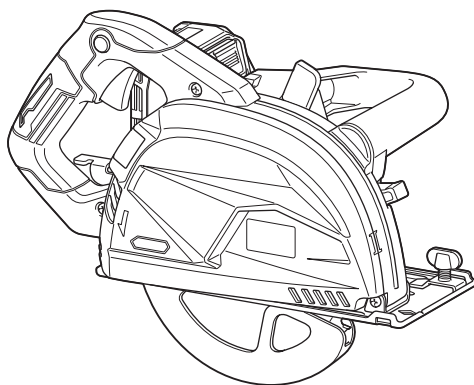


INSTRUCTION MANUAL



# Cordless Metal Cutter

## CS002G



Read before use.

# SPECIFICATIONS

<b>Model:</b>	<b>CS002G</b>
Blade diameter	185 mm
Max. Cutting depth	67 mm
No load speed (RPM)	3,500 min <sup>-1</sup>
Rated voltage	D.C. 36 V - 40 V max
Overall length	350 mm
Net weight	4.2 - 5.4 kg

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

## Applicable battery cartridge and charger

Battery cartridge	BL4020 / BL4025* / BL4040* / BL4050F* / BL4080F * : Recommended battery
Charger	DC40RA / DC40RB / DC40RC

- Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

**⚠ WARNING: Only use the battery cartridges and chargers listed above.** Use of any other battery cartridges and chargers may cause injury and/or fire.

## Symbols

The followings show the symbols which may be used for the equipment. Be sure that you understand their meaning before use.



Read instruction manual.



Wear safety glasses.



Only for EU countries

Due to the presence of hazardous components in the equipment, waste electrical and electronic equipment, accumulators and batteries may have a negative impact on the environment and human health. Do not dispose of electrical and electronic appliances or batteries with household waste!

In accordance with the European Directive on waste electrical and electronic equipment and on accumulators and batteries and waste accumulators and batteries, as well as their adaptation to national law, waste electrical equipment, batteries and accumulators should be stored separately and delivered to a separate collection point for municipal waste, operating in accordance with the regulations on environmental protection.

This is indicated by the symbol of the crossed-out wheeled bin placed on the equipment.

## Intended use

The tool is intended for cutting in mild steel.

## Noise

The typical A-weighted noise level determined according to EN62841-2-5:

Sound pressure level ( $L_{pA}$ ) : 102 dB(A)

Sound power level ( $L_{WA}$ ) : 113 dB (A)

Uncertainty (K) : 3 dB(A)

**NOTE:** The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

**⚠ WARNING: Wear ear protection.**

**⚠ WARNING: The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.**

**⚠ WARNING: Be sure to 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).**

## Vibration

The vibration total value (tri-axial vector sum) determined according to EN62841-2-5:

Work mode: cutting metal

Vibration emission ( $a_{h,M}$ ): 2.5 m/s<sup>2</sup> or less

Uncertainty (K): 1.5 m/s<sup>2</sup>

**NOTE:** The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared vibration total value(s) 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 value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

**⚠ WARNING:** Be sure to 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).

## EC Declaration of Conformity

### For European countries only

The EC declaration of conformity is included as Annex A to this instruction manual.

## SAFETY WARNINGS

### General power tool safety warnings

**⚠ WARNING:** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

### Save all warnings and instructions for future reference.

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

#### 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

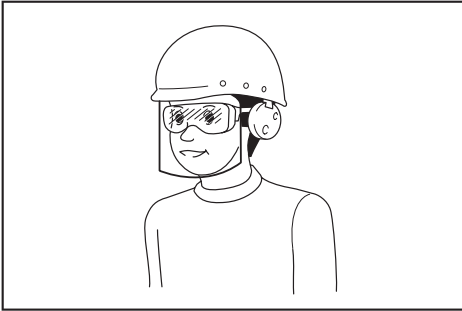
1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.

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) protected supply.** Use of an RCD 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.

#### 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 a 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.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
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 and clothing 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.

9. **Always wear protective goggles to protect your eyes from injury when using power tools. The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.**



**It is an employer's responsibility to enforce the use of appropriate safety protective equipments by the tool operators and by other persons in the immediate working area.**

#### **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 does 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 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.
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 and accessories.** Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
6. **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.

9. **When using the tool, do not wear cloth work gloves which may be entangled.** The entanglement of cloth work gloves in the moving parts may result in personal injury.

#### **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 designed 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 accidentally 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.
2. **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.**

### **Cordless Metal Cutter safety warnings**

#### **Cutting procedures**

1. **⚠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.
2. **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
3. **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.
4. **Never hold the workpiece in your hands or across your leg while cutting. Secure the workpiece to a stable platform.** It is important to support the work properly to minimise body exposure, blade binding, or loss of control.

5. **Hold the 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 could give the operator an electric shock.
6. **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
7. **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 off-centre, causing loss of control.
8. **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.
6. **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.
7. **Use extra caution when sawing into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.
8. **ALWAYS hold the tool firmly with both hands. NEVER place your hand, leg or any part of your body under the tool base or behind the saw, especially when making cross-cuts.** If kickback occurs, the saw could easily jump backwards over your hand, leading to serious personal injury.
9. **Never force the saw. Push the saw forward at a speed so that the blade cuts without slowing.** Forcing the saw can cause uneven cuts, loss of accuracy, and possible kickback.

#### **Kickback causes and related warnings**

- kickback is a sudden reaction to a pinched, jammed 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 jammed 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 workpiece 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.

1. **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.
2. **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.
3. **When restarting a saw in the workpiece, centre 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.
4. **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.
5. **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

#### **Lower guard function**

1. **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. 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.
2. **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.
3. **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.
4. **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.
5. **To check lower guard, open lower guard by hand, then release and watch guard closure. Also check to see that retracting handle does not touch tool housing.** Leaving blade exposed is VERY DANGEROUS and can lead to serious personal injury.

#### **Additional safety warnings**

1. **Do not stop the blades by lateral pressure on the saw blade.**
2. **Do not attempt to remove cut material when blade is moving. Wait until blade stops before grasping cut material.** Blades coast after turn off.
3. **Place the wider portion of the saw base on that part of the workpiece which is solidly supported, not on the section that will fall off when the cut is made. If the workpiece is short or small, clamp it down. DO NOT TRY TO HOLD SHORT PIECES BY HAND!**

4. Never attempt to make a cut with the tool held upside down in a vise. This is extremely dangerous and can lead to serious accidents.
5. Wear safety goggles and hearing protection during operation.
6. Do not use any abrasive wheels.
7. Only use the saw blade with the diameter that is marked on the tool or specified in the manual. Use of an incorrectly sized blade may affect the proper guarding of the blade or guard operation which could result in serious personal injury.
8. Always use the saw blade intended for cutting the material that you are going to cut.
9. Only use the saw blades that are marked with a speed equal or higher than the speed marked on the tool.
10. Before setting the tool down after completing a cut, be sure that the guard has closed and the blade has come to a complete stop.
11. Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.
12. Wear a dust mask and hearing protection when use the tool.
7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Do not nail, cut, crush, throw, drop the battery cartridge, or hit against a hard object to the battery cartridge. Such conduct may result in a fire, excessive heat, or explosion.
9. Do not use a damaged battery.
10. The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.
11. When disposing the battery cartridge, remove it from the tool and dispose of it in a safe place. Follow your local regulations relating to disposal of battery.
12. Use the batteries only with the products specified by Makita. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.

## SAVE THESE INSTRUCTIONS.

**⚠WARNING:** DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

### Important safety instructions for battery cartridge

1. Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
2. Do not disassemble or tamper with the battery cartridge. It may result in a fire, excessive heat, or explosion.
3. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
4. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
5. Do not short the battery cartridge:
  - (1) Do not touch the terminals with any conductive material.
  - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
6. Do not store and use the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
13. If the tool is not used for a long period of time, the battery must be removed from the tool.
14. During and after use, the battery cartridge may take on heat which can cause burns or low temperature burns. Pay attention to the handling of hot battery cartridges.
15. Do not touch the terminal of the tool immediately after use as it may get hot enough to cause burns.
16. Do not allow chips, dust, or soil stuck into the terminals, holes, and grooves of the battery cartridge. It may cause heating, catching fire, burst and malfunction of the tool or battery cartridge, resulting in burns or personal injury.
17. Unless the tool supports the use near high-voltage electrical power lines, do not use the battery cartridge near a high-voltage electrical power lines. It may result in a malfunction or breakdown of the tool or battery cartridge.
18. Keep the battery away from children.

## SAVE THESE INSTRUCTIONS.

**⚠CAUTION:** Only use genuine Makita batteries. Use of non-genuine Makita batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Makita warranty for the Makita tool and charger.

## Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.



- Charge the battery cartridge with room temperature at 10 °C - 40 °C (50 °F - 104 °F). Let a hot battery cartridge cool down before charging it.
- When not using the battery cartridge, remove it from the tool or the charger.
- Charge the battery cartridge if you do not use it for a long period (more than six months).

**CAUTION:** Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

**CAUTION:** Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

## FUNCTIONAL DESCRIPTION

**CAUTION:** Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

### Installing or removing battery cartridge

**CAUTION:** Always switch off the tool before installing or removing of the battery cartridge.

**CAUTION:** Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.

To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge.

To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator as shown in the figure, it is not locked completely.

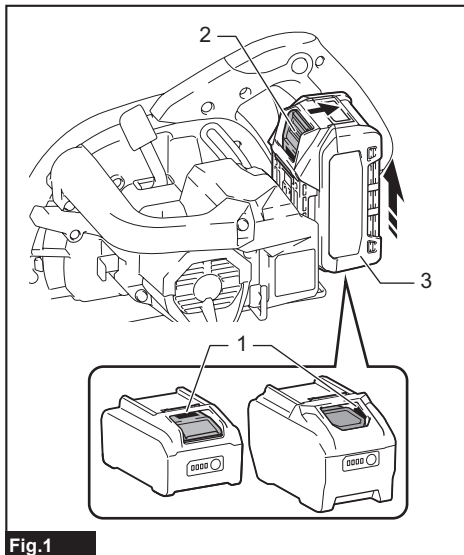


Fig.1

► 1. Red indicator 2. Button 3. Battery cartridge

## Tool / battery protection system

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions.

### Overload protection

When the tool/battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

### Overheat protection

When the tool/battery is overheated, the tool stops automatically and the lamp blinks. In this situation, let the tool cool down before turning the tool on again.

### Overdischarge protection

When the battery capacity becomes low, the tool stops automatically. If the product does not operate even when the switches are operated, remove the batteries from the tool and charge the batteries.

### Protections against other causes

Protection system is also designed for other causes that could damage the tool and allows the tool to stop automatically. Take all the following steps to clear the causes, when the tool has been brought to a temporary halt or stop in operation.

- Turn the tool off, and then turn it on again to restart.
- Charge the battery(ies) or replace it/them with recharged battery(ies).
- Let the tool and battery(ies) cool down.

If no improvement can be found by restoring protection system, then contact your local Makita Service Center.

## Indicating the remaining battery capacity

Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light up for a few seconds.

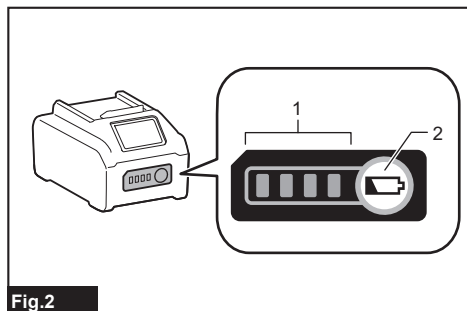


Fig.2

► 1. Indicator lamps 2. Check button

Indicator lamps			Remaining capacity
Lighted	Off	Blinking	
■ ■ ■ ■ ■	□ □ □ □ □	▬	75% to 100%
■ ■ ■ □ □	□ □ □ □ □	▬	50% to 75%
■ ■ □ □ □	□ □ □ □ □	▬	25% to 50%
■ □ □ □ □	□ □ □ □ □	▬	0% to 25%
▬ □ □ □ □	□ □ □ □ □	▬	Charge the battery.
■ ■ □ □ □	□ □ □ □ □	▬	The battery may have malfunctioned.
□ □ ■ ■	□ □ □ □ □	▬	

**NOTE:** Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

**NOTE:** The first (far left) indicator lamp will blink when the battery protection system works.

## Switch action

**WARNING:** Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

**WARNING:** NEVER defeat the lock-off button by taping down or some other means. A switch with a negated lock-off button may result in unintentional operation and serious personal injury.

**WARNING:** NEVER use the tool if it runs when you simply pull the switch trigger without pressing the lock-off button. A switch in need of repair may result in unintentional operation and serious personal injury. Return tool to a Makita service center for proper repairs BEFORE further usage.

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided. To start the tool, depress the lock-off button and pull the switch trigger. Release the switch trigger to stop.

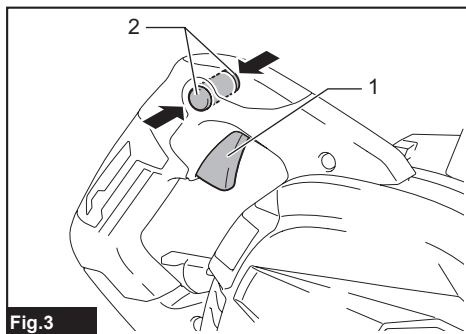


Fig.3

► 1. Switch trigger 2. Lock-off button

**NOTICE:** Do not pull the switch trigger hard without pressing in the lock-off button. This can cause switch breakage.

**CAUTION:** The tool starts to brake the circular saw blade rotation immediately after you release the switch trigger. Hold the tool firmly to respond the reaction of the brake when releasing the switch trigger. Sudden reaction can drop the tool off your hand and can cause a personal injury.



## Adjusting depth of cut

**CAUTION:** After adjusting the depth of cut, always tighten the lever securely.

Loosen the lever and move the base up or down. At the desired depth of cut, secure the base by tightening the lever.

For cleaner, safer cuts, set cut depth so that no more than one blade tooth projects below workpiece. Using proper cut depth helps to reduce potential for dangerous KICKBACKS which can cause personal injury.

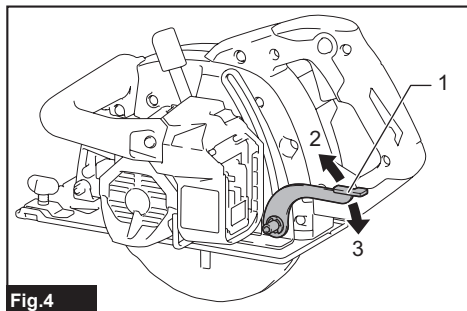


Fig.4

► 1. Lever 2. Loosen 3. Tighten

## Sighting

Place the alignment point of the base on your intended cutting line on the workpiece.

The sight window in the base makes it easy to check the distance between the front edge of the circular saw blade and the workpiece whenever the circular saw blade is set to the maximum depth of cut.

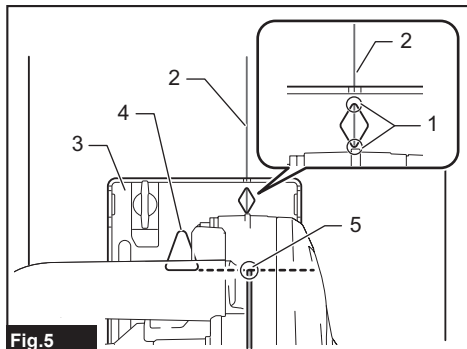


Fig.5

► 1. Alignment point 2. Cutting line 3. Base 4. Sight window 5. Front edge of the circular saw blade

## Lighting the lamp

**CAUTION:** Do not look in the light or see the source of light directly.

To turn on the lamp without running the tool, pull the switch trigger without pressing the lock-off button. To turn on the lamp with the tool running, press and hold the lock-off button and pull the switch trigger. The lamp goes out 10 seconds after releasing the switch trigger.

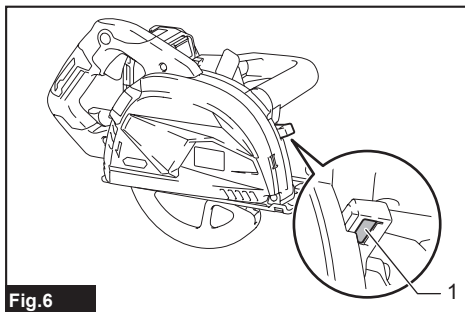


Fig.6

► 1. Lamp

**NOTE:** Use a dry cloth to wipe the dirt off the lens of the lamp. Be careful not to scratch the lens of lamp, or it may lower the illumination.

## Dust case

**CAUTION:** Do not touch metal chips and the dust case with bare hands immediately after the operation. They may be extremely hot and could burn your skin.

**CAUTION:** Do not cut the material on which thinner, gasoline, grease, or other chemicals are applied. The metal chips of such materials can damage the dust case and result in breakage which can cause personal injury.

**CAUTION:** Wear eye protection or goggle when emptying the dust case.

Metal chips are collected into the dust case. Periodically dump the metal chips before the metal chips become visible through the sight window.

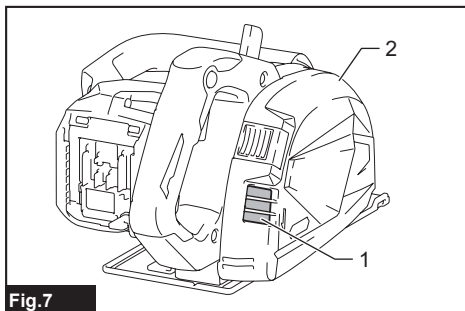
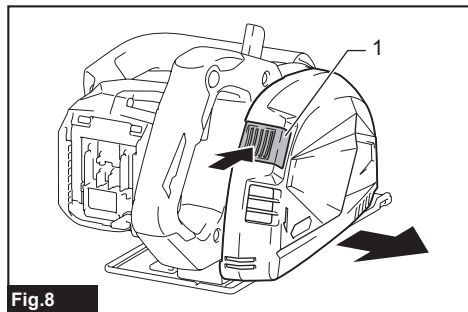


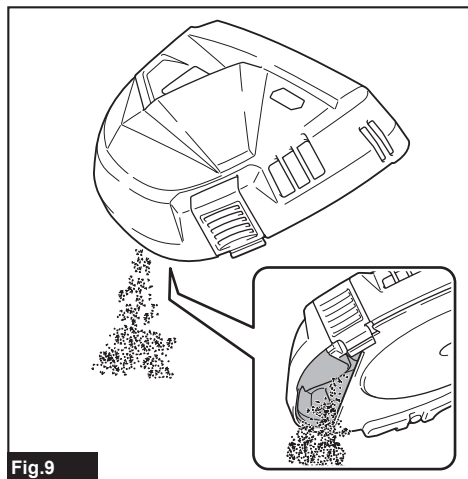
Fig.7

► 1. Sight window 2. Dust case

Push the latch button on the dust case to remove the dust case. Dump the metal chips while the inside of the dust case faces downward.

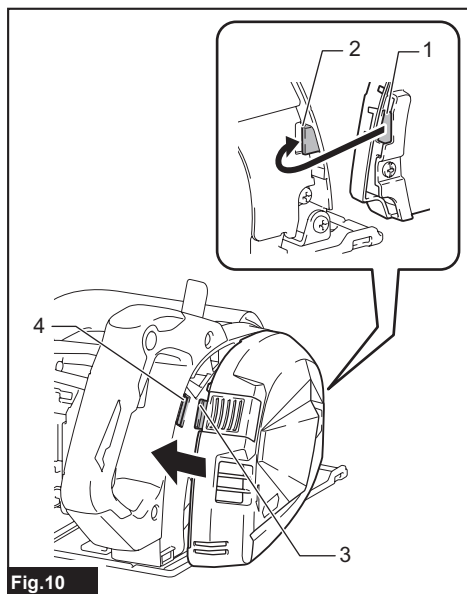


► 1. Latch button

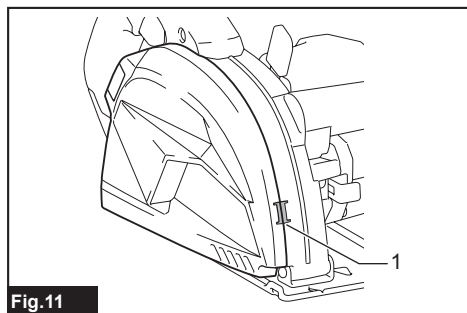


After dumping the metal chips, set the dust case. Align the hole on the dust case with the hook on the tool.

At this time, align the "I" marking as illustrated so that you can set the dust case in the proper position. Then, insert the hook on the latch button to the hole on the tool.



► 1. Hole on the dust case 2. Hook on the tool 3. Hook on the latch button 4. Hole on the tool



► 1. "I" marking

**NOTICE:** Make sure that each hook is secured with the holes.

## Electric brake

This tool is equipped with an electric blade brake. If the tool consistently fails to quickly stop the circular saw blade after switch trigger released, have tool serviced at a Makita service center.

**CAUTION:** The blade brake system is not a substitute for blade guard. NEVER USE TOOL WITHOUT A FUNCTIONING BLADE GUARD. SERIOUS PERSONAL INJURY CAN RESULT.

## Electronic function

The tools equipped with electronic function are easy to operate because of the following feature(s).

### Soft start feature

Soft start because of suppressed starting shock.

### Constant speed control

Electronic speed control for obtaining constant speed. Possible to get fine finish, because the rotating speed is kept constant even under load condition.

## ASSEMBLY

**CAUTION:** Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

## Hex wrench storage

When not in use, store the hex wrench as shown in the figure to keep it from being lost.

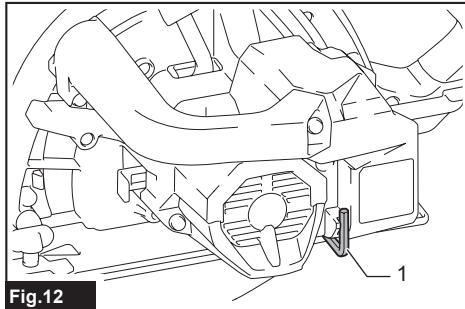


Fig.12

- 1. Hex wrench

## Installing or removing the circular saw blade

**CAUTION:** Use only the Makita wrench to install or remove the circular saw blade.

**CAUTION:** When installing the circular saw blade, be sure to tighten the bolt securely.

**CAUTION:** Be sure the circular saw blade is installed with teeth pointing up at the front of the tool.

1. Remove the dust case.
2. Press the shaft lock fully so that the circular saw blade cannot revolve and use the hex wrench to loosen the hex bolt.

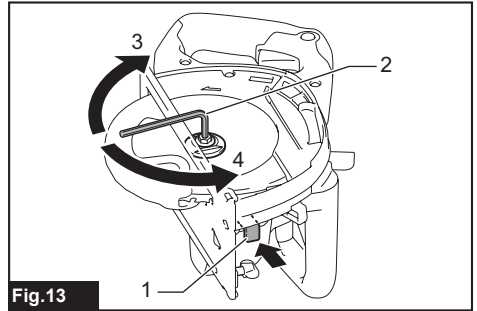


Fig.13

- 1. Shaft lock 2. Hex wrench 3. Tighten 4. Loosen

3. Remove the hex bolt, outer flange and circular saw blade.

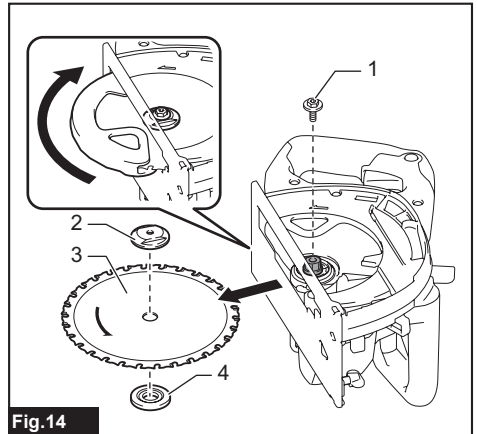


Fig.14

- 1. Hex bolt 2. Outer flange 3. Circular saw blade 4. Inner flange

4. To install the circular saw blade, follow the removal procedure in reverse.

5. After installing the circular saw blade, set the dust case again.

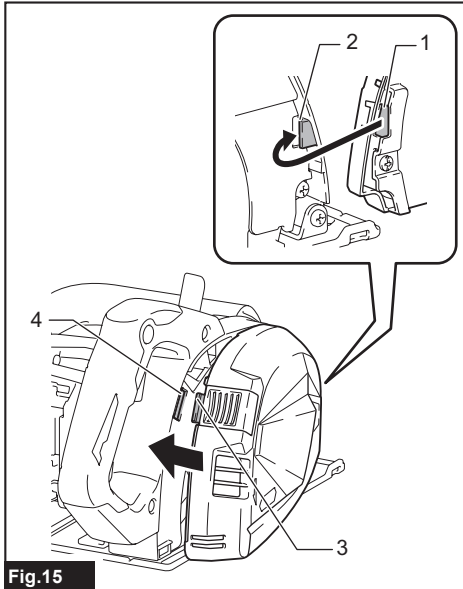


Fig. 15

- 1. Hole on the dust case 2. Hook on the tool 3. Hook on the latch button 4. Hole on the tool

**⚠ WARNING:** BE SURE TO TIGHTEN THE HEX BOLT SECURELY. Also be careful not to tighten the bolt forcibly. Slipping your hand from the hex wrench can cause a personal injury.

**⚠ WARNING:** If the inner flange is removed, be sure to install it on the spindle. When installing, choose a correct side on which protrusion fits into the circular saw blade hole perfectly. Mounting the circular saw blade on the wrong side can result in the dangerous vibration.

## For tool with the inner flange for other than 15.88 mm hole-diameter saw blade

The inner flange has a certain diameter protrusion on one side of it and a different diameter protrusion on the other side. Choose a correct side on which protrusion fits into the saw blade hole perfectly. Mount the inner flange onto the mounting shaft so that the correct side of protrusion on the inner flange faces outward and then place saw blade and outer flange.

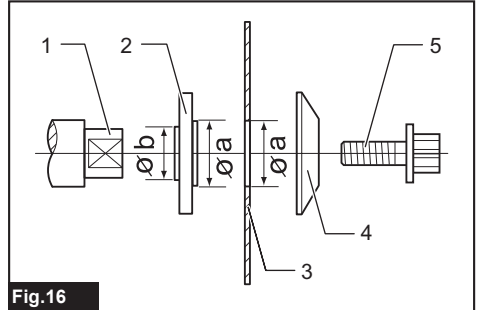


Fig. 16

- 1. Mounting shaft 2. Inner flange 3. Circular saw blade 4. Outer flange 5. Hex bolt

**⚠ WARNING:** BE SURE TO TIGHTEN THE HEX BOLT CLOCKWISE SECURELY. Also be careful not to tighten the bolt forcibly. Slipping your hand from the hex wrench can cause a personal injury.

**⚠ WARNING:** Make sure that the protrusion "a" on the inner flange that is positioned outside fits into the saw blade hole "a" perfectly. Mounting the blade on the wrong side can result in the dangerous vibration.

## For tool with the inner flange for a 15.88 mm hole-diameter saw blade (country specific)

Mount the inner flange with its recessed side facing outward onto the mounting shaft and then place circular saw blade (with the ring attached if needed), outer flange and hex bolt.

### For tool without the ring

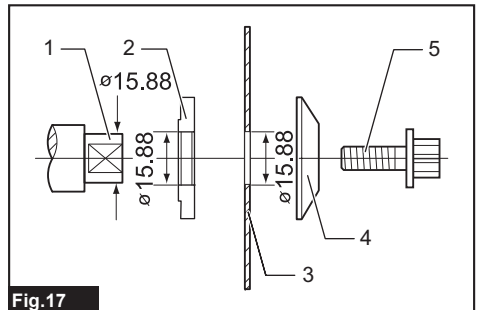


Fig. 17

- 1. Mounting shaft 2. Inner flange 3. Circular saw blade 4. Outer flange 5. Hex bolt

## For tool with the ring

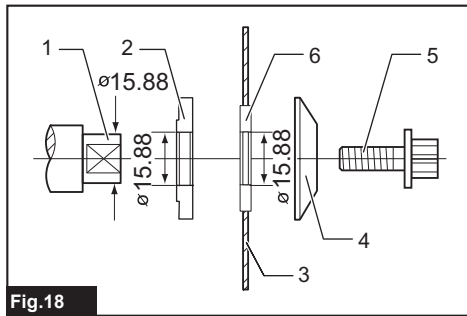


Fig. 18

- 1. Mounting shaft 2. Inner flange 3. Circular saw blade 4. Outer flange 5. Hex bolt 6. Ring

**⚠ WARNING: BE SURE TO TIGHTEN THE HEX BOLT CLOCKWISE SECURELY. Also be careful not to tighten the bolt forcibly. Slipping your hand from the hex wrench can cause a personal injury.**

**⚠ WARNING: If the ring is needed to mount the blade onto the spindle, always be sure that the correct ring for the blade's arbor hole you intend to use is installed between the inner and the outer flanges. Use of the incorrect arbor hole ring may result in the improper mounting of the blade causing blade movement and severe vibration resulting in possible loss of control during operation and in serious personal injury.**

## Blade guard cleaning

When changing the circular saw blade, make sure to also clean the upper and lower guards of accumulated metal chips as discussed in the section for maintenance. Such efforts do not replace the need to check lower guard operation before each use.

## OPERATION

This tool is intended to cut mild steel only. Refer to our website or contact your local Makita dealer for the correct circular saw blades to be used for the material to be cut.

**⚠ CAUTION: Always wear eye protection or goggles before operation.**

**⚠ CAUTION: Be sure to move the tool forward in a straight line gently.** Forcing or twisting the tool will result in overheating the motor and dangerous kickback, possibly causing severe injury.

**⚠ CAUTION: Never twist or force the tool in the cut.** This may cause motor overload and/or a dangerous kickback, resulting in serious injury to the operator.

**⚠ CAUTION: Always use the circular saw blades appropriate for your job.** The use of inappropriate circular saw blades may cause a poor cutting performance and/or present a risk of personal injury.

**⚠ CAUTION: Do not use a deformed or cracked circular saw blade. Replace it with a new one.**

## Checking blade guard function

Remove the battery cartridge and the dust case. Retract the lower guard manually to the end and release it. The lower guard is properly functioning if;

- it is retracted above the base without any hindrance and;
- it automatically returns and contacts with the stopper.

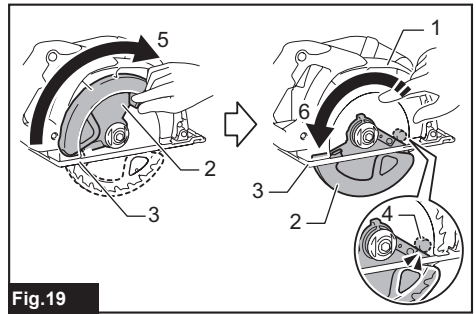


Fig. 19

- 1. Upper guard 2. Lower guard 3. Base 4. Stopper 5. Open 6. Close

If the lower guard is not functioning properly, check if metal chips are accumulated inside of the upper and lower guards. If the lower guard is not functioning properly even after removing metal chips, have your tool serviced at a Makita service center.

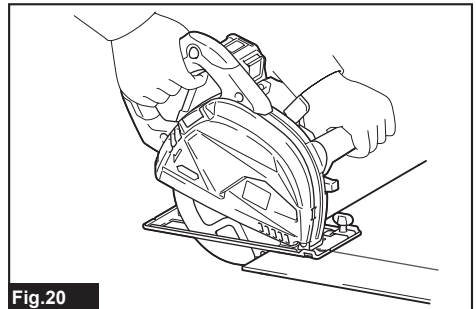


Fig. 20

Hold the tool firmly. The tool is provided with both a front and rear handle. Use both to best grasp the tool. If both hands are holding the tool, they cannot be cut by the circular saw blade. Set the base on the workpiece to be cut without the circular saw blade making any contact. Then turn the tool on and wait until the circular saw blade attains full speed. Now simply move the tool forward over the workpiece surface, keeping it flat and advancing smoothly until the cutting is completed. To get clean cuts, keep your cutting line straight and your speed of advance uniform. If the cut fails to properly follow your intended cut line, do not attempt to turn or force the tool back to the cut line. Doing so may bind the circular saw blade and lead to dangerous kickback and possible serious injury. Release switch, wait for the circular saw blade to stop and then withdraw tool. Realign tool on new cut line, and start cut again. Attempt to avoid positioning which exposes operator to chips and particles being ejected from the tool. Use eye protection to help avoid injury.

**CAUTION:** Do not stack materials when cutting them.

**CAUTION:** Do not cut hardened steel, wood, plastics, concrete, tile, etc. Cut only mild steel and stainless steel with a suitable circular saw blade.

**CAUTION:** Do not touch the circular saw blade, workpiece or cutting chips with bare hands immediately after cutting. They may be extremely hot and could burn your skin.

**CAUTION:** If the tool is operated continuously until the battery cartridge has discharged, allow the tool to rest for 15 minutes before proceeding with a fresh battery.

**NOTE:** When making a miter cuts etc., sometimes the lower guard does not move easily. At that time, use the retracting lever to raise the lower guard for starting cut and as soon as blade enters the material, release the retracting lever.

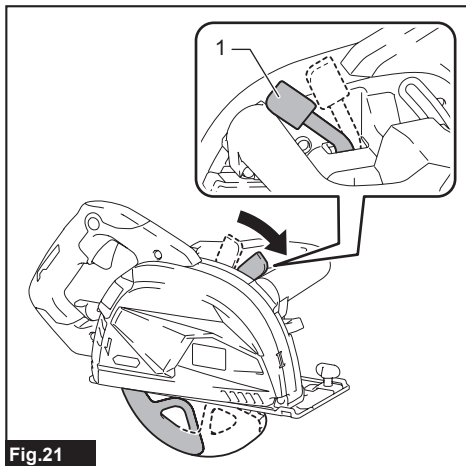


Fig.21

► 1. Retracting lever

## Rip fence (Guide rule)

### Country specific

**CAUTION:** Make sure that the rip fence is securely installed in the correct position before use. Improper attachment may cause dangerous kickback.

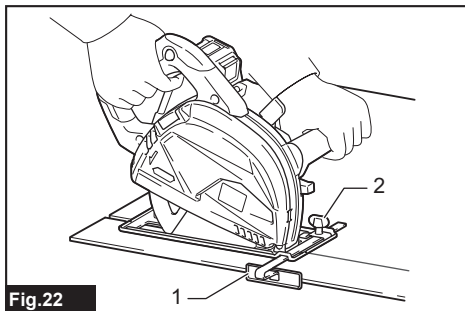


Fig.22

► 1. Rip fence (Guide rule) 2. Clamping screw

The handy rip fence allows you to do extra-accurate straight cuts. Simply slide the rip fence up snugly against the side of the workpiece and secure it in position with the clamping screw on the front of the base. It also makes repeated cuts of uniform width possible.

## MAINTENANCE

**CAUTION:** Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

**CAUTION:** Clean out the upper and lower guards to ensure there is no accumulated metal chips which may impede the operation of the lower guarding system. A dirty guarding system may limit the proper operation which could result in serious personal injury. **When using compressed air to blow metal chips out of the guards, wear a proper eye and breathing protection.**

**CAUTION:** After each use, clean up the inside of the dust case and wipe off the metal chips on the tool. Fine metal chips may come inside the tool and cause malfunction or a fire.

**NOTICE:** Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

## Inspecting the circular saw blade

- **Check the circular saw blade carefully for cracks or damage before and after each use. Replace a cracked or damaged circular saw blade immediately.**
- **Replace with a new circular saw blade as soon as it no longer cuts effectively.** Continuing to use a dull circular saw blade may cause a dangerous kickback and/or motor overload.
- **Circular saw blades for metal cutter cannot be re-sharpened.**

## OPTIONAL ACCESSORIES

**⚠ CAUTION:** These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Carbide-tipped circular saw blades
- Rip fence (Guide rule)
- Clamping screw
- Hex wrench
- Safety goggles
- Makita genuine battery and charger

**NOTE:** Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.



**Makita Europe N.V.** Jan-Baptist Vinkstraat 2,  
3070 Kortenberg, Belgium

**Makita Corporation** 3-11-8, Sumiyoshi-cho,  
Anjo, Aichi 446-8502 Japan

[www.makita.com](http://www.makita.com)

885965-221 EN 20211202
------------------------------