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ANGLE GRINDER 20V POWXB20050

1 INTENDED USE

This machine is developed for grinding and roughing of metal and stone. With help of the correct accessories the machine can also be used for brushing and sanding. Not suitable for professional use.



WARNING! Read this manual and general safety instructions carefully before using the appliance, for your own safety. Your power tool should only be passed on together with these instructions.

2 DESCRIPTION (FIG A)

1. Lock lever for protection guard	8. Grinding disc (NOT included)
2. Spindle lock button	9. Charger
3. Main handle	10. Battery pack with battery capacity indicator
4. On/Off switch	11. Battery pack release button
5. Air vents	12. Button for battery capacity indicator
6. Auxiliary handle	
7. Protective guard	

3 PACKAGE CONTENT LIST

- Remove all packaging materials.
- Remove remaining packing and package inserts (if included).
- Check that the package contents are complete.
- Check the appliance, the power cord, the power plug and all accessories for transportation damage.
- Keep the packing materials as far as possible till the end of the warranty period. Dispose it into your local waste disposal system afterwards.



WARNING: Packaging materials are not toys! Children must not play with plastic bags! Danger of suffocation!

1 x Machine	1 x safety guard
1 x Manual	1 x battery
1 x auxiliary handle	1 x charger
1 x spanner	

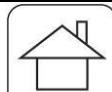
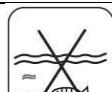


If any parts are missing or damaged, please contact your dealer.

4 SYMBOLS

In this manual and/or on the machine the following symbols are used:

	Denotes risk of personal injury or damage to the tool.		In accordance with essential requirements of the European directive(s)
	Read manual before use		"Class II - The machine is double insulated; Earthing wire is therefore not necessary (only for charger)"

	Wear noise protection		Ambient temperature 40°C max. (only for battery)
	Wear eye protection		Use battery and charger only in closed rooms
	Wear a mask In dusty conditions		Do not expose charger and battery pack to water
	Wear gloves		Do not incinerate battery pack or charger

5 GENERAL POWER TOOL SAFETY WARNINGS

Read all safety warnings and instructions. Failure to heed warnings and follow instructions may result in electric shock, fire and/or serious injury. Keep safety warnings and instructions for future reference. The term "power tool" in the safety warnings refers to your mains-operated (corded) power tool or battery- operated (cordless) power tool.

5.1 Working area

- Keep working area clean and well lit. Untidy and dark areas can lead to accidents.
- Do not operate power tools in potentially explosive surroundings, for example, in the presence of inflammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders at a distance when operating a power tool. Distractions can cause you to lose control of it.

5.2 Electrical safety

- Always check that the power supply corresponds to the voltage on the rating plate.
- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use adapter plugs with earthed power tools. Unmodified plugs and matching outlets will reduce the risk of an electric shock.
- Avoid body contact with earthed surfaces such as pipes, radiators, kitchen ranges and refrigerators. There is an increased risk of an electric shock if your body is earthed.
- Do not expose power tools to rain or wet conditions. If water gets inside a power tool, it will increase the risk of an electric shock.
- Do not damage the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of an electric shock.
- When operating a power tool outdoors, use an extension cable suitable for outdoor use. Using a cord suitable for outdoor use reduces the risk of an electric shock.
- If operating a power tool in a damp location is unavoidable, use a power supply protected by a residual current device (RCD). Using an RCD reduces the risk of an electric shock.

5.3 Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool when you are tired or under the influence of drugs, alcohol or

medication. A moment of inattention when operating a power tool may result in serious personal injury.

- Use safety equipment. Always wear eye protection. Using safety equipment such as a dust mask, non-skid safety shoes, a hard hat, or hearing protection whenever it is needed will reduce the risk of personal injury.
- Avoid accidental starts. Ensure the switch is in the off position before inserting the plug. Carrying power tools with your finger on the switch or plugging in power tools when the switch is in the on position makes accidents more likely.
- Remove any adjusting keys or spanners before turning on the power tool. A spanner or key left attached to a rotating part of the power tool may result in personal injury.
- Do not reach out too far. Keep your feet firmly on the ground at all times. This will enable you retain control over the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from the power tool. Loose clothes, jewellery or long hair can become entangled in the moving parts.
- If there are devices for connecting dust extraction and collection facilities, please ensure that they are attached and used correctly. Using such devices can reduce dust-related hazards.

5.4 Power tool use and care

- Do not expect the power tool to do more than it can. Use the correct power tool for what you want to do. A power tool will achieve better results and be safer if used in the context for which it was designed.
- Do not use the power tool if the switch cannot turn it on and off. A power tool with a broken switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store power tools, when not in use, out of the reach of children and do not allow people who are not familiar with the power tool or these instructions to operate it. Power tools are potentially dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or jammed moving parts, breakages or any other feature that might affect the operation of the power tool. If it is damaged, the power tool must be repaired. Many accidents are caused by using poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to jam and are easier to control.
- Use the power tool, accessories and cutting tools, etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work which needs to be done. Using a power tool in ways for which it was not intended can lead to potentially hazardous situations.

5.5 Service

- Your power tool should be serviced by a qualified specialist using only standard spare parts. This will ensure that it meets the required safety standards.

6 SPECIFIC SAFETY INSTRUCTIONS FOR ANGLE GRINDERS

- Check that the maximum speed indicated on the grinding disc corresponds to the maximum speed of the machine. The speed of the machine must not exceed the value on the grinding disc.
- Make sure that the dimensions of the grinding disc correspond to the specifications of the machine.
- Make sure that the grinding disc has been mounted and fastened properly. Do not use reducing rings or adapters to make the grinding disc fit properly.
- Treat and store grinding discs in conformance with the supplier's instructions.

- Do not use the machine for grinding workpieces with a maximum thickness exceeding the maximum grinding depth of the grinding disc.
- Do not use grinding discs for deburring.
- When grinding discs have to be mounted on the thread of the spindle, make sure that the spindle has sufficient thread. Make sure that the spindle is sufficiently protected and does not touch the grinding surface.
- Before use, inspect the grinding disc for any damage. Do not use grinding discs which are cracked, ripped or otherwise damaged.
- Before use, let the machine run idle for 30 seconds.
- Immediately switch off the machine in case of abnormal vibrations or occurrence of another defect. Carefully inspect the machine and grinding disc before switching the machine on again.
- Make sure that sparks do not put people into danger or that they contact highly flammable substances.
- Make sure that the workpiece is sufficiently supported or clamped. Keep your hands away from the surface to be cut.
- Always wear safety goggles and hearing protection. If desired or required also use another kind of protection like for example an apron or helmet.
- Ensure that mounted wheels and points are fitted in accordance with the manufacturer's instructions.
- Ensure that blotters are used when they are provided with the bonded abrasive product and when they are required.
- If a guard is supplied with the tool never use the tool without such a guard.
- For tools intended to be fitted with threaded hole wheel, ensure that the thread in the wheel is long enough to accept the spindle length.
- Ensure that ventilation openings are kept clear when working in dusty conditions.

7 ADDITIONAL SAFETY INSTRUCTION FOR KICKBACK

If an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
- Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- Use special care when working corners, sharp edges, etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

8 ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGERS

8.1 *Batteries*

- Never attempt to open for any reason.
- Do not store in locations where the temperature may exceed 40 °C.
- Charge only at ambient temperatures between 4 °C and 40 °C.
- Store your batteries in a cool dry place (5 °C-20 °C). Never store batteries in discharged state.
- It is better for Li-ion batteries to discharge and reload them regularly (at least 4 times a year). The ideal charge for long-term storage of your Li-ion battery is 40% of capacity.
- When disposing of batteries, follow the instructions given in the section "Protecting the environment".
- Do not cause short circuits. If connection is made between the positive (+) and negative (-) terminal directly or via accidental contact with metallic objects, the battery is short circuited and an intense current will flow causing heat generation which may lead to casing rupture or fire.
- Do not heat. If batteries are heated to above 100 °C, sealing and insulating separators and other polymer components may be damaged resulting in electrolyte leakage and/or internal short circuiting leading to heat generation causing rupture or fire. Moreover do not dispose of the batteries in fire, explosion and/or intense burning may result.
- Under extreme conditions, battery leakage may occur. When you notice liquid on the battery, proceed as follows:
 - Carefully wipe the liquid off using a cloth. Avoid skin contact.
 - In case of skin or eye contact, follow the instructions below:
 - ✓ Immediately rinse with water. Neutralize with a mild acid such as lemon juice or vinegar.
 - ✓ In case of eye contact, rinse abundantly with clean water for at least 10 minutes. Consult a physician.



Fire hazard! Avoid short-circuiting the contacts of a detached battery. Do not incinerate the battery.

8.2 *Chargers*

- Never attempt to charge non-rechargeable batteries.
- Have defective cords replaced immediately.
- Do not expose to water.
- Do not open the charger.
- Do not probe the charger.
- The charger is intended for indoor use only.

9 CHARGING AND INSERTION OR REMOVAL OF BATTERY

9.1 *Charger indications (Fig. 1)*

Connect the charger to the power outlet socket

- Solid green: ready to charge
- Solid red: charging
- Solid green: charged



Note: if the battery does not fit properly, disconnect it and confirm that the battery pack is the correct model for this charger as shown on the specification chart. Do not charge any other battery pack or any battery pack that does not securely fit the charger.

1. Frequently monitor the charger and battery pack while connected
2. Unplug the charger and disconnect it from the battery pack when finished.
3. Allow the battery pack to cool completely before using it.
4. Store the charger and battery pack indoors, out of reach of children.



NOTE: If battery is hot after continuous use in the tool, allow it to cool down to room temperature before charging. This will extend the life of your batteries.

9.2 Removal / insertion of battery (Fig. 2)



WARNING: Before making any adjustments ensure the machine is switched off or remove the battery pack.

- Hold the tool with one hand and the battery pack (10) with the other.
- To install: push and slide battery pack into battery port, make sure the release latch on the rear side of the battery snaps into place and battery is secure before beginning operation.
- To remove: Press the battery release latch and pull the battery pack out at the same time.

9.3 Battery capacity indicator (Fig. 3)

There are battery capacity indicators on the battery pack, you can check the capacity status of the battery if you squeeze the button (12). Before using the machine, please press switch trigger to check if the battery is full enough for properly working.

Those 3 LED might show the status of the capacity level of the battery:

3 LED's are lit: Battery fully charged

2 LED's are lit: Battery 60% charged

1 LED is lit: Battery almost discharged

10 ASSEMBLY

10.1 Fitting the auxiliary handle (Fig. 4)



Warning: Prior to assembly and adjustment always switch off the grinder and pull out the battery pack from the angle grinder body.

The auxiliary handle (6) can be attached to the angle grinder in 2 different positions: left and right.

10.2 Assembly of the protective guard (Fig. 5-6)

- Place the protective guard (7) on the front gear housing.
- Adjust the position of the protection guard to the requirements of the operation.
- Lock the protection guard tightening the locking screw with a hex key or screw driver.
- Check if the protective guard has been fixed firmly and correctly.



Note: the protective guard must be positioned to protect the user if the disc shatters during use.

10.3 Replacing the grinding disc (Fig. 7 – 8)



Beware – a disc which has been used may be very hot!



Warning: prior to assembly and adjustment always pull out the battery pack from the grinder body.

- Depress and hold down the spindle lock button (2) to secure the spindle.
- Turn the output spindle until it locks.
- Remove the outer flange and backing flange by using the two-hole spanner provided.
- Fit the desired disc (8) on the spindle and replace the outer flange and backing flange.
- Release the spindle lock.



Important! Only ever press the spindle lock when the motor and grinding spindle are at a standstill!

You must keep the spindle lock pressed while you change the wheel!

Switch the grinder on using the ON/OFF switch (4), and let it run for 30 seconds to check that it is working correctly and that there are no abnormal vibrations. Stop the grinder immediately if heavy vibration occurs, and investigate the cause.

For grinding disc and cutting wheel with a thickness up to approx. 3 mm, screw on the outer flange with the flat side facing the grinding disc or cutting wheel.

11 OPERATION

11.1 Switch on/off (Fig. 9)



Before engage the ON/OFF switch button, check that the grinding disc is properly fitted and run smoothly, the outer flange is well tightened.

- Connect the battery pack onto the angle grinder body.

11.1.1 Switching on

Switch the angle grinder on by depress the rear position of the ON/OFF switch button (4) as the arrow 1 shows on the Fig. 9 and pushing the switch button forward as the arrow 2 shows on the Fig. 9 and lock onto the "ON" position.

11.1.2 Switching off

Depress the rear position of the ON/OFF switch button (4), it returns automatically to the "OFF" position and the tool turns off. Do not let go of grinder until it has stopped running.

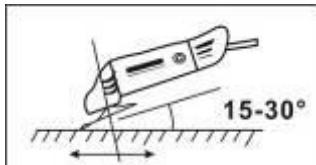


The wheel continues to rotate after the tool is switched off.

Note: the switch of this angle grinder has a power-off protection function that avoids to personal injury and damage after power down because of sudden start when power on again.

12 USE

12.1 Grinding



Hold the handle (3) and auxiliary handle (6) firmly and switch on. Avoid blocking the ventilation slots with your hand, as this may cause the grinder to overheat. Let the disc reach full speed. Apply the grinder to the item. Maximum effect is achieved when the grinder is held at an angle of 15-30° in relation to the item. Move the grinder gently along the item. Give the grinder time to work. It is rarely necessary to press the disc hard against the surface to be worked. Sparks can occur in the motor compartment during use. This is normal and does not mean the grinder is defective. Switch off the grinder after use.

13 CLEANING AND MAINTENANCE

13.1 Cleaning

- Keep the ventilation slots of the machine clean to prevent overheating of the engine.
- Regularly clean the machine housing with a soft cloth, preferably after each use.
- Keep the ventilation slots free from dust and dirt.
- If the dirt does not come off use a soft cloth moistened with soapy water.



Never use solvents such as petrol, alcohol, ammonia water, etc. These solvents may damage the plastic parts.

14 TECHNICAL DETAILS

Model nr.	POWXB20050
Rotation speed	10 000min-1
Disc diameter	125mm
Rated Voltage	20V
Spindle lock	Yes
Battery connection	Slide-on
Disc bore	22 mm
Soft grip	Yes
Safety guard	Yes
Battery capacity	20V-4000mAh
Charger rating output	20V-2A

15 NOISE

Noise emission values measured according to relevant standard. (K=3)

Acoustic pressure level LpA	89 dB(A)
Acoustic power level LwA	100 dB(A)



ATTENTION! Wear hearing protection when sound pressure is over 85 dB(A).

aw (Vibration)	Max 1,8 m/s ²	K = 1,5 m/s ²
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16 WARRANTY

- This product is warranted for a 36-month period effective from the date of purchase by the first user.
- This warranty covers all material or production flaws excluding: batteries, chargers, defective parts subject to normal wear & tear such as bearings, brushes, cables, and plugs, or accessories such as drills, drill bits, saw blades, etc.; damage or defects resulting from maltreatment, accidents or alterations; nor the cost of transportation.
- Damage and/or defects resulting from inappropriate use also do not fall under the warranty provisions.
- We also disclaim all liability for any bodily injury resulting from inappropriate use of the tool.
- Repairs may only be carried out by an authorised customer service centre for Powerplus tools.
- You can always obtain more information at the number 00 32 3 292 92 90.
- Any transportation costs shall always be borne by the customer, unless agreed otherwise in writing.
- At the same time, no claim can be made on the warranty if the damage of the device is the result of negligent maintenance or overload.
- Definitely excluded from the warranty is damage resulting from fluid permeation, excessive dust penetration, intentional damage (on purpose or by gross carelessness), inappropriate usage (use for purposes for which the device is not suitable), incompetent usage (e.g. not following the instructions given in the manual), inexpert assembly, lightning strike, erroneous net voltage. This list is not exhaustive.
- Acceptance of claims under warranty can never lead to the prolongation of the warranty period nor commencement of a new warranty period in case of a device replacement.
- Devices or parts which are replaced under the warranty therefore remain the property of Varo NV.
- We reserve the right to reject a claim whenever the purchase cannot be verified or when it is clear that the product has not been properly maintained. (Clean ventilation slots, carbon brushes serviced regularly, etc.).
- Your purchase receipt must be kept as proof of date of purchase.
- Your appliance must be returned undismantled to your dealer in an acceptably clean state, (in its original blow-moulded case if applicable to the unit), accompanied by proof of purchase.
- Your tool must be charged at least 1x per month to ensure optimal operation of this tool.

17 ENVIRONMENT



Should your appliance need replacement after extended use, do not dispose of it with the household refuse, but in an environmentally safe way.

Waste produced by electrical machine items should not be handled like normal household rubbish. Please recycle where recycle facilities exist. Check with your Local Authority or retailer for recycling advice.

18 DECLARATION OF CONFORMITY

**varo**

VARO-Vic. Van Rompu N.V. - Joseph Van Instraat 9 - BE2500 Lier - BELGIUM,
declares that,

Product: ANGLE GRINDER 20V
Trade mark: POWERplus
Model: POWXB20050

is in conformity with the essential requirements and other relevant provisions of the applicable European Directives, based on the application of European harmonized standards. Any unauthorized modification of the apparatus voids this declaration.

European Directives (including, if applicable, their amendments up to the date of signature);
2011/65/EU
2006/42/EC
2014/30/EU

European harmonized standards (including, if applicable, their amendments up to the date of signature);

EN60745-1 : 2009
EN60745-2-3 : 2011
EN55014-1 : 2017
EN55014-2 : 2015

Keeper of the Technical Documentation : Philippe Vankerkhove, VARO – Vic. Van Rompu N.V.

The undersigned acts on behalf of the company CEO,

Philippe Vankerkhove
Regulatory Affairs – Compliance Manager
20/01/2021, Lier - Belgium