

# 500W 85mm Mini Circular Saw

# **USER MANUAL**



## **Description of Symbols**



#### Caution

Read the operating instructions to reduce the risk of injury



#### Wear ear-muffs

The impact of prolonged exposure to loud noise can cause damage to hearing.



### Wear a breathing mask.

Dust is injurious to health, and will be generated when working on wood and other materials.

Never use the device to work on any materials containing asbestos!



#### Wear safety goggles.

Sparks, splinters, chips and dust emitted by the device during use can cause loss of sight.

### **GENERAL SAFETY INSTRUCTIONS**

### 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.

### 1) Work area

- a) Keep work area clean and well lit. Cluttered and 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 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 the 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 using 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 an RCD 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 safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your fingers on the switch or plugging in power tools that have the switch in 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 a 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 get 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 these devices 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 is 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 preventative safety measures reduce the risk of starting power tools accidentally.
- d) Store idle power tools out of 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, breakage 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 easier to control.
- g) Use the power tool, accessories and tool bits 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 to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation

#### 5) 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. Contact the Kogan customer support team for information.

### SPECIAL SAFETY INSTRUCTIONS

- a) DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.
- b) **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- c) Adjust the cutting depth to the thickness of the workpiece. Less than a full tooth of the blade teeth should be visible below the workpiece.
- d) Never hold the piece being cut in your hands or across your leg. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- e) Hold power tool by insulated gripping surfaces when performing an

- operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
- f) When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.
- g) Always use blades with correct size and shape (diamond versus round) of arbour holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- h) **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

### **Further safety instructions**

Causes and operator prevention of kickback:

- Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;
- When the blade is pinched or bound tightly by the kerf (gap in a cut) closing, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
- If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- b) When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.
- c) When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- d) Support large panels to minimise the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- e) **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce a narrow kerf, causing excessive friction, blade binding and kickback.
- f) Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.
- g) Use extra caution when making a "plunge cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

### Safety instructions for circular saws

- a) Check guard for proper closing before each use. Do not operate the saw if guard does not move freely, and enclose the blade instantly. Never clamp or tie the guard so that the blade is exposed. If the saw is accidentally dropped, the guard may be bent. Check to make sure that guard moves freely and does not touch the blade or any other parts, in all angles and depths of cut.
- b) Check the operation and condition of the guard return spring. If the guard and the spring are not operating properly, they must be serviced before use. Guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- c) Assure that the base plate of the saw will not shift while performing the "plunge cut" when the blade bevel setting is not at 90°. Blade shifting sideways will cause binding and likely kick back.
- d) Always observe that the guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be mindful of the time it takes for the blade to stop spinning after switch is released.

### Additional safety instructions

- a) Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.
- b) Fully unwind extension cords to avoid potential overheating.
- c) When an extension cord is required, please ensure it has the correct ampere rating for the power tool and that it is in a safe electrical condition.
- d) Ensure the supply voltage is same as rating voltage.
- e) The tool is double insulated for additional protection against a possible electrical insulation failure within the tool.
- f) After long working periods, external metal parts and accessories could be hot.
- g) Wear eye protection when operating this tool.
- h) Always check the workpiece before operation and remove any obstructions such as nails, staples, screws, string, rags, cloths and other debris. Do not cut into nails, screws or other metal objects.
- i) Check the position of power cables before commencing work ensuring they are well away from the work area.
- j) Do not use worn or damaged blades. This may result in motor overload and substandard work.
- k) Keep hands and other body parts well away from the blades while the circular saw is in use. Do not attempt to remove cut material whilst the machine is in operation or reach underneath for any reason.
- I) Do not to use any abrasive wheels with this saw.
- m) This saw must use only Ø85mm blades.

#### WARNING!

Some dust created by power planing, cutting and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products,
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

#### Vibration and noise reduction

To reduce the noise and vibration emission of sanding, limit the time of operation, use low-vibration and low-noise operating modes as well as wear personal protective equipment.

Take the following points into account to minimize the vibration and noise exposure risks:

- 1. Only use the product as intended by its design and these instructions.
- 2. Ensure that the product is in good condition and well maintained.
- 3. Use correct application tools for the product and ensure they in good condition.
- 4. Keep a tight grip on the handles/grip surface.
- 5. Maintain this product in accordance with these instructions and keep it well lubricated (where appropriate).
- 6. Plan your work schedule to spread any high vibration tool use across a number of days, if possible.

### **Emergency**

Familiarise yourself with the use of this product by means of this instruction manual. Memorise the safety directions and follow them to the letter. This will help to prevent risks and hazards.

- 1. Always be alert when using this product, so that you can recognise and handle risks early. Fast intervention can prevent serious injury and damage to property.
- 2. Switch off and disconnect from the power supply if there is any malfunction. Have the product checked by a Kogan technician or a qualified specialist and repaired, if necessary, before you put it back into operation again.

#### Residual risks

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:

- 1. Health defects resulting from vibration emission if the product is being used over long periods of time, or exposure is not adequately managed and properly maintained.
- 2. Injuries and damage to property due to broken application tools or the sudden impact of hidden objects during use.
- 3. Danger of injury and property damage caused by flying objects.

#### **WARNING!**

This product produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!

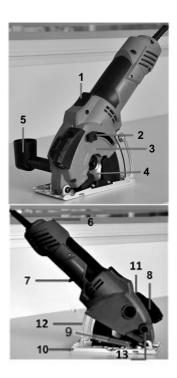
#### Important note

Be sure the supply is the same as the voltage given on the rating plate. Remove the mains plug before carrying out any adjustment or servicing.

# Layout and items supplied

### Layout

- 1. Guard locking lever
- 2. Locking screw for cutting depth setting
- 3. Safety guard
- 4. Saw blade
- 5. Dust collecting pipe
- 6. Reset button
- 7. ON/OFF switch
- 8. Laser cell cover
- 9. Locking screw for parallel stop
- 10. Soleplate
- 11. ON/OFF switch for laser
- 12. Lever for raising the soleplate
- 13. Connection for dust extraction system



### Supplied package

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if available).
- Check to see if all items are supplied.
- Inspect the equipment and accessories for transport damage.
- If possible, please keep the packaging until the end of the warranty period.

**Important!** The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of choking or suffocation!

#### **Contents of carton**

- Mini circular saw
- Instruction manual
- Hexagon wrench
- Ruler
- · Dust collecting pipe

### Intended use

The electric mini circular saw is designed for sawing straight cuts in wood, wood-type materials and plastics, as well as for cutting tiles using the appropriate saw blade or cutting wheel.

The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user/operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

### **Technical data**

Mains voltage: 230-240V ~ 50Hz

Power input: 500W Idling speed: 6350/min Cutting depth: max. 25mm Saw blade diameter: 85mm Blade holder diameter: 10mm

Protection class: II Weight: 4.0Kg

#### Sound and vibration

Sound and vibration values were measured in accordance with EN 60745

LpA sound pressure level: 90 dB(A)

KPA uncertainty: 3dB

Lwa sound power level: 101dB(A)

Kwa uncertainty: 3dB

#### Wear ear-muffs.

The impact of noise can cause damage to hearing.

Total vibration values (vector sum of three directions) determined in accordance with EN 60745.

#### Handle

Vibration emission value ah=2.085 m/s<sup>2</sup>

K uncertainty=1.5 m/s<sup>2</sup>

**WARNING!** Depending on the actual use of the product the vibration values can differ from the declared total! Adopt proper measures to protect yourself against vibration exposures. Take the whole work process including times the product is running under no load or switched off into consideration.

Proper measures include among others regular maintenance and care of the product and application tools, keeping hands warm, periodical breaks and proper planning of work processes.

# Before starting the equipment

Before you connect the equipment to the power supply make sure that data on the rating plate are identical to the supply voltage.

Always pull out the power plug before making adjustments to the equipment.

#### Setting the cutting depth

- Undo the locking screw (2) for setting the cutting depth.
- Set the cutting depth in accordance with the scale.
- When cutting wood or plastic, the selected cutting depth should be a little larger than the material thickness.
- To prevent damage to underlying surfaces, the cutting depth can be set exactly to the thickness of the material. However, this will result in a slightly unclear cut.

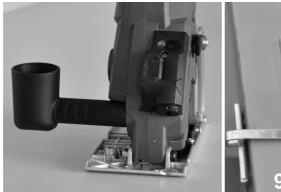


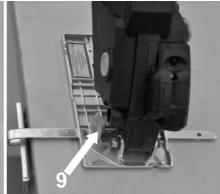
### **Extraction of dust and chips**

Connect your tool to an extraction unit or vacuum cleaner. This will provide excellent extraction of chips and dust from the workplace.

The benefits are that you will protect both the equipment and your health. Your work area will also be clean and safe.

- Attach the adapter for the dust extraction system to the connection for the dust extraction system.
- You can then connect a suitable vacuum cleaner (not supplied) to the dust extraction system adapter.





### Parallel stop

- The parallel stop enables you to saw parallel lines.
- Loosen the locking screw (9) for the parallel stop on the saw foot.
- To assemble, slide the parallel stop into the guide on the saw foot.
- Set the required spacing and then lighten the locking screw (9) again
- Using the parallel stop: Position the parallel stop flat on the edge of the workplace and start the cut.

### **Operation**

#### Working with the electric mini circular saw

- Always hold the electric mini circular saw firmly.
- Do not use force! Push forward gently and evenly with the electric mini circular saw.
- The waste piece should be on the left-hand side of the electric mini circular saw so that the wide section of the support bench supports its full area.
- If you are sawing down a line that has been drawn, guide the electric mini circular saw along the corresponding notch.
- Clamp small pieces of wood securely before sawing them. Never hold them with your hand.
- Always follow the safety instructions. Wear safety goggles.
- Do not use defective saw blades or blades that are cracked or broken.
- Do not use any flanges/flange nuts whose bore hole is larger or smaller than those in the saw blade.
- The saw blade must not be decelerated by hand or by applying lateral pressure to

the blade.

- The soleplate must not jam and must return to its initial position after the operation has been completed.
- Before you use the electric mini circular saw, check the function of the soleplate with the mains plug disconnected.
- Before you use the machine, ensure that the safety equipment such as the soleplate, flanges and adjustment devices are in working order and are correctly adjusted and secure.
- You can connect a suitable dust extraction system to the dust extraction adapter. Ensure that the dust extraction system is safely and correctly connected.

**Important!** Always pull out the power plug before doing any work on the circular saw!

### Using the electric mini circular saw

- Select a suitable blade for the material you wish to saw.
- Check the condition and sharpness of the blade.
- Set the cutting depth.
- Pick up the tool and make sure that no air vents are covered.
- Switch on the tool and wait for a few seconds for the blade to reach operating speed.
- Press the locking button and applying a little pressure, slowly lower the tool into the workplace.
- Push the saw forwards through the workplace. Never cut backwards!
- Exert only little pressure on the tool when cutting.
- The base plate must always lie flat on the workplace.
- Before you start your sawing work on the workplace, you can raise the soleplate with the lever. Starting the sawing work is easier when you want to begin at the edge of a workplace.

### **Switch ON/OFF**

To switch on: Slide the ON/OFF switch backwards and hold.

To switch off: Release the ON/OFF switch.

**Important!** Carry out a trial cut in a piece of waste wood.



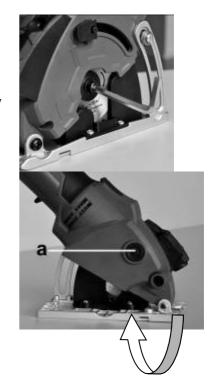


### Changing the saw blade

**Important!** Always pull out the power plug before doing any work on the circular saw! Only use saw blades of the same type as the saw blade supplied with this circular saw. Ask the customer support team for advice.

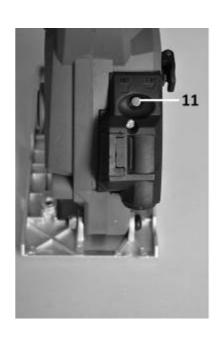
**Important!** The electric mini circular saw must not be operated with the Allen key inserted in it.

- Undo the screw for securing the saw blade by turning it in clockwise direction with the Allen key while at the same time holding on the opposite side with another Allen key.
- Press the locking button (a) and use the lever to raise the adjustable soleplate and hold.
- Remove the saw blade in a downwards direction.
- Clean the flange and insert the new saw blade.
  Pay attention to the running direction (see arrow on the housing and saw blade).
- Tighten the screw to secure the saw blade, check it runs true.
- Before you press the ON/OFF switch, make sure that the saw blade is correctly fitted and that moving parts run smoothly and the clamping screws are lightened securely.



#### Using the laser

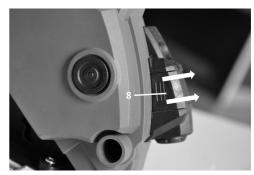
- The laser enables you to make precision cuts with your circular saw.
- The laser light is generated by a laser diode. The laser light is enlarged to form a line and is emitted through the laser emission aperture. You can then use this line as an optical marker for the sawing line for precision cuts. Follow the laser safety instructions.
- You can switch the laser ON and OFF with the ON/OFF switch.
- The laser beam may be affected by deposits of dust and chips. The emission aperture of the laser beam must therefore be cleaned after each use.
- Always switch off the laser when not in use.



### Replacing the battery

Ensure that the laser is switched off. Remove the battery compartment cover. Remove the flat battery and replace with a new one (button cell CR2032). Check that the battery terminals are positioned correctly when inserting the new batteries. Close the battery compartment again.

In case of overloading, e.g. due to the saw blade becoming jammed, the equipment will shut down automatically. To restart, you must first press the reset button. The equipment can then be operated as normal.





### Cleaning and maintenance

Always pull out the power plug before starting any cleaning work.

#### Cleaning

- Keep all safety devices, air vents and the motor housing free of dirt as far as possible. Wipe the equipment with a clean cloth or blow it down with compressed air at low pressure.
- We recommend that you clean the equipment immediately after you use it.
- Clean the equipment regularly with a damp cloth and some soft soap. Do not use cleaning agents or solvents; these may be aggressive to the plastic parts in the equipment. Ensure that no water can get into the interior of the equipment.

#### **Carbon brushes**

In case of excessive sparking, have the carbon brushes checked only by a qualified electrician.

**Important!** The carbon brushes should not be replaced by anyone but a qualified electrician.

#### Servicing

There are no spare parts inside the equipment which require additional maintenance. If the replacement of the supply cord is necessary, this has to be done by a Kogan technician or a qualified electrician in order to avoid a safety hazard.

# Disposal and recycling

The equipment is supplied in packaging to prevent it from being damaged in transit. The raw materials in this packaging can be reused or recycled. The equipment and its accessories are made of various types of material, such as metal and plastic. Defective components must be disposed of as special waste.

Ask your dealer or your local council.

### **Storage**

Store the equipment and accessories out of children's reach in a dark, dry place at above freezing temperature. The ideal storage temperature is between 5 and 30  $^{\circ}$ C. Store the electric tool in its original packaging.

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