

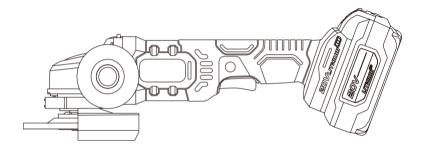


#### A WARNING

Read this manual before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.







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#### **General Power Tool Safety Warnings**

**AWARNING**: Read all safety warnings and 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 tools or battery-operated (cordless) power tools.

#### 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 plug must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

**b.** Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is 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 residual current device (RCD) protected supply. Use of a RCD reduces the risk of electric shock.

**NOTE** : The term residual current device (RCD) may be replaced by the term ground fault circuit interrupter (GFCI) or earth leakage circuit breaker (ELCB).

#### 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 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 jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery 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.

#### 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 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.

**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. Check for misalignment or binding of moving parts, break- age of parts and any other condition that may affect the power tools 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.

#### 5. Battery tool use and care

**a.** 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.

**b.** Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

**c.** When 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 fire.

**d.** Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

e. 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.f. Always push the gear selector and turn the operating mode selector switch through to the stop. Otherwise, the machine can become damaged.

g. Don't open the battery. Protect the battery from heat, sunlight, fire, water, and



moisture. Pay attention to the danger of explosion and short circuit.

#### 6.Special Safety rules for angle grinder

**a.** This power tool is intended to function as a grinder, sander, wire brush or cutoff 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.

**b.** Operations such as polishing are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.

**c.** 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.

**d.** 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.

**e.** 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.

**f.** Threaded mounting of accessories must match the grinder spindle thread. For accessories mounted by flanges, the arbor hole of the accessory must fit the locating diameter of the flange. 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.

**g.** 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 accessories will normally break apart during this test time.

**h.** Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or work piece fragments. The eye protection must be capable of stopping flying

debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.

**i.** 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 fly away and cause injury beyond immediate area of operation.

**j.** Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

**k.** 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 spinning wheel.

**I.** Never lay the power tool down until the accessory has come to a complete stop. The spinning wheel may grab the surface and pull the power tool out of your control.

**m.** 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.

**n.** 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.

**o.** Do not operate the power tool near flammable materials. Sparks could ignite these materials.

#### Kickback and related warnings

Kickback is a sudden reaction to a pinched 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.

**a.** 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. b. Never place your hand near the rotating accessory. Accessory may kickback over your hand.

**c.** 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.

**d.** 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.

#### 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 main-tained.

#### 7.Symbols

a.Some of the following symbols may appear on this product. Study these symbols and learn their meanings. Proper interpretation of these symbols will allow for more efficient and safer operation of this product.

SYMBOL	DESCRIPTION
	Read the manual before set-up and/or use.
	Wear safety glasses.

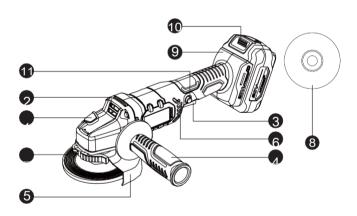


ß	Use dust mask. Dust which is injurious to health can be generated when working on wood and other materials. Never use the device to work on any materials containing asbestos.
	Do not dispose with house-hold waste.
CE	Conforms to relevant safety standards.

#### **b.** Technical Specification

Voltage:	DC-20V
No Load Speed:	5000RPM
Dia of Wheel:	Ø115mm
Thread size:	M14

#### c. Function Description



- 1.Spindle lock button
- 2.Gear Case
- 3. Trigger switch
- 4. Auxiliary handle
- 5.Protection guard
- 6. Optimized Ventilating System
- 7. Sanding wheel
- 8.Cutting wheel
- 9.Battery
- 10. Battery unlocking button
- 11.Lock-off Switch

#### 8.Assembly

#### Inserting the battery

**NOTE** :Use only original batteries with the voltage listed on the nameplate of your power tool. Using other batteries can lead to injuries and pose a fire hazard.

Press the button of the battery, and then insert the charged battery from the front into the base of the power tool. Push the battery completely into the base until



the stripe can no longer be seen and the battery is securely locked.

#### Removing the battery

Press the button of the battery and then pull the charged battery from the front into the base of the power tool.

#### Mounting the Protective Guard for Grinding

a. Place the protective guard on the front gear housing.

**b.** Adjust the position of the protection guard to the requirements of the operation.

**c.** Lock the protection guard tightening the locking screw with a hex key or screw driver.

d. Check if the protective guard has been fixed firmly and correctly.

**NOTE** : The guard can prevent the sparking towards the operator.

#### Installing the Auxiliary Handle

Screw the auxiliary handle on the right or left of the machine head depending on the working method.

#### Installing the Wheel

**a.** In the spindle completely static situation, keep locked by pressing the spindle lock button.

**b.** Slip the inner flange onto the spindle shaft and make sure that the slots of inner flange faces to the front gear housing.

**c.** Place the wheel into the spindle shaft, and make sure that the printed wheel faces to the inner flange.

**d.** The Grinding Wheel--Rotate the outer flange clockwise into the spindle shaft by hand, and make sure that the convex of outer flange faces to the wheel. e. The Cut-off Wheel--Rotate the outer flange clockwise into the spindle shaft by hand, and make sure that the deep groove of outer flange faces to the wheel. f. Retighten the outer flange clockwise with the spanner.

**MOTE** : Check if the wheel has been installed firmly and correctly.

**A WARNING** : Considering the compatibility of the wheel and flange, no clearance is allowed.

#### **Removing the Wheel**

a. Keep locked by pressing the spindle lock button. b.

Rotate the outer flange counterclockwise with spanner.



**b** Take the outer flange and wheel out of the spindle shaft.

**c.** Release the spindle button.

### Operation

**A WARNING**: Observe correct main voltage! The voltage of the power source must agree with the voltage specified on the nameplate of the machine.

### Trigger Switch

**a.** ON: To start the machine press the lock-off switch firstly and then press the trigger switch.

b. OFF: To turn off the machine just release the trigger switch.

### 8. Application

Grinding

**NOTE** : Before operation, please check whether the grinding wheel on the machine is suitable for grinding.

**a.** When grinding, keep a 15 ° angle between the wheel and the work piece, the best grinding results can be achieved with part contact.

**b.** For avoid the work piece will not overly heat up nor discolor and no ridges will be formed, move the machine back and forth with moderate pressure.

**c.** Always hold the tool properly so that sparks and grinding dust fly away from the body.

### Cutting

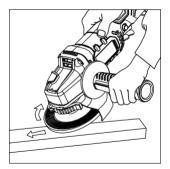
**a.** For cutting with bonded abrasives, always use the protection guard for cutting.

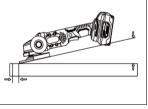
**b.** When cutting, work with moderate feed, adapted to the material being cut. Do not exert pressure onto the cutting disc, tilt or oscillate the machine

**c.** Do not reduce the speed of running down cutting discs by applying sideward pressure.

**d** .The machine must always work in an grinding motion.

Otherwise, the danger exists of it being pushed uncontrolled out of the cut.







**e.** When cutting profiles and square bar, it is best to start at the smallest cross section.

#### Accessories

Description	Application
Grinding disc	Aluminum, iron, steel and other metal materials
Cutting disc	Aluminum, iron, steel and other metal materials

#### 10. Maintenance

a. Keep the machine clean all the time.

**b.** If you discover any damage, consult the exploded drawing and parts list to determine exactly which replacement part you need to order from our customer service department.

**c.** Clean the housing only with a damp cloth. Do not use any solvents! Dry thoroughly afterwards.

**d.** If the supply cord of this power tool (or battery) is damaged, it must be replaced by a similar cord(battery) available through the service organization or a qualified authoritative technician.



**A CAUTION** : Do not use cleaning agents to clean the plastic parts of the tool. A mild detergent on a damp cloth is recommended. Water must never come into contact with the tool.

#### 11. Transport

Turn the motor off and disconnect the mains plug(remove the battery). While transporting, be careful not to drop, or shock the machine. For transport, the machine has to be fixed against slipping and tipping over. Do not place objects on the machine.

12. Seller Details

#### CE DECLARATION OF CONFORMITY

TOOLSAVE Unit C. Manders Ind. Est., Old Heath Road, Wolverhampton, WV1 2RP. Tel: 01902 450 470

Declares that the ANGLE GRINDER (AG115) Is in compliance with the regulations included in the Directives: 2006/42/EC

#### EC DECLARATION OF CONFORMITY

Certificate for EC-type examination delivered by TÜV SÜD Product Service GmbH. Zertifizerstelle, Ridlerstraße 65, 80339 München, Germany (Registration No.:M8A 18 06 42661 461) Person who declares: Bill Evans



24.06 2019

The Director











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