

# **OPERATING INSTRUCTIONS**

## **FIREWOOD PROCESSOR**

### **RCA 380**

### **RCA 380 E**



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## 1. GENERAL

Dear Customer,

By purchasing our firewood processor you obtained the equipment which will provide you with great help in your work. To make operating the machine as safe and pleasant as possible, please carefully read this operating instructions and follow the safety and maintenance directives.

We would like to thank you for your trust and wish you great satisfaction in your work.



### 1.1. MANUFACTURER'S ADDRESS



Tajfun Planina, d.o.o., Planina 41a, 3225 Planina pri Sevnici, Slovenia

Tel.: +386 (0)3 746 44 00, Fax.: +386 (0)3 579 10 16, E-mail: [export@tajfun.com](mailto:export@tajfun.com), [www.tajfun.com](http://www.tajfun.com)

## 1.2. APPLICATION

Firewood processor (RCA 380, RCA 380 E) is a machine used for preparation of firewood. The processor can handle logs from 10 to 38 cm (4 - 15") in diameter, which can be cut to 25 - 50 cm (10" - 20") length and thereafter split.

## 1.3. SCOPE OF DELIVERY

<ul style="list-style-type: none"> <li>• RCA-380 / RCA 380 E</li> </ul>	<ul style="list-style-type: none"> <li>• Discharge Conveyor</li> </ul>	<ul style="list-style-type: none"> <li>• Operating Instructions</li> </ul>
<ul style="list-style-type: none"> <li>• Log Loader Control Valve – integrated in machine control panel</li> </ul>	<ul style="list-style-type: none"> <li>• Chain 3/8" Oregon DuraCUT ; Number of driving teeth = 64, b = 0.058" (1.5 mm)</li> </ul>	<ul style="list-style-type: none"> <li>• Discharge Conveyor's speed regulator – integrated in Discharge Conveyor</li> </ul>
<ul style="list-style-type: none"> <li>• Manual Winch Operating Instructions</li> </ul>	<ul style="list-style-type: none"> <li>• Sawbar: Oregon 178SLHD009 or compatible</li> </ul>	<ul style="list-style-type: none"> <li>• Electric Motor 11 kW (RCA 380 E)</li> </ul>

Chain lubrication oil is not included in the scope of delivery.

## 1.4. OPTIONAL EQUIPMENT

- LOG LOADER DM 1511 – Tajfun
- LOG LOADER DM 2000 – Tajfun
- EL. POWER UNIT EP 12 – Tajfun



LOG LOADER DM 1511 – Tajfun  
 Retractable, with drive cylinders  
 Log loader length: 1840 mm  
 Lifting power: 4500 N  
 Weight: 160 kg

LOG LOADER DM 2000 – Tajfun  
 Retractable, with drive cylinders  
 Log loader length: 1650 mm  
 Lifting power: 7000 N  
 Weight: 330 kg



EP 12



ELECTRIC POWER UNIT EP 12 – Tajfun  
Motor Power: 11 kW  
Weight: 211 kg

## 1.5. TECHNICAL DATA

Length of Cut Log	25 – 50 cm (10" - 20")
Diameter of Log	10 – 38 cm (4 – 15")
Sawbar	Oregon 17", b=0,058" (1,5 mm)
Chain	3/8", 64 driving teeth, b=0,058" (1,5 mm)
Splitting Power	150 kN (≈ 15 T)
Width	1290 mm (50,8")
Length	2350 mm (92,5")
Height	2360 mm (92,9")
Required Tractor Power (RCA 380)	30 kW (40 HP)
Electric Drive (RCA 380 E)	Electric Motor U: 400V/50Hz P <sub>1</sub> : 11 kW, n=2910 min <sup>-1</sup> , IP 55
P.T.O. Shaft Speed (RCA 380)	Min.: 400 min <sup>-1</sup> (RPM)
	Max.: 430 min <sup>-1</sup> (RPM)
Maximum pressure	250 bar
Oil Reservoir Volume	100 l (25 gal)
Chain Lubrication Oil Reservoir Volume	8 l (2 gal)
Operating Noise (Max.)	RCA 380: 92 dB (A) / RCA 380 E: 96 dB (A)
Weight	RCA 380: 900 kg (1985 lbs) RCA 380 E: 1100 kg (2426 lbs)
<b>Discharge Conveyor</b>	
Conveyor Length	4000 mm (13')
Conveyor Belt Width	430 mm (17,5")
Maximum Speed	60 cm/s (24")
Weight	130 kg (286 lbs)

### 1.5.1. SPECIFICATION PLATE

Year of Manufacture

Serial number

**Tajfun Planina d.o.o.**  
Planina 41a  
3225 Planina pri Sevnici  
www.tajfun.com

**Tip / Typ / Type / Тип:**  
**RCA 380**

**FIREWOOD PROCESSOR** Nr.: XXXXX-XXXXX

2013

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L = 25 - 50 cm  
D = ø10 - ø38 cm  
F<sub>c</sub> = 150 kN  
17" x 3/8"

n<sub>min</sub>: 400 min<sup>-1</sup>  
n<sub>max</sub>: 430 min<sup>-1</sup>

P<sub>max</sub>: 100 / 250 bar  
900 + 130 kg

501556

**Tajfun Planina d.o.o.**  
Planina 41a  
3225 Planina pri Sevnici  
www.tajfun.com

**Tip / Typ / Type / Тип:**  
**RCA 380 E**

**FIREWOOD PROCESSOR** Nr.: XXXXX-XXXXX

2013

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L = 25 - 50 cm  
D = ø10 - ø38 cm  
F<sub>c</sub> = 150 kN  
17" x 3/8"

IP 55  
P<sub>1</sub>: 11 kW  
U : 400V / 50Hz

P<sub>max</sub>: 100 / 250 bar  
1100 + 130 kg

501555

## 2. SAFETY INSTRUCTIONS

- *Machine operation and maintenance is allowed to qualified persons older than 18 years of age, only!*
- *Before starting the work, the machine must be placed in a stable position,!*
- *Use only P.T.O. shafts of appropriate strength (min. 25 kW), with undamaged outer plastic protective cover (RCA 380)!*
- *Never use damaged, cracked or deformed cutting chains!*
- *Always wear personal protective equipment (safety glasses, hearing protectors, gloves and forestry boots)!*
- *When troubleshooting, replacing the chain or any service procedure, always disengage P.T.O. shaft and shut down the tractor (RCA 380) or unplug the power cord from the electrical outlet (RCA 380 E)!*
- *Do not wear loose clothes!*
- *Keep the working environment clean and tidy!*
- *Always use caution when operating the machine! Rotating chain can cause serious injuries in case of incorrect use of the machine.*
- *Never leave the machine running without supervision!*
- *Do not reach into the working area, while the machine is in operation!*
- *Before removing a wedged piece of wood, shut down the machine drive (RCA 380) or turn off the machine using »START-STOP« Switch (RCA 380 E)!*
- *When transporting the machine on public roads it is necessary to install lights on the rear end of the machine!*
- *For your own safety use only original spare parts and accessories which are approved by the manufacturer!*
- *The machine must be grounded according to regulations (RCA 380 E)!*
- *Damaged power cord or plug must be replaced immediately (RCA 380 E)!*

## 3. MACHINE SETUP AND OPERATION

### RCA 380:

- Mount the firewood processor to the three-point tractor system using bolts. Lower tractor connecting handles must be fixed with tensioning screws, so the machine cannot move transversely. When transporting the machine, consider the weight of the whole machine (Chapter: 1.5.).
- Connect the P.T.O. shaft to the cardan shaft and **secure** it using the safety chain.

#### **Before the first installation also check the P.T.O. shaft length.**

Check the P.T.O. shaft length by raising and lowering the machine to determine the position with the shortest distance among connecting shafts. Tubes should be in this position, when the P.T.O. shaft is connected, app. 20 mm shorter.

In case the P.T.O. shaft is too long, it must be shortened:

- Saw of steel and plastic tubes on both ends to the same length. Afterwards file down, clean and **grease** the edges.

When using our machines, we recommend Tajfun PTO Shafts:

Model	Dimensions	Compatibility
PTO Shaft C Line-T 6BR + KK560	1 3/8" Z6 – 1 3/8" Z6; L <sub>KK</sub> = 560	EP 12 (RCA 380, RCA 400 JOY, RCA 480 JOY)
PTO Shaft C Line-T4 DZ DZ BR + KK510	1 3/8" Z6 – 2X; L <sub>KK</sub> = 510	RCA 380, RCA 400 JOY, RCA 480 JOY

P.T.O. shaft must be connected to the machine as perpendicular as possible! Therefore, it is recommended the machine is connected to the three point tractor system, during the operation.

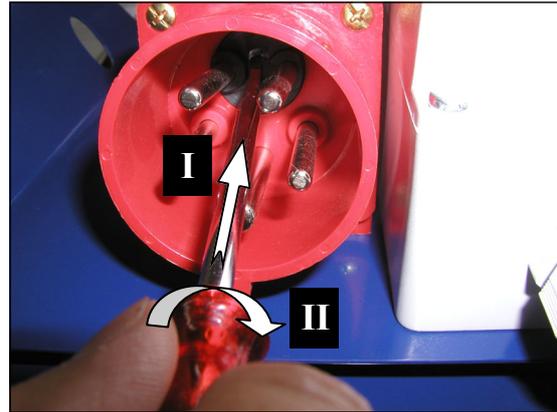
## RCA 380 E:

Connect the RCA 380 E to the three-phase electric power source:

- Nominal voltage: 400 V / 50 Hz
- Minimum Power Cable Size: 4 mm<sup>2</sup>
- Plug: 32A-CCE 3P+N+E 400 V
- Nominal Current of the Main Fuses: 32 A
- Connection Power: 21,2 kW

### Warning!

Before completing the connection of the machine it is necessary to check the rotating direction of the cutting chain and/or electric motor. Wrong rotating direction can cause damages to the oil pump.

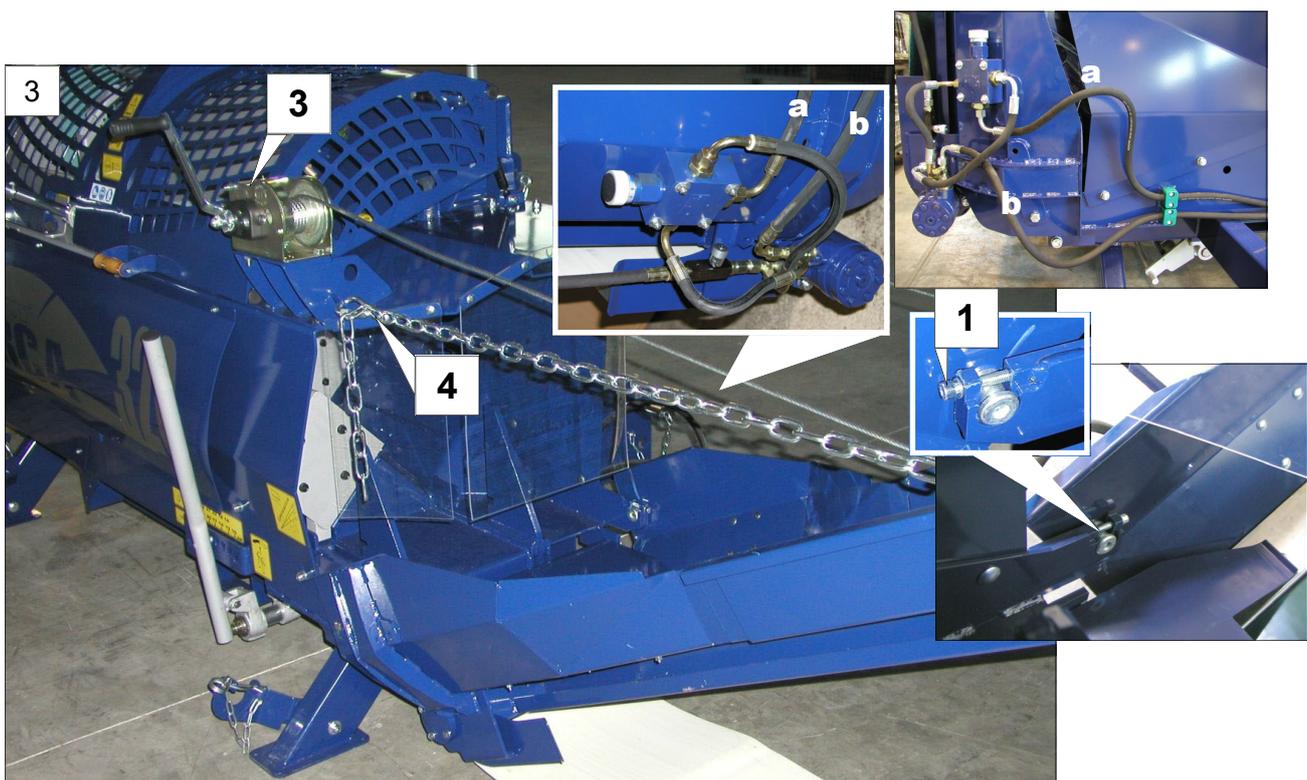


Change the rotating direction of the electric motor by inverting the poles on the plug.

## 3.1. DISCHARGE CONVEYOR ASSEMBLY (in case of separate delivery)

Hydraulically driven discharge conveyor is also a component part of the firewood processor.

- Place the discharge conveyor on the ground and move it closer to connecting spot.
- Slide the discharge conveyor on the supporting forks and secure it with two screws (1-Figure: 3).
- Fasten the lifting package by fixing rope pulleys to their position (2-Figure: 4).
- Use the hand winch (3-Figure: 3) to lift the discharge conveyor slightly above the desired height and attach the carrying chain (4-Figure: 3).
- Loosen the wire rope, so that the weight of discharge conveyor is distributed between the wire rope and carrying chain (4-Figure: 3).
- Connect the hydraulic connectors (a & b).



### 3.1.1. RETRACTION OF THE DISCHARGE CONVEYOR

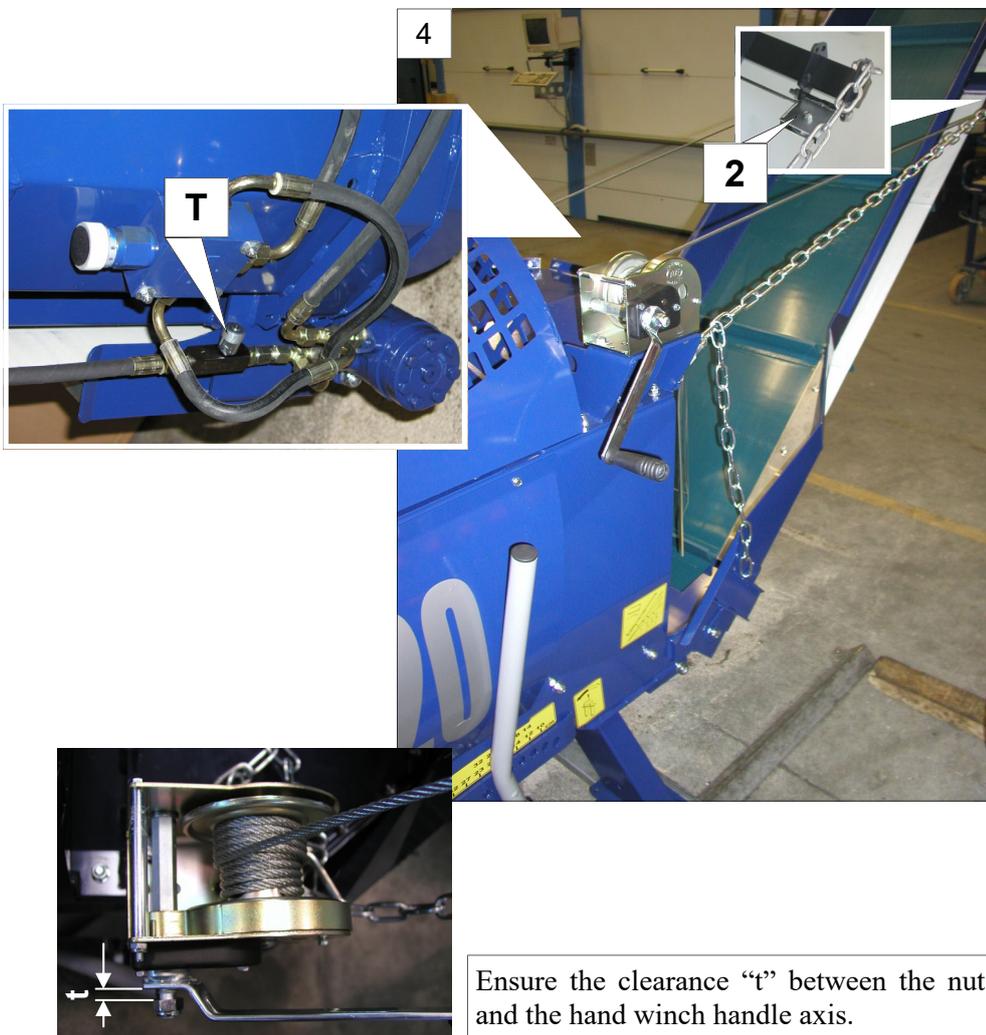
Discharge conveyor is usually telescopically retracted in the machine transport position. By activating the machine, telescopic cylinder of the discharge conveyor automatically activates and fully extends the machine, so the belt is tensioned.

Before starting the machine, make sure to loosen the conveyor belt, by moving the Discharge Conveyor from vertical to horizontal position using the hand winch (3-Figure: 3). Otherwise damages to the belt can occur during the extension procedure!

To optimally tension the belt, move the control handle of the lifting table (E-Figure: 1) to the lowering position, which increases the system pressure. To position the Discharge Conveyor into the working – extended position, the discharge conveyor valve (T-Figure: 1) must be closed – fully tightened.

After you disconnect the machine drive, you can retract the discharge conveyor. Open the discharge conveyor valve (T-Figure: 1) and leave the discharge conveyor to retract by its own weight. Therefore put the machine in more upright position.

When the discharge conveyor is retracted, close the discharge conveyor valve (T-Figure: 4). The valve must be also closed during the operation.



### 3.2. TRACTOR PTO SHAFT DRIVE (RCA 380):

- P.T.O. shaft (grooved shaft 13/8!" Z6 – DIN 9611A) must comply with the required driving power of the machine (technical data).
- The tractor P.T.O. shaft must rotate in a clockwise direction.
- **Recommended rotating speed of the P.T.O. shaft: 420 RPM; maximum: 430 RPM, minimum: 400 RPM.**

### 3.3. STARTING UP:

Before each machine startup, it is necessary to check the chain tension and readjust it if necessary!  
A too loose chain can induce vibrations, which unfavorably affect the drive belt's operation. Increased vibrations can also cause damages to the drive belt. A new cutting chain needs to be retensioned after approx. half an hour of use. Please check.

Remove all wood remains and other particles from the splitting chute, before starting the machine!

Check the oil levels of the hydraulic system and cutting chain lubrication system, before starting the machine!

Before starting the machine, make sure to loosen the conveyor belt, by moving the Discharge Conveyor from vertical to horizontal position using the hand winch (3-Figure: 3). Otherwise damages to the belt can occur during the extension procedure!

#### RCA 380:

- Examine the machine and equipment for faults and check the chain lubrication.
- Place the tractor manual throttle handle in lowest position.
- Lift the machine cover (B-Figure: 1a) to activate the safety switch and disengage all major machine functions.
- Slowly engage the P.T.O. shaft drive and start the machine.
- Set the required rotating speed of P.T.O. shaft (420 RPM), using the manual throttle handle.
- Lower the machine cover.

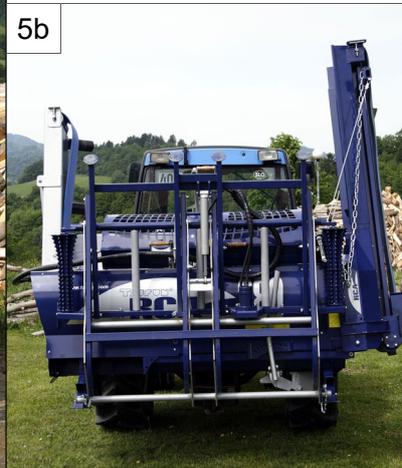
#### RCA 380 E:

- Examine the machine and equipment for faults and check the chain lubrication
- Plug the machine to electric power source
- Turn on the **Main Switch** (R-Figure: 1)
- Lift the **machine cover** (B-Figure: 1) to activate the safety switch and allow easier starting of the electric motor
- Push the "**Start-Stop**" switch (green button) (S-Figure: 1) and **immediately check the rotating direction of the cutting chain:** in case of wrong cutting chain direction, immediately stop the drive (push the red button on the "**Start-Stop**" switch and change the rotating direction of the electric motor (Chapter: 3.)
- Lower the machine cover

### 3.4. TRANSPORT POSITION OF THE MACHINE



The maximum allowable speed of the tractor when transporting the machine on the rut or off-road is 10 km/h (12 mph) and 40 km/h (25 mph), when the tractor is driven on the asphalt roads!



Driving at unsuitable speeds for the road conditions can cause damages to the machine or the tractor.

## 4. OPERATING THE FIREWOOD PROCESSOR

The machine must be operated by one person only. Please ensure that there is nobody else in the near vicinity of the machine working area.

### 4.1. NOISE

Machine operator is exposed to the following noise levels, during the machine operation (measured near the ear of the machine operator):

	RCA 380	RCA 380 E
Idling mode:	87 dB (A)	88 dB (A)
Operation mode:	92 dB (A)	96 dB (A)

Therefore, it is mandatory to wear hearing protectors while operating the machine.

### 4.2. LOG FEEDING

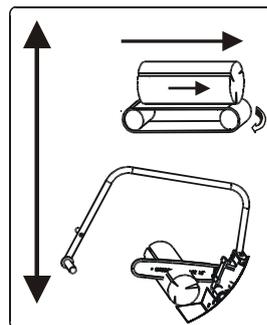
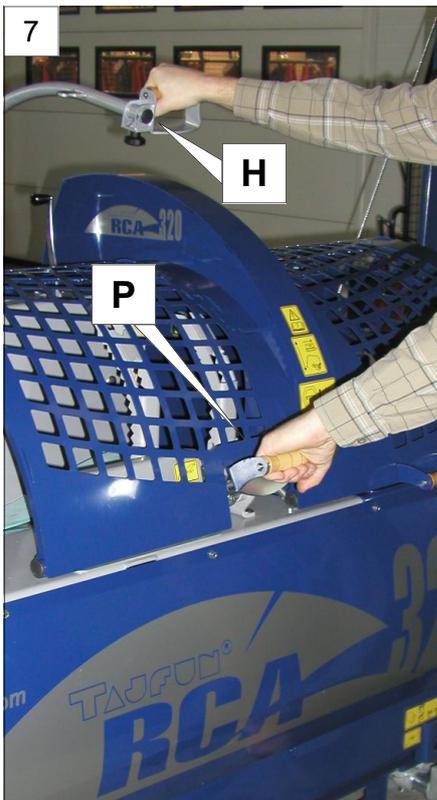
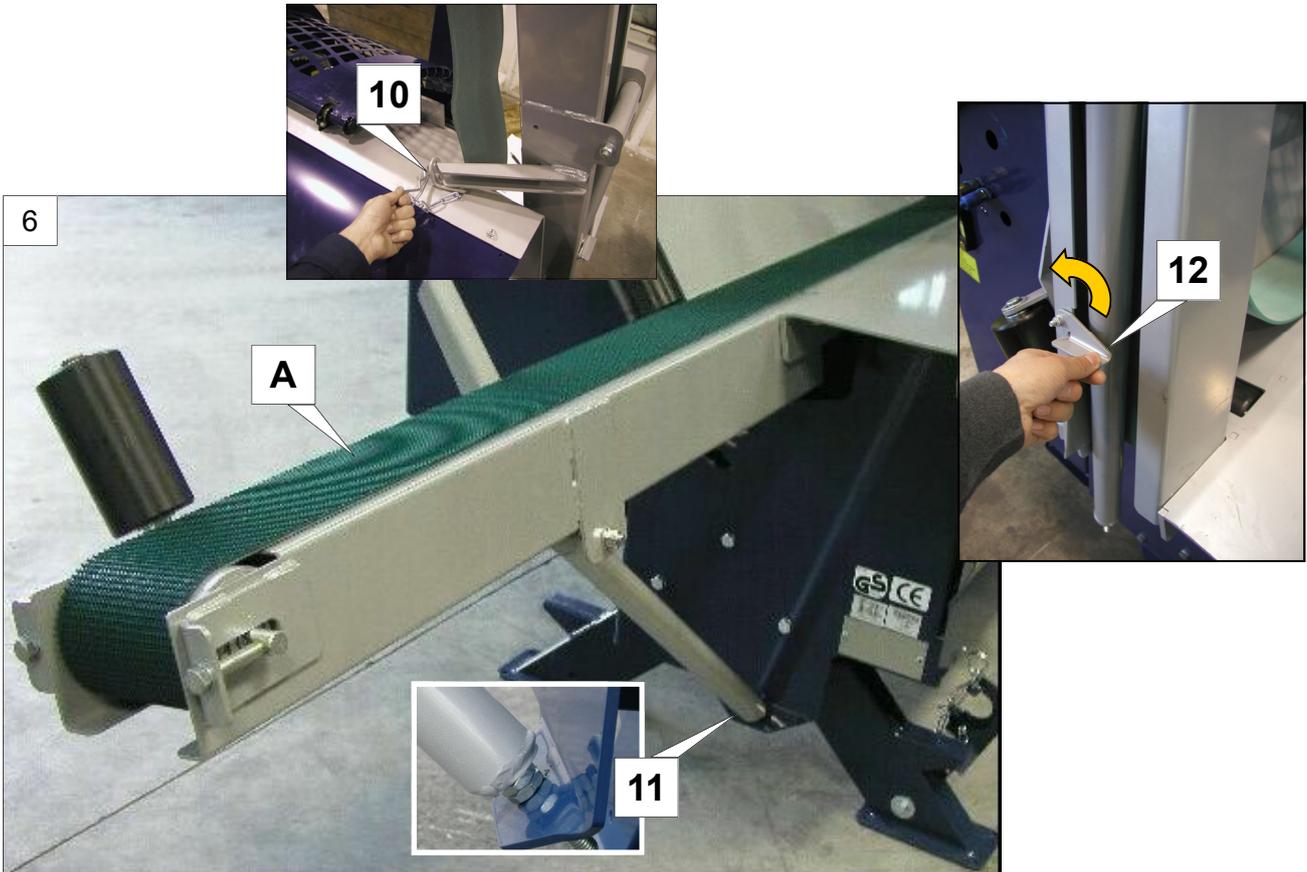
The in-feed conveyor must be placed in a horizontal working position before operation of the machine:

- Pull out the safety pin (10-Figure: 6)
- Remove the support limiter (12-Figure: 6)
- Lower the in-feed conveyor (A-Figure: 6) in horizontal position and support it using the supporting leg (11-Figure: 6)
- Set the supporting leg so that the upper rod on the conveyor belt in the middle of the feed conveyor is slightly elevated above the table (already factory set).

Activate the feeding by pushing the sawbar activation handle (H-Figure: 1) from the upper position (neutral position) forward - away from yourself; you can stop it at any time (when the log reaches length limiter), by returning the handle to the neutral position.

In case you don't stop the feeding after the log reaches the length limiter, you can damage the in-feed conveyor belt.

The in-feed conveyor can be additionally operated with the handle for setting its rotating direction (D-Figure: 1). Using this handle, the conveyor belt can be activated in either direction.



### 4.3. SAWING

The barsaw is always operating.

The sawbar movement is performed using the sawbar activation handle (H-Figure: 7), during which the sawed log must be held using the retaining handle (P-Figure: 7). When the sawing begins, the trapdoor (13-Figure: 8) moves away automatically, so the log can fall freely into a splitting chute after the cut.

Adjust the sawbar moving speed according to the hardness of the wood. Finish the cut (app. last 20 mm - last 1 in) with rapid downward movement of the sawbar activation handle, to make the cut log fall into the chute correctly.

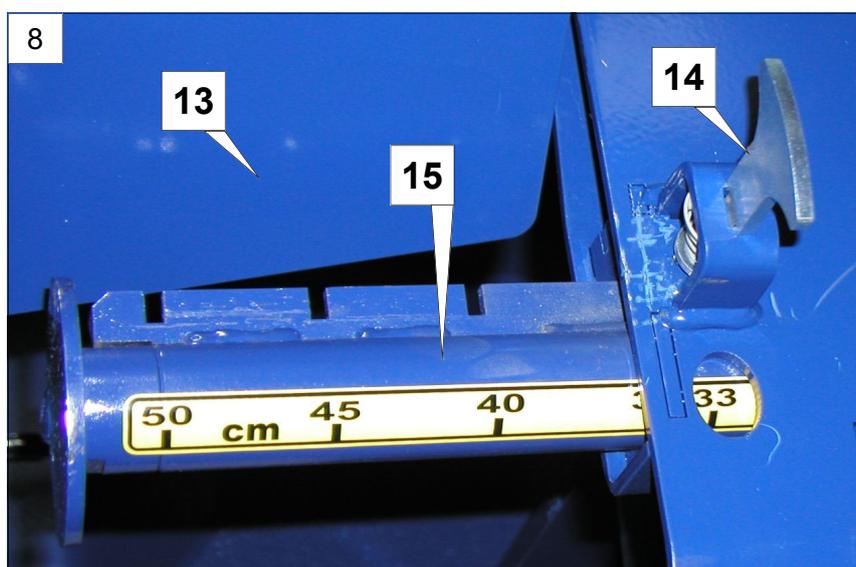
When cutting hard wood, the cut log can fall into the chute and rebound in the air - and splitting cylinder can grab it sideways\*, which can cause the jam and even damage to the machine. To avoid this, hold the sawbar activation handle after the cut in lower position, to allow the cut log to correctly position itself in the chute. Only then lift the sawbar activation handle to activate one of the two splitting cylinders.

**\*... in this case quickly switch the cylinders or open the machine cover, to stop the splitting cylinder and reposition the cut log.**

**The force on the sawbar activation handle should not exceed 100 N. Greater force can cause increased vibrations of the belt, which may result in damage to the belt. Check the tension of the belt (Chapter: 5.9).**

#### 4.3.1. ADJUSTING THE WOOD LENGTH

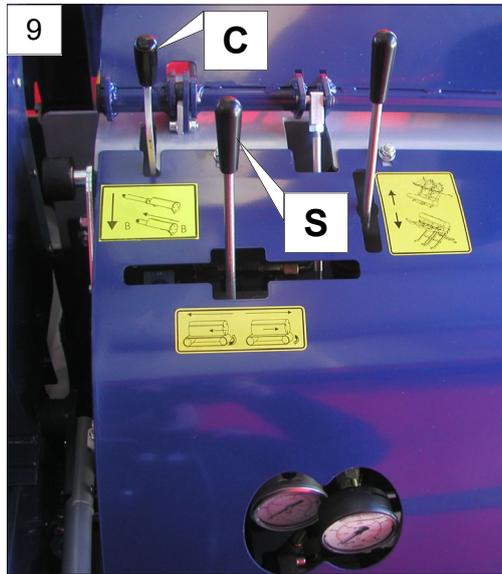
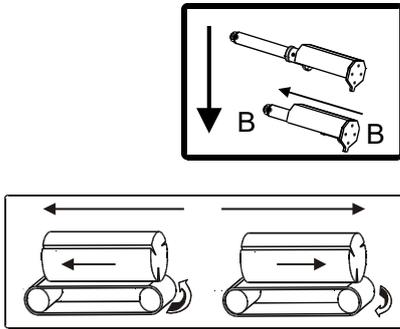
The length of the firewood is set by adjusting the position of the length limiter (15-Figure: 8), which is fixed in the required position using the fixing pin (14-Figure: 8).



### 4.4. SPLITTING

Splitting is performed by a splitting cylinder that pushes the log towards a splitting wedge. The splitting speed depends on the wood resistance and changes during splitting. Since the splitting speed is inversely proportional with the splitting force, the splitting cylinder enables greater splitting force at a lower speed and smaller splitting force at a greater splitting speed. The splitting cylinder automatically selects the necessary speed or splitting force, which results in greater energy efficiency.

The activation of splitting cylinder is performed by lifting the sawbar activation handle (H-Figure: 1), after the log has been cut or using the cylinder operating handle (C-Figure: 9). Cylinder operating handle (C-Figure: 9) can also be used at any time, to move the Cylinder Piston to the starting position, which is sometimes required in practice to prevent jamming during the splitting phase.



#### 4.4.1. ADJUSTING THE HEIGHT OF THE SPLITTING WEDGE



By using a splitting wedge handle (L-Figure: 10), the splitting wedge can be gradually lifted or lowered depending on the diameter of the logs - so the logs are split in center.

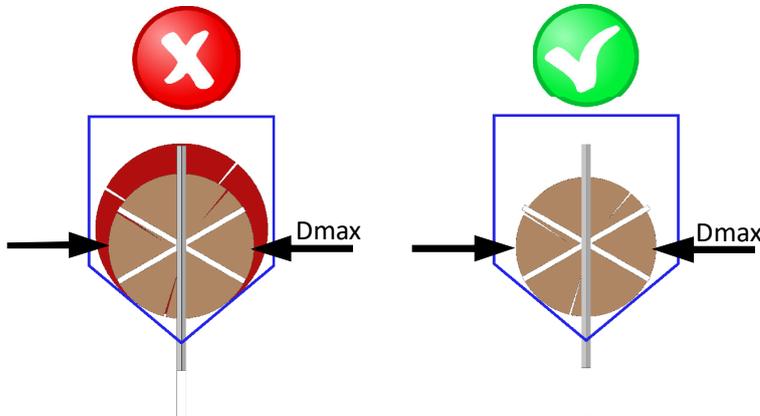
Splitting wedge adjustment can be performed most easily when the splitting chute is empty or at the point when the splitting cylinder start to move.

Lifting mechanism of the splitting wedge also allows partial height movements of the splitting wedge during the splitting phase. In case the wood gets stuck under the splitting wedge it must be removed to prevent damage to the lifting mechanism of the splitting wedge (Chapter: 5.11.).

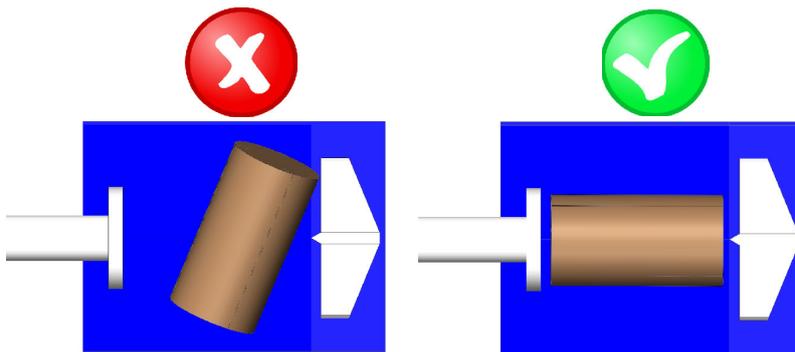
#### 4.4.2. PROPER USE OF SPLITTING WEDGE

To ensure the durability of your splitting wedge, follow these instructions:

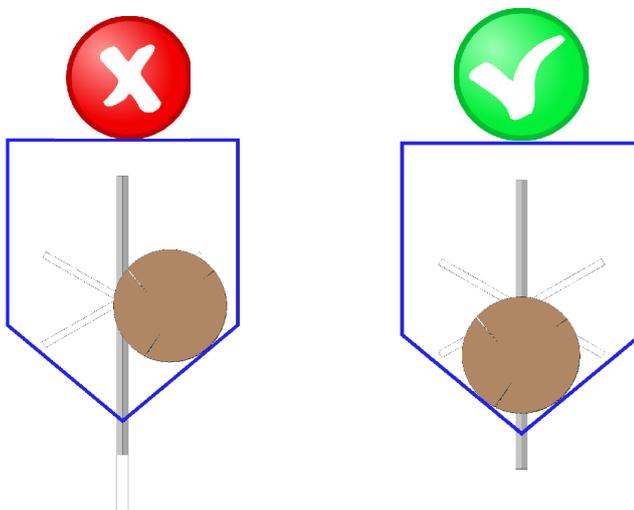
1. The splitting wedge is designed exclusively for wood splitting up to the max. diameter specified on your RCA machine.



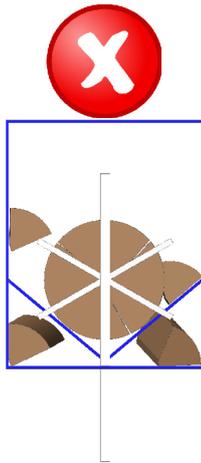
2. The log in the splitting chute must always be longitudinally directed towards the splitting wedge. This prevents unnecessary overloads and downtime.



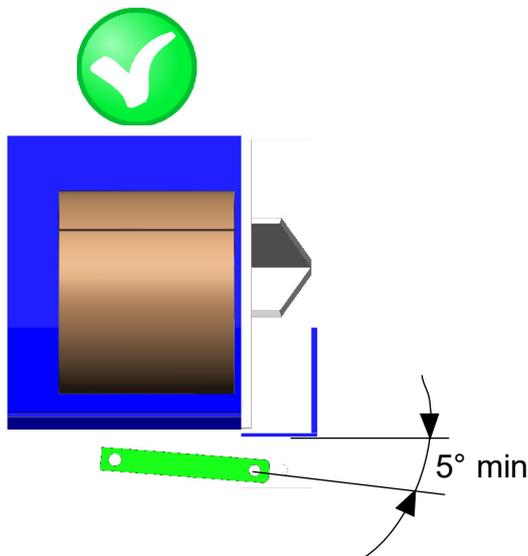
3. The log in the splitting chute must always be centred on the vertical blade of the splitting wedge. This prevents overloading of the side blades of the splitting wedge.



4. Ensure that the splitting chute and splitting wedge are never obstructed. Always remove any wedged pieces of wood.



5. Adjust the height of the splitting wedge to be slightly less than the mechanism permits. This allows the splitting wedge to still “breathe” during the splitting so as not to burden the mechanism and the lower blades of the wedge.



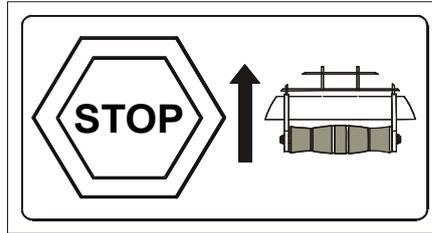
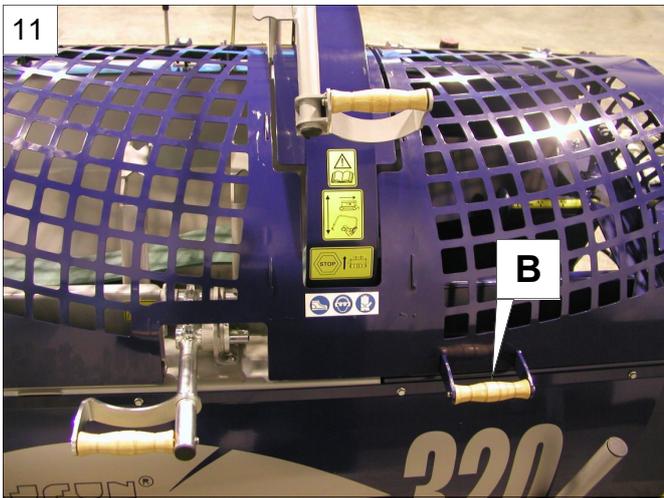
**Failure to observe the instructions may result in mechanical damage to the wedge and the machine that is not subject to reclamation.**

#### *4.4.3. MACHINE COVER WITH SAFETY SWITCH*

In case of eventual problems during the splitting phase, or in case the log is wrongly positioned in the splitting chute, the splitting process must be **stopped** immediately. In this case it may be also necessary to switch the cylinder, so the splitting cylinder which pushes towards the splitting wedge, moves back (Chapter: 4.4.).

Machine cover (B-Figure: 11) is linked to the safety switch, which disengages all major machine functions when the machine cover is lifted: in-feed and discharge conveyors stop, splitting cylinder stop and sawbar is withdrawn into the saw shield. Lifting the machine cover therefore acts also as a main safety switch.

The log can be reached by hand only when the machine cover is opened and machine is stopped. Sawing and splitting cannot continue until the machine cover is closed and safety switch disengaged.



#### 4.4.4. "START-STOP" SWITCH (RCA 380 E)

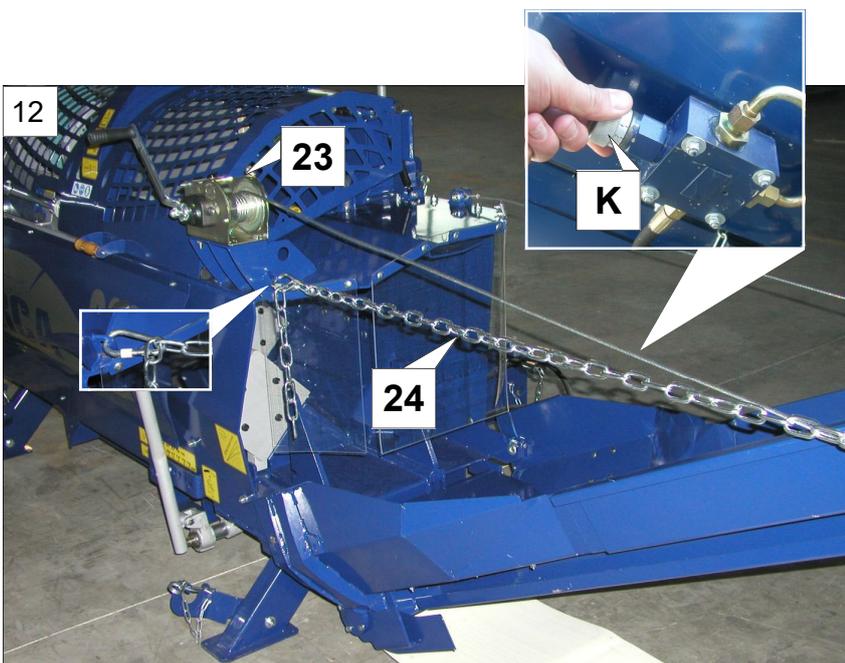
Electrical system of the wood processor RCA 380 E includes, besides the main switch, also the "Start-Stop" switch (S-Figure: 1). The "Start-Stop" switch is used to turn ON/OFF the electric driving motor, which powers the cutting chain and whole hydraulic system. Using the red button of the "Start-Stop" switch you can completely stop the operation of the machine.

Before starting the machine or pushing the "start-stop" switch it is recommended to lift the machine cover, to allow easier starting of the electric motor (Chapter: 3.3.).

#### 4.4.5. MAIN SWITCH (RCA 380 E)

The wood processor's main switch (R-Figure: 1b) shuts down the main power supply. Use the main switch when stopping the work for longer periods or leaving the work place. Unauthorized access to the power switch can be prevented by installing the padlock.

### 4.5. DISCHARGE CONVEYOR



Lifting and lowering of the discharge conveyor is performed with the hand winch handle (23-Figure: 12). When the desired position is reached, secure it with the chain, so that the weight of discharge conveyor is distributed between the wire rope and the carrying chain. (24-Figure: 12).

When using and maintaining the hand winch, follow the **enclosed** manufacturer's instructions.

The speed of the discharge conveyor can be adjusted using the speed regulator of the discharge conveyor (K-Figure: 12).

## 5. MAINTENANCE AND REPAIR

Regular machine maintenance ensures reliable operation and long lifetime of the machine.

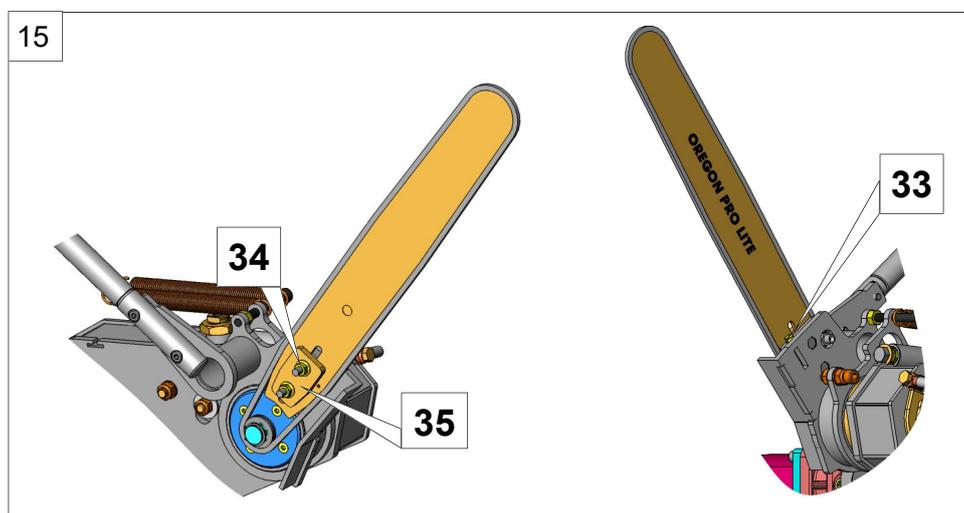
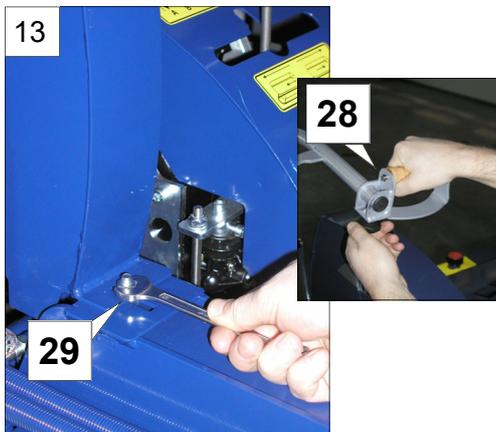
### 5.1. CUTTING CHAIN REPLACEMENT

**Before replacing the chain, you must disconnect the machine drive (RCA 380) or unplug the power cord from the electrical outlet (RCA 380 E)!**

- Disconnect the P.T.O. shaft or unplug the power cord from the electrical outlet.
- Turn the handle (28-Figure: 13) 90 degrees on the sawbar activation handle.
- Unscrew the screw (29-Figure:13) and move the saw shield (30-Figure: 14) in the forward position.
- Loosen the cutting chain tensioning screws (33-Figure: 15).
- Unscrew both nuts (34-Figure: 15) on the fixing plate (35-Figure: 15) until you can move the sawbar away from the tensioner.
- Remove the worn cutting chain and replace it with new well-sharpened chain.
- Make sure the cutting teeth are turned in the right direction – the cutting edge on the top of the sawbar must face the machine controls.
- Replace the cutting chain in a reverse order and don't forget to tension it afterwards.

A new cutting chain must be run-in; 2 to 3 minutes. The cutting chain tension must be rechecked immediately afterwards (Chapter: 5.2.).

Do not install a new cutting chain on a worn out sprocket. Replace the sprocket after second replacement of the worn out chain at the latest.



## 5.2. CUTTING CHAIN TENSIONING

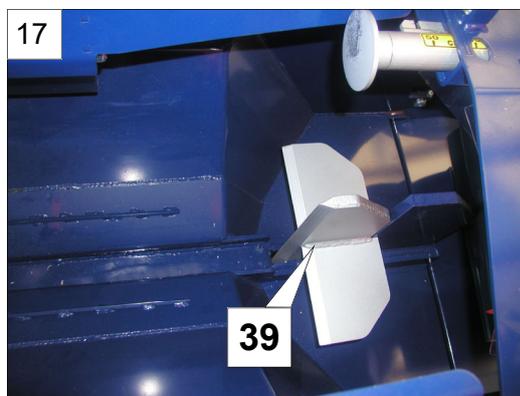
- Loosen both nuts (34-Figure: 15) on the fixing plate (35-Figure: 15)
- Tighten the tensioning screw (33-Figure: 15) until the chain is tensioned correctly\*
- Tighten both nuts (34-Figure: 15) on the fixing plate (35-Figure: 15)

\*The cutting chain is tensioned correctly when it clings to the lower side of the sawbar when cold and can be still lifted on the upper side of the sawbar (approximately in the middle), three or four times the height of the driving teeth.

**Always wear gloves when checking the chain tension to avoid cutting your fingers on the sharp chain!**

## 5.3. CHANGING THE SPLITTING WEDGE

- Remove all firewood and wood remains from the **splitting wedge area** (splitting chute and under the machine).
- Activate the splitting cylinder and open machine cover when the cylinder reaches the middle position, to make enough room for splitting wedge replacement.
- Put the handle of the splitting wedge (L-Figure: 16) in the right position, to lower the splitting wedge completely.
- Remove the splitting wedge from its mount and replace it with a new wedge (39-Figure: 17).
- Close the machine cover.
- Set the desired splitting wedge height.



## 5.4. HYDRAULIC SYSTEM OIL CHANGE

### **Important:**

To prevent pollution of the environment, dispose of used oil properly!

- **Perform the first oil change after 5000 hours of operation. Afterwards change the oil every 2 years.**
- The oil drain plug is located on the lower side of the tank.
- Hydraulic system oil quantity: 100 l. / 25 gallons.

Hydraulic oil – suitable brands: (Viscosity: 46 mm<sup>2</sup>/s at 40°C)

Manufacturer's:	Substitute oils:
	Castrol Hyspin AVH 46
	Mobil DTE 16
Renolin B 46 - HVI	Shell TELLUS T46
	BP Energol SFA 46
	SETRAL Poclair

## 5.5. CHANGE OF FILTER INSERT

- First change the filter insert after 200 working hours, then every 1000 working hours
- The filter insert is not washable
- Bad filter permeability is seen on the filter gauge – if the gauge indicator is in the red zone when oil is heated to operating temperature (if gauge indicator reaches the red zone only occasionally, filter replacement is NOT needed).

## 5.6. LUBRICATION OF THE MULTIPLICATION GEAR (RCA 380)

- Oil quantity and grade: 1.2 l (0,32 gallon), SAE 75 (Renolin CLP 100 DIN 51 517/13)

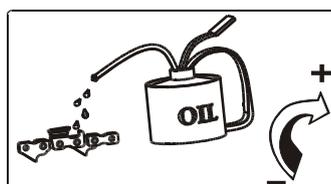
## 5.7. CUTTING CHAIN LUBRICATION

Never operate the machine without lubricating the chain first!

Chain lubrication oil quantity: 8 L

Approximate oil consumption: (0.6 - 1.0) L/h

Quality chain lubrication oils with viscosity grade of 95 mm<sup>2</sup>/s at 40°C are recommended.



Never use used oils!

The flow of the cutting chain lubrication oil can be regulated depending on the oil quality, using a regulation screw (Figure: 18). It is factory set to maximum!

## 5.8. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SOLUTION
The machine does not react to movements of the sawbar activation handle		Check the machine drive (P.T.O. shaft or electric motor must be connected and in operation, otherwise the pump and chainsaw drive do not work) Check the level of the oil in the tank
	Damaged control mechanism	Repair or replace the control mechanism ⊗
Electric motor does not start or it often shuts down (RCA 380 E)	Damages to power cables or blown fuses	Check the power cables, install the appropriate fuses
	Motor protection is shutting the motor down.	Power cable size is not appropriate, the machine is overloaded
Hydraulic oil is overheating	Not enough oil in the reservoir	Check the oil level and add more if necessary.
	Worn-out hydraulic oil	Change the hydraulic system oil.
	Clogged oil filter, the filter gauge is in the red zone when the oil is warm.	Replace the oil filter insert (Chapter: 5.5.).
	Clogged hydraulic pipes	Check the hydraulic pipes and clean them if necessary.
	Splitting cylinder did not reach the final position.	Reverse the cylinders, clean the splitting chute
	High Outside Temperature	Install the oil cooler
Machine is losing power	Hydraulic oil is overheating	Refer to “Hydraulic oil is overheating”
	Not enough oil in the reservoir	Check the oil level and add more if necessary.
	The machine is overloaded	Remove the overloading causes
Excessive power consumption during sawing	The chain is dull	Sharpen or replace the chain
	The chain is not properly tensioned	Tension the chain
	The chain is covered with resin	Clean the chain using the solvent (i.e. Nitro-Solvent) or replace the chain
Louder operation of the machine	Revolution speed of the tractor is exceeded (RCA 380)	Consider the recommended revolution speed.
	Clogged filter	Clean the filter
	Not enough oil in the reduction gear	Check the oil level and add more if necessary.
	The machine is not connected to the tractor – only P.T.O. shaft is connected (RCA 380)	Connect the machine to the tractor or position the tractor <b>perpendicular</b> to machine
	P.T.O. shaft is not lubricated	Lubricate P.T.O. shaft appropriately
Hydraulic hoses are overheating	Not enough oil in the hydraulic system	Check the oil level and add more if necessary.
	Worn-out hydraulic oil	Replace the hydraulic system oil. (**)
Hydraulic cylinder is leaking	Seals are worn-out	Replace worn-out seals.
	Damaged piston-rod	Replace the cylinder
In-feed conveyor is slipping or not operating	Conveyor belt is not tensioned enough	Tension the conveyor belt
	Not enough oil in the hydraulic system	Check the oil level and add more if necessary.
Sawbar overheating	Not enough lubrication causes increased friction and subsequent overheating.	Use dedicated chainsaw lubrication oil, increase lubrication pump flow (Chapter: 5.7.), check oil quantity in the lubrication reservoir, ensure uninterrupted oil flow to the groove on the sawbar.
	The PTO shaft speed is too high – more than 430 min <sup>-1</sup> .	Set the PTO shaft speed to 420 min <sup>-1</sup> .

PROBLEM	POSSIBLE CAUSES	SOLUTION
In-feed conveyor is not generating enough pull, although low pressure gauge shows 90 bars during its operation.	Conveyor belt is not tensioned enough	Tension the in-feed conveyor belt
	Incorrect installation of the conveyor belt	Check the placement of the supporting foot (Chapter: 4.2.)
	The log too heavy or jammed	Position or cut the log – shorten the log
The chain is not lubricating	The machine ran out of chain lubrication oil	Add chain lubrication oil
	Lubrication system is clogged or damaged	Check the lubrication system
Discharge conveyor is not operating	Conveyor belt is not tensioned enough	Tension the conveyor belt
	Not enough oil in the hydraulic system	Check the oil level and add more if necessary
	Speed regulator is fully screwed down	Set the speed regulator appropriately
	Stuck wood is preventing the conveyor belt from moving.	Clean the conveyor belt area – stop the machine during cleaning procedure.
Torn cutting chain drive belt	Inappropriate rotating speed of the P.T.O. shaft + worn cutting chain	Replace the belt (Chapter: 5.10.), replace the cutting chain (Chapter: 5.1.). Increase the rotating speed of the P.T.O. shaft (Chapter: 3.2.).
	Cutting chain is not properly tensioned	Replace the belt (Chapter: 5.10.), tension the cutting chain properly (Chapter: 5.2.)
	Belt is not properly tensioned	Replace the belt (Chapter: 5.10.)
	Excessive force on the operating handle during cutting	Replace the belt (Chapter: 5.10.), (Chapter: 4.3.), check the cutting chain and use lower force on the operating handle.

⊗ More demanding procedures must be performed by a qualified technical service only.

(\*\*) In worse operating conditions with high temperatures of the environment we recommend installation of oil cooler.

## 5.9. MAINTENANCE PLAN

**The machine must be turned off (the P.T.O. shaft must be disconnected from the tractor), while performing any service and maintenance procedures!**

WHAT?	WHEN?	HOW?
Check the tension of the cutting chain	Before each use	Chapter: 5.2.
Check the tension of the cutting chain belt	Every 50 hours of operation	Chapter: 5.10.1.
Tighten any loose bolts and nuts and hydraulic connections	<ul style="list-style-type: none"> <li>• After first hour of operation</li> <li>• After every 100 hours of operation</li> </ul>	Using appropriate tools
Check the oil level (hydraulic & bar oil levels)	Before each use	Visually
Hydraulic system oil change	First after 5000 hours of operation, afterwards once every two years	Chapter: 5.4.
Replacing the oil filter insert	After first 200 hours of operation Later, after every 1000 hours of operation During the oil change or in case the gauge indicator is in the red zone	Replace the filter insert.
Multiplication gear oil change (RCA 380)	<ul style="list-style-type: none"> <li>• After the first 50 hours of operation</li> <li>• Later, after every 1000 hours of operation</li> <li>• When changing the bearings in the multiplication gear</li> </ul>	Drain the oil in the appropriate vessel from the lowest plug and replace the plug. Fill the oil through the upper plug.
Cleaning and replacing the air filter on the saw drive	<ul style="list-style-type: none"> <li>• Cleaning the filter - daily</li> <li>• Replacing the filter - every 6 months</li> </ul>	Chapter: 5.10.2.

Regularly remove all wood remains and sawdust from the splitting channel, under the conveyor belt, under the lifting mechanism of the Splitting Wedge and under Sawbar Activation Handle!

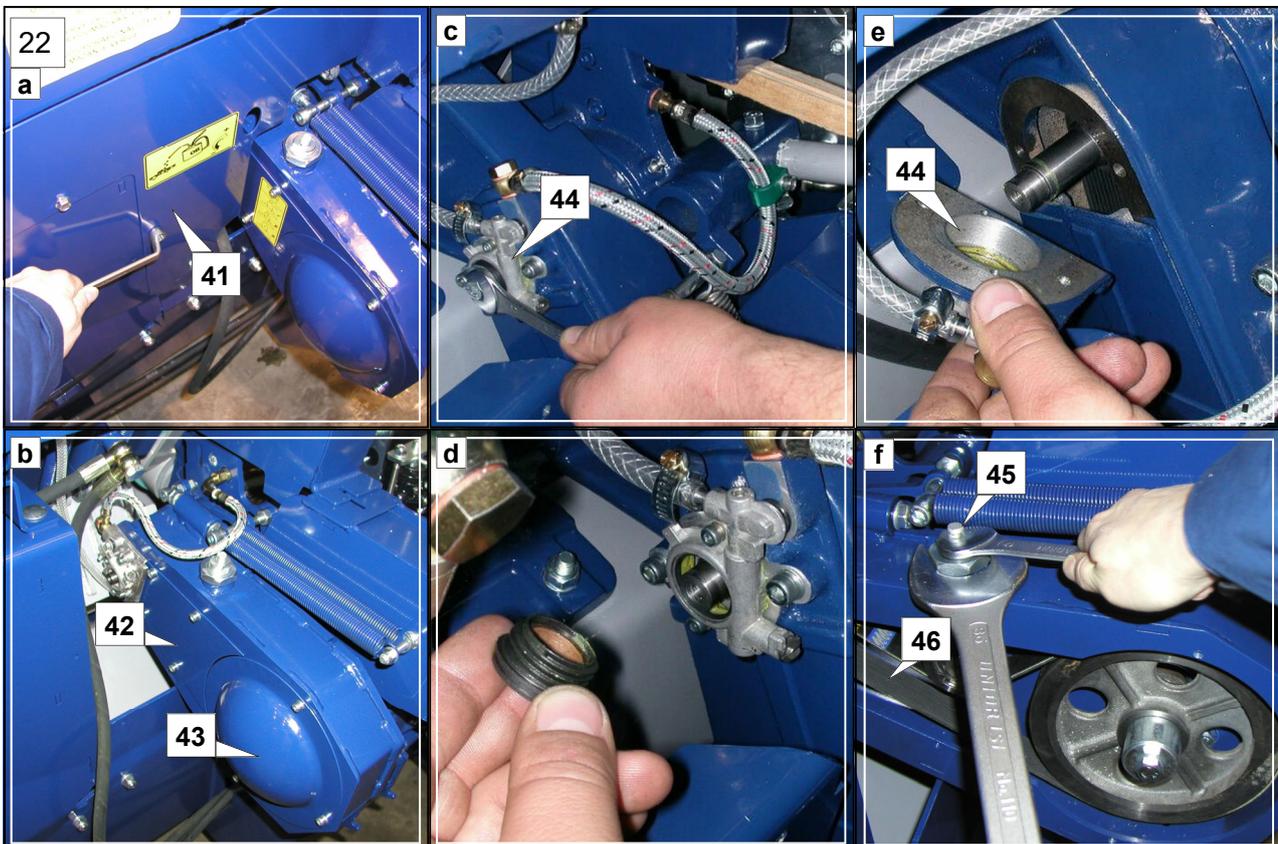
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WHAT?	WHEN?	HOW?
<b>Lubrication</b> (Figure: 19)		
Lubrication Point: <b>a, b, c</b>	At least every 80 hours of operation	Lithium Grease
Lubrication Point: <b>d</b>	At least every 80 hours of operation	Lubricating Spray

## 5.10. CUTTING CHAIN BELT REPLACEMENT

- Disconnect the machine from the drive or unplug the power cord from the electrical outlet.
- Remove the drive protection (41-Figure: 22), remove the housing cover (42-Figure: 22), remove the drive cover (43-Figure: 22).
- Remove the lubrication pump (44-Figure: 22).
- Loosen the belt tensioner (45-Figure: 22).
- Remove the belt (46-Figure: 22) from the driven pulley (47-Figure: 22).
- Remove the old belt and clean the area.
- Install the new belt.
- Position the belt onto the pulleys.
- Tension the belt and reinstall removed elements: lubrication pump (44-Figure: 22), drive protection (41-Figure: 22), housing cover (42-Figure: 22), drive cover (43-Figure: 22).
- After one hour test operation, recheck the tension of the belt (disconnect the machine from the drive). Perform additional tension controls every 50 hours of operation.

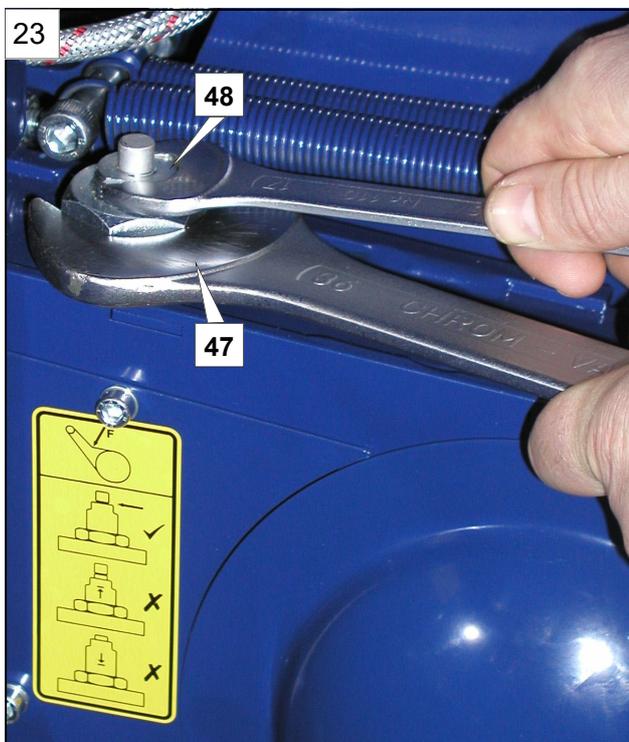


### 5.10.1. BELT TENSIONING

**The machine must be stopped, during the operation!**

Set the correct tension of the belt using the notch on the tension indicator. The notch must be aligned with the edge of the spring guide. Set the tension of the belt as follows:

- Loosen the safety nut (47-Figure: 23)
- Screw or unscrew the spring guide, as appropriate (48-Figure: 23) and correctly align the notch
- Tighten the safety nut (47-Figure: 23)



## 5.10.2. CLEANING AND REPLACING THE AIR FILTER

### FILTER REPLACEMENT

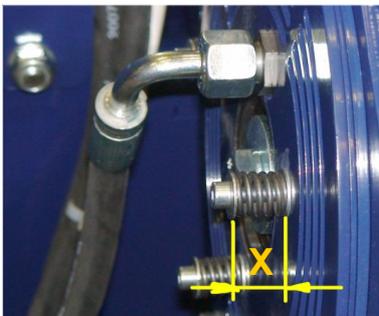
- Disconnect the machine from the drive
- Remove the drive protection



- Remove the drive cover, the hydraulic tube, and the spring screws



- Replace the filter with a new one, clean the interior, and reattach the drive cover
- Tighten the spring screws and secure them with the adhesive LOCTITE 222 (or similar). Pay attention to distance X, which should be between 16 and 17 mm. The distance for all three screws must be **THE SAME LENGTH**. **Attention!** If the spring is completely compressed, the clutch will not work



- Tighten the hydraulic tube and, finally, secure the drive protection

### CLEANING THE FILTER

Remove sawdust and waste from the top of the filter (the cover) to allow free air flow to the inside of the saw drive.

Regularly clean and change the filter on the saw drive. An unclean filter impedes the cooling air flow to the drive assembly, which may result in overheating or damage to the drive assembly (bearings, belt, shaft, ...).

## 5.11. INDICATIONS OF IMPROPER USE

Certain damages which occur before the end of the lifespan of exposed machine components may indicate overloading or inappropriate handling of the machine. Manufacturer's warranty does not cover damages of this kind.

- Torn or damaged in-feed or discharge conveyor belts
- Torn cutting chain
- Damaged chain guide (sawbar)
- Damaged or bent framework, wedge or cylinder protection
- Damaged or bent length limiter or trapdoor
- Torn cutting chain drive belt
- Damages to the operating handles
- Damages to the framework due to unsuitable transport
- Damaged hand winch on the conveyor
- Damaged carrying chain carabiner
- Damaged wedge holder
- Damaged or broken splitting wedge
- Clogged or damaged air filter

### **Important:**

The machine is functionally and safety tested. To ensure flawless and safe operation it is necessary to use only original spare parts in case of breakdown. The customer loses all claims of warranty if non-original spare parts are used, if repairs are performed unprofessionally or by unqualified person or in case of any modifications to the machine.

## 5.12. SUPPLIES

The machine incorporates following parts, which have to be replaced by the customer as necessary. These parts are not covered by the warranty period, which is defined in the warranty statement.

- Cutting chain
- Drive chainwheel
- Cutting chain guide (sawbar)
- Cutting chain drive belt
- Electric motor driven belt
- Conveyor wire rope
- In-feed conveyor belt
- Discharge conveyor belt
- Splitting wedge
- Oil
- Oil filter
- Air filter

## 5.13. SPARE PARTS ORDERING

When ordering spare parts it is necessary to provide the following information:

**Model and serial number of the machine; catalogue number, name and quantity of the spare part;**  
**Exact address of the customer**

The manufacturer warrants spare parts availability and service 10 years after the purchase of the machine.

## ***EC Declaration of Conformity***

*Manufacturer:*

**TAJFUN Planina, proizvodnja strojev d.o.o., Planina 41a, 3225 Planina pri Sevnici**

*declares with full responsibility that hereinafter mentioned product:*

### **FIREWOOD PROCESSOR RCA 380**

*covered by this declaration complies with the requirements of:*

Directive 2006/42/EC

*and is in compliance with harmonized standards:*

EN ISO 4254-1:2009; EN ISO 12100:2010; EN ISO 13857:2008; EN 349:1993+A1:2008;  
EN 609-1999+A2:2009; ISO 4413:2010

*Authorized person for technical documentation:*

Iztok Špan, Planina 41a, SI-3225 Planina pri Sevnici

Planina, 19. 05. 2020

Iztok Špan  
General Manager

## ***EC Declaration of Conformity***

*Manufacturer:*

**TAJFUN Planina, proizvodnja strojev d.o.o., Planina 41a, 3225 Planina pri Sevnici**

*declares with full responsibility that hereinafter mentioned product:*

### **FIREWOOD PROCESSOR RCA 380 E**

*covered by this declaration complies with the requirements of:*

Directive 2006/42/EC

Directive 2004/108/EC

Directive 2006/95/EC

*and is in compliance with harmonized standards:*

EN ISO 4254-1:2009; EN ISO 12100:2010; EN ISO 13857:2008; EN 349:1993+A1:2008;  
EN 609-1999+A2:2009; ISO 4413:2010

*Authorized person for technical documentation:*  
Iztok Špan, Planina 41a, SI-3225 Planina pri Sevnici

Planina, 19. 05. 2020

Iztok Špan  
General Manager





# WARRANTY SHEET

We guaranty:

- that the product will operate fault free, if operated according to enclosed operating instructions;
- that we will repair any fault or defectiveness during the warranty period, within 45 days. In case the product is not repaired within the mentioned term, we will replace it with a new product on customer's request.

The product is warranted **12 MONTHS** from the day of purchase, which must be proved by the customer with the certified warranty sheet (stamp of the shop, date of purchase and salesman's signature, serial number and year of manufacture).

**Guarantee sheet is valid only if shown together with original invoice!**

The warranty covers parts against defects in material and workmanship. In case of repairs performed by unqualified person or if non-original spare parts were used, the customer loses all claims of warranty! Our guaranty is void also in case of:

- Damages caused by not following these operating instructions
- Damages which are customer's fault
- Damages resulting from improper use or overload and operation in unsuitable conditions



*Product specifications (copy from the type plate):*

Type:	Serial no.:	Year of manufacture:
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*Data on product sale:*

STORE (company and headquarters):	Date of delivery:
	Stamp and signature of the salesperson: