



ORIGINAL INSTRUCTIONS  
**Grinder Sander**

RBGL650G



## **Important!**

It is essential that you read the instructions in this manual before assembling, operating and maintaining the product.

Subject to technical modifications.



Safety, performance, and dependability have been given top priority in the design of your grinder sander.

## INTENDED USE

- This grinder sander is intended for grinding and shaping metal. It can be used to sharpen metal hand tools (e.g., chisels, axes and knives) or drill bits, remove burrs or sharp edges.
- With the proper accessories, the product can be used for cleaning metal surfaces using a wire brush or for buffing and polishing using a cloth wheel.
- Never use the product for cut-off operations.

## GENERAL SAFETY WARNINGS

### 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.

- **Keep work area clear.** Cluttered areas and benches invite injuries.
- **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.
- **Guard against electric shock.** Avoid body contact with earthed or grounded surfaces (e.g., pipes, radiators, ranges, refrigerators).
- **Keep other persons away.** Do not let persons, especially children, be involved in the work, touch the tool or the extension cord, and keep them away from the work area.
- **Store idle tools.** When not in use, tools should be stored in a dry locked-up place, out of reach of children.
- **Do not force the tool.** It will do the job better and safer at the rate for which it was intended.
- **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.
- **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.
- **Use protective equipment.** Use safety glasses. Use face or dust mask if working operations create dust.
- **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.
- **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.

- **Secure work.** Where possible, use clamps or a vice to hold the work. It is safer than using your hand.
- **Do not overreach.** Keep proper footing and balance at all times.
- **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.
- **Disconnect tools.** When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.
- **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.
- **Avoid unintentional starting.** Ensure switch is in "off" position when plugging in.
- **Use outdoor extension leads.** When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.
- **Stay alert.** Watch what you are doing, use common sense and do not operate the tool when you are tired, under the influence of any drugs, alcohol, or medication that could affect your ability to use the tool properly.
- **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.**
- **Warning.** The use of any accessory or attachment other than the one recommended in this instruction manual may present a risk of personal injury.
- **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.

## GRINDER SANDER SAFETY WARNINGS

- The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. If you are not sure, have a certified electrician check the receptacle.



- Mount the grinder sander firmly to the workbench, grinding stand or other rigid frame before operation. An unsecured grinder sander is unstable and may move during operation. This may result in damage or injury.
- Provide adequate general or localized lighting to prevent stroboscopic effect and hazards.
- Prior to operation, inspect the components and any accessories of the grinder sander to ensure there are no conditions that may affect proper operation. Tighten grinding wheel lock nuts, securing bolts and all clamps and guards.
- Prior to each start up, inspect the grinding wheel for damage. Do not use damaged or misshapen wheels. Replace any damaged grinding wheel according to the instructions.
- Check that the wheel rotates freely prior to each start up. With the grinder sander unplugged and the switch turned to OFF, carefully spin the wheel by hand. The wheel should not contact any components of the bench grinder, and there should be no binding or other conditions that may affect proper operation.
- During each start-up, stand to one side of the grinder sander and switch it ON. Let the grinder sander operate at full speed for one minute so that any undetected flaws or cracks of the wheel will become apparent. Do not contact the wheel with the work piece until the grinder sander has reached full speed.
- Keep hands and body parts clear of grinding wheels. Contacting the rotating wheel may cause injury.
- Always use guards and eye shields. Keep all guards in place and in working order. Operating the grinder sander without guards or with damaged guards may result in injury.
- Avoid burns. Grinding may cause items and the grinding wheel to become hot. Do not touch the grinding wheel or items that may be hot.
- Do not use the grinder sander to work on small items or items which cannot be held properly. The item may be thrown and result in injury.
- Never grind on the side of the wheel. The wheel will shatter. Grind on the face of the wheel only.
- Never leave a running tool unattended. Turn the power switch to OFF. The grinding wheels continue to rotate after the tool is switched off. Do not leave the tool until it has come to a complete stop.
- Never reach behind or beneath the grinding wheels.
- Use ear protection, such as plugs or muffs, during extended periods of operation.
- Remove the plug before carrying out any adjustment, servicing or maintenance. The power cord must remain unplugged whenever you are maintaining your grinder sander.
- Adjust tool rests whenever necessary to keep the distance between the work rests and the grinding wheels as small as possible. This distance should be less than or equal to 2 mm. As the diameter of

the grinding wheel decreases with use, maintain the maximum tool rest distance by adjusting it.

- Adjust spark arrestors whenever necessary to keep the distance between the spark arrestors and the grinding wheels as small as possible. This distance should be less than or equal to 2 mm. As the diameter of the grinding wheel decreases with use, maintain the maximum spark arrestor distance by adjusting it.
- If the work rest becomes worn or damaged, replace it with an identical replacement from the authorised service centre.
- When fitting a new grinding wheel, always check that the stated maximum RPM meets or exceeds that stated on the grinder sander. Ensure the wheel diameter and arbor size meet that stated on the specifications. Also check the new wheel for damage, such as flaws or cracks.

### GRINDING WHEEL SAFETY INSTRUCTIONS

#### **⚠ WARNING**

To reduce the risk of injury, user must read and comply with instructions, warnings and operator's manual before starting to use this grinding wheel. Failure to heed these warnings can result in wheel breakage and serious personal injury. Save these instructions.

- The use of any wheel other than the one recommended in the machine instruction manual may present a risk of personal injury. Use only grinding wheels which have marked speed equal or greater to that marked on the machine.
- Never use grinding wheel that is too thick to allow outer flange to engage with the flats on the spindle. Larger wheels will come in contact with the wheel guards, while thicker wheels will prevent the bolt from securing the wheel on the spindle. Either of these situations could result in a serious accident and can cause serious personal injury.
- This wheel is for grinding and shaping metal. Do not attempt to do cut-off operation.
- This grinding wheel is only suitable for dry grinding.
- Do not use damaged grinding wheels, do not use wheels that are chipped, cracked or otherwise defective.
- Ensure that the abrasive grinding wheel is correctly fitted and tightened before use.
- Machine should never be connected to power supply when you are installing or removing grinding wheels.
- Store your spare grinding wheel carefully.
  - Keep the wheel inside the original package if possible.
  - Store the wheel in a dry area at room temperature.
  - Wheels may be stored vertically on a shelf.
  - Do not allow the wheels to fall or suffer any impact.



## Information available on the grinding wheel label

The information on the wheel label is important. Read and check it carefully to ensure you are selecting the correct type of wheel.

1. Manufacturer, supplier, importer or trade mark.
2. Nominal dimensions of grinding wheel, in particular the diameter of the bore.
3. Abrasive type, grain size, grade or hardness, type of bond and use of reinforcement.
4. Maximum operation speed in metres per second.
5. Maximum permissible speed of rotation in 1/min.
6. For declaration of conformity, the abrasive products shall be marked with EN 12413.
7. Restriction of use and safety warning symbols.
8. Traceability code, eg. A production/batch number, expiry date or series number.

## RESIDUAL RISKS

Even when the product is used as prescribed, it is still impossible to completely eliminate certain residual risk factors. The following hazards may arise in use and the operator should pay special attention to avoid the following:

- Risk of contact with unguarded parts of the rotating wheel.
- Burn hazard from contact with hot wheel or work piece.
- Damage to respiratory system if effective dust mask is not worn.
- Damage to hearing if effective hearing protection is not worn.

## KNOW YOUR PRODUCT

See page 6.

1. Spark shield
2. Spark arrestor
3. Wheel guard
4. Wheel dressing tool
5. Work rest
6. Work lamp
7. Sanding belt adjustment knob
8. Sanding belt
9. Work rest
10. Work rest lock knob
11. Water tray
12. On/off switch
13. Mounting hole
14. Sanding belt guard
15. Sander guard

## MAINTENANCE

- Do not modify the product in any way or use accessories not approved by the manufacturer. Your safety and that of others may be compromised.
- Do not use the product if any switches, guards or other functions does not work as intended. Return to an authorised service centre for professional repair or

adjustment.

- Do not make any adjustments whilst the product is running.
- Always make sure the power plug has been removed from the mains power source before making adjustments, lubricating or when doing any maintenance on the product.
- Before and after each use, check the product for damage or broken parts. Keep the product in top working condition by immediately replacing parts with spares approved by the manufacturer.
- Clean out accumulated dust using a brush or vacuum cleaner. Do not use compressed air.
- To assure safety and reliability, all repairs, including changing brushes, should be performed by an authorised service centre.
- If the power supply cord is damaged, it must be replaced only by the manufacturer or by an authorised service centre to prevent damage to the saw or risk of electrocution.

## ⚠ WARNING

For greater safety and reliability, all repairs should be performed by an Authorised RYOBI Service Centre.

## TRANSPORTATION AND STORAGE

- When storing the product, disconnect the power cord. Store the product in a secure place that is not accessible to children.
- Clean the product using a brush and vacuum cleaner before storage.

## ENVIRONMENTAL PROTECTION



Recycle raw materials instead of disposing of as waste. The machine, accessories and packaging should be sorted for environmental-friendly recycling.

## SYMBOLS ON THE PRODUCT



Safety alert



CE conformity



Please read the instructions carefully before starting the machine.



EurAsian conformity mark



Ukrainian mark of conformity



Wear ear protection



Wear eye protection



Not for wet grinding or cutting



Do not use chipped, cracked or defective grinding wheel.



Wear safety gloves.



Size and speed of grinding wheel



Size and speed of sanding belt



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

## SYMBOLS IN THIS MANUAL



Plug in the product.



Unplug the product.



Waiting time for the product to reach full speed



Parts or accessories sold separately

The following signal words and meanings are intended to explain the levels of risk associated with this product:

### **DANGER**

Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

### **WARNING**

Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

### **CAUTION**

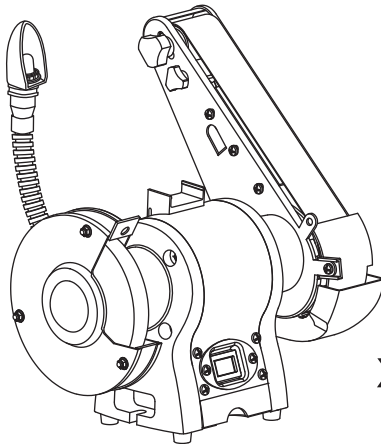
Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

### **CAUTION**

(Without Safety Alert Symbol) Indicates a situation that may result in property damage.



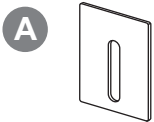
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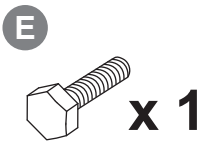
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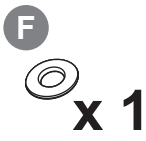
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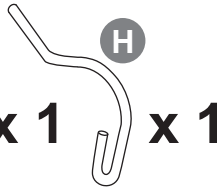
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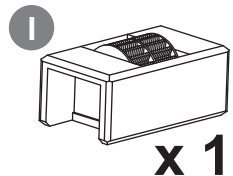
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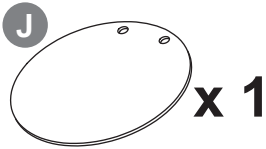
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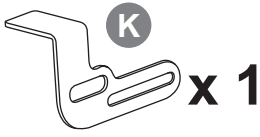
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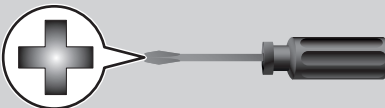
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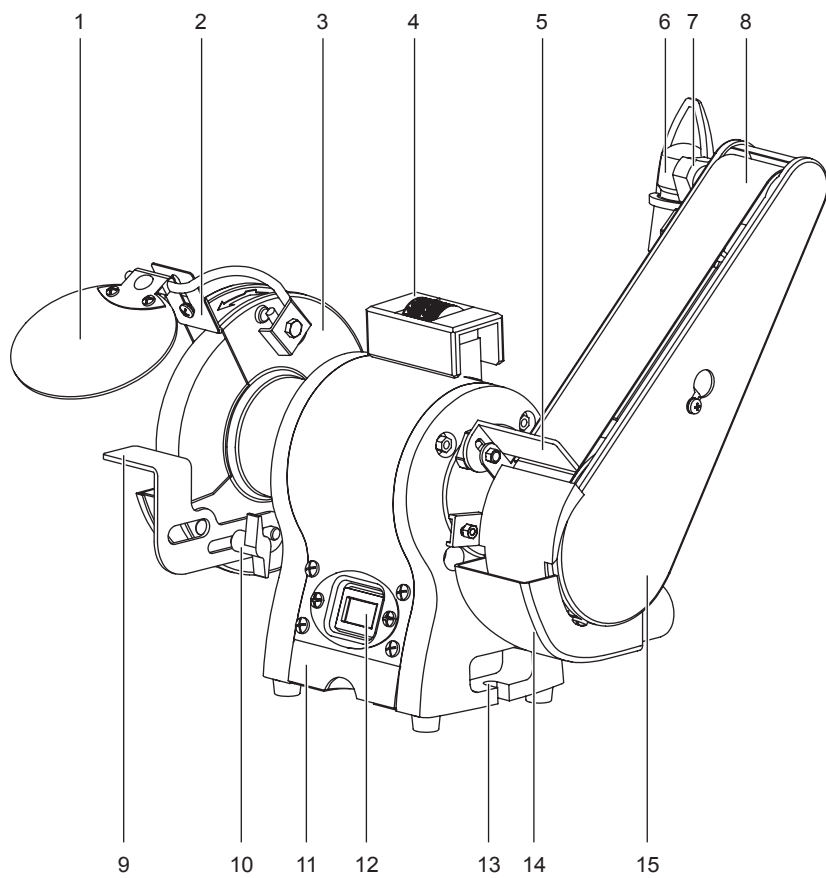


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# Know your product







Getting started

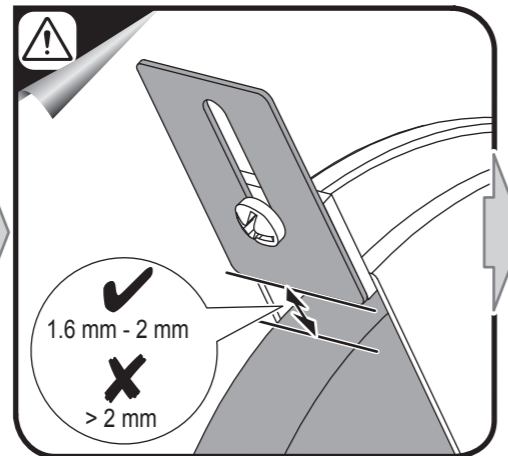
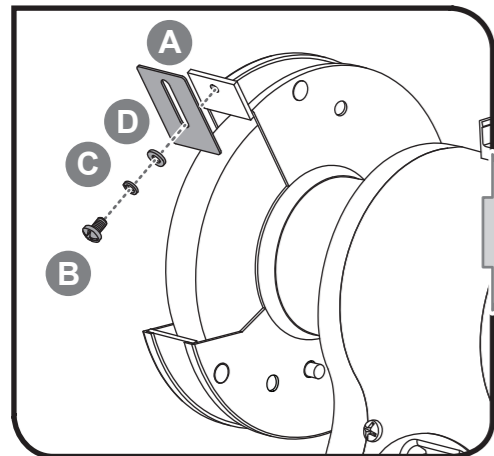


Getting started

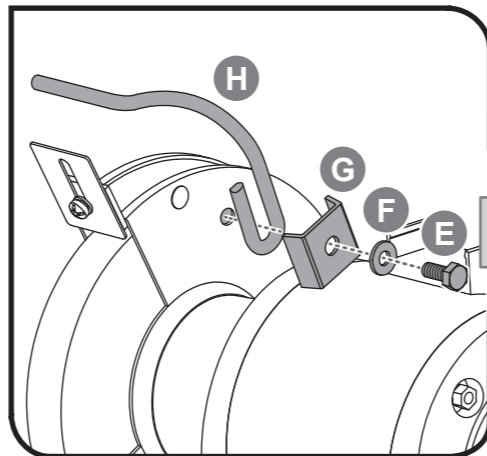


Getting started

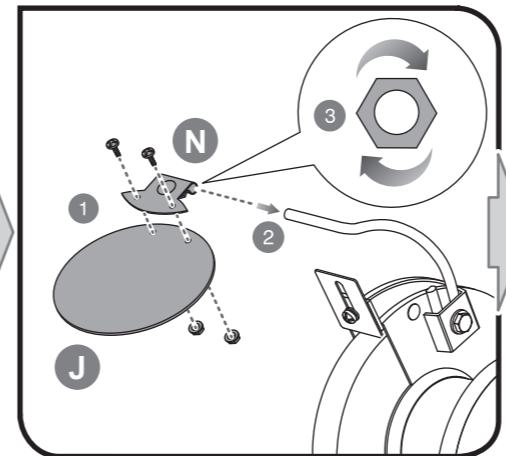
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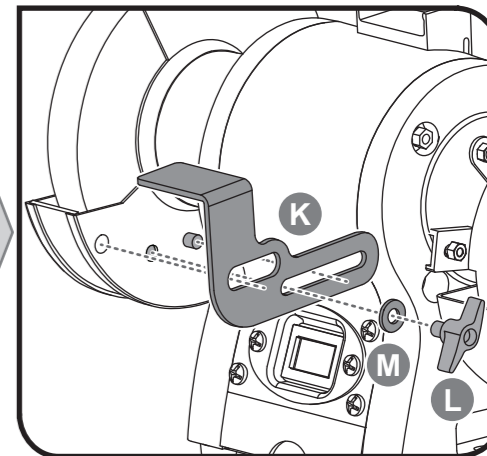
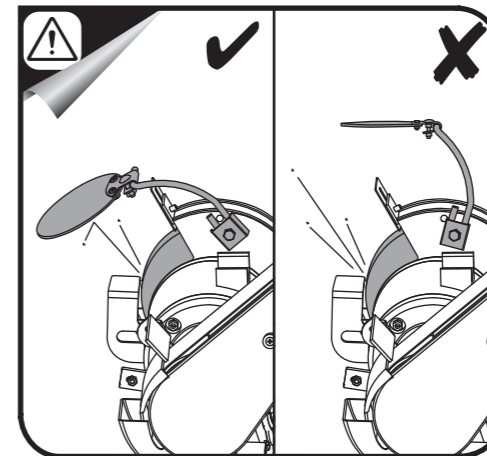
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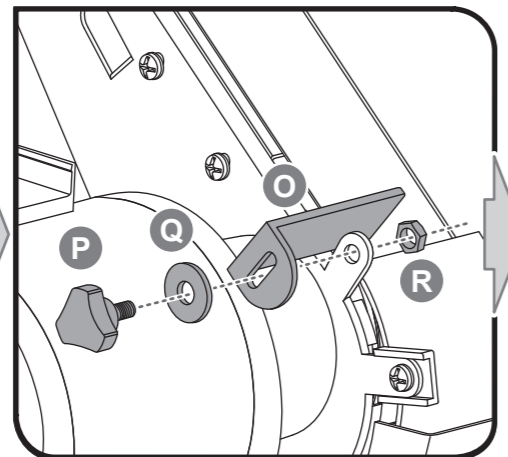
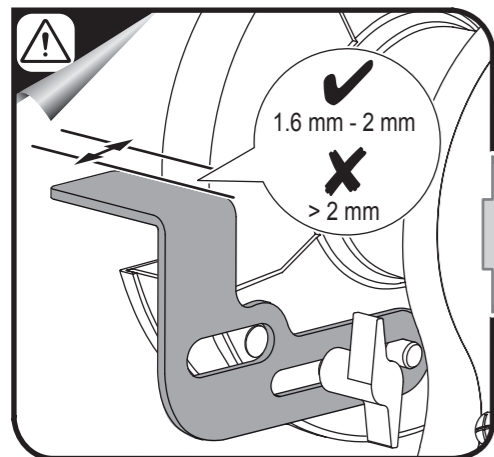
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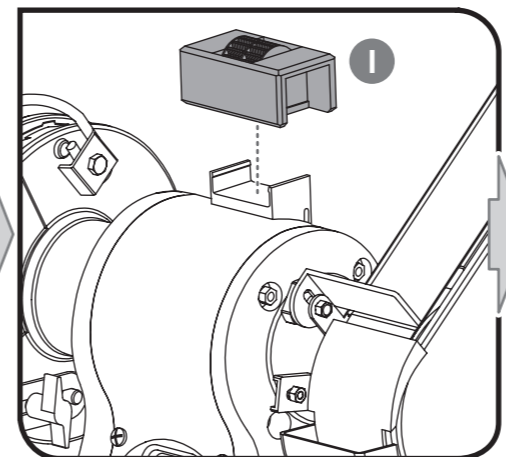
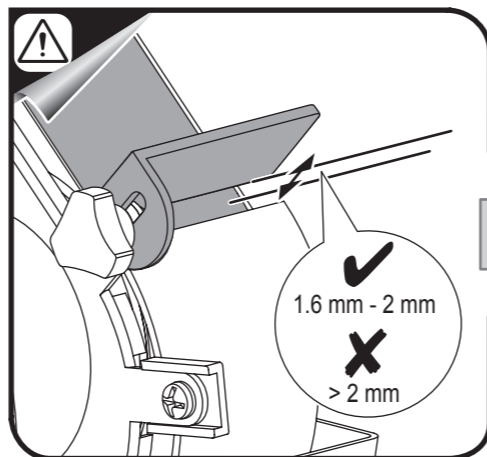
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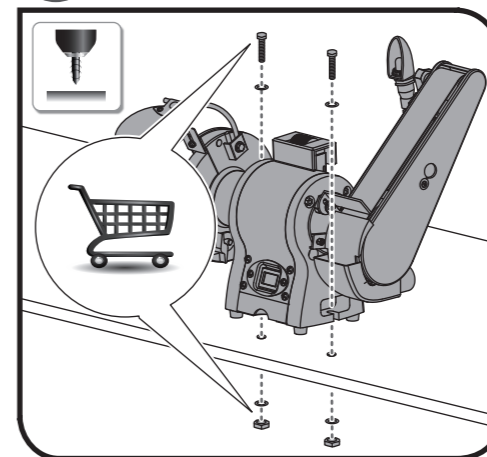
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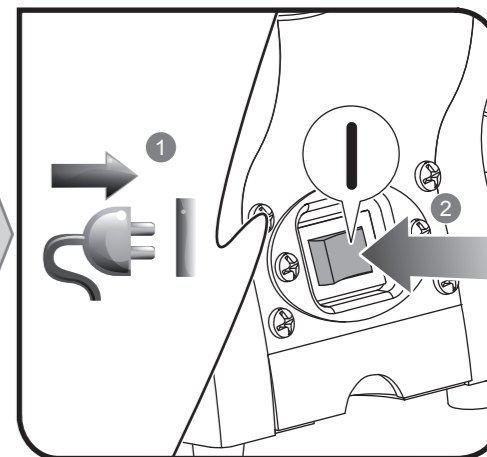
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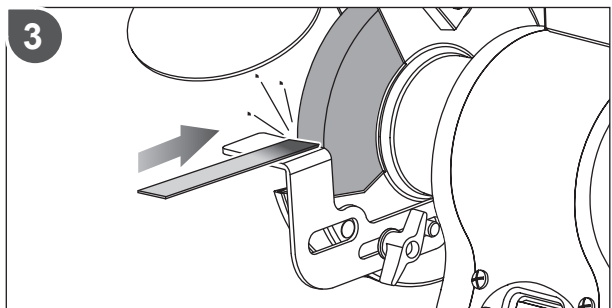
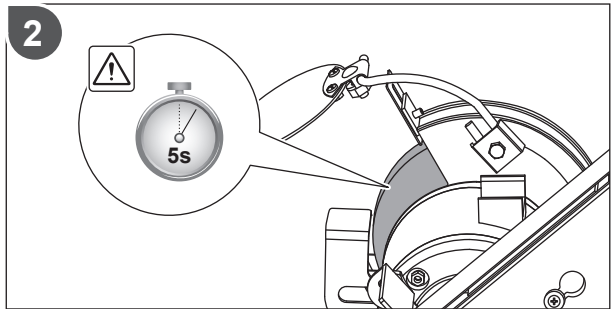
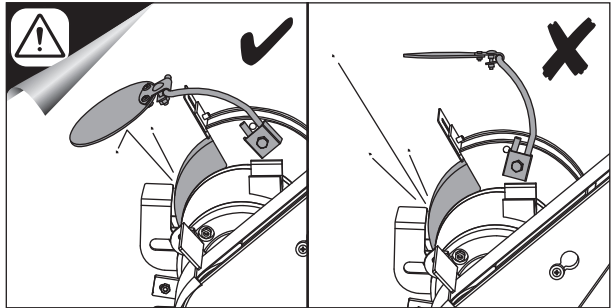
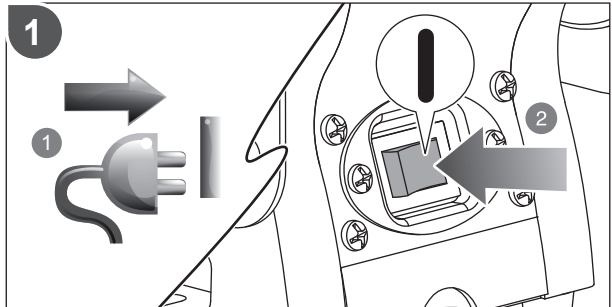
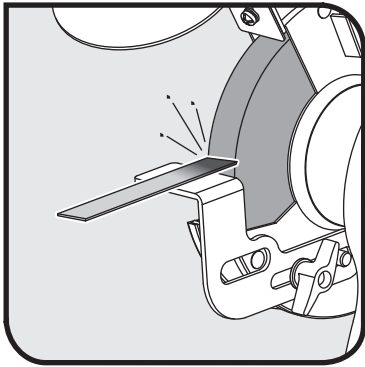
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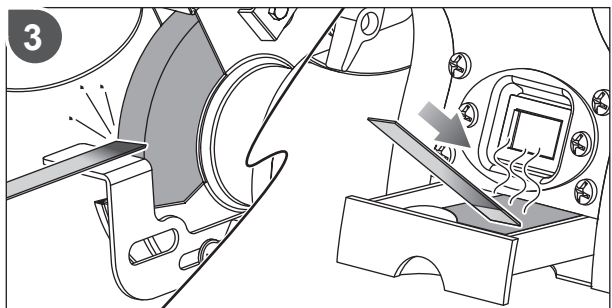
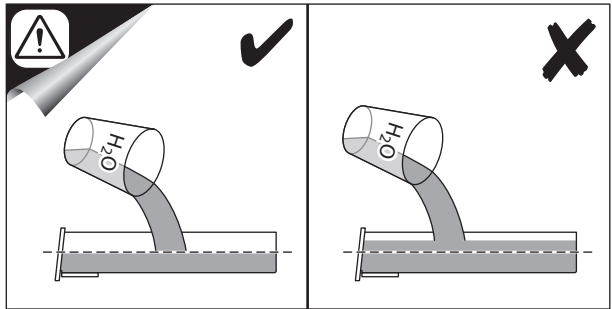
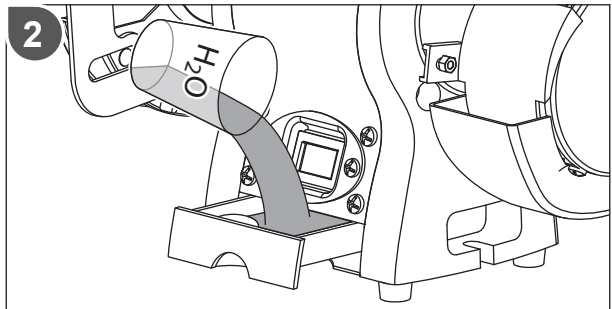
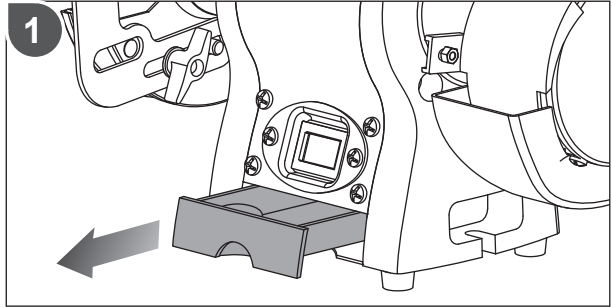
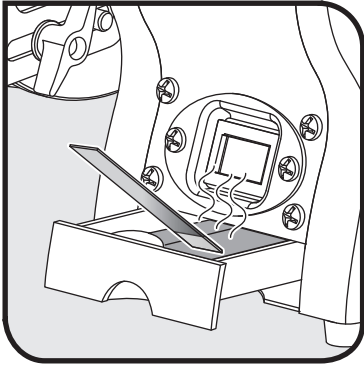


# Operation



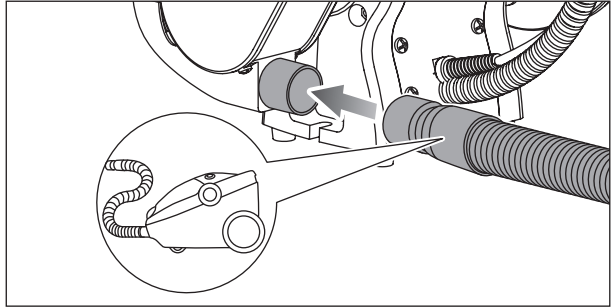
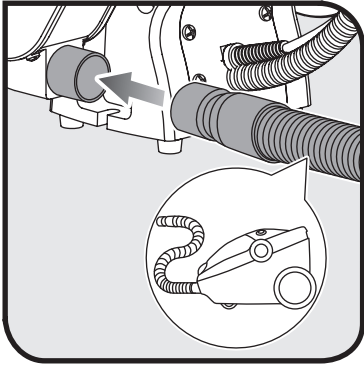


# Operation



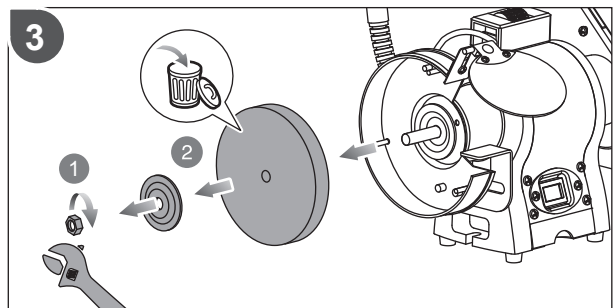
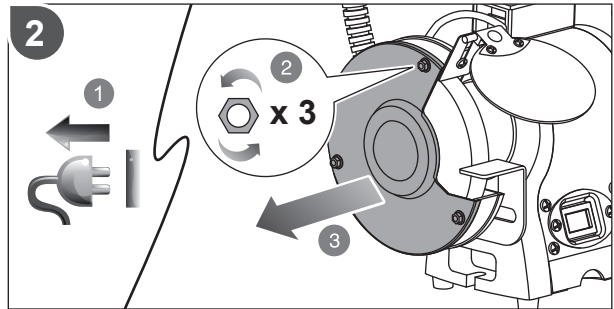
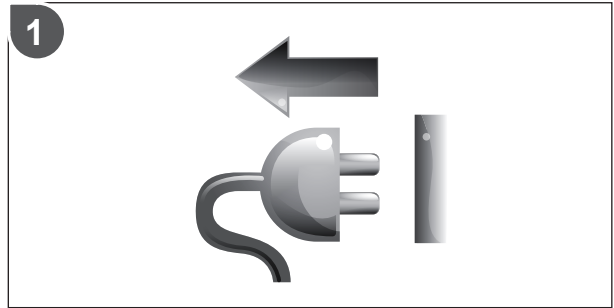
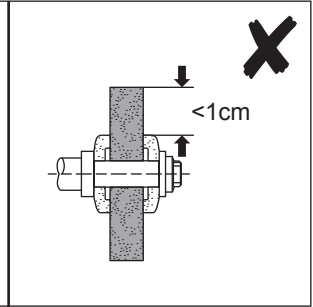
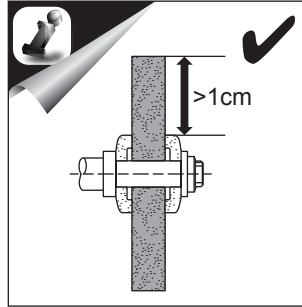
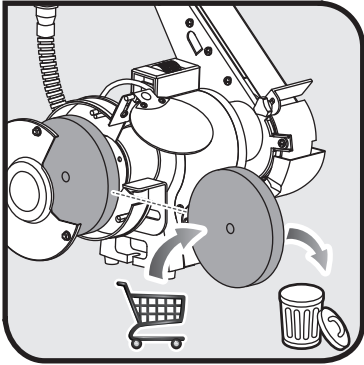


# Operation



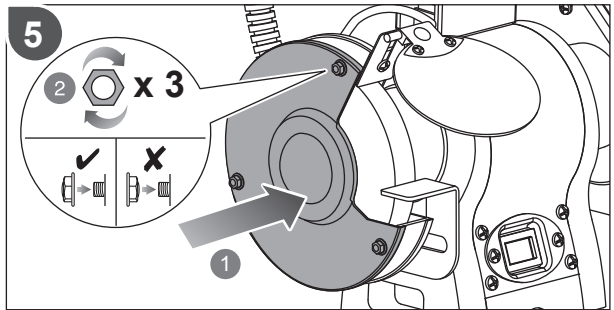
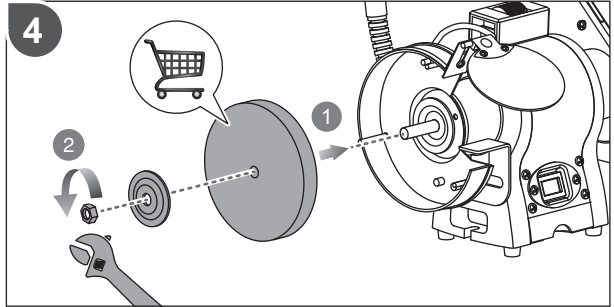


# Maintenance



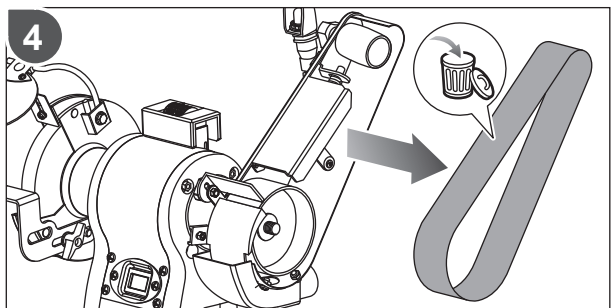
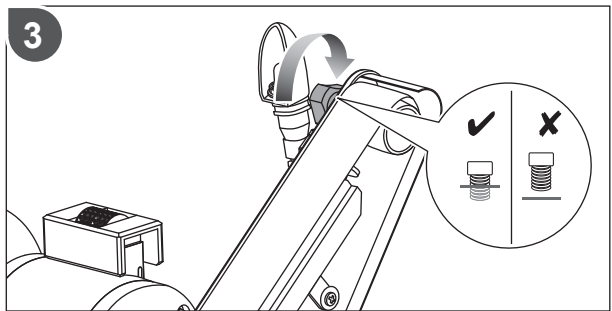
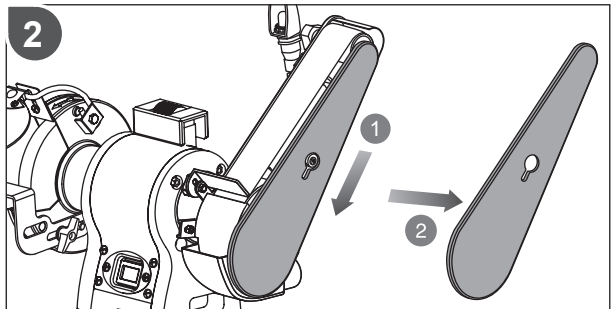
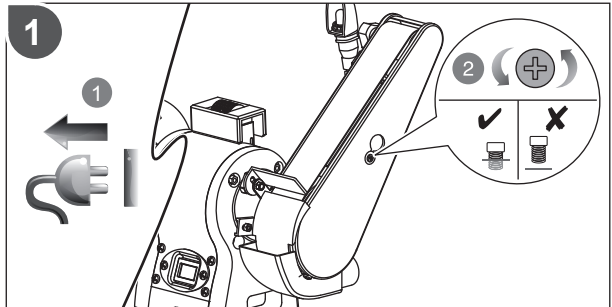


# Maintenance





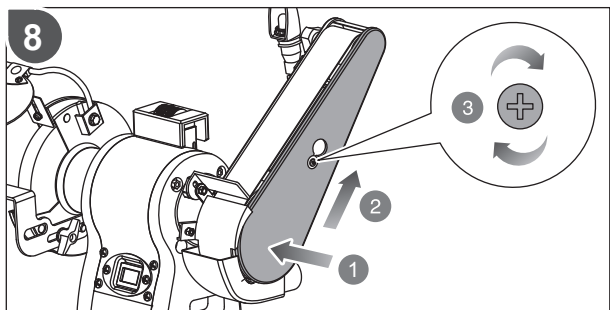
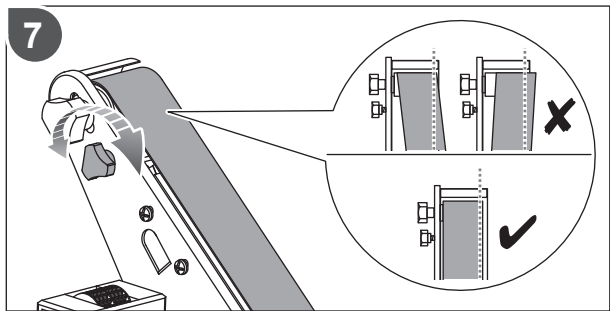
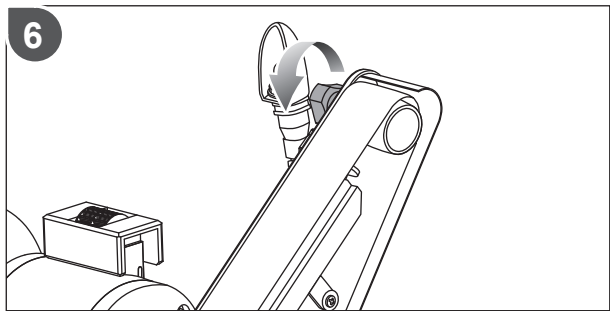
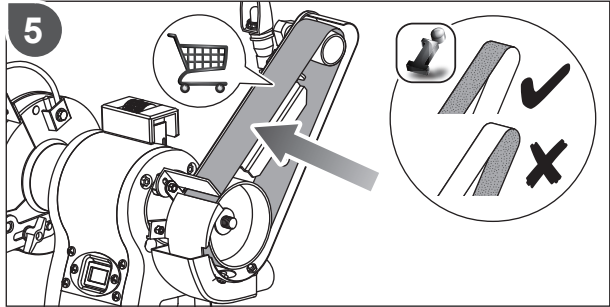
# Maintenance





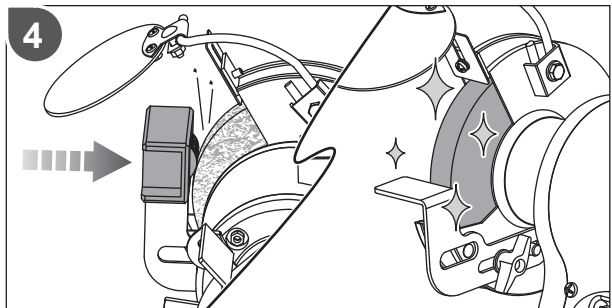
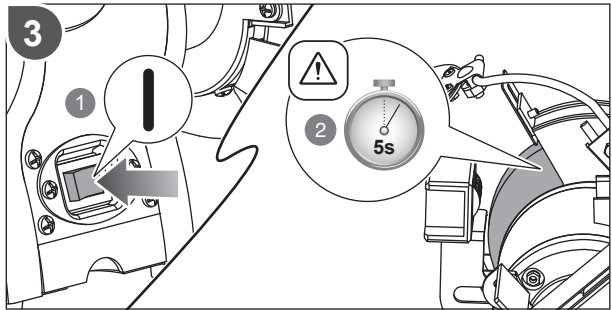
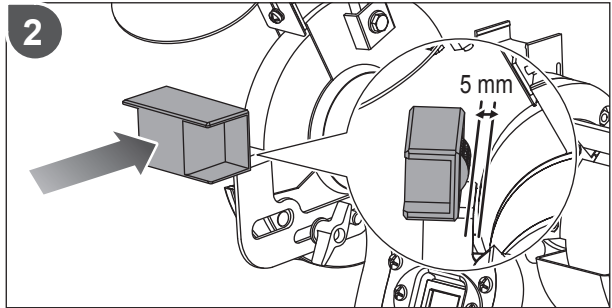
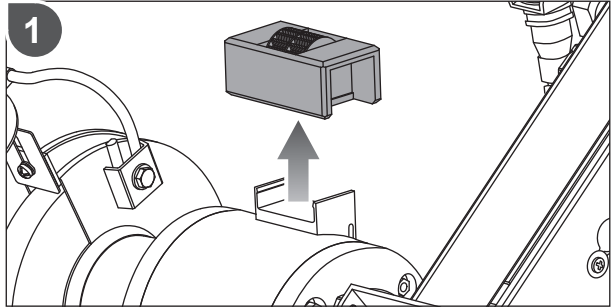
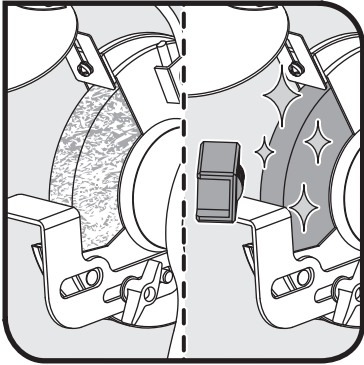


# Maintenance



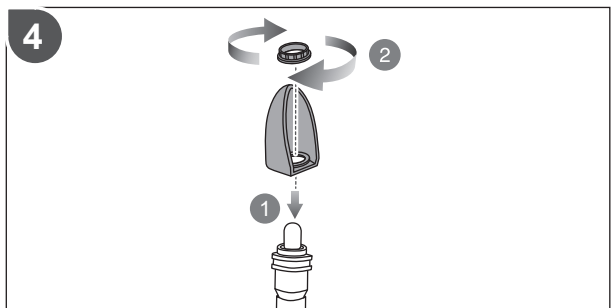
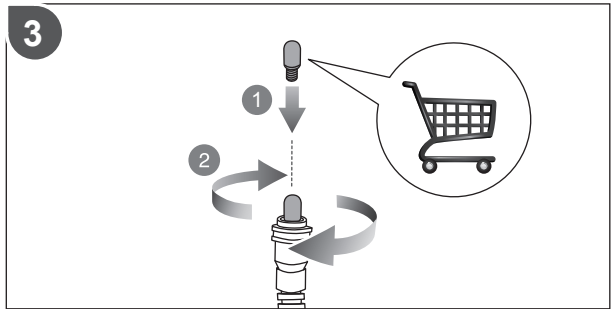
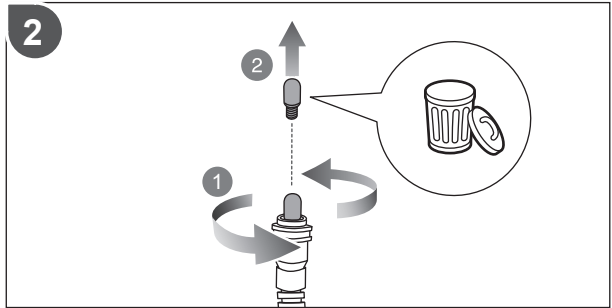
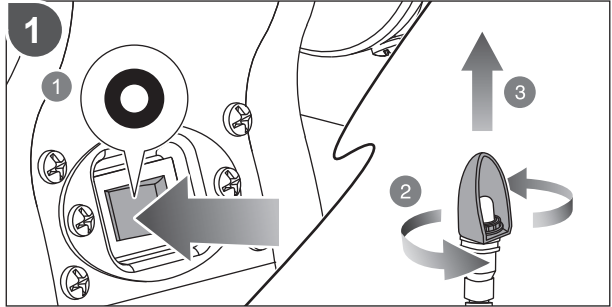
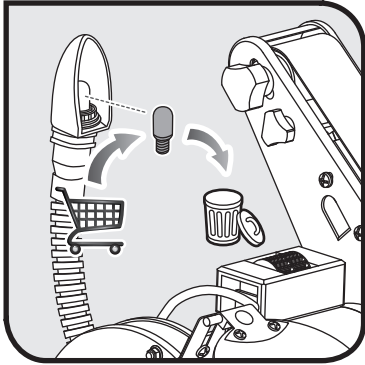


## Maintenance



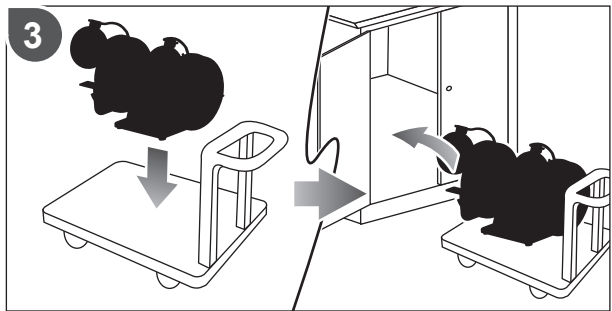
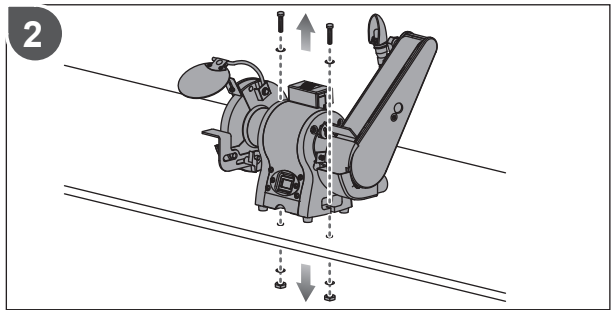
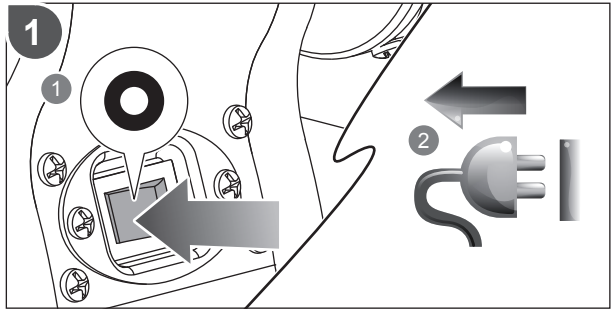


# Maintenance





## Maintenance



## PRODUCT SPECIFICATIONS

Grinder Sander

Model	RBGL650G
Motor type	Induction
Motor ratings	230V - 240V ~ 50 Hz
Rated power	370 W (S2 30 mins)
Wheel diameter	150 mm
Wheel width	20 mm
Bore diameter	12.7 mm
Belt size	50 mm x 686 mm
No-load speed	2,850 RPM
Wheel grits	36 (Coarse)
Net weight	10.3 Kg

Measured values determined according to EN61029 A-weighted sound pressure level

$$L_{pA} = 78.0 \text{ dB(A)}$$

Uncertainty K	3 dB(A)
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Measured values determined according to EN61029 A-weighted sound power level

$$L_{WA} = 87.0 \text{ dB(A)}$$

Uncertainty K	3 dB(A)
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### NOTE:

(S2 30 mins) indicates short-time operation. Operate the product at working load for 30 minutes. Then allow the product to cool down to room temperature.

## RYOBI® WARRANTY APPLICATION CONDITIONS

In addition to any statutory rights resulting from the purchase, this product is covered by a warranty as stated below.

1. The warranty period is 24 months for consumers and commences on the date the product was purchased. This date has to be documented by an invoice or other proof of purchase. The product is designed and dedicated to consumer and private use only. So there is no warranty provided in case of professional or commercial use. This warranty applies only on new products.
2. There is a possibility to extend for a part of the range of power tools (AC/DC) the warranty period over the period described above using the registration on the [www.ryobitools.eu](http://www.ryobitools.eu) website. The eligibility of products for extended warranty is clearly displayed in stores and / or on packaging and is contained within the product documentation. The end user is required to register his/her newly-acquired products online within 30 days from the date of purchase. The end user may register for the extended warranty in his/her country of residence if listed on the online registration form where this option is valid. Furthermore, end users must give their consent to the storage of their personal data that is required to be entered online. They must also accept the terms and conditions. The registration confirmation receipt, which is sent out by e-mail, and the original invoice showing the date of purchase will serve as proof of the extended warranty.
3. The warranty covers all defects of the product during the warranty period due to faults in workmanship or material at the purchase date. The warranty is limited to repair and/or replacement and does not include any other obligations including but not limited to incidental or consequential damages. The warranty is not valid if the product has been misused, used contrary to the instruction manual, or has been incorrectly connected to a power supply. This warranty does not apply to:
  - any damage to the product that is the result of improper or lack of maintenance
  - any product that has been altered or modified
  - any product where original identification (trade mark, serial number) markings have been defaced, altered or removed
  - any damage caused by non-observance of the instruction manual
  - any product not displaying the CE approval mark on the rating plate
  - any product that has been attempted to be repaired by a non-authorised warranty service centre or without prior authorisation by Techtronic Industries
  - any product connected to an improper power supply (amps, voltage, frequency)
  - any damage caused by external influences (water, chemical, physical, shocks) or foreign substances
  - normal wear and tear spare parts
  - inappropriate use, overloading of the tool
  - use of non-approved accessories or parts
  - Power tool accessories provided with the tool or purchased separately. including but not limited to screw driver bits, drill bits, abrasive discs, sand paper and blades, lateral guide etc.
  - Components (parts and accessories) subject to natural wear and tear, including but not limited to Service & Maintenance Kits, carbon brushes, bearings, chuck, SDS drill bit attachment or reception, power cord, auxiliary handle, transport carry case, sanding plate, dust bag, dust exhaust tube, felt washers, impact wrench pins & springs, etc.
4. For servicing, the product must be sent or presented to a RYOBI authorised service station listed for each country in the following list of service station addresses. In some countries your local RYOBI dealer undertakes to send the product to the RYOBI service organisation. When sending a product to a RYOBI service station, the product should be safely packed without any dangerous contents such as petrol, marked with sender's address and accompanied by a short description of the fault.
5. A repair / replacement under this warranty is free of charge. It does not constitute an extension or a new start of the warranty period. Exchanged parts or products become our property. In some countries delivery charges or postage will have to be paid by the sender. Your statutory rights arising from the purchase of the product remain unaffected.
6. This warranty is valid in the European Community, Switzerland, Iceland, Norway, Liechtenstein, Turkey and Russia. Outside these areas, please contact your authorised RYOBI dealer to determine if another warranty applies.

## AUTHORISED SERVICE CENTRES

### **ACD PLANT LTD**

145 Southbank Road  
Coundon  
Coventry, West Midlands  
CV6 1FG  
Phone: 02476 594348  
Email: danmcgunigle@acdplant.co.uk  
Web: www.acdplant.co.uk

### **CBS Power Tools Limited**

Unit 4, V P Square  
Storeys Bar Rd, Fengate  
Peterborough, Cambridgeshire  
PE1 5YS  
Phone: 01733 343031  
Email: steve@cbspowertools.co.uk  
Web: www.cbspowertools.com

### **C D Powertools**

76 Old Road  
Churwell Morley, Leeds  
LS27 7TH  
Phone: 0113 2718494  
Email: info@cdpowertools.co.uk  
Web : www.cdpowertools.co.uk

### **C J Sinclair Limited**

44 Victoria Road  
St Peters  
Broadstairs, Kent  
CT10 2UG  
Phone: 01843 869400  
Email: repairs@cjsinclairltd.co.uk  
Web: www.cjsinclairltd.co.uk

### **Powertech Ind Ltd**

Unit 2C, Ellison Road  
Norwood Ind, Killamarsh  
Sheffield, South Yorkshire  
S21 2JG  
Phone: 01142 474080  
Email: stores@powertech-industrial.co.uk  
Web: www.powertech-industrial.co.uk

### **RYCKO Technical Services LTD**

104 Green Lane  
St Albans, Herts  
AL3 6EX  
Phone: 08458 678790  
Email: info@ryckotechnical.com  
Web: www.ryckotechnical.com

### **ToolTech Industrial Equipment**

227 E Dunhill Road, Macosquin  
Coleraine, Co Londonderry  
BT514LQ  
Phone: 028 70359493  
Email: john@tooltech.org.uk

For an updated list of authorised service centres, visit <http://en.ryobitools.eu/header/service-and-support/service-agents>.

## DECLARATION OF CONFORMITY

Techtronic Industries GmbH  
Max-Eyth-Straße 10, 71364 Winnenden, Germany

*Herewith we declare that the product*

Grinder Sander  
Brand: RYOBI  
Model number: RBGL650G  
Serial number range: 44486902000001 - 44486902999999

*is in conformity with the following European Directives and harmonised standards*

2006/42/EC, 2014/30/EU, 2011/65/EU  
EN 55014-1:2006+A1:2009+A2:2011; EN 55014-2:2015;  
EN 61000-3-2:2014; EN 61000-3-3:2013;  
EN 61029-1:2009+A11:2010; EN 61029-2-4:2011

RoHS documentation is compiled according to EN 50581:2012.



Andrew John Eyre (BEng, CEng, MIET)  
Vice President, Regulatory & Safety  
Winnenden, Aug. 1, 2017



Authorised to compile the technical file:  
Alexander Krug, Managing Director  
Techtronic Industries GmbH  
Max-Eyth-Straße 10, 71364 Winnenden, Germany

**Techtronic Industries GmbH**  
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71364 Winnenden, Germany

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