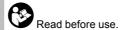
#### **INSTRUCTION MANUAL**



# Cordless Drywall Saw DSD180





#### **ECIFICATIONS**

Model:		DSD180		
Length of stroke		61	6 mm	
Strokes per minute		0 - 6,000 min <sup>-1</sup>		
Maximum cutting capacities	Drywall	30	30 mm	
	Wood	15	mm	
Rated voltage		D.C. 18 V		
Standard battery cartridges		BL1815N, BL1820, BL1820B	BL1830, BL1830B, BL1840, BL1840B, BL1850, BL1850B, BL1860B	
Overall length		258 mm	263 mm	
Net weight		1.7 kg	1.9 kg	

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications and battery cartridge may differ from country to country.
- Weight, with battery cartridge, according to EPTA-Procedure 01/2003

#### Symbols

The following show the symbols used for the equipment. Be sure that you understand their meaning before use.



Read instruction manual



Only for EU countries Do not dispose of electric equipment or battery pack together with household waste

In observance of the European Directives, on Waste Electric and Electronic Equipment and Batteries and Accumulators and Waste Batteries and Accumulators and their implementation in accordance with national laws, electric equipment and batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

#### Intended use

This tool is intended for plunge-cutting of a drywall. Wood can also be cut by installing a suitable saw blade.

#### Noise

The typical A-weighted noise level determined according to EN60745-2-11:

Sound pressure level  $(L_{nA})$ : 79 dB(A)

Uncertainty (K): 3 dB(A)

The noise level under working may exceed 80 dB (A).

**WARNING:** Wear ear protection.

#### Vibration

The vibration total value (tri-axial vector sum) determined according to EN60745-2-11:

Work mode: cutting drywall (thickness 30 mm)

Vibration emission (a<sub>h</sub>): 2.5 m/s<sup>2</sup>

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

Work mode: cutting chip board (thickness 15 mm)

Vibration emission (a<sub>h</sub>): 5.0 m/s<sup>2</sup> Uncertainty (K): 1.5 m/s<sup>2</sup>

NOTE: The declared vibration emission value has been measured in accordance with the standard test method and may be used for comparing one tool with another.

NOTE: The declared vibration emission value may also be used in a preliminary assessment of exposure.

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

**AWARNING:** 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 EU declaration of conformity is included as Annex A to this instruction manual.

#### SAFETY WARNINGS

#### General power tool safety warnings

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

# Save all warnings and instructions for future reference.

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

#### Work area safety

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

#### **Electrical Safety**

- 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.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 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.
- 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.
- 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.

#### **Personal Safety**

- 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.
- 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.
- 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.
- 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.

- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 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.
- 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.

#### Power tool use and care

- 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.
- 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.
- 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.
- 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.
- 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.

#### Battery tool use and care

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

#### Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- Follow instruction for lubricating and changing accessories.
- Keep handles dry, clean and free from oil and grease.

#### Cordless drywall saw safety warnings

- Hold power tool by insulated gripping surfaces, when performing an operation where
  the cutting accessory may contact hidden
  wiring. Cutting accessory contacting a "live"
  wire may make exposed metal parts of the power
  tool "live" and could give the operator an electric
  shock.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- Always use safety glasses or goggles.
   Ordinary eye or sun glasses are NOT safety glasses.
- 4. Avoid cutting nails. Inspect workpiece for any nails and remove them before operation.
- 5. Do not cut oversize workpiece.
- Check for the proper clearance beyond the workpiece before cutting so that the blade will not strike the floor, workbench, etc.
- 7. Hold the tool firmly.
- Make sure the blade is not contacting the workpiece before the switch is turned on.
- 9. Keep hands away from moving parts.
- Do not leave the tool running. Operate the tool only when hand-held.
- Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.
- Do not touch the blade or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
- Do not operate the tool at no-load unnecessarily.
- Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.
- Always use the correct dust mask/respirator for the material and application you are working with.

#### 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

- 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 battery cartridge.
- If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- 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.

- Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
- 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. Be careful not to drop or strike battery.
- 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. Follow your local regulations relating to disposal of battery.

#### SAVE THESE INSTRUCTIONS.

**ACAUTION:** 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

- Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- 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.
- Charge the battery cartridge if you do not use it for a long period (more than six months).

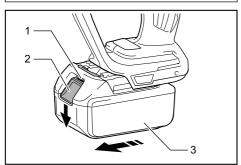
# FUNCTIONAL DESCRIPTION

**ACAUTION:** 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

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

**ACAUTION:** 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.



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

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

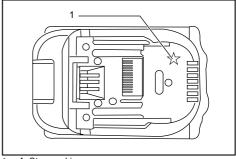
To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

**ACAUTION:** 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.

#### **Battery protection system**

#### Lithium-ion battery with star marking



1. Star marking

Lithium-ion batteries with a star marking are equipped with a protection system. This system automatically cuts off power to the tool to extend battery life.

The tool will automatically stop during operation if the tool and/ or battery are placed under one of the following conditions:

#### Overloaded:

The tool is operated in a manner that causes it to draw an abnormally high current.

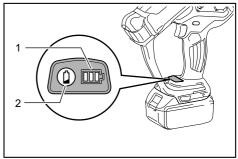
In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

If the tool does not start, the battery is overheated. In this situation, let the battery cool before turning the tool on again.

#### Low battery voltage:

The remaining battery capacity is too low and the tool will not operate. In this situation, remove and recharge the battery.

# Indicating the remaining battery capacity



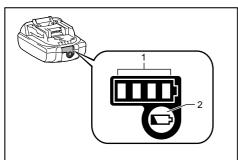
1. Battery indicator 2. Check button

Press the check button to indicate the remaining battery capacities. The battery indicators correspond to each battery.

Battery indicator status		
On	Off	Remaining battery capacity
		50% or more
		20% - 50%
		Less than 20%

# Indicating the remaining battery capacity

Only for battery cartridges with "B" at the end of the model number



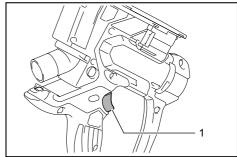
▶ 1. Indicator lamps 2. Check button

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

Indicator lamps			Remaining
Lighted	Off	Blinking	capacity
			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.

#### Switch action

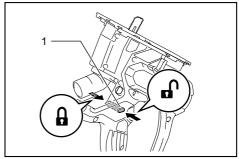


▶ 1. Switch trigger

▲ CAUTION: 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.

To start the tool, simply pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

The trigger can be locked off to prevent it from being pulled accidentally. To lock the trigger off, press the button from the side with  $\bigcap$  marking. To unlock, press the button from the side with  $\bigcap$  marking.

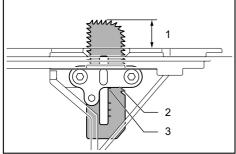


▶ 1. Lock-off button

**ACAUTION:** Always lock the tool off when carrying or suspending the operation.

#### Adjusting depth of cut

The cutting depth corresponds with the scale on the blade. Loosen the screw on the blade holder until the blade can move freely. Align the scale on the blade with the bottom line of the blade holder. Then tighten the screws.



1. Cutting depth 2. Bottom line of the blade holder
 3. Scale on the blade

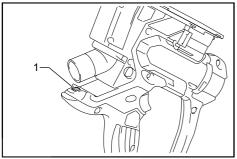
The maximum cutting depth depends on the type of the saw blade. Always use the saw blade designed for cutting the working material.

Type of saw blade	Max. cutting depth	
For drywall	30 mm	
For wood	15 mm	

#### **LED light**

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

Pull the switch trigger to light up the lamp. The lamp keeps on lighting while the switch trigger is being pulled. The lamp goes out approximately 10 seconds after releasing the trigger.



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.

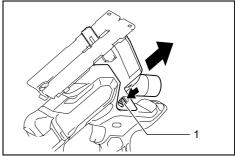
#### **ASSEMBLY**

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

#### Removing the dust collector

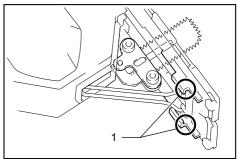
**ACAUTION:** Never operate the tool without the dust collector. Dust may come into your eyes and cause eye injury.

To remove the dust collector, hold the tool handle and pull back the tabs on the tool. Be sure to pull the tabs on the both sides at the same time.



1. Tab

When installing, align the dust collector's edge with the groove on the base.



▶ 1. Groove

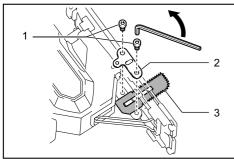
#### Replacing drywall saw blade

ACAUTION: Always clean out all chips or foreign matter adhering to the blade and/or blade holder. Failure to do so may cause insufficient tightening of the blade, resulting in a serious personal injury.

**ACAUTION:** Do not touch the blade or the workpiece immediately after operation. They may be extremely hot and could burn your skin.

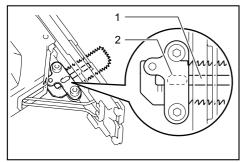
**ACAUTION:** Make sure that the blade is properly secured. Insufficient tightening of the blade may cause blade breakage or serious personal injury.

- 1. Remove the dust collector.
- 2. Remove the bolts on the blade holder with the hex wrench.



1. Bolts 2. Blade holder 3. Blade

3. Set a new blade as shown in the figure. Make sure that the curved edge of the blade points forward. Fit the protrusion of the blade holder into the slot on the blade.



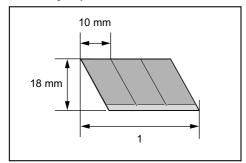
▶ 1. Slot 2. Protruded portion (opposite side)

- 4. Adjust the cutting depth then tighten the bolts.
- 5. Attach the dust collector.

#### Installing snap-off blade

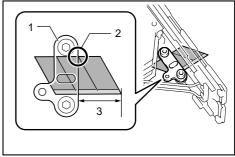
**A**CAUTION: Always use the snap-off blade with designated length, width, and thickness. An inappropriately installed snap-off blade can be broken. A broken blade can fly off and cause a personal injury.

A snap-off blade can also be used with this tool. Use 3 segments of 18 mm wide snap-off blade with 0.5 mm thickness. The maximum cutting depth is 12.5 mm when cutting a drywall.



1. Three segments of snap-off blade

- 1. Loosen the bolts on the blade holder. Turn the blade holder so that its protrusion faces outward.
- 2. Insert the snap-off blade so that the sharp edge faces forward.
- 3. Secure the snap-off blade at the position where the end of the first segment comes to the edge of blade holder as illustrated.

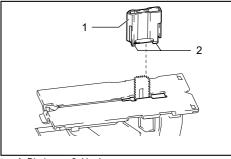


 1. Blade holder 2. End of the first segment of snapoff blade 3. Allowable cutting length

#### Attaching blade cap

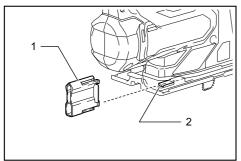
**ACAUTION:** Always attach the blade cap when tool is not used. A bare blade may cause personal injury or damage to the blade itself.

Pass the blade cap through the blade until the hook catches the base cover. Note the direction of the blade cap when attaching; the wider hook comes front side. When removing the blade cap, lift it while pinching the both sides.



▶ 1. Blade cap 2. Hook

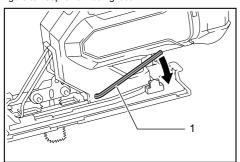
During operation, insert the blade cap to the hook on the base as illustrated until it clicks.



1. Blade cap 2. Hook

#### Hex wrench storage

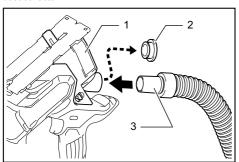
When not in use, store the hex wrench as shown in the figure to keep it from being lost.



▶ 1. Hex wrench

#### Connecting a vacuum cleaner

Connect a Makita vacuum cleaner for clean operation. Remove the rubber cap on the dust collector and connect the vacuum cleaner's hose to the nozzle of the dust collector.



 1. Dust collector 2. Rubber cap 3. Vacuum cleaner hose

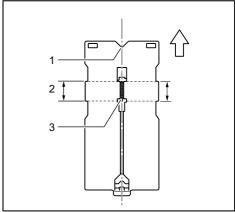
#### **OPERATION**

ACAUTION: Hold the tool firmly.

**ACAUTION:** Always hold the base flush with the workpiece during cutting. Never perform a curved cut. Failure to do so may cause blade breakage, resulting in a serious injury.

The V-notch and convexed portion in the base cover of the tool indicate the position of the blade. Always check the blade position when cutting.

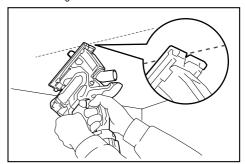
#### The base cover of the tool



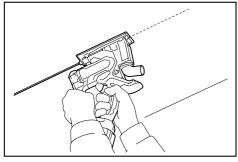
1. V-notch 2. Convexed portion 3. Blade

**NOTE:** For accurate cutting, it is recommended to draw cutting lines on the workpiece beforehand.

1. Place the tip of the blade on the start line. Tilt the tool so that the front edge of the base touches the workpiece. Align the bottom of the V-notch in the front edge with the cutting line.



2. Slowly pull the trigger without the blade making any contact with the workpiece. When the blade attains full speed, push the tool toward the workpiece. As the blade pierces the workpiece, make the whole surface of the base cover contact with the workpiece.



**3.** Move the tool straight forward until the cutting finishes.

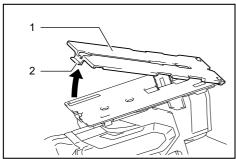
#### **MAINTENANCE**

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

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

#### Cleaning the base cover

Clean off the cutting chips and dust accumlated on the base cover. Lift the base cover while pulling the hook on the back end to remove. Follow the removal procedure in reverse when installing.



▶ 1. Base cover 2. Hook

**ACAUTION:** Pay attention to the tip of the blade and cutting chips when removing the base cover.

**NOTICE:** Perform the cleaning periodically. Dirty base cover may damage or deface the working surface.

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.

# OPTIONAL ACCESSORIES

**ACAUTION:** 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.

- · Drywall saw blade
- Wood saw blade
- Dust box
- Dust collector
- Hex wrench
- Hook
- · 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.

Mak

Mak

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> 885512-228 EN 20160205