

ORIGINAL INSTRUCTIONS



## CHAIN SHARPENER



RAC220ES-1

READ THIS INSTRUCTIONS BEFORE USE THE TOOL

RACING  
32, rue Aristide Bergès - ZI 31270 Cugnaux – France



## 1. SAFETY WARNINGS

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### Special safety instructions for the sharpener

**WARNING!** When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Read all these instructions before attempting to operate this product and save these instructions.

### Safe operation

1. **Keep work area clear**
  - Cluttered areas and benches invite injuries.
2. **Consider work area environment**
  - Do not expose tools to rain.
  - Do not use tools in damp or wet locations.
  - Keep work area well lit.
  - Do not use tools in the presence of flammable liquids or gases.
3. **Guard against electric shock**
  - Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).
4. **Keep other persons away**
  - Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.
5. **Store idle tools**
  - When not in use, tools should be stored in a dry locked-up place, out of reach of children.
6. **Do not force the tool**
  - It will do the job better and safer at the rate for which it was intended.
7. **Use the right tool**
  - Do not force small tools to do the job of a heavy duty tool.
  - Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.
8. **Dress properly**
  - Do not wear loose clothing or jewellery; they can be caught in moving parts.
  - Non-skid footwear is recommended when working outdoors.
  - Wear protective hair covering to contain long hair.
9. **Use protective equipment**
  - Use safety glasses.
  - Use face or dust mask if working operations create dust.
10. **Connect dust extraction equipment**
  - If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.
11. **Do not abuse the cord**
  - Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
12. **Secure work**
  - Where possible use clamps or a vice to hold the work. It is safer than using your hand.
13. **Do not overreach**
  - Keep proper footing and balance at all times.
14. **Maintain tools with care**
  - Keep cutting tools sharp and clean for better and safer performance.
  - Follow instruction for lubricating and changing accessories.
  - Inspect tool cords periodically and if damaged have them repaired by an authorized service facility.
  - Inspect extension cords periodically and replace if damaged.
  - Keep handles dry, clean and free from oil and grease.
15. **Disconnect tools**
  - When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

- 16. Remove adjusting keys and wrenches**
  - Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
- 17. Avoid unintentional starting**
  - Ensure switch is in "off" position when plugging in.
- 18. Use outdoor extension leads**
  - When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.
- 19. Stay alert**
  - Watch what you are doing, use common sense and do not operate the tool when you are tired.
- 20. Check damaged parts**
  - Before further use of tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
  - Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
  - A guard or other part that is damaged should be properly repaired or replaced by an authorized service centre unless otherwise indicated in this instruction manual.
  - Have defective switches replaced by an authorized service centre.
  - Do not use the tool if the switch does not turn it on and off.
- 21. Warning**
  - The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.
- 22. Have your tool repaired by a qualified person**
  - This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user

#### **Additional instructions**

- Read the instructions, be familiar with the controls and the correct use of the machine and apply the safety regulations with care.
- Keep the working area clean; an untidy work-bench may cause injury.
- Place the equipment in a well-lit zone, on a flat, stable surface, dry and well ventilated, well away from inflammable substances and with plenty of space for the discharge of sparks and sharpening waste.
- Do not allow anyone, and especially children, to come within a radius of at least five metres around the working area when any working operation is in progress.
- Do not use the tool in damp or wet places or in the rain or when there is a risk of thunderstorms and lightning.
- Check all parts in the delivery packaging.
- The tool must not be used by unskilled persons or children. Children should be supervised to ensure that they do not play with the appliance.
- Fix the tool's support to the work-bench. Check often that the screws and fixing bolts are tight, even during operation.
- Wear suitable clothing. Do not wear shirts with loose or unbuttoned sleeves. Do not wear jewellery which may come into contact with moving parts. If you have long hair, tie it back or wear a suitable safety helmet.
- When at work, use the specified personal protective equipment (PPE): goggles, glasses, mask and ear plugs or ear defenders.
- Check before use that the tool is undamaged, that all specified safety devices are fitted and operational, and that all bolts and screws are tight. Never operate the machine with defective guards or shields, or without safety devices in place.
- Do not overload the tool.
- During use, make sure that your feet are always firmly on the floor and you are well balanced.
- Take care to disconnect the power supply plug when not using the tool.
- Always take care to disconnect the power supply plug before doing any maintenance work.

- Do not use the tool if you are not in a suitable physical condition. Do not use the machine when you are tired, under the influence of alcohol or drugs or sick.
- Do not disconnect the plug by pulling on the power supply lead. Keep the power supply lead well away from heat sources, oil and sharp objects
- Disconnect the plug immediately in case of a malfunction of the motor, the power supply lead, the plug or the on/off button, or in case of any unusual noise.
- Do not use the tool if the power supply lead or plug is damaged.
- Keep spare grinding wheels in dry places, protected from knocks or falls.
- Never tamper with the tool's plug or power supply lead. If necessary, have any repairs done by a skilled technician.
- After fitting, replacement wheels must turn freely. Do not keep on using ovalized or vibrating wheels.
- Do not move the chain on with your hand with the wheel in motion.
- Do not stop the wheel with your hands or other objects.
- Treat the chain teeth with caution when at work; they may cause deep cuts.
- Do not use damaged or misshapen wheels.
- Do not disassemble the tool yourself. Disassembly, repair or verification must be made exclusively by qualified personnel.
- Always carry the machine by its handle; never use the cord or any other part of the machine.
- In case of accident, immediately stop using the machine. Turn off and unplug it and check the problem. Do not use the machine while the machine is damaged.
- Operate the machine in a recommended position and only on a firm, level surface.
- If the machine should start making any unusual noise or vibration, immediately shut off the power source and allow the machine to stop.
- Disconnect the machine from the supply and take the following steps before restarting and operating the machine:
  - Inspect for damage;
  - Replace or repair any damaged parts;
  - Check for and tighten any loose parts.
- Do not transport this machine while the power source is running.
- Stop the machine, and remove plug from the socket. Make sure that all moving parts have come to a complete stop
  - Whenever you leave the machine,
  - Before removing blockages or handling jammed accessories,
  - Before checking, cleaning or working on the machine.
- Do not tilt the machine while the power source is running.

### **Maintenance and storage**

When the machine is stopped for servicing, inspection, or storage, or to change an accessory, shut off the power source, disconnect the machine from the supply and make sure that all moving parts have come to a complete stop. Allow the machine to cool before making any inspections, adjustments, etc. Maintain the machine with care and keep it clean.

- Store the machine in a dry place out of the reach of children.
- Always allow the machine to cool before storing.
- Replace worn or damaged parts for safety. Use only genuine replacement parts and accessories.
- Never attempt to override the interlocked feature of the guard.

 **Residual risks**

Even when the tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the tool's construction and design

- Damage to lungs if an effective dust mask is not worn.
- Damage to hearing if effective hearing protection is not worn.
- Health defects resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.

**Symbols**



Read the instruction manual before use



Wear dust mask to protect against dust



Wear gloves for cutting protection



Keep viewers away from work area



Wear ear protection against noise



Wear eye protection



Class II protection tool

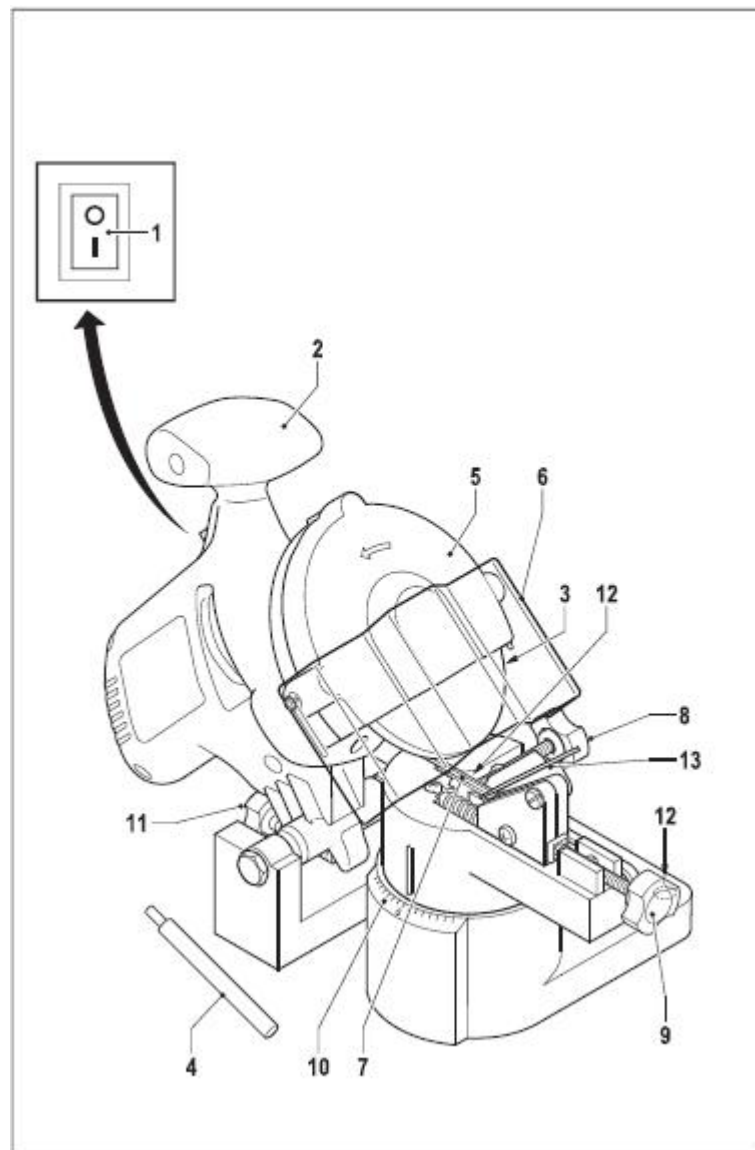
**Intended use**

- The machine is intended to be used for sharpening the chains of chainsaws. Do not use it to sharpen any other types of products or for any other operation.
- This product is intended for private domestic use only. It may be used indoors and outdoors.
- The use of this product in case of rain or humid environment is prohibited.
- Any other use might lead to damage of the appliance, property or personal injury.

## 2. YOUR PRODUCT

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### a. Description



1. ON/OFF switch
2. Handle
3. Sharpen wheel
4. Fork wrench
5. Carter of protection
6. Cover of the carter of protection
7. Guide chain
8. Locking screw of the chain
9. Chain position adjuster screw
10. Angle scale
11. Depth abutment
12. Mounting holes
13. Chain fixation

The tool is provided with wrenches, plate key and screwdriver.

**b. Technical data**

Rated power input (W)	220 W
Rated voltage (V)	230 V~
Rated frequency (Hz)	50Hz
Mass of machine (kg)	1,65 kg
Sound power level $L_{WA}$ in dB(A)	L <sub>wa</sub> : 91,7 dB(A) K=3 dB(A)
Sound pressure level in dB(A)	L <sub>pa</sub> : 78,7 dB(A) K=3 dB(A)
Vibration total value	2,753m/s <sup>2</sup> K: 1,5m/s <sup>2</sup>
Class protection	Class II

**Wear hearing protection while operating the power tool.**

The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.

The declared vibration total value may also be used in a preliminary assessment of exposure.

**Warning**

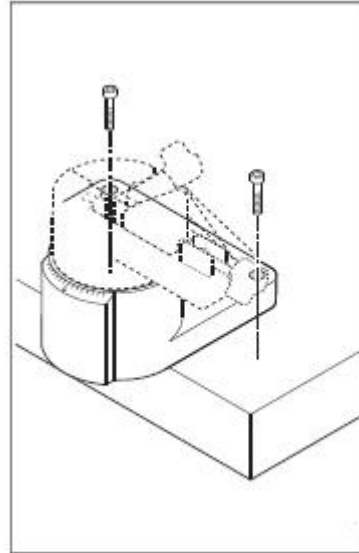
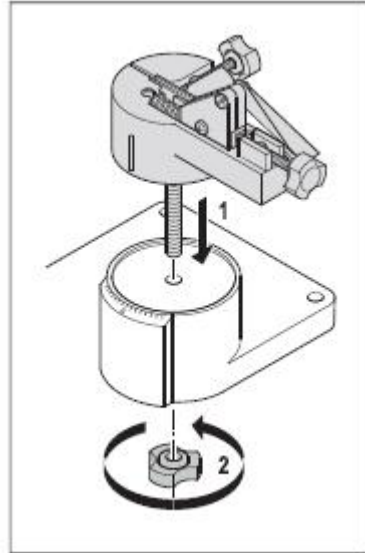
The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used.

There is the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

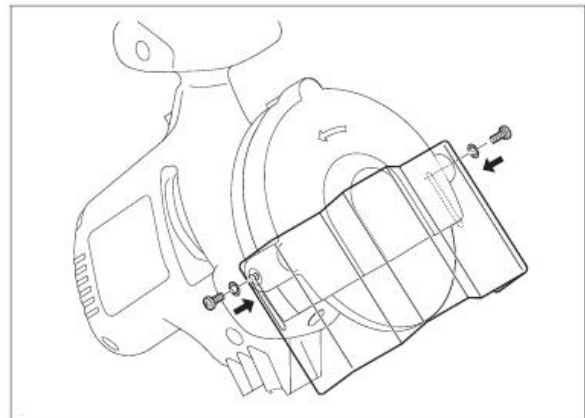
### 3. ASSEMBLY

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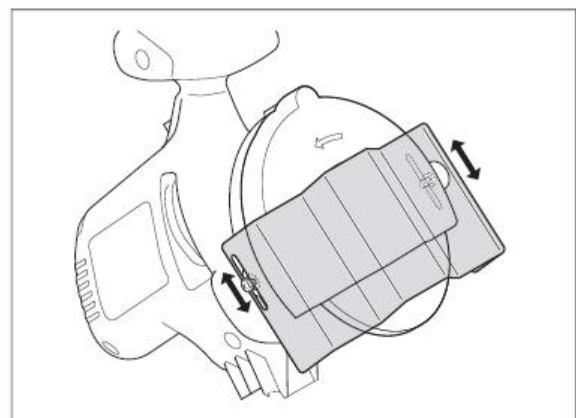
- Install the pivoting table in the sharpen base (1). Screw it with the provided nut (2).
- Fix the sharpen base on an appropriate bench with two screws (the screws are not provided).



- Install the cover of the carter of the protection on the carter and screw it with the two provided screws.



- The position of the carter can be changed. Unscrew a little the screw and modify the position up or down.



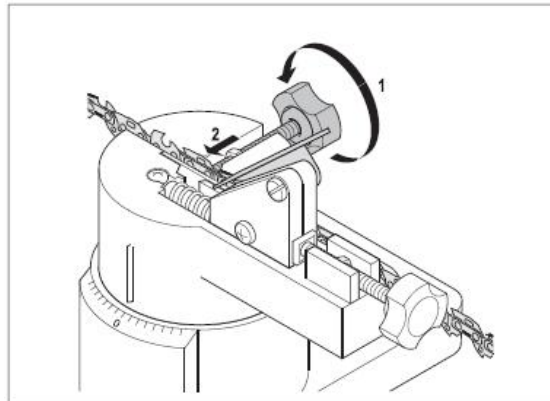
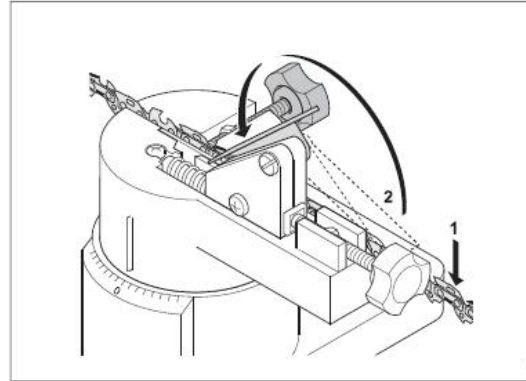
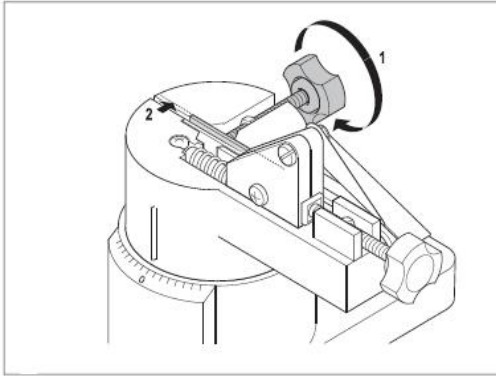


## 4.USE

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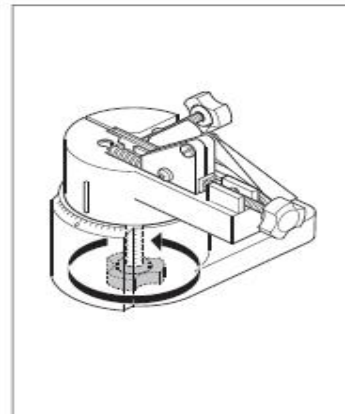
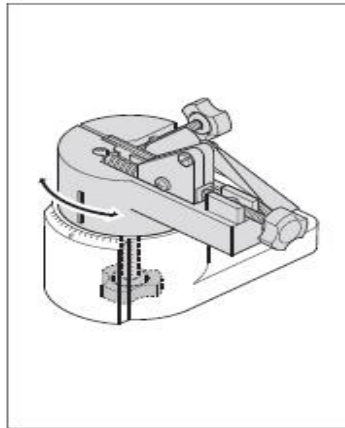
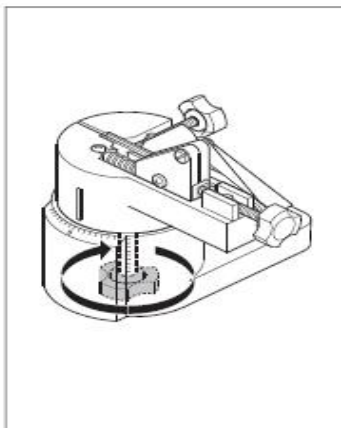
### a. Installation of a chain

- Unscrew the fixation screw.
- Install the chain in the guide rail the sharp edges must be directed to the sharpen wheel.
- Tilt the abutment, pull the chain rearward until the teeth of the chain comes the abutment
- Screw the fixation screw.



### b. Angle sharpening

The angle of sharpening can be change according the position of the pivoting table. Unscrew the nut which in on the bottom of the pivoting table. Change the angle of the table (from – 30 to 30 degrees). Then reinstall the nut to fix it.



**c. Adjustment of the abutment**

Move down the sharpening head. With the adjustment screw, bring the sharpened teeth towards the sharpen wheel until that the teeth comes against the wheel.

Fix the link of the chain by using the fixation screw.

Adjust the depth abutment by using the adjusting screw in a way that the wheel touches the teeth.

**d. Starting and stopping**

- Plug the tool to an appropriate socket
- Push the ON/OFF switch on "I" to start the operation
- Push the ON/OFF switch on "O" to stop the operation.

Recommendation: before first use and after changing the wheel, run the tool without chain inside during 30 seconds. If the sharpen wheel doesn't turn, or turn incorrectly or if abnormal noise are emitted, stop the machine and do not use it. Reassemble it, check for damages. if any problems, bring the tool to a qualified service for inspection.

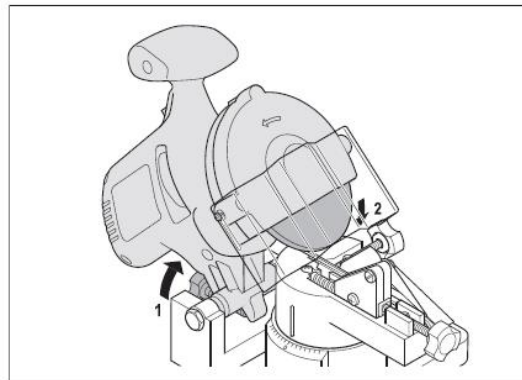
**e. Sharpening work**

**WARNING! A chain non-correctly sharpened will increase the risk of kickback when using it with a tool. Sharpen carefully the chain; make the adjustment correctly. Consider the sharpening angle and the dimensions of the chain.**

**After the sharpening, all teethes of the chain shall be long and wide.**

**The cover of the carter of protection must be not firmly tighten and not blocked. It must be movable.**

Switch on the tool. Push lightly the handle to bring down the sharpening head to teeth to sharpen.



To continue to sharpen the others teethes; stop the tool by switching off it. Pull up the sharpening head. Unscrew the fixation screw and fix the next teeth to sharpen with the abutment and the fixation screw.

Switch off and unplug the tool after operation.

## 5.MAINTENANCE AND STORAGE

### **a.Maintenance**

Regular maintenance is essential for the best performance, a safe operation and a long machine working life. Remove the plug before carrying out any adjustment, servicing or maintenance.

- Do not make modifications to the machine's electrical system.
- Never carry out maintenance with the motor running.
- If necessary, call a specialist staff.
- Take care of moving parts (grinding wheel) during maintenance work.
- Do not use abrasive, caustic agents to clean the tool. These types of products will damage your tool.
- Do not perform repairs by yourself. Repairs and inspection must be carried out by a competent person or at an authorized service center (please contact your service dealer).

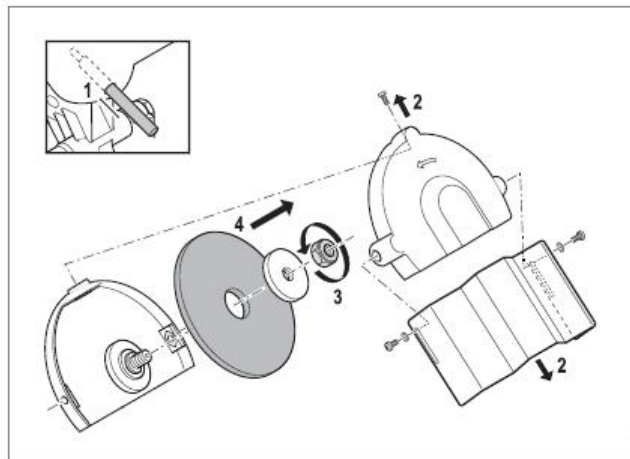
There is no others specific maintenance to be performed by the user. After each season, please bring the tool to an authorized service center to perform a general cleaning and the following operations:

- Lubrication of the blade
- Mechanical check of motor, spindle, bearings and housing.
- Electrical check.
- Electrical and mechanical performance.

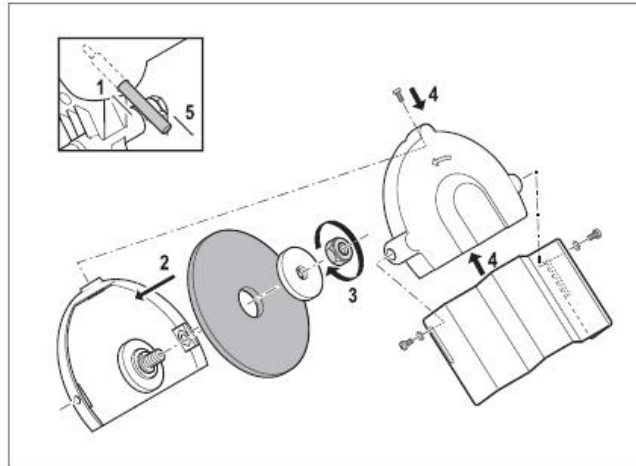
### **b.Replacement of the sharpen wheel**

**NOTE: Buy new sharpen wheel in specialized stores. Ask advice to your retailer.**

- The tool must be switched off and unplugged.
- Insert the fork wrench in the tool to block the axle (1).
- Unscrew and remove the cover of the carter of protection and then unscrew and remove the carter of protection (2)
- Unscrew the nut with the provided plate key (3) and then remove the flange and the sharpening wheel (4).



- Install a new wheel on place (2). Reinstall the flange.
- Then, screw the nut on the flange (3). Make sure that the for wrench is still inserted (1).
- Reinstall in place the carter of protection and the cover (2). Make sure that they are correctly screwed.
- Remove the fork wrench (5).



### **c.0Storage**

- After use and cleaning, please store your tool.
- Store the tool in a clean, dry place, preferably in its box.
- The tool must be stored away from children and pets.
- Avoid exposing the tool to direct sunlight.

## **6.DISPOSAL**

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Electrical products should not be discarded with household products. According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, electrical products used must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

## 7.DECLARATION OF CONFORMITY

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**RACING**  
ZI, 32, rue Aristide Bergès – 31270 Cugnaux - France

Declares that the machine

**CHAIN SHARPENER**  
**RAC220ES-1**

Serial number: 20200335944-20200336447

Are in conformity with the applicable EU directives  
**Directive Machine 2006/42/EC**  
**Directive EMC 2014/30/EU**  
**ROHS directive (EU)2015/863 amending 2011/65/EU**

Are also in conformity with the following standards

**EN 62841-1:2015**  
**EN ISO 12100: 2010**  
**EN 55014-1:2017**  
**EN 55014-2:2015**  
**EN 61000-3-2:2014**  
**EN 61000-3-3:2013**

Responsible of the technical file: M Olivier Patriarca

Cugnaux, le 06/01/2020



Philippe MARIE / PDG