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INSTRUCTION MANUAL FOR USE AND MAINTENANCE

FIREWOOD PROCESSOR

RCA PRO 500

CE

ISO 9001 Q-2295

UK CA

Ver.: 1.0

06/2023-ENG

Read the instructions carefully before setting up and using the machine!

MANUFACTURER'S ADDRESS

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CONTENT

1. INTRODUCTION

Dear customer,

by purchasing **firewood processor**, you have acquired a working tool that will be of great help to you at work.

The correct use and maintenance of the product greatly affect its reliability during work and during its lifetime, so we advise you **to read the instructions carefully and thoroughly** and to follow them during work.

We thank you for your trust and wish you a lot of satisfaction when working with the **FIREWOOD PROCESSOR RCA PRO 500 TAJFUN**.

In particular, follow the following basic rules:

- Follow all safety instructions;
- regularly clean the machine, as dirt increases the wear of moving parts and thus the possibility of damage;
- always use lubricants of the prescribed quality;
- contamination with lubricants and oil increases the risk of an accident;
- our sales department is available for all necessary professional advice, and our service department can help you with maintenance;
- when requesting RCA PRO 500 information or ordering replacement parts, please quote the type and factory number;
- **observe the regulations and instructions for safe work!** In this way, you will protect your life and the lives of others;
- any errors must be reported as soon as they are identified;
- all documents are protected by copyright!
- documents, including individual sections, may not be distributed or reproduced!

DANGER!
Carefully observe the information about the dangers listed next to such a sign!

1.1. WARRANTY LIMITATIONS

Please read these operating instructions carefully before using the machine.

The manufacturer assumes no responsibility for damage or faults caused by not following the instructions for use!

The machine manufacturer's warranty and its responsibility cease in the following cases:

- If the machine was used in an incorrect way or was operated by a person who was not professionally qualified for this work;
- inadequate attachments and drives not supplied with the machine;
- if non-original spare parts or accessories were used;
- partial or complete non-compliance with the instructions for use;
- alterations or modifications not approved in writing by the manufacturer;
- exceptional cases.

The manufacturer is not liable for defects in consumables.

1.2. RESERVATIONS

The manufacturer reserves its right to make changes to technical specifications, pictorial material and safety standards in the attached instructions for use.

2. SAFETY RULES

To protect against the risk of injury, electric shock and fire, you must follow the following instructions when using the machine.

Read the following instructions carefully before starting work!

2.1. GENERAL SAFETY RULES

- The machine may only be used by persons who are familiar with its operation, the hazards at work and the instructions for use.
- Persons who are under the influence of alcohol, drugs or medications that affect psychophysical abilities must not operate or maintain the machine.
- Only one person can operate the machine. Make sure that no one else stays in the dangerous area of the machine (radius = 3 m)!
- Before starting work, place the machine in a stable position in accordance with the instructions for setting up the machine!
- Use P.T.O. drives of suitable power (min. 25 kW) and with an undamaged external plastic guard!
- Do not use damaged, cracked or deformed chains, sprockets and sawbars!
- All protective devices on the machine (protective nets, saw shield, covers, etc.) must be correctly installed before start-up and are not allowed to be modified or removed during operation!
- Use personal protective equipment (protective eyewear, ear muffs, gloves, protective footwear)!
- When repairing faults, changing the cutting chain, cleaning or any service intervention on the machine, it is absolutely necessary to disconnect the P.T.O. drive and switch off the power unit (tractor) or pull out the electrical plug from the mains (EP 12)!
- Do not wear loose clothes!
- Maintain a clean and tidy work environment!
- Be careful when working! Improper use of the machine can result in severe injuries due to moving parts!
- Do not leave the machine running unattended!
- Do not reach into the moving parts of the machine during the work process!
- Before removing any jammed piece of wood, switch off the power unit of the machine or turn off the machine.
- When transporting the machine on public roads, it is necessary to attach lights to the back of the machine!
- For your safety, use only original spare parts provided by the manufacturer of the machine!
- A damaged electrical cable or plug must be replaced immediately.

2.2. ADDITIONAL SAFETY PRECAUTIONS FOR THE RCA MACHINE

- The Declaration of Conformity and Risk Assessment of the manufacturer Tajfun Planina d.o.o. includes a machine that is operated by a single person, with an adequate inspection of the entire area around the machine and covers the entire working area of the machine.
- Personal protective equipment and protective equipment, which must be used when working with the machine, are not included in the scope of delivery.
- Never reach into the working area of the chain saw, splitting cylinder and sawdust extractor fan while the machine is in operation. Also, never remove chips and other wood residues from the dangerous area during cutting, splitting and extracting when the machine is in operation.
- The machine is designed for outdoor use. If you also use the machine indoors, you must use the sawdust extractor fan that is part of the machine's standard equipment.
- You must ensure regular maintenance and cleanliness of the machine. Regularly remove sawdust and scrap wood.
- The working pressure of the hydraulic system must not exceed 230 bar.
- It is not allowed to move the firewood processor when in working position. Before any transport or relocation, put the machine in the transport position.

2.3. SAFETY INSTRUCTIONS FOR WORK WITH THE DISCHARGE CONVEYOR

- Consider the dangerous area of the machine, which is in the immediate vicinity of moving parts, as well as under the entire machine along the conveyor belt and not only at the exit part of the discharge conveyor.
- Transported material can fall out in this area.
- Never reach into the chute or touch the belt when the machine is running.
- Switch off the machine before starting to remove any stuck pieces of wood.

2.4. SAFETY INSTRUCTIONS FOR ROPE PULLEYS

- Avoid pulling the wire rope over sharp edges!
- Do not touch the wire rope with your hand during winding and unwinding!

2.5. SAFETY INSTRUCTIONS FOR THE SAWDUST EXTRACTOR FAN

- A damaged hydraulic hose must be replaced immediately!
- Wood dust can be harmful to health. Hard wood such as beech and oak, and especially tropical wood, can cause cancer. Therefore, use additional ventilation devices when using the machine in a poorly ventilated area!

2.6. NOISE

When working with the machine, the operator is exposed to noise measured at the operator's ear:

RCA PRO 500	
No load	85 dB (A)
Operating	92 dB (A)

The total noise level also depends on the noise of the driving machines (tractor, electric power unit, hydro power unit, ...).

For this reason, operators must use mufflers when working with the machine.

2.7. USER QUALIFICATION

- Te firewood processor can only be repaired by persons who are **qualified** for this work (**authorised maintenance service**).
- The machine may only be used by persons who are familiar with its operation, the hazards at work and the instructions for use.
- Only qualified persons over the age of 18 are allowed to work with the machine and maintain it!

2.8. OTHER DANGERS

Even if all safety precautions are taken and the machine is used in accordance with the instructions, some risks remain:

- Touching rotating parts of the machine;
- injuries due to flying pieces of wood;
- burns from touching hot parts of the machine (multiplication gear);
- damage to hearing if protection is not used correctly or not at all;
- human errors (excessive physical effort, mental stress, etc.).

2.9. INTENDED USE

The firewood processor RCA PRO 500 is a machine used to make wooden log splits. It is intended exclusively for cutting wood with a diameter of 5 to 50 cm and splitting with a splitting force of up to 250 kN. The machine enables splitting wood into 2, 4, 6, 8, 12 or 16 log splits, whereby the length of the log splits is adjustable (from 25 to 50 cm).
The machine is intended for outdoor work.

2.10. INCORRECT USE OF THE MACHINE

Any other use of the machine as described in the previous section is considered improper use and is prohibited.

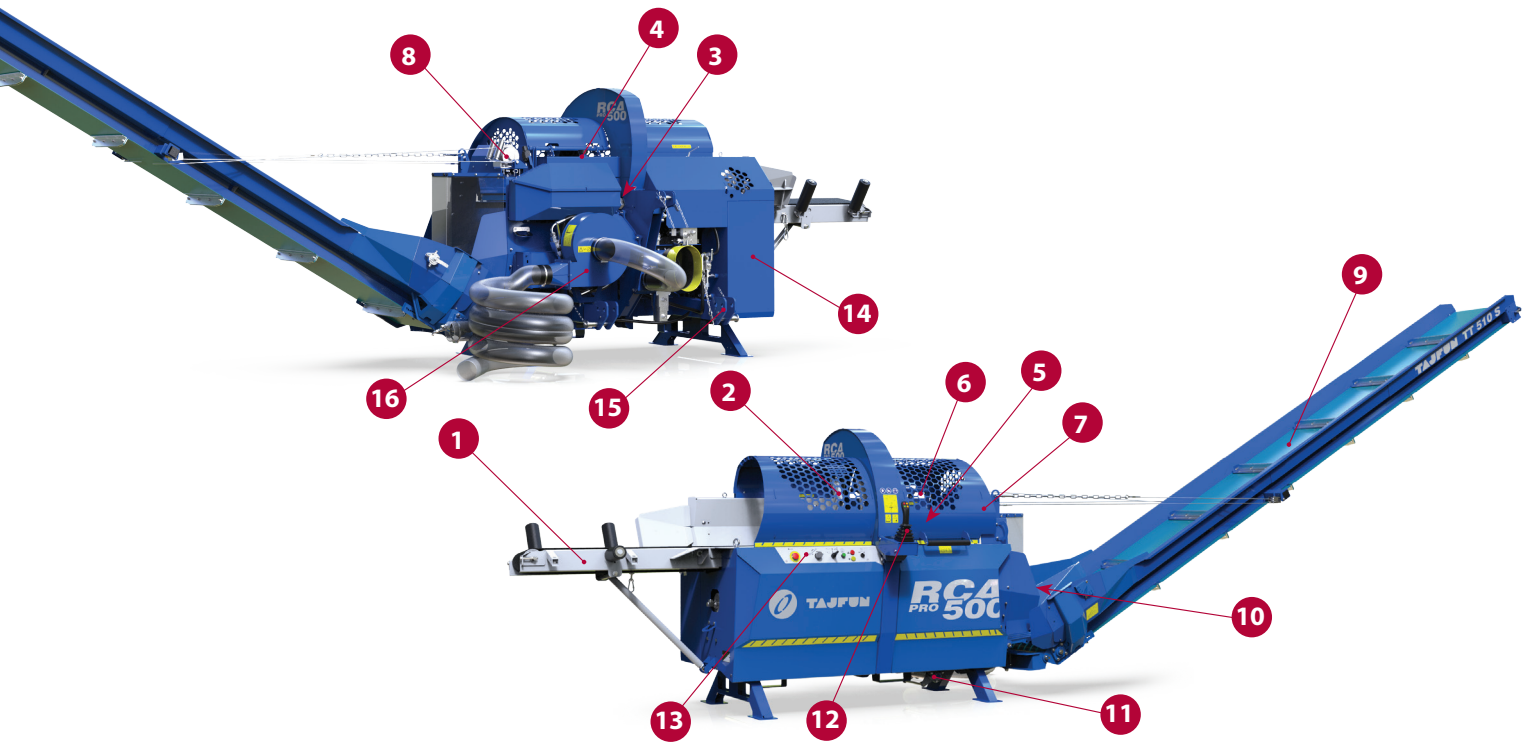
3.1. DESCRIPTION

The firewood processor (RCA PRO 500) is used to make wooden logs.
The work process takes place in the following order:

- Storage of logs on the **live deck** (accessory), which allows transverse and longitudinal feeding of logs, synchronised with the infeed belt on the machine;
- Transport of logs of maximum diameter (5 - 50 cm or 2" - 20") with an **infeed conveyor** to an adjustable length limiter that determines the cutting length (25 - 50 cm or 7.9" - 20") (*See section: Wood feeding*);
- Cutting with a **chain saw** to an adjustable length (*See section: Cutting);*
- Splitting logs. By choosing the appropriate **splitting wedge**, the size (section) of the log splits may be chosen (*See section: Splitting*);
- Transport of log splits with an adjustable **discharge conveyor** (adjustment of speed, height and transverse offset) (*See section*: *Discharge Conveyor)*.

When using pre-split wood, the quality of the firewood will be worse, and the capacity of the machine will also be lower.

3.2. MAIN COMPONENTS OF THE MACHINE



1	Infeed Conveyor	9	Discharge Conveyor
2	Log Holder	10	Splitting Cylinder, Splitting Wedge
3	Chain saw drive	11	Wedge lifting mechanism
4	Chain lubrication oil reservoir	12	Operating handle - Joystick
5	Swinging Lap	13	Control panel
6	Length Limiter	14	Hydraulic oil reservoir
7	Machine cover with safety switch	15	Three-point hitch
8	Hydraulic pulley	16	Sawdust extractor fan

3.3. TECHNICAL DATA

RCA PRO 500	
Cutting length	25 - 50 cm (7.9″ - 20″)
Cutting diameter	5 - 50 cm (2″ - 20″)
Sawbar	24″, b = 0.058″ (1.5 mm)
Chain	3/8″ Oregon DuraCut™, Z = 42
Splitting force	250 kN (≈ 25 T)
Required Tractor Capacity	30 kW (40 KM) - Drive 70 - 80 kW (95 - 110 KM) - transport
Required tractor outlet voltage	12 V
Electric fuse	20 A
PTO Shaft Speed	min.: 400 min^{-1} (RPM)
	max.: 430 min^{-1} (RPM)
Max. splitting pressure	230 bar
Volume of oil in reservoir	100 L (25 gal)
Chain lubrication oil reservoir volume	8 L (2 gal)
Operating noise level (max.)	92 dB (A)
Weight (RCA + sawdust extractor fan + discharge conveyor)	1650 kg (3638 lbs)

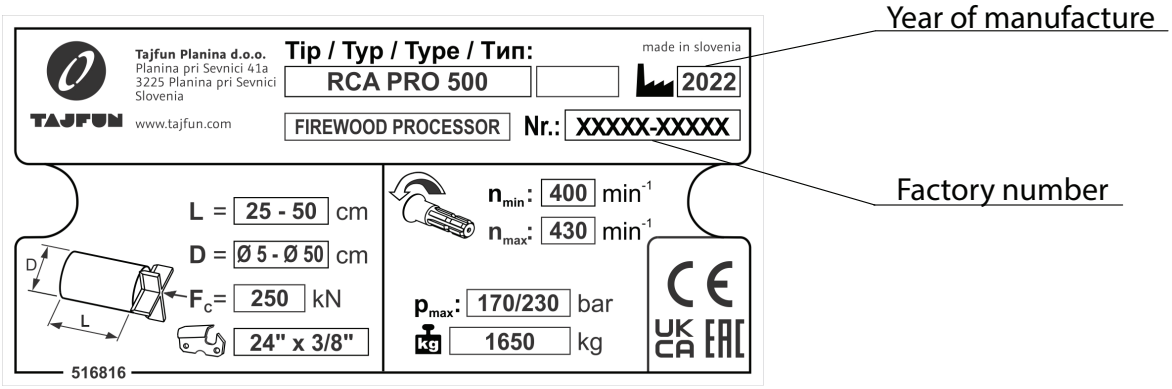
Discharge Conveyor TT 510 S	
Discharge conveyor length	5000 mm (16.5')
Conveyor belt width	580 mm (23″)
Maximum speed	0.8 m/s (31.5″/s)
Weight	255 kg (562 lbs)

Dimensions RCA PRO 500		
	Working Position *(incline 45°)*	Transport Position
Width	6930 mm (273″)	2410 mm (95″)
Length	1625 mm (64″)	1625 mm (64″)
Height	3800 mm (150″)	2630 mm (104″)

Sawdust extractor fan XE 12 Hy-V	
Number of revolutions	~ 2400 min^{-1}
Diameter and length of the pressure (outlet) tube	Ø 120 mm; 5 m
Diameter and length of the pressure (inlet) tube	Ø 140 mm; 1 m
Length x width x height	375 x 636 x 700 mm
Weight	30 kg

3.4. TYPE PLATE

The type plate contains information about the product and the manufacturer and is attached to the machine body.



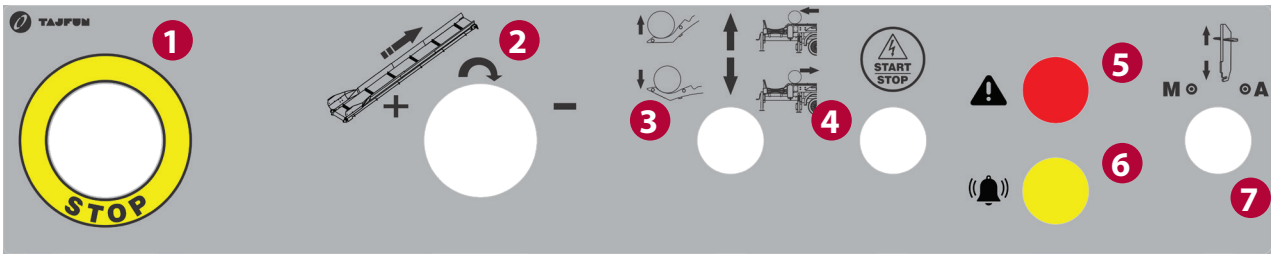
When ordering spare parts, always state the type and complete factory number of the machine! In this way, you will receive exactly those parts that belong to your version of the machine.

CE

With the CE mark the manufacturer declares that the machine meets all essential safety and health requirements.

The manufacturer has also issued the prescribed **Declaration of Conformity** for this machine.

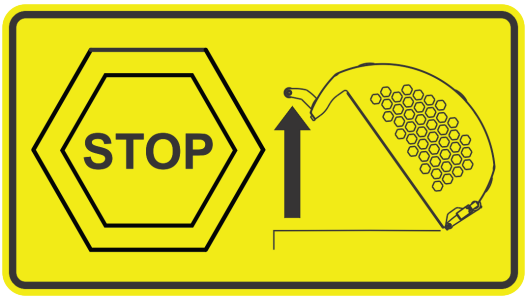
3.5. LABELS ON THE MACHINE AND THEIR MEANING



Control panel:

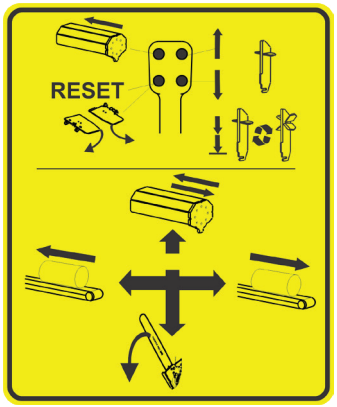
1. Safety STOP switch - EMERGENCY STOP;
2. Setting the belt speed;
3. Operating a ramp or log loader;
4. Turning the el. system off/on - start/stop switch;
5. Red light: State of the security circuit;
6. Yellow light: Alarms;
7. Toggle switch for automatic or manual levelling of the splitting wedge.

Automatic machine stop when the cover is raised.



Dangerous area of the machine. The dangerous area extends 3 m around the machine.

Functions of the control handle - Joystick

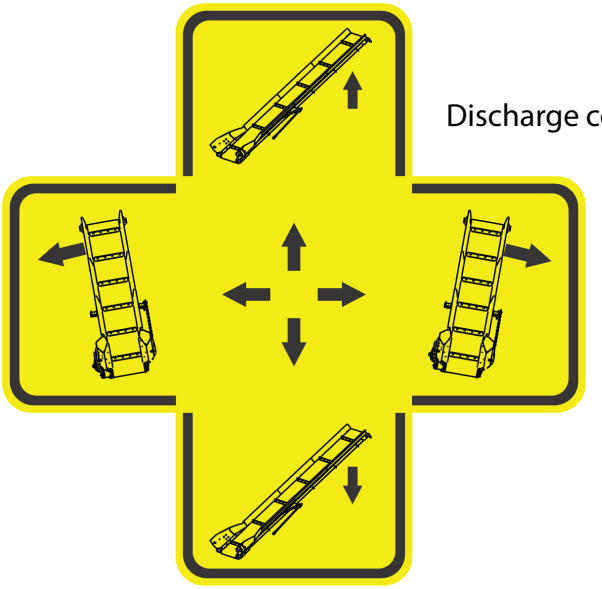


Be sure to read the instructions for use.

Mandatory use of protective gloves.

Mandatory use of mufflers and protective eyewear.

Mandatory use of protective footwear.



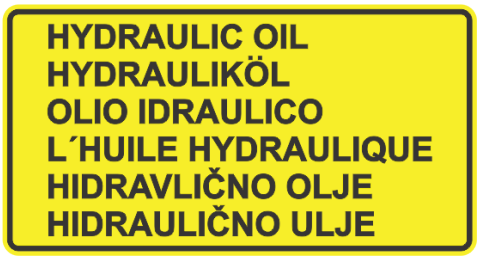
Discharge conveyor movement functions.

Direction of movement of the drive belt.

Display of the cutting length setting.

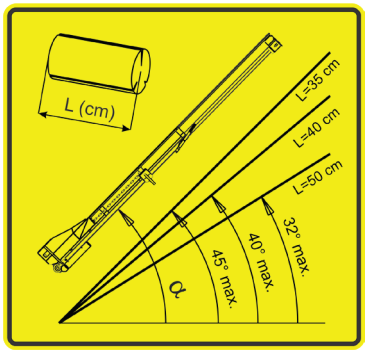
Display of the remaining length of the log on the infeed conveyor.

Hydraulic oil reservoir.



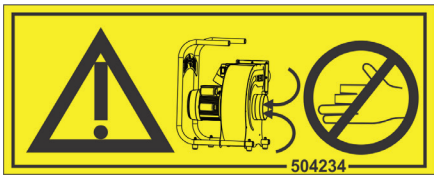
Cutting chain lubrication oil reservoir.

Maximum permissible tilt of the discharge conveyor relative to the length of the log splits.

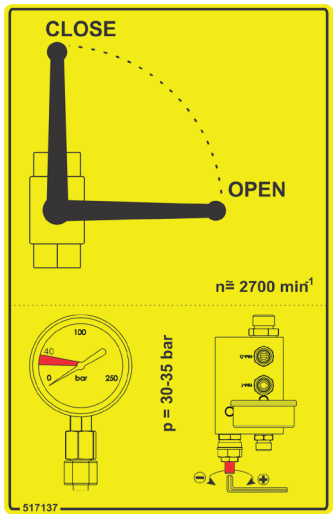


Position of the toggle switch in case of working with the live deck/lift table or without.

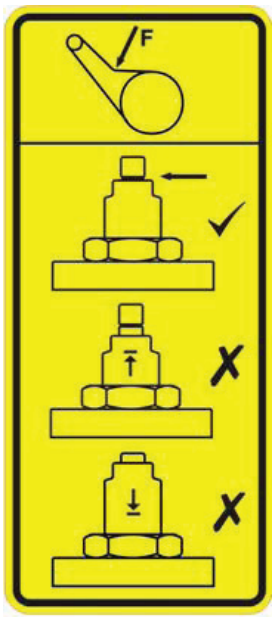
Do not reach into the dangerous area of the sawdust extractor fan.



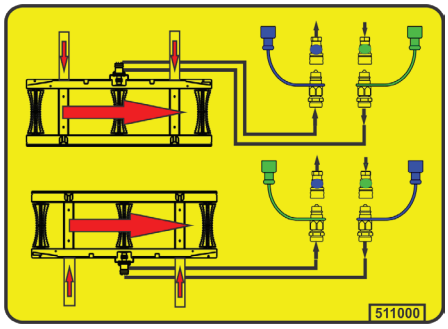
Switching the sawdust extractor fan on/off.



Display of correct belt tension.



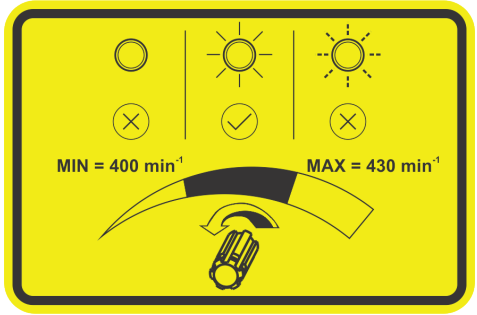
Display of the connection of the hydraulic hoses of the live deck/lift table according to its layout.



Danger of contact with the cutting chain.

Correct direction of rotation of the P.T.O. shaft. Permissible RPM range.

Setting the intensity of lubrication of the cutting chain.



Display of the activity of the warning light, depending on the number of revolutions of the P.T.O. shaft:

- Flashes slowly -> revolutions too low;
- Solid -> correct revolutions;
- Flashes quickly -> revolutions too high.

4.1. CONNECTION TO THE TRACTOR

Attach the firewood processor to the three-point tractor system using bolts. The lower lift arms of the tractor must be fixed with tensioning screws in such a way that they prevent the machine from moving transversely. When transporting the machine, consider the weight of the entire machine *(See section: Technical data)*. Connect the P.T.O. to the P.T.O. shaft and secure it with a safety chain. Connect the power cable of the machine to the 12 V socket on the tractor (*See section: Connection to the power supply)*.

When installing for the first time, also check the length of the P.T.O.

Check the length of the P.T.O. by raising and lowering the machine to find the position with the shortest distance between the connecting shafts. In this position, the tubes should be approximately 20 mm shorter with the P.T.O. installed.

If the P.T.O. is too long, it is necessary to shorten it:

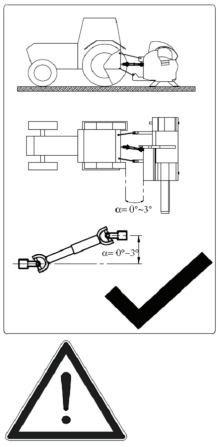
- Saw off the steel and plastic tubes at both ends to the same length. Then, file the edges, clean and lubricate.

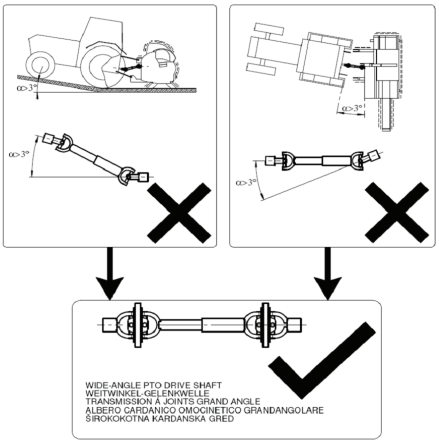
Do not use a P.T.O. with a clutch.

When using our machines, we recommend Tajfun P.T.Os:

Name	Dimensions	Compatibility
C Line-T 6BR + KK560 P.T.O.	1 3/8" Z6 – 1 3/8" Z6; LKK = 560	EP 12 (RCA 330 JOY, RCA 380, RCA 400 JOY, RCA 480 JOY, RCA PRO 500)
C Line-T4 DZ DZ BR + KK510 P.T.O.	1 3/8" Z6 – 2X; LKK = 510	RCA 330 JOY, RCA 380, RCA 400 JOY, RCA 480 JOY, RCA PRO 500

The output shaft of the power unit and the input shaft on the machine must be as parallel as possible! If they are at an angle, due to the geometry of the P.T.O. shaft, the rotation is transmitted unevenly and vibrations are created as a result. If this cannot be ensured, it is necessary to use a P.T.O. shaft with wide-angle joints on both sides, which is the only one that ensures uniform rotation at different angles.

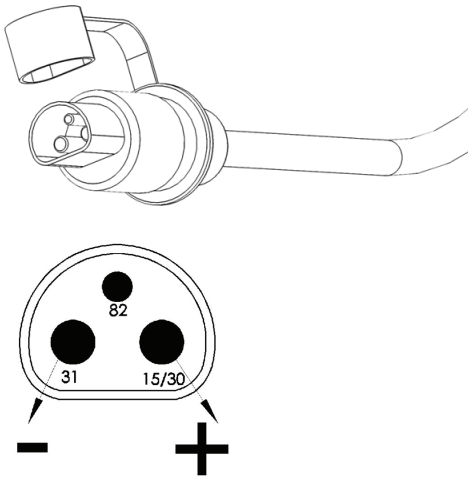




- The P.T.O. (spline shaft 13/8!" Z6 – DIN 9611A) must correspond to the required drive power of the machine *(See section: Technical data)*.
- The P.T.O. shaft on the tractor must rotate clockwise (looking towards the tractor). If you are working with an EP (Electric power unit), the shaft must also rotate clockwise.
- **Recommended P.T.O. shaft speed: 420 min^{-1};** maximum: 430 min^{-1}; minimum: 400 min^{-1}.
- With the machine disconnected, install the P.T.O. on the P.T.O. shaft holder.
- Display of the activity of the warning light, depending on the speed of the P.T.O. shaft:

Speed too high > 430 min^{-1}		*flashes quickly*
Speed too low < 390 min^{-1}		*flashes slowly*
Appropriate speed		*solid*

4.2. CONNECTION TO THE POWER SUPPLY



Connect the 3-pin plug to the power supply on the tractor or EP unit (accessory).

The power source must have a voltage of 12 V and current protection with 20 A fuses, otherwise the electrical system may malfunction. From the source of power, the minimum cross-section of each wire must be at least 5 mm^2.

Always disconnect the power cable after finishing work, otherwise the battery on the power unit may be discharged.

4.3. PLACING THE MACHINE IN WORKING POSITION

- Place the firewood processor on a level and solid surface;
- place the infeed conveyor in its working position (*See section: Infeed Conveyor)*;
- place the discharge conveyor in its working position (*See section: Discharge Conveyor)*.

It is not allowed to move the firewood processor when in working position. Before any transport or relocation, put the machine in the transport position.

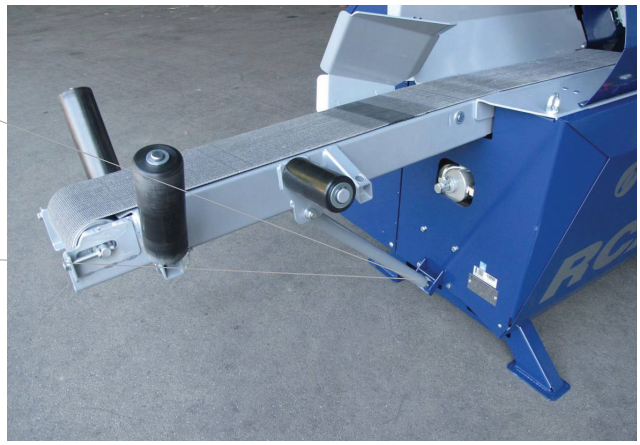
4.4. PLACING THE MACHINE IN TRANSPORT POSITION

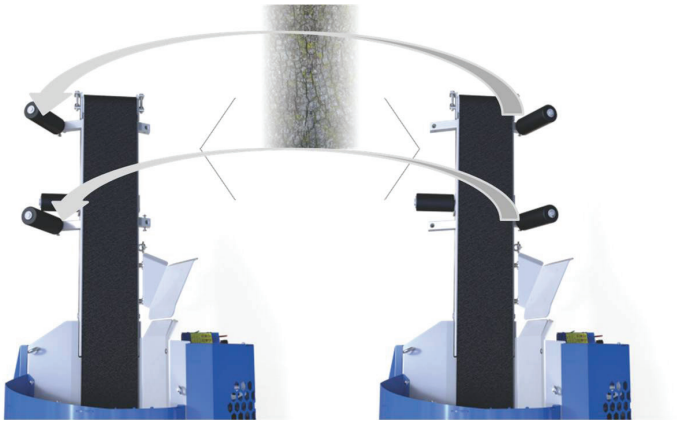
- Lift the infeed conveyor in its transport position (*See section: Infeed Conveyor);*
- lift the discharge conveyor in its transport position (*See section: Discharge Conveyor)*.

4.5. INFEED CONVEYOR

The infeed conveyor must be placed in a horizontal working position before starting work:

- Remove the safety pin;
- Remove the support limiter;
- Lower the infeed conveyor to a horizontal position and support it with a support leg;
- Adjust the support leg so that the infeed belt is slightly raised in the middle (it is already set at the factory);
- Open the guide flap and, if necessary, move the side rollers to the appropriate position, according to the direction of transport of the logs to the infeed conveyor.



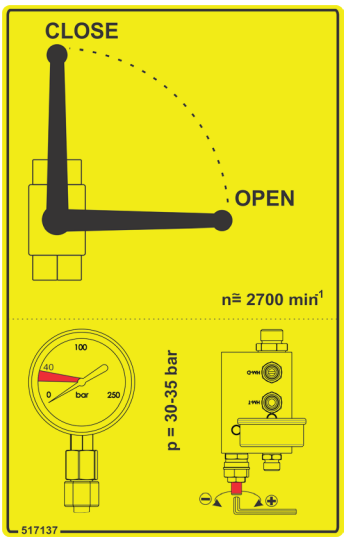


4.6. SAWDUST EXTRACTOR FAN

To turn it on, it is necessary to open the valve of the sawdust extractor fan.

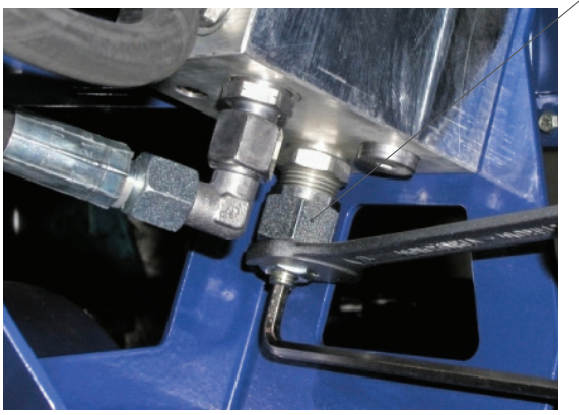
CLOSED VALVE

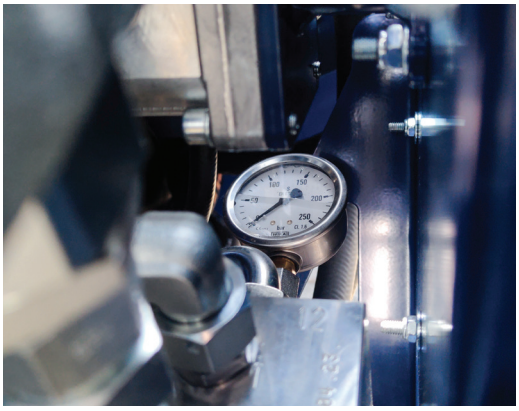
OPENED VALVE



IMPORTANT: Check the pressure on the pressure gauge of the sawdust extractor fan! Eliminate the deviation from 30 - 35 bar by adjusting the safety valve as shown in the picture below.

Safety valve



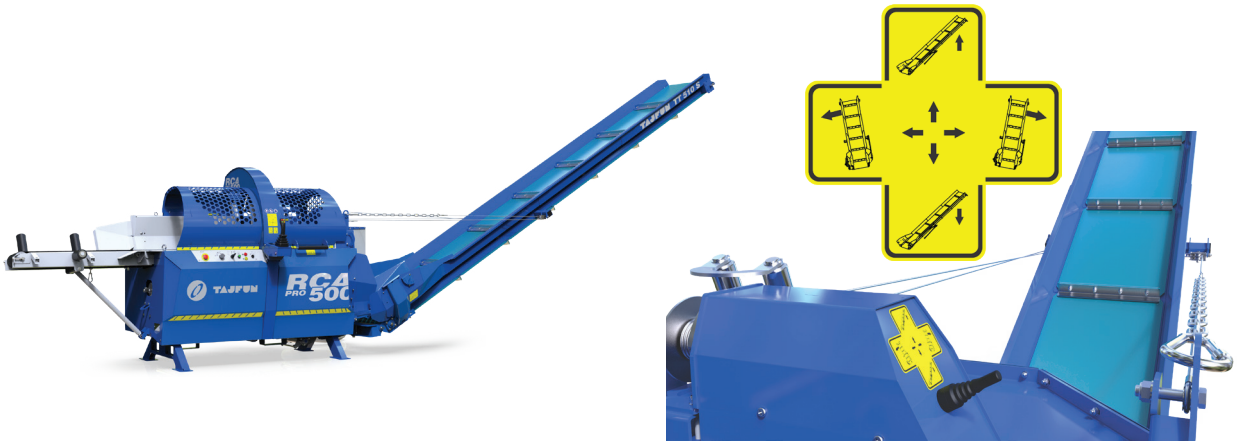


Pressure during operation	30 - 35 bar
Number of revolutions	~ 2400 min^{-1}

If the sawdust extractor fan is not in use, it is necessary to remove the suction tube and allow the sawdust to flow freely through the canal for sawdust discharge.

4.7. DISCHARGE CONVEYOR

You raise and lower the discharge conveyor with the operating handle - joystick of the discharge conveyor, which is located at the hydraulic winch. At the desired height, always secure it with a supporting chain. The discharge conveyor can also be moved from the centre position by 15° to the left or right. Before starting work, place the discharge conveyor in its working position.



Placing the discharge conveyor in its working position:

- The machine should be in operation (*See section: Machine start-up);*
- Move the operating handle - joystick of the discharge conveyor "down" to move the discharge conveyor out of the vertical position. If necessary, push the discharge conveyor slightly away from the machine. The discharge conveyor belt speed adjustment valve should not be set to the slowest speed, because the brake in the hydraulic winch will not release in this case;
- Set the discharge conveyor to the desired angle of inclination (max. 45°) by moving the operating handle - joystick up and down.

Discharge Conveyor TT 510 S

- Turn the vale in the placement position and press and hold the yellow button on the machine's control handle - joystick until the discharge conveyor is fully extended.

Placing the discharge conveyor in its transport position:

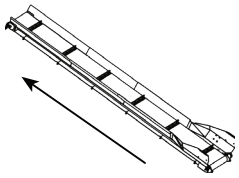
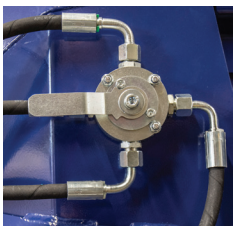
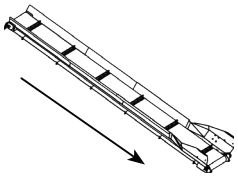
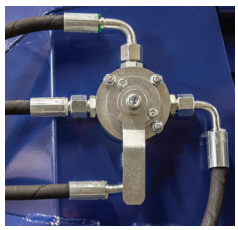
Before placing it in the discharge conveyor position, it is necessary to align the conveyor to the centre position (operating handle - joystick left or right).

Discharge Conveyor TT 510 S

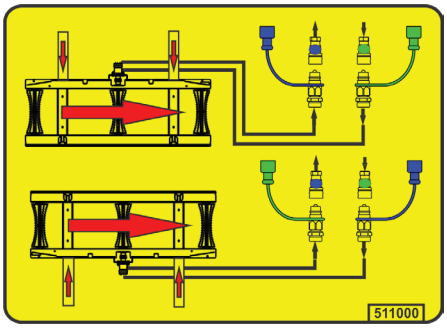
- Turn the vale in the folding position and press and hold the yellow button on the machine's control handle - joystick until the discharge conveyor is fully folded.
- Move the operating handle - joystick of the discharge conveyor "up" and place the discharge conveyor in its transport position.

The discharge conveyor belt speed may be regulated with the discharge conveyor belt speed regulator.

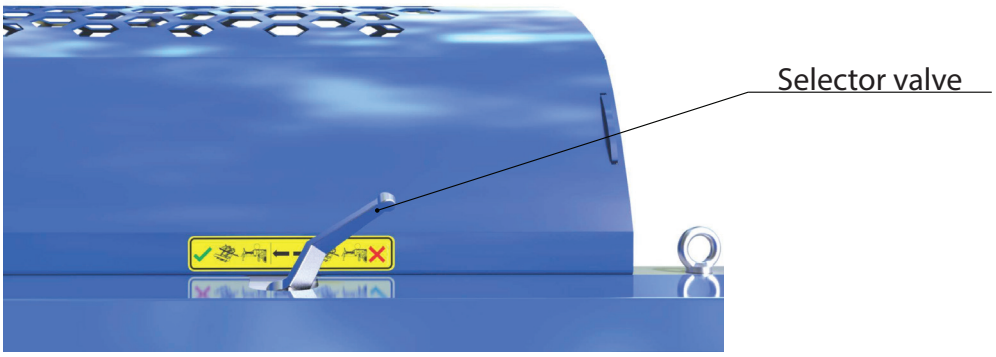
Discharge Conveyor TT 510 S

4.8. CONNECTING THE ACCESSORIES

- Connect the hydraulic hoses (live decks or log loaders) with quick couplings to the couplings on the machine. A sticker and coloured covers of the couplings are helpful for correct connection.
- If the hydraulic couplings on the machine are not connected or if the live deck is not used, the selector valve must be in the appropriate position (X).



5. MACHINE START-UP

Before each start-up of the machine, a visual inspection of the machine must be carried out. Check for:

- The operation of automatic tensioning (pre-tensioning with springs) and sharpness of the cutting chain;
- amount of hydraulic oil and oil for lubricating the cutting chain;
- correct installation of all safety pins;
- the cleanliness of the machine (*See section*: *Cleaning during operation);*
- damaged tubes or cables (scratched, pressed, etc.);
- mechanical damage on the machine;
- regular maintenance of the machine according to the maintenance plan;
- firmly tightened screws and nuts.

Machine start-up:

- The machine must be placed in the working position, the sawdust extractor fan switched off;
- set the manual throttle lever on the tractor to minimum;
- lift the cover of the machine and disable the operation of all the main functions of the machine;
- turn on the P.T.O. shaft drive;
- the required RPM of the P.T.O. shaft (420 min^{-1}) can be achieved by manually opening the throttle;
- the safety STOP switch must be turned off;
- turn on/press the Start/Stop switch on the control panel;
- lower the protective cover;
- press the green RESET key (Joystick);
- turn on the sawdust extractor fan.

Before starting work, it is necessary to check the operation of the safety devices and perform a function test of the machine:

- Check the faultlessness of the machine and equipment and the lubrication of the cutting chain;
- check the operation of the safety STOP switch (EMERGENCY STOP);
- check the operation of the safety switch on the protective cover;
- check that all the functions of the machine are working (*See section*: *Operating RCA PRO 500).*

If faults are found during the inspection, they must be corrected before starting work!

At outside temperatures below 0°C, let the machine idle for about **5 minutes** to warm up the hydraulic system to operating temperature (hydraulic hoses warm to the touch).

Only one person can operate the machine! Make sure that no one else is near the machine.

5.1. OPERATING RCA PRO 500

TURNING ON OPERATION

The protective cover of the machine must be closed. Press the Start/Stop button located behind the operating handle and hold it for about 3 seconds. Then press the green button (RESET) on the control handle - joystick. The safety STOP switch must be turned off.

Control handle (Joystick)

The control handle (joystick) has the following functions:

- Left / right -> move the infeed conveyor left / right;
- Back -> cutting (2 phases: first fixing the log and starting the cutting chain, then moving the saw);
- Forward -> splitting (short push of the handle forward, do NOT hold it there). Holding forward longer than 0.5s activates "Full splitting".

Buttons on the control handle - joystick:

- Yellow buttons -> move the wedge up / down;
  -> turn on/off the additional electrical output (e.g.: LED light) by simultaneously pressing both yellow buttons (5 seconds)
- Red button -> return the splitting cylinder back from any position;
- Green button -> RESET function, manually open the swinging laps. After each shutdown of the machine (lifting the cover, STOP switch), it is necessary to press RESET to re-establish the control functions.

Control panel:

A -> Safety STOP switch - "EMERGENCY STOP";

B -> Discharge conveyor belt speed regulator;

C -> Live deck (discharge conveyor chain), log loader;

D -> On/Off switch for turning on and off the el. system;

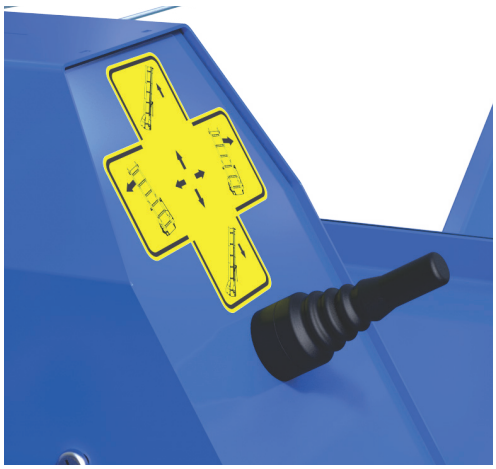
E -> Red light - state of the security circuit;

F -> Yellow light - alarms (for the description *See section: Alarms and errors)*;

G -> toggle switch for automatic or manual levelling of the splitting wedge
A -> automatic levelling
M -> manual levelling

Additional functions - discharge conveyor

- UP / DOWN -> raising and lowering the discharge conveyor using the hydraulic winch;
- LEFT / RIGHT -> moving the discharge conveyor left or right (15° to each side).



Warning!

The speed of these functions depends on the setting of the discharge conveyor belt speed adjustment valve.

If the speed is set too low, the hydraulic winch remains locked and does not work.

5.2. DISPLAY AND CONTROL

The display is used to show information that is useful to the machine's operator. In addition to displaying information, it also enables data input, in the form of selection (language, length of sawing, production reset, ...).
The display consists of 5 selection keys and a screen.

5.2.1. NAVIGATING THE DISPLAY

Using the "Up" and "Down" keys, you can move through the various display windows and within the selected display window.
Enter the selected display window with the "Confirm" key.

Use the "Left" and "Right" keys to move through the additional displays of the selected line. Press the "Confirm" key to confirm the desired selection.
If you do not want to confirm the selection, wait 30 seconds and the display will automatically exit without any changes to the settings.

Certain values can be reset to 0 (interval working hours, interval production, firewood production, average production). Use the keys to select the desired value and press the "Confirm" key. By pressing the "Right" key, the "RESET" option appears. Confirm the reset by pressing the “Confirm” key.

5.2.2. VALUES ON THE SCREEN

Value	Units	Description
RCA PRO 500		Machine type
TOTAL HOURS	[h]	Working hours
TOTAL PROD	[m^3]	Total production
ID:		Control circuit ID
PTO RPM	[min^{-1}]	P.T.O. shaft revolutions
SAW RPM	[min^{-1}]	Saw hydro-motor revolutions
SUPPLY	[V]	Voltage
OIL TEMP	[°C]	Hydraulic oil temperature
SYSTEM PRESS	[bar]	System pressure
SPLIT. PRESS	[bar]	Splitting pressure
SAWBAR PRESS	[bar]	Sawbar movement pressure
HYDRO. PRESS	[bar]	Chain saw hydro-motor pressure
DIAMETER	[cm]	Log diameter (measured during cutting)
WEDGE HEIGHT	[cm]	Splitting wedge height
FULL / FAST SPLITTING		Splitting method
TMP. HRS	[min]	Interval working hours
TMP. PROD	[m^3]	Interval production
FIREWOOD	[m^3]	Firewood production
AVG. PROD	[m^3/h]	Average production
LENGTH	[cm]	Value setting for cutting length
DIAMETER CORR	[%]	Diameter correction
FIREWOOD CORR		Firewood correction
LANGUAGE		Language
ALARMS_0		Machine alarms
ALARMS_1		Machine alarms
ERRORS_0		Machine errors
INPUT_1		State of inputs and outputs
STATUS		Machine statuses
BLE:		Bluetooth status
SW:		Software version

5.2.3. ALARMS AND ERRORS

The machine's alarms and errors are displayed. In the event of a error/alarm, a yellow light on the control panel lights up.

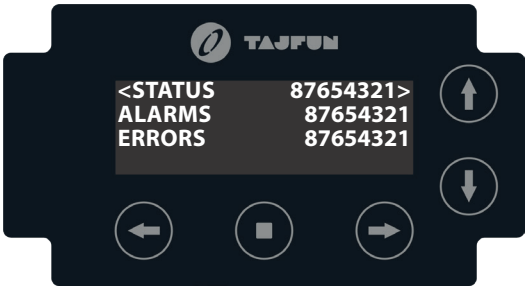
Machine alarms are reset when the *"Confirm"* key is pressed and the red button on the main joystick is pressed for 3 seconds.

ALARMS_0							
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**
Saw drive pressure > 250 bar (3 s)	Supply voltage > 16 V (6 s)	Cutting pressure > 50 bar (2 s)	Splitting pressure > 260 bar (10 s)	System pressure > 180 bar (60 s)	Supply voltage < 10 V (6 s)	Oil temp. > 85°C	P.T.O. shaft revolutions > 450 min^{-1} (60 s)

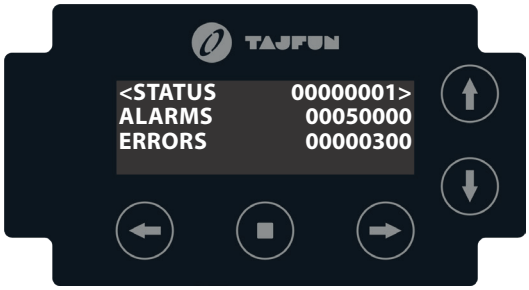
ALARMS_1							
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**
Not in use	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use	Cutting chain speed > 13000 min^{-1} (5 s)

ERRORS_0							
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**
Not in use	Saw drive pressure sensor error ANA_7	Oil temp. sensor error ANA_6	Splitting wedge height sensor error ANA_5	Log diameter sensor error ANA_4	Cutting pressure sensor error ANA_3	Splitting pressure sensor error ANA_2	System pressure sensor error ANA_1

DISPLAY EXAMPLE:
All statuses, alarms and errors are displayed.



DISPLAY EXAMPLE:
Status no. 1, alarm no. 5, error no. 3.



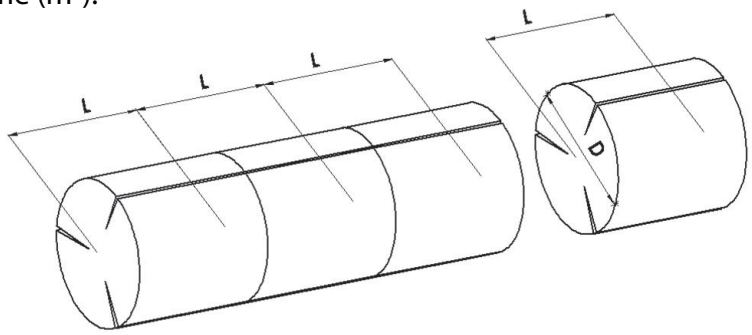
5.2.3. STATE OF THE SECURITY CIRCUIT

Definition	**Red light** *State of the security circuit*
Open safety circuit	*The light is solid*
Closed safety circuit	*The light flashes*

When the safety circuit is open, one of the safety devices (protective cover or emergency stop) is activated.
When the safety circuit is closed, it is necessary to press the green RESET button on the joystick to operate the machine.

5.2.4. MACHINE PRODUCTION

The output of the machine represents the amount of processed wood that is cut and split in the machine. It is determined based on the DIAMETER (D) and LENGTH (L) of the sawn logs and is expressed in volume (m^3).



DIAMETER [cm] (D)
The machine measures the diameter automatically, while cutting.

LENGTH [cm] (L)
For the correct calculation of production, the length must be set manually on the display (*See chapter: Navigating the display)*. Length was set so that it matches the cutting length limiter setting.

The factory-set LENGTH (L) on the new machine is 33 cm. If, before starting work, you forget to select the appropriate value on the display that matches the setting of the cutting length limiter, the programme on the machine takes into account the factory-set value or last selected length.

Total production [m^3] - *(TOTAL PROD)*
It is the sum of the volume of CUT and split wood during the entire lifetime of the machine.
Resetting is not possible.

Average production or productivity [m^3/h] - *(AVG.PROD)*
Calculates the amount of processed wood per hour, since the last reset.

Interval working hours [min] - *(TMP.HRS)*
It is the time the machine has been running since the last reset.

Interval production [m^3] - *(TMP.PROD)*
It is the sum of the volume of cut and split wood on the machine from the last reset.

Diameter correction [%] - *(DIAMETER CORR)*

The values of the calculated production volume (m^3) depend on the measurements of the diameter of the log and may deviate. For an accurate production calculation, the diameter correction needs to be set on the display, according to the curvature of the wood that is currently being cut and split. The correction can be set between 85% and 100%, where the value of 85% is intended for the most curve log, and 100% for a completely straight one. The value is factory set at 100%.

Diameter correction	100%	92%	85%

Firewood production [m^3] - *(FIREWOOD)*

It is the sum of the volume of cut and split wood on the machine according to their shape (piled, stacked, etc.). The volume depends on the shape, size and arrangement of individual pieces of wood, so that production can be adjusted according to the current work or the value needed. Production is adjusted using the Firewood correction (*FIREWOOD CORR*) option on the display.

Firewood correction - *(FIREWOOD CORR)*

The value can be set between 1.0 and 2.8 (the factory setting is 1.0). For an easier presentation, the correction factors for the production of split wood are shown in the table and in the pictures.

Shape of wood	Round logs	Stacked firewood	Metre firewood	Piled firewood	Shavings
Firewood correction	1	1.2	1.4	2.0	2.8

	Round logs	Stacked firewood	Piled firewood
Volume of 1 m^3 of wood in various forms	1 m^3	1.2 m^3	2.0 m^3

The machine does not take into account the last piece of wood when calculating productions. To add the value of the last piece, press the green key on the joystick and at the same time push the joystick forward.

The calculated production values are informative (framework) and may deviate due to curved logs, incorrectly set corrections, lengths, etc.

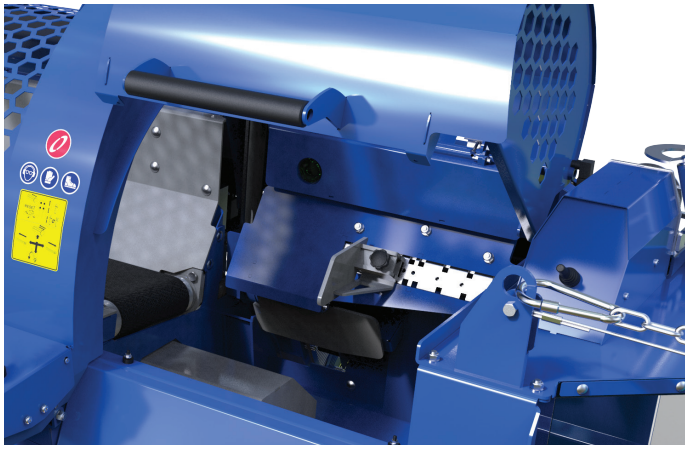
6.1. WOOD FEEDING

The infeed conveyor needs be placed in a horizontal working position before starting work:

Feeding is activated by pushing the control handle - joystick to the right, and feeding can also be stopped at will (when the log reaches the length limiter) by returning the handle to the neutral position. By pushing the control handle - joystick to the left, feeding in the opposite direction is activated.

Attention! If feeding is still active even after the log has already reached the length limiter, the infeed belt slides and can be damaged!

During feeding, both swinging laps rise and remain in position until the cutting phase is complete or until the green RESET button is pressed.
Also, the length limiter moves closer during feeding.



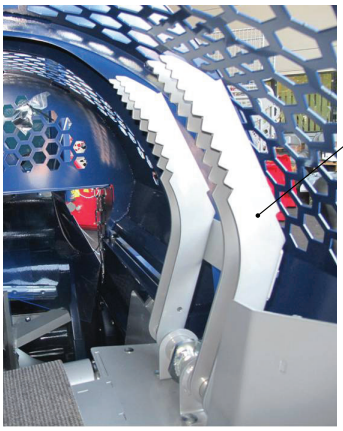
6.2. CUTTING

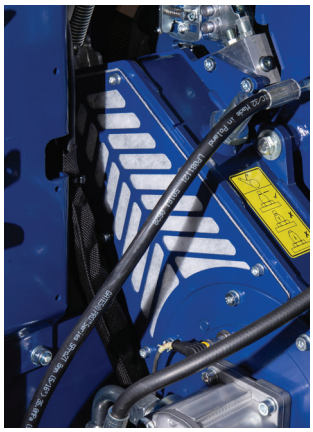
The chain saw is in motion only during cutting, otherwise it is stationary and located in the starting position.
Switch on the cutting process by moving the control handle - joystick back. The cutting process involves 2 stages. In the first stage, you fix the log with the holder and turn on the power unit to rotate the cutting chain, and in the second stage, the movement of the sawbar begins. During the cutting process, the handle must be kept in the "back" position, otherwise the sawbar will return to its starting position.
There are two inductive switches on the cylinder for moving the sawbar. Switch 1 (the cylinder is retracted) prevents the infeed belt from moving when the sawbar is out of its starting position. Switch 2 opens the swinging laps and returns the sawbar to its original position.
The force with which the cylinder pushes the sawbar is set at the factory with pressure and is not allowed to be changed. The speed of the sawbar movement is also fixed. The cutting speed varies depending on the sharpness of the cutting chain and the type or thickness of the wood.

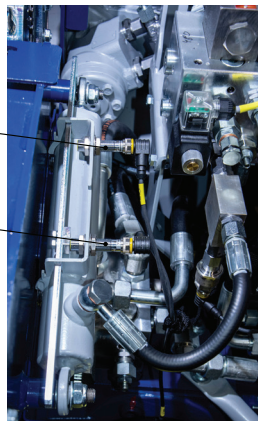
Before cutting, always check the sharpness and operation of the automatic chain tensioner, as well as the amount of lubricating oil!

The wood must not move during cutting, and be especially careful with the last piece, so that both holders grip it well. Moving the wood during cutting leads to damage to the sawbar and chain!

The swinging laps ensure a better fall of the cut log rounds into the splitting chute and are in a horizontal position during cutting. They open, when the sawbar is in the lower position. They can be opened at any time by pressing the green button on the control handle - joystick. This is especially useful for curved wood, which leans against the lap during cutting and thus presses laterally on the sawbar, which hinders cutting.

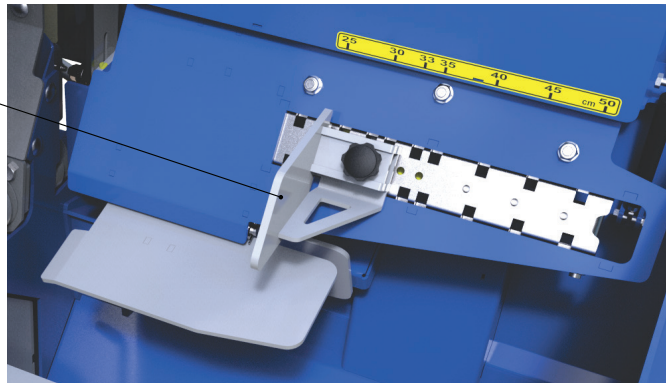






Regularly clean and, if necessary, replace the filter on the saw drive. A dirty filter prevents the ingress of air for cooling the drive parts and shortens their service life.

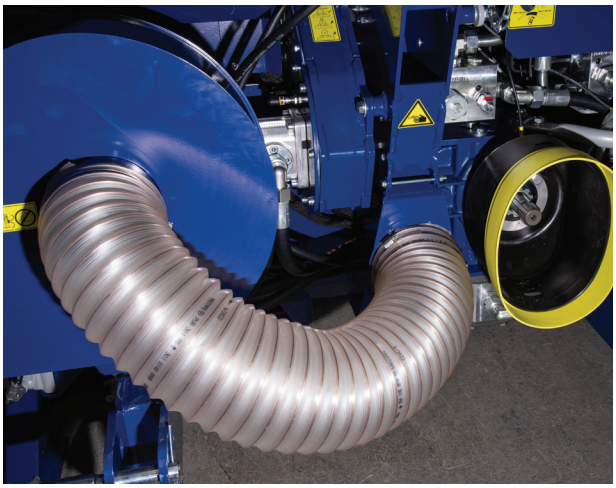
6.2.1. SETTING THE CUTTING LENGTH

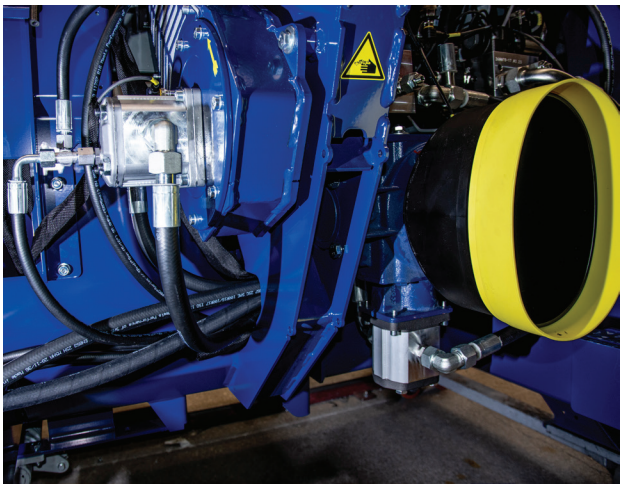


The length of the log splits may be adjusted by using the position of the length limiter, which is fixed in the desired position with a screw.

Important! The set value of the length must also be entered in the display for the correct calculation of the production
(See section: Machine production).

6.2.2. SAWDUST DISCHARGE





The canal for sawdust discharge is connected to the suction tube of the XE 12 Hy-V unit. This must be switched on during machine operation. Otherwise the canal for sawdust discharge becomes clogged. If the sawdust extractor fan is not used during work, it must be switched off (close the valve) and the suction tube with the adapter must be removed from the canal for sawdust discharge.

The firewood processor can also be used indoors, but only if you have the sawdust extractor fan switched on.

6.3. SPLITTING

Splitting is carried out using a splitting cylinder that presses the log round against the splitting wedge. The splitting speed depends on the resistance of the wood and changes during splitting. Since the splitting speed is inversely proportional to the splitting force, the splitting cylinder allows a higher splitting force at a lower speed and a lower force at a higher splitting speed. Required speed or the splitting force is automatically selected by the cylinder, which results in a very good utilisation of the energy used.

Switch on the splitting cylinder by briefly pushing the control handle - joystick forward. **Do not hold the handle in this position!** The cylinder will automatically travel back and forth. The cylinder is returned by an adjustable switch under the cover of the machine.

Before each splitting operation, make sure that the splitting is in the correct position in the splitting chute!

The cylinder can be returned at any time by pressing the red button on the control handle - joystick, lifting the protective cover or pressing the safety STOP switch.

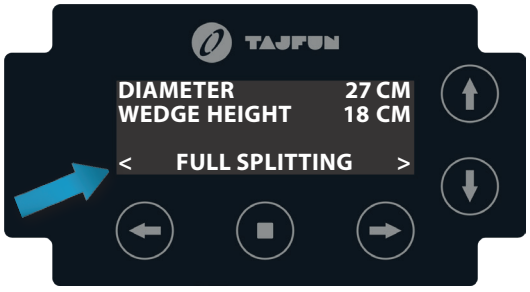
It can happen that the sawn piece falls to the side when it falls into the splitting chute. In that case, you must first open the protective cover and straighten the side lying piece before starting the splitting operation. The pieces that have been sawn at an angle (especially the rear pieces) are also dangerous. These pieces often stand up during splitting, which can lead to damage to the machine.

SPLITTING METHOD

"FAST SPLITTING" - shorter splitting cycle times when splitting short pieces (33 cm or less). Select the FAST SPLITTING option on the display and the splitting cylinder will perform a shorter split, just enough to make room for the next round. The log round, which is currently in the splitting chute, pushes through the splitting wedge beforehand. If you hold the joystick forward for longer than 0.5 s during splitting, the splitting cylinder always goes into full split.

"FULL SPLITTING" - the splitting cylinder makes a full split to the splitting wedge.

The splitting method can be selected on the display.



6.3.1. SETTING THE SPLITTING WEDGE HEIGHT AND REPLACING THE SPLITTING WEDGE

The RCA PRO 500 enables automatic levelling of the splitting wedge. The lifting mechanism of the splitting wedge is connected to the log holder, where the diameter of the log is measured with the help of built-in sensors. With the toggle switch, you can choose between automatic levelling of the splitting wedge (A) or manual levelling of the splitting wedge (M).

Automatic levelling (A):
The position of the splitting wedge is automatically adjusted to the diameter of the splitting. By pressing the yellow buttons on the control handle - joystick, you can further lower or raise the splitting wedge if necessary.

Manual levelling (M):
The splitting wedge can be raised or lowered by pressing the yellow buttons on the control handle - joystick. In this way, you centre the splitting wedge in the centre of the log round and enable the optimal size of the log splits.
The lifting mechanism of the splitting wedge also allows partial height movements of the wedge during splitting. If wood gets stuck under the wedge, it must be removed to avoid damage to the lifting mechanism.

Replace the splitting wedge by:

- Clean the space under the blades;
- Hold the yellow button for lowering the splitting wedge uninterruptedly for 5 seconds until the lifting mechanism is lowered to the lowest position for wedge replacement;
- Pull the wedge out and replace it with another;
- Then slightly lift the mechanism so that it ends in the grip.

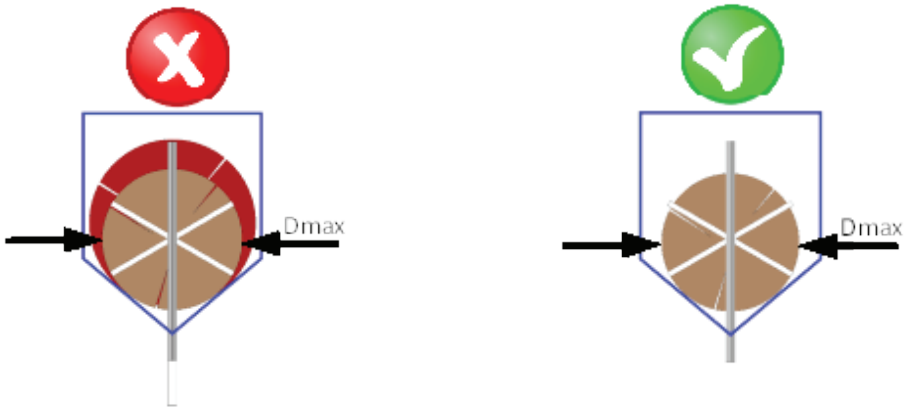
The lifting mechanism has two lower positions:

- Lower working position -> the lowest position to which the lifting mechanism can still be lowered during work. In this position, the splitting wedge is still in the grip of the lifting mechanism and thus cannot be pulled out;
- Lower position for changing the wedge -> holding the yellow button - moving the wedge down (5 seconds), the mechanism moves even lower and releases the splitting wedge.

6.3.2. CORRECT USE OF THE SPLITTING WEDGE

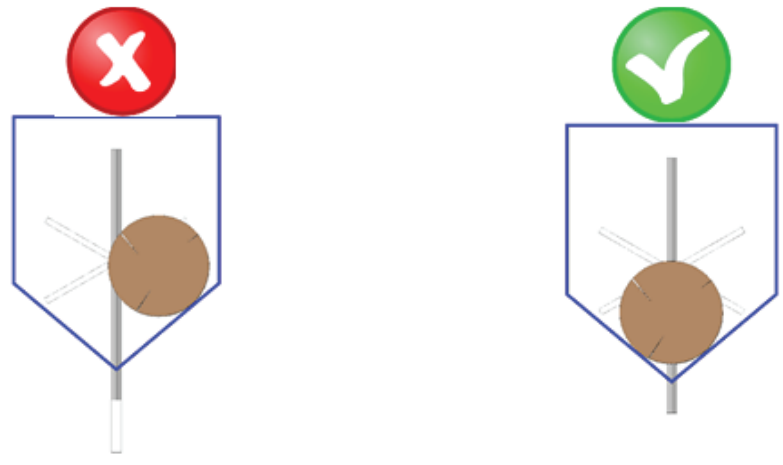
In order for your splitting wedge to have a long service life, follow these instructions:

1. The splitting wedge is intended exclusively for splitting wood up to the maximum diameter listed on your RCA machine.

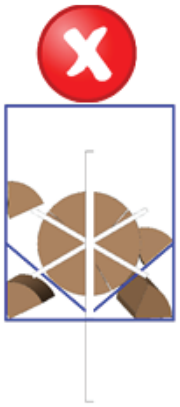


2. The log round in the splitting chute must always be oriented longitudinally towards the splitting wedge. This prevents unnecessary overload and downtime.

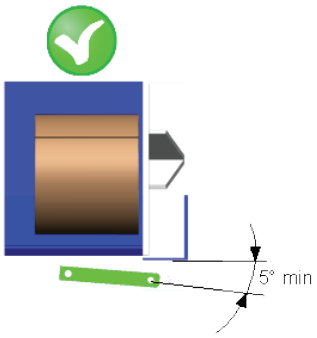
3. The log round in the splitting chute must always be centred on the vertical blade of the splitting wedge. This prevents overloading of the side blades of the splitting wedge.



4. Make sure that the splitting chute and the splitting wedge are always easily accessible. Remove any remaining wood that has become stuck.



5. Adjust the height of the splitting wedge slightly less than the mechanism allows. This allows the splitting wedge to still "breathe" during splitting and does not strain the mechanism and the lower blades of the wedge.



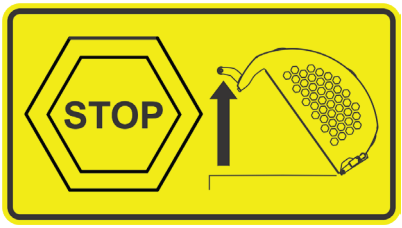
Failure to follow the instructions may result in mechanical damage to the wedge and the machine, which are not subject to complaints.

6.3.3. PROTECTION COVER WITH A SAFETY SWITCH

In the event that disruptions while splitting occur, the splitting process must be stopped immediately.

The cover of the machine is connected to a safety switch, which means that when the cover is raised, all the main functions of the machine stop instantly: feeding stops, and the splitting cylinder and the saw return to the starting position when the cover is raised. The machine cover thus simultaneously functions as the main safety switch.
Only when the machine cover is open and the machine is stopped can manual intervention be performed on the splitting. Also, cutting and splitting cannot continue until the machine cover is closed and the safety switch is on. To restore all functions, it is necessary to press the green RESET button on the control handle - joystick.

The sawdust extractor fan does not stop while the cover is being raised. To turn it off, it is necessary to close the valve of the sawdust extractor fan.



6.4. CLEANING DURING OPERATION

During operation, large piles of sawdust and wood residues especially form in some areas, which must be removed regularly:

1 - Debris under the machine. If you do not clean, sawdust can fill the parts behind the splitting cylinder, preventing it from returning to its starting position. High idle pressure and overheating occur.
2 - Debris under the discharge conveyor drive roller can damage the belt.
3 - The sawdust ejected by the chain saw must be removed continuously so that it does not fill the canal for sawdust discharge (in case of working without a sawdust extractor fan).
4 - Clean the splitting chute (wood scraps and other pieces).

7. MAINTENANCE AND SERVICING

Regular maintenance of the machine is a condition for reliable operation and a long service life of the machine.

Interventions on the electrical wiring may only be carried out by a qualified electrician.

7.1. MAINTENANCE PLAN

During service and maintenance works, the machine must be turned off and the P.T.O. must be disconnected from the power unit!

WHAT?		WHEN?	HOW?
Check the operation of automatic tensioning and the sharpness of the cutting chain		Before each use	Visually
Check the tension of the saw belt		After every 50 hours of operation	*See section: Tensioning the belt*
Tighten all the loose screws and nuts and hydraulic connections		• **After the first hour of operation** • After every 100 hours of operation	Using a tool
Check the quantity of oil	Reservoir of the hydraulic system	Before each use	Visually *See section: Oil quantity*
	Multiplication gear	At least once a week	
	Chain lubrication oil reservoir	Before each use	
Changing oil in the hydraulic system		After 5000 hours of operation or every 2 years	*See section: Changing oil in the hydraulic system*
Changing the return oil filter cartridge		After the first 200 hours of operation Then every 1000 hours of operation When changing oil or if the filter pressure gauge indicator is in the red range	Replace the cartridge.
Clean the pressure oil filter cartridge		Every 1000 hours of operation	Using gasoline for cleaning
Changing oil in the multiplication gear		• After the first 50 hours of operation • Then every 1000 hours • When changing bearings in the multiplication gear	At the lowest plug of the housing, drain the oil into a suitable container and return the plug. Fill in new oil at the upper plug.
Air filter cleaning and replacement at the saw drive		• Cleaning the filter daily • Replacing the filter every 6 months	*See section: Air filter replacement and cleaning*

WHAT?	WHEN?	HOW?
Lubrication		
Lubrication point: a, b, c,	At least every 80 hours of operation	Lithium grease

7.2. WHAT TO DO IF...

FAULT	POSSIBLE CAUSES	FAULT ELIMINATION
The machine does not react to movements of the control handle - joystick or other operating handles.	The power supply cable is not connected.	Connect the cable to the tractor socket.
	The power-supply cable is connected; however, there is no voltage at the socket or the polarity is not correct.	Turn on the lights on the tractor, check the fuses (on the machine fuse box and on the tractor), check the polarity.
	The RESET key was not pressed.	Before each start-up or after opening the protective cover, it is necessary to restore the functions by pressing the RESET key.
The machine shakes violently.	Incorrect position of the tractor in relation to the machine causes vibrations on the P.T.O. shaft.	Reconnect the tractor and machine according to the instructions.
	Worn-out P.T.O. shaft.	Check the P.T.O. shaft and replace it, if necessary.
The machine gets very hot.	Low oil in the reservoir.	Add oil of adequate quality.
	Clogged return oil filter, filter pressure gauge is in the red range with warm oil.	Replace the return filter cartridge.
	Excessive P.T.O. shaft speed results in increased flow and greater losses that heat the oil.	Check the rotation speed of the P.T.O. shaft, which should be between 400 and 430 rpm.
	The splitting roller cannot return completely to its starting position because too much sawdust and wood particles have accumulated behind it, which is also seen in the increase in pressure when the machine is idling.	Remove the splitting roller cover and clean the residue. As you work further, regularly clean under the machine.
	Heating and a large loss of splitting force can be the cause of internal leakage of the splitting roller.	A service check is required.
None of the hydraulic components work and the lights on the valves come on when you move the control handle - joystick.	Interrupted connection between multiplication gear and hydraulic pump.	Replace the gear that connects the multiplication gear and the pump (service).
The machine is too loud.	P.T.O. shaft speed is too high.	Check the rotation speed of the P.T.O. shaft, which should be between 400 and 430 rpm.
	Low oil in the multiplication gear.	Check the oil level and add oil, if necessary.
	P.T.O. shaft with built-in clutch produces noise.	We do not recommend using a P.T.O. shaft with built-in clutch, since it causes damage to the drive parts. Use a regular P.T.O. shaft or a shaft with wide-angle joints on both sides.
	Improper position of the tractor in relation to the machine, there are also vibrations.	Reconnect the tractor and machine according to the instructions.
	The P.T.O. shaft is not lubricated.	Lubricate it in accordance with the instruction for the P.T.O. shaft.
The output conveyor belt is not rotating.	The RESET key was not pressed before start-up.	Before each start-up or after opening the protective cover, it is necessary to restore the functions by pressing the RESET key.
	The belt speed regulator is set to the lowest value.	Set the regulator to the highest value.
	A piece of wood mechanically blocks rotation.	Remove the foreign object and clean the area under the drive roller regularly.
The infeed belt does not move or slide, and there is pressure on the pressure gauge (90 - 100 bar).	The hydraulic hoses for driving the rollers on the log loader are incorrectly connected and the oil flow is blocked.	Check the hose joints, or push the couplings deep enough.
	The log loader is not connected, and the quick couplings behind the table are free.	Turn the vale above the hydraulic system cover *(See section: Connecting the accessories)*.
	The roller slides on the belt, the belt is too loose.	Tension the belt.
	Too heavy a log that also gets stuck.	Cut the log into smaller pieces.
The belt is being pulled to one side. Applies to the infeed conveyor and discharge conveyor.	Poor adjustment of driven rollers.	Adjust the driven roller so that the belt runs in the centre.
The hydraulic cylinder is not tightening.	Damaged sealing.	Sealing replacement (service).
	Damaged piston rod.	Cylinder replacement (service).

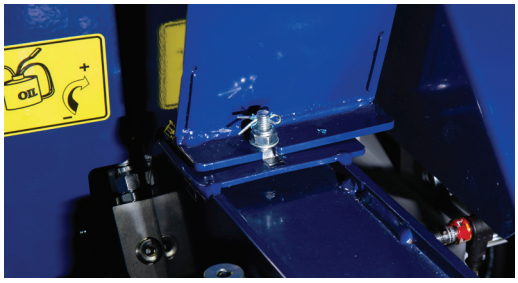
FAULT	POSSIBLE CAUSES	FAULT ELIMINATION
The splitting roller starts to split and starts to return too quickly or starts to return when some other function is turned on.	The splitting valve does not stay in position due to insufficient electrical power.	Check the output voltage on the tractor. If you supply power to the machine using another power source, where you convert 220V to 12V, check its output power. The electric current can even rise to 16A. The direct current from such a power supply must be as "even" as possible, without fluctuations. A transformer alone is not sufficient and a sufficiently large capacitor must be added. Do not use a cable with a small wire diameter or an unnecessarily long cable, because the voltage drops are considerable with direct current.
The splitting roller goes all the way and does not return automatically. It is possible to manually return it by pressing the red button on the control handle - joystick.	Reed switch for the end position failed to provide a signal for returning the splitting cylinder.	Under the cover of the machine at the splitting cylinder, it is necessary to set the position of the switch so that it detects the end position.
The splitting roller loses power, long high-to-low speed transitions are possible, inability to reach max. pressure. Sometimes it works perfectly normal and other times it doesn't.	Possibility of internal leakage of the splitting cylinder due to a unscrewed piston. Or a crack in the inner piston rod.	Repair the cylinder at the service centre.
Increased pressure (above 50 bar) when the machine is idling on the pressure gauge for splitting. Faster heating of hydraulic oil is also possible.	The splitting roller cannot return completely to its starting position because too much sawdust and wood particles have accumulated behind it, which is also seen in the increase in pressure when the machine is idling.	Remove the splitting roller cover and clean the residue. As you work further, regularly clean under the machine.
	Clogged pressure filter.	Remove the pressure filter and clean it in cleaning gasoline.
Adjusting the wedge height is not working.	The wedge probably fell out of the lifting mechanism.	Reinstall the wedge in the lifting mechanism.
Torn drive belt.	Too little speed of the P.T.O. shaft and blunt and loose chain.	Replace the belt, work with correct settings.
	Belt not sufficiently tensioned.	Replace the belt.
	Blocked chain when cutting because the wood was not fixed well.	Replace the belt.
	Blocked bearing at the drive.	Replacement of damaged bearings (service).
Sawbar does not move, the log holder and chain rotation are working.	In the muffler between the hydraulic cylinder for moving and the hydraulic block a foreign object is stuck and is blocking the oil flow.	Remove the foreign body by unscrewing the coupling where the pressure gauge for the saw is attached. The muffler is located at this point in the small block, where the foreign object is most likely to be located.
Slowed cutting.	The chain has become blunt.	Install a sharp chain. The force with which the sawbar pushes into the wood is always the same, but the cutting speed depends on the quality of the chain and the resistance of the wood being cut.
Sawbar becoming too hot.	There is not enough lubricant, as a result of which there is increased friction and, consequently, overheating.	Use dedicated oil for chain lubrication, open the lubrication pump more, check the amount of oil in the lubrication reservoir, ensure the unobstructed flow of oil into the sawbar groove.
	P.T.O. shaft speed too high – over 430 min^{-1}.	Set the P.T.O. shaft speed to 420 min^{-1}.
The sawbar is pulled to one side, cuts sideways, overheating is also possible.	Bent sawbar, which is probably due to the movement of the wood during cutting.	Replace the sawbar.
	A few teeth on the chain are damaged.	Resharpen or replace the chain. And check the sawbar.
	Chain-damaged surface on the sawbar holder. The chain made an edge on the surface and the sawbar rests on that edge. The sawbar is therefore sideways in relation to the cutting direction.	Smooth out the resulting edge.

More demanding tasks may only be carried out by an authorised maintenance service. *

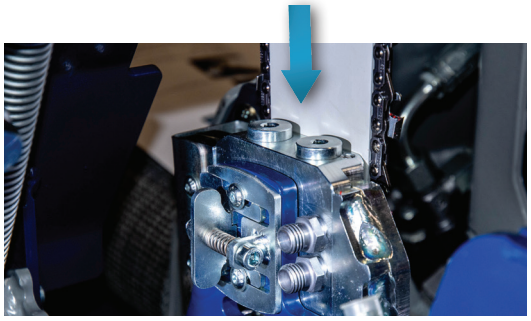
7.3. REPLACING THE CUTTING CHAIN

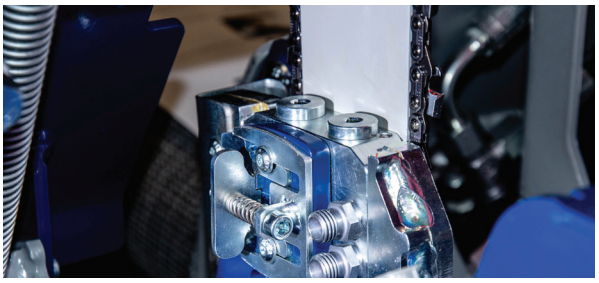
Before replacing the cutting chain, the machine must be disconnected from the power unit!

- Disconnect the P.T.O.;
- unscrew the nut and switch the saw shield to the forward position;

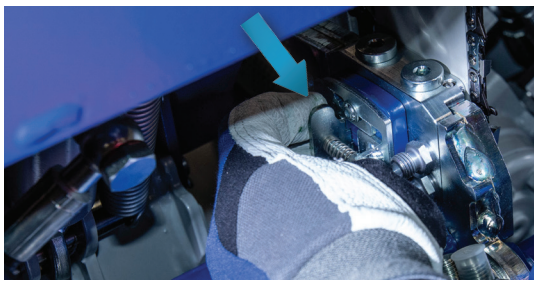


- push the sliding holder of the sawbar all the way in until the mechanism engages;





- remove the damaged cutting chain;
- remove any sawdust on the sawbar holder, in the oil groove and on the sawbar;
- install a new or well sharpened/sharp cutting chain. Pay attention to the correct direction of the cutting teeth – on the upper side of the sawbar, the edge must be facing the control point of the machine;
- unlock the mechanism so that the springs pre-tension the cutting chain;



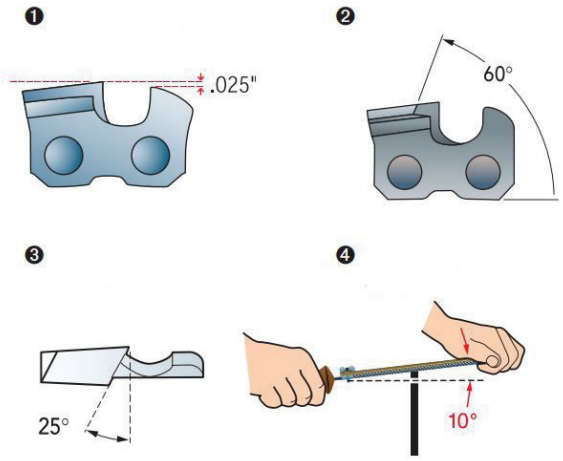
- install the saw shield and tighten it with a nut.

Before cutting, run the saw 2-3 times without cutting the log to establish chain lubrication.

Do not install a new cutting chain on a worn sprocket. You must change the sprocket at the latest after changing another used chain *(See section: POWER MATE sprocket)*.

If the machine is turned on without the cutting chain installed, the tensioner or the lock can be damaged.

7.4. SHARPENING ANGLES OF THE CUTTING CHAIN



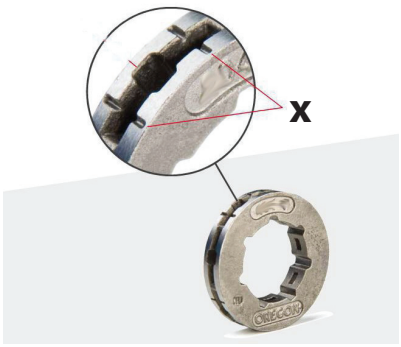
On the figure are shown the angles for sharpening the DuraCut™ 3/8″ chain used on firewood processors.

1. Depth of cut (0.025″ = 0.65 mm) – the difference between the height of the blade and the depth tooth.
2. Ridge angle
3. Sharpening angle
4. File tilt

7.5. POWER MATE SPROCKET

Use only OREGON Power mate 3/8″ sprockets (OREGON code 68210). The sprocket has a wear indicator (X). When worn to the depth of the indicator, it should be discarded.

3/8″ - 7 teeth



7.6. CHANGING OIL IN THE HYDRAULIC SYSTEM

Important: Used oil must be appropriately disposed of in order to prevent polluting the environment!

- **Change oil after 5000 hours of operation or every 2 years.**
- The oil drain plug is located on the lower surface of the reservoir.
- Quantity of oil in the hydraulic system: 100 l.

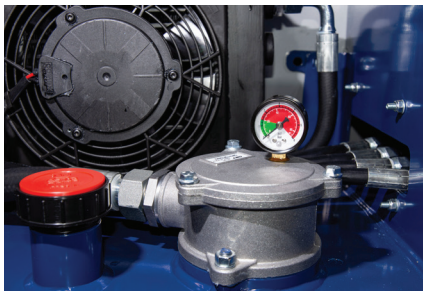
Hydraulic oil of appropriate viscosity (viscosity: **46 mm²/s at 40°C**).
The factory oil used is **Hydrolubric VGS 46** (OLMA d.d.).

The quality of the hydraulic oil must meet the following standards:

STANDARD	CODE
DIN	DIN 51 524/3 HVLP
ISO	ISO 6 743/4 HV
Denison	HF-2, HF-0
Vickers	I-286-S, M-2950-S
Cincinnati Milacron	P-68, P-69, P-70

7.7. HYDRAULIC SYSTEM FILTERS

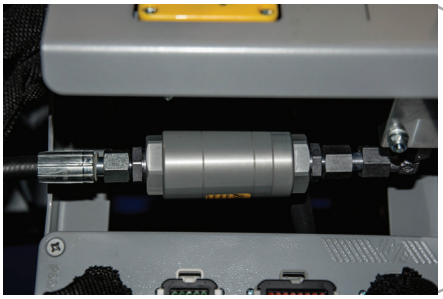
RETURN



- First change of the filter cartridge after 200 hours of operation, then after every 1000 hours of operation.
- The filter cartridge is not washable.
- Poor filter permeability can be seen on the filter pressure gauge if the indicator is in the red range at the oil's operating temperature (if it only occasionally fluctuates to the red range, this is NOT a sign to change).

PRESSURE

- Clean the pressure filter cartridge with gasoline for cleaning, every 1000 hours of operation.



7.8. LUBRICATING THE MULTIPLICATION GEAR

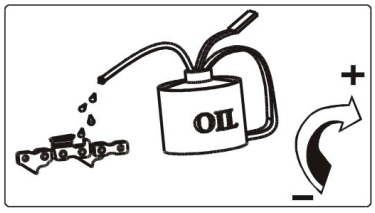
- The added factory oil is 1.2 L of SAE 75 (Renolin CLP 100 DIN 51 517/13).

7.9. LUBRICATING THE CUTTING CHAIN

Lubricating the cutting chain is automated. Regularly check the oil level in the reservoir.

Never operate the machine without lubricating the chain!

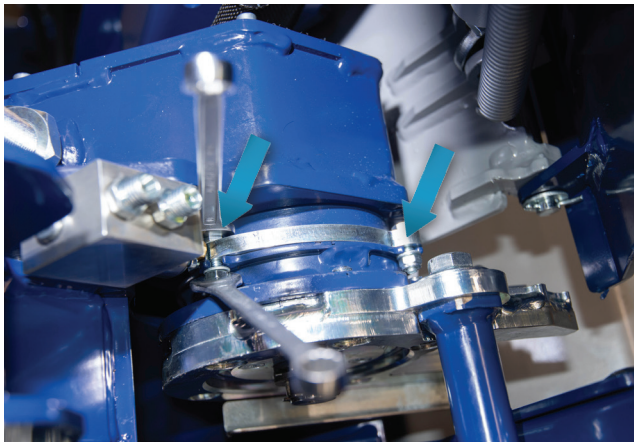
Chain lubrication oil reservoir volume: 8 L
Indicative oil consumption: (0.6 - 1.0) L/h
Use only dedicated quality chain lubrication oil with a viscosity of 95 mm^2/s at 40°C.



The use of used oil is not permitted!

ADJUSTING THE LUBRICATION QUANTITY

- Position the sawbar so that the necessary screws are accessible;



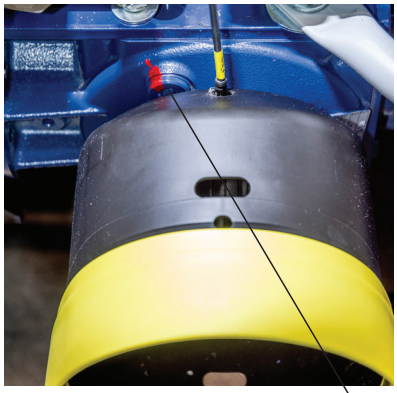
- Use the wrench to loosen both nuts and bolts;
- Use the adjusting screw to set the desired amount of lubrication depending on the quality of the oil. By screwing, the amount is increased, by unscrewing, it is decreased.
- Use the wrench to tighten both nuts and bolts.

7.10. OIL QUANTITY

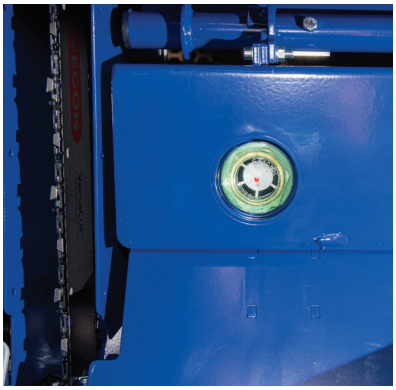
Regularly check the amount of oil and top up if necessary. The firewood processor must stand horizontally on a level surface.

HYDRAULIC SYSTEM RESERVOIR

MULTIPLICATION GEAR



LUBRICATION RESERVOIR OF THE CUTTING CHAIN



MULTIPLICATION GEAR

The firewood processor must be turned off and the multiplication gear must be sufficiently cold so as to avoid burns.

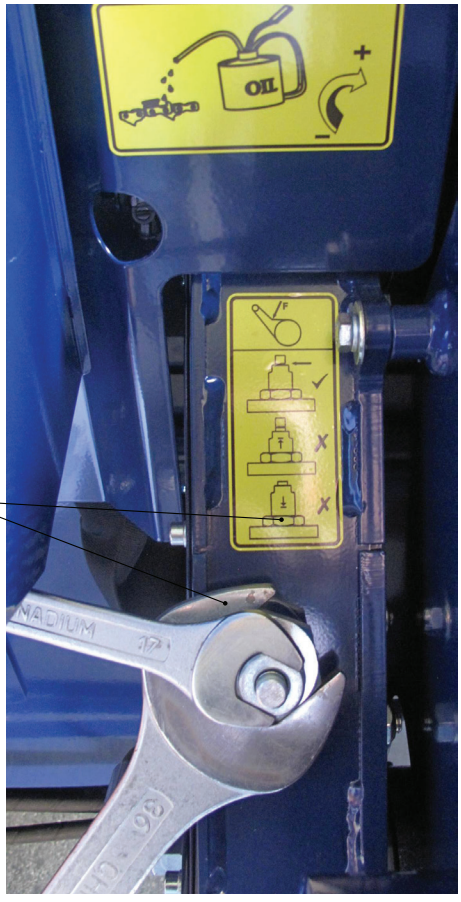
- Unscrew the oil level control screw.
- The oil level must reach the lower edge of the opening.
- After checking, tighten the screw back.

7.11. TENSIONING THE BELT

Tension the belt with the machine at a standstill!

Correct tension of the belt can be verified using the notch on the tension indicator. With a properly tensioned belt, the notch must line up with the edge of the spring guide, otherwise you must:

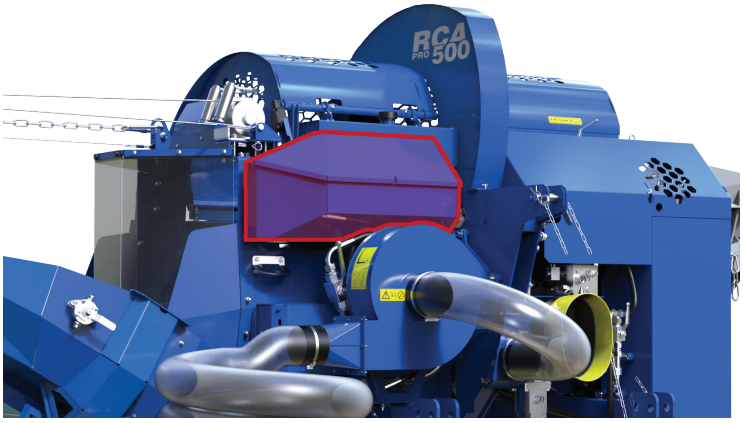
- Loosen the safety nut;
- Screw or unscrew the spring guide accordingly to align the notch properly;
- Fasten the safety nut.



7.12. AIR FILTER REPLACEMENT AND CLEANING

REPLACING THE FILTER

- Disconnect the machine from the drive;
- Remove the tool box and lid for easy access;



- Unscrew the screws on the drive cover;

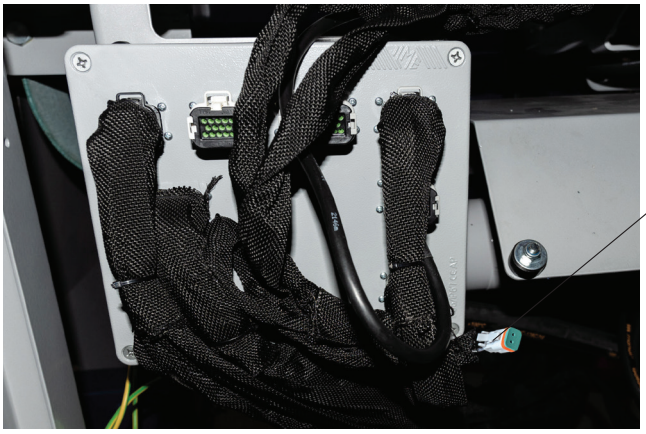
- Replace the filter with a new one, clean the inside and reattach the drive cover, lid and toolbox.

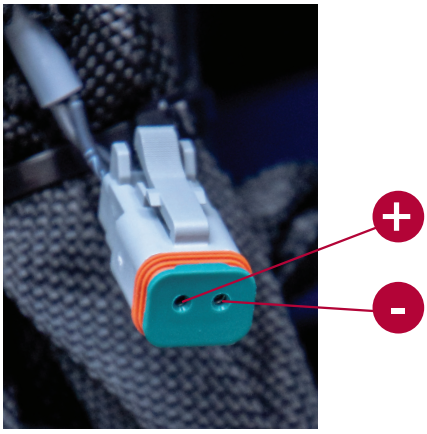
CLEANING THE FILTER

- Remove sawdust and debris from the top of the filter (cover) so as to allow free flow of air inside the saw drive;
- Regularly clean and replace the filter on the saw drive. Due to a dirty filter, the flow of air for cooling the drive unit is difficult, which in turn means overheating and damage to the drive unit (bearings, belt, shaft, etc.).

7.13. ADDITIONAL POWER OUTLET (12V)

The firewood processor has an additional 12V power outlet installed on the control electronics housing for connecting accessories (LED lights, fans, etc.).
The outlet may be turned on or off by simultaneously pressing both yellow buttons of the control handle - joystick.





Additional 12V power outlet	
Voltage	12 V
Power	10 W
Electric current (max)	1 A

7.14. SIGNS OF IMPROPER MACHINE USE

Certain damage before the end of the service life of exposed machine parts can be indicators of overloading or improper handling of the machine. The manufacturer does not provide a warranty for this type of damage:

- Torn or damaged discharge conveyor belt or infeed belt;
- Torn cutting chain;
- Damaged chain guide (sawbar);
- Damaged or bent frame, wedge, cylinder or cylinder protection;
- Damaged or bent length limiter or swinging laps;
- Torn drive chain belt;
- Damage to the control handle - joystick or other operating handles;
- Damage to the frame due to inappropriate transport at the worksite;
- Damaged winch of the discharge conveyor;
- Damaged carabiner on the supporting chain;
- Damaged wedge holder;
- Damaged or broken splitting wedge;
- Clogged or damaged air filter.

Important: The machine is functionally and safety tested. In order to ensure fault-free and safe operation, only original spare parts should be used in case of failure. The buyer loses all warranty rights if he/she uses non-original spare parts, if the repair is carried out unprofessionally, if the repair is carried out by an unauthorised person, if the machine is modified or obstructed in any way.

7.15. CONSUMABLES

The machine is equipped with the following consumable or wear material, which the customer renews as needed. These parts are not covered by the warranty period of the machine stated in the warranty statement:

- Cutting chain;
- Drive sprocket;
- Chain guide (sawbar);
- Drive chain belt;
- Discharge conveyor wire rope;
- Infeed belt;
- Conveyor belt;
- Splitting Wedge;
- Oil;
- Air filter;
- Oil filter.

7.16. ORDERING SPARE PARTS

When ordering spare parts, it is necessary to specify:
Type and factory no. of the machine; catalogue number, name and quantity of the spare part; exact address of the client.

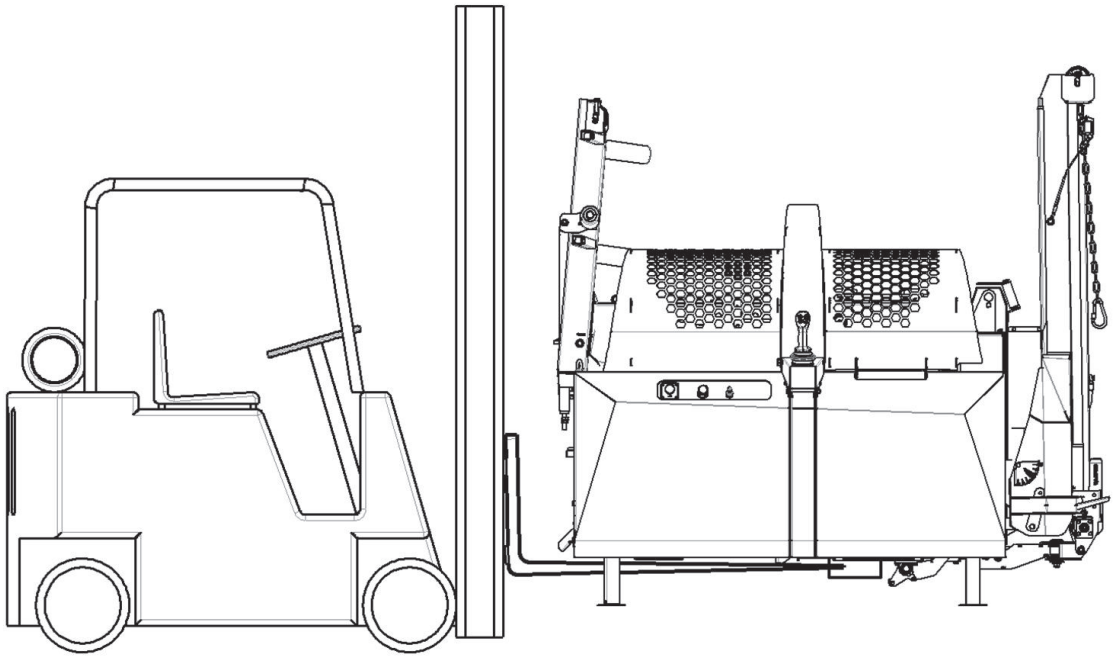
The manufacturer guarantees servicing and all necessary spare parts for 10 years after the purchase of the machine.

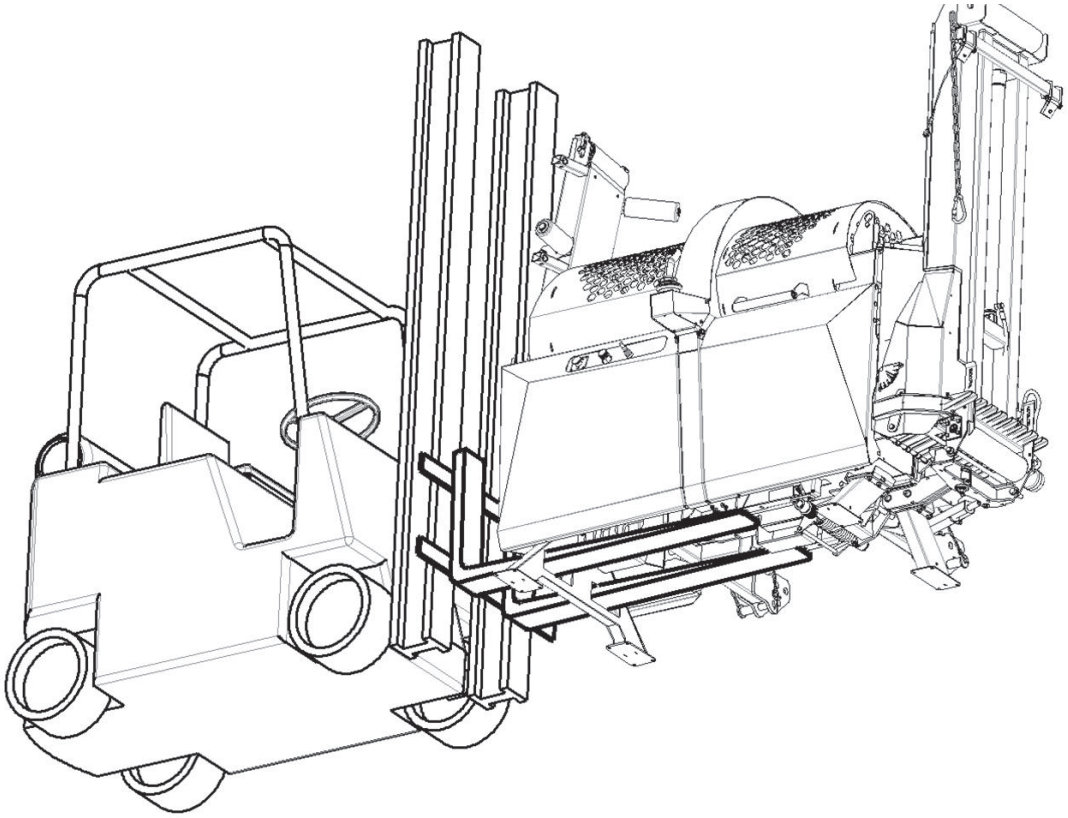
8. LOADING AND TRANSPORT

8.1. LOADING WITH A FORKLIFT

Loading the machine with a forklift is possible from two sides.

LONGITUDINALLY:





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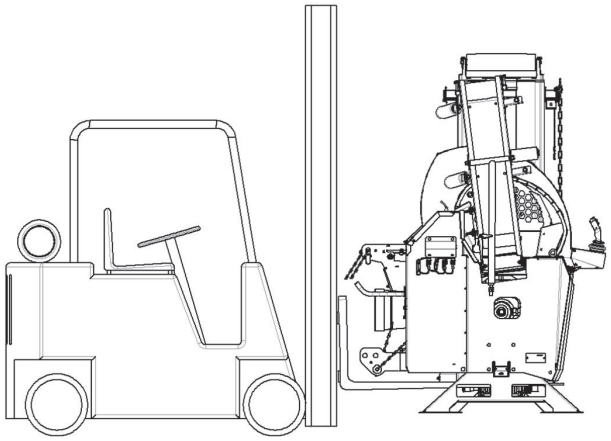
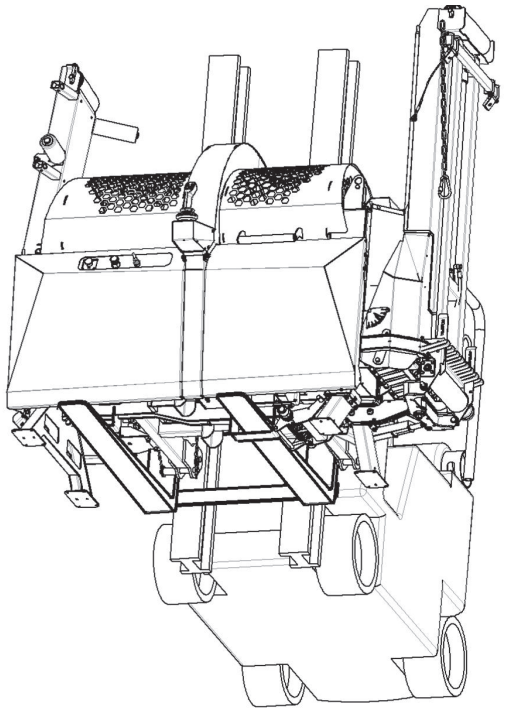
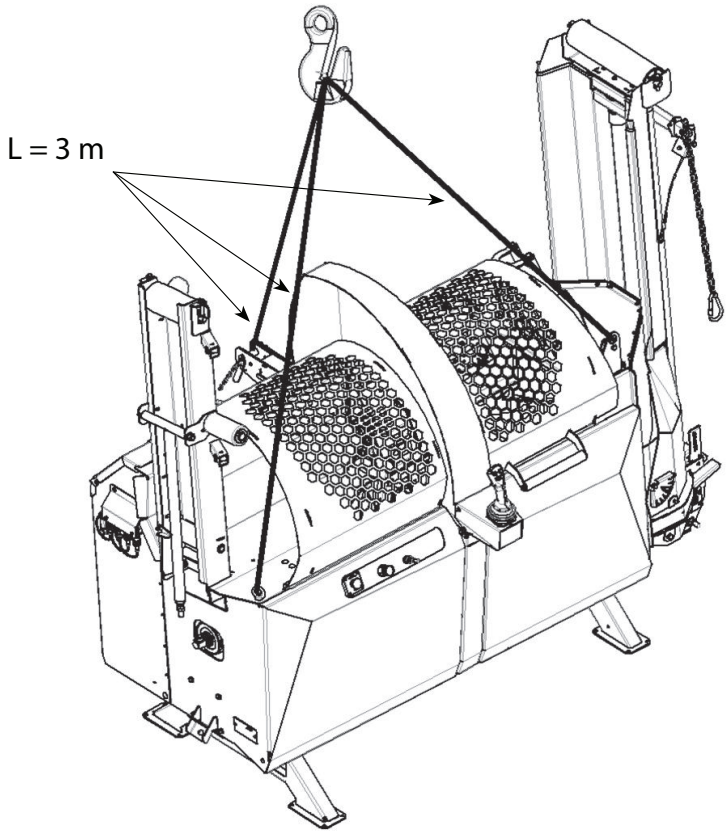




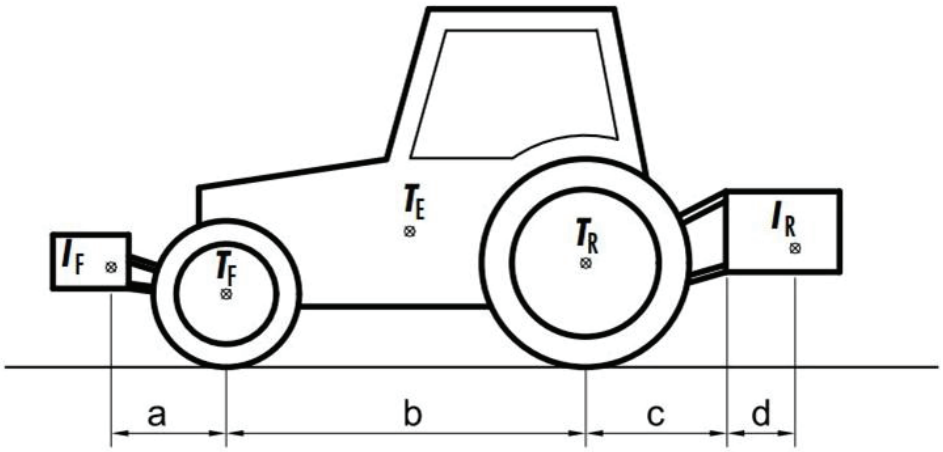
8.2. LOADING WITH LOAD BELTS



8.3. TRANSPORT WITH A TRACTOR

The machine can be transported with a three-point hitch. Due to the weight of the machine, it is necessary to check the stability of the vehicle and, if necessary, add weights to the front. It is necessary to ensure sufficient pressure on the front wheels, which must amount to a minimum of 20% of the weight of the empty tractor.
You can use the formula below to calculate the mass of the weights $I_{F, min}$.

$$I_{F,min} = \frac{(I_R \times (c + d)) - (T_F \times b) + (0{,}2 \times T_E \times b)}{a + b}$$



$I_{F,min}$	[kg]	Minimum mass of the front weights
I_R	[kg]	The total mass of the machine attached to the rear (1650 kg - RCA PRO 500)
T_F	[kg]	Axle load of the front axle of an empty tractor
T_E	[kg]	Mass of an empty tractor
a	[m]	The distance between the centre of gravity of the front weight and the centre of the front axle
b	[m]	Wheelbase of the tractor
c	[m]	The distance between the centre of the rear axle and the centre of the coupling bolts
d	[m]	The distance between the centre of the coupling bolts and the centre of gravity of the connected machine (0.8 m - RCA PRO 500)

Tajfun Planina proizvodnja strojev, d.o.o.
Planina pri Sevnici 41a
SI-3225 Planina pri Sevnici
Slovenija
www.tajfun.com

EC DECLARATION OF CONFORMITY FOR THE MACHINES

Manufacturer:
Tajfun Planina proizvodnja strojev d.o.o.,
Planina pri Sevnici 41A, 3225 Planina pri Sevnici, Slovenia

declares under full responsibility that the following product:

FIREWOOD PROCESSOR

Type:	Factory number:
RCA PRO 500	259446 - XXXXX

subject to this declaration, complies with the:

DIRECTIVE 2006/42/EC
OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL ON MACHINERY,

taking into account the following standards and regulations:

EN ISO 4254-1:2013; EN ISO 12100:2010; EN ISO 13857:2019;
EN ISO 13854:2017; EN 609-1:2017; ISO 4413:2010;

The person authorized to draw up the technical documentation at the address of the manufacturer shall be the same as the signatory of this declaration:

Planina, 12. 06. 2023

Tajfun Planina
proizvodnja strojev, d. o. o.
Planina pri Sevnici

Iztok Špan
Director

Tajfun Planina proizvodnja strojev, d.o.o.
Planina pri Sevnici 41a
SI-3225 Planina pri Sevnici
Slovenija
www.tajfun.com

DECLARATION OF CONFORMITY

IN ACCORDANCE WITH UK GOVERNMENT GUIDANCE

1. Product / Type:
   a. Product: **FIREWOOD PROCESSOR**

Type:	Factory number:
RCA PRO 500	259446 - XXXXX

2. Manufacturer:
   a. Name: **Tajfun Planina, d.o.o**
   b. Address: **Planina pri Sevnici 41A, 3225 Planina pri Sevnici, Slovenia**

3. This declaration is issued under the sole responsibility of the product manufacturer.

4. The object of the declaration described above is in conformity with the relevant UK Statutory Instruments and their amendments:

Supply of Machinery (Safety) Regulations 2008

5. We hereby declare that the product described above, to which this declaration of conformity refers to, is in conformity with the essential requirements of the following standards:

EN ISO 4254-1:2013; EN ISO 12100:2010; EN ISO 13857:2019;
ISO 13854:2017; EN 609-1:2017; ISO 4413:2010;

Planina, 12. 06. 2023

Tajfun Planina
proizvodnja strojev, d. o. o.
Planina pri Sevnici

|4|

Iztok Špan
Director

WARRANTY CERTIFICATE

THIS WARRANTY DOES NOT EXCLUDE CONSUMER RIGHTS DERIVING FROM THE SELLER'S LIABILITY FOR DEFECTS OF GOODS.

We hereby undertake:

- to guarantee the proper operation of the product during the warranty period, if all instructions herein are adhered to;
- to ensure the elimination of all defects and deficiencies within the warranty period within 45 days at the maximum. If the product is not repaired within the stated period, it will be replaced with a new one at your request.

The warranty is valid for **12 MONTHS** from the day of purchase, or from the day of delivery, which must be proven with a certified warranty certificate (seller's seal, date of delivery and signature of the seller, serial number, year of manufacture).

The warranty certificate is only valid together with the invoice!

The warranty covers material and workmanship defects. If an unauthorised person has tampered with the product system or has carried out a repair, or if non-original spare parts have been installed, the warranty becomes void. The warranty also becomes void:

- if the user does not comply with the user manual;
- in case of damages through your own fault;
- in case of damages resulting from improper use or overloading, and use in inappropriate conditions.

The warranty does not cover compensation for additional costs incurred due to the failure of the product (loss of income, transport costs, other potential damages, etc.).

Servicing and supply of spare parts is guaranteed for further 9 years after the expiry of the warranty period.

TAJFUN

Product information (copy the information from the type plate):

Type:	Factory number:	Year of manufacture:

Product sale details:

SELLER (company and registered office):	Date of delivery: Seller seal and signature: