

Firewood Processor SSG750



Original Operator's Manual Copyright by Binderberger GmbH



Read the operating instructions carefully before
commissioning the machine!

This manual is valid for:

Model	Article number
SSG Z	SSG-M75-1
SSG D	SSG-M75-2
SSG E	SSG-M75-3

Version of this manual: SSG750 3.0

Creation date: 2021-02

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	Keep information available	9
2.4	General safety instructions	9
2.5	Intended use	9
2.6	Operator's duty of care.....	10
2.7	Operator requirements.....	11
2.8	Maintenance and servicing personnel.....	11
2.9	Modifications to the machine.....	12
2.10	Environmental Protection.....	12
2.11	Misuse and residual risks	12
3	Overview	13
3.1	How it works	13
3.2	Overview	14
3.3	Part description.....	15
3.4	Technical data	16
3.5	Equipment.....	17
4	Transport of the machine	18
4.1	Safety instructions during operation	18
5	Set up of the machine	20
5.1	Safety instructions for set up.....	20

5.2	Duties before starting work	21
5.3	Electrical supply line	21
5.4	Check direction of rotation of the motor	22
5.5	Switch on Battery main switch	23
5.6	Positioning the tractor	23
5.7	Bringing the machine into working position.....	24
5.8	Fold out the feeder	25
5.9	Set up of the feeder	26
5.10	Hydraulic connection cross conveyor	27
5.11	Oil cooler	27
5.12	Adjusting the saw speed	28
5.13	Unlocking the lift cage	28
6	Operation	29
6.1	Safety instructions during operation	29
6.2	Radio remote control.....	31
6.3	Setting the cutting length	32
6.4	Operation in splitting mode.....	32
6.5	Harvester	33
6.5.1	Hultdins Chainsaw:	33
6.5.2	Bleeding the chain tensioning system.....	34
6.5.3	Adjusting the chain tensioning pressure	35
6.5.4	Adjusting the guidebar speed.....	36
6.5.5	Changing the chain	37
6.5.6	Changing the guide bar.....	38
6.5.7	Bleeding the chain lubrication system	39

- 7 Shutdown 40
 - 7.1 Safety instructions for the shutdown procedure 40
 - 7.2 Switch off the drive..... 41
 - 7.2.1 Diesel-engine 41
 - 7.2.2 Electric drive 41
 - 7.2.3 PTO drive 41
- 8 Maintenance 42
 - 8.1 Safety instructions during maintenance 42
 - 8.2 Important instructions during maintenance 44
 - 8.3 Notes when working on electric equipment 45
 - 8.4 Notes when working on hydraulic equipment 45
 - 8.5 Cleaning 45
 - 8.6 Daily maintenance work 45
 - 8.7 Duties before finishing maintenance..... 46
 - 8.8 Check chain oil-level 47
 - 8.9 Maintenance work every 250 hours..... 47
 - 8.10 Lubrication 48
 - 8.11 Sharpening the saw chain 50
 - 8.12 Oil change 52
 - 8.13 Changing the oil in the gearbox 52
 - 8.14 Changing the oil filter..... 53
 - 8.15 Changing the hydraulic hoses 53
 - 8.16 Setting the pusher limit 53
 - 8.17 Changing the splitting wedge 54
- 9 Help in case of malfunctions..... 55

9.1 Safety instructions 55

9.2 Troubleshooting..... 56

10 Guarantee and Warranty 59

11 Conduct when dealing with accidents 60

12 Notes 61

1 EC Declaration of Conformity

We hereby declare that the various technical versions of the machine:

Designation: _____
Type: SSG 750
Serial number: _____

comply with the provisions of the Machinery Directive 2006/42 / EC and the other related standards.

The machine mentioned meets the requirements of the EMC Directive 2004/108 / EC and the Low Voltage Directive 2006/95 / EC.

The accompanying safety regulations and operating instructions apply to these machines.

The machines must not be modified. If changes are made to the machine that have not been agreed with us, this declaration becomes invalid.

The following named place

- has carried out the type examination. The product has received the EC type examination under the number _____.
- has carried out the EC type-examination procedure specified in Annex IX of 2006/42 / EC.

Notified checkplace for type examination according to Annex IX

The following is the name and address of the person authorized to compile the technical documentation.

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

2 Safety instructions

2.1 Explanation of symbols

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

DANGER



*Indicates an immediate threat of danger.
If the information is not followed, death or serious bodily injury (invalidity) is the result.*

WARNING



*Indicates a potentially dangerous situation.
If the information is not followed, death or serious bodily injury (disability) are the result*

CAUTION











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

NOTICE



Indicates general instructions, useful operator instructions and working recommendations that have no influence on the safety and health of personnel.

2.2 Pictograms and their meaning:

	<p><i>Read the operating instructions carefully before commissioning!</i></p>
	<p><i>During operation, ear protectors and protective glasses must be worn!</i></p>
	<p><i>During operation, safety shoes (with steel cap) are to wear!</i></p>
	<p>Note that the machine may only be operated by one person!</p>
	<p><i>Warning of hazardous electrical voltage</i></p>
	<p><i>Warning against hot media</i></p>
	<p><i>Set up straight</i></p>
 <p>Schmierstelle lubrication point</p>	<p><i>Lubrication point</i></p>

2.3 Keep information available

These operating instructions must be kept with the machine. It must be ensured that all persons who have to carry out activities on the machine can read the operating instructions at any time.

All safety instruction signs and operating instruction signs on the machine must always be kept in a clearly legible condition. Damaged or illegible signs must be replaced immediately.

2.4 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.

2.5 Intended use

The sawing and splitting giant is designed exclusively for sawing logs with a 75 cm diameter and splitting 90 cm diameters. Any use beyond this is not in accordance with the intended use. The operator of the machine, not the manufacturer, is responsible for any personal injury or damage to property resulting from improper use!

Intended use also includes reading these operating instructions and complying with all the information contained in them, especially the safety instructions. It also includes carrying out all inspection and maintenance work at the prescribed intervals.

2.6 Operator's duty of care

The machine was designed and built taking into account a hazard analysis and after careful selection of the harmonised standards to be complied with, as well as other technical specifications. It therefore corresponds to the current state of the art and ensures the highest level of safety.

Furthermore, for safe operation, the operator must ensure that:

- the machine is only used for its intended purpose (cf. chapter "Intended use")
- the machine is only operated when it is in perfect working order and, in particular, that the safety devices are regularly checked to ensure that they are in good working order.
- the necessary personal protective equipment is available and used by the operating, maintenance and repair personnel.
- the operating manual is always available at the place of use of the machine in a legible condition and complete.
- only sufficiently qualified and authorised personnel operate, maintain and repair the machine.
- this personnel is regularly instructed in all applicable questions of occupational safety and environmental protection, and is familiar with the operating instructions and in particular the safety instructions contained therein.
- all safety and warning notices attached to the machine are not removed and remain legible.

2.7 Operator requirements

No special knowledge of mechanical or electrical engineering is required to operate the machine. However, the operator must be at least **18 years** old. The operator must be trained and instructed accordingly by the operator of the machine before starting work for the first time (see General safety regulations). Protective shoes and close-fitting clothing must be worn when operating the machine.

If the operator carries out maintenance and servicing work, he must have the necessary specialist knowledge.

After training, the operator must be able to carry out the following activities independently:

- Checking the safety equipment before starting work and during operation.
- Eliminating faults for which no professional training in mechanical or electrical engineering is required.

2.8 Maintenance and servicing personnel

This manual contains all the information necessary for maintenance and set-up and is intended for instructed personnel with the following tasks:

- Inspection, maintenance and repair of the machine.
- Setting up and adjusting the machine.
- Checking the safety devices.
- Carrying out test runs.
- Eliminating faults for which vocational training in mechanical or electrical engineering is required.

2.9 Modifications to the machine

For safety reasons, no unauthorised modifications may be made to the machine; this applies in particular to welding work on load-bearing parts.

Only use original spare parts / original wear parts / original accessories - these parts are specially designed for the machine. In the case of externally sourced parts, there is no guarantee that they are designed and manufactured to withstand stress and safety.

Parts and special equipment not supplied by us are also not approved by us for use on the machine.

2.10 Environmental Protection

For all work on and with the machine, the regulations on waste avoidance and proper waste recycling and disposal must be observed.

Particularly during installation and maintenance work as well as during shut down, care must be taken to ensure that substances hazardous to groundwater - such as grease, oil, cleaning fluids containing solvents, etc. - do not contaminate the soil or enter the sewage system. These substances must be collected in suitable containers and disposed of.

2.11 Misuse and residual risks

Despite correct application of all safety instructions for the machine, residual risks can still occur. These usually result from misuse of the machine.

- Touching rotating or moving components
- Injury from falling wooden or machine parts.
- Fire hazard due to inadequate ventilation of the engine
- Hearing damage from working without hearing protection
- Human error:
 - Mental overload
 - Entering a danger zone
 - Distractions
 - Neglected control activities

3 Overview

3.1 How it works

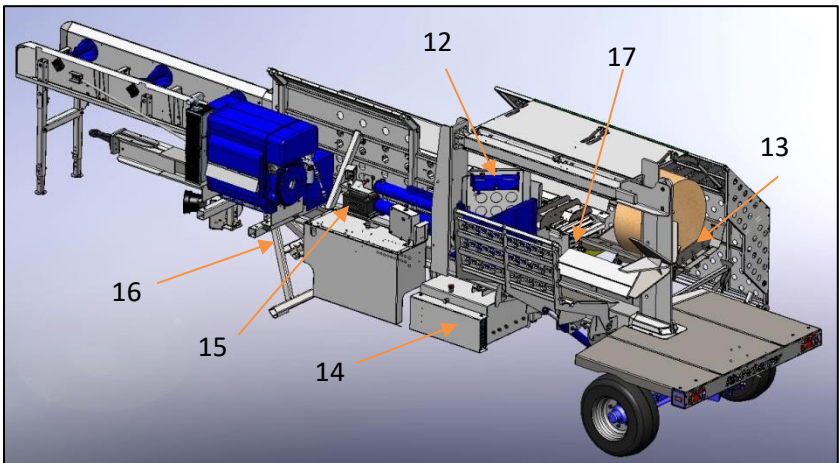
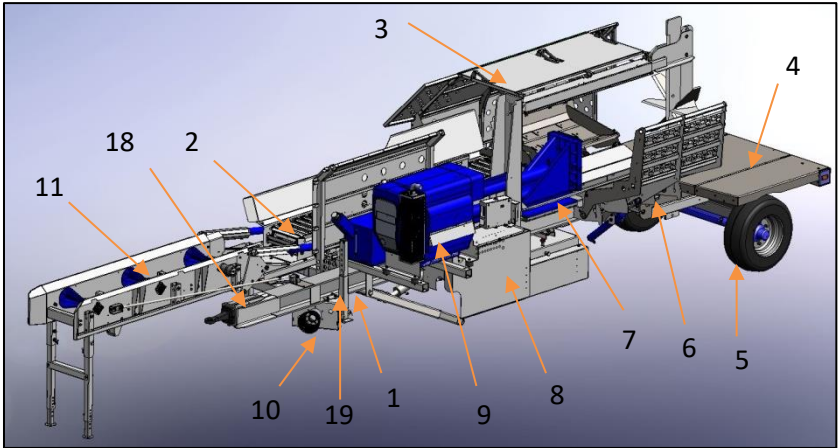
The Saw-Splitting-Giant 750 is designed for processing large logs. The machine can cut the firewood by the metre and splits the wood in the next work step.

Thanks to the different drive options (electric / diesel or PTO drive), the machine is suitable for all workplaces.

The log length can be individually adjusted in the range of 33-100cm and can be split by the splitting cross with a maximum diameter of 90cm. Remaining pieces or logs that are too big for the harvester blade can be transported sideways with a lifting basket directly into the splitting channel.

The giant is operated via a radio remote control and ensures effortless firewood preparation.

3.2 Overview



3.3 Part description

Number	Component
1	Base frame
2	Infeed belt
3	Saw guard
4	Support table
5	Axle (brake axle, trailing axle)
6	Log lifter
7	Pusher
8	Control block
9	Diesel engine
10	PTO unit
11	Draw in frame
12	Chain oil tank
13	Splitting wedge
14	Hydraulic oil tank
15	Battery box (for diesel engine)
16	Support foot
17	Harvester
18	Support foot right
19	Support foot left

3.4 Technical data

Type	SSG Z	SSG D	SSG E
Weight*	4400 kg	4680 kg	4600 kg
Drawbar load*	850 kg	1050 kg	1000 kg
Working height	1m		
Chain saw	Oregeon 18H		
Chain saw bar	Oregeon EA 542HSFL 104		
Power	30kW (41PS)	34,2kW Hatz Diesel	22+9 kW
Speed [rpm]	450	1450	1450
Splitting force	40 t		
Wood length	33-100 cm		
Max. Wood diameter	75 cm		
Hydraulic oil	180 Litre HVI 46		
Diesel tank capacity	---	70 l	---
Splitting speed v1	10 cm/sec	6 cm/sec	10 cm/sec
Splitting speed v1	19 cm/sec	11 cm/sec	19 cm/sec
Return speed	29 cm/sec	17 cm/sec	29 cm/sec
Chain tensioning pressure	8 bar		
Working dimensions L x W x H*	8600x 2450 x 2260 mm		
Transport size L x B x H*	7350 x 2450 x 2660 mm		


*.... the dimensions and weights given are approximate values

3.5 Equipment

Article-Nr.	Equipment
	Feeder
SSZ-ZAL-02	Feeder stand 2m foldable incl. feeder stand attachment
SSZ-ZAL-03	Feeder frame 2m stationary
	Splitting wedge
SSZ-ZAL-14	Splitting cross 4-divider
SSZ-ZAL-15	Splitting cross 6-divider
SSZ-ZAL-16	Splitting cross 8-divider
SSZ-ZAL-17	Splitting cross 12-divider
	Chassis
SSZ-ZAL-35	Chassis 25 km/h incl. equipment, compressed air and lighting
SSZ-ZAL-59	Running axle unbraked
	General equipment
SSZ-ZAL-39	Electric throttle adjustment
SSZ-ZAL-40	Spare saw chain 110 driving links
SSZ-ZAL-44	Spare harvester bar 100cm
SSZ-ZAL-48	Cardan shaft 1010mm BG4 (Walterscheid)
SSZ-ZAL-49	Starter package: 1x guide bar, 3x chain, 1x limit switch each, 1x Filter set
SSZ-ZAL-50	E-motor trolley for Z-drive
SSZ-ZAL-51	Service set for Hatz engine 3 cylinders (2 Oil filter, 2 fuel filter)
SSZ-ZAL-52	Hydraulic support foot

4 Transport of the machine

4.1 Safety instructions during operation

WARNING	
	<p style="text-align: center;"><u>Risk of injury during transport!</u></p> <ul style="list-style-type: none">• <i>Make sure that there are no persons in the danger zone and that a sufficient safety distance is maintained.</i>• <i>Lubricants may have leaked out due to inclined positions during transport, and there is a risk of burns in the event of direct contact with the skin.</i>• <i>Suspended loads can fall down, then there is danger to life - do not stay under suspended loads!</i>• <i>Always use suitable lifting gear to load the machine.</i>• <i>The machine may only be lifted at the intended holding points</i>

4.2 Transport

Before transporting the machine, all points relating to decommissioning must be carried out.

When driving on public roads, the legal regulations must be observed!

When driving on public roads, a maximum width of 2.50 m must not be exceeded.

Furthermore, the lighting must be checked every time the machine is driven.


The machine must be cleaned of the coarsest dirt.


Checklist:

- Draw-in frame folded up and stopcock turned off.
- Lifting cage folded upwards
- Lighting in order


5 Set up of the machine

5.1 Safety instructions for set up

DANGER	
	<p style="text-align: center;"><u><i>Danger to life from electric shock!</i></u></p> <ul style="list-style-type: none">• <i>Machines with electric drives must be operated on a mains supply that is protected by a 30-mA residual current circuit breaker.</i>• <i>Before each start-up, check the supply line for damage!</i>

WARNING	
	<p style="text-align: center;"><u><i>Risk of injury if the machine is not set up correctly.</i></u></p> <ul style="list-style-type: none">• <i>Always check the machine for transport damage before setting it up.</i>• <i>Set up the machine on a level and firm surface!</i>• <i>Use the support feet of the machine!</i>• <i>Ensure that no persons are endangered by the installation and that there are no persons or foreign objects in the danger zone.</i>• <i>Machine connections Lay cables and hoses so that there are no tripping hazards!</i>• <i>The machine may only be operated when in perfect condition!</i>

5.2 Duties before starting work

<h1>NOTICE</h1>	
	<p><u>Carry out the following activities before starting work:</u></p> <ul style="list-style-type: none">• <i>Check electrical connections before starting</i>• <i>Check safety devices for proper functioning</i>• <i>Check all bolts and screw connections for tightness before starting work!</i>• <i>Before starting work, check the direction of rotation of the electric motor. If the direction of rotation is incorrect, the pump will be destroyed.</i>• <i>Check oil cooler for cleanliness</i>• <i>Check electrical and hydraulic connections, as well as lubricant supply and hydraulic oil level (Attention: Never work without chain lubricating oil).</i>• <i>At outside temperatures below 0°C, let the machine run for approx. 5 minutes at idle speed without load.</i>

5.3 Electrical supply line

The fuse protection and dimensioning of the electrical supply line must be selected from the line length! This should be done by an electrician according to national standards.

The supply line must be 400V / 63A.

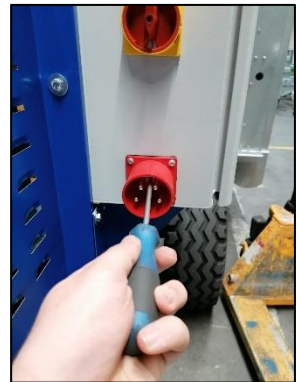
Never carry out work on electrical systems if you do not have the necessary expertise!

5.4 Check direction of rotation of the motor (only for electric machines)

Switch on the motor only briefly and check the direction of rotation on the fan blades of the motor. The correct direction of rotation is indicated by the sticker on the fan cover of the motor. If the direction of rotation is not correct, disconnect the supply line to the firewood processor.



There is a phase inverter in the plug with which you can change the direction of rotation of the motor (press the disc in the plug in with a screwdriver and turn it 180°). If the direction of rotation is still not correct, please contact an electrical specialist.

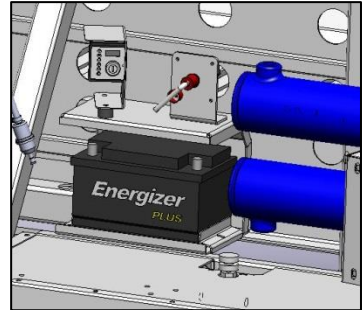


5.5 Switch on Battery main switch

(only for diesel machines)

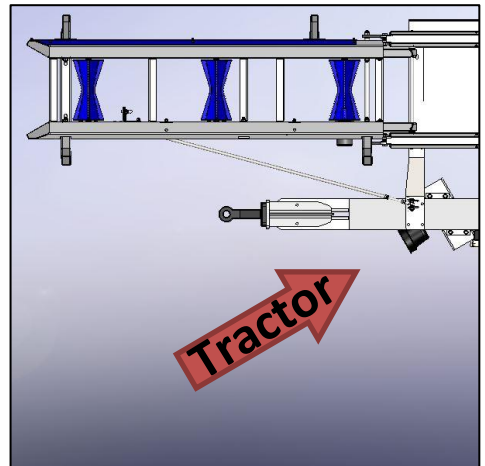
There is a main switch for the battery on the SSG. This must be switched on before each operation to enable the engine to start and to supply the control unit with power.

To avoid discharging the battery, the main switch must be switched off again after each operation. However, the main switch must not be switched off as long as the oil cooler is running.



5.6 Positioning the tractor

In the case of PTO drive, the tractor must be positioned diagonally to the left of the drawbar and properly connected to the machine with a PTO shaft. Make sure that the PTO shaft engages completely. The PTO shaft guard must be secured against turning by means of a safety chain.



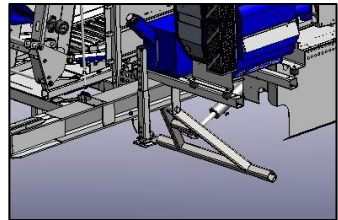
5.7 Bringing the machine into working position

To prevent serious personal injury and machine damage, always place the machine on a level and firm floor and follow the instructions below carefully.

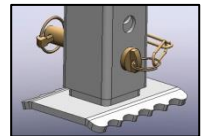
Bring the support foot into position:

Secure the machine with chocks to prevent it from rolling away and raise it with the aid of the support foot until the towing jaw is completely unloaded.

Now the SSG can be disconnected from the towing vehicle.

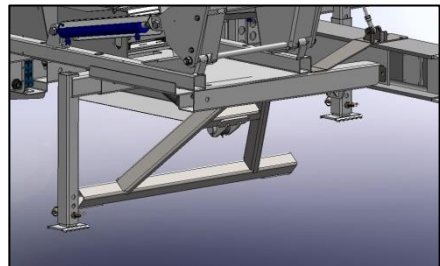


Lift the machine up or down using the support foot with the aid of the control unit until it reaches a horizontal position.



Now the feet at the front of the machine must be adjusted to the ground.

To do this, remove the bolts on both feet and position the foot in the appropriate horizontal position of the machine.



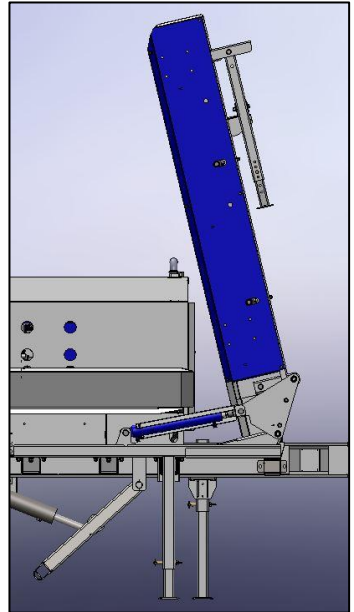
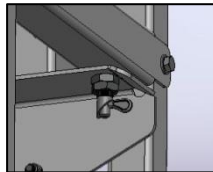
Once the stands are positioned, the hydraulic support foot must be relieved.



5.8 Fold out the feeder

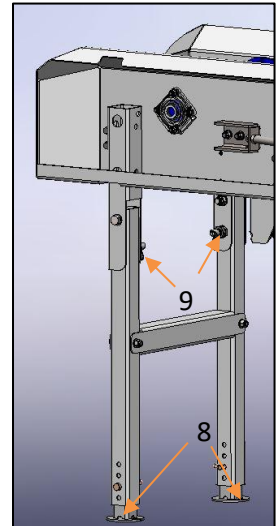
Now you can tilt the feed ring by pressing the button 8B (see 6.2 Radio remote control) on the radio remote control.

However, do not tilt the feeder completely into its horizontal position, because the support legs (3) must be folded out first. To do this, turn the spring latch (4) half a turn until it is pulled out completely. Swivel the legs by 90° and secure them with the two spring locks (5) on the inside of the supports.



Afterwards, the feeder can be brought into the horizontal position.

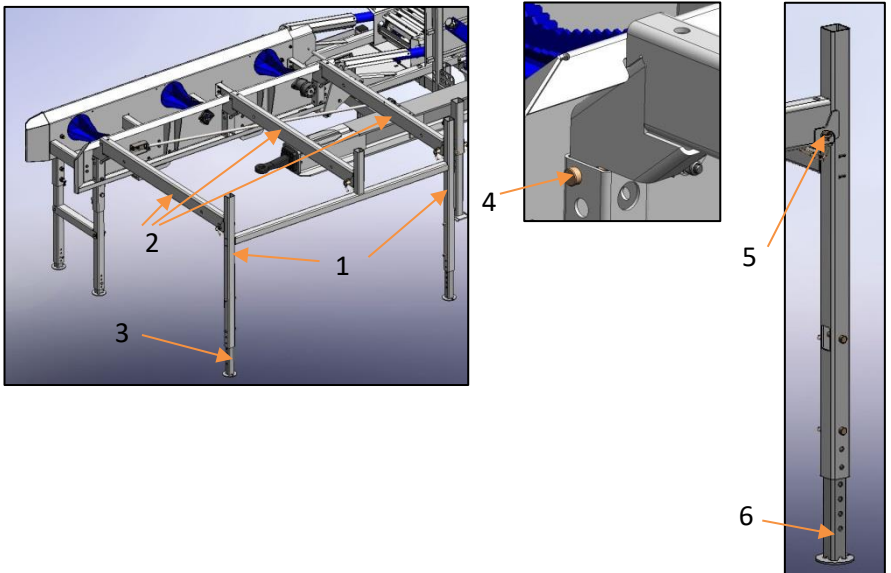
With the two adjustable feet (8) the feet can be adapted to the ground. Always make sure that both legs rest on the ground.



5.9 Set up of the feeder

The feeder consists of the support “H” (1), the three transverse shape tubes (2) and the two support feet (3). For setting up, the transverse tube is hooked into the tube on the feeder and fixed with a pin (4).

Now place the support H to the feeder and fix the other side of the transverse shape tube with a lynch pin (5). Proceed in the same way with the other two transverse shape tubes. Finally, adjust the feet of the support “H” (6) so that the transverse shape tubes are horizontal.

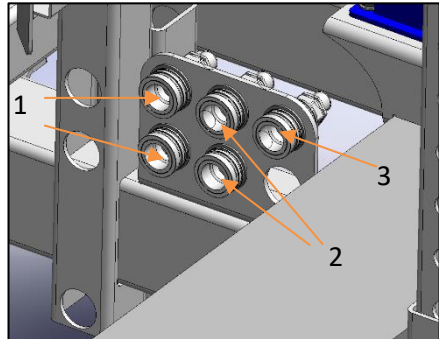


5.10 Hydraulic connection cross conveyor

A cross conveyor can be optionally added to the feeder.

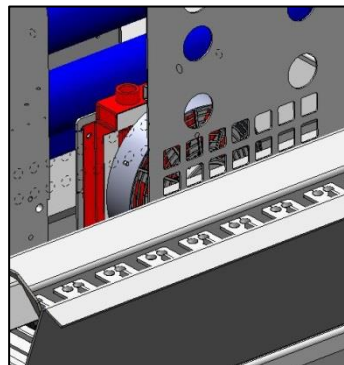
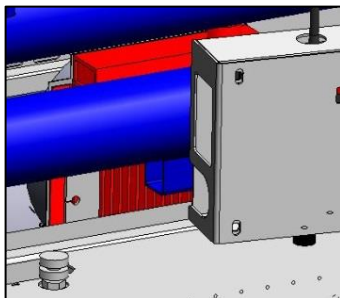
Connections:

1. Connection feeder
2. Cross conveyor connection
3. Leakage oil line



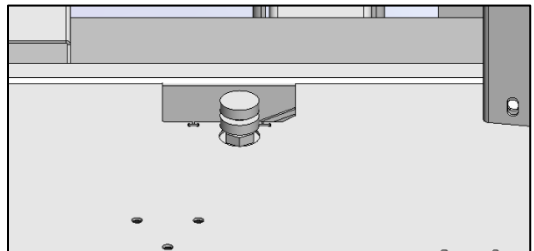
5.11 Oil cooler

The oil cooler is protected between the pusher cylinders and the feed belt. To ensure proper functioning, the cooling fins must always be kept clean.

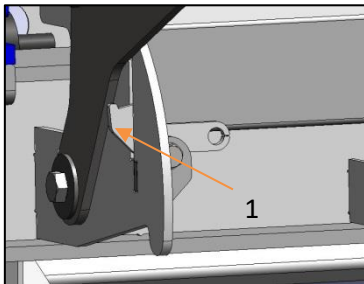


5.12 Adjusting the saw speed

The adjusting wheel for the saw speed is located on the control panel. This must be secured against turning with the lock nut at the bottom after the respective setting.




5.13 Unlocking the lift cage





Open the lift cage to maximum using the remote control and button 3B (see **6.2 Radio remote control**). Now the locking lever (1) can be folded back.

6 Operation

6.1 Safety instructions during operation

DANGER	
	<p><u>Risk of injury from being caught or pulled in on moving machine parts!</u></p> <ul style="list-style-type: none">• <i>Keep a sufficient safety distance from moving machine parts!</i>• <i>Illuminate the workplace sufficiently</i>

WARNING	
	<p><u>Risk of injury during operation!</u></p> <ul style="list-style-type: none">• <i>Make sure that there are no persons in the danger zone and that a sufficient safety distance is maintained.</i>• <i>Before removing jammed pieces of wood, the drive must be switched off.</i>• <i>Keep away from suspended loads</i>

CAUTION	
	<p><u>Stumbling over parts lying around!</u></p> <ul style="list-style-type: none">• <i>All parts that do not belong to the machine must be removed from its vicinity!</i>

CAUTION



Risk of injury due to negligent use of personal protective equipment!

- *Wear protective goggles, ear protection, protective gloves and safety shoes with steel toe caps!*

CAUTION



Risk of injury during operation

- *Only one person may work on the machine at a time!*
- *Make sure that no other persons are in the area of the machine.*

NOTICE



- *The operating personnel must ensure that no unauthorised persons are in the working area of the machine.*
- *Before switching on the machine, inform yourself about the correct behaviour in the event of a malfunction.*
- *Before switching on the machine, carry out the points listed in the chapter "Duties before starting work".*
- *After switching off the machine, always carry out the work steps in the following chapter "Shut down".*
- *If the operator leaves the machine unattended, it must be shut down and secured against unauthorised restarting.*
- *No persons are allowed within a radius of at least 4m in the area of the conveyor belt ejection.*

6.2 Radio remote control

- 1A – Feeder return
- 1B - Feeder forward
- 2A --
- 2B - Harvester chain drive
- 3A - Harvester feed downwards
- 3B - Harvester feed upwards
- 4A - Throw-over rocker to the rear
- 4B - Throw-over rocker to the front
- 5A - Pusher to the rear
- 5B - Pusher to the front
- 6A - Wedge adjustment downwards
- 6B - Wedge adjustment upwards
- 7A - Lifting cage downwards
- 7B - Lifting basket upwards
- 8A - External (e.g., Feeder upwards)
- 8B - External (e.g., Feeder downwards)

Start / 0 / Stop



Rocker switch

- Start - Cross conveyor upwards
- Stop - cross conveyor downwards

1A	2A	3A	4A	5A	6A	7A	8A
↕	↕	↕	↕	↕	↕	↕	↕
1B	2B	3B	4B	5B	6B	7B	8B



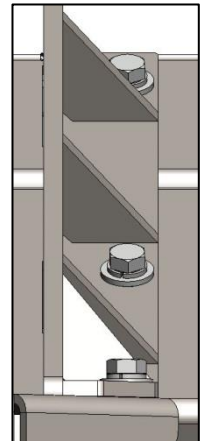
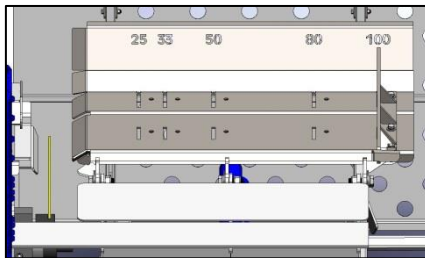
Operating light

6.3 Setting the cutting length

The length of the wood can be adjusted in a range of 25 - 100 cm.

The stop is secured against slipping with 3 M12x30 screws, the corresponding spring washer and a washer.

To adjust, first loosen the 3 screws, move the stop to the desired position and reattach the 3 screws.



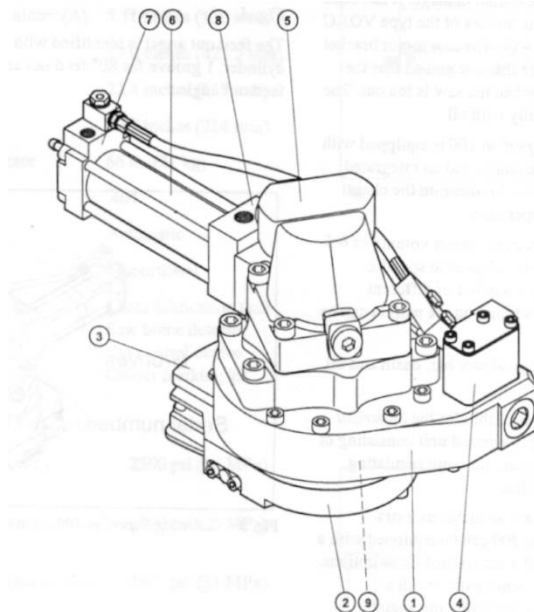
6.4 Operation in splitting mode

1. Move the lift cage downwards and load it with the log.
2. Swing the lift cage upwards and use it to move the log into the splitting area
3. If necessary, adjust the splitting wedge to the diameter of the log and press button 5B to let the pusher move forward.
4. When the splitting process is complete, press the button in the opposite direction (5A) so that the pusher moves back to its starting position.
5. The wood now remains on the storage table of the log splitter, where it can be conveniently removed.
6. Now another splitting cycle can be carried out

6.5 Harvester

6.5.1 Hultdins Chainsaw:

- Always wear protective gloves when working on the chain. Remove the chain when service or adjustment work is required.
- Never adjust the pressure of the hydraulic system without a pressure gauge.
- Always close all connections to avoid unnecessary oil loss.
- The chainsaw has sharp edges and corners. Therefore, always use suitable spanners and protective gloves when working on the machine.



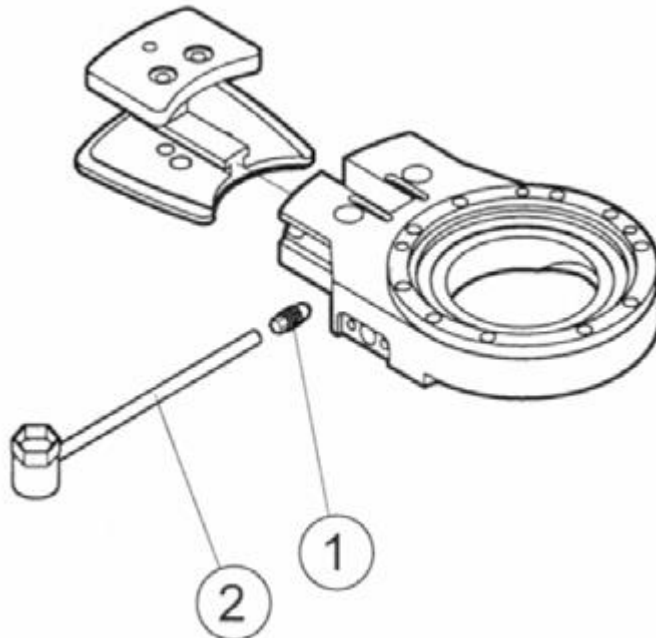
1 Saw stand
2 Tensioning device
3 Saw guide holder

4 Cutting control
5 Saw motor
6 Feed cylinder

7 Lubrication oil pump
8 Mounting flange
9 Swivel motor with bearing

6.5.2 Bleeding the chain tensioning system

CAUTION! All service and repair work may only be carried out by qualified personnel or by an authorised repair workshop.



1. Remove the saw chain (see chapter Changing the chain).
2. Start the machine and leave it idle
3. Tilt the unit back as far as possible so that the discharge valve is as high as possible above the tensioning piston
4. Open the outlet valve (1) 1-2 turns. To do this, use the enclosed tool (shown in the picture).
5. Close the outlet valve (1) as soon as the escaping oil is free of air.
6. Replace the chain.
7. Repeat the procedure after approx. 30 minutes of operation.

6.5.3 Adjusting the chain tensioning pressure

If the chain jumps off the bar during sawing, there may either be air in the tensioning system or the tensioning pressure is too low.

To solve the problem, bleed the system. (See previous chapter Bleeding the chain tensioning system).

If the problem persists, the chain tensioning pressure must be readjusted. The tensioning pressure is measured at the pressure measuring point, which is located in front of the pressure control valve.

If readjustment is necessary, follow the steps below.

1. Remove the saw chain (see Changing the chain).
2. Connect a pressure gauge to the pressure measuring point for the chain tensioning circuit.
3. Start the machine and leave it idle. If no chain is inserted, the bar moves to the outer position and stays there.
4. Check the back pressure.
5. Adjust the back pressure from 8-20bar on the pressure control valve.

Important! Never set a pressure without a pressure gauge.

6. Remove the pressure gauge.
7. Put the chain back in place.

6.5.4 Adjusting the guidebar speed

When checking the feed pressure, proceed as follows:

1. Remove the chain.
2. Connect a pressure gauge to the pressure measuring point for the chain tensioning circuit.
3. Start the machine and the saw (close the protective cover beforehand).
4. Check the feed pressure (correct between 85 and 95bar).
5. Remove the pressure gauge
6. Reattach the chain.

Guidebar feed speed

If the guidebar retraction speed is too high, a gross fault has occurred in the saw unit.

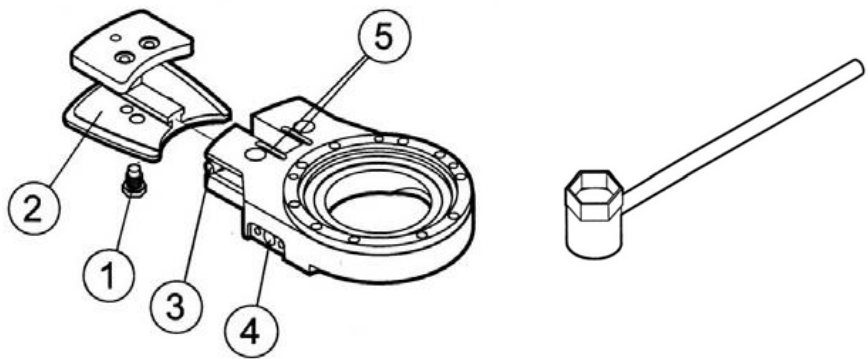
A suitable retraction time is 2-5 seconds. The retraction time should not be less than 1 second.

The sword return speed is set via a throttle valve on the feed cylinder.

6.5.5 Changing the chain

The first signs of a dull chain are very long sawing times and blue smoke coming from the cut. If you want to change the chain, follow the instructions below.

1. New chains must be placed in clean chain lubricating oil overnight before fitting. This allows the chain oil to penetrate all the chain links.
2. Before changing the chain, the machine must be stopped and disconnected from the tractor or the mains.
3. Release chain tensioning device
4. Slowly lift the chain from the guidebar by hand until the tensioning device is pushed in.
5. If there is no saw chain in the guidebar, slowly push the guidebar towards the tensioning device until it is pressed in.
6. Remove the chain.
7. Remove any dirt from the guidebar.
8. Insert the new chain (pay attention to the cutting direction) and lift it slowly by hand until the mechanical locking device is released again.
9. Operate the saw carefully for a moment to build up the pressure in the chain tensioning system. If the new chain suddenly jumps out of the bar after changing, bleed the system.
10. Problems when changing the chain can be caused by a dirty chain or dirt particles in the lubrication channels. The mobility of the guidebar may be restricted by dirt particles. If this is the case, the centreboard holder must be dismantled and cleaned.
11. **Important!** Always wear gloves and suitable work clothes when changing the chain.



- 1 Guide screw
- 2 Guide bar holder
- 3 Locking device

- 4 Control valve
- 5 Furrows

6.5.6 Changing the guide bar

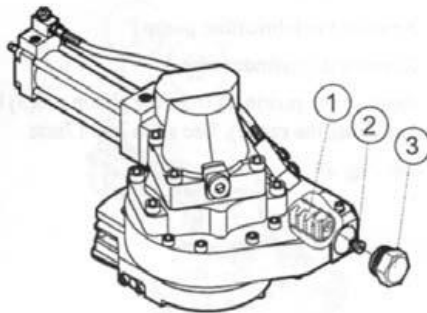
1. Remove the chain.
2. Using the tool supplied, loosen the guide screws and pull out the guidebar.
3. Insert the guidebar and tighten the guide screws.
4. Fit the chain.

Illustration: See chapter "Changing the chain"

6.5.7 Bleeding the chain lubrication system

The lubricating oil pump supplies oil during the entire pivoting process.


1. Remove the chain.
2. Open the end screw as shown in the illustration below using a 37mm wrench.
3. Open the end screw with a 5mm Allen key.
4. Close the screw plug as soon as the oil in the piston rod is free of air.
5. Tighten the end screw.
6. Refit the chain.





- 1) Piston rod
- 2) Screw plug
- 3) End screw

7 Shutdown

7.1 Safety instructions for the shutdown procedure

DANGER	
	<p><u>Risk of injury from being caught or pulled in by moving machine parts!</u></p> <ul style="list-style-type: none">• <i>After parking, wait until all moving machine parts have come to a standstill!</i>• <i>Keep a sufficient safety distance from moving machine parts!</i>

WARNING	
	<p><u>Risk of injury when taking out of operation!</u></p> <ul style="list-style-type: none">• <i>Make sure that there are no persons in the danger zone and that a sufficient safety distance is maintained.</i>• <i>Read the chapter "General safety instructions".</i>

WARNING	
	<p><u>Risk of injury when the machine is switched on by unauthorised persons!</u></p> <ul style="list-style-type: none">• <i>Secure the machine against unauthorised switching on after operation.</i>

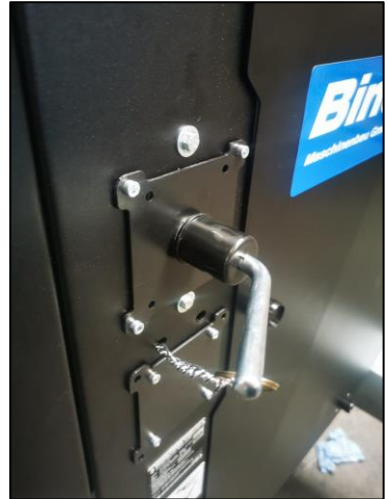
7.2 Switch off the drive

7.2.1 Diesel-engine

If the machine has been used under full load for a longer period of time, you should let the automatic firewood processor run for a few minutes without load before shutting it down. This allows the machine to return to operating temperature and can be shut down without any problems.

If an electric motor adjustment is used, it should be adjusted back so that the motor still runs smoothly.

After shutting down the machine, disconnect the main battery switch.



7.2.2 Electric drive

1. Switch off the drive by pressing the switch!
2. Disconnect the 400V/63A supply cable from the plug and secure the drive against being switched on again!


7.2.3 PTO drive


Disconnect the PTO drive on the tractor and then park the tractor. Secure it against being switched on again and disconnect the PTO connection.


8 Maintenance


During the first month every week all screws and connections should be checked for tightness.


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">• <i>Switch off machine!</i>• <i>Secure against unintentional restart!</i>


DANGER	
	<p><u>Danger to life due to electric shock</u></p> <ul style="list-style-type: none">• <i>Work on electrical systems may only be carried out by qualified personnel!</i>• <i>Secure the machine against being switched on or the power line being plugged in.</i>

CAUTION	
	<p><u>Slipping on oil residues during maintenance work (oil change)!</u></p> <ul style="list-style-type: none">• <i>Use suitable collection containers.</i>• <i>Remove spilled oil immediately</i>

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

CAUTION	
	<p><u>Risk of chemical burns from contact with lubricants!</u></p> <ul style="list-style-type: none">• <i>Avoid contact with skin and eyes</i>• <i>Use suitable protective equipment (gloves, safety goggles).</i>

8.2 Important instructions during maintenance

<h1>HINWEIS</h1>	
	<ul style="list-style-type: none">• <i>Immediately replace all machine parts that are not in perfect working order.</i>• <i>Use only original spare parts</i>• <i>Ensure that suitable collection containers are available for all substances hazardous to groundwater (oils, coolants, etc.)</i>• <i>Use only the specified operating materials.</i>• <i>Self-locking bolts and nuts must always be renewed.</i>• <i>All operating materials and lubricants that are not used again must be disposed of in an environmentally friendly manner.</i>• <i>Installing the wrong spare parts or wearing parts can cause serious damage to the machine.</i>• <i>There is a risk of fire during welding work. Keep fire extinguishers ready.</i>• <i>Improperly routed cables can cause braising and cable fires.</i>• <i>Check the running direction of the motor. Incorrect direction of rotation will destroy the pump.</i>• <i>Never release the machine for operation without the factory-provided safety devices.</i>• <i>It is strictly forbidden to remove safety notices attached to the machine.</i>• <i>Always observe the warning notices located on the machine. They help to avoid hazards.</i>• <i>Do not carry out any repairs if you do not have the required qualifications.</i>

8.3 Notes when working on electric equipment

All work on the electrical equipment of the machine may only be carried out by trained electricians. Check electrical equipment regularly:

- Reattach loose connections.
- Replace damaged lines or cables immediately.

Whenever work is carried out on live machine parts or cables, a second person must always be present to disconnect the power supply in an emergency. Never clean electrical equipment with water or similar liquids.

8.4 Notes when working on hydraulic equipment

All work on the hydraulic equipment of the machine may only be carried out by trained specialists.

Depressurise all hydraulic systems and parts before starting work.

Before starting work, ensure that suitable collection containers are available for all substances hazardous to groundwater (oils, coolants, etc.).

8.5 Cleaning

After each operation and before each maintenance, the machine must be cleaned of dirt!

8.6 Daily maintenance work

Check that:

- nothing abnormal has occurred on the attachments and hydraulic hoses of the saw unit.
- there is no damage or breakage of the saw unit.
- there are no leaks.
- you start working with a sharp saw chain.

8.7 Duties before finishing maintenance

After completing the maintenance work and before starting the machine, observe the following points:

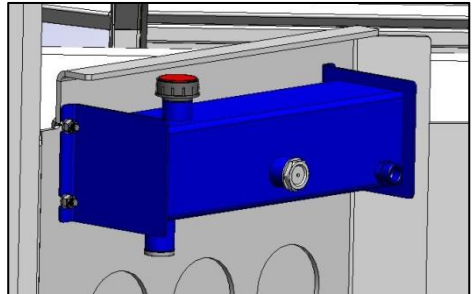
- Check all previously loosened bolted connections for tightness.
- Check that all previously removed guards, covers, container lids, are properly reinstalled.
- Ensure that all tools, materials and other equipment used have been removed from the work area.
- Clean the work area and remove any spilled liquids and similar substances.
- Ensure that all safety devices of the machine are working properly again.
- Check the function of the safety devices. Do not release the machine for use if the safety devices are not functioning properly.
- Assemble and secure dismantled safety devices.
- Remove any tools, foreign parts and operating materials that have been left lying around.
- Carry out a test run with a function check of the repaired components.
- Secure the machine against unauthorised switching on if you have not completed the work.
- Do not handle open flames or smoke.

8.8 Check chain oil-level

Check the chain oil level before each operation and top up the tank if necessary.

Caution! Only use chain oil with a viscosity number of 140!

To check the oil level in the chain oil tank (1), there is a sight glass on the front side. Make sure that the sight glass is always filled and that the machine is standing straight.



8.9 Maintenance work every 250 hours

Check that:

- no brackets or fasteners are missing.
- the hydraulic hoses are not damaged.
- no damage or breaks have occurred to the saw unit.
- there are no leaks.

All damaged or worn parts must be repaired or replaced.

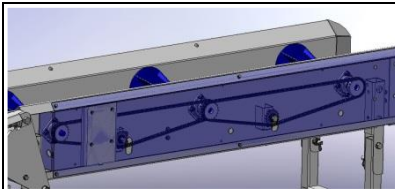
8.10 Lubrication

The saw must be lubricated every 200 hours, depending on the conditions of use. There are grease nipples on the machine, as shown in the illustration below.

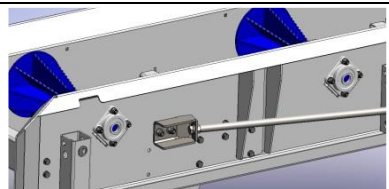
Caution. Use water-free grease with lithium or silicone additives.

The properties of the grease should include water resistance, rust inhibition, high lubricity and mechanical strength.

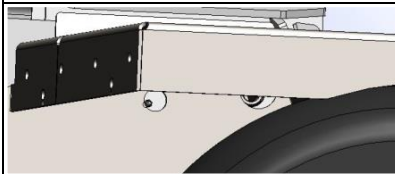
Lubrication point	Number	SSG750D	SSG750Z
Feed belt	4x front 4x rear	x	x
Harvester head	2	x	x
Support foot	2	x	x
Pusher track	-	x	x
Feeder	5	x	x
Joint feeder	4	x	x



Feed belt front



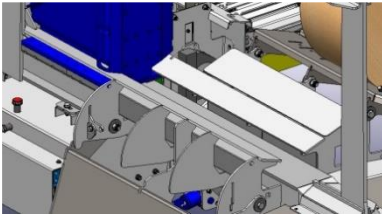
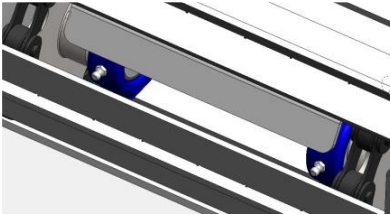
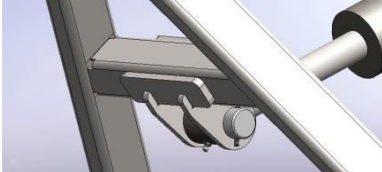
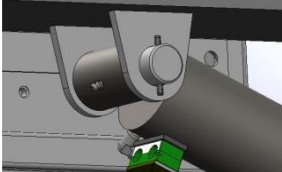


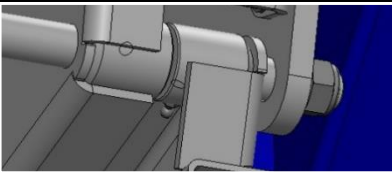
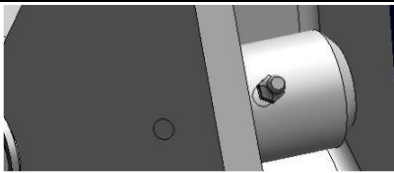
Feed belt rear



Wedge left



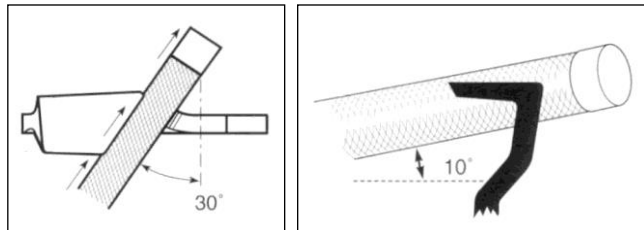
Wedge right

	
<p>Pusher track</p>	<p>Infeed conveyor belt</p>
	
<p>Support foot-1</p>	<p>Support foot-2</p>
	
<p>Harvester head - 1</p>	<p>Harvester head - 2</p>
	
<p>Joint outside</p>	<p>Joint inside</p>

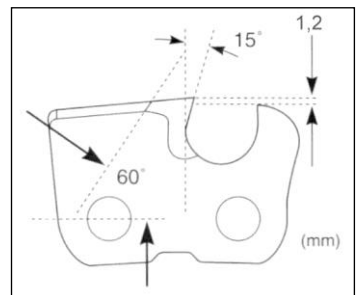
8.11 Sharpening the saw chain

When sharpening the chain, the following steps must be followed in order to achieve perfect chain sharpness.

The following steps refer to the original Oregon 18H chain used on the machine.



- The sharpening angle must be the same for all chain teeth, otherwise the chain will run unevenly and roughly. This leads to increased wear.
- When sharpening, the file must have an angle of 10 degrees to the ground.
- It is advantageous to use a file holder when sharpening.
- When sharpening accurately, the angles shown on the right are self-evident.
- The depth gauge determines the depth of the cut. This should be 1.2mm for an optimal cut.
- The depth gauge distance must be checked using a filing gauge. If the depth gauge overlaps the file gauge, it must be filed flush with the gauge using a flat or triangular file.
- Use a special chain file with a diameter of 5.5 mm to sharpen the chain teeth.



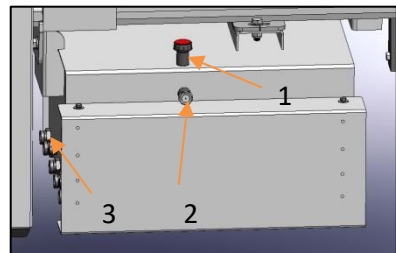
- The cutting edges must always be filed from the inside to the outside.
- File quickly. Note that the file only removes material in the forward movement. During the backward movement, the file must be lifted off.
- The file should be turned again and again, otherwise one-sided wear will result.
- **Caution:** The connecting and driving links must not be filed.
- The saw teeth must all have the same length. Different lengths also result in different tooth heights. If they are not the same height, this will cause the chain to run unevenly and may even cause chain cracks.
- First determine the shortest tooth. This is now sharpened and then the other teeth are filed back to this length.
- First sharpen all the cutting teeth on one side and then those on the other side.
- Check the chain often for cracks and damaged rivets.
- Damaged chain parts must be replaced.
- The new chain parts must be filed to the same size as the other chain links.
- It is better to sharpen more often but file away less. Usually, 2-3 file strokes are enough.
- After sharpening, the chain must be cleaned of all chips with petrol or other solvents.
- Then it must be lubricated again in an oil bath.
- For longer breaks, the chain should be removed and placed in an oil bath.

8.12 Oil change

The first oil change is carried out after 250 operating hours. Thereafter, the oil must be changed every 1000 operating hours or once a year. HVI 46 or equivalent oil must be used as hydraulic oil. Make sure that an appropriately large collecting tank (min. 200l) is available.

Due to the low position of the tank, which is favourable for the centre of gravity, it does not have a drain plug on the underside. To drain the hydraulic oil, open a hydraulic screw connection (3) on the side. When the oil has been drained from the tank, close the tank tightly again. Refill the tank with oil through the filler neck (1). A sight glass is attached to the tank for the filling level. This must always be filled to the top to ensure smooth operation.

After filling, start the automatic saw and splitter and run it through a few cycles without wood. Check the oil level again at the sight glass (2) and top up with hydraulic oil if necessary. If necessary, also bleed the chain tensioning system.



8.13 Changing the oil in the gearbox

The oil of the gearbox must be changed regularly. The first time should be after 100 operating hours. The further change intervals should be done every 1500 operating hours or once a year.

Place a suitable container under the gearbox. Unscrew the drain plug at the bottom of the gearbox and wait until all the oil has drained out.

Then close the drain plug tightly again. Fill the side of the gearbox up to the inspection opening with gear oil 80W 90.

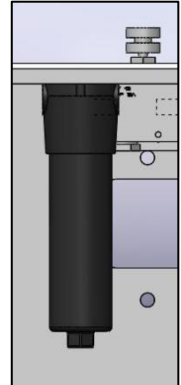


8.14 Changing the oil filter

The oil filter should be changed regularly every 250 operating hours.

The machine must be switched off and cooled down at this point.

1. Unscrew the protective cover from the block mounting.
2. Position the oil drain channel under the hydraulic filter.
3. Unscrew the outer filter sleeve
4. Replace filter cartridge
5. Screw the filter sleeve back on
6. Check for leaks
7. Dispose of drained oil and refill hydraulic oil



8.15 Changing the hydraulic hoses

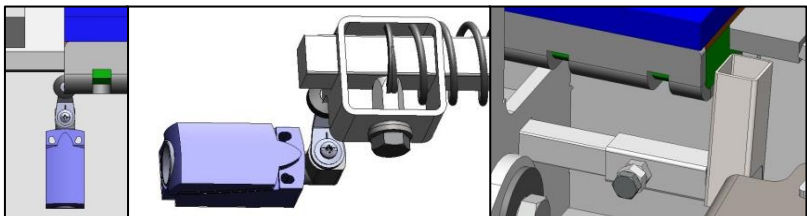
All hydraulic hoses must be replaced after 5 years due to ageing and durability.

Otherwise, damage (brittle spots, etc.) to the hoses can cause serious injuries. Contact a specialist to replace the hydraulic hoses.

8.16 Setting the pusher limit

To protect the machine from overload and unnecessary oil heating, the pusher is limited by limit switches.

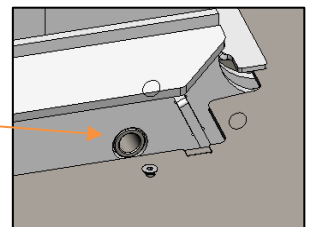
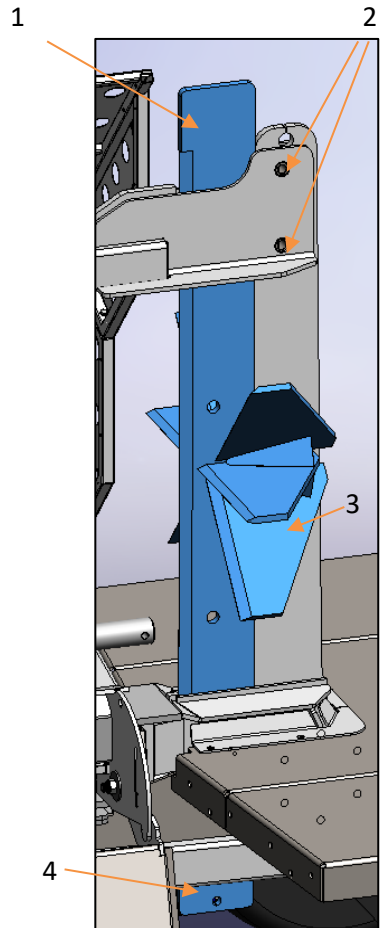
These must be set so that they are triggered 10mm before the pusher reaches the stop.



8.17 Changing the splitting wedge


1	Splitting wedge
2	Fastening wedge guide
3	Splitting Wedge guide
4	Fastening the cylinder Splitting wedge adjustment


1. Move the splitting wedge upwards using the radio remote control.
2. Switch off the machine.
3. Open and remove the three screws of the knife guide
4. Pull out the knife guide upwards using the hoist.
5. Secure the splitting wedge against slipping down with a hoist.
6. Loosen and remove the cylinder fastening screw on the splitting wedge.
7. The splitting wedge can now be pulled out diagonally to the rear.
8. For reassembly, proceed in reverse order





9 Help in case of malfunctions

9.1 Safety instructions

DANGER	
	<p><u>Danger to life from switching on the drive in the event of a malfunction</u></p> <ul style="list-style-type: none">• <i>Switch off the machine</i>• <i>Secure against being switched on again</i>

DANGER	
	<p><u>Danger to life due to electric shock</u></p> <ul style="list-style-type: none">• <i>Work on electrical systems may only be carried out by qualified personnel!</i>• <i>Secure the machine against being switched on or the power line being plugged in.</i>

CAUTION	
	<p><u>Scalding from hot machine components!</u></p> <ul style="list-style-type: none">• <i>Allow the machine to cool down to ambient temperature before carrying out any maintenance work.</i>

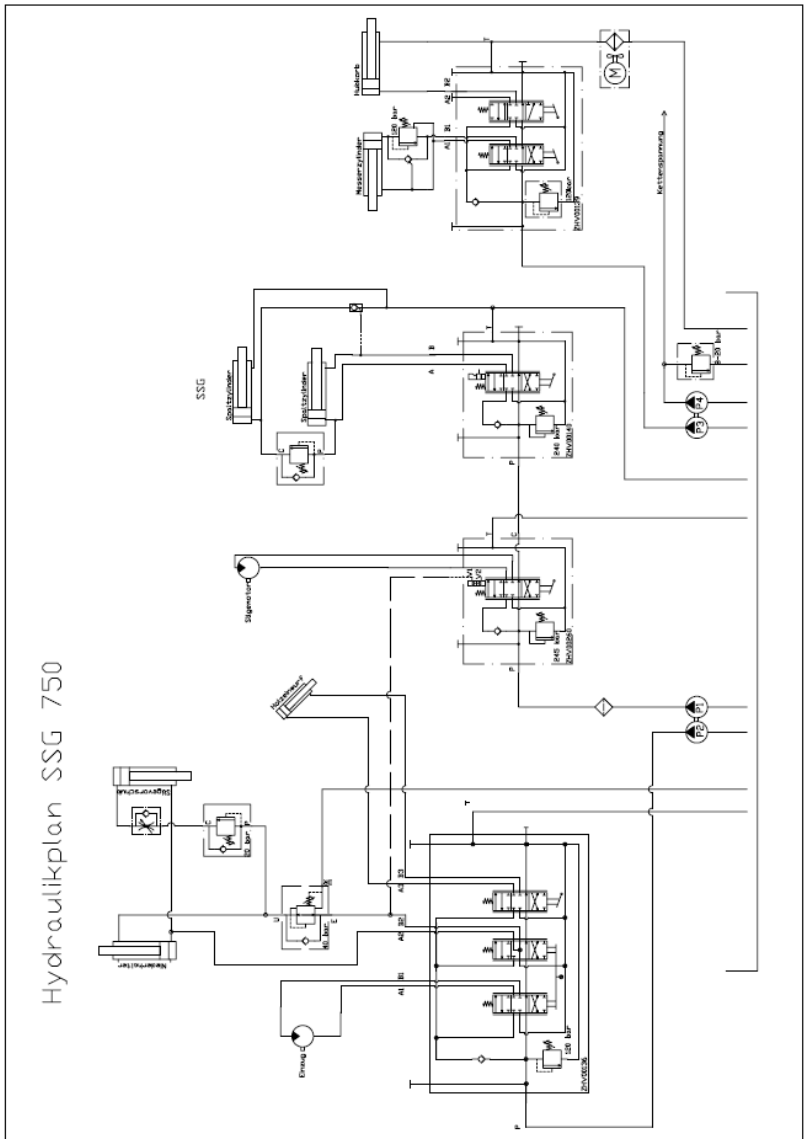
CAUTION	
	<p><u>Chemical burns from contact with lubricants!</u></p> <ul style="list-style-type: none">• <i>Avoid contact with skin and eyes</i>• <i>Use suitable protective equipment (gloves, safety goggles).</i>

9.2 Troubleshooting

Error	Cause	Error correction	Look up
Saw chain jumps out	Chain tensioning pressure is too low	Adjust chain tension pressure	6.5.3
	Leaky check valve	Check the check valve, clean or replace it	Contact a specialist
	Air in chain tensioning system	Bleeding the chain tensioning system	6.5.2
Saw chain is not lubricated	Hydraulic hose of the lubrication system defective	Fill tank with chain saw oil	8.9
	Air in lubrication system	Bleed the system	6.5.2
	Hydraulic hose of the lubrication system defective	Replace hydraulic hose	8.16
	Leakage in the chain lubrication pump	Check chain lubrication pump, clean or replace	8.5
	Machine tilted at an angle	Place machine in horizontal position	5.7
Hydraulic oil gets very hot	Oil cooler not cooling properly	If fan blade does not turn, check power supply; check cleanliness	5.4
	Oil filter clogged or heavily contaminated	Check oil filter and replace if necessary	8.15
	Not enough hydraulic oil in the system	Check oil level, top up if necessary	8.13
	Machine tilted	Move the machine to a horizontal position	5.7
Hydraulic cylinder leaking	Sealing sleeve worn	Change sealing sleeve	Contact a specialist

Long sawing times	Chain is blunt	Sharpen chain	8.12
Infeed belt does not run	Too little hydraulic oil in the system	Check oil level	8.13
Cross conveyor does not run	Too little hydraulic oil in the system	Check oil level	8.13
	Flow divider incorrectly adjusted	Adjust flow divider	
Chain saw does not move down	Speed regulator of the chain saw adjusted	Adjust speed	5.12
Chain saw does not move upwards	Chain saw speed regulator adjusted	Adjust speed	5.12
Saw motor does not run	Solenoid valve does not switch	Check solenoid valve no. CT 2 and CT 3	Contact a specialist

If the malfunctions cannot be eliminated according to the above instructions, please contact your specialist dealer! He will be happy to help you.



10 Guarantee and Warranty

A guarantee period of 12 months and a warranty period of 24 months from the date of invoice is granted for the firewood processor (please keep the invoice!).

The warranty claim covers all material and / or manufacturing defects.

Defective parts will be replaced free of charge - they may only be replaced by a specialist. Please request and replace damaged stickers.

No warranty is given for:

- Damage caused by improper handling or use.
- Transport damage - this must be reported to the delivery company immediately after receipt of the goods delivery.
- Modifications or changes to the machine or if no original spare parts or standard parts were used for repair work.

11 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
Phone: +43 / 7748 / 8620
Fax: +43 / 7748 / 8620 – 20
office@binderberger.com
www.binderberger.com