

VONROC CT503DC Rotary Multi Tool User Manual

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VONROC CT503DC Rotary Multi Tool



SAFETY INSTRUCTIONS

Read the enclosed safety warnings, the additional safety warnings, and the instructions. Failure to follow the safety warnings and instructions may result in electric shock, fire, and/or serious injury. Save the safety warnings and the instructions for future reference. The following symbols are used in the user manual or on the product:



Denotes risk of personal injury, loss of life, or damage to the tool in case of nonobservance of the instructions in this manual.



Risk of electric shock



Variable speed control



Wear ear and eye protection



Wear a dust mask

Indoor use only



Do not press the spindle lock button while the motor is running.



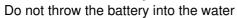
Class II machine - Double insulation -You don't need any earthed plug.



Max temperature 40°C



Do not throw the battery into fi re





Do not dispose of the product in unsuitable containers.



The product is in accordance with the applicable safety standards in the European directives.









GENERAL POWER TOOL SAFETY WARNINGS

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

Work area safety

- Keep the work area clean and well-lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmos-pheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

- · Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.
- Unmodified plugs and matching outlets will reduce the risk of electric shock.
- Void body contact with earthed or grounded surfaces, such as pipes, radiators, ranges, and refrigerators. There

is an increased risk of electric shock if your body is earthed or grounded.

- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse 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 electric
 shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. The use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. The use of an RCD reduces the risk of electric shock.

Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the infl uence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust masks, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to a power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- D o not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do is not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

Power tool use and care

- do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
 - Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the power tool before making any
 adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of
 starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other
 condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.
 Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, tak-ing into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Battery tool use and care

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery
 pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designed battery packs. Use of any other battery packs may create a risk of injury and fire.
- When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fi re.
- nder abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, fl
 ush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may
 cause irritation or burns.
- o not use a battery pack or tool that is damaged or modifi ed. Damaged or modifi ed batteries may exhibit unpredictable behavior resulting in fi re, explosion or risk of injury.
- Do not expose a battery pack or tool to fi re or excessive temperature. Exposure to fi re or temperature above
 130 °C may cause explosion. NOTE The temperature "130 °C" can be replaced by the temperature "265 °F".
- Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specifi ed in the instructions. Charging improperly or at temperatures outside the specifi ed range may damage the battery and increase the risk of fire.

Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will
 ensure that the safety of the power tool is maintained.
- Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer
 or authorized service providers.

SPECIFIC SAFETY INSTRUCTIONS

- This power tool is intended to function as a grind er, sander, wire brush, polisher, carving or cut-off tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fi re and/or serious injury.
- Do not use accessories which are not specifi -cally designed and recommended by the tool manufacturer. Just

because the accessory can be attached to your power tool, it does not assure safe operation.

- The rated speed of the grinding accessories must be at least equal to the maximum speed marked on the
 power tool. Grinding accessories running faster than their rated speed can break and fl y apart.
 The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.
 Incorrectly sized accessories cannot be adequately controlled.
- The arbour size of wheels, sanding drums or any other accessory must properly fit the spindle or collet of the power tool. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and can lead to loss of control of the power tool.
- Mandrel-mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck. If the mandrel is insuf-ficiently held and/or the overhang of the wheel is too long, the mounted wheel may become loose and be ejected at high velocity.
- Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, sanding drum for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged acces-sories will normally break apart during this test time.
- Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety
 glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping
 small abrasive or workpiece fragments. The eye protection must be capable of stopping fl ying debris
 generated by various operations. The dust mask or respirator must be capable of fi Itrating particles generated
 by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of work piece or of a broken accessory may fl y away and cause injury beyond immediate area of operation.
- Hold power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory
 may contact hidden wiring. Cutting accessory contacting a "live" wire may make exposed metal parts of the
 power tool "live" and could give the operator an electric shock.
- lways hold the tool fi rmly in your hand(s) during the start-up. The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.
- Use clamps to support workpiece whenever practical. Never hold a small workpiece in one hand and the tool in
 the other hand while in use. Clamping a small workpiece allows you to use your hand(s) to control the tool.
 Round material such as dowel rods, pipes or tubing have a tendency to roll while being cut, and may cause the
 bit to bind or jump toward you.
- Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the inning accessory.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
- After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment
 devices are securely tight-ened. Loose adjustment devices can unexpectedly shift, causing loss of control,
 loose rotating components will be violently thrown.
- Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.

- Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

Kickback and related warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel, sanding band, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation. For example, 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 pinch-ing. 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.

 The operator can control kickback forces, if proper precautions are taken.
- 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 toothed saw blade. Such blades create frequent kickback and loss of control.
- Always feed the bit into the material in the same direction as the cutting edge is exiting from the material (which is the same direction as the chips are thrown). Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work and pull the tool in the direction of this
- When using rotary fi les, cut-off wheels, high-speed cutters or tungsten carbide cutters, always have the work securely clamped. These wheels will grab if they become slightly canted in the groove, and can kickback.
 When a cut-off wheel grabs, the wheel itself usually breaks. When a rotary fi le, high-speed cutter or tungsten carbide cutter grabs, it may jump from the groove and you could lose control of the tool.

ADDITIONAL SAFETY INSTRUCTIONS FOR GRINDING AND CUTTING-OFF OPERATIONS

Safety warnings specifi c for grinding and abrasive cutting-off operations:

- Use only wheel types that are recommended for your power tool and only for recommended applications. For example: do not grind with the side of a cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- For threaded abrasive cones and plugs use only undamaged wheel mandrels with an unrelieved shoulder fl ange that are of correct size and length. Proper mandrels will reduce the possibil-ity of breakage.
- Do not "jam" a cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut.

 Overstressing the wheel increases the loading and susceptibility to twisting or snagging of the wheel in the cut and the possi-bility of kickback or wheel breakage.
- Do not position your hand in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your hand, the possible kickback may propel the spinning wheel and the power tool directly at you.
- When wheel is pinched, snagged or when inter-rupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel

from the cut while the wheel is in motion otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel pinching or snagging.

- Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.
- upport panels or any oversized workpiece to minimize the risk of wheel pinching and kick-back. Large
 workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of
 cut and near the edge of the workpiece on both sides of the wheel.
- Use extra caution when making a "pocket cut" into existing walls or other blind areas. The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kick-back.

ADDITIONAL SAFETY INSTRUCTIONS FOR WIRE BRUSHING OPERATIONS

Safety warnings specifi c for wire brushing operations:

- Be aware that wire bristles are thrown by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush. The wire bristles can easily penetrate light clothing and/or skin.
- Allow brushes to run at operating speed for at least one minute before using them. During this time no one is to stand in front or in line with the brush. Loose bristles or wires will be discharged during the run-in time.
- Direct the discharge of the spinning wire brush away from you. Small particles and tiny wire fragments may be discharged at high velocity during the use of these brushes and may be-come embedded in your skin.

FOR THE CHARGER

Intended use

Charge only rechargeable battery packs. Other types of batteries may burst to cause personal injury and damage.

- The appliance is not to be used by persons (in-cluding children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction Children being supervised not to play with the appliance
- Do not recharge non-rechargeable batteries!
- During charging, batteries must be placed in a well-ventilated area!
 Integrated batteries may only be removed for disposal by qualified personnel. Opening the housing shell can destroy the power tool.
- To remove the battery from the power tool, press the On/Off switch (5) until the battery is fully discharged.
 Unscrew the screws on the housing and remove the housing shell in order to remove the battery. To prevent a short circuit, disconnect the connectors on the battery one at a time and then isolate the poles. Even when fully discharged, the battery still contains a residual capacity, which can be released in case of a short circuit.

Electrical safety

When using electric machines always observe the safety regulations applicable in your country to reduce the risk of fi re, electric shock and personal injury. Read the following safety instructions. Always check that the power supply corresponds to the voltage on the rating plate. Your machine is double insulated, therefore no earth wire is required.

MACHINE INFORMATION

Intended use

This power tool is intended to function as a grinder, sander, wire brush, polisher, carving or cut-off tool. This combi tool is great for editing of materials like wood, plastic, stone, shell aluminum, brass and steel. Always use the proper accessories and speed settings.

TECHNICAL SPECIFICATIONS

Model No.	CT503DC
Rechargeable Battery	4V Li-ion 600mAh
Battery charging time	2 hours
Maximum disc diameter	Ø35 mm
Maximum drill diameter	Ø2.3 mm
No load speed	5000/10000/15000/min
Capacity of spring chuck	2.3 mm
Weight	0.1 kg
Lpa (Sound pressure level)	79+3 dB(A)
Lwa (Sound power level)	90+3 dB(A)
Vibration	1.177+1.5 m/s2

Vibration level

The vibration emission level stated in this instruc-tion manual has been measured in accordance with a standardized test given in EN 60745; it may be used to compare one tool with another and as a preliminary assessment of exposure to vibration when using the tool for the applications mentioned using the tool for different applications, or with different or poorly maintainted accessories, may significantly increase the exposure level. the times when the tool is switched off or when it is running but not actually doing the job, may significantly reduce the exposure level. Protect yourself against the effects of vibration by maintaining the tool and its accessories, keeping your hands warm, and organizing your work patterns.

DESCRIPTION

The numbers in the following text refer to the pictures on page 2-4



- 1. Collet chuck
- 2. Spindle lock
- 3. On/off button and speed adjustment button
- 4. Speed indication lights
- 5. Charger indication light
- 6. Charger cable

ASSEMBLY

Always make sure the machine is turned off before mounting an accessory.

Warning! Change accessories by inserting an accessory into the collet (or chuck) as far as possible to minimize runout and unbalance.

Assembly of accessories (Fig. B)

Press the spindle lock button (2) and hold it. Unscrew the collet chuck (1) by hand. Put the accessory in its place. Press the spindle lock button (2) when fastening the collet chuck (1). Do not press the spindle lock button while the motor is running.

OPERATION

Switch on the machine by pressing the on/off button (3). By pressing the on/off button (3) a second time, the machine will adjust to speed 2, press for the third time and the machine will adjust to speed 3. By pressing the on/off button (3) for a fourth time, the machine switches off. Do not put the machine down when the motor is still running. Do not place the machine on a dusty surface. Dust particles may enter the mechanism. Too high a load at a low speed of the Combitool can burn out the engine. The battery must be charged before fi rst use. Charging the device (with the charger)

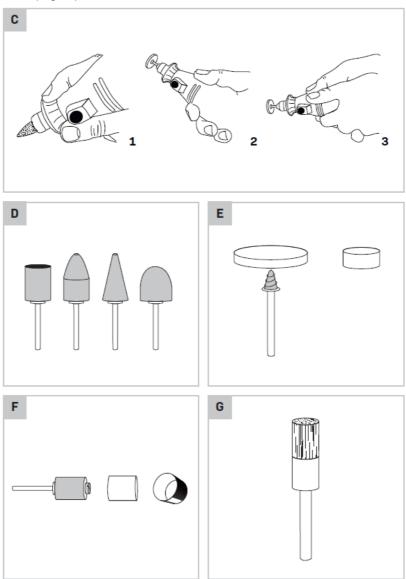
- Plug the charger cable (6) (included) into an adapter (not included).
- Plug the charger cable (6) into the machine. (fi g. J)

• Plug the charger plug into an electrical outlet and wait for a while. The charger indication light (5) will lighten up and show the charging status.

LED	Charger status
Red	Battery charging in progress
Green	Battery charging finished, battery fully charged

After the battery is fully charged remove the charger plug from the outlet and remove the small plug from the device.

Holding and guiding the tool (Fig. C)



- For precision work (engraving): pencil grip (C1)
- For rough work (grinding): paring knife hand grip (C2)
- When you need to keep the tool parallel to the work surface (e.g. using a cut-off wheel): 2 hand golf grip (C3)

Optimal use of the combi tool and its accessories (Fig. A)

For optimal use of the accessories use the correct speed. You can refer to the overview "Recommend-ed speed setting" below to determine the correct speed, based on the material being worked on and the type of accessory being used. This overview enables you to select both the correct accessory and the optimum speed. The 3

speeds indication lights (4) are equal to the numbers 1, 2 and 3 in the overview "Recommend-ed speed setting". Ultimately, the best way to de-termine the correct speed for work on any material is to practice on a piece of scrap.

RECOMMENDED SPEED SETTING

Grinding stones (Fig. D)

Material	Speed setting
Stone, shell	1-2
Steel	2-3
Aluminium, brass	2
Plastic	1-2

Felt wheels and tip (Fig. E)

The felt wheels or tip should be screwed on the mandrel.

Material	Speed setting
Steel	2-3
Aluminium, brass	2
Plastic	2-3

Sanding bands and disc (sanding disc not included)(Fig. F)

Material	Speed setting
Wood	3
Steel	1-2
Aluminium, brass	2
Plastic	1-2

Bristel brush (Fig. G)

Material	Speed setting
Stone, shell	2
Aluminium, brass	2

High speed cutter, Diamond wheel point and Drill (Fig. H)

Material	Speed setting
Stone, shell	3
Steel	2
Aluminium, brass	3
Plastic	1-2

Abrasive disc (Disc not included) (Fig. I)

Material	Speed setting
Steel	2-3
Aluminium, brass	2
Plastic	1-2

MAINTENANCE

Make sure that the machine is not live when carrying out maintenance work on the motor. 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. Please clean the tool immediately after use.

ENVIRONMENT

Damaged and/or disposed of electrical or electronic devices must be dropped off at recycling stations intended for that purpose. Only for EC countries

Do not dispose of power tools into domestic waste. According to the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment and its implementation into national right, power tools that are no longer usable must be collected separately and disposed of in an environmentally friendly way.

WARRANTY

VONROC products are developed to the highest quality standards and are guaranteed free of defects in both materials and workmanship for the period lawfully stipulated starting from the date of original purchase. Should the product develop any failure during this period due to defective material and/or workmanship then contact VONROC directly. The following circumstances are excluded from this guarantee:

- Repairs and or alterations have been made or attempted to the machine by unauthorized service centers
- · Normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- · Non-original spare parts have been used.

This constitutes the sole warranty made by the company either expressed or implied. There are no other warranties expressed or implied that extend beyond the face hereof, herein, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall VONROC be liable for any incidental or consequential damages. The dealer's remedies shall be limited to the repair or replacement of nonconforming units or parts. The product and the user manual are subject to change. Specifi cations can be changed without further notice.

Documents / Resources



<u>VONROC CT503DC Rotary Multi Tool</u> [pdf] User Manual CT503DC Rotary Multi Tool, CT503DC, Rotary Multi Tool, Multi Tool

References

VONROC Gereedschap & Tuin artikelen

Manuals+,