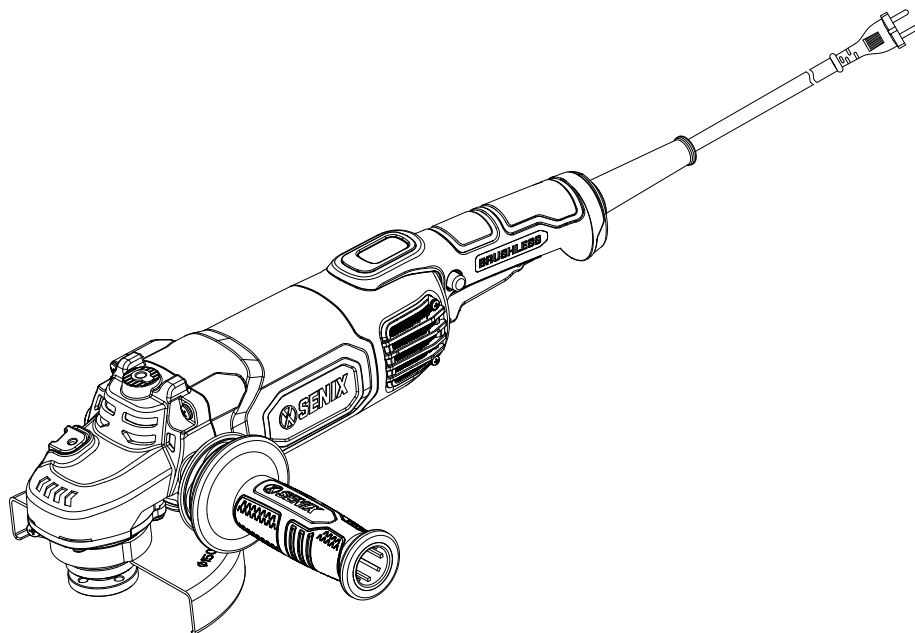




# 2200W 150mm ANGLE GRINDER

PAE22-M-EU



**CAUTION:** Before using this tool, please read this manual completely, and follow all operating safety measures.

For customer service please find all information on [WWW.SENIXTOOL.RU](http://WWW.SENIXTOOL.RU)

CAUTION: BEFORE USING THIS PRODUCT, READ THIS MANUAL AND FOLLOW ALL ITS SAFETY RULES AND OPERATING INSTRUCTIONS.

ORIGINAL INSTRUCTIONS

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## SAFETY & INTERNATIONAL SYMBOLS

The following table depicts and describes Safety and International symbols and pictographs that may appear on this product. Read, understand, and follow all instructions on the machine and in the instruction manual for complete safety, assembly, operating, maintenance, and repair information before attempting to assemble and operate.



Caution / Warning.



To reduce the risk of injury, user must read instruction manual.



Wear eye protection.



Wear hearing protection.



Wear a dust mask.



Wear protective gloves.



Wear sturdy, non-slip footwear.



Always operation with two hands.



Do not use in rain or wet conditions.



Keep bystanders a safe distance away from the work area.

# SAFETY INSTRUCTIONS

## GENERAL POWER TOOL SAFETY WARNINGS



### WARNING!

**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, 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.

#### 1. Work Area Safety

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

#### 2. Electrical Safety

- a. **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 risk of electric shock.*
- b. **Avoid 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.*
- c. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric*

*shock.*

- f. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** *Use of a GFCI reduces the risk of electric shock.*
- #### 3. Personal Safety
- a. **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 influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
  - b. **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.*
  - c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to 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.*
  - d. **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.*
  - e. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
  - f. **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.*
  - g. **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.*
  - h. **Do 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.*
- #### 4. Power Tool Use and Care
- a. **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.*

- b. **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.*
- c. **Disconnect the plug from the power source and/or remove the battery pack, if detachable, 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.*
- d. **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.*
- e. **Maintain power tools and accessories. 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.*
- f. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking 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.*
- h. **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.*
- 5. **Service**
  - a. **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.*

- 1. **This power tool is intended to function as a grinder 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, fire and/or serious injury.*
- 2. **Operations such as sanding, wire brushing, polishing or hole cutting are not to be performed with this power tool without first installing the applicable accessory and tool guard for each application.** *Operations for which the power tool was not designed may create a hazard and cause personal injury.*
- 3. **Do not convert this power tool to operate in a way which is not specifically designed and specified by the tool manufacturer.** *Such a conversion may result in a loss of control and cause serious personal injury.*
- 4. **Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** *Just because the accessory can be attached to your power tool, it does not assure safe operation.*
- 5. **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** *Accessories running faster than their rated speed can break and fly apart.*
- 6. **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 guarded or controlled.*
- 7. **The dimensions of the accessory mounting must fit the dimensions of the mounting hardware of the power tool.** *Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.*
- 8. **Do not use a damaged accessory.** **Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad 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*

## SAFETY INSTRUCTIONS FOR ALL OPERATIONS

accessories will normally break apart during this test time.

9. **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 flying debris generated by various applications. The dust mask or respirator must be capable of filtering particles generated by the particular application. Prolonged exposure to high intensity noise may cause hearing loss.*
10. **Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** *Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.*
11. **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring.** *Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
12. **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.*
13. **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.*
14. **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.*
15. **Do not operate the power tool near flammable materials.** *Sparks could ignite these materials.*
16. **Do not use accessories that require liquid coolants.** *Using water or other liquid coolants may result in electrocution or shock.*

or snagged rotating wheel, backing pad, 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 at the point of the binding.

- 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 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.
1. **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.*
  2. **Never place your hand near the rotating accessory.** *Accessory may kickback over your hand.*
  3. **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.*
  4. **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.*
  5. **Do not attach a saw chain woodcarving blade or toothed saw blade.** *Such blades create frequent kickback and loss of control.*

## KICKBACK AND RELATED WARNINGS

- Kickback is a sudden reaction to a pinched

## SAFETY WARNINGS SPECIFIC FOR GRINDING AND CUTTING-OFF OPERATIONS

1. **Use only wheel types that are specified for your power tool and the specific guard designed for the selected wheel.** *Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.*
2. **The grinding surface of centre depressed wheels must be mounted below the plane of the guard lip.** *An improperly mounted wheel that projects through the plane of the guard lip cannot be adequately protected.*
3. **The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator.** *The guard helps to protect the operator from broken wheel fragments, accidental contact with wheel and sparks that could ignite clothing.*
4. **Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel.** *Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.*
5. **Always use undamaged wheel flanges that are of correct size and shape for your selected wheel.** *Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.*
6. **Do not use worn down wheels from larger power tools.** *A wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.*
7. **When using dual purpose wheels always use the correct guard for the application being performed.** *Failure to use the correct guard may not provide the desired level of guarding, which could lead to serious injury.*
2. **Do not position your body in line with and behind the rotating wheel.** *When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.*
3. **When wheel is binding or when interrupting 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 binding.*
4. **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.*
5. **Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback.** *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.*
6. **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 kickback.*
7. **Do not attempt to do curved cutting.** *Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage, which can lead to serious injury.*

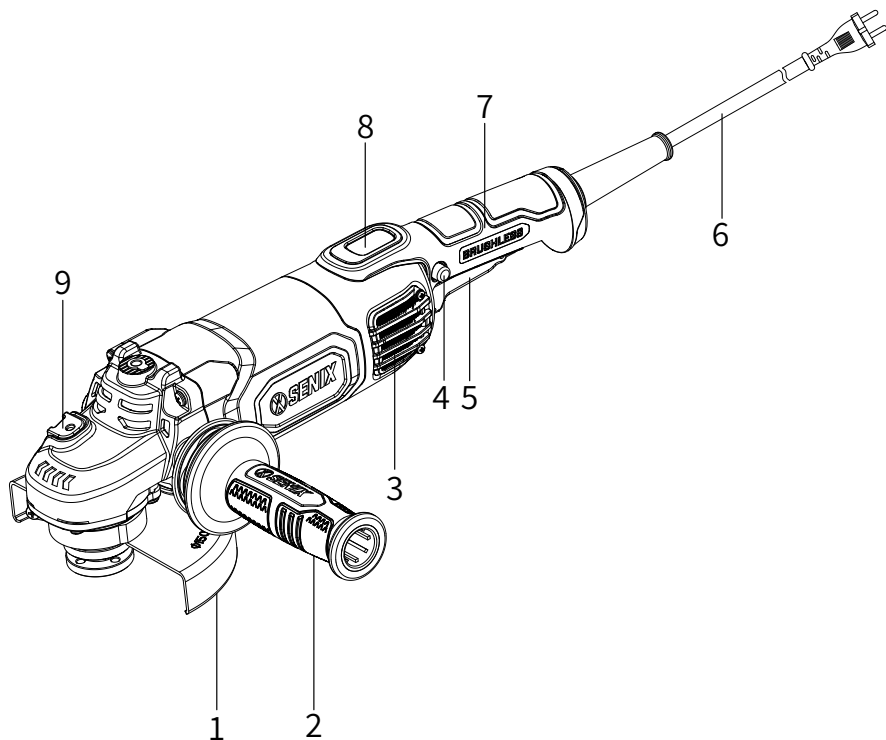
## SAVE THESE INSTRUCTIONS INTENDED USE

The tool is intended for grinding and cutting metal, concrete or tiles. Do not use it for other purposes.

## ADDITIONAL SAFETY WARNINGS SPECIFIC FOR CUTTING-OFF OPERATIONS

1. **Do not “jam” the 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 binding of the wheel in the cut and the possibility of kickback or wheel breakage.*

## KNOW YOUR UNIT



### APPLICATIONS

Model: PAE22-M-EU

As an angle grinder:

Cutting and grinding metal, concrete or tiles.

1	Grinding Wheel Guard
2	Auxiliary Handle
3	Air Vent
4	Safety Switch
5	Trigger

6	Power Cord
7	Overmold Grip Area
8	LED Indicator
9	Spindle Lock Button

## SPECIFICATIONS\*

Model	PAE22-M-EU
Voltage	220 V-240 V/50-60 Hz
Motor Type	Brushless
Rated Power	2200 W
No-Load Speed	9500 RPM
Max. Disc Diameter	150 mm
Spindle Thread	M14
Weight (Tool Only)	3.6 kg

## ASSEMBLY

1. Unpack all parts and lay them on a flat, stable surface:
2. Remove all packing materials and shipping devices, if applicable.
3. The scope of delivery varies depending on the country and purchased variant:
  - Angle grinder x1
  - Auxiliary handle x1
  - Grinding wheel guard x1
  - Spanner wrench x1
  - Instruction manual x1
4. If you find that parts are missing or show damage, do not use the product and contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
5. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

## WARNING!



Wear protective gloves for this assembly work and always lay the product on a flat and stable surface while assembling.

Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product!

Do not connect to the power supply before the power tool is completely assembled or adjusted!

## INSTALLING/REMOVING THE AUXILIARY HANDLE

### WARNING!

Use only as described in this manual. Use only manufacturer's recommended attachments.

### WARNING!

Always work with auxiliary handle attached to prevent loss of control and possible serious injury.

Remove the dust plug from the handle mounting hole. Manually screw the auxiliary handle securely in the left, center or right threaded hole. Take working requirement or use preference into account for best performance.

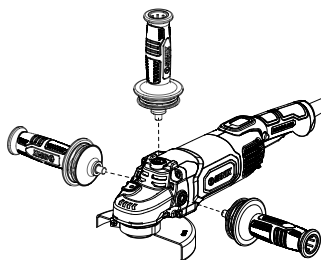


Fig. 1

## INSTALLING/REMOVING THE GUARD

1. Loosen the screw.



2. Align and seat the guard on the spindle.
3. Turn the guard counterclockwise to where it always protect user from being hurt.
4. Tighten the screw.

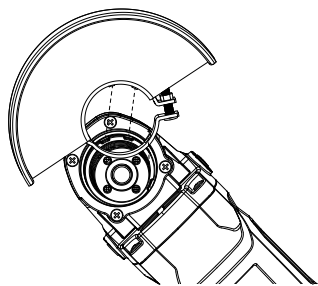


Fig. 2

## INSTALLING/REMOVING THE GRINDING WHEEL

### **! WARNING!**

To reduce the risk of injury, use only accessories rated at least equal to the maximum speed marked on the tool.

1. Fit the inner flange on spindle.
2. Lay the grinding wheel flat on the inner flange.
3. Attach the convex side of outer flange to the grinding wheel and secure it with assistance of the included wrench while pressing the spindle lock button.

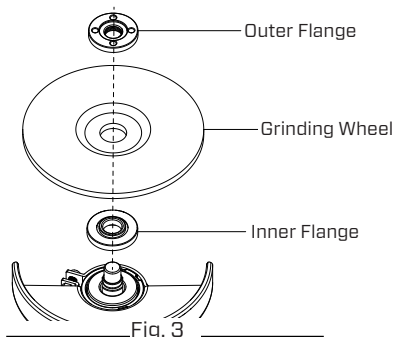


Fig. 3



### **NOTE:**

For cutting, match concave surface to the cutting wheel.

4. Remove wrench and release the spindle lock button when the outer flange get enough tightened.



### **WARNING!**

Never press the spindle lock when the spindle is running.

## OPERATION



### **WARNING!**

Inspect the tool for complete installation. Operating with any missing or damaged parts or accessories can result in serious injury.



### **WARNING!**

Always wear eye, hearing, hand protection to reduce the risk of injury when operating the tool. Keep all parts of your body away from the rotating wheel.



### **WARNING!**

Sparks generated when grinding metal. Take care that no combustible materials are present in working area.

## SWITCHING ON/OFF



### **WARNING!**

Only start the tool when its wheel is not contacting with workpiece.

1. To start, connect the angle grinder to the power supply, press the safety switch then pull the trigger.
2. To stop the tool, release the trigger.
3. For continuous operation, start the angle grinder, and then fully depress the safety switch until you hear a "click" sound, after which you may release both the safety switch and the trigger. To stop the tool, pull the trigger fully, and then release it.

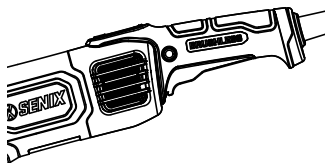


Fig. 7

## GENERAL OPERATION

1. Test the machine for one minute at the maximum speed before applying to workpieces.
2. Discard accessories that have been dropped or damaged. Out-of-balance or damaged accessories can mar workpiece, damage the tool, and cause stress that may cause accessory failure.
3. Always guide the grinder with both hands. Grip the main handle with one hand and another on the auxiliary handle.
4. Use cutting wheel for cutting and use grinding wheel for grinding.
5. Fit a proper guard for the purpose of cutting or grinding to provide maximum protection. Using unsuitable guard during operation will cause serious injury.
6. Secure workpiece in a vise or clamp on a workbench to ensure a safe operation.
7. Allow accessories to come to full speed before starting work.
8. Apply proper pressure and control the contact between accessory and workpiece.
9. Lift the grinder away from the workpiece before turning off the grinder.
10. Turn off the tool and make sure it comes to a complete stop before laying it down.

## GRINDING

1. Fit a grinding wheel and a guard for grinding recommended by the manufacturer.
2. Position the tool at an angle of 15° to 30° for a best working results.

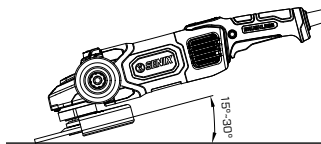


Fig. 8

3. Do not apply excessive force to the tool. Gently and evenly press down and lead the machine forward or backward.

## CUTTING

1. Fit a cutting wheel and a guard for cutting recommended by the manufacturer.
2. Apply vertical contact to the work surface using the cutting wheel.
3. Do not give any lateral pressure to the wheel or sway from side to side.
4. Begin cutting with minimum cross-sections.
5. Only work against the run of the wheel.
6. If the wheel becomes increasingly hot and begins to emit sparks, stop cutting and allow the wheel to cool at no-load speed for several minutes.

## MAINTENANCE



### WARNING!

Only perform cleaning and maintenance according to these instructions! All further works must be performed by an Authorized Service Center.

## CLEANING

1. Clean dust and debris from air vents.
2. Keep the handle clean, dry, and free of oil or grease.
3. Make sure the clamp is free of debris.
4. Remove stubborn dirt from housing with high-pressure air (max. 3 bar).
5. Never immerse your tool in liquid or allow a liquid to flow inside them.

## **WARNING!**

Do not use chemical, alkaline, abrasive, or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces.

## **TRANSPORTATION**

1. Only carry by its handle.
2. Protect from any heavy impact or strong vibrations which may occur during transportation in vehicles.
3. Secure to prevent it from slipping or falling over.

## **STORAGE**

1. Clean thoroughly as described above.
2. Store in a dark, dry, frost-free, and well-ventilated area that is inaccessible to children. The recommended storage temperature for tools is 10°C ~ 30°C (50°F ~ 86°F).
3. Use the original package for storage or cover it with a suitable cloth to protect it against dust.

## **DISPOSAL**

Waste products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice. Dust may be produced by the tool during operation, users should clean these objects to protect the environment.



Electrical products should not be discarded with household products. Used electrical products must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

# TROUBLESHOOTING

Suspected malfunctions are often due to causes that the users can fix themselves. Therefore, troubleshoot the product using this section. In most cases the problem can be solved quickly.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Product does not start	Not connected to power supply	Connect to power supply
	Power cord or plug is defective	Contact an Authorized Service Center for repair
	Other electrical defect to the product	Contact an Authorized Service Center for repair
Unsatisfactory result	Wheel accessory is dull/damaged	Replace with new one
	Wheel accessory not suitable for intended operation	Use proper one
Overheating	Blocked air vents	Clean the air vents
Vibration or noise is excessive	Bolts/nuts are loose	Tighten bolts/nuts