

INSTRUCTION MANUAL FOR USE AND MAINTENANCE

FIREWOOD PROCESSOR

RCA 330 JOY GM



MANUFACTURER'S ADDRESS



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1. INTRODUCTION	5
1.1. Limitations of warranty	6
1.2. Reservations	6
2. SAFETY RULES	7
2.1. General safety rules	7
2.2. Additional safety precautions specific to the RCA machine	8
2.3. Safety precautions for operating the discharge conveyor	8
2.4. Driving safety instructions	8
2.5. Safety instructions for wire rope pulleys	9
2.6. Noise	9
2.7. User qualification	9
2.8. Remaining risks	9
2.9. Intended use	9
2.10. Incorrect use of the machine	9
3. GENERAL	10
3.1. Description	10
3.2. Main machine components	10
3.3. Technical data	11
3.4. Type plate	12
3.5. Labels on the machine and their meanings	13
4. INSTALLATION AND TRANSPORT	15
4.1. Working position	15
4.2. Transport position	15
4.3. Infeed conveyor	15
4.4. Discharge conveyor	16
4.5. Connecting additional equipment	17
5. MACHINE STARTUP	18
5.1. RCA 330 JOY GM Controls	20
6. MACHINE OPERATION	21
6.1. Feeding logs	21
6.2. Cutting	21
6.3. Splitting	23
6.4. Correct use of the splitting wedge	24
6.5. Machine cover with safety switch	26
6.6. Cleaning during operation	26

7. MAINTENANCE AND SERVICING	27
7.1. Maintenance plan	27
7.2. What to do if ...	28
7.3. Cutting chain replacement	31
7.4. Cutting chain tensioning	32
7.5. Cutting chain grinding angles	32
7.6. Power mate sprocket	32
7.7. Hydraulic system oil change	33
7.8. Hydraulic system filters	33
7.9. Quantity of oils	34
7.10. Cutting chain lubrication	34
7.11. Chain saw belt replacement	35
7.12. Belt tensioning	36
7.13. Air filter replacement and cleaning	36
7.14. Additional electrical output (12 V)	37
7.15. Pressure gauges	37
7.16. Incorrect use of the machine	38
7.17. Consumables	38
7.18. Ordering spare parts	39
8. LOADING	39
8.1. Loading on a forklift	39
8.2. Loading with load belts	39

1. INTRODUCTION



Dear customer,

By purchasing this **firewood processor**, you have acquired a working tool that will be of great help to you during your work.

Proper use and maintenance of the product dramatically affects its reliability during its work and service life, so we advise you to read the instructions **carefully and thoroughly** and follow them closely.

Thank you for your purchase; we hope that your new **TAJFUN RCA 330 JOY GM FIREWOOD PROCESSOR** will make your work environment a more productive place.

Always note the following:

- follow all safety instructions;
- clean the machine regularly, as dirt speeds up the wear of moving parts and increases the risk of damage;
- always use lubricants of the prescribed grades;
- pollution with lubricants and oils increases the risk of accidents;
- our sales department is always at your disposal for professional advice, and our service department can help you with any questions regarding the maintenance;
- when requesting information about the RCA 330 JOY GM or ordering spare parts, please provide the type and factory number;
- **always follow all regulations and instructions for safe work!** They are implemented to protect your life and the lives of others;
- any errors must be reported as soon as they have been identified;
- all documents are protected by copyright;
- documents or parts or sections thereof may not be distributed or reproduced!



DANGER!
**Strictly observe the hazard information given
next to this sign!**

1.1. LIMITATIONS OF WARRANTY

Read the instructions for use carefully before using the machine.



The manufacturer accepts no liability for damage or defects caused by non-compliance with the instructions for use!

The manufacturer's warranty and liability become void in the following cases:

- the machine has been used improperly or operated by a person not properly trained for the job;
- use of inappropriate implements or drives not supplied with the machine
- if non-original spare parts were used;
- partial or complete failure to comply with the instructions for use;
- modifications or conversions not approved by the manufacturer in writing;
- exceptional circumstances.

The manufacturer is not liable for defects on consumables.

1.2. RESERVATIONS

The manufacturer reserves the right to change technical specifications, illustration materials and safety standards in the accompanying instructions for use.

2.1. GENERAL SAFETY RULES

In order to protect yourself against the risk of personal injury, electrocution and fire, the following instructions must be observed when using the machine.



Before starting work, carefully read the following instructions!

- The machine may only be used by persons who are familiar with its operation, possible hazards and the instructions for use.
- Persons under the influence of alcohol, drugs or medication that affect physical and mental fitness may not operate or maintain the machine.
- Only one person may operate the machine at any time. Make sure no one else is within the danger zone of the machine (radius = 3 m)!
- Working with the machine is only permitted to qualified persons over the age of 18 years!
- Prior to starting to work, place the machine in a stable position in accordance with the machine placement instructions.
- Do not use damaged, cracked or deformed cutting chains, chain sprockets or saw bars!
- 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 goggles, hearing protection, protective gloves and boots)!
- Before troubleshooting, cutting chain replacement, cleaning or any kind of service work on the machine, it is mandatory to switch off the drive engine and switch off the main electrical switch on the control panel.
- Do not wear loose clothing!
- Maintain a clean and tidy work environment!
- Always be careful during work! Improper use of the machine may lead to severe injuries due to moving parts!
- Never let the machine run unattended!
- Do not reach into the work area while the machine is operating!
- Prior to removing a stuck piece of wood, stop the drive or shut down the machine.
- For your safety, use only the original spare parts specified by the manufacturer!
- Damaged electrical cable or plug must be replaced immediately!
- The machine must not be used indoors. During its operation, it produces exhaust gases containing carbon monoxide (CO), which are life-threatening.
- During operation, the engine and its parts become very hot. Do not touch the exhaust muffler during and after using the machine. Serious bodily injury may occur.
- Petrol is highly flammable and can explode. When using and refuelling the machine, it is strictly prohibited to be near open fire.
- The engine must be switched off when refuelling.
- Avoid contact with fuel and do not inhale its vapours.
- 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.

2.2. ADDITIONAL SAFETY PRECAUTIONS SPECIFIC TO THE RCA MACHINE

The conformity declaration and risk assessment undertaken by its manufacturer, Tajfun Planina d.o.o., cover the machine operated by one person that has an appropriate overview of the entire area around the machine and encompassing the entire working zone of the machine.

Personal protection equipment and protection means necessary during machine operation are not in the scope of supply.

- Never reach into the chain saw and splitting cylinder working zones while the machine is in operation. Likewise, never attempt to remove cuttings or other wood scraps from the cutting and splitting danger zone while the machine is in operation.
- The machine is designed for outdoor operation. Indoor use is prohibited.
- Make sure the machine is regularly maintained and kept clean. Regularly remove sawdust and wood scraps.
- The hydraulic system operating pressure may not exceed 250 bar.

2.3. SAFETY PRECAUTIONS FOR OPERATING THE DISCHARGE CONVEYOR

- Observe the machine danger zone, i.e. the areas immediately surrounding the moving parts and the area underneath the machine along the conveyor belt, rather than only around the conveyor belt discharge area.
- Conveyed material can drop from the machine anywhere in this entire area.
- Never reach into the chute and never touch the belt while the machine is in operation.
- Prior to removing any stuck wood particles, shut down the machine.

2.4. DRIVING SAFETY INSTRUCTIONS

- Before connecting the machine, check the coupling on the transport vehicle to ensure that it is suitable and that it is load-bearing.
- The maximum speed of 25 km/h must not be exceeded!
- Adjust the driving speed based on weather and road conditions. Take special care when driving through turns and on steep slopes.
- It is forbidden to transport people or cargo on the connected machine.
- Clean the machine properly and check the operation of the lights before transport.
- Driving with a "trailer" is more demanding than driving without. The greater the chance of a rollover, the braking distance is longer, ...
- Before transporting, place the machine in transport position (*See section: Transport position*).
- Before your first ride, check that the wheel bolts are tight and the tyre pressure is correct. Check the bolts every 1000 kilometres of use and check the tyre pressure once a month.
- The machine is not type-approved and is not intended for use on public roads. The machine attachment serves as a working aid.
- Observe the traffic rules and regulations for parts or equipment in vehicles in your country.

2.5. SAFETY INSTRUCTIONS FOR WIRE ROPE PULLEYS

- Make sure the wire rope is not drawn over sharp edges!
- Never touch the wire rope by hand during winding or unwinding!

2.6. NOISE

When operating the machine, the operator is exposed to the following noise levels, as measured next to the operator's ear.

Idle run	85 dB (A)
During operation	95 dB (A)

Therefore, hearing protection must be used during machine operation.

2.7. USER QUALIFICATION

The installation, inspection and repair of the firewood processor may only be carried out by persons **that are qualified to do so (authorized service personnel)**.

2.8. REMAINING RISKS

Even if all safety precautions are followed and the product is used according to the instructions, some risks remain:

- touching rotating parts of the machine;
- injury from flying wood particles;
- burns due to touching hot parts of the machine (engine, exhaust, ...);
- hearing damage due to failure to use hearing protection or its improper use;
- human error (excessive physical exertion, mental strain, etc.).

2.9. INTENDED USE

RCA 330 JOY GM firewood processor is designed for production of log splits. It is designed exclusively for cutting logs of 5 to 33 cm in diameter and their splitting into log splits with splitting force of up to 110 kN, with adjustable log split length (20 to 40 cm).

The machine is designed for outdoor operation.

2.10. INCORRECT USE OF THE MACHINE

Any uses of the machine other than those described in the previous section are considered incorrect and are prohibited.

3. GENERAL



3.1. DESCRIPTION

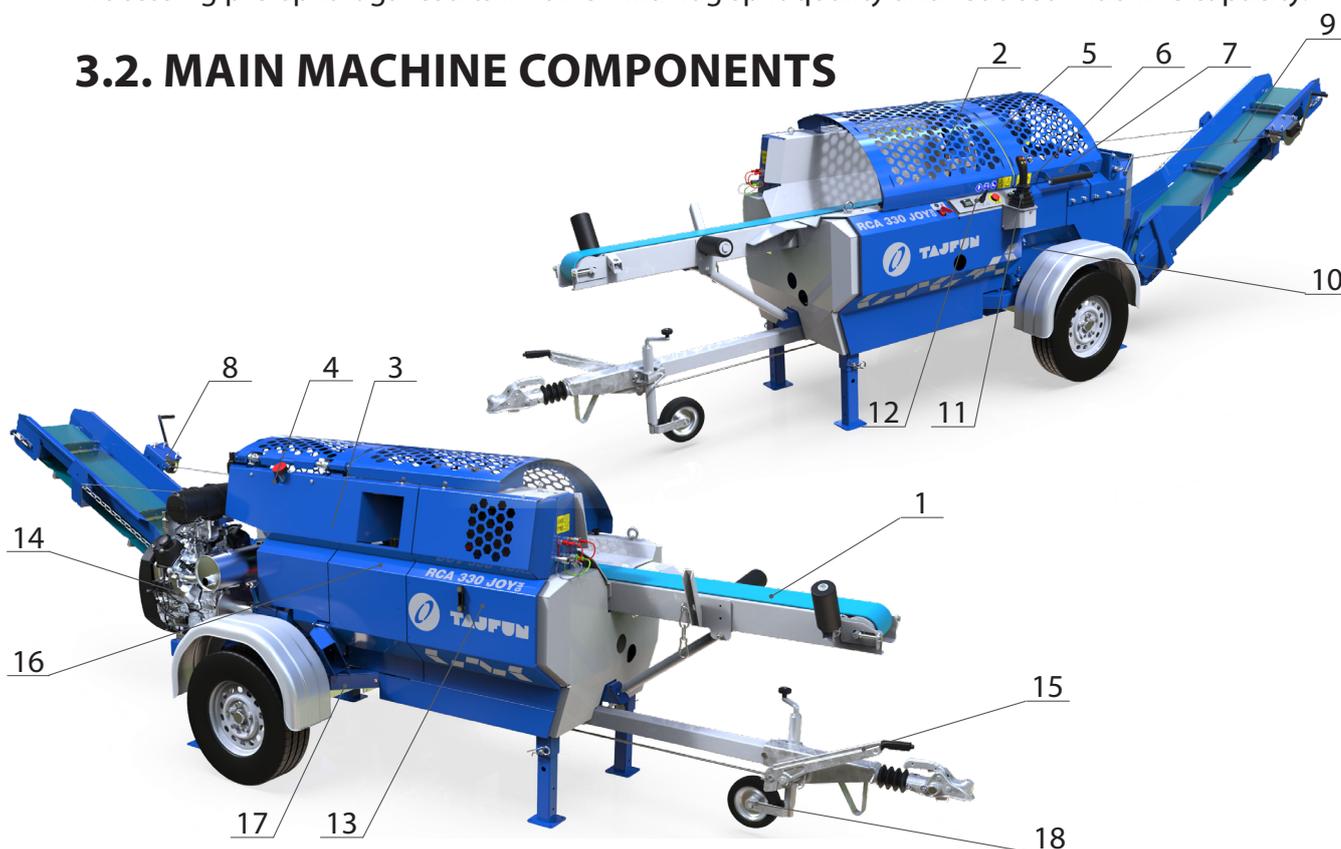
The RCA 330 JOY GM firewood processor is designed for production of log splits. The machine is powered by a **Vanguard EFI 40** petrol engine.

The working process consists of the following sequence of steps:

1. Deposition of log onto the live deck (additional equipment), which enables longitudinal and transversal feeding of logs synchronised with the machine infeed belt.
2. Transport of logs (5 to max. 33 cm, i.e. 2" do 13" in diameter) by the infeed conveyor to the length limiter, which can be adjusted to set the cutting length (20 to 40 cm, i.e. 7.9" to 15.75").
3. Cutting by chain saw to set lengths.
4. Splitting of logs into log splits. The number and cross sections of log splits are determined by selecting the splitting wedge.
5. Transport of log splits on the discharge conveyor (with adjustable height).

Processing pre-split logs results in lower final log split quality and reduced machine capacity.

3.2. MAIN MACHINE COMPONENTS



1	Infeed conveyor	10	Splitting cylinder, splitting wedge
2	Log holder	11	Control handle – Joystick
3	Chain saw drive	12	Control panel
4	Cutting chain lubrication oil reservoir	13	Hydraulic oil reservoir
5	Cutting length limiter	14	Petrol engine
6	Swinging Lap	15	Manual brake
7	Machine cover with safety switch	16	Fuel reservoir
8	Manual winch	17	Chassis
9	Discharge conveyor	18	Support wheel

3.3. TECHNICAL DATA

RCA 330 JOY GM	
Cutting length	20 - 40 cm (7,9" - 15,75")
Cutting diameter	5 - 33 cm (2" - 13")
Saw bar	Oregon 16", b = 1,5 mm
Cutting chain	3/8" Oregon DuraCut™
Splitting force	110 kN (≈ 11 T)
Max. splitting pressure	250 bar
Fuel Reservoir capacity	35 L (9,3 gal)
Volume of hydraulic oil in the reservoir	70 L (18,5 gal)
Cutting chain lubrication oil reservoir capacity	9 L (2,4 gal)
Operating noise level (max.)	95 dB (A)
Weight (without discharge conveyor)	857 kg (1889 lbs)

Discharge conveyor TT 320	
Discharge Conveyor length	2000 mm (78.7")
Discharge Conveyor belt width	300 mm (11,8")
Maximum speed	0,6 m/s (24"/s)
Weight	82 kg (180 lbs)

Discharge conveyor TT 340	
Discharge Conveyor length	4000 mm (157,5")
Discharge Conveyor belt width	300 mm (11,8")
Maximum speed	0,6 m/s (24"/s)
Weight	158,2 kg (408,3 lbs)

Vanguard EFI 40 petrol engine	
Engine power	29,9 kW
Engine capacity	993 cm ³
Engine oil quantity	2,3 L (0,6 gal)
Weight	60 kg (132 lbs)
Optimal engine speed	3000 min ⁻¹ (RPM)

Battery	
Voltage	12 V
Storage capacity	45 Ah
Dimensions	207 X 175 X 175 mm

		Dimensions	
		RCA 330 JOY GM & TT 320	RCA 330 JOY GM & TT 340
Working position <i>(incline 45°)</i>	Width	5060 mm (199")	7300 mm (287")
	Length	1520 mm (60")	1520 mm (60")
	Height	1780 mm (70")	2450 mm (96")
Transport position	Width	3660 mm (144")	4050 mm (159")
	Length	1520 mm (60")	1520 mm (60")
	Height	2590 mm (102")	2590 mm (102")

Tires and rims	
Dimensions	Pressure
112 x 5 ; 165R13 C96N	2,5 kPa / bar

3.4. TYPE PLATE

The **type plate** provides product and manufacturer details and is affixed to the machine enclosure.

Year of manufacture

Factory number

When ordering spare parts, always state the type and full factory number of the product! This way, you will receive precisely the right parts for your version of the machine.

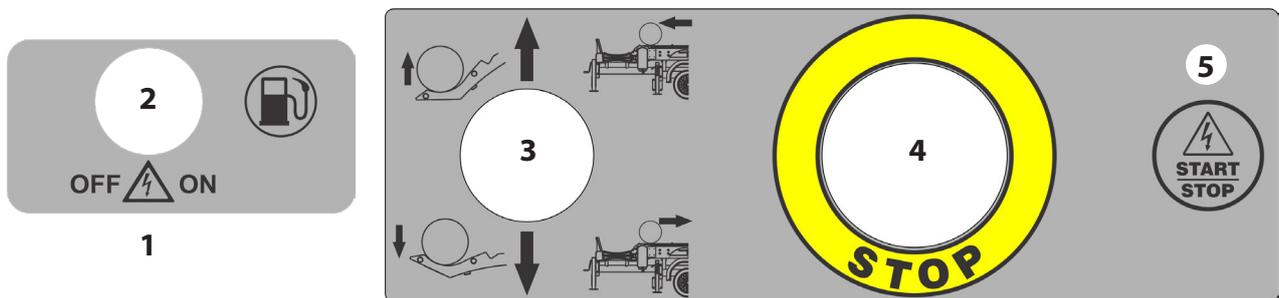


With the CE marking, the manufacturer declares that the machine meets all the essential safety and health requirements.

The manufacturer has also issued the mandatory **Declaration of Conformity** for this product.

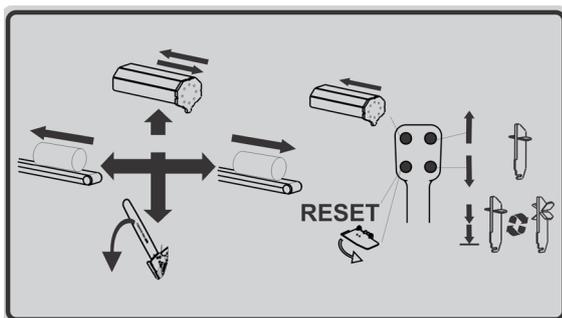
3.5. LABELS ON THE MACHINE AND THEIR MEANINGS

RCA 330 JOY GM



CONTROL PANEL

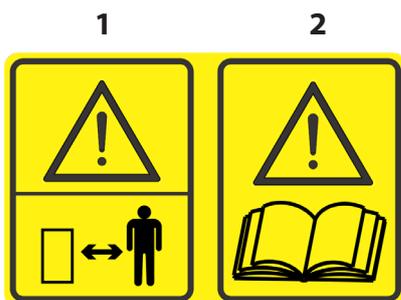
1. Main electrical switch for switching on the electrical power supply of the firewood processor
2. Fuel level warning light
3. Controlling the live deck or the log loader
4. Safety stop switch – “EMERGENCY STOP”
5. Elec. system on/off - Start/Stop button



Main control handle (joystick) functions.



Automatic machine stop when cover is lifted.



1. Machine danger zone. The machine danger area extends up to 3 m from the machine.
2. Read the instruction manual for use prior to operating the machine.

Mandatory use of protective gloves.



Mandatory use of ear protectors and protective goggles.



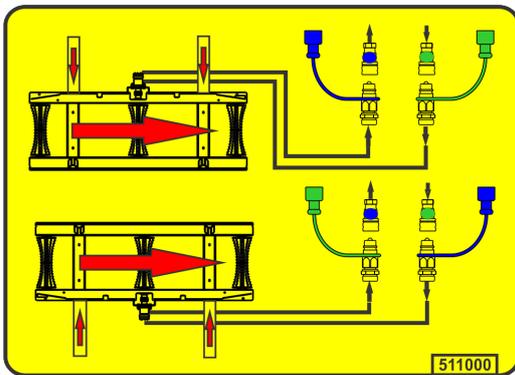
Mandatory use of protective shoes.



Cutting length setting indication.



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



Indication of the connection of the hydraulic hoses depending on its arrangement.

CHAIN OIL
KETTENSCHMIERÖL
LUBRIFICANTE CATENA
L'UILE POUR LA CHAÎNE
OLJE ZA VERIGO
ULJE ZA LANAC

Cutting chain lubrication oil reservoir.

HYDRAULIC OIL
HYDRAULIKÖL
OLIO IDRAULICO
L'UILE HYDRAULIQUE
HIDRAVLICNO OLJE
HIDRAULICNO ULJE

Hydraulic oil reservoir.



Danger of contact with cutting chain.

4.1. WORKING POSITION

- Activate the hand brake.
- on a level and firm surface, lower the support wheel and disconnect the machine from the transport vehicle;
- lower the rear lights;
- install the rear support legs and secure them with a bolt and bolt safety pin;
- lift the front of the machine with the support wheel, install the front support legs and secure them with the bolt and bolt safety pin;
- lift the support wheel;
- lower the infeed conveyor into the working position (*See section: Infeed conveyor*);
- lower the discharge conveyor into the working position (*See section: Discharge conveyor*).

4.2. TRANSPORT POSITION

- The machine and drive engine must be switched off and the main electrical switch must be switched off;
- activate the hand brake;
- raise the infeed conveyor into the Transport Position (*See section: Infeed conveyor*);
- raise the Discharge Conveyor into the Transport Position (*See section: Discharge conveyor*);
- lift the front of the machine with the support wheel and remove the front support legs;
- lower the machine enough to remove the rear support legs using the support wheel;
- couple the machine to the transport vehicle and lift the support wheel (the wheel must be facing backwards when transporting);
- secure the support wheel with a safety pin;
- install the rear lights and secure them with a bolt;
- connect the lights to the transport vehicle.

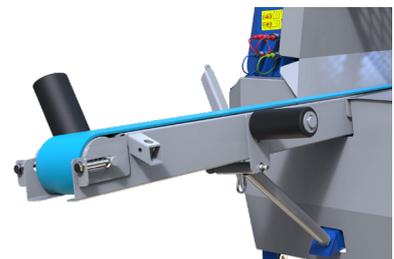
Deactivate the handbrake before driving!

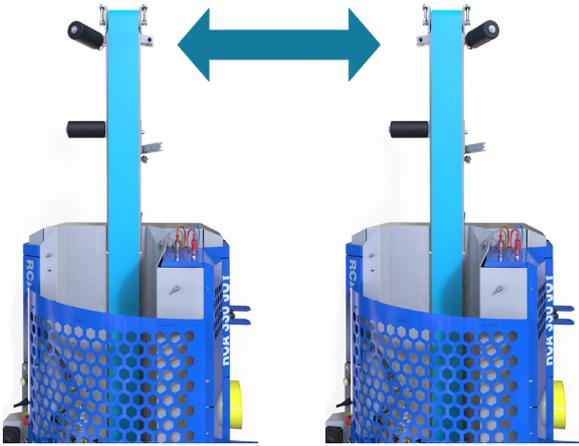
During transport, take the total machine weight into consideration.

4.3. INFEEED CONVEYOR

Prior to operation, the infeed conveyor must be set to its horizontal working position:

- Remove the guard;
- remove the support limiter;
- lower the infeed conveyor to the horizontal position and support it by means of the support leg;
- set the support leg so as to make the infeed conveyor belt slightly elevated at the centre (it is factory set).





Place the infeed conveyor liftable part to its working position and, if necessary, move the guide cylinder to the appropriate position according to the direction of log transport to the infeed conveyor.

4.4. DISCHARGE CONVEYOR

Prior to operation, the discharge conveyor must be set to its working position. The discharge conveyor is lifted/raised by means of a manual winch. At the desired height, secure it by means of a support chain so as to distribute the conveyor weight between the wire rope and the support chain.

As regards operation and maintenance of the manual winch, follow the manufacturer's instructions enclosed with this instruction manual.



SETTING THE DISCHARGE CONVEYOR TO ITS WORKING POSITION

Discharge conveyor TT 320

Lower the discharge conveyor to the desired incline and secure it.

Discharge conveyor TT 340

Lower the discharge conveyor to the lowest possible position. Manually pull out the discharge conveyor and secure it with the lock. Set the conveyor to the desired incline (max.: 45 °) and secure it.

SETTING THE DISCHARGE CONVEYOR TO ITS TRANSPORT POSITION

Discharge conveyor TT 320

Lift the discharge conveyor to the vertical position and secure it.

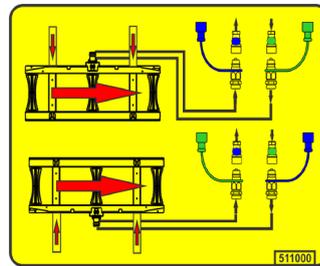
Discharge conveyor TT 340

Lower the discharge conveyor to the lowest possible position. Disengage the lock and manually stow the conveyor. Lift the conveyor to the vertical position and secure it.



Lock
(TT 330)

4.5. CONNECTING ADDITIONAL EQUIPMENT



Connect the hydraulic hoses (live deck or log loader) with quick couplings to the couplings on the machine. Coloured coupler caps and labels help the user to correctly connect the hoses.



If you are not using the log loader, it is mandatory to use connecting hoses. Otherwise, the machine will not function properly!

5. MACHINE STARTUP



Before starting the petrol engine for the first time, please read the **attached Kohler EFI ECH980 user and service instructions**.

The RCA 330 JOY GM engine uses **petrol** as its only propellant. The fuel requirements are described in detail in the **Vanguard EFI 40** Engine Owner's Manual.

Before each start-up, a visual inspection of the machine and the engine must be carried out and any deficiencies corrected. Check the following:

- the tension and sharpness of the cutting chain;
- the quantities of the cutting chain lubrication oil and the hydraulic oil;
- level of oil in the reservoir and engine oil quantity;
- proper mounting of all safety bolts and pins;
- the machine cleanliness (*See section: Cleaning during Operation*);
- presence of any piping or cable damage (scratching, kinking, ...);
- presence of any mechanical damage to the machine;
- regular maintenance of the machine according to the maintenance plan;
- tightness of all screws and nuts.

Machine startup procedure:

- Lift the machine protection cover to disable all the machine main functions;
- set the throttle lever on the engine to minimum;
- switch on the main electrical switch located on the control panel;
- start the petrol engine;
- the required engine speed (3000 min^{-1}) is reached using the rotary knob located on the control console;
- the emergency stop switch must be released;
- press the Start/Stop button on the control panel;
- lower the protection cover;
- press the RESET button (green button on the Joystick).

Prior to machine operation, safety devices and the machine functions must be checked:

- Check proper condition of the machine and lubrication of the cutting chain;
- Check the function of the safety stop switch (EMERGENCY STOP);
- Check the function of the protection cover safety switch;
- Check proper performance of all the machine functions (*See section: RCA 330 JOY GM Controls*).

If a fault is detected during the inspections (e.g. safety device not working, chain not tensioned, etc.), work must stop immediately and the fault must be rectified.

- **Recommended engine speed (RPM):** minimal: 3000 min^{-1} ; maximum: 3200 min^{-1} .

At ambient temperatures below 0°C , let the machine run in idle for approx. **5 minutes** to allow the hydraulic system to warm up to the operating temperature (hydraulic hoses warm to the touch).



Only one person may operate the machine at a time! Make sure no other persons are present in the vicinity of the machine.

Engine start-up

Ignition key has three positions: OFF, ON, START.

- First, turn key to the right to the ON position. A red power indicator light will illuminate and remain lit while the engine is running.
- Then, turn the contact key further to the right to the START position. Release the ignition key immediately after the engine starts. The key will return to the neutral position automatically.

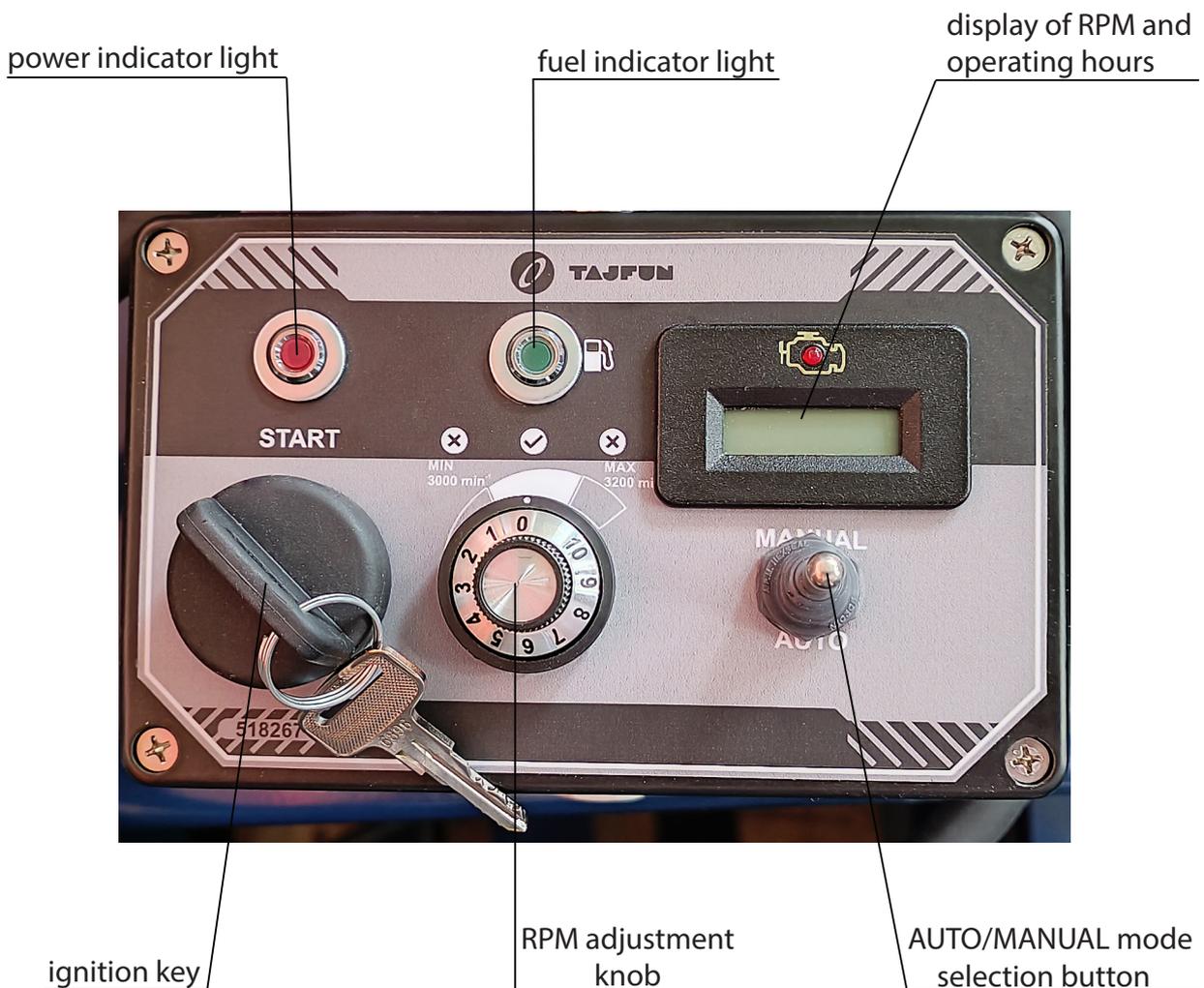
Drive shaft rotation speed

For a flawless operation of the RCA 330 GM machine, an optimal engine speed of 3000 to 3200 revolutions per minute must continuously be maintained, which ensures the recommended output revolutions of the drive shaft – output speed. The optimal drive shaft revolutions are adjusted using the rotary knob located on the control console.

Auto/manual mode

Using a function button you can choose between AUTO and MANUAL modes. The AUTO mode activates the automatic switch of the machine to idle after 10s of inactivity which reduces fuel consumption.

CONTROL CONSOLE



5.1. RCA 330 JOY GM CONTROLS

ENABLING CONTROLS

The protective cover of the machine must be closed. Press and hold the Start/Stop button located behind the control handle for about 3 seconds. Then press the green (RESET) button on the main control handle. Release the emergency stop switch.



DESCRIPTION OF THE CONTROLS

Main Control handle (joystick).

Moving of the control handle (joystick) has the following functions:

- Left / right → movement of the infeed conveyor belt left-right;
- backwards → cutting (2 phases: first, fix the log and startup the cutting chain, then movement of the saw);
- forwards → splitting (just briefly push the handle forwards, **DO NOT HOLD IT**).

Buttons on the main control handle:

- Yellow buttons → move the splitting wedge up / down;
- red button → return the splitting cylinder from any position;
- green button → RESET function, opening the swinging lap manually. After each startup of the machine (after lifting the protection cover, activation of the emergency stop switch), the RESET button must be pressed to restore control functions;
- double-clicking the green button to lower the swinging lap (See section: Feeding logs).

Control panel:

- Start/Stop button to power on/off the el. system;
- Safety STOP switch – “EMERGENCY STOP”;
- Additional equipment control handle: Up/Down
→ Log loader: lift/lower the lifting forks;
→ Live deck: forward / backward movement of the transport chain;
- Main electrical switch for switching on the electrical power supply of the firewood processor;
- Fuel low level warning light.



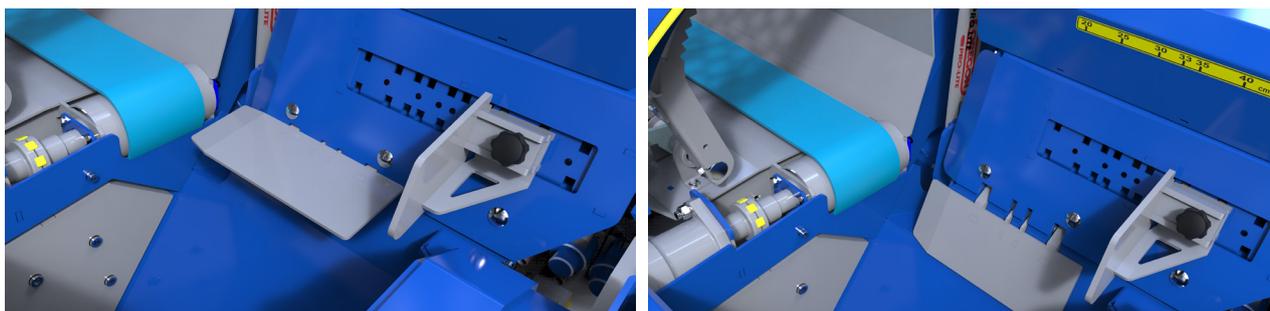
6.1. FEEDING LOGS

To activate log feeding, push the main control handle (joystick) to the right. To stop feeding at any point (when the log reaches the cutting length limiter), return the handle to its neutral position. By pushing the main control handle to the left, feeding in the opposite direction is activated.



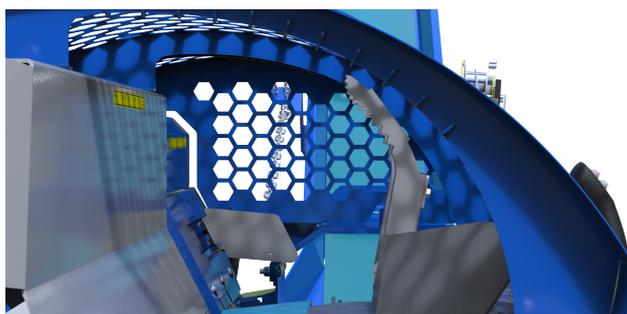
Caution! If the infeed command is held after the log reaches the cutting length limiter, the infeed belt will slip and may get damaged!

During the feeding operation, the swinging lap is raised and remains in the horizontal (support) position until the sawing phase is finished or until the cover is opened and closed and the green button (RESET) is pressed. The swinging lap remains in the support position even when you open the cover. To lower it, close the cover and press the green button twice. During feeding, the cutting length limiter is brought out.



6.2. CUTTING

The chain saw is running only during cutting; at other times, it stands still in its initial position. To start the cutting process, move the main control handle backwards. The cutting process comprises two phases. In the first phase, the log is fixed by means of the holder; in the second phase, the sawbar moves and cuts the log. During the cutting process, the handle must be held in the »backwards« position, otherwise the sawbar will return to its starting position. When the sawbar reaches the lowermost position, the swinging lap opens and the sawed log splits falls freely into the splitting chute. Finally, the saw returns to its original, starting position.



The force with which the cylinder pushes the sawbar is factory set by pressure and **cannot be changed**. The speed of the sawbar is also fixed. Sawing speed depends on the cutting chain sharpness and the type of wood / thickness of the wood logs.

Always check the sharpness and tension of the cutting chain and the amount of lubricating oil before cutting!

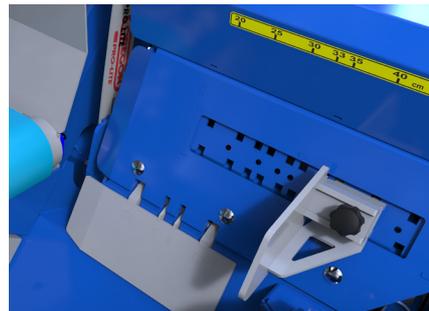
The wood must not move during cutting, and pay particular attention to the last piece to ensure that both handles grip it firmly. **Moving the wood while cutting will damage the sawbar and cutting chain!**

The swinging lap ensures that the cut logs fall more easily into the splitting chute and is in a horizontal (supporting) position during cutting. It opens when the sawbar is in the lower position, but can be opened at any time by pressing the green button on the main control handle. This is particularly useful for curved wood, which rests on the swinging lap during cutting, putting lateral pressure on the sawbar and hindering the cutting action.

Clean regularly and replace the air filter on the saw drive if necessary. A dirty filter prevents air from entering to cool the clutch and belt parts and shortens their lifespan.

SETTING THE LOG CUTTING LENGTH

The log length is set by means of adjusting the position of the cutting length limiter; in the desired position, secure the limiter with a screw.



SAWDUST DISCHARGE

RCA 330 JOYGM is fitted with a canal for sawdust discharge, to which an extraction device may be connected to evacuate wood chips and dust (XE 10).

Canal for
sawdust discharge



6.3. SPLITTING

Splitting is realized by the splitting cylinder, which presses the log splits against the splitting wedge. The splitting cylinder features a quick reverse movement to the initial position.

The splitting cylinder is activated by means of briefly pushing the main control handle forwards. **Do not hold the handle in the forwards position!** The cylinder will automatically carry out the forwards-reverse stroke cycle. The reverse stroke is initiated by an adjustable switch beneath the machine cover.

Prior to each splitting, check the correct position of the log round in the splitting chute!

The cylinder reverse stroke can be initiated at any point by pressing the red button on the main control handle, lifting the protective cover or pressing the STOP safety switch.

Sometimes, the cut log falls into the splitting chute sideways. In such an event, you must lift the protection cover and adjust the log position prior to proceeding with the splitting. Another type of risk is presented by pieces cut at an angle (in particular, the end piece of a log). Such pieces may rise upright during splitting and damage the machine.

SETTING THE SPLITTING WEDGE HEIGHT AND REPLACEMENT OF THE SPLITTING WEDGE

The splitting wedge may be raised or lowered by pressing the two yellow buttons on the control handle. This will align the splitting wedge concentrically with the log for optimal split log dimensions.

The lifting or lowering of the blade is best done when the chute is empty or at the moment when the splitting cylinder starts to move.

The lifting mechanism of the splitting blade also allows partial height movements of the blade during splitting. If wood gets stuck under the wedge, it must be removed to avoid damaging the lifting mechanism.

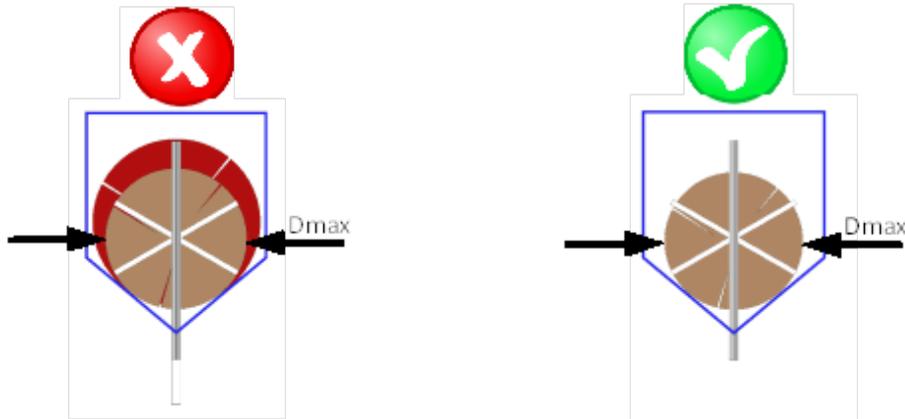
The splitting wedge replacement procedure is as follows:

1. Clean the area beneath the blades;
2. remove the pin at the top of the splitting wedge;
3. lower the splitting wedge all the way to release the lifting mechanism;
4. remove the splitting wedge and install a new one;
5. then lift the mechanism up so that it is in the grip.

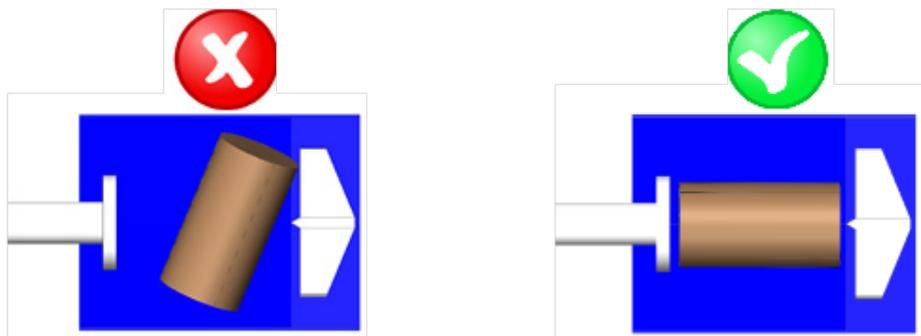
6.4. CORRECT USE OF THE SPLITTING WEDGE

To optimize the splitting wedge service life, observe the following directions:

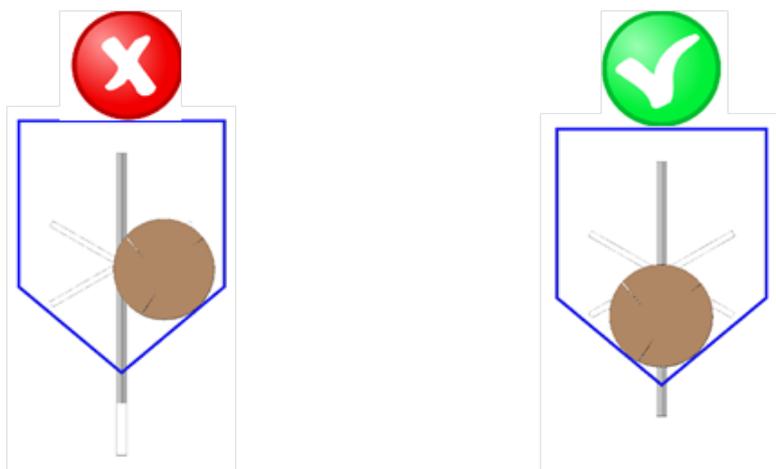
1. The splitting wedge is designed exclusively to split logs of diameters not exceeding the maximum diameter specified for your firewood processor.



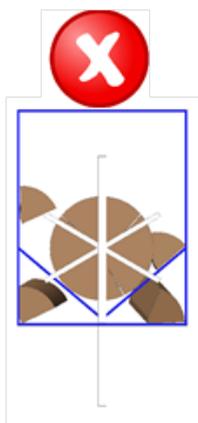
2. In the splitting chute, the log splits must always be oriented longitudinally towards the splitting wedge. In this way, undue stress and work stoppages are prevented.



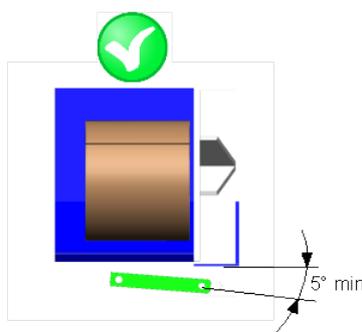
3. In the splitting chute, the log splits must always be concentric to the splitting wedge vertical cutter. In this way, overloads of the splitting wedge side cutters are prevented.



4. Make sure the splitting chute and the splitting wedge are always free of obstacles. Immediately remove any stuck wood scrap.



5. Avoid setting the splitting wedge height to the maximum range of the lifting mechanism. In this way, the splitting wedge retains some freedom of "breathing" during splitting and does not exert loads on the mechanism itself and on the bottom cutters.



Failure to comply with the instructions may result in mechanical damage to the wedge or the machine not covered by warranty.

6.5. MACHINE COVER WITH SAFETY SWITCH

In the event of disturbances in the splitting process, the process must be stopped immediately.

The protection cover is fitted with a safety switch, which means that lifting the cover instantly stops all the main functions of the machine: the infeed and discharge conveyors stop and the splitting cylinder and saw return to the starting position when the cover is lifted. This way, the machine cover also acts as the main safety switch.

Any intervention to the log being split is only allowed after lifting the machine cover and thereby stopping the machine. Cutting and splitting cannot be resumed until the protection cover is closed back, since the safety switch remains active until that moment. To restore all the machine functions, the protection cover must be closed and the green RESET button on the control handle must be pressed.



6.6. CLEANING DURING OPERATION

During operation, some areas are prone to collect heaps of sawdust and wood scraps, and these need to be removed regularly:

1. Scraps beneath the machine. If not removed, sawdust may clog sections behind the splitting cylinder and prevent the cylinder from reversing fully into its initial position. This will result in increased machine idle run pressure and machine overheating;
2. Scrap beneath the discharge conveyor drive roller may damage the belt;
3. Sawdust ejected by the chain saw needs to be removed regularly to prevent its blocking the sawdust extraction channel.



7. MAINTENANCE AND SERVICING



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

Any interventions in electric installation may only be undertaken by a qualified specialist-electrician.

7.1. MAINTENANCE PLAN

For service and maintenance work, the engine must be switched off and the machine shut down.

WHAT?		WHEN?	HOW?
Check the tension of the cutting chain		Before each use	See section: <i>Cutting Chain Tensioning</i>
Check saw belt tension		Every 50 hours of operation	See section: <i>Belt tensioning</i>
Tighten all loose screws and nuts and hydraulic connections		After the first hour of operation Every 100 hours of operation	With tools
Check oil quantity	Hydraulic system reservoir	Before each use	See section: <i>Quantity of oils</i>
	Cutting chain lubrication reservoir	Before each use	Visually
Engine oil level		Before each use	See the manufacturer's instructions
Hydraulic system oil change		Every 5000 hours of operation or every 2 years	See section: <i>Hydraulic System Oil Change</i>
Changing the return oil filter cartridge		<ul style="list-style-type: none"> • After the first 200 hours of operation • Every 1000 hours of operation thereafter • At oil change, if the filter pressure gauge is in the red zone. 	Oil filter insert change
Clean the pressure oil filter cartridge		Every 1000 hours of operation	Using gasoline for cleaning
Cleaning and changing the air filter on the saw drive		Filter cleaning daily Filter change every 6 months	See section: <i>Air filter replacement and cleaning</i>
Check tyre pressure		1x per month	With pressure gauge
VANGUARD EFI 40 engine		Before First Use	See the manufacturer's instructions
Manual winch			

7.2. WHAT TO DO IF ...

FAULT	POSSIBLE CAUSES	REMEDY
The machine does not react to the movement of the control handle or of the additional equipment operation handle.	The power cable (3-pin plug) is disconnected.	Plug in the 3-pole plug in the engine's electrical box.
	The main power switch is not switched on.	Switch on the main electrical switch located on the control panel.
	Safety stop switch activated – "EMERGENCY STOP".	Check the safety STOP switch and release it if necessary.
	The RESET button has not been activated.	Prior to each startup or following each opening of the protection cover, the machine functions must be restored by pressing the RESET pushbutton.
	The electric system is not switched on.	Turn the Start/Stop button to switch on the electrical system.
The machine severely overheats.	Insufficient hydraulic oil in the reservoir.	Top up with oil of proper grade.
	Hydraulic oil depleted.	Check the state (quality) of oil and replace oil if necessary.
	Clogged oil filter, oil filter pressure gauge in the red zone with oil warmed up.	Replace the filter cartridge.
	Too high an engine speed leads to higher losses, higher flow and consequently higher oil temperatures.	Check the speed, which should be set to 3200 min ⁻¹ .
	The splitting cylinder cannot reverse fully to the initial position, because too much sawdust and wood scraps have accumulated behind it; this also results in increased pressure during the machine idle run.	Remove the splitting cylinder cover and remove scraps. From then on, regularly clean the area beneath the machine.
	Overheating and significant loss of splitting force may also result from internal leaks in the splitting cylinder.	Inspection by a service centre is necessary.
The machine has become loud in operation.	Insufficient quantity of oil in the engine.	Check the oil level and top up if necessary.
	Damaged engine exhaust.	Check and replace the engine exhaust if necessary (service).
No hydraulic component works, valve lights turn on as the control handle is operated.	Disrupted connection between the drive engine and the hydraulic pump.	Replace the connection between the engine and the pump (service).

FAULT	POSSIBLE CAUSES	REMEDY
The discharge conveyor belt does not rotate.	The RESET pushbutton has not been pressed prior to the startup.	Prior to each startup or following each opening of the protection cover, the machine functions must be restored by pressing the RESET pushbutton.
	The drive roller rotates, but the belt does not move because it is too loose.	The discharge conveyor valve must be fully tightened during operation, as this prevents oil from draining from the belt tensioning cylinder (TT 340 only).
	A wooden splinter blocks rotation.	Remove the foreign particle and regularly clean the area beneath the drive roller.
The infeed belt does not move or slips, the gauge indicates pressure: (90 - 100 bar).	The hydraulic hoses for rollers drive of lifting table are incorrectly connected and the oil flow is blocked.	Check pipe connections (push the couplers fully onto the ports).
	The roller slides on the belt; the belt is too loose.	Tension the belt.
	The log is too heavy and is also getting stuck.	Cut the log to shorter segments.
The belt veers to the side. This applies both to the infeed conveyor and to the discharge conveyor.	Improper setting of the driven rollers.	Adjust the driven roller so as to make the belt run centrally.
The hydraulic cylinder is not sealing.	Damaged seal.	Replace seals (service).
	Damaged piston rod.	Cylinder replacement (service).
The splitting cylinder loses force, it is not capable of reaching max. pressure. Sometimes this is normal, other times, it is not.	Malfunction of the control valve.	Check the 250 bar pressure.
	Worn hydraulic pump.	Check the 250 bar pressure.
	Malfunction of the safety valve.	Safety valve setup.
The splitting cylinder moves to the end of the stroke and does not reverse automatically. It can be manually reset by pressing the red button on the main control handle.	The end position inductive switch has not output the reversing signal to the splitting cylinder.	The position of the switch beneath the protection cover needs to be adjusted so as to detect the end position.
Increased pressure (exceeding 50 bar) indicated by the splitting pressure gauge during the machine idle run. Possibly combined with hydraulic oil overheating.	The splitting cylinder cannot reverse fully to the initial position, because too much sawdust and wood scraps have accumulated behind it; this also results in increased idle run pressure.	Remove the splitting cylinder cover and remove scraps. From then on, regularly clean the area beneath the machine.

FAULT	POSSIBLE CAUSES	REMEDY
The splitting wedge height adjustment mechanism does not work.	The wedge has probably dropped from the lifting mechanism.	Reposition the wedge onto the lifting mechanism.
Drive belt torn.	Belt not tight enough.	Replace the belt.
	Blocked cutting chain during sawing because the wood was not sufficiently held in place.	Replace the belt.
	Locked bearing on the drive.	Replacement of damaged bearings (service).
The sawbar movement does not work while the log holder and the cutting chain rotation do work.	A foreign particle is stuck in the restrictor between the hydraulic travel cylinder and the hydraulic block, blocking oil flow.	Remove the foreign particle by unscrewing the coupling where the saw pressure gauge is attached. There is a choke point in this small block where the particle is most likely located.
Reduced speed of cutting.	The cutting chain has become blunt.	Install a sharp cutting chain. The force pressing the sawbar into the log is always the same, while the sawing speed depends on the chain quality and on the resistance of the processed wood.
Overheating of the sawbar.	Inadequate lubrication, resulting in increased friction and, in turn, overheating.	Use oil designed specifically for cutting chain lubrication, increase the oil pump feed rate, check the quantity of oil in the reservoir, make sure oil flow into the sawbar groove is not obstructed.
The sawbar is drawn to the side, the saw cuts askew, possibly combined with overheating.	Sawbar bent, probably as a result of movement of the log during cutting.	Replace the sawbar.
	Several cutting chain teeth damaged on the cutting chain.	Resharpener or replace the cutting chain and inspect and align the leading edges on the sawbar.
	Chain bar holder surface damaged by the cutting chain. The chain has created a bead on the surface and the sawbar now seats on this bead. As a result, the sawbar seats sideways to the sawing direction.	File the created bead.



For more complex tasks, you must have a qualified service technician carry out the work.

7.3. CUTTING CHAIN REPLACEMENT

Before changing the cutting chain, the machine and drive engine must be switched off!

- remove the protection cover;



- loosen the cutting chain tensioning screw;



Cutting chain tensioning screw

- loosen the two nuts on the mounting plate so as to allow the sawbar to be separated from its tensioner;



Nuts on the mounting plate

- dismantle the blunt cutting chain and replace it with a properly ground sharp one;
- pay attention to the right orientation of the cutting teeth – on the upper side, the cutting edge must face towards the machine operating post;
- the installation of the cutting chain takes place in the reverse order of dismantling; do not forget to tension it (*See section: Cutting chain tensioning*);
- remove any sawdust from the sawbar holder, from the lubricating groove and the bar surface.

The newly mounted cutting chain must be run-in (2 to 3 minutes). After this, recheck its tension.

Do not install a new cutting chain on a worn sprocket. The sprocket must be replaced at the second replacement of the cutting chain at the latest.

7.4. CUTTING CHAIN TENSIONING

- Loosen the two nuts on the mounting plate (*See section: Cutting chain replacement*);
- tighten the tensioning screw so as to correctly* tension the cutting chain;
- retighten the two nuts on the mounting plate.

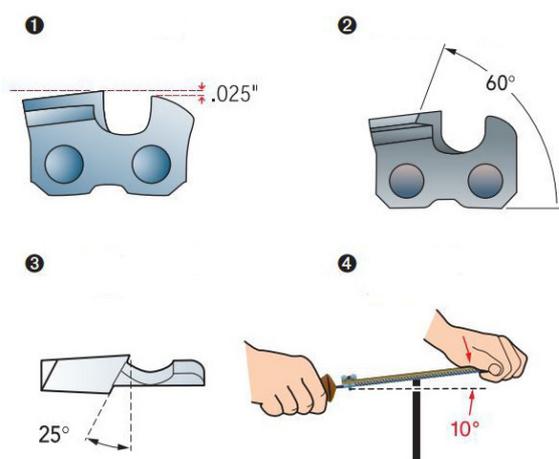
* The cutting chain is correctly tensioned if, on the bottom side of the sawbar, it adheres to the bar, while on the upper side of the bar (approximately at the middle), it can be pulled away from the bar by approx. three quarters of the drive link.

An under-tensioned cutting chain induces vibrations that adversely affect the performance of the drive belt. Increased vibrations may damage the drive belt.



When checking the cutting chain tension, wear gloves to protect yourself from injuries from sharp chain teeth!

7.5. CUTTING CHAIN GRINDING ANGLES



The figure presents grinding angles for the DuraCut™ 3/8" cutting chain, which is used on firewood processors.

1. Depth of cut (0.025" = 0.65 mm) – distance between the top plate and the depth gauge
2. Side plate angle
3. Grinding angle
4. File inclination

7.6. POWER MATE SPROCKET

Use only OREGON Power mate 3/8" sprockets (OREGON code 68210). The sprocket is fitted with a wear indicator (X). Once it wears to the indicator depth, it must be discarded.



3/8" - 7 teeth



7.7. HYDRAULIC SYSTEM OIL CHANGE



Used oil must be disposed of appropriately to prevent environmental pollution.

- Oil must be changed every 5000 hours of operation or every 2 years;
- the oil drain plug is located on the reservoir bottom surface;
- volume of oil in the hydraulic system: 70 litres.

Hydraulic oil of appropriate viscosity (46 mm²/s at 40°C).

The machine is supplied from the factory filled with Hydrolubric VGS 46 (OLMA d.d.) oil.

Oil quality must meet the following standard requirements:

STANDARD	Designation
DIN	DIN 51 524/3 HVL P
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

7.8. 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.



7.9. QUANTITY OF OILS

Please check oil quantities regularly and refill as necessary. The firewood processor must operate horizontally on a flat surface.

HYDRAULIC SYSTEM RESERVOIR



CUTTING CHAIN LUBRICATION RESERVOIR



For engine oil, please refer to the **VANGUARD EFI 40 user and service instructions**.

7.10. CUTTING CHAIN LUBRICATION



Never operate the machine without cutting chain lubrication!

The RCA 330 JOY GM firewood processor applies automatic cutting chain lubrication. Regularly check the oil level in the reservoir.



Cutting chain lubrication oil reservoir capacity: 9 litres

Indicative oil consumption: (0.6 - 1.0) litres/h.

Use only special purpose cutting chain lubrication oils with viscosity 95 mm²/s at 40°C.



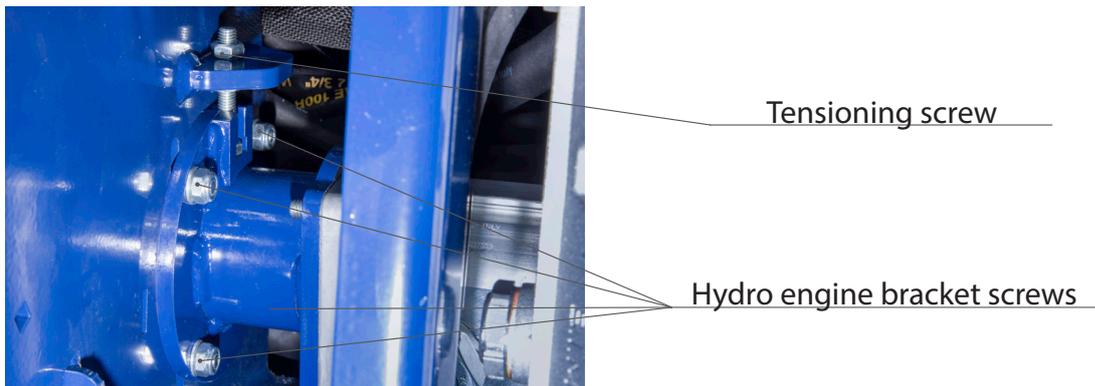
Reusing oil is prohibited!

7.11. CHAIN SAW BELT REPLACEMENT

- Switch off the machine and the drive engine;
- remove the protection covers;



- loosen the belt: loosen the tensioning screw and the screws of the hydro engine bracket;



- remove the belt from the driven belt pulley;
- remove the old belt and clean the drive compartment;
- insert the new belt;
- install the belt on the pulley;
- the process of tensioning the belt: Tighten the tensioning screw until the tension in the belt is 250 N - use a tension meter. If you do not have a tension gauge, tension the belt so that you can turn it a maximum of 90°. Tighten the screws of the engine mount;
- after one hour of test operation, check the belt tension again (with the machine and engine switched off). Subsequent belt tension checks should be carried out after every 100 hours of work.

7.12. BELT TENSIONING



Tension the belt with the machine switched off!

- Loosen the belt: loosen the tensioning screw and the screws of the hydro-motor bracket (*See section: Chain saw belt replacement*);
- the process of tensioning the belt: Tighten the tensioning screw until the tension in the belt is 250 N - use a tension meter. If you do not have a tension gauge, tension the belt so that you can turn it a maximum of 90°. Tighten the screws of the engine mount.

7.13. AIR FILTER REPLACEMENT AND CLEANING

FILTER REPLACEMENT

- Switch off the machine and the drive engine;
- remove the protective covers;



- loosen the screw with the plastic handle and remove the air filter cover, air filter and drive cover;



- replace the filter with a new one, clean the inside and fit the covers back on.

CLEANING THE FILTER

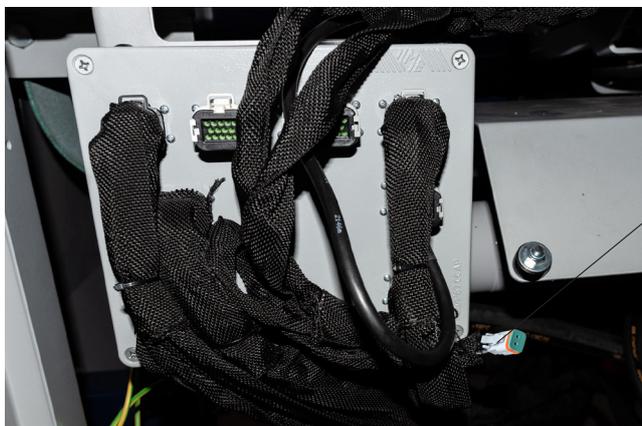
Remove sawdust and particles from the top of the filter (cover) to allow air to flow freely inside the saw drive.

Clean regularly and replace the air filter on the saw drive when necessary. An unclean filter makes it difficult for air to flow to cool the drive train, resulting in overheating and damage to the drive train (bearings, belt, shaft, etc.).

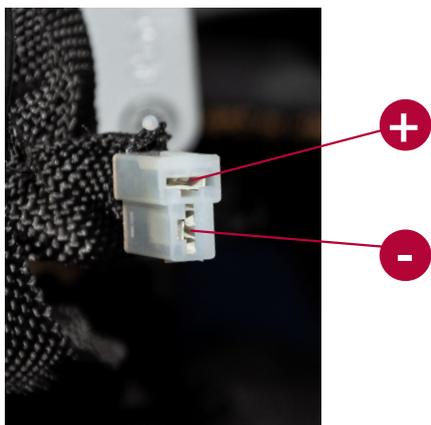
7.14. ADDITIONAL ELECTRICAL OUTPUT (12 V)

Firewood processor has an additional 12V electrical output for connecting accessories (LED light, fan, ...), located at the electronic control box.

The output is switched on or off by simultaneously pressing both yellow buttons on the main control handle.



Additional 12 V output



Additional 12 V output	
Voltage	12 V
Power	12 W (15 W max)

7.15. PRESSURE GAUGES



1	Saw pressure gauge
2	Operating pressure gauge
3	High pressure gauge - splitting
4	Oil filter pressure gauge

7.16. INCORRECT USE OF THE MACHINE

Certain types of damage before the end of the service life of the exposed parts of the machine may be indicative of overload or the inappropriate operation of the machine. The manufacturer warranty does not cover the following types of damages:

- Torn or damaged discharge conveyor or infeed belt
- Broken cutting chain
- Damaged cutting chain guide (sawbar)
- Damaged or bent frame, wedge, cylinder or cylinder protection
- Damaged or bent cutting length limiter or swinging lap
- Cutting chain drive belt broken
- Damages to the main control handle or other control handles
- Damages to the frame due to improper transport on the work site
- Damaged discharge conveyor winch
- Damaged carabiner on the support chain
- Damaged wedge holder
- Damaged or broken splitting wedge
- Clogged or damaged air filter



The machine is tested in terms of functionality and safety. To ensure impeccable and safe operation, only original spare parts should be used in case of failure. The buyer loses all warranty rights if they use non-genuine spare parts, if repairs have been performed unprofessionally, if repairs have been performed by an unauthorised person or if the machine has been modified or altered in any way.

7.17. CONSUMABLES

The machine is fitted with the following consumables and wearing parts, which the customer will replace as needed. The warranty period stated in the warranty certificate does not apply to such parts:

- Cutting chain
- Drive sprocket
- Cutting chain guide (sawbar)
- Cutting chain drive belt
- Discharge conveyor wire rope
- Infeed belt
- Discharge conveyor belt
- Splitting wedge
- Oils
- Air filter
- Oil filter
- Tyres
- Brakes
- Battery
- Light bulbs

7.18. ORDERING SPARE PARTS

When ordering spare parts, always provide the following information:

- Type and factory no. of the machine;
- catalogue number, name and quantity of the spare part;
- full address of the customer.

The manufacturer provides maintenance, servicing and purchase of spare parts for a period of ten years from the date of manufacture of the product.

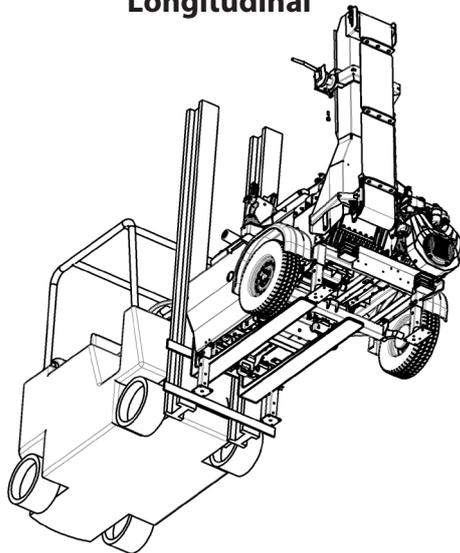
8. LOADING



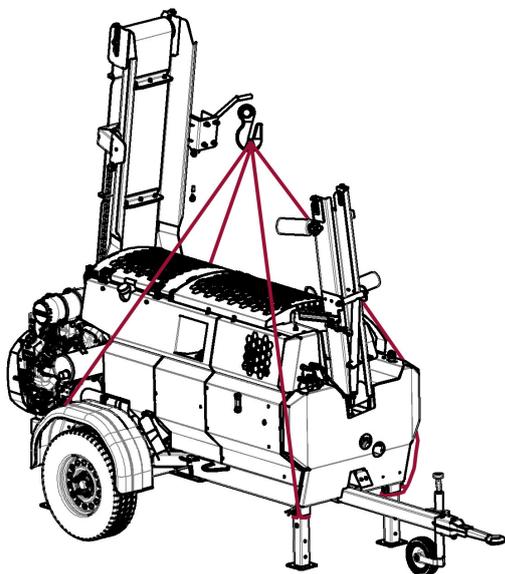
8.1. LOADING ON A FORKLIFT

Before loading the machine, the drawbar must be removed.

Longitudinal



8.2. LOADING WITH LOAD BELTS



EC DECLARATION OF CONFORMITY FOR THE MACHINES

Manufacturer:

**Tajfun Planina 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 330 JOY GM	249142 - 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 4254-1:2015/A1:2021, EN ISO 12100:2010,
EN ISO 13857:2019, 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, 21. 10. 2025

**TAJFUN®**

Tajfun Planina
proizvodnja strojev, d. o. o.
Planina pri Sevnici |4|

Iztok Špan
Director



DECLARATION OF CONFORMITY

IN ACCORDANCE WITH UK GOVERNMENT GUIDANCE

1. Product / Type:
 - a. Product: **FIREWOOD PROCESSOR**
 - b. Type: **RCA 330 JOY GM**
 - c. Factory number: **249142 - 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 4254-1:2015/A1:2021, EN ISO 12100:2010,
EN ISO 13857:2019, EN 609-1:2017, ISO 4413:2010

Planina, 21. 10. 2025



TAJFUN®

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.



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:



