



PETROL WOOD CHIPPER

original operating instructions

RAMBO-HM200



ATTENTION! The machine is delivered without engine oil and without fuel.

Both the model number and the serial number can be found on the nameplate on the machine. You should keep both numbers safe so that you can access them in the future. This

Instructions explain the functions and applications of the machine.

FOR YOUR SAFETY

**Before using the device, read the operating instructions,
Safety and warning instructions must be observed!**

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1. Foreword

Before assembly and before commissioning, read the entire text of the operating instructions. Use these instructions to familiarize yourself with the machine, its correct use and the safety instructions.

1.1 Information on the operating instructions

This operating manual provides important information on how to use the RAMBO-HM200 wood chipper. The prerequisite for safe working is the correct observance of all safety instructions and handling instructions. In addition, the local regulations applicable to the area of application of the machine must be observed.

accident prevention regulations and general safety regulations to comply with.

1.2 Limitation of Liability

We have endeavoured to provide you with as much information as possible about accident prevention when operating the machine, but we accept no liability for incomplete information on the danger points and sources listed.

The manufacturer assumes no liability for damages resulting from:

- Failure to follow the operating instructions
- Improper use of the machine
- Improper assembly, commissioning, operation and maintenance of the machine
- Operating the machine with defective safety devices or not properly installed or non-functional security and protective devices
- Failure to observe the instructions in the operating manual regarding transport, storage, function, operation, maintenance and care of the machine
- Unauthorized structural changes to the machine
- Defective surveillance from machine parts, the one wear and tear subject to
- Improperly performed repairs

- disasters through foreign body influence and force majeure

1.3 Designation of machine

The Designation machine replaced the Trade name of the item to which this operating manual refers - see cover page.

1.4 Copyright

All documents are protected by copyright. The distribution and reproduction of documents, even in part, as well as communication of the content to third parties is not permitted unless expressly agreed.

1.5 Reservations

Information on technical data, dimensions and illustrations of the machine, as well as changes to safety standards, are subject to further development and are therefore not binding for delivery in every case.

Subject to printing and wording errors.



IMPORTANT NOTE!

The machine is delivered without engine oil.

Before first use, ENGINE OIL must be topped up!

2. Intended use use

The petrol wood chipper – RAMBO-HM200 – is designed exclusively for chipping wood up to 12 cm thick. The machine is not suitable for processing garden soil.

Roots with soil, stones, glass, metal, textiles, kitchen waste, cardboard or plastic must under no circumstances be shredded with the machine.



CAUTION!

Cuttings from conifers or similarly dense cuttings can lead to blockages!

The machine is designed to be operated by 1 one person only. Two or more people must never work on one machine.

The security, work and maintenance The manufacturer's instructions and the dimensions specified in the technical data must be observed.

Any other use is improper. Improper use, modifications to the machine or the use of parts that have not been tested and approved by the manufacturer can result in unforeseeable damage!



WARNING!

Possible misuse

- Safety devices are dismantled may not bypassed.
- Use of non-approved accessories.
- The machine must not be used for commercial purposes.

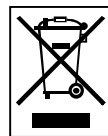
Persons who are not familiar with the operating instructions, children, young people and persons under the influence of alcohol, drugs or medication are not permitted to operate the machine.

3. Operating hours- restriction

In residential and small settlement areas or on the premises of hospitals and care facilities, shredders may not be operated all day on Sundays and public holidays, or on working days from 8 p.m. to 7 a.m.

Please also observe the regional regulations regarding noise protection.

4. Environment



Please recycle waste and do not dispose of it as garbage. All tools, hoses and packaging must be sorted, taken to the local recycling center and

to be disposed of in an environmentally friendly manner.

The site of use must be protected against contamination by leaking operating materials. Used or remaining operating materials must be recycled in accordance with the environmental protection regulations applicable at the site of use.



Please contact your local waste disposal authority for Possibilities

environmentally friendly and

one

factual

fair disposal.

5. Security

This section provides a comprehensive overview of all important safety aspects for adequate protection of the operator as well as for safe and trouble-free operation.

Failure to follow the instructions and safety information contained in this manual may result in significant hazards.

5.1 Warnings

Warnings are marked with symbols in this operating manual. The safety instructions are introduced by signal words that express the extent of the danger.

The instructions must be strictly followed to avoid accidents, personal injury and property damage.



DANGER!

Failure to follow these instructions may result in serious danger to life or death.



WARNING!

Failure to follow these instructions may result in death or serious injury.



CAUTION!

Failure to follow these instructions may result in minor to moderate injury.



IMPORTANT NOTE!

Failure to follow these instructions may result in damage to the engine or other property.

5.2 Safety instructions



WARNING!

Familiarize yourself with the machine. Proper training is a prerequisite for working safely with this machine. Incorrect operation or operation by untrained personnel can be dangerous.

Read the operating instructions for this machine carefully and observe the labels on the machine. Familiarize yourself with the application and limitations as well as the specific potential hazards associated with it.

Also, familiarize yourself with the controls and how to use them properly. Learn how to stop the machine and turn it off quickly. Inexperienced operators must be instructed by personnel who are familiar with the machine. Only then may they operate the machine.

In addition to the occupational safety instructions in this operating manual, the safety, accident prevention and environmental protection regulations applicable to the area of application of the machine, as well as the road traffic regulations, must be observed.

responsibility of the operator The operator must make the operating manual available and ensure that the operator has read and understood it. The operating manual must be handed over. In addition, the operator must train the staff at regular intervals and inform them about the dangers involved in using the machine.

Furthermore, the operator is responsible for ensuring that the machine is always in technically perfect condition.

operator's responsibility

Only trained persons may start, operate and switch off the machine. The operator must be trained in the correct operation of the machine and be familiar with the necessary safety devices. Insufficiently informed operators can be.

and endanger other persons through improper use.

First-time users should seek instruction from the seller to familiarize themselves with the characteristics of the machine, its intended use and the necessary safety devices.

operating personnel



WARNING!

Persons who are not familiar with the operating instructions, children, young people under the age of 18 and people under the influence of alcohol, drugs or medication are not permitted to operate the machine. Young people aged 16 and over may use the machine as part of a training course and under the supervision of a trained person.



The machine is designed to be operated by one person only! Two or more people must never operate and load the machine.

It is forbidden for children or other people to be in the work area while you are working. Also watch out for animals.

The machine may only be operated outdoors and not in enclosed spaces.

The operator is liable for all damage to third parties and their property.

work area

Working with the machine requires a high level of attention.

- **Pay attention to the environmental conditions at the workplace.** To work, you need a level, stable area with enough room to move. Make sure that the work surface is stable and cannot tip over!
- **Ensure adequate lighting in the work area and the area surrounding the machine.** Poor lighting can significantly increase the risk of injury!
- Ensure you have a secure footing in bad weather and on uneven terrain. **Danger of slipping!**

Operation



WARNING!

The processed material is ejected from the machine at high speed. Always wear protective goggles!

Never operate a damaged machine!

Only work when you are in good physical condition.

Carry out all work calmly and carefully.

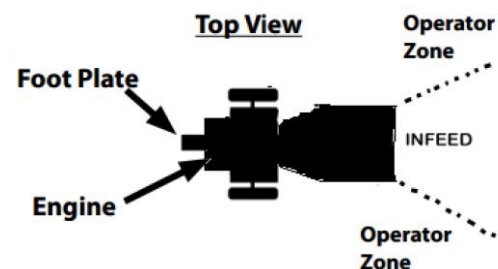
Never leave the machine running unattended.

Do not stand in the area of the ejection openings when starting the engine.

Only start the hoe when the petrol engine has reached the maximum speed.

Never force the material into the machine. Wear appropriate protective equipment (e.g. safety glasses, hearing protection, gloves and sturdy shoes).

Always operate the machine from the side of the feed hopper. It is forbidden to stand in front of the discharge chute when the machine is in operation.



working position

Keep face and body away from the feed hopper.

Never reach into the feed or ejection chute.

Only work with sharp knives, this reduces the risk of kickback

To avoid injury, keep fingers, hands and feet away from the feed hopper and discharge chute.

If handled improperly, the sharp edges of the knives can pose a significant risk of injury. Make sure that the two chopping blades and the counter blade are correctly installed and securely fastened. Failure to do so could result in serious injury.

The machine safety devices never without Protection- and operate. Not installed protective and safety devices are a source of danger and can cause serious injuries.

If the machine comes into contact with a foreign object, stop the engine and remove the spark plug. Check the machine for any damage. Have the damage repaired before restarting the machine and continuing to work.

If the cutting unit and ejector are blocked, switch off the engine, remove the spark plug and clean the cutting unit using a suitable tool.

Always switch off the engine when work is delayed or when moving the machine from one location to another.

Caution at rotating tools - **Keep a safe distance!**

Caution at trailing tools. cleavers can, conditionally through the Flywheel mass continues to run. Work on the machine may only be carried out when the tools have come to a complete stop, the engine switch is in the OFF position and the spark plug connector has been removed.

Do not reach into the running machine (feed hopper/discharge chute) while checking the functionality of the chopping blades.

Never work without protective devices. The effectiveness of the safety and protective devices must not be unduly influenced or eliminated.

Starting up the machine at a higher speed than in the *Technical data* recommended, may cause engine damage. **A high speed increases the risk of accidents!**

The drive must be switched off immediately if there are noticeable changes in the behavior of the machine.

end of work

Do not leave the machine unattended while the engine is running.

When leaving the machine (even for short breaks), switch off the engine and secure the machine against unauthorized use. On models with an ignition key, remove the key; otherwise, remove the spark plug connector.

Park the machine so that it cannot tip over, fall or slip.

Store the machine properly when not in use. After use, store the machine in a locked, clean, frost-free and dry place that is inaccessible to children.

5.3 Personal protective equipment (PPE)

When handling the machine, it is essential to wear personal protective equipment (PPE) to minimize risks to the operator. The following protective measures must be observed:

- Tight-fitting **work clothes** that does not hinder movement. It is primarily used to protect against being caught by moving parts.
- **soundproofing agents** such as hearing protection, earmuffs, etc. to protect against hearing damage. **ATTENTION! Noise can be harmful to health. If the permissible noise level of 80 dB(A) is exceeded, hearing protection must be worn.**
- **face mask** for the Protection before Respiratory diseases to retain fine dust or particles.
- **safety glasses with side protection** to protect the eyes from dust or splinters.
- **work gloves** made of sturdy leather to protect against sharp edges, splinters or excessive vibration.
- **safety shoes or boots** with steel caps to protect against uneven, sharp-edged surfaces or falling objects. The safety footwear also ensures a secure stand.
- **protective helmet** to protect the head from falling parts and swinging loads. It can also protect against injuries in confined situations.

5.4 Transport

When transporting the machine on a vehicle or trailer and before moving it to another location, switch off the engine and wait until the work tools have come to a standstill. Then remove the spark plug connector and close the fuel tap (if fitted).

Only transport the machine upright.

5.5 Safe handling of operating materials/ refueling



WARNING!

Internal combustion engines pose a particular danger during operation and when refueling. Always read and observe the warnings and the additional safety instructions listed further down in this manual. Failure to observe these instructions could result in serious or even fatal injuries.

Do not start or run the engine indoors, in a garage or in a confined space. The engine's exhaust fumes contain poisonous carbon monoxide. Being in an environment containing carbon monoxide can lead to unconsciousness and death.

Before refueling, switch off the engine and let it cool down.

Smoking and any open fire are not permitted.

Fuels can be solvent-like substances. Avoid skin and eye contact with petroleum products. Wear gloves when refueling.

Do not spill fuel or oil. If fuel or oil is spilled, clean the machine immediately. Do not allow fuel to come into contact with clothing. If fuel gets on clothing, change clothing immediately.

Make sure that no fuel or oil gets into the ground (environmental protection!). Use a suitable base.

Carefully loosen the tank cap so that the existing pressure in the tank can slowly dissipate. Check the fuel lines, tank cap and tank for leaks or cracks. The machine

must not be put into operation with such damage.

Close the tank cap properly after refueling.

To start the machine, change location (at least 3 meters away from the refueling area).

Fuels cannot be stored indefinitely. Only buy as much as you plan to use in a few months. Do not use old fuel!

Transport and store fuel and oil only in approved and marked canisters.

Do not transport or store fuel and oil near flammable or easily combustible materials, sparks or open flames.

Never use a machine with a damaged ignition cable and spark plug connector. Danger of sparks!

Fuels and oils are, according to safety regulations, must be kept out of the reach of children.

5.6 Service security



WARNING!

Repair, setup, maintenance and cleaning work, as well as transporting the machine, should only be carried out when the drive is switched off and the tools are at a standstill. In the event of a malfunction, the machine must always be switched off. Moving parts can cause serious injury.

To machines with gasoline engine before
Repair, setup, maintenance and cleaning work
Pull the spark plug connector and unscrew the spark plug to prevent accidental starting.

Always ensure that the machine is in a safe operating condition; in particular, check the fuel system for leaks.

If protective devices and work tools are subject to wear, they must be checked regularly and replaced if necessary.

damaged cutting tools (jumped, worn out or otherwise damaged) must be replaced immediately. When replacing the chopping blades, use suitable tools and wear protective gloves.

Regularly check that the screw connections are tight and tighten them if necessary. Always keep the machine controls dry and free from resin, oil and grease.

After repair, adjustment, maintenance and cleaning work, always fit the protective and safety devices on the machine and put them in the protective position.

Work on the electrical system may only be carried out by qualified electricians.

Only use original LUMAG spare parts and accessories. The use of other spare parts and accessories increases the risk of accidents. We accept no liability for any resulting damage.

5.7 Electrical system

People wearing a pacemaker must not touch the live parts of the ignition system when the engine is running.

5.8 Residual risks and protective measures



WARNING!

Disabling, modifying, blocking, dismantling, converting or attaching any parts to the machine's safety and protective devices is strictly prohibited and failure to do so may result in serious or life-threatening injuries.

Mechanical residual

hazards capture, winding

The machine can catch and pull in items of clothing, cords, wires and other foreign objects.

→ Check the wood chips for foreign objects.

Wear tight-fitting clothing. **pulling in, catching**

Rotating parts such as the blade mechanism can pull in and catch loose clothing.

→ When handling the machine, wear

personal protective equipment (PPE) is absolutely necessary.

Squeeze

Careless handling of the wood chips can lead to serious injuries.

→ Feed the wood chips slowly and carefully into the feed hopper.

→ Do not reach into the funnel. **Automatic feed!**

→ Always insert the material with the thick end first.

→ Maintain sufficient safety distance.

→ Operate the machine calmly and carefully.

→ Pay attention to people nearby!

neglect of ergonomic principles **careless**

use

personal

protective equipment (PPE)

negligent use or omission of personal protective equipment can result in serious injury.

→ Wear prescribed protective equipment.

Insufficient local lighting

Poor lighting poses a high safety risk.

→ Always ensure adequate lighting at the workplace.

Human behavior, misconduct

→ Always concentrate fully when doing any work. Residual risk can never be ruled out.

Electrical Residual Hazards

Direct or indirect electrical contact Touching live parts when electrical components are open or defective or when electrical connections are not in place properly can result in injury.

→ Never touch the spark plug connector or spark plug while the engine is running.

→ Have defective cables or plugs replaced by a specialist.

Thermal residual hazards

burns, chilblains

Touching hot surfaces can cause burns.

→ Allow the engine to cool down. Always ensure that the engine is adequately ventilated.

danger from noise

hearing loss

Prolonged, unprotected work with the machine can lead to hearing damage.
→ Always wear hearing protection.

Hazards from materials and other substances **contact, inhalation**

Thrown objects or liquids can cause health damage.

- Mechanical particles can injure your eyes when working. Always wear protective goggles!
- Exhaust fumes can be harmful to health. Only use motorized equipment outdoors and take regular breaks.

fire, explosion

Risk of fire and slipping due to leaked fuel or hydraulic fluid.

- Smoking, fire and open flames are prohibited during operation!
- Immediately remove spilled liquid with an oil absorbent and dispose of it properly.

Other hazards

Slipping, tripping or falling of persons On unstable and uneven surfaces, you may be injured by tripping.

- Be aware of obstacles in the work area. Always ensure you have a secure footing and wear safety shoes.

5.9 Behavior in an emergency

If an accident occurs, initiate the necessary first aid measures and request qualified medical assistance as quickly as possible.

When requesting assistance, please provide the following information:

Where it happened - what happened - how many injured - what type of injury - who is reporting!

6. Warning and information symbols used

Symbols are provided on the machine to provide important information about the product and instructions for use.



DANGER!

This is about your safety. The symbol indicates a danger, warning or caution.



Before commissioning, read and observe the operating instructions and safety information.



Before cleaning, maintenance and Repair work: Switch off the engine and disconnect the spark plug connector.



DANGER!

Health and explosion hazards from combustion engines



The engine's exhaust contains poisonous carbon monoxide. Being in an environment containing carbon monoxide can lead to unconsciousness and death.



Do not run the engine in an enclosed space.



Keep the machine away from heat, sparks and flames. Do not smoke near the machine.



Petrol is extremely flammable and explosive. Before refueling, turn off the engine and let it cool down.



Use unleaded fuel RON95 or higher.

MANDATORY SIGNS



Read these instructions completely before using the machine. Failure to do so increases the risk of injury to the operator and bystanders.



Carry the safety shoes with steel caps.



Wear protective gloves.



Wear eye protection.



Wear hearing protection.



Check engine oil!

Check the oil level before each use and after at least 8 operating hours (BTS).



Never remove or tamper with any protective or safety devices.



Warning of hot surfaces.

Danger of burns!

Do not touch hot engine parts. These remain hot for a short time even after the machine has been switched off.



Getting caught in the rotating belt will cause a hand injury. Always put on the belt guard.



WARNING! Keep hands and feet

away from rotating blades. Do not reach into openings, the feed hopper or discharge chute when the engine is running.



WARNING! Keep hands away from

rotating parts. Only touch machine parts when they have come to a complete standstill. Never open or remove protective devices when the engine is running.



WARNING! Danger through thrown away objects at engine running. There is a risk that processed material or material residues such as chips will suddenly be ejected. For this reason, uninvolved persons, as well as pets and livestock, must never stand in front of or next to the machine.



When the engine is running, maintain a sufficient safety distance of at least 12 meters.



Keep bystanders away from the work area.

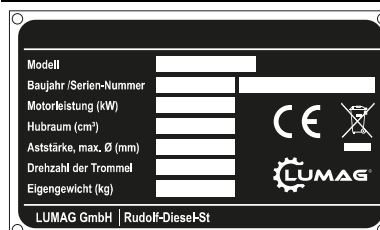


Chop

up to max. 120 mm diameter, depending on the type and freshness of the wood.



electric start, ignition key (12V)



nameplate

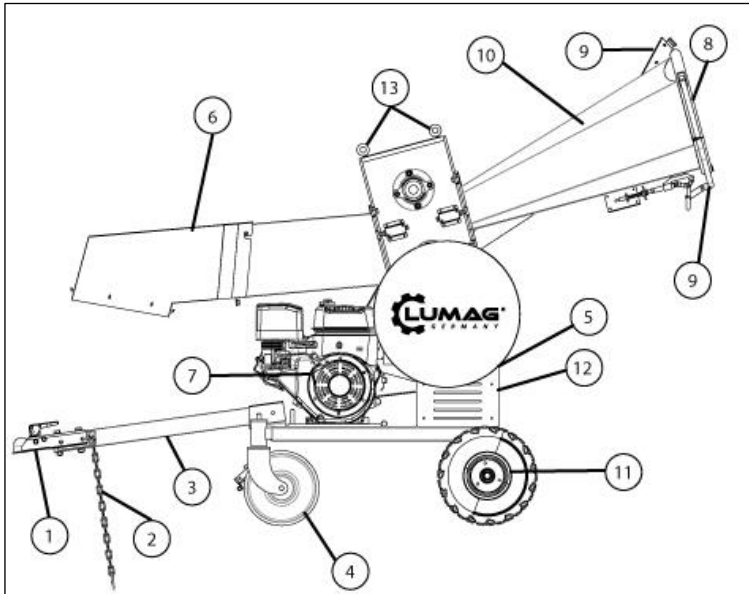
Equipped with model name, year of manufacture and serial number. Please always state this information when ordering spare parts or for service information.



Old electrical/motor devices are recyclable materials and therefore do not belong in household waste! Please dispose of the components in an environmentally friendly manner.

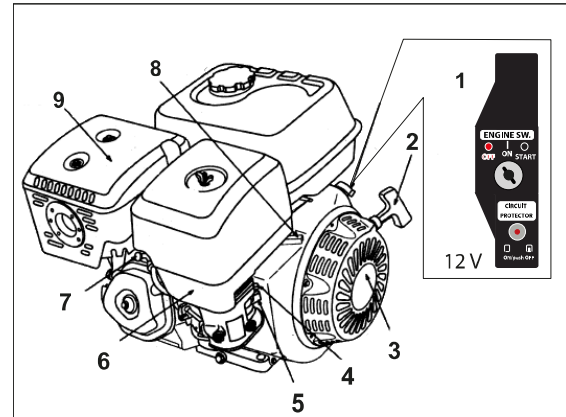
7. Part designation

7.1 Shredder

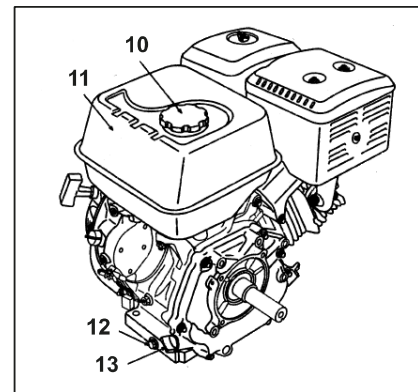


- 1 trailer hitch
- 2 safety chain
- 3 drawbar
- 4 Front axle, with parking brake
- 5 Chipper, incl. chipper key
- 6 Ejection chute, foldable
- 7 gasoline engine
- 8 rubber protective flap
- 9 safety bar & push button (EMERGENCY STOP)
- 10 Feed hopper, foldable
- 11 Transport wheel (2x)
- 12 starter battery
- 13 lifting points

7.2 gasoline engine



- 1 Engine switch (main switch) = ignition switch on the electric
- 2 starter handle
- 3 recoil starter
- 4 choke lever
- 5 fuel tap
- 6 air filter
- 7 Spark plug, spark plug connector
- 8 throttle lever
- 9 muffler



- 10 tank cap
- 11 fuel tank
- 12 oil drain plug
- 13 oil filler plug with dipstick

8. Functions

8.1 Engine

Engine switch (main switch) = ignition switch on the electric starter (1)

The engine switch in the OFF position prevents the machine (engine) from starting. To restart, turn the engine switch to the ON position, **then start the engine as described in COMMISSIONING / Starting process (14.2).**

recoil starter, recoil starter (2+3) The starter is designed as a magneto ignition spring with return. Handling the recoil starter can **damage** the starter. Never wrap the recoil starter cable around your hand.

choke lever (4)

The choke lever opens and closes the carburetor choke valve. The choke lever is only used to start a cold engine.

fuel tap (5)

The fuel tap opens and closes the connection between the tank and the carburetor.

air filter (6)

The air filter consists of a foam pre-filter and a paper filter insert. It is located under the cover (6). A dirty air filter is noticeable by the engine running poorly and black smoke.

muffler (9)

The engine exhaust becomes hot when the engine is running. Avoid touching the muffler when it is hot. Caution: risk of burns!

throttle (8)

The throttle can be reduced using the lever on the engine so that the engine idles and the blade drum stops.

Spark plug, spark plug connector (7)

Ignition is achieved via an ignition cable and a spark plug connector that is connected to the spark plug. Before starting the engine, check that the spark plug connector is correctly seated. Always remove the spark plug connector from the spark plug when performing adjustment and maintenance work.

oil filler plug with dipstick (13)

The engine oil is filled into the dipstick holder. The dipstick must NOT be screwed down to check the oil level.

oil drain plug (12)

The oil drain plug is located on the back of the engine.

fuel tank (11)

There is a fuel tap under the tank.

8.2 Device unit

safety circuit

EMERGENCY STOP bar without a snap fastener (9) on feed hopper

In dangerous situations, the motor can be stopped by pressing the EMERGENCY STOP lever or push button (9).

There is another switch with the same function.

- Engine switch (ignition switch) (1) on the engine.



WARNING!

The knife shafts run because of the Flywheel for a short time!

In the event of unexpected circumstances, never hesitate to operate the EMERGENCY STOP lever or push button (9) on the feed hopper.

Foldable feed hopper (10)

The feed hopper can be folded to the side to clean the blade shaft, remove blockages and change the blades.



DANGER!

Before starting up the machine, the feed hopper and the safety circuit must be reinstalled. Check that the safety circuit is working!

pull rod (3)

A pull rod is provided to better guide the machine.



IMPORTANT NOTE!

Remove the drawbar during loading!



CAUTION!

Never lift the machine by the feed hopper or discharge chute; use the two lifting points (13) and a lifting device appropriate to the weight of the machine as well as the necessary accessories!

9. Technical data

model number	RAMBO-HM200
drive	4-stroke OHV Beninmotor
displacement	420 cm ³
Engine power, max.	9.0 kW*
Engine speed max.	3,600 rpm
starting system	manual start, electric start
cleavers	2x3 knives
fuel	unleaded regular gasoline
fuel volume	6.5 liters
engine oil	SAE 10W-30 or SAE 10W-40
oil tank volume	~ 1.1 liters
spark plug	Type F7RTC or equivalent spark plug
trunk diameter, max.	120 mm °
cutting length, approx.	200 - 250mm
Guaranteed sound power level LwA	110 dB(A) ¹
Weight	approx. 370 kg

* Actual performance during continuous operation is likely to be lower due to operating limitations and environmental influences.

° Max. branch diameter to be processed, depending on wood type and freshness.

¹ Factor of measurement uncertainty K=1.5 dB (A). The measurement was carried out in accordance with DIN EN ISO 3744.

The technical data was valid at the time of printing and is subject to change without prior notice.

9.1. Electrical connection



WARNING!

Work on the electrical installation and electrical equipment may only be carried out by qualified electricians.

9.1.1 Electric start

The battery is already mounted on the chassis.



WARNING!

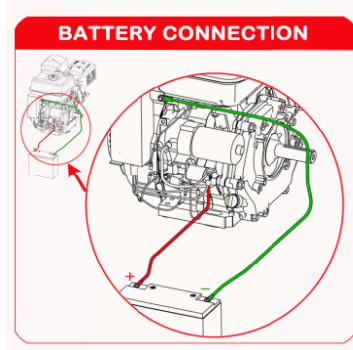
Before connecting, the key on the electric starter must be turned to the OFF position and then removed.

Connecting the battery:

1. Turn the ignition key on the electric starter (1) to the OFF position and remove
2. First connect the green cable to the negative pole (-).
3. Then connect the red cable to the positive pole (+).

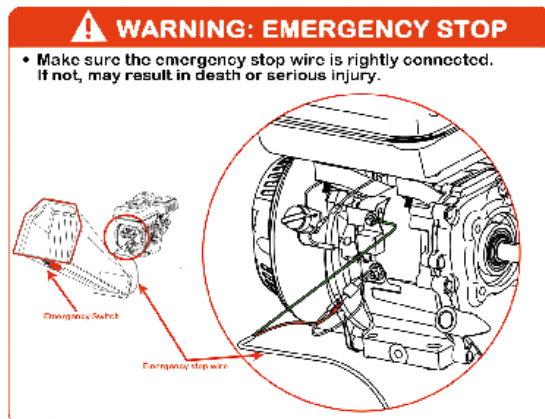


E-Start



Connecting the battery

9.1.2 Safety circuit (EMERGENCY STOP)



Connect safety circuit (EMERGENCY STOP)

10. Technical Description

The wood chipper is used to produce firewood.

The machine is powered by a powerful 4-stroke OHV petrol engine.

The chopping device works on the principle of two counter-rotating knife shafts - each with three chopping knives - these are driven by two flywheels and two V-belts.

The chopped material is ejected through the ejection chute. Due to the cutting angle of the chopping blades and the arrangement, the wood is automatically drawn in. No feeding device is necessary.

The ejection chute allows for targeted ejection into wheelbarrows or a collection bag, which can be hooked into the already integrated eyelets of the ejection chute.

A wide chassis with pneumatic tires and front wheels that can rotate 360° and have a parking brake enable convenient transport.

Thanks to the drawbar with trailer coupling, the machine can also be transported to the site using a trailer coupling.

Please note that the machine may only be driven on private property. It is not approved for road use!

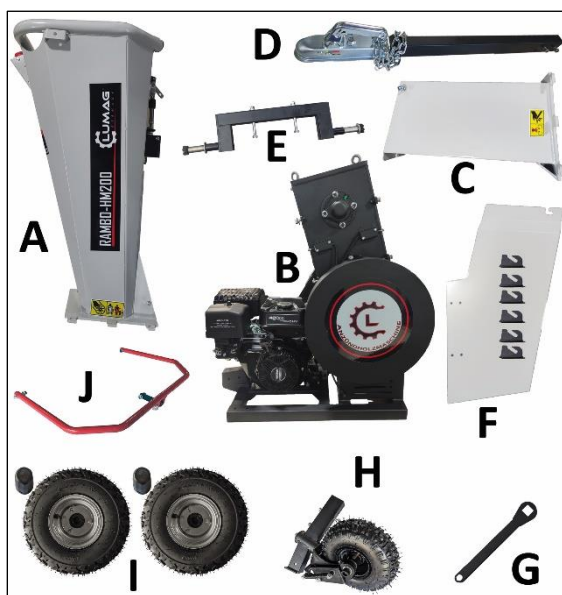
11. Scope of delivery

After unpacking, check the contents of the box or transport box for

- completeness
- possible transport damage

Report any complaints to the dealer or manufacturer immediately. Complaints made later will not be accepted.

The machine is delivered partially disassembled. The assembly work in section 12 must be observed.



scope of delivery

- A Feed hopper, foldable Gasoline engine
- B with frame and rotor Rear part,
- C discharge hopper, foldable Drawbar
- D with trailer coupling Wheel axle
- E
- F Front part, ejection funnel + 6x bag hooks,
- G chopping key
- H 2 steering wheels with parking brakes
- I 2 wheels, 2 axles, 2 cotter pins, 2 cover caps
- J Safety bar (EMERGENCY STOP)

12th assembly



IMPORTANT NOTE!

At least two to three people are required for assembly. Install assembly parts while the engine is turned off.

The machine consists of parts that weigh more than 20 kg. These parts must always be carried by at least two people.

- Filling funnel, foldable (A)

The assembly (B) gasoline engine with frame and rotor should be lifted using a forklift or crane.

If you have any questions or problems during installation, please contact us. You can reach us by email:

info@lumag-maschinen.de or by phone at +49 8571/92 556-0.

To simplify the assembly process, we have divided the assembly instructions into several steps.

Please note that most of the screws listed were placed loosely in their intended location for shipping.

Lay all parts flat on a suitable mounting surface.

Step 1 Install the wheel axle (E)



WARNING!

Danger to life during lifting and transport operations!

- Falling loads or parts thereof can kill people.

- Only use lifting and transport devices as well as lifting, holding and securing devices that are in perfect technical condition and have sufficient load-bearing capacity.
- Before starting any lifting or transport operation, check that the load is securely fastened and that the holding and securing devices are functioning reliably.

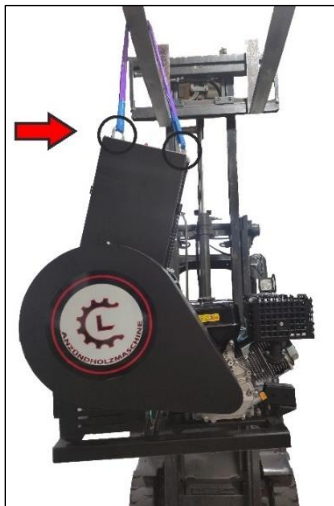
- Lifting and transport operations should only be carried out under the guidance and instructions of a supervisor.
- Lifting and transport operations must always be carried out only by qualified and authorised persons.
- Never stand under a raised load.
- Wear a protective helmet during lifting and transport operations.



CAUTION!

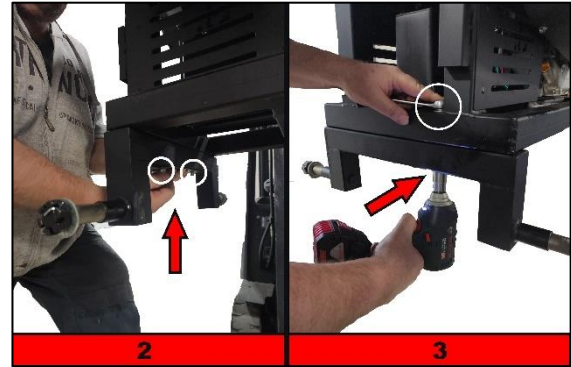
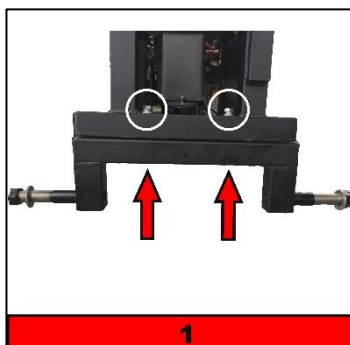
The frame with rotor and petrol engine is very heavy (approx. 200 kg). Pay attention to the weight!

Lift the assembly using a forklift or crane suitable for lifting loads. Use approved straps and use the two lifting points (13) on the assembly *gasoline engine with frame and rotor*. Make sure that the straps are not twisted and that they are pulled evenly tight when lifting.



Lifting the machine (lifting points (13))

Mount the *wheel axle (E)* with two hexagon screws, washers and nuts, as shown in pictures 1-3, onto the *frame with rotor and gasoline engine (B)*

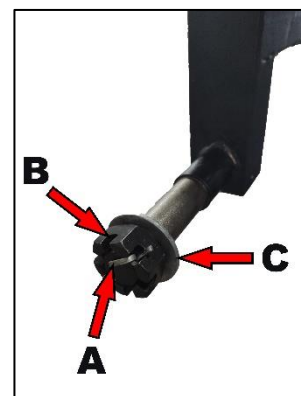


Step 2: Mounting wheels (I)

The wheels are placed on the *wheel axle (E)* assembled.

1. From the *wheel axle (E)* Remove the locking pin (A), castle nut (B) and washer (C).
2. Grease the axle. Use commercially available multi-purpose grease.
3. Wheel with the hub over the axle – until stop – push. The valve on the wheel must point outwards.
4. Secure the wheel with washer (C), castle nut (B) and locking pin (A). Tighten the castle nut by hand! Insert the locking pin (A) into the axle from top to bottom and bend the ends up and down.
5. Place the dust cap on the end of the axle.

Repeat the step for the second wheel.

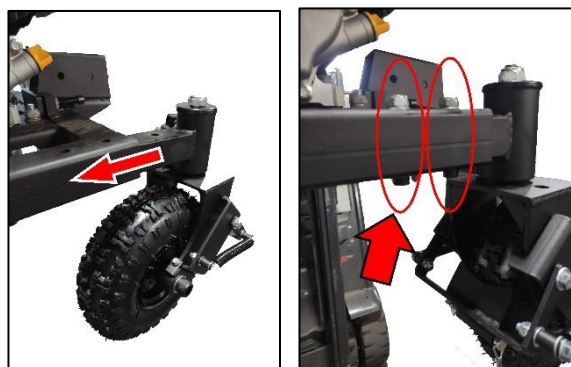


Step 3: Install the steering wheels (H)

The steering wheels (H) are attached to the *frame with rotor and gasoline engine (B)* assembled.

1. Pre-assembled fastening material (Allen screws, Nuts and the corresponding washers) from the steering wheel (H).
2. Insert the steering wheel (H) into the square socket.
3. Make sure that the holes in the steering wheel (H) are aligned with the holes in the square guide.
4. Support wheel with 2 washers ~~Allen screws~~, the square guide of the *frame with rotor and gasoline engine (B)* screw together.

Repeat the step for the second steering wheel.



Tire pressure: *max. 2 bar*

Now lower the assembly with the mounted wheels and steering wheels and remove the straps.

Secure the machine against rolling away.

Function of the manual parking brake

Push the lever up:

- Steering wheel is unlocked (driving position)

Press the lever down:

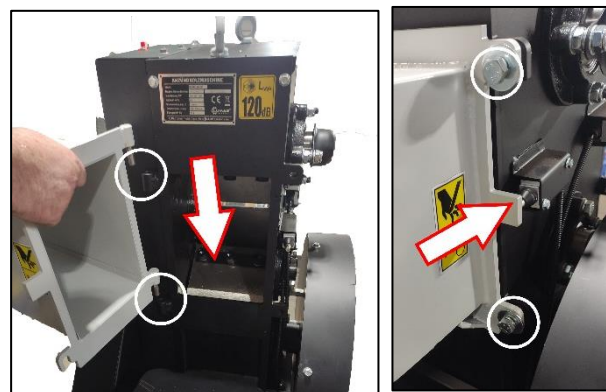
- Steering wheel is locked (parking position)



Step 4: Mount the rear part, ejection funnel, foldable (C)

The machine can now be lowered onto the wheels for further assembly and secured using the brake on the steering wheel (H).

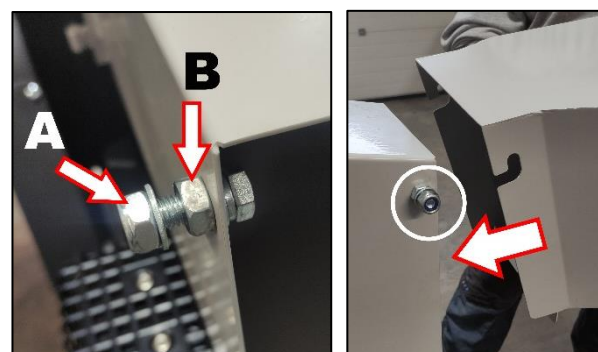
Position the rear part, ejection funnel, foldable (C) so that the fastening rails of the ejection funnel are aligned with the mounts on the *gasoline engine with frame and rotor (B)* Then slide it open. Now close it and screw it to the *frame with rotor and gasoline engine (B)* Make sure that it is screwed on tightly enough so that the safety switch is activated.



Step 5: Front part, ejection funnel, foldable (F) mount

The *front part, ejection funnel, foldable (F)* will be sent to the *rear part, ejection funnel, foldable (C)* assembled.

1. Loosen the outer 3 nuts (A) on *rear part, ejection funnel, foldable (C)* a little and lock the inner nuts (B) with the screws. Now hang the *front part, ejection funnel, foldable (F)* first at the bottom and then at the side into the rear part, the ejection chute. Finally, tighten the 3 outer nuts and thus fix it to the rear part, the ejection funnel, foldable (C).



Step 6: Bag hook on front part, Install the ejection funnel (F)

Screw the 6 bag hooks, 2 on each side + 1 hook at the front, as shown in the pictures on the *front part, ejection funnel (F)*.

These are in a small bag and are included in the delivery.

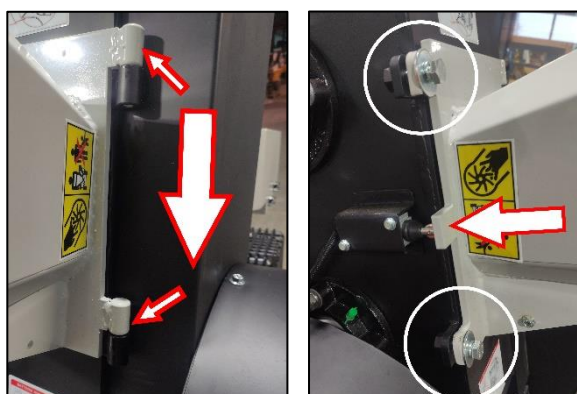


Step 7: funnel, foldable (A)

A NOTICE:

This component is very heavy, so please ask a second person to help with assembly.

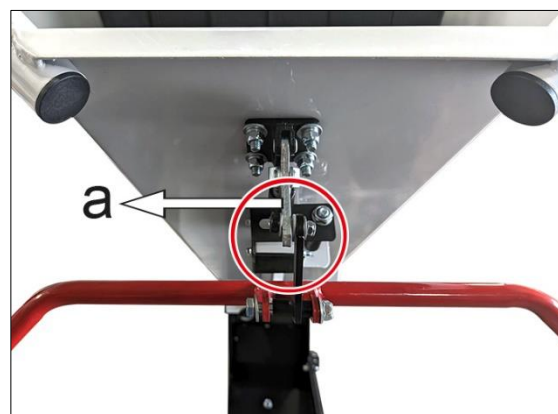
funnel, foldable (A) Position it so that the mounting rails of the hopper are aligned with the mounts on the *gasoline engine with frame and rotor (B)* Then slide it open. Now close it and screw it to the *frame with rotor and gasoline engine (B)* Make sure that it is screwed on tightly enough so that the safety switch is activated.



Step 8: Safety bar (EMERGENCY STOP) (J) assemble

Mount the EMERGENCY STOP bracket on the EMERGENCY STOP frame of the filling funnel.

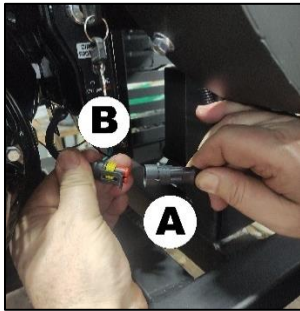
1. Pre-assembled fastening material (Screws, nuts and the corresponding washers) from the EMERGENCY STOP bracket. (1x in the middle and at both ends of the bracket).
2. Screw the EMERGENCY STOP bracket onto the EMERGENCY STOP frame device (a).
3. Swing the EMERGENCY STOP bracket upwards and screw the ends on the right and left of the filling funnel.



Installing the emergency stop bracket

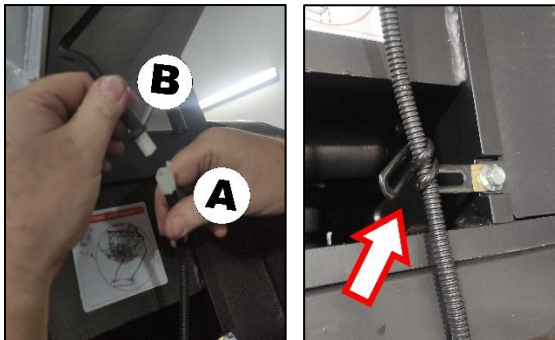
Connect safety circuit (EMERGENCY STOP)

Connect the cable (a) to the motor cable (B) near the battery holder.



Connect safety circuit (EMERGENCY STOP)

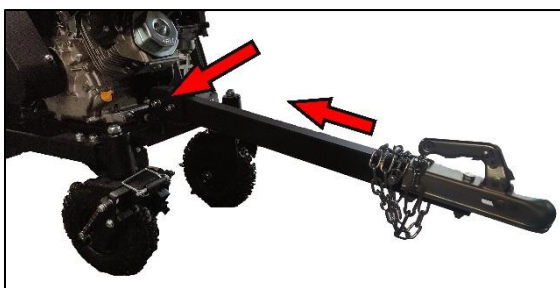
Connect the motor cable (a) near the battery holder to the cable (B) of the feed hopper. Then secure the cable with the cable holder.



Step 9: Install the drawbar with trailer coupling (D)

Mount the pull rod on the *frame with rotor and gasoline engine (B)*.

1. Pre-assembled fastening material (screw, nut and corresponding washers) from the pull rod.
1. Insert the pull rod into the square socket and secure it with two screws, washers and nuts on the *frame with rotor and gasoline engine (B)* assemble.



Installing the drawbar with trailer hitch

Step 10: Connect the battery



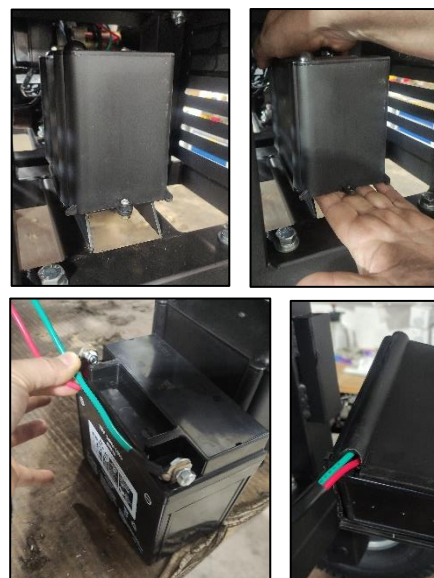
ATTENTION! Before connecting the battery, the ignition key must be turned to "OFF" and removed!

The battery is mounted under the filling funnel.

1. Loosen and remove the battery cover screw.
2. Carefully pull the battery cover including the battery backwards off the retaining plate.

A NOTICE: The battery cover is open at the bottom! Therefore, hold your other hand underneath when pulling it out to prevent the battery from falling out.

3. Connect the battery, see point "9.1.1 Electric start - Connecting the battery"
4. Route the cable as shown in picture 4 and replace the battery cover.
5. Slide the battery including the cover back onto the retaining plate
6. Screw the battery cover to the retaining plate using the previously removed screw.



ATTENTION! Check all screw connections again and tighten if necessary!



IMPORTANT NOTE!

Before starting the machine, check all fluids and refill them if necessary as described to avoid damage to the machine.

13. Drive type

13.1 Gasoline engine

The machine is powered by a petrol engine. For information on starting and stopping the petrol engine, please refer to the engine operating instructions or the following pages of this manual. [See... COMMISSIONING / Starting the engine \(14.2\) and stopping the engine \(14.3\)](#)



IMPORTANT NOTE!

When delivered, the machine's engine does not contain any engine oil or fuel. Fill the drive motor as described under "FUELLING".

13.2. Refueling



WARNING!

You may only carry out the work described in this chapter after you have read and understood the safety instructions. It concerns your personal safety.

13.2.1 Filling engine oil



IMPORTANT NOTE!

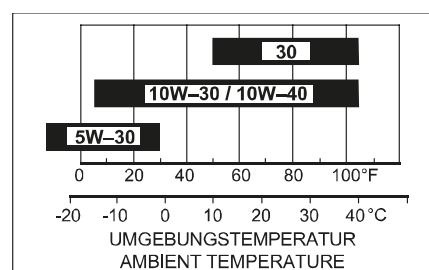
The engine oil must be topped up before the first use! Incorrect oil filling can lead to irreparable damage to the engine. In this case, the seller and manufacturer will not provide any warranty.

- Place the machine on a level surface and place it on a stable surface so that the motor is horizontal.
- Commercially available engine oil with the **specification SAE 10W-30 or 10W-40** use.
- Correct oil level is between upper and lower levels.

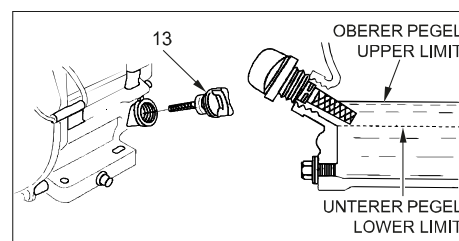
Check engine oil level

Turn off the engine and let it cool down.

1. Unscrew the dipstick.
2. Wipe the dipstick with a clean cloth and reinsert it, do not screw it in.
3. Pull out the dipstick again and read the oil level; if necessary, fill engine oil up to the lower edge of the oil filler opening. *Use a funnel!*
4. Tighten the dipstick.
5. Wipe away any oil residue/dirt.



engine oil viscosity



refill engine oil

Capacity: approx. 1.1 liters Do not overfill!

DANGER!

When the engine is running, the oil filler plug must always be firmly seated in the filler neck!



IMPORTANT NOTE!

Using SAE 30 oil below 10°C will result in harder starting and possible damage to the engine bore due to insufficient lubrication.

13.2.2 Refueling



DANGER!

health and risk of explosion through Combustion engine. Be careful when handling fuel!



The engine's exhaust contains poisonous carbon monoxide. Being in an environment containing carbon monoxide can lead to unconsciousness and death.



Do not run the engine in an enclosed space.



Before operating the machine, read the operating instructions and the engine manual.



Keep the engine away from heat, sparks and flames. Do not smoke near the machine!



Petrol is extremely flammable and explosive. Before refueling, turn off the engine and let it cool down.

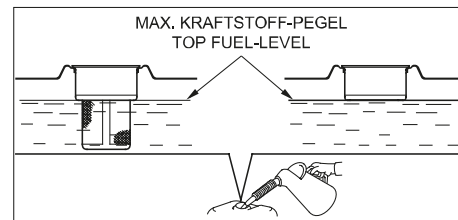
This engine requires only regular unleaded gasoline with a research octane rating of 95. Use only fresh, clean fuel. Water or impurities in the gasoline will damage the fuel system.

When refilling fuel, please note:

- Switch off the engine and allow it to cool for at least 10 minutes before removing the fuel tank cap.
- Keep the engine away from heat, sparks and flames.
- Fill fuel outdoors or in a well-ventilated area to dissipate fumes.
- Keep gasoline away from sparks, open flames, pilot lights, heat sources and other sources of ignition.
- Do not spill fuel, use suitable filling aids.
- If fuel is spilled, wait until the vapors have dissipated before starting the engine.

refueling

1. Turn the fuel tap to OFF.
2. Clean the area around the fuel tank cap of dirt and foreign objects.
3. Unscrew the tank cap.
4. Fuel tank with **gasoline (RON95)** To allow room for the gasoline to expand, do not fill beyond the bottom edge of the fuel filler neck.
5. Screw the tank cap tightly onto the tank neck.
6. Wipe up any spilled gasoline immediately.



fuel

Tank volume: approx. 6.5 liters Do not overfill!

storing fuel

- Fuels can only be stored for a limited time; they age. Fuels or fuel mixtures that have been stored for too long can lead to starting problems. Only store as much fuel as you will use in a month.
- Only store fuel in containers that are specifically approved for this purpose. Store fuel containers in a dry and safe place.
- **Store fuel containers out of the reach of children.**

14. Commissioning

The machine must not be set up on a sloping surface. Particular care must be taken to ensure that the floor does not give way under the heavy load of the machine.

Do not work alone; someone must be nearby (within calling distance) in case of emergencies.

14.1 Preparation for use

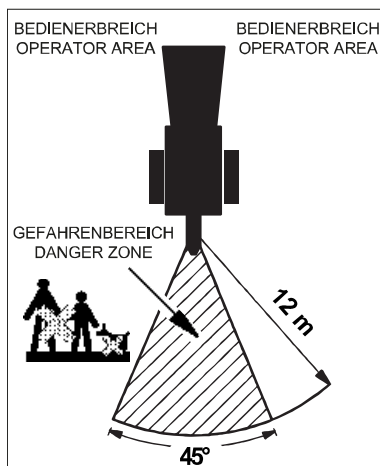
- Make sure that the machine is completely and correctly assembled.
- All safety devices must be fitted to the machine. They must not be removed or rendered unusable.
- Before using the machine, check it for external damage.
- Only use the machine on a level and solid surface. **Attention, risk of tipping over!**
- Only install the machine outdoors. Keep at least 3 metres away from house walls or other rigid objects.



WARNING!

The presence of persons, children and animals in the danger area is prohibited.

Mark out an area at least 3 m wide and 12 m long on the side of the discharge. Check the immediate area before starting. Pay particular attention to children, other people and animals.



When working, wood chips, stones, etc. can be thrown out. No other people or animals may be in the ejection area = danger zone.

Also pay attention to vehicles, windows and other objects so that they are not damaged.



WARNING!

When working, care must be taken to ensure that no one can be injured by ejected material.

- Keep handles dry and clean.
- Before starting work, check that the EMERGENCY STOP lever moves smoothly and functions properly.
- Check that the blades are in good condition and properly attached. Blunt blades can be turned over.
- Check the tire pressure regularly (approx. 1.7 bar)
- If faults or defects occur, the machine must not be operated until they have been eliminated.



IMPORTANT NOTE!

Severely damaged or bent blades must be replaced with new blades.



WARNING!

Only operate the machine when all blades are correctly inserted and secured. Furthermore, make sure that all guards are in place and in protective position.

- Check oil level and fuel, top up if necessary.
- Check the condition of the air filter, the fuel lines and connections for leaks and mechanical damage, and the fuel tank for cracks and leaks.



DANGER!

Do not start the engine in enclosed spaces. The exhaust fumes contain carbon monoxide, which is very toxic if inhaled!



WARNING!

Warning of hot surfaces!

The exhaust and other engine parts become very hot during operation. Never touch the hot engine. Keep a safe distance from hot surfaces and keep children away from the running engine.

ATTENTION! When carrying out any work on the machine, always wear appropriate protective equipment and switch off the drive.

14.2 Startup process

1. Turn the fuel tap (5) to the ON position.
2. In cold engine the choke lever (4) to the left to CLOSE/ CLOSED (=CHOKE).

In the warm engine Leave the choke lever (4) set to the right to OPEN/ RUN, no choke.

3. Move the throttle lever (8) slightly to the left from the idle position LOW (= TURTLE) towards HIGH (= RABBIT).
4. Insert the ignition key into the electric starter (1) and turn it to the ON position.

→ Manual start (HANDSTART)

5. Slowly pull the manual starter handle (2) out of the recoil starter until you feel resistance, then pull it with a quick but gentle movement and slowly pull it back again. The engine starts.

DANGER!

Do not pull the starter rope all the way out and do not let the starter handle hit the engine back.

→ start with electric starter (E-START)

5. Insert the ignition key into the electric starter (1) and turn the key to the ON position.

Then turn the ignition key to the START position and hold it in this position for a maximum of 5 seconds.

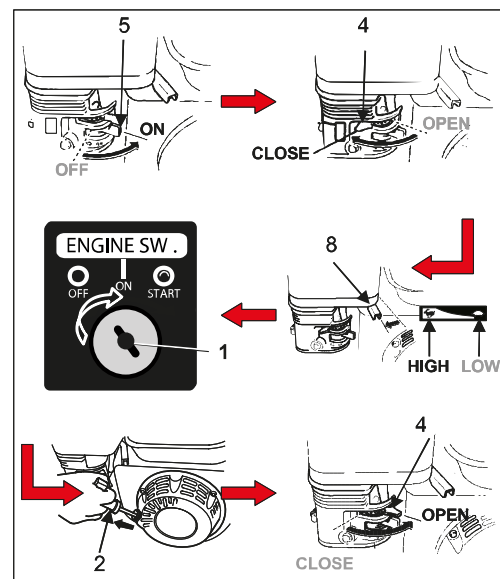
Release the ignition key as soon as the engine starts. It will automatically return to the ON position.

DANGER!

If the engine does not start within 5 seconds, the starting process must be interrupted. Repeat this process a maximum of 8 times, with a 5-second break each time. Then wait at least 40 minutes for the starter to cool down. If the engine does not start after the next 8 attempts, go to a specialist workshop.

6. If the choke lever (4) was set to CLOSE (=CHOKE) to start the engine, gradually return it to OPEN (=RUN) while the engine warms up.

To operate, open the throttle lever (8) fully and slowly move it towards HIGH/FAST (=RABBIT).

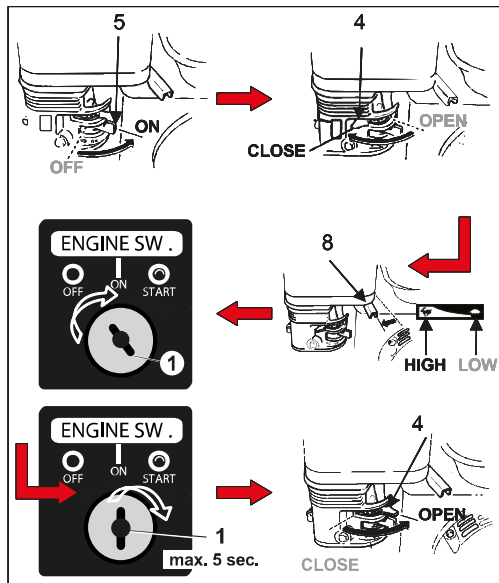


Manual start (HANDSTART)



IMPORTANT NOTE!

Stopping the engine suddenly at full throttle can cause engine damage.



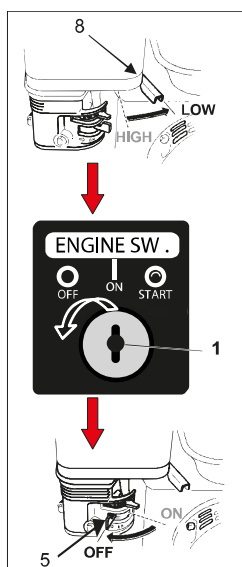
start with electric starter (E-START)

14.3 Switching off the engine

1. Push the throttle lever (8) to the right into the idle position LOW (=TURTLE).
2. Turn the ignition key on the electric starter (1) to the OFF position and remove it.
3. Then turn the fuel tap (5) to the left to the OFF position to close it.

When leaving the machine, remove the spark plug connector (7) = protection against unauthorized use!

ATTENTION! Positions She never the Choke lever to CLOSE to stop the engine. This may cause backfiring or engine damage.



Turn off the engine

14.4 Stopping the engine in an emergency

In dangerous situations, machine movements must be stopped as quickly as possible and the power supply switched off.

In case of danger:

1. Press the safety bar or push button (9) on the feed hopper; an EMERGENCY STOP is initiated.
2. Inform those responsible at the site.
3. If necessary, alert a doctor and fire brigade.
4. Rescue injured persons and initiate first aid measures.
5. Switch off the motor switch (1) and secure it against being switched on again.
6. Keep access routes clear for emergency vehicles.

To restart safety bar Pull back or turn the push button, turn the engine switch to the ON position, then start the engine as described in COMMISSIONING / Starting process (14.2).

14.5 Idle speed

When not working, move the throttle lever (8) to the LOW position to reduce the load on the engine.

Reducing the engine speed when idling extends the life of the engine, saves fuel and reduces noise levels.

15th chipping operation

Before each use, check the machine for:

- loose screws and nuts
- damaged rubber flap in the feed hopper, replace if necessary
- Function of the safety circuit
- properly installed protective devices and their protective position
- Engine oil level
- Cracks in the cladding panels and/or loose welds
- Damage or breakage to the rotor



Wear tight-fitting clothing and personal protective equipment (PPE)

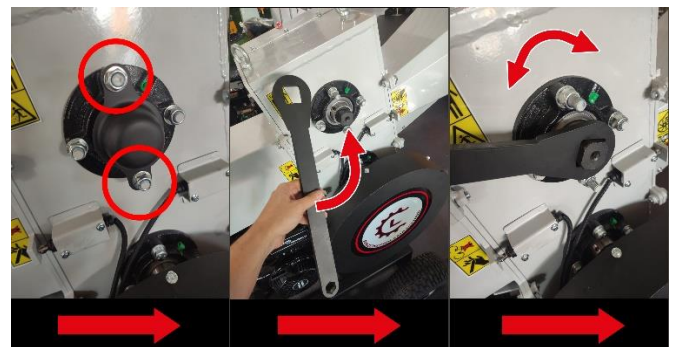
- Always work on a stable, level surface. Secure the machine against accidental rolling away (wheel chocks). Do not operate the machine if it is on a slope.
- Do not use the machines without the two rear wheels and the front axle with the front wheels mounted.
- The working position is to the side of the machine's feed hopper. Never stand in the area of the discharge chute.
- Never use a stepladder or other elevated position to fill the grass clippings into the hopper.
- Never reach into the inlet or outlet openings.
- Keep your face and body away from the feed opening. Maintain a sufficient distance!
- Do not place hands, other body parts or clothing into the feed hopper or discharge chute or near other moving parts.
- Attention! When operating the machine, keep a safe distance and do not lean too far forward. Longer pieces of wood chips that protrude from the hopper can spring back when they are drawn in by the blades.
- Before starting the engine, check that there are no wood chips left in the hopper.
- Work may only be carried out once the maximum engine speed has been reached.
- Never tilt the machine while the engine is running.
- When loading, make sure that there are no foreign objects such as nails, wires, stones, etc. into the feed hopper.

For constipation:



Switch off the engine and remove the spark plug connector for safety reasons!

- Only remove wood chips lying across the hopper when the engine is turned off and the blade shafts are at a standstill. Use To remove it, use only another piece of wood.
- The blade shafts can be turned using the chopping key (5) to remove a stuck blockage. To do this, loosen the two screws on the cover cap of the upper blade shaft and put on the chopping key (5). (see picture)
- If there are blockages in the machine's inlet and outlet, or if there are unusual noises or vibrations, switch off the engine immediately. Disconnect the spark plug connector and wait for the tools to stop. Any faults must be rectified immediately.
- When changing the blades, switch off the engine and remove the spark plug connector. After one hour of use, check that all screws and nuts are tight.
- Repairs may only be carried out by an approved service center or our service team.



Use Hackwerk Key

15.1 What may be processed?

JA

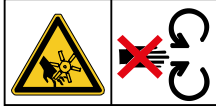
Hardwood and fresh wood, branches up to max. Ø 120 mm.

NEIN

Hedge and tree trimmings, bushes, stones, roots with soil, glass, fabric scraps, plastic and metal parts, food waste.

15.2 Hacking

Make sure the wood chips are as DRY as possible! Wood chips that are too wet will inevitably lead to blockages and time-consuming cleaning or maintenance work.



Always keep your hands away from the inlet and outlet openings!

Hard and fresh wood as well as branches up to Ø 120 mm can be processed.



WARNING!

As soon as the motor starts running, the blades start moving and everything that is fed into the hopper is inevitably processed.

Put wood chips (branches, hardwoods, fresh wood, etc.) into the feed hopper. When the machine grabs them, let go of the material to be processed immediately. This will be drawn in automatically (automatic feed). Feed thick wood chips in small doses! Make sure that the motor speed is maintained.

First saw off side branches longer than 3 cm and insert them separately.

Wood chips protruding from the machine can flop around when pulled into the machine. Therefore, keep a sufficient safety distance from the machine.



IMPORTANT NOTE!

The hardness of the wood to be processed depends, among other things, on the type of wood, the time between cutting and chopping, and the dryness of the material.

- Thin and long branches are drawn in very quickly. For this reason, let go of them very quickly.

- Process material with a high water content alternately with dry material to avoid clogging the machine.
- **The knife mechanism draws in the material to be processed largely independently.**
- Note the maximum diameter to be processed. See... TECHNICAL DATA (9.)
- Depending on the type and freshness, the maximum diameter of the material to be processed may be reduced.
- If the cutting unit becomes blocked, switch off the engine immediately to avoid overloading the engine. Disconnect the spark plug connector and eliminate the problem!

In the event of unexpected circumstances, never hesitate to operate the safety bar or push button (EMERGENCY STOP) (9) on the feed hopper.

The safety bar or push button (EMERGENCY STOP) (9) may only be operated in an emergency. To switch off the machine normally, first let the engine run at idle and then switch it off and secure it against being switched on again. To do this, set the engine switch (1) to OFF. See... STARTING UP / Switching off the engine (14.3)

When you stop working, give the machine enough time to "spin cleanly". This will prevent starting problems the next time you work.

16. Maintenance and maintenance work



Before any maintenance or repair work on the machine:

- Switch off the drive and secure it against restarting and unauthorized operation.
- For petrol engines, remove the spark plug connector.
- Clean the machine of branches, twigs, green waste and other dirt.

Never leave the machine running unattended.

Never work without protective devices. Refit all protective devices after maintenance and repair work.

Wear personal protective equipment:

- protective work clothing
- Sturdy protective gloves when working on components, chemical-resistant
- Protective gloves when handling hazardous substances
- Non-slip safety shoes
- Safety glasses with side protection when working on pressurized components or near pressurized systems

Only use original LUMAG spare parts. Other parts can cause unforeseeable damage and injuries.

Work on the electrical equipment may only be carried out by qualified electricians.

Before starting work, the operator must ensure that the machine is in a safe operating condition.

- The machine is exposed to vibrations during operation. Please check the fastening screws and tighten them if necessary.
- The feed hopper and knives must be carefully maintained to avoid damage and injuries.
- After chopping, the machine should be cleaned inside and out. Please only use a warm, damp cloth and a soft brush. Do not use cleaning agents or solvents, as these can cause irreparable damage to the machine.
- Do not clean the machine with running water or a high-pressure cleaner.
- Please treat bare metal parts with an environmentally friendly, biodegradable spray oil after each use to protect them against corrosion.

16.1 Maintenance work

To maintain value and ensure a long service life, please note the following points:

- Ventilation slots should be kept clear and clean.
- Check the fuel system and tank cap for leaks.

16.2 Maintenance plan

The following sections describe the maintenance work required to ensure optimal and trouble-free operation.

maintenance work	Before everyone use	After everyone use	After respectively 1 bra*	After the first 5 Bh*	All 25 Bh*	All 30-50 Bra*	All 100 Bra*	At Requirement	Every season
Check the machine	■								
safety circuit (EMERGENCY STOP) check	■								
protective devices and rubber protective flap check	■								
fastening screws check, tighten if necessary			■						
refueling and checking the oil level	■								
change engine oil				■		■			
change fuel									■
Clean the air filter	■				■				
Replace air filter								■	
spark plug and spark plug connector control							■		
replacing the spark plug									■
cleaning the machine		■							
Check the V-belt	■								
checking the knife	■								
changing blades						■			
lubrication of the knife drum	■			■					
* Bh = operating hours under normal operating conditions									

general maintenance plan

16.3 Lubricants



IMPORTANT NOTE!

Fuels and lubricants used must comply with the operator's operating fluids regulations and the specified specifications; if necessary, consult the supplier.

fuel	module	specification	filling quantity
fuel	Motor	gasoline ROZ95 or higher	6.5 liters
engine oil	Motor	10W-30 or 10-W-40	1.1 liters
grease	lubrication	multi-purpose grease with EP-Characteristics KP2K-20	1-2 strokes (grease gun)

operating fluid specification

16.3.1 Lubricating the chopping mechanism

On both sides, the bearings of the knife shafts at the 3 green grease nipples on each side as well as the red grease nipple of the gears, **before each use or after 5-10 hours of operation and after each cleaning**, lubricate with a grease gun.

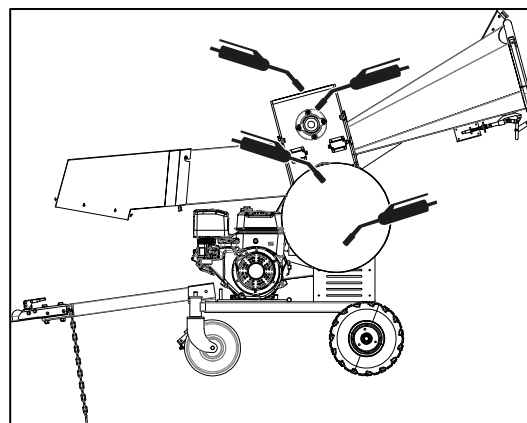
The 3 green grease nipples of the blade shafts on one side are located behind a cover that protects the gears from dirt. This cover must be removed before greasing:

1. Loosen all fastening screws and remove the cover upwards.
2. Clean the grease nipples with a cloth.
3. Place the grease gun on each nipple one after the other and pump in grease.
4. Wipe away any excess grease.

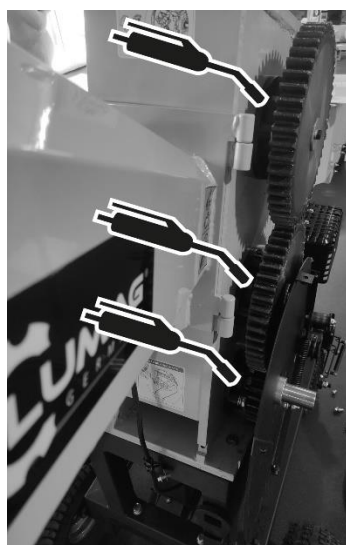


WARNING!

After greasing, the cover must be properly reattached.



lubrication points RAMBO-HM200



lubrication points below the cover

16.3.2 Engine oil change



IMPORTANT NOTE!

The engine oil is after the first 5 operating hours.

Change the engine oil when the engine is warm (the oil will then drain quickly and completely). Dispose of in accordance with environmental regulations.

module	Number	interval (Bra*)	Crowd
Engine oil change - initial commissioning	1	5	1.1 liters
engine oil change operation * or once per season	1	50*	1.1 liters

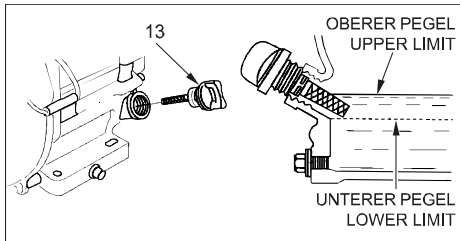
** Operating hours*

For oil changes:

1. Unscrew the oil drain plug
2. Hold a suitable container (at least 2.5 liters) under the oil drain plug
3. Tilt the machine with a second person so that the oil drains

4. Thoroughly clean the area around the oil outlet
5. Screw the oil drain plug back in
6. Slowly pour 1.1 liters of engine oil into the oil filler plug
7. Tighten the oil filler plug
8. Remove oil residues or dirt

9. Engine oil according to the local regulations for environmentally friendly disposal



Oil change, upper and lower levels

DANGER!

Check oil level. Do not operate the engine with too much or too little engine oil. See... Fig. Oil change, upper and lower levels.

16.4 Knife

Knives are blunt when

- the chopping sound sounds clumsy.
- the chopping speed has decreased significantly.
- the drive belt slips despite tension.

After approximately 30-50 hours of operation, the blades are worn out under normal operating conditions. blunted.

Using a thickness gauge, adjust the blades to a cutting gap of 0.5 mm using the slotted hole. Then tighten the fastening screws using medium thread locking compound.



blade screw connection

Blunt blades must be replaced. Damaged blades (cracked, knocked out, severely bent or otherwise damaged) must be replaced immediately.



DANGER!

The machine must not be operated if the blades are not fully inserted!

For all spare parts must the Original versions of the manufacturer are used.

16.5 Drive belt



IMPORTANT NOTE!

Check the condition of both drive belts from time to time and before restarting the machine after a long period of downtime. When changing the belt, both drive belts must always be replaced.

Installed drive belts: **A 1829 LI / 1859 LW**

Number of belts: **2 pieces**



16.5.1 Check drive belt for wear

To check the drive belts:

1. Remove the belt cover
2. If the drive belts show wear, both must be replaced

See... Changing the drive belt (16.5.2)

DANGER!

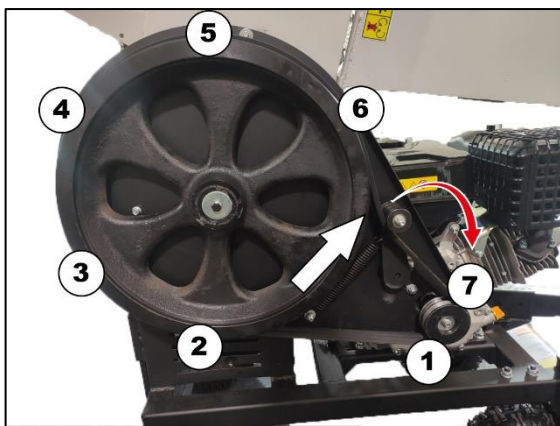
Belt placed loosely on the drive pulley to avoid damage (drive belt break).

16.5.2 Changing the drive belt

To change/tension the drive belts:

1. Remove the belt cover by removing screws 1-7.
2. Release the belt tensioner by pressing until the old drive belts can be removed
3. Install new drive belts and tighten again using the belt tensioner
4. Replace the belt cover and screw it in place using the previously removed screws.

Interval: when worn



IMPORTANT NOTE!

*To long, damaged or worn
Always replace drive belts with new original
drive belts.*

16.6 Changing/cleaning the air filter



DANGER!

Risk of fire and explosion when handling flammable liquids!

Fuels can burn explosively and cause poisoning or skin irritation.

- Do not clean the air filter element with flammable liquids

To clean and/or change the air filter or element:

1. Loosen and remove the air filter cover
2. Wipe dirt from the inside of the filter housing with a clean, damp cloth
3. Carefully remove the foam filter insert from the paper filter insert. Check both parts for damage and replace any damaged inserts if necessary
4. Clean the foam filter insert in warm water and a mild soap solution. Rinse thoroughly with clean water and allow to dry well.
5. Knock out dirt from the paper filter element on a hard surface; do not brush it off as this will press it into the fibres.
6. Place the foam insert on the paper filter insert
7. Install filter element
8. Air filter cover put on and screw tight

Interval: in case of defect or wear



IMPORTANT NOTE!

Do not run the engine without or with a damaged air filter element. This will cause dirt to enter the engine (which will result in engine damage = loss of warranty).

16.7 Check/change/clean spark plug



DANGER!

Danger of burns!

The engine and parts (e.g. exhaust muffler or cooling fins) heat up considerably during operation.

Observe cooling times.

– wear heat-resistant protective gloves.

To check, clean and/or replace the spark plug:

1. Remove the spark plug connector from the spark plug and remove any dirt in the spark plug area
2. Unscrew the spark plug using the spark plug wrench and check its condition. If there is any damage such as insulator cracks or splinters, replace the spark plug
3. Clean spark plug electrodes with a wire brush
4. Check the electrode gap (0.7-0.8 mm) and adjust if necessary
5. Screw in the spark plug manually and tighten it with the spark plug wrench
6. Place the spark plug connector on the spark plug

Interval: in case of defect or wear



IMPORTANT NOTE!

A loose spark plug can overheat and damage the engine. Over-tightening the spark plug can damage the threads in the cylinder head.

guideline:

- Used spark plug: 1/8 - 1/4 turn
- New spark plug: 1/2 turn

16.8 Safety devices

Check safety devices (EMERGENCY STOP) for functionality and perfect technical condition; replace damaged components if necessary.

Interval: weekly

16.9 Check wheels and tire pressure

Wheels (tread and tire condition) and tire pressure:

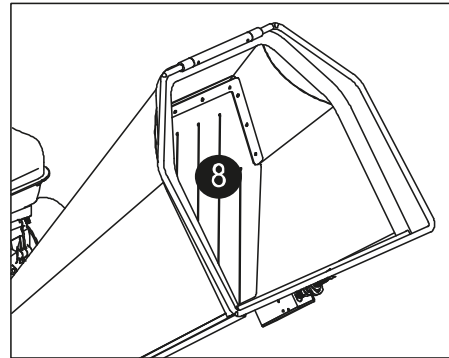
- Check that the screw connection on the wheel axles is correctly seated.
- Check for cuts and foreign objects in the tire tread
- Check tire pressure
max. 2.5 bar (transport wheels)

Interval: weekly

16.10 Rubber protective flap

If the rubber protective cover (8) shows signs of wear, it must be replaced.

Interval: when worn



rubber protective flap

16.11 Cleaning the machine

Check the machine for dirt after use. Any dirt that has accumulated inside the machine (branches, wood residues, dust, green leaves, etc.) must be removed.

Interval: after use

If contamination occurs:

- 1st machine turn off and against restarting secure (ignition plug subtract).
2. Contamination appropriate remove.
Please note:
 - do not use a high-pressure cleaner
 - no aggressive cleaning products use
 - oil separations with binder to record

- Dispose of cleaning cloths and processing residues in an environmentally friendly manner in compliance with applicable local regulations
- use a soft brush or a vacuum cleaner for interior cleaning

After cleaning, check that all previously opened covers and safety devices have been properly closed and are functional.

DANGER!

After cleaning and if the machine is not in use for a long period of time, all moving parts must be greased or oiled.



IMPORTANT NOTE!

When cleaning, do not allow water to come into contact with the bearings or the motor. It can penetrate into narrow slots and damage spindles, pulleys, bearings and the motor. After cleaning, lubricate or oil all lubrication points and let the machine run briefly to force out any water that has penetrated.

16.12 Check and tighten fastening elements

machine turn off and against
Secure against restarting.

1. Check that all screw connections are tight and tighten any loose screw connections if necessary.
If necessary, replace screw fasteners that cannot be tightened with new screws and nuts.
2. Check the technical condition of the blades by visual and tactile inspection. If any defects are detected, replace the blades immediately.
3. If cracks or other damage are visible, determine the cause, repair the weld and reinforce the joints.
4. Check other fastenings such as adhesive joints, pin connections, etc. for technical condition by visual and tactile inspection

Check and, if necessary, repair loose connections properly.

Interval: weekly

16.13 Check and repair construction

1. Whole steel construction through
Visual inspection to ensure perfect technical condition.
2. Have any defects identified, such as hairline cracks, gaps, deformations or loose parts, remedied by the manufacturer or an authorized specialist company.
3. Treat paint damage: Clean damaged areas, apply anti-corrosive agent, apply new paint after drying.
4. Check that all screw connections and fastenings are secure and, if necessary, retighten screw connections or replace fastenings.
5. Check all attachment points for damage and tightness. If necessary, have loose or damaged components replaced by the manufacturer or an authorized specialist company.

Interval: monthly

17th transport



DANGER!

Danger of burns from hot surfaces on the engine!

Contact with hot components can cause burns.

- Wear protective clothing and gloves when working near hot components.
- Before any work, place hot components on Allow to cool to + 50 ° C.

Before dem relocation or transport or dem before one Turn off in interiors:

1. Turn off the machine's motor and allow it to cool down to avoid burns and to eliminate the risk of fire.
2. Disconnect the spark plug connector.
3. Close the fuel tap.
4. Empty the fuel tank to avoid um a fuel overflow.



IMPORTANT NOTE!

Machines with petrol engines may be tilted for transport, but may not be turned over any further, as engine oil may get into the air filter.

- This can put the engine out of operation!

The machine may only be tilted to a maximum of 20°.

Persons must not be endangered by the machine tipping over or slipping, or by machine parts flying up or down.

17.1 Transport by hand

Grab the machine by the drawbar, lift it slightly and move it.

17.2 Transport with chassis

1. Attach the trailer hitch to the towing vehicle.
2. Connect the safety chain to the towing vehicle.
3. Check tire pressure, max. 2.5 bar (transport wheels)

DANGER!

If the machine is uncoupled from the towing vehicle, it must be placed on a horizontal, level and solid surface.



IMPORTANT NOTE!

The machine is not approved for use on public roads.

18. Storage

Storage of the machine and temporary decommissioning.

Store the machine under the following conditions:

- Do not store outdoors
- Store upright
- Store in a dry and dust-free place
- Do not expose to extreme and sudden temperature changes
- Protect from sunlight
- Avoid mechanical shocks
- Storage temperature: 5 to 45°C
- Relative humidity: max. 60%.
- If stored for longer than 3 months, regularly check the general condition of all parts and packaging. If necessary, refresh or renew the preservation.
- Remove soil, dirt and deposits from the engine and machine. Clean the engine with a cloth
- Treat moving parts with environmentally friendly oil (do not use grease!) and run the machine briefly (let it run for 1-2 minutes)

- Drain the fuel by running the engine until the fuel is used up
- Clean air filter, replace if necessary
- Check the function of all moving parts and repair or replace if necessary
- Remove the spark plug connector
- Check the screws and the counter and chopping knives mounted on the drum
- Check drive belt tension
- Check wheels and tire pressure
- Secure the machine against rolling away and unauthorized use (wheel chock)
- Cover the machine and engine to protect it from dust

19. Disposal

When the machine is no longer serviceable and is to be scrapped, it must be deactivated and dismantled, that is, it must be brought to a condition where it can no longer be used for the purposes for which it was designed.

Disposal of the machine must be carried out by trained personnel. The machine may only be disposed of via the designated and approved methods.

19.1 Decommissioning

Disused machines must be taken out of service immediately and professionally in order to avoid later misuse and endangerment of persons or the environment.

Drain all environmentally hazardous operating materials from the old device and dispose of them in an environmentally friendly manner. Oil residues must never be discharged into the soil or wastewater.

Block every moving part of the machine and dismantle the machine into its individual parts. Hand over machine components to controlled disposal sites.

Remove rubber and plastic parts from the machine and take them to a designated collection point

19.2 Disposal of electrical equipment

Electrical components are classified as hazardous waste and must be disposed of separately from the machine. In the event of a fire in the electrical system of the device, extinguishing agents approved for this purpose must be used (e.g. powder extinguishers).

19.3 Disposal of lubricants

The disposal instructions are in the product-specific data sheets. If necessary, ask your lubricant manufacturer.

20. Troubleshooting



WARNING!

Any faults in the machine or engine that require major intervention should always be repaired by your LUMAG specialist workshop or an authorized specialist workshop. Improper intervention will void the warranty.



Before any troubleshooting

- Turn off the machine
- Wait for the chopping knives to stop
- Remove the spark plug connector

PROBLEM	POSSIBLE CAUSE	PROPOSED REMEDY
Engine cannot be started	No fuel	filling the fuel tank
	recoil starter defective	Repair or replace recoil starter
	No engine oil	refill engine oil
	Engine is still in the cooling phase	Let the engine cool down
	No ignition spark	Clean or replace spark plug
	Engine cold and choke set to OPEN (right)	Set choke to CLOSE position (left)
	Fuel tap set to OFF	Turn the fuel tap to ON
Engine is difficult to start or runs poorly	Too rich fuel mixture	Set the choke to OPEN (right) position
	carburetor incorrectly adjusted	Have the adjustment carried out by a specialist dealer
	Faulty spark plug, dirty or incorrectly adjusted	Clean, adjust or replace spark plug
Engine gets too hot	Too little engine oil	refill engine oil
	cooling air system restricted	Clean ventilation grilles, clean internal cooling fins
	air filter dirty	Clean filter element, replace if necessary
	carburetor not adjusted correctly	Have the carburetor adjusted by a specialist dealer
Engine does not deliver enough power	air filter dirty	Clean filter element, replace if necessary
	machine is overloaded	Reduce material feed, pay attention to max. Ø of branches!
	machine is clogged	Clean the machine thoroughly from the inside
Reduced cutting performance or decreases	knives are blunt	Turn or replace blades
	V-belt slipping	tensioning the V-belt
Wood chips are not automatically fed in	knives are blunt	Turn or replace blades
Excessive vibration	Blades, screws, nuts or other parts loose	Stop the engine immediately. Check that all nuts and bolts are tight, replace any damaged parts, Adjust the V-belt tension.

If these measures do not resolve the problem or if errors occur that are not listed here, have your machine checked by a specialist.

21. Warranty/Guarantee/ Customer Service

WARRANTY

On the device becomes the legal warranty period given. performers Defects that can be proven to be due to material or assembly errors must be reported to the seller immediately. Proof of purchase of the device must be provided by presenting the invoice and receipt when making a warranty claim.

The warranty is excluded with regard to the parts if defects are caused by natural wear, temperature, weather influences, as well as by defects resulting from negligent assembly, defective connection, false fuel/fuel mixture, setup, operation, maintenance, lubrication or violence.

Furthermore, no warranty is provided for damage caused by unsuitable or improper use of the machine, such as improper modifications or repair work carried out by the owner or third parties, or by intentional overloading of the machine.

Wear parts with a limited service life (e.g. V-belts, clutch, throttle cable, spark plug, air filter, battery, blades, hoses, wheels, tools and other aids), as well as all setting and adjustment work are excluded from the warranty.

GUARANTEE

LUMAG guarantees impeccable quality and, without prejudice to the statutory warranty, provides a guarantee in the event of material or manufacturing defects. The guarantee for LUMAG products is 24 months for exclusively private use, and 12 months for commercial or professional use or rental, from the date of delivery.

The buyer must always prove warranty claims by means of the original purchase receipt. A copy of this must be enclosed with the warranty application. The buyer's address and machine type must be clearly identifiable for professional or commercial use. Without the original purchase receipt

we can only carry out the repair for a fee.

Please do not send any devices back to us without a SERVICE NUMBER that you have received from our service department. If we receive devices unsolicited, we cannot accept and process them. To request a SERVICE NUMBER, please contact our service team at:

info@lumag-maschinen.de

Please clearly label the shipping box with the SERVICE NUMBER to ensure quick identification.

Warranty work is carried out exclusively by our LUMAG service workshop. Defects that occur within the warranty period due to material or manufacturing defects must be remedied by repair if they have occurred despite proper use and care of the device. We reserve the right to make two repairs if the same defect occurs. If repair fails or is impossible, the device can be exchanged for an equivalent device. If the exchange is also unsuccessful or impossible, the device can be exchanged.

Normal Wear and tear, natural aging, Improper use, as well as cleaning, maintenance and adjustment work are generally not covered by the guarantee (e.g. cutting device, air and fuel filters, spark plug and recoil starter, drive belt and the like). Due to operation and use, some components are subject to normal wear and tear, even when used as intended, and must be replaced in good time if necessary.

CUSTOMER SERVICE

If you have any technical questions, information about our products or would like to order spare parts, our service team is available as follows:

Service time:	Monday to Thursday from 7.30 a.m. to 12 p.m. and 1 p.m. to 5 p.m. Friday from 7.30 a.m. to 12.30 p.m.
Phone:	+ 49 / 8571/92 556-0
Fax:	+ 49 / 8571/92 556-19
E-mail:	info@lumag-maschinen.de

22. CE declaration of conformity

In accordance with the provisions of the EC directives

Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU

explains the company

LUMAG GmbH
Rudolf-Diesel-Straße 1a
D-84375 Kirchdorf a. Inn
Phone: +49 8571 / 92 556-0
Fax: +49 8571 / 92 556-19

that the product

Designation: Wood chipper (kindling wood machine)
Type designation: RAMBO-HM200

meets the essential protection requirements of the above-mentioned EC directives. Conformity is based on the following standards:

EN ISO 12100:2010
Safety of machinery - General principles for design - Risk assessment and risk reduction

EN ISO 14982:2009
Agricultural and forestry machinery - Electromagnetic compatibility - Test methods and evaluation criteria

EN 13525:2020
Forestry Machinery - Bush Wood Chippers - Safety

EN ISO 3744
Acoustics - Determination of sound power and sound energy levels of noise sources from sound pressure measurements - Envelope method of accuracy class 2 for an essentially free sound field above a reflecting plane

Person authorized to compile the technical documentation: Christopher Weißenhorner

The declaration of conformity refers only to the machinery in the condition in which it was placed on the market; it does not take into account any parts and/or interventions subsequently fitted by the end user.

Kirchdorf, July 3, 2024

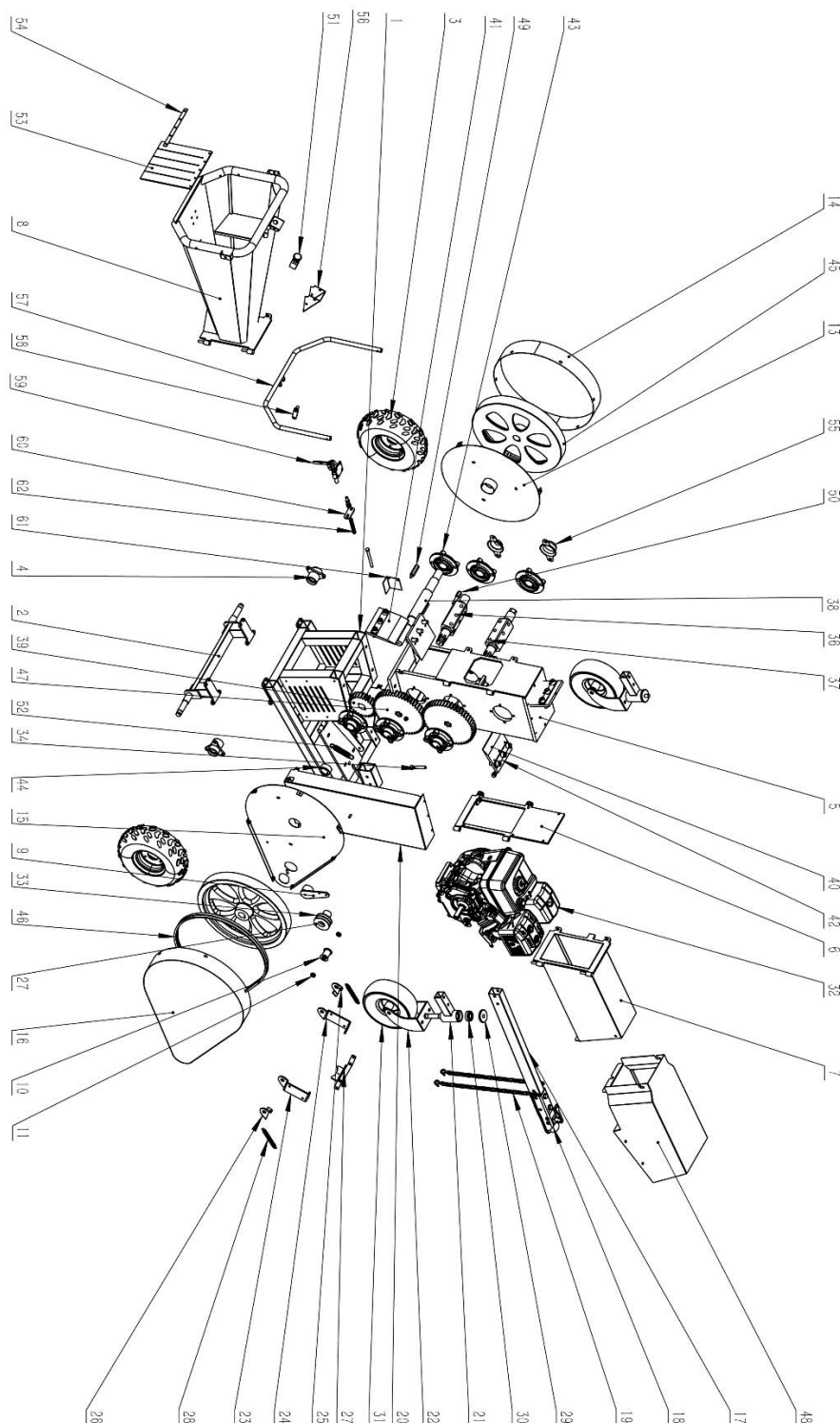
Christopher Weißenhorner, Managing Director

distributor, authorized representative



Place, date
Signature

23. B



WARNING!

All repairs to the machine must be carried out by authorized personnel. Any necessary electrical work should only be carried out by an authorized specialist.

24. Notes

Subject to change!

Version RAMBOHM200 (07.2024 D)

LUMAG specialist dealer
can be found at: www.lumag-maschinen.de

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D-84375 Kirchdorf a.Inn
Germany
Internet: www.lumag-maschinen.de

