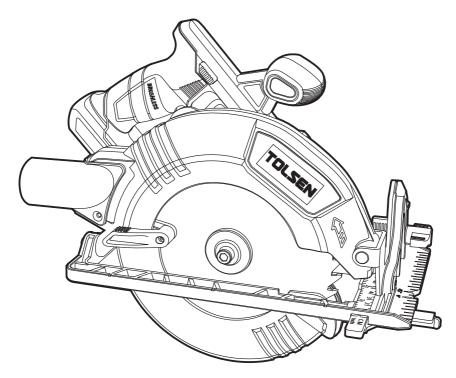


87282 LI-ION CORDLESS CIRCULAR SAW

INSTRUCTION MANUAL

20V LITHIUM-ION

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SAVE THIS MANUAL! You will need this manual for safety instructions, operating procedures and warranty. Put it and the original sales receipt in a safe dry place for future reference.

IMPORTANT SAFETY INFORMATION

General Power Tool Safety Warnings

WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

WARNING: This appliance is not intended for use by persons (including children) with reduced, physical or mental capabilities or lack of experience or knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children must be supervised to ensure that they do not play with the appliance.

Save all warnings and instructions for future reference

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- 1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 2. 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.
- 3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

- 1. 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.
- 2. 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.
- 3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 4. 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.
- 5. 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.
- 6. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) or ground fault circuit interrupter (GFCI) protected supply. Use of an RCD or GFCI reduces the risk of electric shock.
- 7. Power tools can produce electromagnetic fields [EMF] that are not harmful to the user. However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.

3

Personal safety

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations
- 6. 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.
- 7. 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.
- 8. 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.

Power tool use and care

- 1. 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.
- 2. Do not use the power tool if the switch could not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- 3. 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.
- 4. 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.
- 5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 7. 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.
- 8. Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Battery Tool Use and Care

- 1. 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.
- 2. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 3. 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.
- 4. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

- 5. Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- 6. Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- 7. Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

Service

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

Specific Safety Warnings For Circular Saws

- 1. Make sure that all devices screening the saw blade are in perfect working order.
- Make sure that the saw blade is screened correctly. Especially observe the following instructions:
- Never block the saw blade guard. Repair a jammed saw blade guard before using the machine again.
- ·Replace a broken tension spring before using the machine again.
- Never remove the riving knife. The distance between the toothed rim and the riving knife should be 5 mm maximum.
- 3. Do not use saw blades made of HSS steel.
- 4. Do not use bent, deformed or otherwise damaged saw blades.
- 5. Do not use saw blades which do not meet the specifications stated in this manual.
- 6. Before sawing, remove all nails and other metal objects from the workpiece.
- 7. Never start sawing before the saw reaches its full speed.
- 8. Securely clamp the workpiece. Never attempt to saw extremely small workpieces.
- 9. Only put the machine aside after switching off and when the saw blade has come to a complete standstill.
- 10. Never try to slow the saw blade down by exerting pressure on the side.
- 11. Before performing maintenance to the machine, always unplug the machine.
- 12. Keep hands away from cutting area and 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.
- 13. Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece.
- 14. 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.
- 15. 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.
- 16. Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
- 17. When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.
- 18. Always use blades with correct size and shape. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- 19. 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.
- 20. 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.
- 21. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- 22. 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.

- 23. When restarting a saw in the workpiece, center the saw blade in the kerf so that the saw teeth are not engaged into the material. If a saw blade binds, it may walk up or kickback from the workpiece as the saw is restarted.
- 24. Support large panels to minimize 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.
- 25. Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- 26. Blade depth and bevel adjusting locking levers must be tight and secure before making the cut. If blade adjustment shifts while cutting, it may cause binding and kickback.
- 27. Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback
- 28. Check the lower guard for proper closing before each use. Do not operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If the saw is accidentally dropped, the lower guard may be bent.
- 29. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- 30. Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- 31. The lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts". Raise the lower guard by the retracting handle and as soon as the blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
- 32. Always observe that the lower guard is covering the blade before placing the 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.

Battery Safety

🖄 WARNING

This battery can only be used in the machines included in the TOLSEN MP2OV lithium-ion power platform system. This battery can only be used cooperatively with the designated battery charger.

Li-lon batteries, if incorrectly used, stored or charged will cause a fire, burn and explosion hazard.

Failure to follow these instructions may cause overheating or fire.

- 1. Keep the battery out of reach of children.
- 2. The battery should be charged at ambient temperatures between 5 and 40°C (ideally around 20°C). After charging, allow 15 minutes for the battery to cool before use.
- 3. The Battery Charger monitors battery temperature and voltage while charging. DO NOT leave batteries on charge for extended periods and NEVER store batteries on charge. Ensure that the charger is disconnected from the mains supply after use.
- 4. When not in use batteries should be stored at room temperature. Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 40°C (ideally around 20°C).
- 5. Ensure that battery contacts cannot accidentally short in storage. Keep batteries clean; foreign objects or dirt may cause a short. Keep away from other metal objects, for example, paperclips, coins, keys, nails and screws.
- 6. **DO NOT** store lithium-ion battery packs in a discharged state over a long period as this can damage the lithium-ion cells. For long-term storage, store batteries in a high charge state disconnected from the power tool.
- 7. Batteries can become faulty over time, individual cells in the battery can fail and the battery could short. The charger will not charge faulty batteries. Use another battery, if possible, to check correct functionality of the charger and purchase a replacement battery if a faulty battery is indicated.
- 8. DO NOT open, disassemble, crush, heat or incinerate. Do not dispose of in fire or similar.

SAFETY

Battery Charger Safety

🖄 WARNING

This charger can only be used to charge the batteries which has TOLSEN MP20V symbol. If it is used to charge other kinds of batteries, there is a risk of explosion. **DO NOT** attempt to recharge non-rechargeable batteries.

- 1. This is class 2 power supply. It is suitable for indoor use only.
- 2. Before use, the input and output technical data must be checked to secure correct use.
- 3. Do not use the Battery Charger in the circumstances that the output polarity does not match the load polarity.
- 4. Do not attempt to use the charger with any batteries other than those supplied. Keep your battery charger clean; foreign objects or dirt may cause a short or block air vents. Failure to follow these instructions may cause overheating or fire
- 5. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Before Use

Removing a battery

Remove the Battery from the tool by pressing the lock button, then slide the Battery out of the Battery Slot. **WARNING:**

DO NOT try to remove the Battery without pressing the lock button. The tool or Battery could be damaged. Fitting a battery

1. Fit a battery by sliding it on to the Battery Slot of the tool until it clicks and locks into position

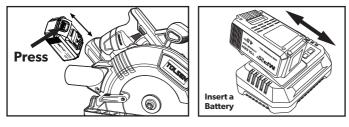
Note: Make sure the Battery and tool are lined up correctly. If the Battery does not slide into the tool easily, do not force it. Instead, slide the Battery out of the tool again, check the top of Battery and the tool battery slot are clean and undamaged and that the contacts are not bent

Setting up the battery charger

1. If there is battery fitted, remove any battery from battery charger first

2. Insert the Battery Charger mains plug into a suitable mains socket

Note: The Green LED on the Charger will always bright to indicate that the charger is ready to charge the battery.



WARNING: Use this charger ONLY to charge the supplied battery or additional purchased batteries that are specifically designed for this tool.

WARNING: Failure to follow the correct procedure when charging batteries will result in permanent damage. **Note:** Normal charging time is approximately 1hr for a recently discharged 2.0Ah capacity battery. However, if the Battery has been left in a discharged state for some time, it may take additional time to charge.

1. Slide a fully or partially discharged Battery on to the Battery Charger .

2. Once charging commences, the Red LED will on.

3. When the Battery is fully charged, the Red LED will off and Green LED will on.

IMPORTANT: When a low charge level is indicated, the tool may stop operating while in use, which is dangerous when operating it. Always ensure the battery pack has a good charge level.



Note: Symbology

	Class II Double insulated for additional protection	
	Double insulated for additional protection	
CE	CE conformity	
(3)	Read the instruction manual before using	
	Wear hearing protection while operating the tool	
	Wear hand protection	
\bigcirc	Always use breathing apparatus when machining materials which generate dust.	
	Wear ear protection.	
	Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.	
Li-ion	Batteries and rechargeable batteries are not household waste! As a consumer, you are required by law to dispose of all batteries and accumulators, whether or not they contain harmful substances *, at a collection point in your municipality / neighborhood or in commerce so that they can be disposed of in an environmentally sound manner.	
	Safety alert	
	For indoor use only	

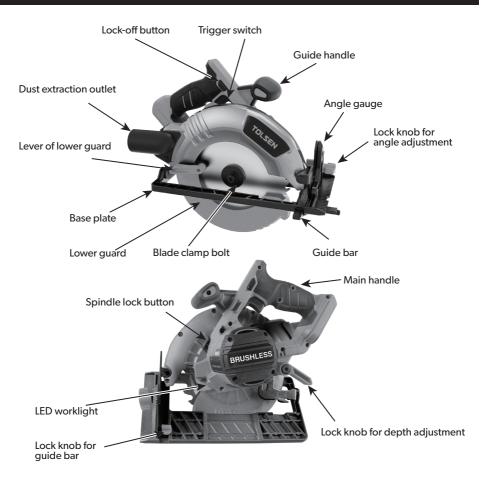


SPECIFICATIONS

Rated voltage	20VDC
No-load speed	3800min ⁻¹
Circular saw blade	Ø190mm
Bore	Ø20mm
Max. cutting depth at 90°	62mm(2-7/16")
Max. cutting depth at 45°	43mm(1-3/4")

CE RoHS

FUNCTIONS



ADJUSTMENTS

Replacing the saw blade

Only use sharp and undamaged saw blades. Cracked or bent saw blades must be replaced immediately. Remove the battery pack from the saw.

- Place this circular saw on its side on a flat surface. Advice you bring the base plate down as if a minimum depth cut which is ease to operate.
- 2. Push the spindle lock button toward motor housing as the arrow shows in Fig. 1 and firmly hold it.
- 3. Turn the blade clamp bolt clockwise by using the Allen key that supplied with the tool.
- 4. Remove the blade clamp bolt and outer flange.
- 5. Raise the lower guard by using the lever for lower guard , and then remove the saw blade.
- 6. Clean the saw blade flanges, then mount the new saw blade onto the output spindle and against the inner flange.
- 7. Make sure the saw teeth and arrow on the blade is to be the same direction as the arrow on the upper guard.
- 8. Reinstall the outer flange, and tighten the blade clamp bolt.

Adjusting the depth of cut(Fig. 2)

The depth of cut is infinitely adjustable. A clean cut is achieved with the saw blade protruding from the material by approx. 3 mm.

- 1. Loosen the lock lever for depth adjustment .
- Hold the base plate flat against the edge of the work piece and lift the body of the saw until the blade is at the right depth determined by the depth gauge (align the scale line).
- 3. Tighten the lock lever for depth adjustment.

Setting the mitre angle (Fig.3)

The mitre angle is infinitely variable between 0° and 45°.

- 1. Loosen the lock lever for angle adjustment.
- 2. Adjust the shoe to the desired angle between 0° to 45°.
- 3. Tighten the lock lever for angle adjustment.

Mounting the parallel fence (Fig. 4)

The parallel fence allows sawing parallel to an edge at a maximum distance of 10 cm.

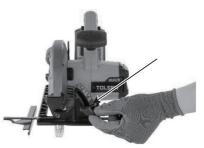
- 1. Loosen the adjustment screw of guide bar.
- 2. Slide the guide bar through the slots in the base plate to the desired width.
- 3. Tighten the adjusting screw to secure it in the position.
- 4. Ensure that the guide bar rests against the wood along its entire length to give consistent parallel cuts.



SETUP











OPERATION

Instructions for use

Clamp the workpiece. Make sure that the side which will be visible later is facing down, because the cut is most accurate at that side.

Switch on the machine before it touches the workpiece. Do not exert pressure on the saw blade. Allow the machine enough time to cut the workpiece.

Hold the machine with both hands using both grips. This ensures optimum control over the machine. For straight cuts along a drawn line use the marking for straight cuts.

For bevel cuts along a drawn line use the marking for bevel cuts.

Switching on and off (Fig. 5)

WARNING

Before engage the Trigger switch, check that the saw blade is properly fitted and run smoothly, the blade clamp bolt is well tightened.

- 1. Connect the battery pack to the cordless circular saw and ensure it firmly.
- 2. To switch the tool on, keep the lock-off button depressed and press the Trigger switch.
- 3. To switch the tool off, release the Trigger switch.



TOLSEN

Dust extraction

A vacuum cleaner can be connected to the dust extraction outlet, either directly to the connector or using an adapter. If necessary, connect an adapter to the extraction outlet.

Cross-cutting

When making a cross-cut or a rip cut, align the guideline with the blade-guide notch on the base. Since blade thicknesses vary, you should always make a trial cut in scrap material along a guideline to determine how much the guideline must be offset from the guide to produce an accurate cut.

NOTICE: The distance from the cutting line to the guideline is the amount by which the guide should be offset. Use a guide when making long or wide rip cuts.

Bevel cutting

- 1. Align the line of cut with the 45° blade guide notch on the base when making 45° bevel cuts.
- 2. Make a trial cut in scrap material along a guideline to determine how much you should offset the guideline on the cutting material.
- 3. Adjust the angle of the cut to any desired setting between 0 and 45°.

LED work-light

The LED work-light can light prior to motor running if you press the lock-off button lightly, which keep the work area to be lighted for checking clearly at first, and it lights also during your operation.

WARNING

WARNING: Do not stare directly at the light beam. Never aim the beam at any person or an object other than the work piece.

WARNING

Do not deliberately aim the beam at personnel and ensure that it is not directed towards the eye of a person for longer than 0.25s.

MAINTENANCE

WARNING: ALWAYS disconnect from the mains power supply, before carrying out any maintenance/ cleaning of the charger. Remove the battery before carrying out any maintenance/ cleaning of the tool.

Note: Both the tool and the charger contain no user-serviceable parts. If the device does not perform as outlined in this manual, return it to an authorised service centre for repair

General inspection

- Regularly check that all the fixing screws are tight
- Inspect the supply cord of the tool, prior to each use, for damage or wear. Repairs should be carried out by an authorised service centre. This advice also applies to extension cords used with this tool.

Cleaning

- Keep your tool clean at all times. Dirt and dust will cause internal parts to wear quickly, and shorten the machine's service life. Clean the body of your machine with a soft brush, or dry cloth. If available, use clean, dry, compressed air to blow through the ventilation holes
- Clean the tool casing with a soft damp cloth using a mild detergent. Do not use alcohol, petrol or strong cleaning agents
- Never use caustic agents to clean plastic parts

Lubrication

- Slightly lubricate all moving parts at regular intervals with a suitable spray lubricant



Disposal

Always adhere to national regulations when disposing of power tools that are no longer functional and are not viable for repair.

- Do not dispose of power tools, or other waste electrical and electronic equipment (WEEE), with household waste.
- Contact your local waste disposal authority for information on the correct way to dispose of power tools

TROUBLESHOOTING

Problem	Possible causes	Likely solutions
Tool will not start.	 Battery Pack not properly connected. Battery Pack not properly charged. Battery Pack worn out. Internal damage or wear. (Carbon brushes or Trigger, for example.) Contact chips of swtich or battery pack deformed. Battery is not suitable for TOLSEN MP2OV lithium-ion power platform system Overload operation. 	 Remove Battery Pack, make sure there are no obstructions, clean battery contacts on tool, reinsert the Battery Pack according to its shape (it should only fit one way), and press firmly until the Battery Pack locks in place. Make sure Charger is connected and operating properly. Give enough time for Battery Pack to recharge properly. Dispose of old Battery Pack properly or recycle. Replace Battery Pack. Have technician service tool. Replace switch or Battery Pack Replace the battery of TOLSEN MP20V Stop to use and restart the machine after cooling.
Tool operates slowly.	 Excess pressure applied to workpiece. Battery Pack wearing out. Low battery 	 Decrease pressure, allow tool to do the work. Dispose of old Battery Pack properly or recycle. Replace Battery Pack. Recharge or replace a fully charged battery.
Performancede- creasesover time.	1 . Battery Pack worn out. 2. Wheel or blade dull	 Dispose of old Battery Pack properly or recycle. Replace Battery Pack. Replace wheel or blade
Excessive noise orrattling.	 Internal damage or wear.(Gear or Bearings,for example.) Disc accessory may be loose or damaged on Spindle. 	 Have technician service tool. Be sure disc accessory arbor is correct and Outer Flange/Arbor Nut is tight. Use only proper type of disc accessory in good condition.
Overheating.	1 . Forcing tool to work too fast. 2. Blocked motor housing vents.	 Allow tool to work at its own rate. Clean the Blocked motor housing vents

CE DECLARATION OF CONFORMITY

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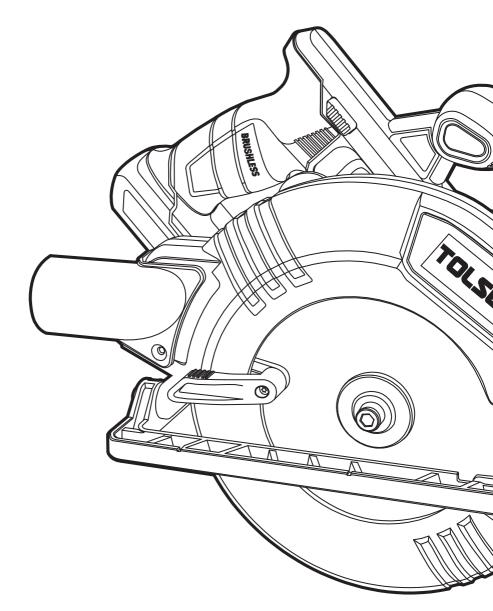
SUZHOU TOLSEN TOOLS CO.,LTD. 198 HUASHAN ROAD, ZHANGJIAGANG, JIANGSU, CHINA

Declare that the product 87282 LI-ION CORDLESS CIRCULAR SAW

Complies with the essential health and safety requirements of the following Directices: council directive 2006/42/EC Standards and technical specifications referred to: EN 62841-1:2015 EN 62841-2-5:2014 EN 55014-1:2017+A11: 2020 EN 55014-2:2015

> Authorised Signatory and technical file holder Signed for and on behalf of: SUZHOU TOLSEN TOOLS CO.,LTD. 198 HUASHAN ROAD, ZHANGJIAGANG, JIANGSU, CHINA WANG QING Group Quality Director on:07/02/2022

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