the Binderberger company.

Only use original replacement parts / original wear parts / original accessories - these parts are specially designed for the machine. With externally manufactured parts, it is not guaranteed that they have been designed and manufactured to fulfil the operational stress and safety demands.

Parts and additional equipment that have not delivered by us are also not authorised by us for use in the machine.

3 Machine description

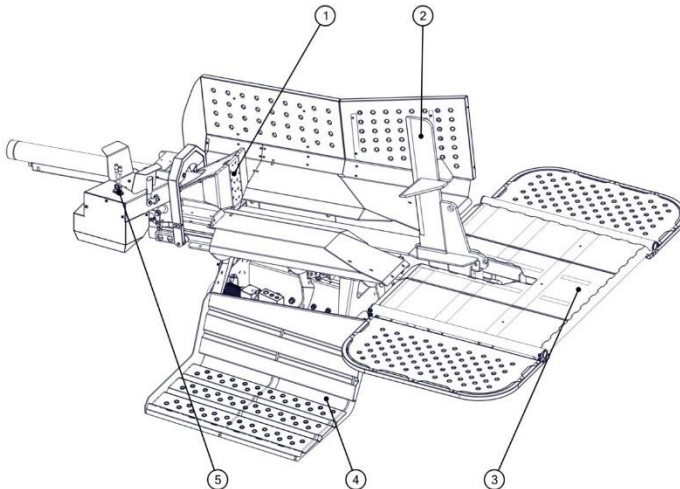
3.1 Functionality

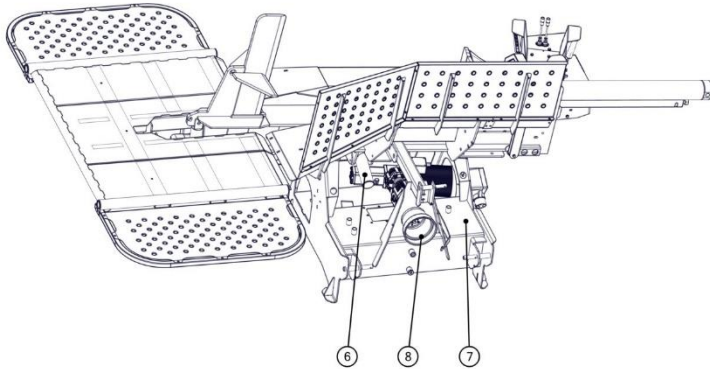
The log splitter is exclusively intended for the splitting of logs. All other forms of usage do not comply with the intended use. The manufacturer is not responsible for any personal injury or material damage that originates from non-compliant usage, but rather the operator of the machine is!

The reading of this manual as well as the observance of all instructions contained within it, particularly the safety instructions, also comply with the intended use. Also included is the fact that all inspection and servicing work is to be conducted in the prescribed time intervals.

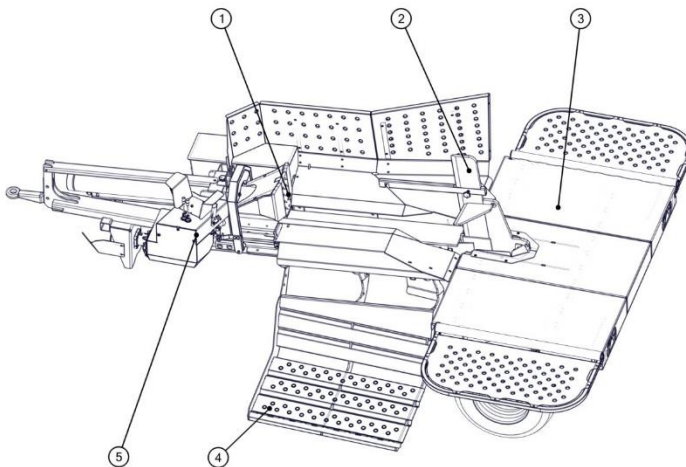
3.2 Overview

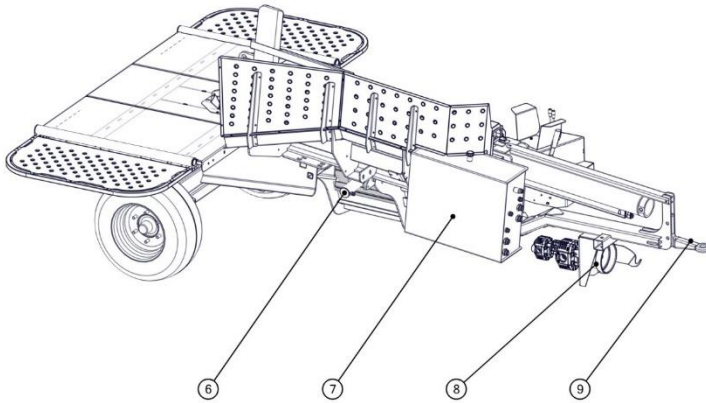
Giant



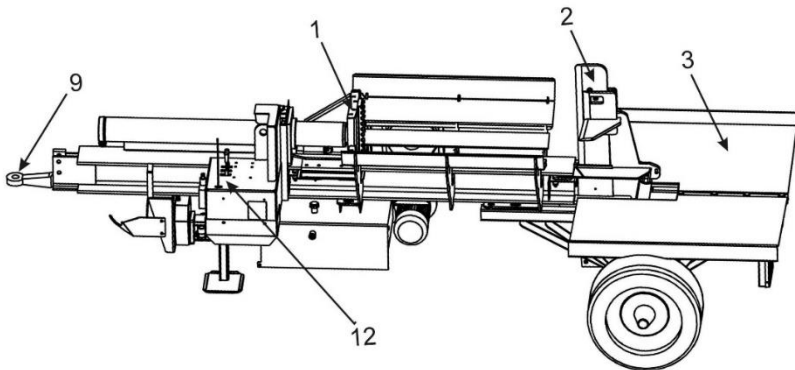


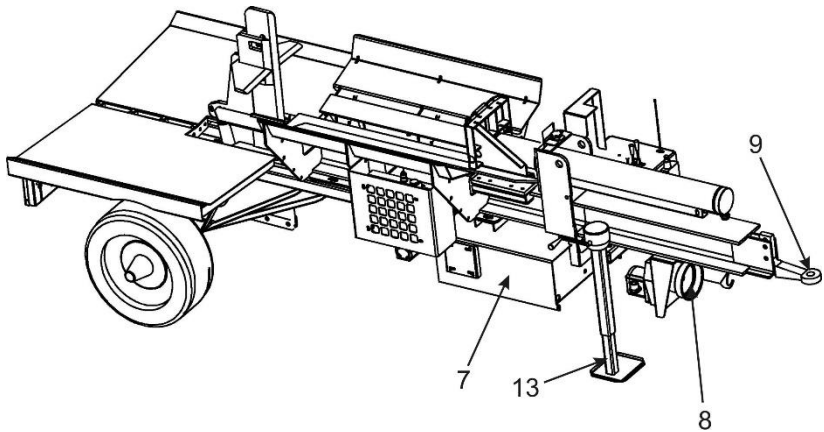
Giant with chassis





Radio-controlled giant





3.3 Parts explanation

Number	Component
1	Pusher
2	Splitting wedge with screwable blades
3	Wood tray
4	Log lifter
5	Control console
6	Log lifter cylinder
7	Hydraulic oil tank
8	PTO shaft stub
9	Drawbar eye
10	Cable winch (optional)
11	Electric motor
12	Control console and receiver for radio-controlled giant
13	Support stand

3.4 Technical Data

Model	Giant 20 Z	Giant 20 E
Splitting length	125 cm	
Splitting pressure	20 t	
Forward speed 1	22 cm/sec	11 cm/sec
Forward speed 2	39 cm/sec	20 cm/sec
Reverse speed	50 cm/sec	26 cm/sec
Oil volume pumped	56 l/min	50 l/min
Hydraulic tank capacity of the chassis	Approx. 80 l	
Hydraulic tank capacity 3-point hitch	Approx. 48 l	
Weight	840 kg	
D x W x H	170 x 266 x 170 cm	

Model	Giant 27 Z	Giant 27 E
Splitting length	125 cm	
Splitting pressure	27 t	
Forward speed 1	15 cm/sec	10 cm/sec
Forward speed 2	24 cm/sec	16 cm/sec
Reverse speed	43 cm/sec	28 cm/sec
Oil volume pumped	84 l/min	50 l/min
Hydraulic tank capacity 3-point hitch	Ca. 48 l	
Hydraulic tank capacity of the chassis	Ca. 80 l	
Weight	940 kg	
D x W x H	170 x 266 x 170 cm	


Model	Giant 30 Z	Giant 30 E
Splitting length	125 cm	
Splitting pressure	30 t	
Forward speed 1	15 cm/sec	10 cm/sec
Forward speed 2	24 cm/sec	16 cm/sec
Reverse speed	43 cm/sec	28 cm/sec
Oil volume pumped	84 l/min	50 l/min
Hydraulic tank capacity 3 - point hitch	Approx. 48 l	
Hydraulic tank capacity Chassis	Approx. 80 l	
Weight	940 kg	
D x W x H	170 x 266 x 170 cm	

Model	Giant 33 Z	Giant 33 E
Splitting length	125 cm	
Splitting pressure	33 t	
Forward speed 1	15cm/sec	10 cm/sec
Forward speed 2	24cm/sec	16 cm/sec
Reverse speed	43cm/sec	28 cm/sec
Oil volume pumped	84l/min	50 l/min
Hydraulic tank capacity 3 point hitch	Ca. 48 l	
Hydraulic tank capacity Chassis	Ca. 80 l	
Weight	940 kg	
D x W x H	170 x 266 x170 cm	

Model	Giant 40 Z radio- controlled giant 40 Z	Giant 40 E radio- controlled giant 40 E	Giant 40 D radio- controlled giant 40 D
Splitting length	125 cm		
Splitting pressure	40 t		
Forward speed 1	19 cm/sec	11 cm/sec	11 cm/sec
Forward speed 2	10 cm/sec	6 cm/sec	6 cm/sec
Reverse speed	29 cm/sec	17 cm/sec	17 cm/sec
Oil volume pumped	84 l/min		
Hydraulic tank capacity 3 point hitch	80 l		
Hydraulic tank capacity Chassis	1250 kg		
Weight	460 x 190 x 240 cm		
D x W x H	460 x 190 x 240 cm		

4 Transportation

4.1 Safety instructions during transport

<h1>WARNING</h1>	
	<p style="text-align: center;"><u>Risk of injury during transport!</u></p> <ul style="list-style-type: none">• Care must be taken to ensure that nobody is in the danger area and a sufficiently safe distance is kept!• During transport, any sloping or inclinations may result in the leaking of lubricants, which can result in a risk of chemical burns should they come into direct contact with the skin.• The machine is only permitted to be hoisted by the intended points!

4.2 Transport journeys and journeys on public streets

All points for the decommissioning must be conducted before the transport of the machine

The national legal regulations must be complied with during transport on public streets!

4.2.1 Transport of the splitter with chassis

The tractor must design to bear the total weight and the support load of the machine.

The legal regulations must be complied with when the machine is transported on public streets (lights, travel speed, etc).

The log splitter must be carefully attached at the drawbar coupling of the tractor and protected.

4.2.2 Transport of the splitters with 3-point securing

If the log splitter is suspended in a tractor and is also to be transported by tractor, care must be taken to ensure that no parts can fall off the machine and that the log splitter is also properly attached to the 3-point hitch of the tractor.

At every instance of attachment, check whether the upper and lower link pins are secured with a cotter pin.

Moreover, the tractor must design to bear the total weight of the machine.


- When travelling with the vehicle, the travelling speed must be adapted to the ground conditions. In this manner, the machine can be protected against strong vibrations that could have a negative impact on the connections.


4.3 Turn off


- With prolonged non-use of the machine, all hydraulic cylinders must be retracted. Otherwise, there is a danger of rust film.
- The log splitter should be cleaned and all paintwork damage should be touched up before the device is switched off.
- All lubrication points are to be lubricated.
- Apply a thin layer of lubricant in the areas that cannot be point enamelled or greased.
- The hoses are to be cleaned and dried.
- Lower the pressure in the cylinders.
- The storage area should be cool and dry.


5 Set up of the machine

5.1 Safety instructions for installation of the machine

<h1 style="margin: 0;">WARNING</h1>	
	<p style="text-align: center;"><u>Risk of injury in the event of improper installation of the machine!</u></p> <ul style="list-style-type: none">• Check the machine for transport damage before each installation!• Install the machine on level and solid ground!• Use the supporting legs of the machine!• Ensure that nobody is endangered by the installation!• Lay the machine connections, cables and hoses in such a manner that there is no risk of tripping!• The machine may only be operated while in perfect condition!• Do not assemble or dismantle hoses under pressure!• Hoses under pressure may not be placed in the operator's cabin! If this is not possible, it must be ensured that the operator cannot be injured in the event of the hoses rupturing!• Secure the PTO shaft guard against rotation. Care must be taken that nobody is between the machine and tractor!• Before working with the log lifter or a cable winch, the splitter must be properly attached to the 3-point securing of the tractor.

CAUTION	
	<p><u>Risk of injury through rotating drive shaft</u></p> <ul style="list-style-type: none">• Secure the PTO shaft guard against rotation

CAUTION	
	<p><u>Use the correct drive shaft</u></p> <ul style="list-style-type: none">• A drive shaft with version BG4 must be used.

<h1>NOTICE</h1>	
	<p><u>Conduct the following actions before starting operation:</u></p> <ul style="list-style-type: none">• Assembly and connection must take place according to the instructions.• Check that all hoses, couplings, bolts and screw connections are mechanically secured.• With outside temperatures under 0° Celsius, allow the machine to idle without load for approximately 10 minutes.• Secure the PTO shaft guard against rotation

5.2 Electrical supply (Giant E and Giant E-Z)

The safeguarding and dimensioning of the electrical power supply are to be chosen by an electrical expert in accordance with the national standards and to be dependent upon the line length!

Plug the 5-pole CEE 400V/ 16A supply line into the power plug.

The log splitter must be operated with a supply grid that is secured with a 30mA fault-current circuit breaker.

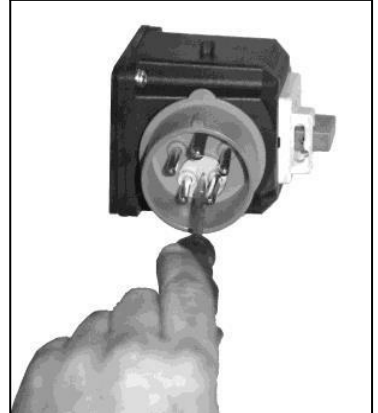
Never perform work on electrical systems if you do not have the necessary technical expertise!

5.3 Controlling the rotation direction of the motors

(Giant E and Giant E-Z)

Briefly switch the motor on and check the rotation direction in the fan blade of the motor. The correct rotation direction can be recognised by the sticker on the fan cover of the motor. If the rotation direction is not correct, disconnect the power supply to the log splitter.

There is a phase inverter in the plug with which the rotation direction of the motor can be changed (push in and turn the disc within the plug 180° with a screw driver).



5.4 Connection of the PTO shaft (Giant Z and Giant E-Z)

Drive the tractor in front of the Giant and connect it to the 3-point securing of the tractor.

Switch off the tractor. The splitter and the tractor can now be connected to the PTO shaft.

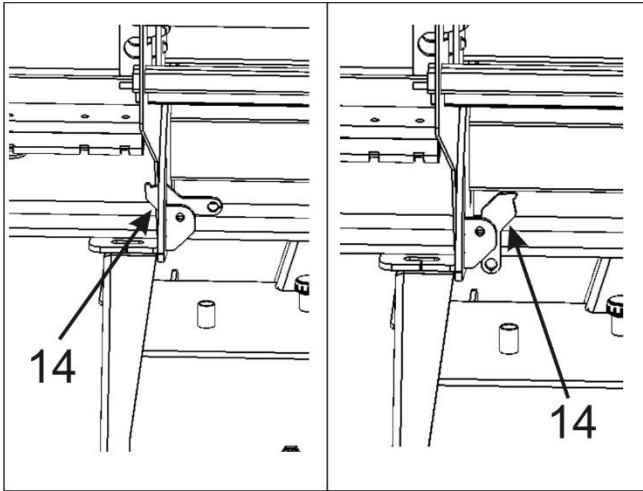


**A drive shaft with version BG4 must be used.
The PTO shaft guard must be secured against rotation.**

5.5 Unlocking the log lifter

5.5.1 Log lifter with bracket

In order to unlock the log lifter, raise the left-hand lever to its uppermost position and pull out the locking bracket (14).



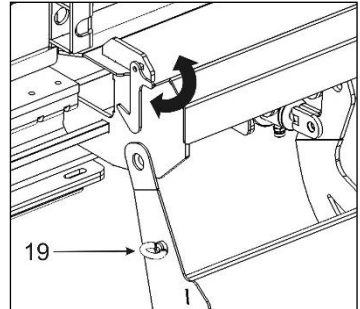
Log lifter
locked

Log lifter
unlocked

5.5.2 Log lifter with hook

In order to unlock the log lifter, lift it upwards and release the hook from the eye (19).

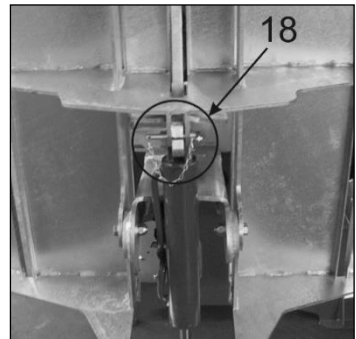
The log lifter can then be lowered to the ground.



5.6 Woodtray (3) folding downwards

With Giants without chassis, the wood tray is to be rebuilt from the transport position into the working position.

Pull out the securing pin (18) and fold down the wood tray (3).

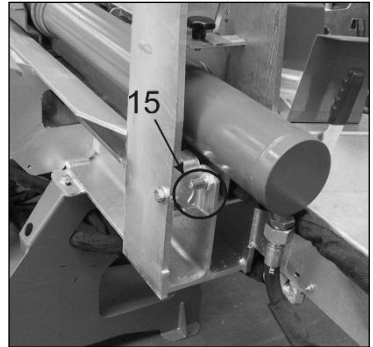


5.7 Extend the cylinders

With Giants without a chassis, the cylinder of the pusher (1) is to be rebuilt from the transport position into the working position.

This functions as follows:

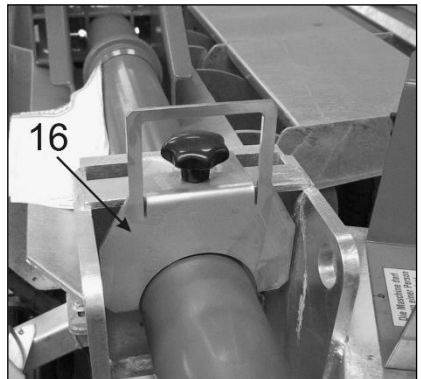
First, open the spring bolts (15) at the back of the cylinder.



To secure the cylinder, remove the forming tube from the splitting chute. Otherwise, it would be split with the moving out of the cylinder.

Next lay a piece of wood between the handle and the knife and extend the cylinder fully using the two-hand controller (22). This pushes the cylinder back.

When its end position is reached, it must be secured again by means of a retaining plate (16). In order to do this, reverse the retaining plate and insert into the slot. Secure the curvature of the cylinder in the groove in the front.





5.8 Blade (2) adjustment:

With the right-hand operating lever, raise the blade (21) upwards until the wood is optimally split. This means that the centre of the splitting wedge should also be the centre of the wood.

6 Operation

6.1 Safety instructions during operation

<h1>DANGER</h1>	
	<p><u>Risk of injury by being drawn in or caught by moving machine parts!</u></p> <ul style="list-style-type: none">• Keep a sufficiently safe distance away from moving machine parts!

<h1>WARNING</h1>	
	<p><u>Risk of injury while operating!</u></p> <ul style="list-style-type: none">• Care must be taken to ensure that only the operator is at the control console.• Ensure that nobody is in the danger area and that a sufficiently safe distance is kept!• Familiarise yourself with the operational controls of the log splitter!• Pay attention that the machine is in a secure position!• Care must be taken to ensure that nobody is between the machine and tractor!• Before working with the log lifter or a cable winch, the splitter must be properly attached to the 3-point hitch of the tractor!

CAUTION



Tripping over parts lying around!

- All parts that do not belong to the machine are to be removed from its area.

CAUTION



Risk of injury through negligent use of personnel protective equipment!


- Wear protective gloves and safety shoes with steel caps.

CAUTION




Risk of injury while operating

- Always only one person may work on the machine.
- Care must be taken to ensure that nobody remains in the area of the machine.
- The splitting area must not be reached into during the splitting process

<h2>CAUTION</h2>	
	<p style="text-align: center;"><u>Risk of injury through rotating drive shaft</u></p> <ul style="list-style-type: none">• Secure the PTO shaft guard against rotation.

6.2 Important instructions during operation

<h2>NOTICE</h2>	
	<ul style="list-style-type: none">• The operating personnel must take care to ensure that no unauthorised people remain in the working area of the machine• Before turning the machine on, make yourself familiar with the correct conduct in the event of a failure.• Before the turning the machine on, perform the points cited in the section "Duties before starting operation".• After switching off the machine, the working steps from the following section "Shutdown" must always be carried out.• If the operating personnel leave the machine so that it is unattended, it must be switched off and secured against unauthorised restarting.

NOTICE



The quality mark is only awarded under specific conditions:

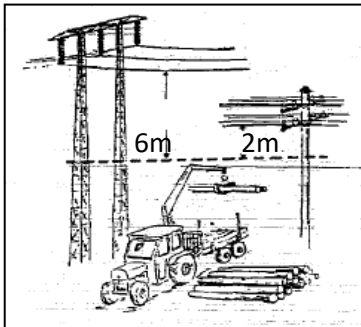
- *Comfort operation*
- *Log lifter*

Operation under power supply lines:

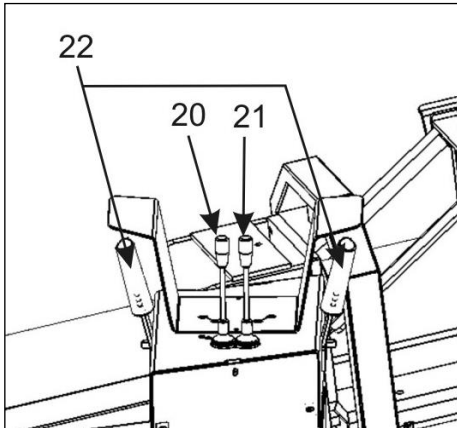
Pay strict attention to the safe distance for work under power supply line. No part of the machine may approach closer than the safe distances from the power supply lines shown below.

With low-voltage lines: min. 2 metres

With high-voltage lines: min. 6 metres



6.3 Functionality of the two-hand safety operation



The splitting process can only be triggered while both hand levers (22) are pressed down. No movement will occur if only one hand lever is pressed. The same applies if the hand lever is released during the splitting process.

The log splitter is equipped with 2 splitting speeds. However, it is not necessary to change them with the hand levers since this log splitter is equipped with SpeedControl. This control independently provides for the fact that the fastest possible speed is used.

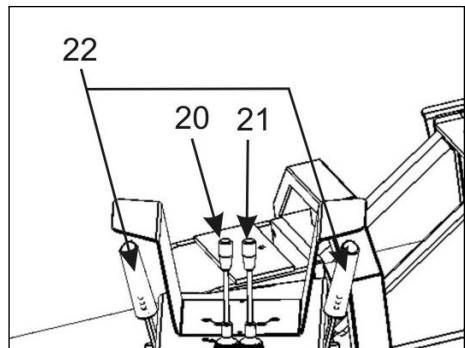
If the hand levers are released, the pusher (1) stops in its position. To return to the starting position, both hand levers must be pushed upward where they will lock into place. The pusher (1) returns to its starting position and switches off at the back.

6.4 The splitting process

Firstly, lower the log lifter by means of the lever (20). Then lay the log on the log lifter(4).

Then transport the log to the splitting chute with the aid of the log lifter (4).

With the second lever (21), bring the blade into the correct position. During the splitting, the centre of the splitting wedge should be in the middle of the log. Then the splitting process can be started with the aid of the two-hand controls (3). For this, both levers (22) must be pressed down during the entire splitting process.



When the wood is split, the pusher (1) must be returned to its starting position. For this, simply push up the two-hand controls (22) until it locks into place. Then the two-hand control can be let go since the pusher will automatically retract. The next splitting process can now be started.

In order to avoid severe injuries, care must be taken that nobody remains in the area of the log lifter when it is being operated

6.5 The splitting process with the radio-controlled giant:

Because the radio-controlled giant has no log lifter (4) for technical safety reasons, the wood must be lifted into the splitting chute using the crane.

A check must be carried out to confirm that the splitting wedge is at the correct height when the log is in the splitting chute. If necessary, it can be moved up or down using Button 5 and Button 6 (photo) on the remote control.

Then the splitting process can be started. For this, simultaneously press Button 1 and Button 8(photo) on the remote control until the splitting process is completed.

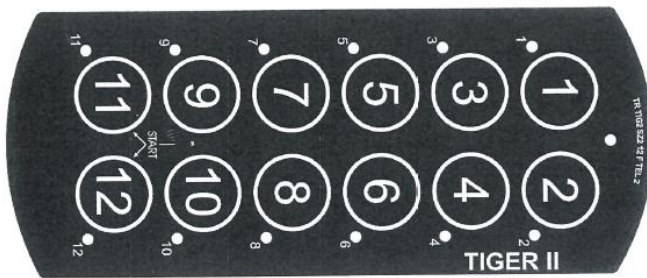
When the wood is split, the pusher (1) must be returned to its starting position. For this, briefly press Button 2 (photo) on the remote control. The pusher will then automatically return to the starting position.



For incidents, the machine can be stopped with the emergency stop at the bottom of the remote control.

6.6 The splitting process with the radio-controlled giant (2):

Button	Function
1 + 12	Both buttons have to be pushed and hold together in order to start the splitting process by extending the cylinders.
2	Push the Button once to retract the cylinder. If the cylinder is still moving back and the button is pushed again, it will stop at the current position.
3	Log lifter up
4	Log lifter down
5	Splitting wedge up
6	Splitting wedge down
7	Not in use
8	Not in use
9	Remove cable winch
10	Retract cable winch
11 + 12	Push both buttons in order to switch the radio controller on or off



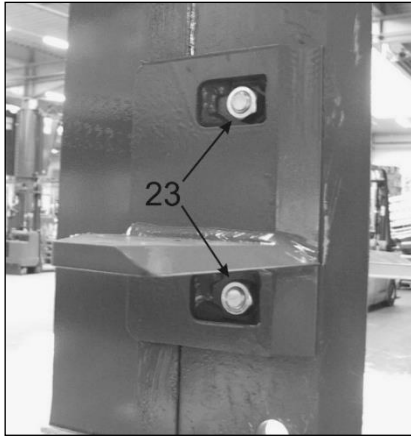
6.7 The Splitting process with the Giant 40:

W The splitting process of the Giant 40 is only initiated after one of the two pressure cylinders is filled first. This reaches a splitting pressure of 17 t. If this force is insufficient, the second cylinder is to be switched on via a pressure distribution valve. This takes as long, however, as it took for the first cylinder for the wood.

Important! The two-hand controls (22) must remain pressed down during the entire process.

6.8 Changing the Giant 20/27/33 split blades

With the Giant 20 and Giant 30 models, the changing is done with the 2, 4, 6 or 8 splitters, the entire blade is not removed.

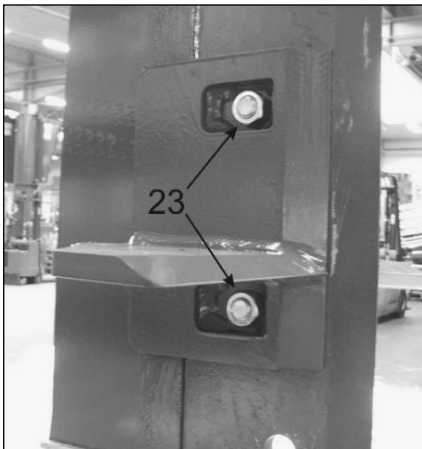


Only 2 splitting blades are to be removed from the left and the right of the blade and replaced with others.

For this, remove the 2 screws (23) that the splitting blades are attached to, then remove the splitting blades and mount new ones.

Splitting cannot take place without splitting blades. To halve the wood, then a 2-splitter must be used.

6.9 Changing the Giant 40 splitting wedge (2)



If you own a Giant 40, then the entire blade must be removed in order to change the splitting blades (4-splitter, 6-splitter, etc).

For this, proceed with the following:

To do this, proceed as follows:

Secure the splitting cross with an appropriate hoisting gear (crane, front loader, etc.).

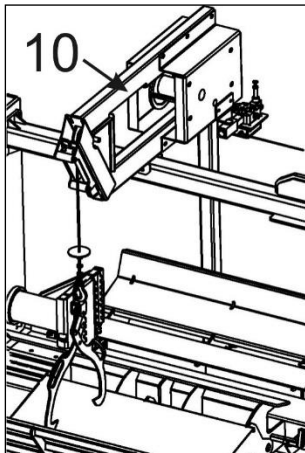
Then the blade (2) below must be separated from the lift cylinder. For this, simply remove the screws (2 4) below.

6.10 Working with a cable winch (optional)

With a cable winch (10), large trunks can be hoisted in without a problem.

Two variations are available to choose from:

- Manual control over a separate controller
- Control over a remote control



The PTO shaft serves as a driving mechanism. In order to be able to pull the wood near with a cable winch, the winch must first be properly connected to the tractor.

If driven via the PTO shaft, the log splitter must only be attached to the tractor with the drive shaft in the customary manner.

When using a cable winch with a radio control, it is also necessary to connect to the electrical power supply in the tractor.

Following this, it is essential to check the cable for damage. A bent or damaged cable must not be used under any circumstances.

In order to remove the cable, it is only necessary to briefly switch on the winch runback. In the process, the driving mechanism is uncoupled and the cable can be readily pulled out. As a standard, there are wood tongs for the cable winch. They are attached to the wood and the winch is switched on.

Particular care must be taken to ensure that neither you nor any other persons are in the vicinity of the cable. A sufficiently long safe distance must also be observed.





Afterward, the wood is comfortably able to be placed on the log lifter (4) and lifted into the splitting chute.


If you should notice that the cable is damaged during the operation, this cable is to be immediately exchanged.


7 Shutdown

7.1 Safety instructions for the shutdown procedure

DANGER	
	<p><u>Risk of injury by being drawn in or caught by moving machine parts!</u></p> <ul style="list-style-type: none">• After the shutdown, wait until all moving machine parts have come to a complete stop!• Keep a sufficiently safe distance away from moving machine parts!

WARNING	
	<p><u>Risk of injury during shutdown!</u></p> <ul style="list-style-type: none">• Care must be taken to ensure that nobody is in the danger area and a sufficiently safe distance is kept• Do not stand under suspended loads, these can drop down!• Care must be taken to ensure that nobody is between machine and tractor

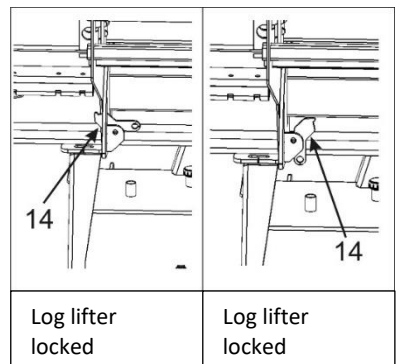
<h1>WARNING</h1>	
	<p><u>Risk of injury with the switching on of the machine by unauthorised people!</u></p> <ul style="list-style-type: none"> • After operation, secure the machine against unauthorised switching on! • With longer absences from the work area, the machine is to be disconnected from the energy source.

<h1>CAUTION</h1>	
	<p><u>Risk of injury through rotating drive shaft</u></p> <ul style="list-style-type: none"> • Secure the PTO shaft guard against rotation

7.2 Locking the log lifter

7.2.1 Log lifter with bracket

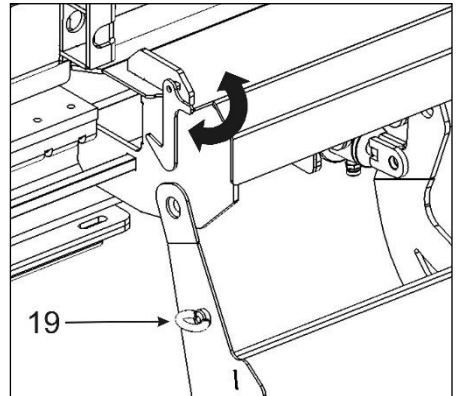
In order to lock the log lifter, raise the left-hand lever to its uppermost position and press the safety bracket (14) through the opening in the plate.



7.2.2 Log lifter with hook

In order to lock the log lifter, raise the left-hand lever completely upwards and release the hook from the eye (19).

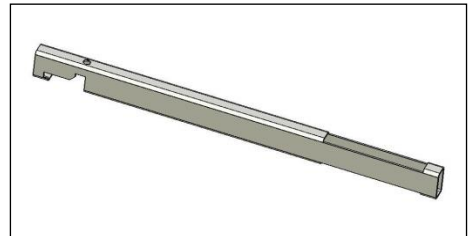
The log lifter (4) must then be lowered until it rests on the ground.



7.3 Retracting the cylinders

With Giants without chassis, the cylinder of the pusher (1) is to be rebuilt from the transport position into the working position.

For this, the pusher must first be completely extended with the aid of the two-hand controls (22). Then the pusher can be connected with the splitting wedge by means of the forming tube provided (image).



Now the retaining plate (16) is to be opened. Then press the two-hand controls (22) upwards until it is locked into place. When the cylinder is fully retracted, it must be fixed again using the locking bar (15).


Fold the wood tray (3) upwards


With Giants without chassis, the wood tray is to be rebuilt from the transport position into the working position.


First, fold the entire wood tray upwards and secure with the pins. Then push the support leg (17) together and fold the wood tray.

8 Maintenance

8.1 Safety instructions during maintenance

DANGER	
	<p><u>Risk of severe injury by switching on the driving mechanism during maintenance work!</u></p> <ul style="list-style-type: none">• Switch off machine!• Secure against unintentional restart!

CAUTION	
	<p><u>Risk of slipping on oil residues during maintenance work (oil change)!</u></p> <ul style="list-style-type: none">• Use appropriate collection containers.• Immediately clear up any oil that has leaked.

CAUTION	
	<p><u>Risk of injury! Scalding due to hot machine components and media!</u></p> <ul style="list-style-type: none">• Allow the machine to cool down to ambient temperature before carrying out any maintenance.

CAUTION



Risk of injury through contact with lubricants!

- Avoid contact with skin and eyes.
- Do not swallow or inhale.
- Use the appropriate protective equipment (gloves, safety glasses).


CAUTION



Risk of injury through rotating drive shaft

- Secure the PTO shaft guard against rotation

8.2 Important instructions during maintenance

<h1>NOTICE</h1>	
	<ul style="list-style-type: none">• Immediately exchange all impaired machine parts.• Only use original replacement parts.• Be certain that appropriate collection containers are available for all substances that pose a threat to groundwater (oils and coolants, among others).• Only use the fuels specified.• Self-securing bolts and nuts are always to be replaced.• All fuels and lubricants that are not re-used are to be disposed of in an environmentally sound manner.• The installation of incorrect replacement or wear parts can result in serious motor damage.• fire extinguishers at the ready.• Improperly laid lines can cause smoulder fires and cable fires.• Never enable the machine without the factory-provided safety equipment for the operation.• It is strictly forbidden to remove safety instructions attached to the machine.• Replace the instruction stickers on the machine if they are no longer readable.• Always follow the warning instructions that are on the machine. This helps hazards to be avoided• Do not carry out any repairs if you are not qualified to do so.

8.3 General instructions

8.3.1 For electric drives

Switch off the central electricity supply with the main switch, lock the main switches and attach a warning sign against restarting.

8.3.2 For PTO shaft machines

Switch off the tractor, remove the key and attached a warning sign against restarting.

8.3.3 For tractor drives

Switch off the tractor, remove the key and disconnect both hydraulic hoses from the tractor. Attach a warning sign against restarting/reconnecting.

8.4 Instructions for working on electrical equipment

It is essential that any work carried out on the electrical equipment of the machine is performed by trained electrical specialists.

- Regularly check electrical equipment.
- Retighten loose connections.
- Immediately exchange broken lines or cables.
- Never clean electrical equipment with water or similar liquids.

8.5 Instructions for working on hydraulic equipment

It is essential that any work carried out on the hydraulic equipment of the machine is performed by trained specialist personnel.

- Release the pressure in all hydraulic equipment/ machine components before the work.
- Be certain before beginning work that the appropriate collection containers are available for all substances that pose a threat to groundwater (oils and coolants among others).


8.6 Duties before finishing work task


After the end of any maintenance work and before starting the machine, the following points are to be followed:


- Check that all previously loosened screw connections are solidly seated.
- Check whether all previously removed safety devices, covers, container lids, etc. are properly reinserted.
- Be certain that all tools, materials and other equipment used have been removed again from the working area.
- Clean the working area and remove any liquids and similar substances that might have leaked.
- Be certain that all safety devices on the machine are functioning perfectly again.
- Check the function of the safety devices. Do not release the machine for use if the safety devices are not functioning perfectly.
- Conduct a trial run with a functional check of the repaired components.
- Protect the machine from unauthorised switching on if the work has not been concluded.
- Contact with open fire and smoking is forbidden.


9 Servicing


9.1 Safety instructions during the servicing

DANGER	
	<p><u>Risk of severe injury by switching on the driving mechanism during servicing work!</u></p> <ul style="list-style-type: none">• Switch off machine!• Secure against unintentional restart!• Disconnect from energy source.

CAUTION	
	<p><u>Risk of slipping on oil residues during servicing work (oil change)!</u></p> <ul style="list-style-type: none">• Use appropriate collection containers.• Immediately clear up any oil that has leaked.

CAUTION	
	<p><u>Risk of injury! Scalding due to hot machine components and media!</u></p> <ul style="list-style-type: none">• Allow machine to cool down to ambient temperature before undertaking any servicing work.• Keep easily inflammable material away from hot surfaces

CAUTION	
	<p style="text-align: center;"><u>Risk of injury through contact with lubricants!</u></p> <ul style="list-style-type: none">• Avoid contact with skin and eyes.• Do not swallow or inhale.• Use the appropriate protective equipment (gloves, safety glasses).

CAUTION	
	<p style="text-align: center;"><u>Environmental danger!</u></p> <ul style="list-style-type: none">• Care must be taken to ensure that no oil reaches the environment.• Leaked oil pollutes water and groundwater.

9.2 Cleaning

The machine is to be free of dirt after each use and before any maintenance operation!

The log splitter must be lubricated after each cleaning with water!

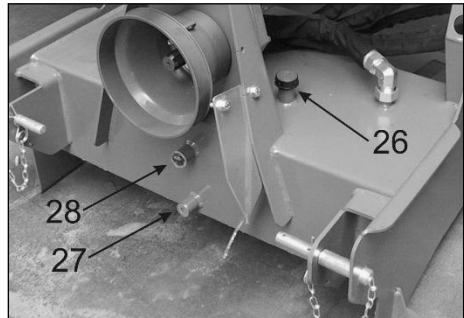
9.3 Change the hydraulic oil

The first oil change must be carried out after 50 hours of operation. Afterwards, oil changes must occur every 250 hours of operation or at least once a year.

Use HLP 32, or equivalent hydraulic oil.

Care must be taken to ensure that a sufficiently large collection container is available.

For the draining of the hydraulic oil, turn the screw (27) below the tank. When the oil is drained from the tank, screw it back in. Refill the tank with oil (oil spigot 26). For the fill level, there is a gauge glass in the tank (28).



Attention! The oil spigot, the drain screw and the gauge glass are in different positions depending on the model.

After the refilling, start running the log splitter and run the pusher back and forth several times without wood. When the pusher (1) is in the most forward position, check the oil level in the gauge glass (28) again and refill with some more hydraulic oil if necessary.

9.4 Changing the oil filters

With the log splitter, the oil filter is on top the hydraulic valve. The filter must be changed for the first time after 50 hours of operation. Then the oil filter change should occur every 250 hours of operation or at least once a year.

To do so:

1. Unscrew the external filter sleeve
2. Exchange the filter cartridge
3. Check the seal and change if damaged
4. Screw filter sleeve back on
5. Examine for tightness

9.5 Tyres (Giant with chassis)

Make sure that the tyres have an air pressure of 5 bar. The lug nuts must be tightened to 340 Nm.

The wheel nuts must be checked after the first 5 km and retightened.

9.6 Checking the cable of the cable winch (optional)

The cable must be checked for damage before and after every operation. It may not exhibit bent or crushed sections. Also, no individual strands must be broken.

Should there be any damage to the cable, the cable winch can no longer be run. The cable must be replaced immediately.

In addition, all pulleys must be checked for wear.

9.7 Battery (with diesel motor drive)

The liquid level must be checked regularly and refilled with distilled water if necessary.

If the log splitter stands unused for an extended period of time, it is advantageous to remove the battery and to furnish a charger to maintain its capacity.

9.8 Electrical installations:

All log splitters can be equipped against a surcharge with emergency lighting and a 7-pole plug. This emergency lighting includes an indicator, rear lights and a brake light.

Attention! The lighting must be checked before every transport on public streets.

Broken lamps can be replaced as follows.

1. First unscrew the two screws (32) from the plastic cover.
2. Remove the plastic cover.
3. Remove the 2 screws (33) that are screwed in the lighting.
4. Pull out the lamp and detach light glass.
5. Change the lamp and reassemble everything.

Always follow the correct watt number when changing lamps.

9.9 Changing the hydraulic hoses

All hydraulic hoses must be exchanged after 5 years at the latest.

Damaged hoses can cause severe injury!


9.10 Service schedule


Regular servicing is the best guarantee for the effective and economical functioning of your splitter. The log splitter has already been carefully tested and adjusted according to factory standards.


	10h	1st time after 50h	Then every 250h or once a year
I-Beam	Lightly grease		
Lubricating the split blades	x		
Oil change		x	x
Oil filter change		x	x

10 Assistance with Malfunctions

10.1 Safety instructions

DANGER	
	<p><u>Risk of severe injury by switching on of driving mechanism with failures!</u></p> <ul style="list-style-type: none">• Switch off machine!• Secure against unintentional restart!

CAUTION	
	<p><u>Risk of injury! Scalding due to hot machine components and media!</u></p> <ul style="list-style-type: none">• Allow machine to cool down to ambient temperature before repairing any faults.

CAUTION	
	<p><u>Risk of injury through contact with lubricants!</u></p> <ul style="list-style-type: none">• Avoid contact with skin and eyes.• Do not swallow or inhale• Use the appropriate protective equipment (gloves, safety glasses)

10.2 Troubleshooting

Failure	Cause	Correction
Pusher does not drive out	Incorrect motor rotation direction (with E-drive mechanism)	Change rotation direction with phase inverter
	Not enough hydraulic oil in the system	Check oil level
Motor does not run or frequently switches off	Blown fuse	Use the correct fuses (16 A inert)
	Motor guard is triggered	Inlet too weakly (min 5 x 2,5mm ²)
	Motor guard is triggered (motor is humming)	Only two phases
		A connector has come loose in the phase inverter
	Faulty line	Allow the line to be checked by an expert
	Contactor or motor guard switch defective	Check switches
Motor covered or heavily soiled	Uncover or clean motor (ATTENTION!! Do not clean with water)	
Motor is hot and has no power	Only two phases connected	Allow the line to be checked by an expert
Pusher (1) blocked	Wood too knotted	Turn wood
	Sealing set is leaking (only with very high operation hours)	Replace sealing collars
Hydraulic hose is hot	Not enough oil in the system	Check oil level
	Old oil in the system	Carry out an oil change
Hydraulic cylinder is leaking	Sealing collars worn out	Replace sealing collars
	Piston rod broken	Replace piston rod
If malfunctions cannot be eliminated, please contact your dealer! He will be happy to help you.		

11 Guarantee and Warranty

Garantiebedingungen 950601:

Guarantee Terms 950601:

The Binderberger Maschinenbau GmbH company provides a guarantee for a period of two years on parts that fail to fulfil their intended purpose as the result of material defects or production errors.

A one year guarantee is provided by our suppliers on goods procured by us, such as wheels, axels and valves. The guarantee comes into force with the delivery date.

The guarantee does not cover failures that are due to normal wear, inattentiveness, incorrect use and incorrect assembly. Hydraulic hoses and couplings are excluded from the guarantee.

Costs that originate within the scope of the guarantee procedure for detaching, assembly and delivery are not refunded. The fault should be repaired upon the mutual arrangement of the customer, the appointed dealer and the Binderberger company. The fault should be repaired following a mutual arrangement between the customer, the appointed dealer and the Binderberger company.

For this, the model of the machine, the production number, the delivery date and the name of the owner, as well as the address, must be indicated. For this, the model of the machine, the production number, the delivery date and the name of the owner as well as the address must be presented.

The guarantee is invalid if the machine deviates from the original implementation, e.g., due to changes, set-up, additional constructions or the replacement of parts that have not been delivered by us.

Otherwise, the NL92 delivery regulations are valid.

12 Conduct when dealing with accidents

As a matter of routine, ensure you have up-to-date information about available first aid options.

After the initial care of injured people, immediately inform your supervisor of any personal injuries, damage to the machine or material damages.

In the event of the specific use of emergency vehicles, state the severity of the injury and damage.

In a disaster situation, immediately leave the machine (fire).

Note

In the pursuit of technical advancement, Binderberger Maschinenbau GmbH continually works to improve its products. We reserve the right to make changes from the illustrations and descriptions in this operating manual/replacement parts list. This cannot give rise to any claim to changes on machines that have been already delivered. The technical data, dimensions and weights are not binding. Errors excepted.

Dealer's stamp:

Name plate:



Maschinenbau GmbH
Fillmannsbach 9
A-5144 St. Georgen am Fillmannsbach
Tel: +43 / 7748 / 8620
Fax: +43 / 7748 / 8620 – 20
office@binderberger.com
www.binderberger.com