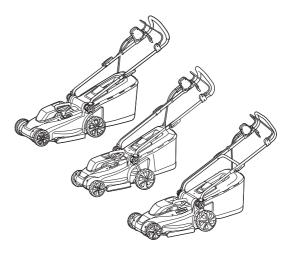
## **INSTRUCTION MANUAL**



## **Electric Lawn Mower**

ELM3320 ELM3720 ELM4120



DOUBLE INSULATION

Read before use.

## **SPECIFICATIONS**

Model:		ELM3320	ELM3720	ELM4120
No load speed		3,400 min <sup>-1</sup>		
Cutting height		20 mm - 55 mm		20 mm - 75 mm
Cutting width		330 mm	370 mm	410 mm
Part number of replacement mower blade		YA00000731	YA00000732	YA00000733
Dimensions (L x W x H)	During operation (with grass basket)	L: 1,040 mm to 1,230 mm W: 380 mm H: 870 mm to 1,110 mm	L: 1,140 mm to 1,330 mm W: 415 mm H: 890 mm to 1,120 mm	L: 1,255 mm to 1,470 mm W: 460 mm H: 955 mm to 1,230 mm
	When stored (without grass basket)	350 mm x 380 mm x 1,090 mm	335 mm x 415 mm x 1,090 mm	395 mm x 460 mm x 1,220 mm
Net weight		10.2 kg	11.6 kg	14.5 kg
Safety class		□/II		

- 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). The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

#### **Symbols**

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



Take particular care and attention. Read the instruction manual.



DOUBLE INSULATION



Danger; be aware of thrown objects. The distance between the tool and bystanders must be at least 15 m.



Wait until all machine components have completely stopped before touching them.



Keep the supply flexible cord away from the cutting blades.



Beware of sharp blades. Blades continue to rotate after the motor is switched off. Remove the plug from the machine before maintenance or if cord is damaged.



The noise of the machine is not more than 96 dB.



Keep hands and feet away. Do not operate mower unless the guards and attachments are in proper place.



Only for EU countries
Do not dispose of electric equipment
together with household waste material! In
observance of the European Directive, on
Waste Electric and Electronic Equipment
and its implementation in accordance with
national law, electric equipment that have
reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

#### Intended use

The machine is intended for lawn mowing. Do not use the machine for other purposes. Use of the machine for operations other than the intended use could result in a hazardous situation.

## Power supply

The tool should be connected only to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply. They are double-insulated and can, therefore, also be used from sockets without earth wire.

If the supply cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard

## For public low-voltage distribution systems of between 220 V and 250 V

Switching operations of electric apparatus cause voltage fluctuations. The operation of this device under unfavorable mains conditions can have adverse effects to the operation of other equipment. With a mains impedance equal or less than 0.425 Ohms (for ELM3720) or 0.427 Ohms (for ELM4120), it can be presumed that there will be no negative effects. The mains socket used for this device must be protected with a fuse or protective circuit breaker having slow tripping characteristics.

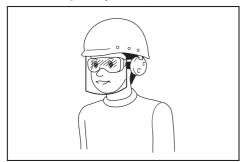
## **SAFETY WARNINGS**

## IMPORTANT SAFETY INSTRUCTIONS

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

## Save all warnings and instructions for future reference.

- Children should be supervised to ensure that they do not play with the mower.
- Never allow children or people unfamiliar with these instructions to use the mower. Local regulations can restrict the age of the operator.
- 3. Never operate the mower while people, especially children, or pets are nearby.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- 5. While operating the mower, always wear substantial footwear and long trousers. Do not operate the mower when barefoot or wearing open sandals. Avoid wearing clothing or jewelry that is loose fitting or that has hanging cords or ties. They can be caught in moving parts.
- 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.

 Before use, check the supply and power cord for signs of damage or aging. If the cord becomes damaged during use, disconnect the cord from the supply immediately. Do not touch the cord before disconnecting the supply. Do not use the mower if the cord is damaged or worn.

- Operate the mower only in daylight or in good artificial light.
- 9. Avoid operating the mower in wet grass.
- 10. Never operate the mower in the rain.
- 1. Always keep a firm hold on the handle.
- 12. Always be sure of your footing on slopes.
- 13. Walk, never run.
- Don't grasp the exposed cutting blades or cutting edges when picking up or holding the mower.
- Physical condition Do not operate mower while under the influence of drugs, alcohol, or any medication.
- Keep hands and feet away from rotating blades. Caution - Blades coast after the mower is switched off.
- 17. Use only the manufacturer genuine blades specified in this manual.
- Check the blades carefully for cracks or damage before operation. Replace cracked or damaged blades immediately.
- Be sure the area is clear of other people before mowing. Stop mower if anyone enters the area.
- Remove foreign matters such as rocks, wire, bottles, bones and large sticks from the work area before mowing to prevent personal injury or damage to the mower.
- Stop operation immediately if you notice anything unusual. Switch off the mower and unplug the power cord from the power supply. Then inspect the mower.
- 22. Never attempt to make wheel height adjustments while mower is running.
- 23. Release switch lever and wait for blade rotation to stop before crossing driveways, walks, roads, and any gravel-covered areas. Also unplug the power cord from the power supply if you leave the mower, reach to pick up or remove something out of your way, or for any other reason that may distract you from what you are doing.
- 24. Objects struck by the mower blade can cause severe injuries to persons. The lawn should always be carefully examined and cleared of all objects prior to each mowing.
- 25. If the mower strikes a foreign object, follow these steps:
  - Stop the mower, release the switch lever and wait until the blade comes to a complete stop.
     Unplug the power cord from the power
  - supply.

     Thoroughly inspect the mower for any
  - Thoroughly inspect the mower for any damage.
  - Replace the blade if it is damaged in any way. Repair any damage before restarting and continuing to operate the mower.
- Check the grass basket frequently for wear or deterioration. For storage, always make sure the grass basket is empty. Replace a worn grass basket with a new factory replacement for safety.
- Use extreme caution when reversing or pulling the mower towards you.

- 28. Stop the blade(s) if the mower has to be tilted for transportation when crossing surfaces other than grass, and when transporting the mower to and from the area to be used.
- Never operate the mower with defective 29. guards or shields, or without safety devices, for example deflectors and/or grass basket, in
- Switch on the mower carefully according to 30 instructions and with feet well away from the
- 31. Do not tilt the mower when switching on the motor, except if the mower has to be tilted for starting. In this case, do not tilt it more than absolutely necessary and lift only the part, which is away from the operator. Always ensure that both hands are in the operating position before returning the appliance to the around.
- 32. Do not start the mower when standing in front of the discharge opening.
- Do not put hands or feet near or under rotating 33. parts. Keep clear of the discharge opening at all times.
- 34. Do not transport the mower while the mower is turned on.
- 35. Stop the mower, and remove plug from the socket. Make sure that all moving parts have come to a complete stop
  - whenever you leave the mower,
  - before clearing blockages or unclogging chute
  - before checking, cleaning or working on the mower.
  - after striking a foreign object. Inspect the mower for damage and make repairs before restarting and operating the mower.
- 36. If the mower starts to vibrate abnormally (check immediately)
  - inspect for damage.
  - replace or repair any damaged parts,
  - check for and tighten any loose parts.
- Be careful during adjustment of the mower to prevent entrapment of the fingers between moving blades and fixed parts of the mower.
- Mow across the face of slopes, never up and down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
- 39. Do not wash with a hose; avoid getting water in motor and electrical connections.
- Check the blade mounting bolt at frequent 40. intervals for proper tightness.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 42. Take care as rotating one blade can cause other blades to rotate.
- Always allow the mower to cool down before 43. storing.
- When servicing the blades be aware that, even though the power source is switched off, the blades can still be moved.

- Replace worn or damaged parts for safety. Use only genuine replacement parts and accessories.
- 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.
- 47. Follow instruction for lubricating and changing accessories.
- 48. Keep handles dry, clean and free from oil and grease.
- 49. Check to make sure that the voltage and frequency of the power supply correspond to the specifications given on the identification plate. We recommend the use of a residual-current-operated circuit breaker (ground-fault circuit interrupter) with a tripping current of 30 mA or less, or an earth leakage current protector.
- This machine can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the machine in a safe way and understand the hazards involved. Cleaning and user maintenance shall not be made by children without supervision.

#### Residual risks

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product.

- Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
- 2 Injuries and damage to property due to broken application tools or the sudden impact of hidden objects during use.
- Danger of injury and property damage caused by 3. flying objects.

AWARNING: This product produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product.

## 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.

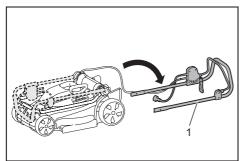
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

## **ASSEMBLY**

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

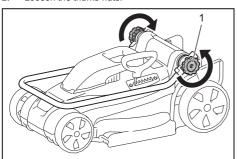
## Assembling the handle

1. Unload the upper handle from the main unit of the machine.



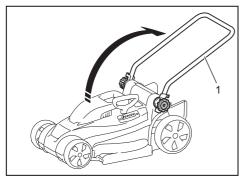
▶ 1. Upper handle

2. Loosen the thumb nuts.



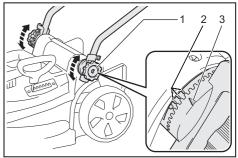
▶ 1. Thumb nut

**3.** Widen the handle outside a little, and then raise the handle.



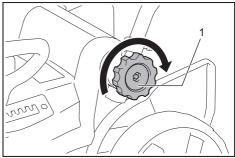
▶ 1. Handle

4. Adjust the handle height by aligning the arrow with the mark.



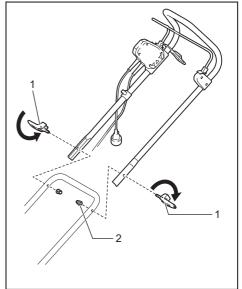
1. Thumb nut 2. Mark 3. Arrow

5. Tighten the thumb nuts.



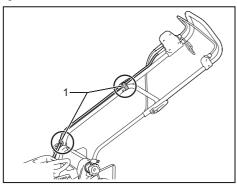
▶ 1. Thumb nut

**6.** Attach the upper handle by inserting the levers from the outside of the handle, and then tighten the nuts with the wrench to secure the handle.



▶ 1. Lever 2. Nut

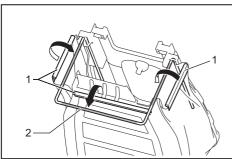
**7.** Secure the cords with the clamps as shown in the figure.



▶ 1. Clamp

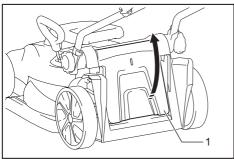
## Installing the grass basket

Attach the pipes of the grass basket to the frame.



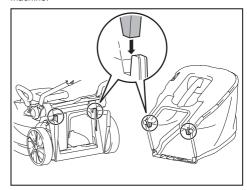
▶ 1. Pipe 2. Frame

2. Open the rear cover.



■ 1. Rear cover

**3.** Hook the grass basket onto the rear side of the machine.



To remove the grass basket, perform the installation procedure in reverse.

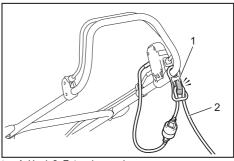
## Connecting extension cord

**AWARNING:** When connecting the extension cord to the power plug of the machine, make sure that the switch lever is released and the cord is unplugged from the power supply.

**AWARNING:** Do not connect or disconnect the extension cord with wet hands.

**NOTICE:** When connecting the extension cord to the power plug of the machine, be sure to insert it fully into the socket.

When connecting the extension cord, hook it over the hook on the handle as shown in the figure to prevent inadvertent unplugging by excessive strain on the plug.



▶ 1. Hook 2. Extension cord

# FUNCTIONAL DESCRIPTION

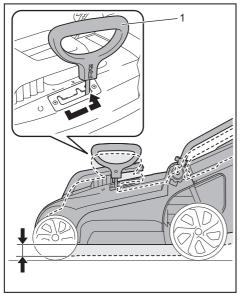
## Adjusting the mowing height

**AWARNING:** Before adjusting the mowing height, unplug the extension cord from the power supply, and check that the blades have come to a complete halt.

**AWARNING:** Never put your hand or leg under the mower body when adjusting the mowing height.

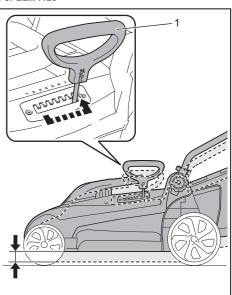
You can adjust the mowing height in the range of 20 mm to 55 mm (for ELM3320/ELM3720) or 20 mm to 75 mm (for ELM4120). The mowing height can be adjusted in 3 levels (for ELM3320/ELM3720) or 7 levels (for ELM4120).

#### For ELM3320/ELM3720



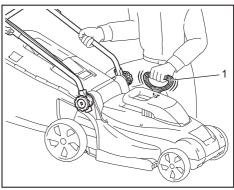
1. Adjusting lever

#### For ELM4120



1. Adjusting lever

Hold the handle with one hand, and then move the adjusting lever with the other hand.



▶ 1. Adjusting lever

**NOTE:** Try a test mowing of grass in a less conspicuous place to get your desired height.

#### Switch action

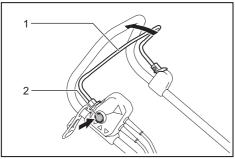
AWARNING: Before plugging in the tool, always check that the switch lever actuates properly and returns to the "OFF" position when released.

▲WARNING: For your safety, this machine is equipped with the lock-off button which prevents the tool from unintended starting. Never use the machine if it starts when you pull the switch lever without pressing the lock-off button. Ask your local Makita Service Center for repairs.

**WARNING:** Never disable the lock function or tape down the lock-off button.

**NOTICE:** Do not pull the switch lever forcibly without pressing the lock-off button. The switch may break.

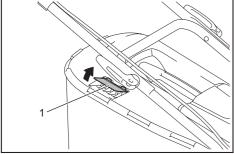
To start the machine, press the lock-off button, and then squeeze in the switch lever. To stop the machine, release the switch lever.



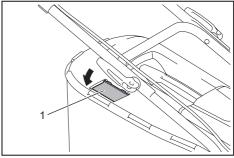
▶ 1. Switch lever 2. Lock-off button

## Level indicator of grass basket

The level indicator of the grass basket opens during mowing if the grass basket is not full. If the grass basket is full, the level indicator closes during mowing. If it's full, empty the grass basket before starting mowing.



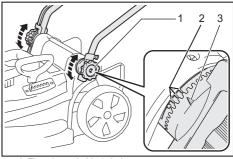
1. Level indicator



1. Level indicator

## Adjusting the handle height

The handle height can be adjusted in three levels. Loosen the thumb nuts while holding the handle, then adjust the handle height by aligning the arrow with one of the marks, and then tighten the thumb nuts.



▶ 1. Thumb nut 2. Mark 3. Arrow

## Motor protection system (Over current relay)

**★WARNING:** If the machine suddenly stops while operating it, release the switch lever and unplug the extension cord. Otherwise, the machine may suddenly restart and cause an injury.

ACAUTION: Before removing an object that is jamming the blade, be sure to wear gloves and unplug the extension cord from the power socket.

If the cut off grass or dirt is jamming inside of the main body, the machine stops automatically to protect the motor (over current relay). In this case, unplug the extension cord from the power socket, then remove the material causing the jam, and then let the machine cool down for a few minutes before turning on the machine.

**NOTE:** The over current relay may be activated when wet or long grass gets caught up inside of the main body.

## **OPERATION**

#### Mowing

**AWARNING:** Before mowing, clear away sticks and stones from the mowing area. Furthermore, clear away any weeds from the mowing area in advance.



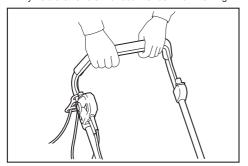
**▲WARNING:** Always wear the safety goggles or safety glasses with side shields when operating the mower.

♠ CAUTION: If the cut grass or foreign object blocks up inside of the mower body, be sure to turn the power off, and then unplug the extension cord from the power socket. Before removing the grass or foreign object, be sure to wear gloves.

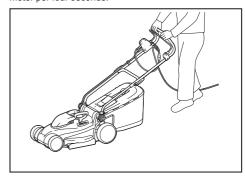
**ACAUTION:** Be sure to install the grass basket when operating the machine.

**NOTICE:** Use this machine for mowing lawn only. Do not mow weeds with this machine.

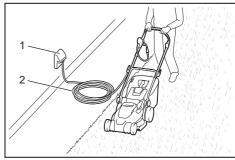
Firmly hold the handle with both hands when mowing.



The mowing speed guideline is approximately one meter per four seconds.

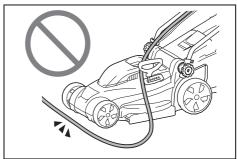


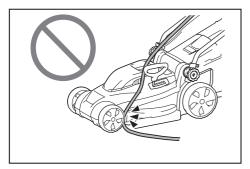
Start mowing near the power socket to ensure that the extension cord does not become an obstacle.



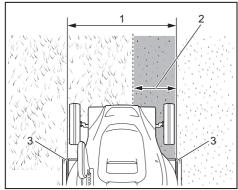
▶ 1. Power socket 2. Extension cord

Do not allow the extension cord to pass under or become entangled beneath the machine.



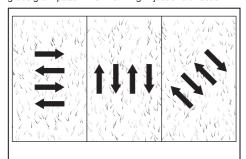


The lines on both sides of the main body are guidelines to mowing width. Using the lines as guidelines, mow in strips. Overlap by one half to one third the previous strip to mow the lawn evenly.



▶ 1. Mowing width 2. Overlapping area 3. Line

Change the mowing direction each time to prevent the grass grain pattern from forming in just one direction.

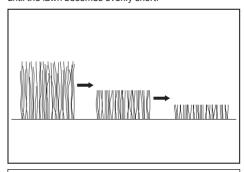


Periodically check the grass basket for mowed grass. Empty the basket before it becomes full. Before every periodic check, be sure to stop the machine.

**NOTE:** Using the mower with the grass basket full prevents smooth blade rotation and places an extra load on the motor, which may cause a breakdown.

## Mowing a long-grass lawn

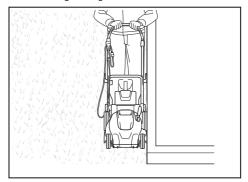
Do not try to cut long grass all at once. Instead, mow the lawn in steps. Leave a day or two between mowings until the lawn becomes evenly short.



**NOTE:** Mowing long grass to a short length all at once may cause the grass to die. The cut grass may also block up inside of the mower body.

### **Edge mowing**

When mowing at the edge, be sure to move the machine along the edge.



## **MAINTENANCE**

**AWARNING:** Before performing the maintenance, unplug the extension cord from the power supply, and confirm that the blades have come to a complete halt.

**ACAUTION:** When performing the maintenance, always wear gloves.

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.

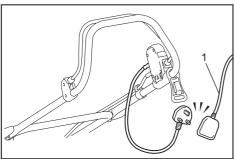
## Maintenance after mowing

After mowing, wipe the machine with a dry cloth or a cloth dipped in soapy water. Also, use a soft brush to brush off grass cuttings and dirt from blades.

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

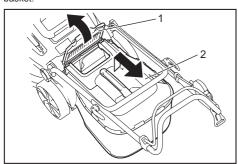
### **Storing**

1. Disconnect the extension cord.



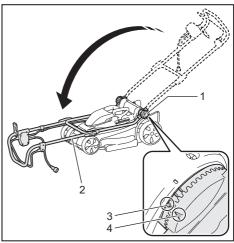
■ 1. Extension cord

**2.** Open the rear cover, and then remove the grass basket.



▶ 1. Rear cover 2. Grass basket

3. Loosen the thumb nuts while holding the handle, then widen the handle outside a little, and then fold the handle.

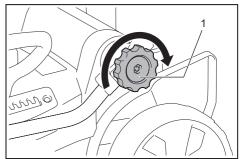


■ 1. Thumb nut 2. Handle 3. Mark 4. Arrow

**ACAUTION:** When folding the handle, be careful not to pinch your hand or fingers.

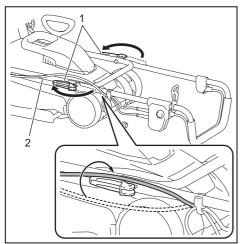
**NOTE:** Make sure that the arrow indicates the mark at the most front position.

Tighten the thumb nuts.



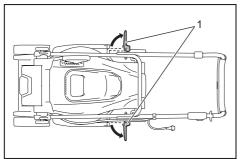
▶ 1. Thumb nut

**5.** Open the levers, and then place the cord over the lever.



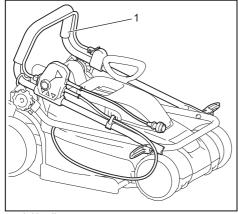
▶ 1. Lever 2. Cord

**6.** Return the levers to the halfway position as shown in the figure.



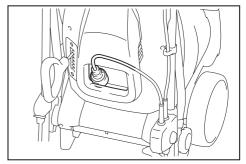
▶ 1. Lever

7. Fold the handle.



▶ 1. Handle

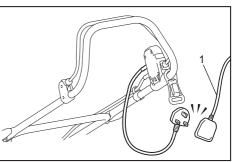
8. Place the machine as shown in the figure.



**ACAUTION:** Be sure to store this machine indoors and place it on a flat surface. Otherwise, the machine may fall and cause an injury.

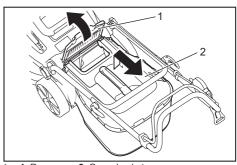
You can also store the machine as follows.

Disconnect the extension cord.



1. Extension cord

**2.** Open the rear cover, and then remove the grass basket.

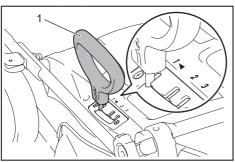


▶ 1. Rear cover 2. Grass basket

3. Set the mowing height with the adjusting lever.

#### For ELM3320/ELM3720:

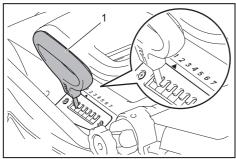
Set the mowing height to "1".



1. Adjusting lever

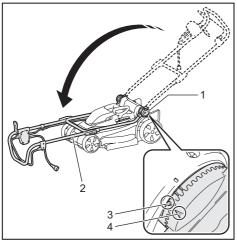
#### For ELM4120:

Set the mowing height to "2".



▶ 1. Adjusting lever

**4.** Loosen the thumb nuts while holding the handle, then widen the handle outside a little, and then fold the handle.

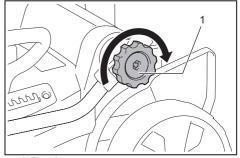


1. Thumb nut 2. Handle 3. Mark 4. Arrow

**ACAUTION:** When folding the handle, be careful not to pinch your hand or fingers.

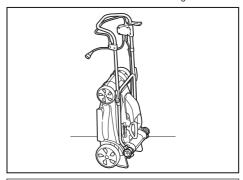
**NOTE:** Make sure that the arrow indicates the mark at the most front position.

5. Tighten the thumb nuts.



■ 1. Thumb nut

6. Place the machine as shown in the figure.

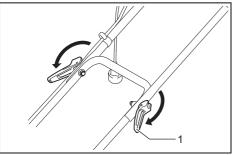


**ACAUTION:** Be sure to store this machine indoors and place it on a flat surface. Otherwise, the machine may fall and cause an injury.

You can also store the machine by folding the handle.

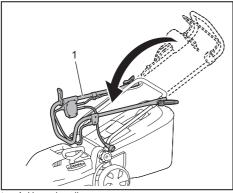
**ACAUTION:** Before opening the levers, hold the upper handle firmly. Otherwise, the handle may fall and cause an injury.

1. Open the levers while holding the upper handle.



1. Lever

2. Fold the upper handle.



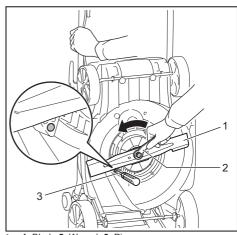
▶ 1. Upper handle

## Replacing the mower blade

**ACAUTION:** Do not use any wrench other than the standard hex wrench when replacing the mower blade. Using a different wrench may lead to over-tightening or looseness, which may cause injury.

1. Unplug the extension cord and stand up the machine. (Refer to the instructions for storing.)

Insert the pin into the hole, and then hold the handle with one hand and loosen the bolt with the wrench counterclockwise.

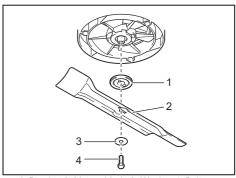


▶ 1. Blade 2. Wrench 3. Pin

3. Remove the mower blade.

#### For ELM3320

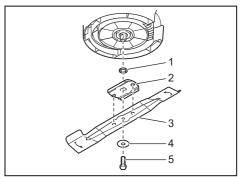
Remove the bolt, washer, mower blade, and bracket in order.



▶ 1. Bracket 2. Mower blade 3. Washer 4. Bolt

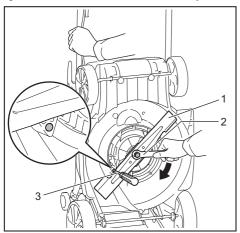
#### For ELM3720/ELM4120

Remove the bolt, washer, mower blade, bracket, and spacer in order.



1. Spacer 2. Bracket 3. Mower blade 4. Washer 5. Bolt

4. Attach a new mower blade, then insert the pin into the hole, and then hold the handle with one hand and tighten the bolt with the wrench clockwise firmly.



▶ 1. Mower blade 2. Wrench 3. Pin

#### **Extension cord**

You should only use extension cords for outdoor use, PVC or rubber cord ordinary duty with a cross sectional area not less than 1.5 mm<sup>2</sup>.

Before and during use, check the supply and extension cords for damage. Do not use the appliance if the cord is damaged or worn. Keep extension cord away from cutting elements. If the cord is damaged during use, disconnect the cord from the supply immediately. Do not touch the cord before disconnecting the supply.

# 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.

Mower blade

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

3-11-8, Sumiyoshi-cho, Anjo, Aichi 446-8502 Japan www.makita.com

ELM3320-3PINS-EN-1906 EN 20190617