

1	INTENDED USE	3
2	DESCRIPTION (FIG. A)	3
3	PACKAGE CONTENT LIST	3
4	SYMBOLS	3
5	GENERAL POWER TOOL SAFETY WARNINGS	4
5.1	<i>Working area</i>	4
5.2	<i>Electrical safety</i>	4
5.3	<i>Personal safety</i>	4
5.4	<i>Power tool use and care</i>	5
5.5	<i>Service</i>	5
6	ADDITIONAL SAFETY INSTRUCTIONS FOR DRILLS	5
7	ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGERS	6
7.1	<i>Batteries</i>	6
7.2	<i>Chargers</i>	6
8	FEATURES	7
8.1	<i>Li-ion battery (6)</i>	7
8.2	<i>Forward/reverse selector (right/left rotation selector) (3)</i>	7
8.3	<i>Variable speed</i>	7
8.4	<i>LED light (8)</i>	7
8.5	<i>Protection system</i>	7
8.5.1	Overload protection	7
8.5.2	Overheat protection	7
9	OPERATION	7
9.1	<i>Charging the battery pack</i>	7
9.1.1	Charging indication (Fig 1)	8
9.2	<i>Battery capacity indicator (Fig. 1a)</i>	8
9.3	<i>Inserting and removing the battery (Fig 2)</i>	8
9.4	<i>Screws</i>	9
9.5	<i>Changing the bit (Fig. 3)</i>	9

9.5.1	Inserting the bit	9
9.5.2	Removing the bit.....	9
9.6	Switch (7)	9
9.6.1	Switch lock (Fig 4)	9
9.6.2	Direction of rotation (Fig 5).....	9
9.6.2.1	Clockwise rotation:.....	9
9.6.2.2	Anticlockwise rotation:	9
9.6.3	Variable speed.....	9
9.7	LED light (Fig 6).....	9
10	CLEANING AND MAINTENANCE	10
10.1	Cleaning	10
10.2	Maintenance.....	10
11	TECHNICAL DETAILS.....	10
12	WARRANTY	10
13	ENVIRONMENT	11

IMPACT SCREWDRIVER 20V POWXB30020

1 INTENDED USE

Your cordless impact screwdriver is intended to loosen/tighten screws and bolts as well as for tightening and loosening nuts within the respective range of dimension.
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. Clamping sleeve | 7. ON/OFF switch |
| 2. Hex-shaped socket | 8. LED work-light |
| 3. Reverse switch | 9. Battery capacity indicator |
| 4. Handle | 10. Button for battery capacity indicator |
| 5. Release button | 11. Belt clip |
| 6. Battery pack | 12. Charger |

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 Impact screwdriver | 1 x Belt clip |
| 1 x Instruction manual | 1 x magnetic bit holder |
| 1 x Charger | 12 x bits |
| 1 x Battery pack | |



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)

	<p>Ambient temperature 40°C max. (only for battery)</p>		<p>Do not expose charger and battery pack to water</p>
	<p>Use battery and charger only in closed rooms</p>		<p>Do not incinerate battery pack or charger</p>

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 ADDITIONAL SAFETY INSTRUCTIONS FOR DRILLS

- Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- The amount of actual torque may vary depending on the cleanness and condition of the threads and other factors. If tightening critical components, check the actual torque applied to the fastener with a mechanical torque wrench (not supplied)
- Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- Avoid unintentional starting. Prepare to begin work before turning on the tool.
- Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
- When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
- Do not leave the tool unattended when the Battery Pack is connected. Turn off the tool, and remove the Battery Pack before leaving.
- The battery Charger gets hot during use. The Charger's heat can build up to unsafe levels and create a fire hazard if it does not receive adequate ventilation, due to an electrical fault, or if it is used in a hot environment. Do not place the Charger on a flammable

surface. Do not obstruct any vents on the Charger. Especially avoid placing the Charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the Charger. Place the Charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the Charger and Battery Pack while charging.

- This product is not a toy. Keep it out of reach of children.
- The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

7 ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGERS



Use only batteries and chargers applicable for this machine.

7.1 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.

7.2 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.

8 FEATURES

8.1 *Li-ion battery (6)*

Advantages of Li-ion batteries:

- Li-ion batteries have a higher capacity/weight ratio (more power for less heavy, more compact, battery)
- No memory effect (capacity loss after several charge/discharge cycles) like other type batteries. (Ni-Cd, Ni-MeH ..).
- Limited self discharge. (also see chapter: Storage)

8.2 *Forward/reverse selector (right/left rotation selector) (3)*

Your tool has a forward/reverse selector located above the switch trigger.

CAUTION: To prevent damage to the gearbox, always allow the chuck to come to a complete stop before changing the direction of rotation or selecting another speed (HI-LO). To stop, release the trigger switch.

8.3 *Variable speed*

Your tool has a variable speed switch. The rotational speed and torque will in-/ decrease equivalently to applied trigger pressure

8.4 *LED light (8)*

Your tool is equipped with 1 LED light-at the front.

8.5 *Protection system*

8.5.1 Overload protection

When the tool is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indications. In this situation, turn the tool off and stop the application that cause the tool to become overloaded. Then turn the tool on to restart.

8.5.2 Overheat protection

When the temperature of the machine is overheated, the machine stops automatically. In this situation, let the machine cool before turning on again.

9 OPERATION

9.1 *Charging the battery pack*

The battery pack for this tool is supplied in a low charge condition to prevent possible problems, therefore, you have to charge the battery before first use.



Note: Batteries will not reach full charge the first time they are charged. Allow several cycles for the item to fully charge. The battery should only be charged indoors.

After normal use, about 1 hour of charging time is required for the battery to be fully charged. The battery pack will become slightly warm while charging, this is normal and does not indicate a problem.

Do not place the charger in an area of extreme heat or cold. Best is at normal room temperature. When the battery becomes fully charged, unplug your charger from the power supply and remove the battery pack from the charger.

Note:

13. Allow the battery pack to cool completely before charging
14. Inspect the battery pack before charging, do not charge a cracked or leaking battery pack.

9.1.1 Charging indication (Fig 1)

Connect the charger to the power outlet socket

- Solid green: ready to charge
- Solid red: charging
- Solid green: charged
- Solid green and red: battery or charger damaged



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.



NOTE: Remove battery pack from charger stand which use your thumb or fingers, press the battery's release button in and pull the battery pack off at the same time.

9.2 **Battery capacity indicator (Fig. 1a)**

There are battery capacity indicators on the battery pack, you can check the capacity status of the battery if you squeeze the button (10). 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

9.3 **Inserting and removing the battery (Fig 2)**



WARNING: Before making any adjustments ensure the drill is switched off with the direction of rotation selector in the centre position

- Hold the tool with one hand and the battery pack (6) 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.

9.4 Screws

- It is advisable to use self-centering screws (e.g. Torx, cross recessed head) as these will enable you to work safely and reliably. Always make sure that the bit used is of the same size and shape as the screw.

9.5 Changing the bit (Fig. 3)

- Always be sure that the tool is switched off and the battery pack is removed before installing or removing the socket.
- To install the socket, push it onto the anvil of the tool until it locks into place. To remove the socket, simply pull it off.

9.5.1 Inserting the bit

- Insert the bit into the bit mount as far as the stop while simultaneously pulling the sleeve on the bit mount toward the bit.
- Release the sleeve again.
- Check that the bit is securely seated.

9.5.2 Removing the bit

Pull the sleeve on the bit mount toward the bit, hold it tight and remove the bit.

9.6 Switch (7)

The drill is started and stopped by depressing and releasing the ON/OFF switch trigger.

9.6.1 Switch lock (Fig 4)

The switch trigger can be locked in the center position.

This helps to reduce the possibility of accidental starting when not in use. To lock the switch trigger, place the direction of rotation selector in the center position.

9.6.2 Direction of rotation (Fig 5)

Direction of rotation is controlled by the direction of rotation selector located above the switch trigger.

9.6.2.1 **Clockwise rotation:**

Right : To select forward rotation, release the on/off switch and push the forward/reverse lever to the left side of the tool.

9.6.2.2 **Anticlockwise rotation:**

Left : To select reverse rotation, push the lever to the right side of the tool.

9.6.3 Variable speed

This tool has a variable speed switch that delivers higher speed and torque with increased trigger pressure.

Speed is controlled by the amount of switch trigger depression.

9.7 LED light (Fig 6)

The LED work-lights can light prior to motor running if you press the switch lightly, which keep the work area to be lighted for checking clearly at first, and it lights also during your operation.



WARNING: Do not stare directly at the light beam. Never aim the beam at any person or an object other than the work piece.



Do not deliberately aim the beam at personnel and ensure that it is not directed towards the eye of a person for longer than 0.25s.

10 CLEANING AND MAINTENANCE

10.1 *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.

10.2 *Maintenance*

- Our machines have been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper machine care and regular cleaning.

11 TECHNICAL DETAILS

Model nr.	POWXB30020
Rated voltage (direct current)	20V
Rotation speed	0-2200 min-1
Impact rate	0-2800 min-1
Socket type	1/4"
Max. torque	160Nm
Battery capacity	20V-2000mAh
Charger rating output	20V-2A

12 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.

13 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.