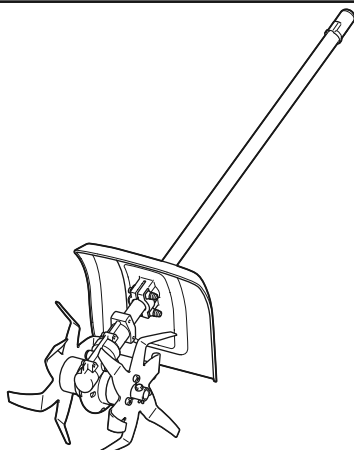




EN	Cultivator Attachment	ORIGINAL INSTRUCTION MANUAL	2
FR	Tête Moto-Bineuse	INSTRUCTIONS D'EMPLOI	11
DE	Kultivator-Aufsatz	ORIGINAL-BETRIEBSANLEITUNG	21
IT	Accessorio coltivatore	MANUALE DI ISTRUZIONI ORIGINALE	31
NL	Grondfreeshulpstuk	ORIGINELE GEBRUIKSAANWIJZING	41
ES	Accesorio para Cultivador	MANUAL DE INSTRUCCIONES ORIGINAL	51
PT	Implemento Cultivador	MANUAL DE INSTRUÇÕES ORIGINAL	61
DA	Tilbehør til kultivator	OPRINDELIG BRUGSANVISNING	71
EL	Προσάρτημα καλλιεργητή	ΠΡΩΤΟΤΥΠΟ ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ	80
TR	Kültivatör ek parçası	ORİJİNAL KULLANIM KILAVUZU	90
ZHTW	耕耘器組件	原始操作手冊	99

KR401MP



SPECIFICATIONS

Model:	KR401MP
Dimensions: length x width x height (with rotor blades)	933 mm x 235 mm x 256 mm
Net weight	3.2 kg
Cultivating width	220 mm
Outer diameter of the rotor blade	220 mm
Gear ratio	1/43

- 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.

Approved power unit




This attachment is approved to use only with the following power unit(s):

- EX2650LH Multi function power head
- BUX360, BUX361, BUX362, UX360D, UX361D, UX362D, DUX60 Cordless Multi Function Power Head

⚠WARNING: Never use the attachment with non-approved power unit. Non-approved combination may cause serious injury.

Symbols

The following symbols are used on the attachment and this instruction manual. Understand these definitions.

	Take Particular care and attention!
	Read instruction manual.
	Wear protective helmet, eye and ear protection!
	Wear sturdy boots with nonslip soles. Steeltoed safety boots are recommended!
	Keep your body clear of rotating blades.
	Keep bystanders at least 5 m (17 ft) away.
	Hot surfaces - Burns to fingers or hands.

Intended use

This attachment is designed for only the purpose of cultivating soil in conjunction with an approved power unit. Never use the attachment for other purposes. Abusing the attachment may cause serious injury.

EC Declaration of Conformity

For European countries only

We as the manufacturers: **Makita Europe N.V.**,
Business address: **Jan-Baptist Vinkstraat 2 3070 Kortenberg BELGIUM**. Authorize **Yasushi Fukaya** for the compilation of the technical file and declare under our sole responsibility that the product(s); Designation: **Cultivator Attachment**. Designation of Type(s): **KR401MP**.

Fulfills all the relevant provisions of **2006/42/EC** and are manufactured in accordance with the following Harmonised Standards: **EN 709:1997+A4:2009**.
Place and date of declaration: **Kortenberg, Belgium. 5.11.2017**

Responsible person: **Yasushi Fukaya, Director - Makita Europe N.V.**

Yasushi Fukaya

SAFETY WARNINGS

Cultivator safety warnings

⚠WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this machine as well as the instruction manual of the power unit before using. Failure to follow all instructions listed below may result in fire and/or serious injury to the operator and/or bystanders.

Save all warnings and instructions for future reference.

The term "cultivator" and "machine" in the warnings and precautions refer to the combination of the attachment and the power unit.

The term "motor" in the warnings and precautions refers to the engine or electric motor of the power unit.

General safety

1. **First-time or inexperienced operator should ask the dealer for training in all operation of the machine. Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with the instructions to use the machine.**
2. **It is recommended only to lend the machine to people who have proven to be experienced. Always hand over the instruction manual.**
3. **Stay alert, watch what you are doing and use common sense when operating the machine. Do not use the machine while you are tired, ill, or under the influence of drugs, alcohol or medication. A moment of inattention while operating the machine may result in serious personal injury.**
4. **Avoid using the machine in bad weather conditions especially when there is a risk of lightning.**
5. **Follow your national and local regulation for use of outdoor power machines.**
6. **Never attempt to modify the machine.**
7. **Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.**

Work area safety

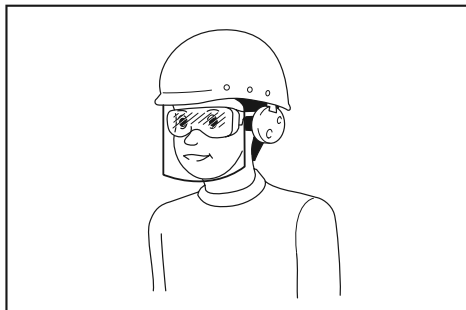
⚠ WARNING: Keep the cultivator away from electric lines and communication cables. Touching or approaching high-voltage lines with cultivator can result in death or serious injury. Watch power lines and electrical fences around the work area before starting operation.

1. **Operate the machine under good visibility and daylight conditions only. Do not operate the machine in darkness or fog.**
2. **Start and operate the engine only outdoors in a well ventilated area. Operation in a confined or poorly ventilated area can result in death due to suffocation or carbon monoxide poisoning.**
3. **Before operation, examine the work area for wire fences, stones, or other solid objects. They can damage the rotor blades.**
4. **During operation, never stand on an unstable or slippery surface or a steep slope. During the cold season, beware of ice and snow and always ensure secure footing.**
5. **Avoid working close to fences, stumps or root of trees. They can damage the rotor blades.**
6. **Avoid working close to buildings, cars and other properties. Stones and debris hit by the cultivator may damage them.**

Personal protective equipment

1. **Always wear heavy, long pants, sturdy boots, gloves, and a long-sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals, or go barefoot. Secure hair so it is above shoulder level.**

2. **Always wear protective goggles to protect your eyes from injury when using the machine. 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.

3. **Wear ear protection, such as ear muffs. Exposure to noise can cause hearing loss.**
4. **Always wear sturdy shoes with a non-slip sole. This protects your feet against injuries and ensures a good footing.**
5. **Wear a dust mask as necessary.**

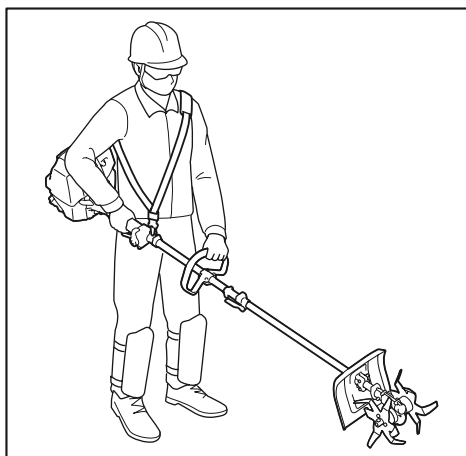
Refueling

1. **Stop the engine before refueling. Keep away from open flames and sparks. Never smoke during refueling. Otherwise fire and/or explosion may result.**
2. **Refuel outdoors. Refueling in a closed room can cause explosion of fuel vapor.**
3. **Avoid contact with fuel or engine oil. Do not inhale fuel vapor. If fuel or oil spills, wipe it off of the machine and/or ground immediately. If fuel spills on your clothes, change it immediately to prevent it from catching fire.**
4. **After refueling, carefully tighten the fuel tank cap and check for fuel leak. Move at least 3 m (10 feet) away from the fueling source and site before starting engine.**
5. **Only transport and store fuel in approved containers. Keep children away from the stored fuel.**

Starting up the cultivator

1. **Before assembling or adjusting the machine, switch off the motor and remove the spark plug cap or the battery cartridge.**
2. **Before handling the rotor blades, wear protective gloves.**
3. **Wear the personal protective equipments before starting the motor.**
4. **Before starting the motor, inspect the machine for damages, loose screws/nuts or improper assembly. Check all control levers and switches for easy action. Clean and dry the handles.**

5. **Never attempt to start the motor if the machine is damaged or not fully assembled with proper guards, plates, or other safety protective devices.** Otherwise serious injury may result.
6. **Before starting the motor, carefully check that the rotor blade is not touching the ground, your body, and other objects.** Starting the motor with the rotor blade contacting with foreign object can cause serious accident.
7. **Before starting the motor, make sure that there is no person or animal in the work area.**
8. **Adjust the shoulder harness and hand grip to suit the operator's body size.**
9. **Replace the rotor blades if they are cracked, bent, or damaged.** Damaged rotor blades may shatter during operation and cause serious injury.
10. **Start and operate the machine only outdoors in a well ventilated area.** Operation in a confined or poorly ventilated area can result in death due to suffocation or carbon monoxide poisoning.
11. **When starting the engine, place the machine on firm ground and then maintain good balance and secure footing.**
12. **When pulling the starter knob of the engine, hold the power unit firmly against the ground by your left hand. Never step on the drive shaft of the power unit.**
13. **If the rotor blades rotate at idle, stop the engine and adjust the idle speed down.** Otherwise unintentional contact with moving rotor blade may result in serious injury.
14. **Stop the motor immediately if you notice any trouble.**
15. **Follow the instruction manual of the power unit for starting the motor.**



6. **Hold the front handle with the left hand and the rear grip with the right hand, no matter you are right-hander or left-hander. Wrap your fingers and thumbs around the handles.**
7. **Never attempt to operate the machine with one hand. Loss of control may result in serious or fatal injury. To reduce the risk of cut injuries, keep your hands and feet away from the rotor blades.**
8. **When operating, do not raise the rotor blades above waist height.**
9. **The rotor blades continue to move for a short period after releasing the throttle trigger or switch off the motor. Don't rush to contact the rotor blades.**
10. **Do not overreach. Keep proper footing and balance at all times. Watch for hidden obstacles such as tree stumps, roots and ditches to avoid stumbling.**
11. **Use extreme caution when reversing the blade rotation or pulling the machine toward you. If the power unit has reverse rotation function, do not use it more than necessary. When operated in reverse rotation, the cultivator will push you if the rotor blades are on the ground.**
12. **Do not overload the machine capacity by attempting to till too deep at too fast a rate. The machine will do better work when used with proper load and there is less likelihood of a risk of injury.**
13. **Do not accelerate the motor with the rotor blades blocked. It increases the load and will damage the machine.**
14. **Be careful when tilling in hard ground. The tines may catch in the ground and propel the tiller forward. If this occurs, let go of the handles and do not restrain the machine.**
15. **If the machine gets heavy impact or fall, check the condition before continuing work. Check the fuel system for fuel leakage and the controls and safety devices for malfunction. If there is any damage or doubt, ask our authorized service center for the inspection and repair.**

Transportation

1. **Stop the motor during transportation.** Otherwise unintentional start-up may cause injury.
2. **Ensure safe position of the machine during car transportation to avoid fuel leakage.**
3. **Lift the entire machine from the ground when carrying the machine.** Dragging the machine causes fuel tank damage and fuel leakage, resulting in fire.
4. **When transporting the equipment, carry it in a horizontal position by holding the shaft. Keep the hot muffler away from your body.**

Operation

1. **During operation, keep bystanders or animals at least 5 m (17 ft) away from the cultivator. Stop the motor as soon as someone approaches.**
2. **In the event of an emergency, switch off the motor immediately.**
3. **If you feel any unusual condition (e.g. noise, vibration) during operation, switch off the motor. Do not use the machine until the cause is recognized and solved.**
4. **With the engine running only at idle, attach the shoulder harness.**
5. **During operation, use the shoulder harness. Keep the machine on your right side firmly.**

16. Do not touch the gear case. The gear case becomes hot during operation.
17. Take a rest to prevent loss of control caused by fatigue. We recommend to take a 10 to 20-minute rest every hour.
18. When you leave the machine, even if it is a short time, always switch off the engine or remove the battery cartridge. The machine unattended with the engine running may be used by unauthorized person and cause serious accident.
19. Follow the instruction manual of the power unit for proper use of the control lever and switch.
20. During or after operation, do not put the hot machine onto dry grass or combustible materials.
21. If the rotor blades catch weeds or the like, switch off the motor and remove the spark plug cap or battery cartridge, and then remove the obstructions.
22. Keep your hands and feet clear of the rotor blades. Contacting the rotor blades can result in serious injury. When handling the rotor blades, stop the motor and remove the spark plug cap or battery cartridge.
23. Check the rotor blades frequently during operation for cracks or blunt edges.
24. Always switch off the engine or remove the battery cartridge when removing the debris of plants such as roots tangled in the rotor blades.
25. Refer to the instruction manual of the power unit for how to start and control the machine.
6. Keep the rotor blades sharp. Replace the rotor blades if they have become blunt.
7. Never repair bent or broken rotor blades by straightening or welding. It may cause parts of the rotor blade to come off and result in serious injury. Contact our authorized service center for the genuine rotor blades to replace them.
8. Do not attempt any maintenance or repair not described in this booklet or the instruction manual of the power unit. Ask our authorized service center for such work.
9. Follow instructions for lubricating and changing accessories.
10. Always use the genuine spare parts and accessories only. Using parts or accessories supplied by a third party may result in the equipment breakdown, property damage and/or serious injury.
11. Request our authorized service center to inspect and maintain the machine at regular interval.

Storage

1. Before storing the machine, perform full cleaning and maintenance. Remove the spark plug cap or the battery cartridge. Drain the fuel after the engine gets cold.
2. Store the equipment in a dry and high or locked location out of reach of children.
3. Do not prop the equipment against something, such as a wall. Otherwise it may fall suddenly and cause an injury.

First Aid

1. In case of accident make sure that a first-aid box is available in the vicinity of the cutting operations. Immediately replace any item taken from the first aid box.
2. When asking for help, give the following information:
 - Place of accident
 - What happened
 - Number of injured persons
 - Kind of injuries
 - Your name

Vibration

Exposing to excessive vibration injures blood vessels or nervous system of the operator and causes the following symptoms in the fingers, hands or wrists: "Falling asleep" (numbness), tingling, pain, stabbing sensation, alteration of skin color or of the skin. If any of these symptoms occur, see a physician.

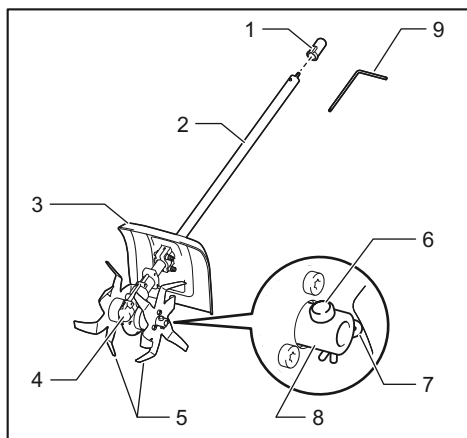
To reduce the risk of "white finger disease", keep your hands warm during operation and well maintain the machine and accessories.

Maintenance

1. Before doing any maintenance or repair work or cleaning the machine, always switch off the motor and remove the spark plug cap or the battery cartridge. Wait until the motor gets cold.
2. To reduce the risk of fire, never service the equipment in the vicinity of fire.
3. Always wear protective gloves when handling the rotor blades.
4. Always clean dust and dirt off the equipment. Never use gasoline, benzine, thinner, alcohol or the like for the purpose. Discoloration, deformation or cracks of the plastic components may result.
5. After each use, tighten all screws and nuts, except for the carburetor adjustment screws.

⚠WARNING: Use of this product can create dust containing chemicals which may cause respiratory or other illnesses. Some examples of these chemicals are compounds found in pesticides, insecticides, fertilizers and herbicides. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

PARTS DESCRIPTION



- 1. Cap 2. Pipe 3. Protector 4. Gear case 5. Rotor blade 6. Lock pin 7. Clip 8. Hub 9. Hexalobular wrench

ASSEMBLY

⚠ WARNING: Before assembling or adjusting the equipment, switch off the motor and remove the spark plug cap or battery cartridge. Otherwise the cutting tool or other parts may move and result in serious injury.

⚠ WARNING: Before handling the rotor blades, wear protective gloves. During the assembly or adjustment, your fingers may contact with the rotor blade and it may cause serious injury.

⚠ WARNING: When assembling or adjusting the equipment, always put it down. Assembling or adjusting the equipment in an upright position may result in serious injury.

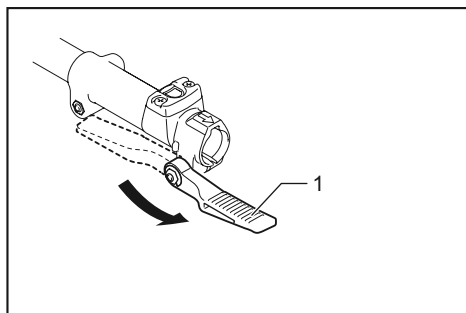
⚠ WARNING: Follow the warnings and precautions in the chapter "SAFETY WARNINGS" and the instruction manual of the power unit.

Mounting the attachment pipe

⚠ CAUTION: Always check that the attachment pipe is secured after installation. Improper installation may cause the attachment falling off from the power unit and cause personal injury.

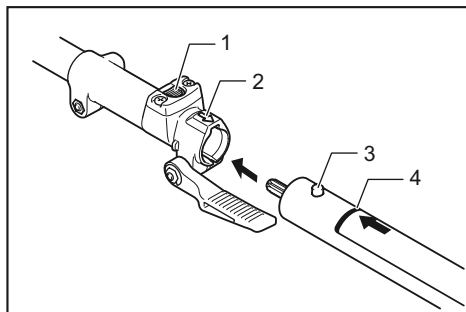
Mount the attachment pipe to the power unit.

1. Turn the lever toward the attachment.



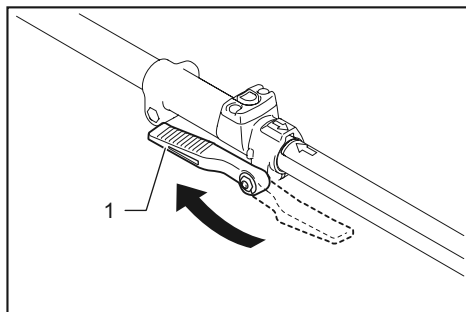
- 1. Lever

2. Align the pin with the arrow mark. Insert the attachment pipe until the release button pops up. Make sure that the position line is on the tip of the arrow mark.



- 1. Release button 2. Arrow mark 3. Pin 4. Position line

3. Turn the lever toward the power unit.

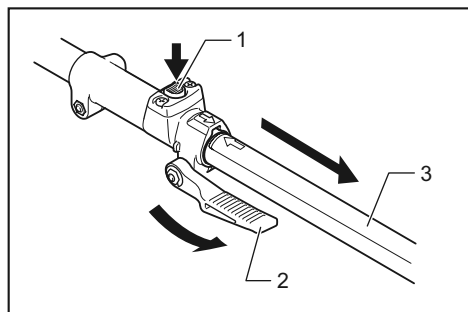


- 1. Lever

Make sure that the surface of the lever is parallel to the pipe.

NOTICE: Do not tighten the lever without the attachment pipe inserted. Otherwise the lever may tighten the entrance of the drive shaft too much and damage it.

To remove the pipe, turn the lever toward the attachment and pull the pipe out while pressing down the release button.



► 1. Release button 2. Lever 3. Pipe

OPERATION

⚠ WARNING: Follow the warnings and precautions in the chapter “SAFETY WARNINGS” and the instruction manual of the power unit.

⚠ WARNING: Adjust the hanger position and shoulder harness to your comfortable position before operating.

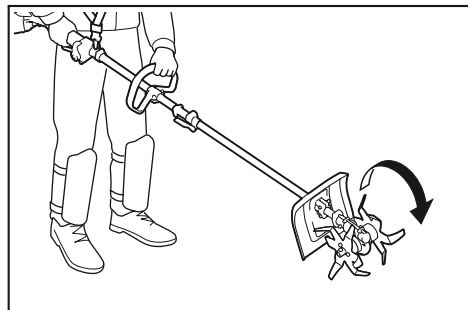
Tilling the soil

⚠ CAUTION: Before operation, remove hard and/or long objects such as stones, cans, and ropes from the working area. They may damage the rotor blade or hinder the rotation of the rotor blade.

⚠ CAUTION: When tilling the soil, do not move the cultivator faster than walking speed.

⚠ CAUTION: When walking with the running cultivator or pulling it, keep a safe distance between your feet and the rotor blades.

The rotor blade rotates in the direction as illustrated. Choose the appropriate way of cultivating depending on the size of the work area, terrain, and ground condition.



Basic operation

Press the rotor blades into the soil and then accelerate the motor. Move them forward and backward alternatively.

Breaking up the soil

Hold the cultivator firmly and till to the desired depth.

Mixing soil improver

Spread soil improver, such as compost, leaves, fertilizers or the like evenly. Apply the rotor blades and mix the soil improver into soil.

Furrowing

Slowly drag the rotor blades backward. If it is difficult to make a desired depth in one go, trace the tilled line again.

NOTICE: The roots of the plants may be damaged by tilling. Be careful of the tilling depth if there are plants nearby.

NOTE: The debris of plants such as roots may tangle in the rotor blades. In this case, stop the motor and remove the rotor blade from the gear case and then wash off the debris.

MAINTENANCE

⚠ WARNING: Before inspecting or maintaining the equipment, switch off the motor and remove the spark plug cap or battery cartridge. Otherwise the cutting tool or other parts may move and result in serious injury.

⚠ WARNING: When inspecting or maintaining the equipment, always put it down. Assembling or adjusting the equipment in an upright position may result in serious injury.

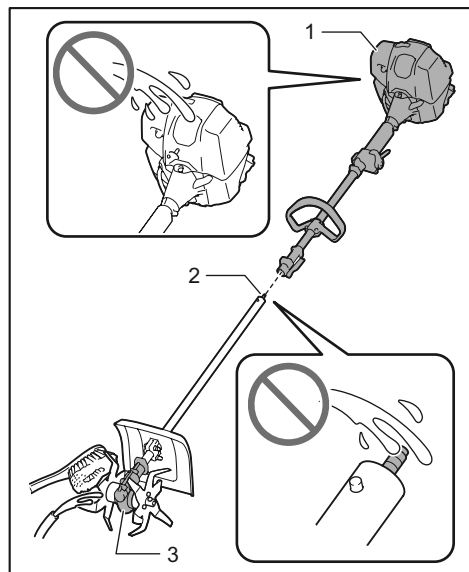
⚠ WARNING: Follow the warnings and precautions in the chapter “SAFETY WARNINGS” and the instruction manual of the power unit.

NOTICE: Never use gasoline, benzene, 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.

Cleaning the cultivator

The cultivator can be washed with water. Use a nylon brush or the similar to wash off dirt. For ease of cleaning, you can remove the rotor blade from the gear case. Refer to "Removing the rotor blades" in "Replacing the rotor blades" section for how to remove.



► 1. Power unit 2. Pipe end 3. Gear case

NOTICE: Do not pour water over the power unit and pipe end and inside the gear case. When the rotor blade is removed, be careful not to let foreign objects come into the gear case. It may cause a malfunction of the cultivator.

Overall inspection

- Tighten loose bolts, nuts and screws.
- Check for damaged parts and blades. Ask our authorized service center to replace them if necessary.

Inspecting the rotor blades and protector

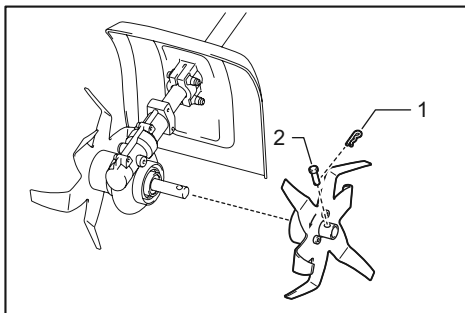
Check and clean the rotor blades and protector daily. If they are worn, bent and cracked, replace them.

Replacing the rotor blades

Optional accessory

CAUTION: Be sure to use the genuine rotor blade from Makita.

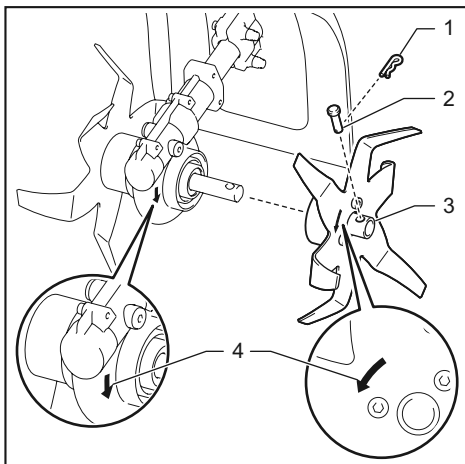
Removing the rotor blades



► 1. Clip 2. Lock pin

1. Remove the clip on the lock pin using pliers.
2. Remove the lock pin.
3. Remove the rotor blade.
4. Remove the rotor blade on the other side in the same way as above.

Installing the rotor blades



► 1. Clip 2. Lock pin 3. Hub of the rotor blade 4. Arrow mark

1. Put the hub of the rotor blade onto the gear case. Be sure to install the rotor blade so that the arrow marks on the rotor blade and the gear case point the same direction.
2. Insert the lock pin into the hole on the hub of the rotor blade.
3. Insert the clip into the hole on the lock pin until it is secured.
4. Install the rotor blade on the other side in the same way as above.

Lubricating moving parts

NOTICE: Follow the instruction of the frequency and amount of grease supplied. Otherwise insufficient lubrication may damage moving parts.

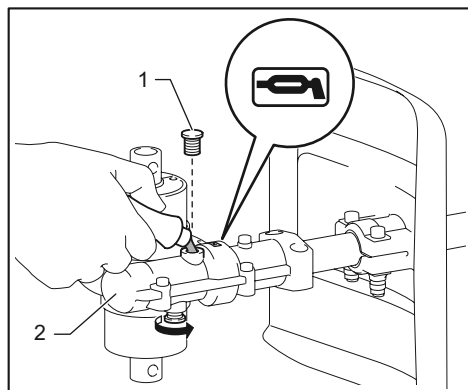
Gear case:

CAUTION: Do not apply grease when the gear case is hot. Hot gear case can cause burn injury.

Fill approx. 30 ml of grease (Makita grease SG No.0) through the grease port evenly every 25 hours of operation.

With the supplied hexalobular wrench, remove the bolt near the lubrication marking on the gear case. Loosen the bolt on the other side so that the air in the gear case can be released when applying the grease.

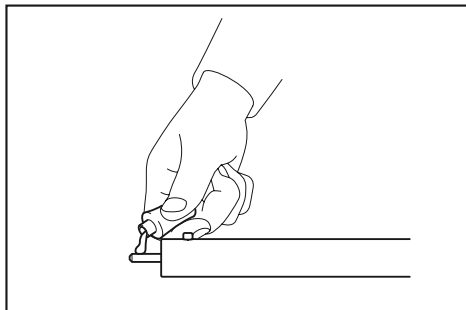
After applying the grease, be sure to tighten the bolts.



► 1. Bolt 2. Gear case

Drive axle:

Apply grease (Makita grease SG No.0) every 25 hours of operation.

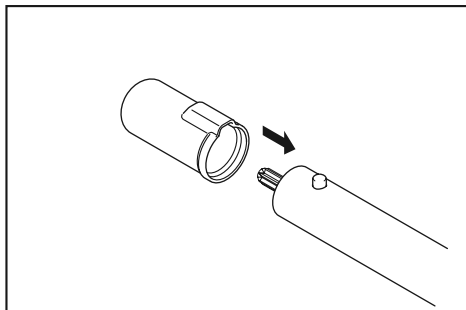


NOTE: Genuine Makita grease may be purchased from your local Makita dealer.

Storage

WARNING: Follow the warnings and precautions in the chapter "SAFETY WARNINGS" and the instruction manual of the power unit.

When storing the attachment separated from the power unit, put the cap onto the end of the shaft.



Interval of inspection and maintenance

Operating hour		Before Operation	Daily (10h)	25h
Whole unit	Visually inspect for damaged parts	✓	-	-
All fixing screws and nuts	Tighten	✓	-	-
Rotor blades and protector	Clean and visually inspect for damaged parts	-	✓	-
Gear case	Supply grease	-	-	✓
Drive axle	Supply grease	-	-	✓
Power unit	Refer to the instruction manual of the power unit			

TROUBLESHOOTING

Before asking for repairs, conduct your own inspection first. If you find a problem that is not explained in the manual, do not attempt to dismantle the machine. Instead, ask Makita Authorized Service Centers, always using Makita replacement parts for repairs.

State of abnormality	Probable cause (malfunction)	Remedy
Motor does not start.	-	Refer to the instruction manual of the power unit.
Motor stops soon.	-	Refer to the instruction manual of the power unit.
Motor speed does not increase.	-	Refer to the instruction manual of the power unit.
Rotor blade does not rotate. ⇒ Stop the motor immediately.	The pipes of the power unit and the cultivator attachment are not connected properly.	Connect the pipes in the correct way.
	Rotor blade caught a root or the like.	Remove foreign matter
	Abnormal drive system	Contact an authorized service center for repairs.
Power unit vibrates abnormally. ⇒ Stop the motor immediately.	Broken or bent rotor blade	Replace the rotor blade.
	Loose attachment of the rotor blade	Tighten the screws on the rotor blade securely.
	Irregular attachment of the rotor blade	Install the rotor blade in the correct way.
	Abnormal drive system	Contact an authorized service center for repairs.
Rotor blades continue to rotate even if the switch trigger/lever is released. ⇒ Stop the motor immediately.	The power unit does not work properly.	Adjust the idle speed if the power unit is engine-operated. Contact an authorized service center for repairs.

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.

- Rotor blade set (L/R)

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