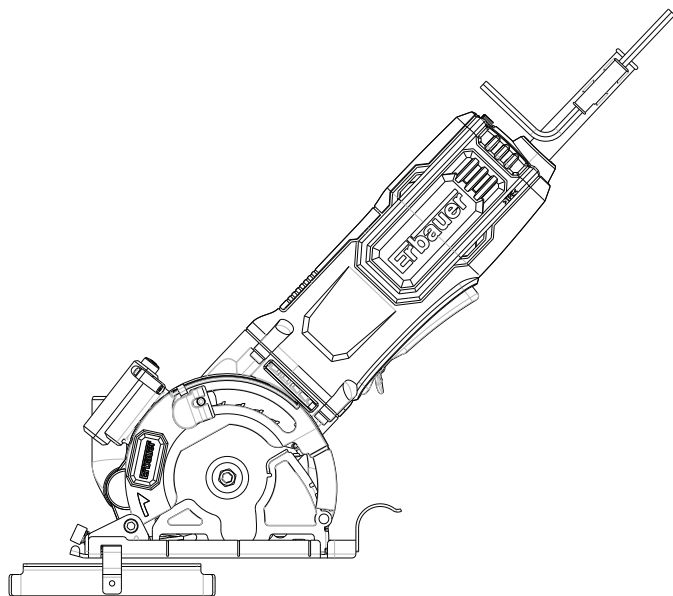




**Erbauer**










EAN: 3663602795841

# EMCS650

ORIGINAL INSTRUCTIONS

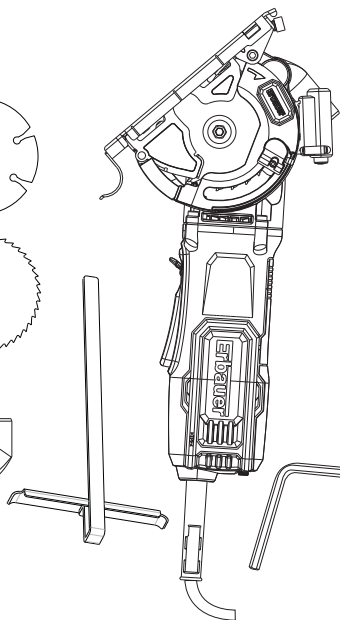
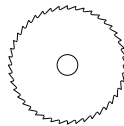
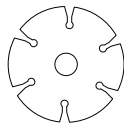
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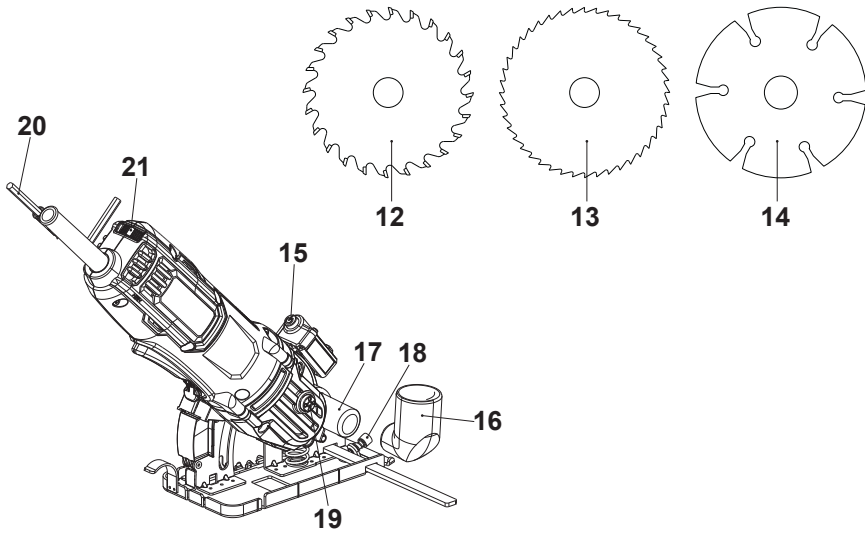
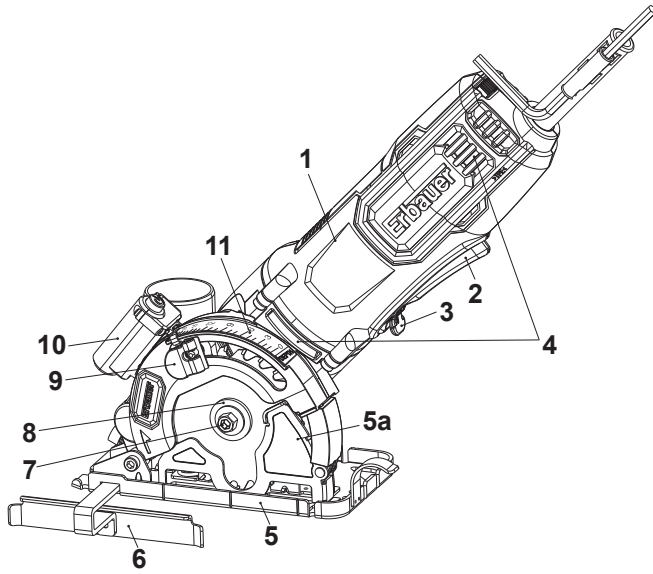
**WARNING!** Please read all safety warnings carefully and be sure that they are fully understood before handling the tool.





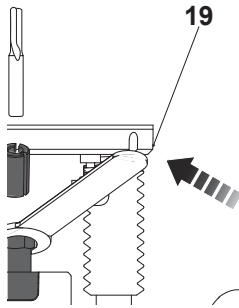
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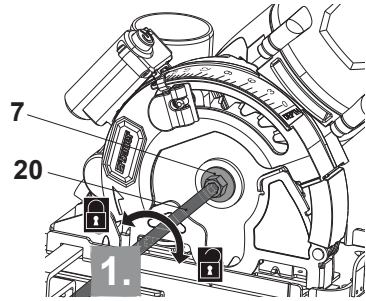




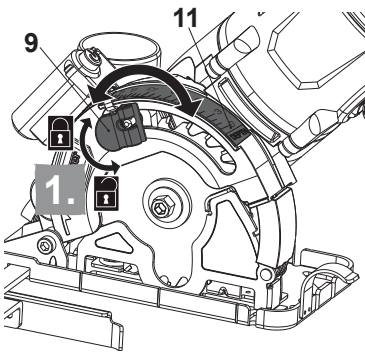
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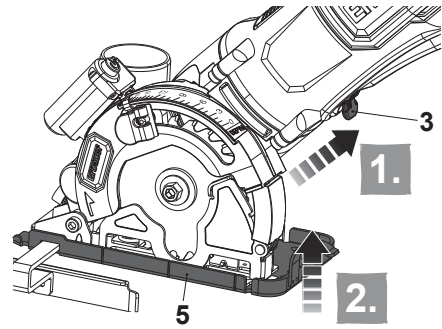
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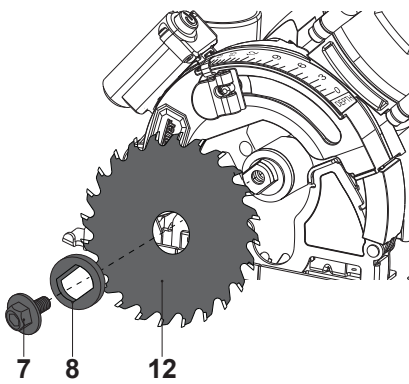
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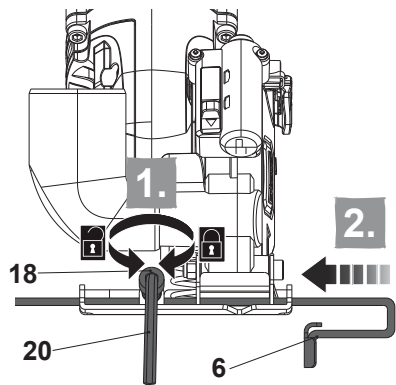
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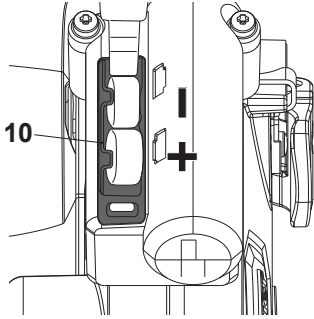
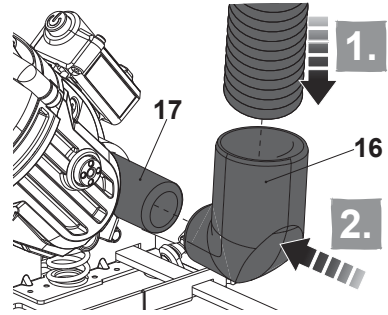
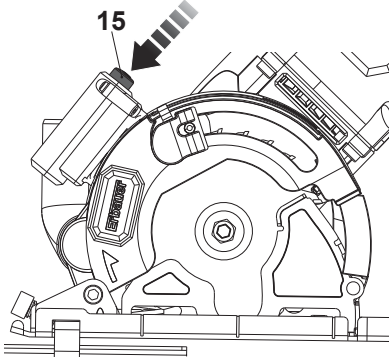
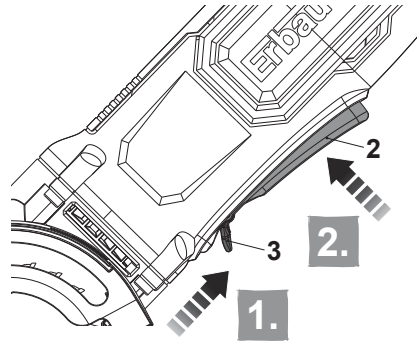
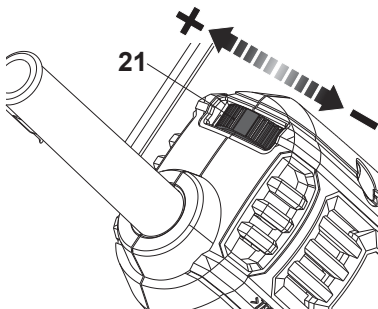
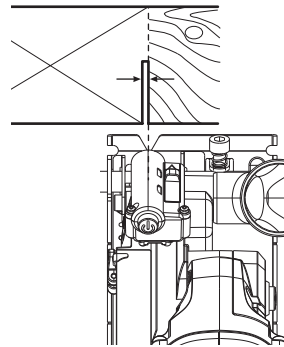


**E**



**F**



**G****H****I****J****K****L**



## Safety instructions

# GENERAL POWER TOOL SAFETY WARNING



**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 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 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 energising 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 and clothing 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.*
- 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.** 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.*

## SAFETY WARNINGS FOR MINI CIRCULAR SAW

### CUTTING PROCEDURES

- a)  **DANGER:** Keep hands away from cutting area and the blade. *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 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 the power tool by insulated gripping surfaces only, 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 could give the operator an electric shock.*
- 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.*

## **KICKBACK CAUSES AND RELATED WARNINGS**

- 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 closing down, 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.

- a) **Maintain a firm grip 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 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 sawing into existing walls or other blind areas.** *The protruding blade may cut objects that can cause kickback.*

## SAFETY INSTRUCTIONS FOR PLUNGE TYPE SAWS

### GUARD FUNCTION

- 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 saw is accidentally dropped, guard may be bent. Check to make sure that guard moves freely and does not touch the blade or any other part, 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 aware of the time it takes for the blade to stop after switch is released.**

## SAFETY INSTRUCTIONS FOR DIAMOND CUTTING-OFF OPERATION

- a) **The guard provided with the tool must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. Position yourself and bystanders away from the plane of the rotating wheel. The guard helps to protect operator from broken wheel fragments and accidental contact with wheel.**

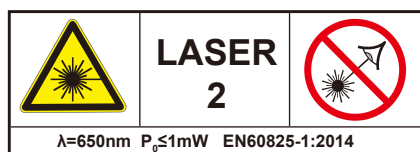
- b) **Use only diamond cut-off wheels for your power tool.** *Just because an accessory can be attached to your power tool, it does not assure safe operation.*
- c) **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** *Accessories running faster than their rated speed can break and fly apart.*
- d) **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.*
- e) **Always use undamaged wheel flanges that are of correct diameter for your selected wheel.** *Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.*
- f) **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.*
- g) **The arbour size of wheels and flanges must properly fit the spindle of the power tool.** *Wheels and flanges with arbour holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.*
- h) **Do not use damaged wheels.** *Before each use, inspect the wheels for chips and cracks. If power tool or wheel is dropped, inspect for damage or install an undamaged wheel. After inspecting and installing the wheel, position yourself and bystanders away from the plane of the rotating wheel and run the power tool at maximum no load speed for one minute. Damaged wheels will normally break apart during this test time.*



- i) **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 workpiece fragments.** *The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.*
- j) **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 wheel may fly away and cause injury beyond immediate area of operation.**
- k) **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.**
- l) **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.*
- m) **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.*
- n) **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.*
- o) **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.*

- p) **Do not operate the power tool near flammable materials.** *Sparks could ignite these materials.*
- q) **Do not use accessories that require liquid coolants.** *Using water or other liquid coolants may result in electrocution or shock.*

## SAFETY INSTRUCTIONS FOR LASER



- a) Do not stare directly at the laser beam. A hazard may exist if you deliberately stare into the beam.
- b) The laser shall be used and maintained in accordance with the manufacturer's instructions.
- c) Never aim the beam at any person or an object other than the work piece.
- d) The laser beam shall not be deliberately aimed at another person and shall be prevented from being directed towards the eye of a person for longer than 0.25 seconds.
- e) Always ensure the laser beam is aimed at a sturdy work piece without reflective surfaces, e.g. wood or rough coated surfaces are acceptable. Bright shiny reflective sheet steel or similar is not suitable for laser applications as the reflective surface may direct the laser beam back at the operator.
- f) Do not change the laser device with a different type. Repairs must be carried out by the manufacturer or an authorized agent.
- g) **CAUTION:** Use of controls or adjustments other than those specified herein may result in hazardous radiation exposure.



## GENERAL SAFETY WARNINGS FOR BATTERIES

- a) **CAUTION:** Danger of explosion if batteries are incorrectly replaced. Replace only with the same or equivalent type. Observe correct polarity.
- b) Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like. Protect from mechanical shock. Keep dry and clean. Keep away from children.
- c) Do not open, dismantle, shred or short-circuit batteries. Do not mix old and new batteries.
- d) Dispose of properly. Pay attention to environmental aspects of battery disposal. Do not dispose of in household waste.
- e) Refer to safety and other instructions on the battery or its packaging.
- f) In case of battery leakage, remove the batteries and clean the battery compartment thoroughly. Avoid contact with skin and eyes.

## ADDITIONAL SAFETY WARNINGS FOR MINI CIRCULAR SAW

- a) Only use saw/diamond blade of the size that is specified in this instruction manual.
- b) Make sure that the correct saw/diamond blade is applied for the material to be cut. Read and compare the information in this instruction manual with the product information of the saw/diamond blade.
- c) Use only blades that are marked with a speed equal or higher than the speed marked on the tool.
- d) The power tool shall not be wet or applied in wet environment.
- e) The voltage of the power source must agree with the voltage specified on the rating label of the machine.
- f) Check the product, its power cord and plug as well as accessories for damage before each use. Do not use the product if it is damaged or shows wear.

- g) Double check that the accessories and attachments are properly fixed. One minute testing running in no-load condition will be helpful to identify any problems.
- h) Secure the workpiece. A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- i) Keep the handle dry to ensure safe control. Grip the product securely with a hand so you have full control at all times.
- j) The blade and the work piece can become very hot while working. Do not touch them before they have cooled down.
- k) Ensure that the air vents are always unobstructed and clear. Clean them if necessary with a soft brush. Blocked air vents may lead to overheating and damage the product.
- l) Switch off the power tool immediately if the blade jams. Be prepared for high reaction torque that can cause kickback. The blade jams when: the power tool is subject to overload or it becomes wedged in the workpiece.
- m) Switch the product off immediately if you are disturbed while working by other people entering the working area. Always let the product come to complete stop before putting it down.
- n) Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the product.
- o) Always keep the power cord behind the power tool.

The following information applies to professional users only but is good practice for all users:

## **ADDITIONAL SAFETY WARNINGS FOR CONSTRUCTION DUST**

The updated Control of Substances Hazardous to Health Regulations 1st October 2012 now also targets to reduce the risks associated with silica, wood and gypsum dusts.

Construction workers are one of the at-risk groups within this because of the dust that they breathe: silica dust is not just a nuisance; it is a real risk to your lungs!

Silica is a natural mineral present in large amounts in things like sand, sandstone and granite. It is also commonly found in many construction materials such as concrete and mortar. The silica is broken into very fine dust (also known as Respirable Crystalline Silica or RCS) during many common tasks such as cutting, drilling and grinding. Breathing in very fine particles of crystalline silica can lead to the development of:

- lung cancer
- Silicosis
- Chronic obstructive pulmonary disease (COPD).

And breathing in fine particles of wood dust can lead to the development of Asthma. The risk of lung disease is linked to people who regularly breathe construction dust over a period of time, not on the odd occasion.

To protect the lung, the COSHH Regulations sets a limit on the amount of these dusts that you can breathe (called a Workplace Exposure Limit or WEL) when averaged over a normal working day. These limits are not a large amount of dust: when compared to a penny it is tiny – like a small pinch of salt:

This limit is the legal maximum; the most you can breathe after the right controls have been used.

## How to reduce the amount of dust?

1. Reduce the amount of cutting by using the best sizes of building products.
2. Use a less powerful tool e.g. a block cutter instead of angle grinder.
3. Using a different method of work altogether – e.g. using a nail gun to direct fasten cable trays instead of drilling holes first.

Please always work with approved safety equipment, such as those dust masks that specially designed to filter out microscopic particles and use the dust extraction facility at all time.

For more information, please see the HSE website:

<http://www.hse.gov.uk/construction> or <http://www.hse.gov.uk/pubns/cis69.pdf>



**WARNING!** Some dust particles created by power sanding, sawing, grinding, drill and other construction jobs contain 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 timber.

Your risk from these exposures varies, depending upon how often you do this type of work. To reduce your exposure to these dusts:

- Work in a well-ventilated.
- Work with approved protective equipment, such as those dust masks that are specially designed to filter microscopic particles.

## VIBRATION

The European Physical Agents (Vibration) Directive has been brought in to help reduce hand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a power tool can be used safely on a daily basis and the choice of tool.

### **SEE TECHNICAL SPECIFICATIONS IN THE INSTRUCTION MANUAL FOR THE VIBRATION LEVELS OF YOUR TOOL.**

The declared vibration emission value should be used as a minimum level and should be used with the current guidance on vibration.

Calculating the actual period of use can be difficult and the HSE website has further information.

The declared vibration total value has been measured in accordance with EN 62841-1 and EN62841-2-5 and may be used for compare one tool with another.

The declared vibration total value may also be used in a preliminary assessment of exposure.



**WARNING!** The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used:

- How the materials are grinded, cut or drilled.
- If the tool is in good condition and well maintained.
- Use correct accessory for the tool and ensure it is sharp and in good condition.
- The tightness of the grip on the handles.
- The tool is being used as intended by its design and these instructions.

**While working with this power tool, hand/arm vibrations occur. Adopt the correct working practices in order to reduce the exposure to vibration. This tool may cause hand-arm vibration syndrome if its use is not adequately managed.**



**WARNING!** Identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

**Note:**

- The use of other tools will reduce the users' total working period on this tool.
- Helping to minimise your vibration exposure risk. ALWAYS use sharp chisels, drills and blades.
- Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate).
- Avoid using tools in temperatures of 10°C or less. Plan your work schedule to spread any high vibration tool use across a number of days.

## HEALTH SURVEILLANCE

All employees should be part of an employer's health surveillance scheme to help identify any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

## VIBRATION AND NOISE REDUCTION

**To reduce the impact of noise and vibration emission, 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 minimise 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 attachments for the product and ensure they are in good condition.
4. Keep 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 longer period of time.
7. Prolonged use of the product exposes the user to vibrations that can cause a range of conditions collectively known as hand-arm vibration syndrome (HAVS) e.g. fingers going white; as well as specific diseases such as carpal tunnel syndrome. To reduce this risk when using the product, always wear protective gloves and keep your hands warm.

## 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 not adequately managed and properly maintained.
2. Injuries and damage to property due to broken attachments or the sudden impact of hidden objects during use.
3. Danger of injury and property damage caused by flying objects or poor power tool accessories.



**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!



## Product description

# Part index

The index below refers to Fig. 1 on page 4.

- |                               |                                    |
|-------------------------------|------------------------------------|
| 1. Main handle                | 11. Cutting depth scale            |
| 2. On/off switch              | 12. TCT saw blade (for wood)       |
| 3. Safety lock switch         | 13. HSS blade (for wood and metal) |
| 4. Air vents                  | 14. Diamond blade (for tiles etc.) |
| 5. Base plate                 | 15. Laser on/off switch            |
| a. Lower guard                | 16. Vacuum cleaner adaptor         |
| 6. Parallel guide             | 17. Dust extraction outlet         |
| 7. Clamping screw             | 18. Parallel guide clamping bolt   |
| 8. Blade clamping flange      | 19. Spindle locking button         |
| 9. Depth clamping knob        | 20. Hex key (5 mm)                 |
| 10. Laser battery compartment | 21. Speed dial                     |

# Symbols

On the product, the rating label and within these instructions you will find among others the following symbols and abbreviations. Familiarize yourself with them to reduce hazards like personal injuries and damage to property.



Always wear eye protection.



Wear a dust mask.



Lock / to tighten or secure.



Note / Remark.

dB(A)

Decibel (A-rated)



Laser radiation.



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



Always wear ear protection.



Wear protective gloves.



Unlock / to loosen.



Caution / Warning.

$n_0$

No-load speed



Do not stare into beam.





Switch the product off and disconnect it from the power supply before assembly, cleaning, adjustments, maintenance, storage and transportation.



This product is of protection class II. That means it is equipped with enhanced or double insulation.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.



WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.

yyWxx

Manufacturing date code; year of manufacturing (20yy) and week of manufacturing (Wxx)




3 metre Power Cord Length



Built in Laser Guide

## Technical data

<b>Rated voltage, frequency</b>	: 220-240 V~, 50 Hz
<b>Rated power input</b>	: 650 W
<b>Rated no load speed <math>n_0</math></b>	: 0 - 4400 min <sup>-1</sup>
<b>Blade size</b>	: Ø 85 mm
<b>Bore size</b>	: Ø 15 mm
<b>Max cutting depth</b>	: 27 mm
<b>Protection class</b>	: II 
<b>Weight</b>	: Approx. 2.2 kg
<b>Sound pressure level <math>L_{pA}</math></b>	: 90 dB(A)
<b>Sound power level <math>L_{WA}</math></b>	: 101 dB(A)
<b>Uncertainty <math>K_{pA}</math>, <math>K_{WA}</math></b>	: 3 dB(A)
<b>Vibration total value <math>a_{h,w}</math></b>	: 2.5 m/s <sup>2</sup> (cutting wood) : 2.3 m/s <sup>2</sup> (cutting metal)
<b>Uncertainty K</b>	: 1.5 m/s <sup>2</sup>
<b>Laser information</b>	
<b>Laser class</b>	: Class 2
<b>Wave length</b>	: 650 nm
<b>Output power</b>	: ≤ 1mW

The sound emission values have been obtained according to the noise test code given in EN 62841-1 and EN 62841-2-5. The noise for the operator may exceed 80 dB(A) and ear protection measures are necessary.



## Rating label explanation

EMCS650 = Model number

E = Erbauer

MCS = Mini circular saw

650= Power (Watts)



## Assembly

### 01

## Unpacking

1. Unpack all parts and lay them on a flat, stable surface.
2. Remove all packing materials and shipping devices, if applicable.
3. Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
4. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.



**WARNING!** The product must be fully assembled before operation!

Do not use a product that is only partly assembled or assembled with damaged parts!



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 the product to power supply before it is completely assembled!



**WARNING!** The product and the packaging are not children's toys!

Children must not play with plastic bags, sheets and small parts! There is a danger of choking and suffocation!

## 02

**Saw/diamond blade (Fig. A, B, C, D, E)**

**WARNING!** Always use blades according to the intended use! For example, never use a saw blade intended for working on wood for working on metal/tiles or vice versa!

Observe the technical specifications of this product and the saw/diamond blades when purchasing and using blades!



Attachments are sharp and hot after use! Handle them with care! Wear safety gloves when handling attachments to avoid injuries like burns and cuts!



**WARNING!** Never press the spindle locking button (19) whilst the spindle is rotating!

**Installation/Replacement**

1. Press the spindle locking button (19) fully and hold it in position. (Fig. A)
2. Turn the clamping screw (7) slightly with the hex key (20) until the spindle is locked. (Fig. B)
3. Loosen the clamping screw (7) clockwise and remove it together with the blade clamping flange (8). (Fig. B)
4. Open the depth clamping lever (9), move it to the left end and lock the depth clamping knob (9) afterwards. (Fig. C)
5. Shift the safety lock switch (3) backward (Fig. D step 1), raise the base plate (5) fully to expose the blade (Fig. D step 2) and remove the blade from spindle if applicable.
6. Keep the base plate raised as above while inserting a new saw/diamond blade into the lower guard (5a) and then placing it on the spindle.



The direction-of-rotation arrow on the blade should comply with the one on blade guard!

7. Fix the saw/diamond blade with the clamping flange (8) and clamping screw (7) by turning it anti-clockwise while the spindle locking button (19) is pressed. (Fig. E)

8. Release the spindle locking button, remove the hex key and turn the saw/diamond blade by hand to check if it rotates smoothly. The blade should not flutter.
9. Switch the product on and let it run at no-load speed for about one minute to ensure that the saw/diamond blade has been installed properly. If there is any abnormal vibration or excessive noise, switch the product off and re-fit the saw/diamond blade according to the above instructions.

## 03

### Parallel guide (Fig. F)

Attach the parallel guide to perform cuts parallel to the workpiece edges.

1. Loosen the parallel guide clamping bolt (18) anti-clockwise with the hex key (20) (Fig. F step 1).
2. Align the parallel guide (6) with the two brackets and insert it through them (Fig. F step 2).
3. Use the scale to adjust the desired width.
4. Secure the parallel guide (6) in position by tightening the parallel guide clamping bolt (18) clockwise.

## 04

### Replacing the batteries of laser (Fig. G)

1. Slide and open the cover of the laser battery compartment (10).
2. Insert 2 button cell batteries of type LR44H as indicated. Please pay attention to the cell polarity marked on the housing.
3. Close the laser battery compartment (10) cover and slide to fix it in position.

## 05

### Dust extraction (Fig. H)



**WARNING!** Always attach a dust extraction device when using this product to keep the working area clean!



Wear a dust mask when operating this product! Dust can be harmful to health!

Attach a proper dust extraction device, e.g. a suitable vacuum cleaner attachment (Ø35mm) to the vacuum cleaner adaptor (16) and then attach to dust extraction outlet (17).



Use

## Intended use

The product is intended for longitudinal and plunge cutting on solid wood, wood-like materials, metal and mineral materials (e.g. tiles) when equipped with appropriate saw blades / diamond cutting wheels.

For safety reasons it is essential to read the entire instruction manual before first operation and to observe all the instructions therein.

## Before you start

### 01 Protection



## Controls



**WARNING!** Always switch the product off and disconnect it from power supply before making any adjustments!



### 01 Adjusting cutting depth (Fig. C)

Always use the correct cutting depth setting! The correct blade depth setting for all cuts should allow approx. 3 mm to be visible below the material being cut.

1. Open the depth clamping lever (9) by hand.
2. Raise/lower the depth clamping lever (9) and set the blade to the required depth as shown on the cutting depth scale (11).
3. Lock the depth clamping lever (9).

## 02 Laser (Fig. I)

Use the laser as guide when cutting on marked lines.

1. Switch the laser on by pressing the laser on/off switch (15).
2. Switch the laser off by pressing the laser on/off switch (15) again.



**WARNING!** Do not stare into the beam, class 2 laser product!

## 03 Switching on/off (Fig. J)

1. Shift the safety lock switch (3) backward to unlock the on/off switch (2).
2. Press the on/off switch (2) to switch the product on.
3. Release the on / off switch (2) to switch the product off.

## 04 Speed adjustment (Fig. K)

Adjust the speed depending on the application.

1. Turn the speed dial (21) left (as seen from operators position) to increase the working speed.
2. Turn the speed dial (21) right (as seen from operators position) to decrease the working speed.

# Operation

## 01 Cutting wood



**WARNING!** During operation fine dust will be generated! The dust is highly inflammable and explosive! Do not smoke during operation, keep heat sources and open flames out of the working area!



Always wear a dust mask to protect yourself against hazards resulting from fine dust!



Take the cutting channel into consideration when cutting along marked cutting lines. Do not cut directly on the line but next to it. (Fig. L)

It is recommended to make a trial cut before working on the actual workpiece to determine the position and width of the cutting channel, especially after replacing the blade or changing bevel angle.

Switch the product off, let it come to a complete stop and disconnect it from the power supply if the saw blade gets stuck in the workpiece. Only then free the jammed blade.

1. Cut in the direction of the wood grain whenever possible to avoid jamming the blade and fraying edges.
2. Ensure the workpiece is free of obstacles like nails or screws before operation. Remove them if required.
3. Check the function of the lower guard (5a) by raising and releasing the base plate (5).
4. Set proper cutting depth and rotation speed.
5. Ensure that there is sufficient clearance for the blade under the workpiece.
6. Never hold the workpiece with your hands or across your leg. Secure the workpiece with proper clamps to a stable worktop. Support longer workpieces to avoid tilting.
7. Hold the product firmly with main handle.
8. Switch the product on and wait until it runs at full speed before placing it on the workpiece.
9. Align the centre of the “V”-notch on the front of the base plate with the marked cutting line.
10. Plunge the blade into the material slowly and gently, but firmly. Then push the tool forward along the line to be cut. If necessary, switch on the laser.
11. Only apply proper feeding force. Higher feeding force will not increase but lower the performance of the product, overheat the blade tips and leads to low cutting surface/edge quality.



12. Keep the product moving at all times, do not stop in one position to avoid grooves.
13. Lift the product from the workpiece before switching it off.

## 02 Cutting metal

The product can be used for cutting metal, e.g. brass, copper, aluminium or galvanised mild steel. Learn to use the tool by cutting wood before attempting to cut metal.

1. Always set the depth adjustment to at least 1 mm deeper than the material thickness to avoid the blade riding up over the surface. Scrap material is required underneath the work surface.
2. Remove burrs and rust as these impede the feed across the material.
3. Thick beeswax (furniture polish) applied to the base plate of the tool makes metal easier to cut.
4. Every 2 minutes of metal cutting should be followed by a rest of at least 3 minutes.



**WARNING!** DO NOT use vacuum cleaner adaptor (16) or attach vacuum cleaner for cutting metal! Pay attention to the hot metal dust which comes out from the dust extraction outlet (17).

## 03 Cutting tiles etc.

1. Only use a blade specifically designed for this purpose.
2. Always attach a suitable vacuum cleaner or dust extractor as the dust can be hazardous to the operator and prevent the guard operating correctly.

## After use

1. Switch the product off, wait for complete stop, disconnect it from the power supply and let it cool down.
2. Check, clean and store the product as described below.



## Care & maintenance



**WARNING!** Always switch the product off, disconnect the product from the power supply and let the product cool down before performing inspection, maintenance and cleaning work!



Only perform care and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

## Clean

1. Clean the product with a dry cloth. Use a brush for areas that are hard to reach.
2. In particular clean the switches and air vents after every use with a cloth and brush.
3. Open the lower guard (5a) and remove the saw blade / diamond cutting wheel to clear the inside of the guard if necessary.
4. Remove stubborn dirt with high pressure air (max. 3 bar).
5. Check for worn or damaged parts. Replace worn parts as necessary or contact an authorised service centre for repair before using the product again.



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

## Maintenance

Your power tool requires no additional lubrication or maintenance.

There are no user serviceable parts in your power tool.

Before and after each use, check the product and accessories (or attachments) for wear and damage. If required, exchange them for new ones as described in this instruction manual. Observe the technical requirements.

## 01 Power cord

If the replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.

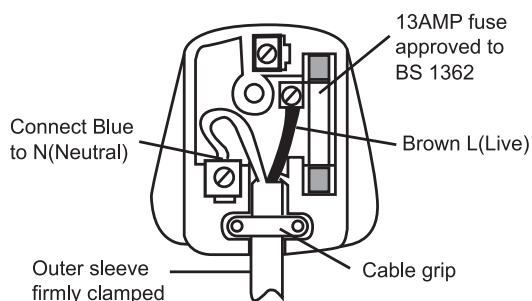
## 02 UK plug (only for UK market)

Replacement of the plug shall always be carried out by the manufacturer of the tool or his service organization and follow the instructions below.

**IMPORTANT:** The wires in the mains lead are coloured in accordance with the following code:

Blue – Neutral Brown – Live

As the colours of the wire in the mains lead of this product may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows. The wire, which is coloured blue, must be connected to the terminal, which is marked with N or coloured black. The wire, which is coloured brown, must be connected to the terminal, which is marked L or coloured red.



**WARNING!** Never connect live or neutral wires to the earth terminal of the plug, which is marked with E.

Only fit an approved 13 Amp BS 1363 or BS 1363/A plug and the correctly rated fuse. If in doubt, consult a qualified electrician.

If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.

## Transportation



**WARNING!** Always carry the product by its main handle.  
Never use the cord for carrying the product.

1. Switch the product off and disconnect it from the power supply.
2. Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
3. Secure the product to prevent it from slipping or falling over.

## Storage

1. Switch the product off and disconnect it from the power supply.
2. Clean the product as described above.
3. Store the product and its accessories in a dark, dry, frost-free, well-ventilated place.
4. Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 10 °C and 30 °C.
5. We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.

## Recycling and disposal



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or local store for recycling advice.



## Guarantee

At Erbauer we take special care to select high quality materials and use manufacturing techniques that allow us to create ranges of products incorporating design and durability. We carry out stringent testing procedures on all our tools and are confident that they can provide regular, sustained daily use during the period covered. That's why we offer a 2 year guarantee against manufacturing defects on our Erbauer power tool products.

This power tool is guaranteed for 2 years from the date of purchase, if bought in store, delivered or bought online. You may only make a claim under this guarantee upon presentation of your sales receipt or purchase invoice. Please keep your proof of purchase in a safe place.

This guarantee covers product failures and malfunctions provided the Erbauer power tool was used for the purpose for which it is intended and subject to installation, cleaning, care and maintenance in accordance with standard practice and with the information contained above and in the user manual. This guarantee does not cover defects and damage caused by or resulting from:

- Normal wear and tear
- Overload, misuse or neglect
- Repairs attempted by anyone other than an authorised agent
- Cosmetic damage
- Damage caused by foreign objects, substances or accidents
- Accidental damage or modification
- Failure to follow manufacturer's guidelines
- Loss of use of the goods

This guarantee is limited to parts recognised as defective. It does not, in any case, cover ancillary costs (movement, labour) and direct and indirect damage.

If the Erbauer power tool is defective during the guarantee period, then we reserve the right, at our discretion, to replace the item with a product of equivalent quality and functionality or to provide a refund.

This guarantee only applies to the country of purchase or delivery and is not transferrable to any other countries. This guarantee is non-transferrable to any other person or product. Relevant local law will apply to this guarantee.

Guarantee related queries should be addressed to a store affiliated with the distributor from where you purchased the Erbauer power tool.

This guarantee is in addition to and does not affect your statutory rights relating to faulty goods as a consumer.



## Declaration of conformity



EU Declaration of Conformity

**We**  
**Kingfisher International Products Limited**  
**3 Sheldon Square**  
**London W2 6PX**  
**United Kingdom**

Declare that the product  
 650W Mini circular saw  
 EMCS650  
 Serial number: from 000001 to 999999

Complies with the essential health and safety requirements of the following directives:  
 2006/42/EC The Machinery Directive

References to the following harmonized standard were made:

EN 62841-1:2015  
 EN 62841-2-5:2014

2014/30/EU Electromagnetic Compatibility directive  
 References to the following harmonized standard were made:

EN 55014-1:2017  
 EN 55014-2:2015  
 EN 61000-3-2:2014  
 EN 61000-3-3:2013

2011/65/EU, (EU) 2015/863 Restrictions of the Use of Certain Hazardous Substances in  
 Electrical and Electronic Equipment

Authorised signatory and technical file holder:  
 Kingfisher International Products Limited  
 3 Sheldon Square  
 London W2 6PX  
 United Kingdom

on: [ 01/10/2019]  
 Eric Capotummino  
 Group Quality Director



## Declaration of conformity



EU Declaration of Conformity

**We**  
**Kingfisher International Products B.V.**  
 Rapenburgerstraat 175E 1011 VM Amsterdam  
 The Netherlands

Declare that the product  
 650W Mini circular saw  
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Distributor:  
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