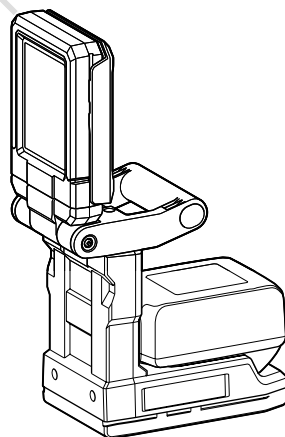


INSTRUCTION MANUAL
MANUEL D'INSTRUCTION
MANUAL DE INSTRUCCIONES



Cordless Magnetic Light Lampe Magnetique sans fil Linterna Magnética Inalámbrica

DML819



IMPORTANT: Read Before Using.

IMPORTANT : Lire avant usage.

IMPORTANTE: Lea antes de usar.

SPECIFICATIONS

Model:		DML819
Rated voltage		D.C. 18 V
Luminous flux (High / Medium / Low)		1,200 lm / 800 lm / 500 lm
Operating time (High / Medium / Low)	with BL1860B	9 hours / 14 hours / 22 hours 
Dimensions (without battery cartridge) (L x W x H)	Folding position	172 mm x 91 mm x 161 mm (6-3/4" x 3-5/8" x 6-3/8")
	Operating position (Maximum height)	172 mm x 91 mm x 284 mm (6-3/4" x 3-5/8" x 11-1/8")
Net weight (without battery cartridge and magnet cover)		0.88 kg (1.9 lbs)

- 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.
- Operating times are approximate and may differ depending on battery type, charging status, and usage condition.

Applicable battery cartridge and charger

Battery cartridge	BL1815N / BL1820B / BL1830B / BL1840B / BL1850B / BL1860B
Charger	DC18RC / DC18RD / DC18SD / DC18SE / DC18SF / DC18SH / DC18WC

- 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.

SAFETY WARNINGS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
WARNING – When using this appliance, following precautions should always be followed:

1. To reduce the risk of injury, close supervision is necessary when a product is used near children.
2. Do not contact hot parts to reduce the risk of burns. The lens may be extremely hot during use and soon after using.
3. Only use attachments recommended or sold by the manufacturer.
4. Do not use the appliance in the rain or the snow.
5. To reduce the risk of electrical shock, do not put the appliance in water or other liquid. Do not place or store the appliance where it can fall or be pulled into a tub or sink.
6. **WARNING:** To reduce the risk of injury, do not stare at the operating lamp, or do not expose

- the light to eyes. Serious eye injury may occur.
7. **WARNING:** Do not use magnet for horizontal overhead mounting.
 8. To reduce the risk of fire, keep away from combustible materials while in operation.
 9. The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.
 10. The controlgear of this luminaire is a non-replaceable component; when the controlgear reaches its end of life the whole luminaire shall be replaced.
 11. Do not direct the light toward other persons.
 12. If the appliance has vents, do not cover or block the vents. Keep the vents clean for cooling. Clogged vents can cause fires.
 13. Do not use the carrying handle any other purpose than carrying the appliance, such as hoisting.
 14. Be careful not to hit your hand placed on the carrying handle when inserting the battery cartridge.
 15. Place the appliance out of the reach of children.

16. **When using the appliance where the magnetic surface cannot be attached, place the appliance on a level and stable surface.** Otherwise the appliance may topple and causing a falling accident.
17. **If the appliance falls off, be sure to check for any damage or safety issues before use.**
18. **Do not use the appliance in strong winds.** Otherwise a falling accident may occur.
19. **Do not use the appliance in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
20. **Do not expose the appliance to sparks or corrosive atmosphere, etc.**
21. **When the appliance is not in use, always remove the battery cartridge from the appliance.**
22. **Store the appliance indoors.**
23. **Do not wash the appliance in water.**
24. **Keep the tags and nameplate on the product, which contains important information.** If it cannot be read or lost, please contact MAKITA Service Center for free replacement.
25. **Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance.** Such preventive safety measures reduce the risk of starting the appliance accidentally.
26. **Do not modify or attempt to repair the appliance or the battery pack except as indicated in the instructions for use and care.**
27. **Do not handle the appliance roughly, such as dropping or hitting.** Doing so may cause malfunction or injury.
28. **Do not handle charger and charger terminals with wet hands.**
29. **Do not charge the battery outdoors.**
30. **Do not use the appliance near the heart pacemakers.** Magnets can interfere with the function of heart pacemakers.
31. **Do not bring the magnetic surface closer to precision equipment such as electronic device, clock, watch, or IC card.** The magnetic force may affect them.
32. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the light in unexpected situations.
33. **Do not use the appliance on a ladder or unstable support.** Stable footing on a solid surface enables better control of the appliance in unexpected situations.

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.



Do not stare at operating lamp.



Warning: Hot surface. Risk of burns. Do not touch until cooled.

V

volts



direct current

Safety warnings for battery-operated appliance

Battery-operated appliance use and care

1. **Prevent unintentional starting.** Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
2. **Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance.** Such preventive safety measures reduce the risk of starting the appliance accidentally.
3. **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.
4. **Use appliances only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
5. **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.
6. **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.
7. **Do not use a battery pack or appliance that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
8. **Do not expose a battery pack or appliance to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
9. **Follow all charging instructions and do not charge the battery pack or appliance 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.
10. **Have servicing performed by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the product is maintained.

11. Do not modify or attempt to repair the appliance or the battery pack except as indicated in the instructions for use and care.

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 appliance and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
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. Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.
11. 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.
12. When disposing the battery cartridge, remove it from the appliance and dispose of it in a safe place. Follow your local regulations relating to disposal of battery.

13. 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.
14. If the appliance is not used for a long period of time, the battery must be removed from the appliance.
15. 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.
16. Do not touch the terminal of the appliance immediately after use as it may get hot enough to cause burns.
17. Do not allow chips, dust, or soil stuck into the terminals, holes, and grooves of the battery cartridge. It may result in poor performance or breakdown of the appliance or battery cartridge.
18. Unless the appliance supports the use near high-voltage electrical power lines, do not use the battery cartridge near high-voltage electrical power lines. It may result in a malfunction or breakdown of the appliance or battery cartridge.
19. 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 appliance and charger.

NOTICE: Makita is not responsible for any accidents resulting from the use of non-genuine Makita batteries or batteries that have been modified. Genuine Makita batteries have been rigorously evaluated for compatibility with Makita tools and chargers, in line with applicable legislation and safety standards.

Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged. Always stop appliance operation and charge the battery cartridge when you notice less appliance power.
2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
3. 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.
4. When not using the battery cartridge, remove it from the appliance or the charger.
5. Charge the battery cartridge if you do not use it for a long period (more than six months).

SERVICE

1. This appliance service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

2. When servicing this appliance, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.
3. Do not incinerate this appliance, even if it is severely damaged. The batteries can explode in a fire. Dispose of the appliance in accordance with the local regulations.

FCC caution

For United States

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

PARTS DESCRIPTION

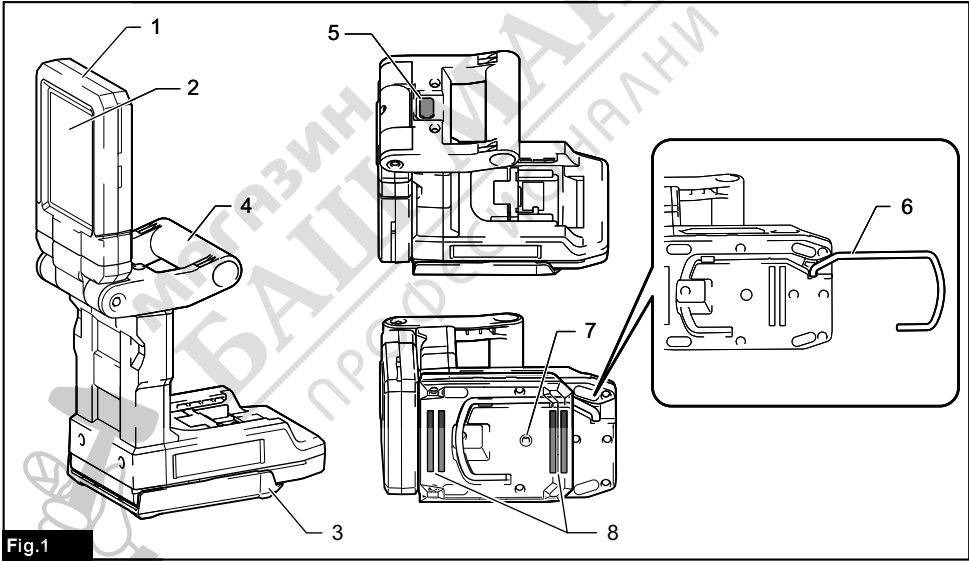


Fig.1

1	Light head	2	Lens	3	Magnet cover	4	Carrying handle
5	Power switch button	6	Hook	7	Screw hole (1/4")	8	Magnet

FUNCTIONAL DESCRIPTION

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

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 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.

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

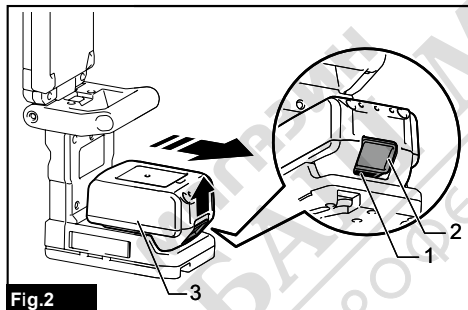


Fig.2

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

⚠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.

Indicating the remaining battery capacity

Only for battery cartridges with the indicator

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

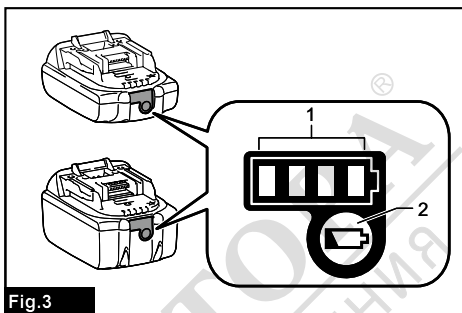


Fig.3

► 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.

Appliance / battery protection system

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

Overheat protection

When the appliance or battery is overheated, the appliance stops automatically. In this situation, let the appliance cool down before turning it on again.

Overdischarge protection

When the battery capacity becomes low, the LED lights go out except a part of LEDs. Later, the system automatically cuts off power. In this situation, remove the battery cartridge from the appliance and charge it.

Protections against other causes

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

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

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

You can rotate the light head up to 90° clockwise and up to 210° counterclockwise.

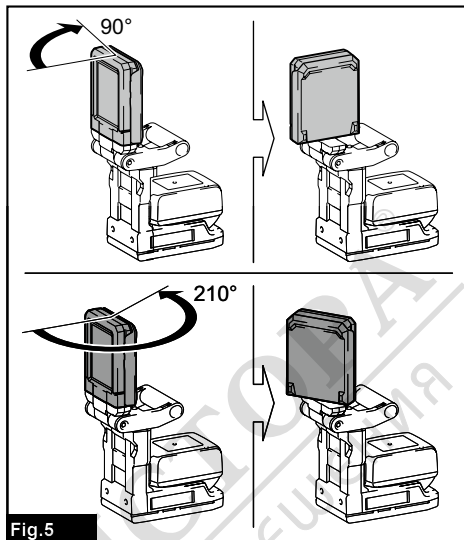


Fig.5

ASSEMBLY

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

Adjusting the angle of the light head

⚠CAUTION: Hold the appliance when adjusting the angle of the light head.

⚠CAUTION: Be careful not to pinch your fingers when adjusting the angle of the light head.

You can unfold the light head up to 180°.

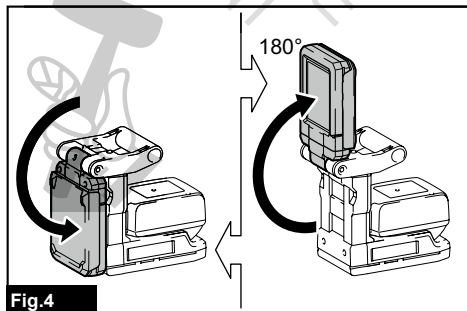


Fig.4

OPERATION

⚠WARNING: To reduce the risk of injury, do not stare at the operating lamp, or do not expose the light to eyes. Serious eye injury may occur.

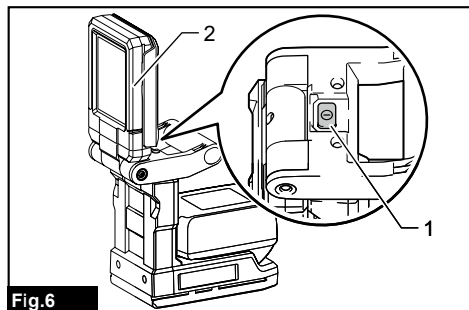
⚠WARNING: To reduce the risk of burns and fire, do not touch the light head, and keep it away from combustible materials while in operation.

NOTICE: Do not press the button forcibly. Otherwise a malfunction may occur.

Switch action

⚠CAUTION: Hold the appliance when pressing the power switch button.

To turn on the light, press the power switch button after opening the light head. The brightness changes every time you press the power switch button. The brightness cycles through high, medium, low, and off.



► 1. Power switch button 2. Light head

NOTE: You can also turn off the light by folding the light head with the luminous surface facing inward. To turn the light on again, press the power switch button after opening the light head.

Using with magnet

CAUTION: Remove any foreign substances attached to the magnetic surface before use. Otherwise, the magnetic force decreases and it may cause injury.

CAUTION: When using the magnets, attach the magnetic surface to a flat place. Then, make sure that the appliance is firmly fixed.

CAUTION: When using the appliance with the magnets, do not place your hand between the magnets and a metal surface. Your hand may get caught.

CAUTION: Do not put anything on the appliance when it is attached by magnets.

CAUTION: When detaching the magnetic surface, always hold the handle firmly.

CAUTION: When not using the appliance, such as storage, always mount the magnet cover on the bottom of the appliance. Failure to do so may cause unintended metal objects to adhere to the magnetic surface.

CAUTION: When attaching the magnets to a metal surface at a high location, tie the handle with a rope or strap to prevent the appliance from falling off.

NOTICE: If the magnet is attached to the material for a long period, the surface of the material may be damaged depending on the use conditions.

NOTICE: When detaching the magnetic surface, do not slide it. The surface to which the magnet attachment is attached may be damaged.

Slide and remove the magnet cover. The magnet cover can be stored in the back side of the light head. Then, attach the magnets to a metal surface.

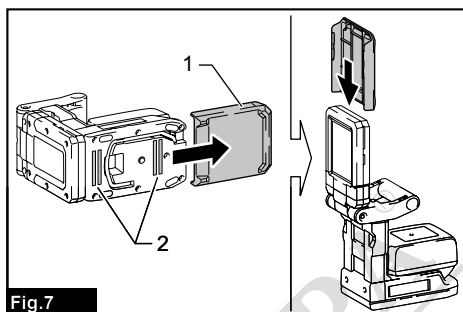


Fig.7

► 1. Magnet cover 2. Magnet

Using with hook

CAUTION: When hanging the appliance at a high location, tie the handle with a rope or strap to prevent the appliance from falling off.

CAUTION: Do not pull the appliance downward when it is hang.

Slide and remove the magnet cover, then turn the hook.

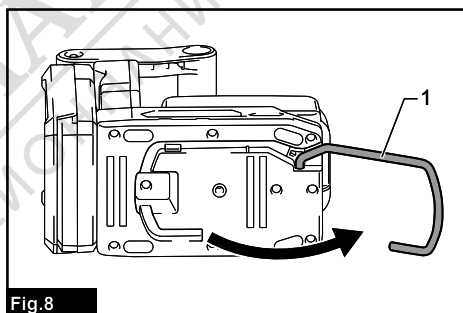


Fig.8

► 1. Hook

Hang the hook on a pipe (max. $\phi 50$ mm (2")).

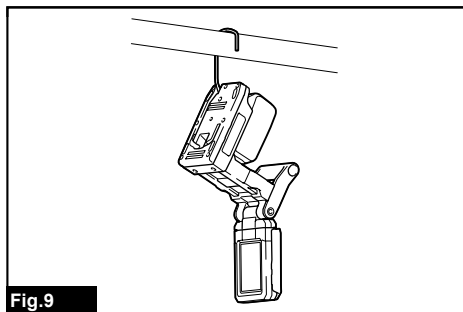


Fig.9

Using with vise

Optional accessory

CAUTION: Be sure to screw the adapter firmly into the screw hole on the bottom of the appliance when fastening the adapter to the appliance.

CAUTION: Be sure to tighten the fixing nut firmly when fastening the adapter to the vise.

CAUTION: Make sure that the vise is fixed securely after mounting the vise at your desired position.

NOTE: Please purchase the adapter separately. The vise and the adapter are sold individually.

1. Unscrew the thumb screw from the vise.
2. Screw the large-diameter end of the adapter into the vise.
3. Turn the fixing nut to secure the adapter to the vise.

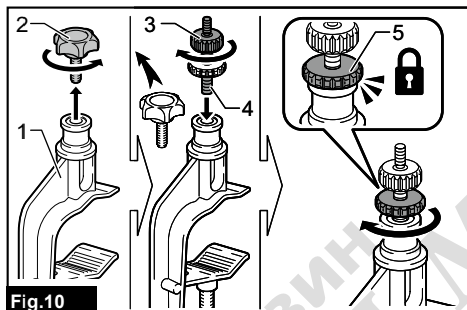


Fig.10

- 1. Vise 2. Thumb screw 3. Adapter 4. Large-diameter end 5. Fixing nut

4. Screw the other end of the adapter into the screw hole on the bottom of the appliance. Secure the adapter to the appliance.

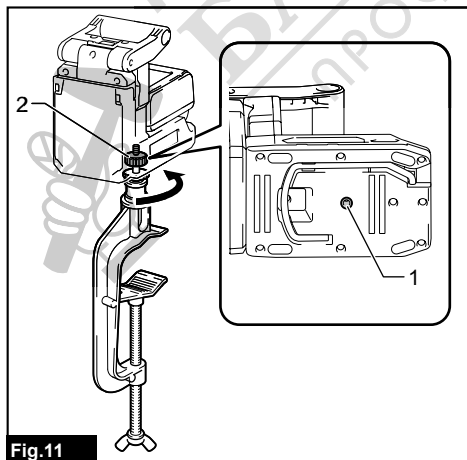


Fig.11

- 1. Screw hole 2. Adapter

5. Mount the vise at your desired position.

You can adjust the direction of the appliance by slightly loosening the fixing nut and turning the appliance. After adjusting the direction, tighten the fixing nut again.

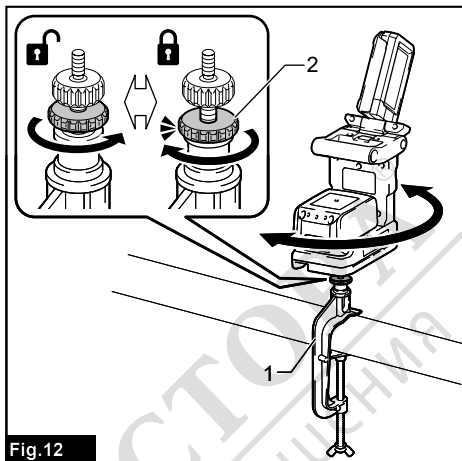


Fig.12

- 1. Vise 2. Fixing nut

MAINTENANCE

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

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

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

Cleaning

CAUTION: Do not wash the appliance in water.

From time to time, wipe off the outside (appliance body) of the appliance using a cloth dampened in soapy water.

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.

- Vise
- Adapter
- 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 LIMITED WARRANTY

Please refer to the annexed warranty sheet for the most current warranty terms applicable to this product. If annexed warranty sheet is not available, refer to the warranty details set forth at below website for your respective country.

United States of America: www.makitatools.com

Canada: www.makita.ca

Other countries: www.makita.com

