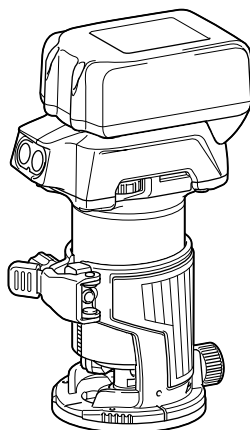


INSTRUCTION MANUAL



# Cordless Trimmer

## DRT50



Read before use.

# SPECIFICATIONS

<b>Model:</b>	<b>DRT50</b>
Collet chuck capacity	6 mm, 8 mm, 1/4", or 3/8"
No load speed	10,000 - 30,000 min <sup>-1</sup>
Overall length	226 mm
Rated voltage	D.C. 18 V
Standard battery cartridge	BL1815N / BL1820 / BL1820B / BL1830 / BL1830B / BL1840 / BL1840B / BL1850 / BL1850B / BL1860B
Net weight	1.8 - 2.1 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.
- The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

## 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 material!  
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

The tool is intended for flush trimming and profiling of wood, plastic and similar materials.

## Noise

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

Sound pressure level ( $L_{pA}$ ) : 78 dB(A)

Uncertainty (K) : 3 dB(A)

**⚠ WARNING: Wear ear protection.**

## Vibration

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

Work mode: rotation without load

Vibration emission ( $a_h$ ) : 2.5 m/s<sup>2</sup> or less

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

Work mode: cutting grooves in MDF

Vibration emission ( $a_h$ ) : 4.5 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.

**⚠ WARNING:** 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.

**⚠ WARNING:** Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

## EC Declaration of Conformity

*For European countries only*

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

## SAFETY WARNINGS

### General power tool safety warnings

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

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

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

## Work area safety

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

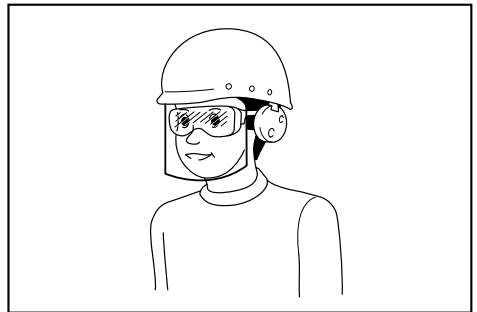
## Electrical Safety

1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
5. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.
7. **Power tools can produce electromagnetic fields (EMF) that are not harmful to the user.** However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.

## Personal Safety

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
3. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
4. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

5. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
6. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
7. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
8. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.
9. **Always wear protective goggles to protect your eyes from injury when using power tools.** The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.



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

## Power tool use and care

1. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
2. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
4. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
5. **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.

6. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
8. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
9. **When using the tool, do not wear cloth work gloves which may be entangled.** The entanglement of cloth work gloves in the moving parts may result in personal injury.
2. **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.
3. **Wear hearing protection during extended period of operation.**
4. **Handle the trimmer bits very carefully.**
5. **Check the trimmer bit carefully for cracks or damage before operation. Replace cracked or damaged bit immediately.**
6. **Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.**
7. **Hold the tool firmly.**
8. **Keep hands away from rotating parts.**
9. **Make sure the trimmer bit is not contacting the workpiece before the switch is turned on.**

#### Battery tool use and care

1. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
2. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
3. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
4. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
5. **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
6. **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
7. **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
11. **Be careful of the trimmer bit rotating direction and the feed direction.**
12. **Do not leave the tool running. Operate the tool only when hand-held.**
13. **Always switch off and wait for the trimmer bit to come to a complete stop before removing the tool from workpiece.**
14. **Do not touch the trimmer bit immediately after operation; it may be extremely hot and could burn your skin.**
15. **Do not smear the tool base carelessly with thinner, gasoline, oil or the like. They may cause cracks in the tool base.**
16. **Use trimmer bits of the correct shank diameter suitable for the speed of the tool.**
17. **Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.**
18. **Always use the correct dust mask/respirator for the material and application you are working with.**

#### Service

1. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
2. **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.
3. **Follow instruction for lubricating and changing accessories.**

### Cordless trimmer safety warnings

1. **Hold power tool by insulated gripping surfaces, because the cutter may contact hidden wiring.** Cutting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.

### SAVE THESE INSTRUCTIONS.

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

#### Important safety instructions for battery cartridge

1. **Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.**
2. **Do not disassemble battery cartridge.**
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 the tool 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. 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.

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

## Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
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. Charge the battery cartridge if you do not use it for a long period (more than six months).

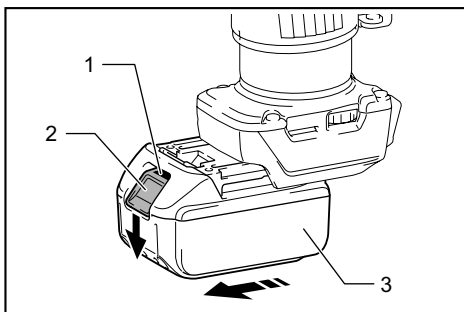
## FUNCTIONAL DESCRIPTION

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

## Installing or removing battery cartridge

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

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



► 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.

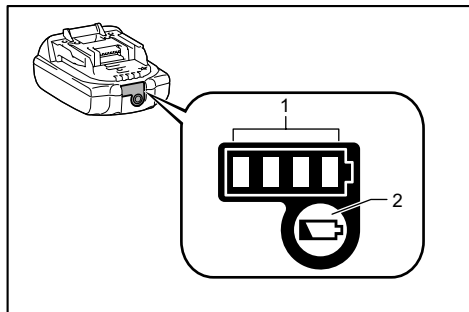
To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

**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



► 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 a few seconds.

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.

## Tool / battery protection system

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

### Overload protection

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

### Overheat protection

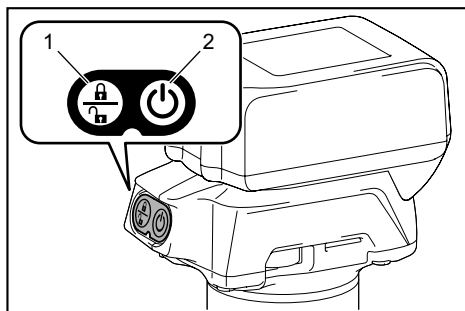
When the tool or battery is overheated, the tool stops automatically and the lamp blinks. In this case, let the tool and battery cool before turning the tool on again.

### Overdischarge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

## Switch action

To turn on the tool, press the lock/unlock button. The tool turns into the standby mode. To start the tool, press the start/stop button in the standby mode. To stop the tool, press the start/stop button again. The tool turns into the standby mode. To turn off the tool, press the lock/unlock button in the standby mode.



► 1. Lock/unlock button 2. Start/stop button

**NOTE:** If the tool is left for 10 seconds without any operation in the standby mode, the tool automatically turns off and the lamp goes off.

**NOTE:** You can also stop and turn off the tool by pressing the lock/unlock button while the tool is operating.

## Lighting up the front lamp

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

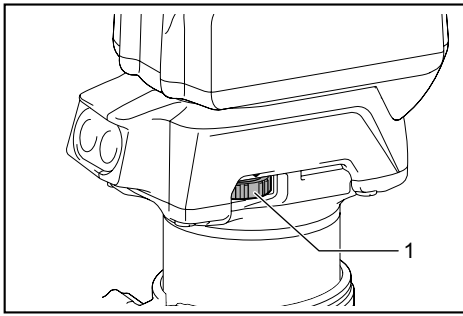
To turn on the lamp, press the lock/unlock button. To turn off the lamp, press the lock/unlock button again.

**NOTICE:** When the tool is overheated, the lamp flickers. Cool down the tool fully before operating the tool again.

**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.

## Speed adjusting dial

The rotation speed of the tool can be changed by turning the speed adjusting dial. The table below shows the number on the dial and the corresponding rotation speed.



► 1. Speed adjusting dial

Number	Speed
1	10,000 min <sup>-1</sup>
2	15,000 min <sup>-1</sup>
3	20,000 min <sup>-1</sup>
4	25,000 min <sup>-1</sup>
5	30,000 min <sup>-1</sup>

**NOTICE:** If the tool is operated continuously at low speed for a long time, the motor will get overloaded, resulting in tool malfunction.

**NOTICE:** When changing the speed dial from "5" to "1", turn the dial counterclockwise. Do not turn the dial clockwise forcibly.

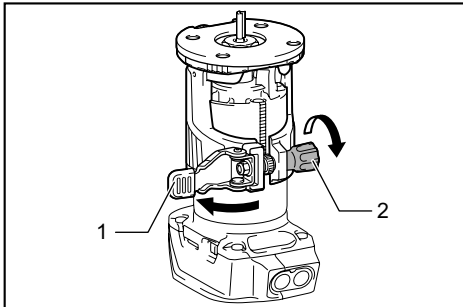
## Electronic function

The tool is equipped with the electronic functions for easy operation.

- Constant speed control  
The speed control function provides the constant rotation speed regardless of load conditions.
- Soft start  
The soft-start function minimizes start-up shock, and makes the tool start smoothly.

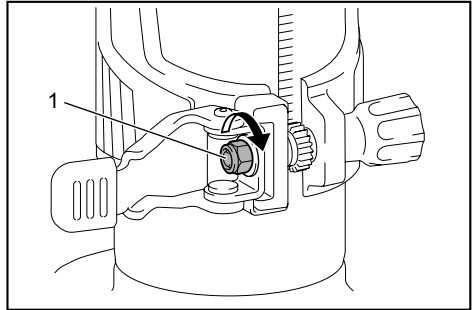
## Adjusting cutting depth

To adjust the cutting depth, open the lock lever, then move the tool base up or down by turning the adjusting screw. After the adjustment, close the lock lever firmly.



► 1. Lock lever 2. Adjusting screw

**NOTICE:** If the tool is not secured after closing the lock lever, tighten the hex nut, and then close the lock lever.

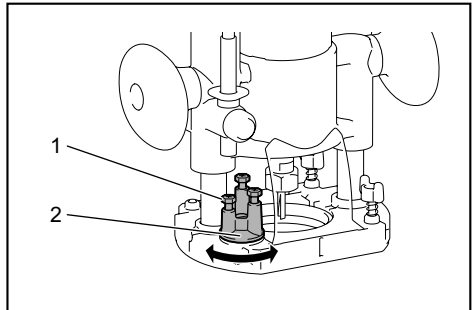


► 1. Hex nut

## Adjusting cutting depth with the plunge base

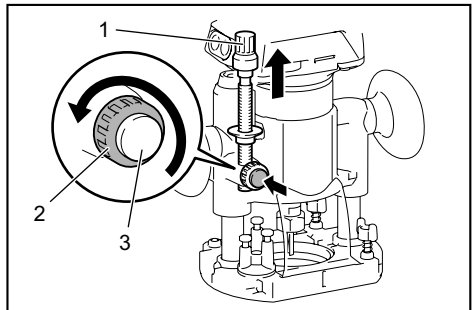
### Optional accessory

1. Place the tool on the flat surface.
2. Select the stopper screw by rotating the stopper base.



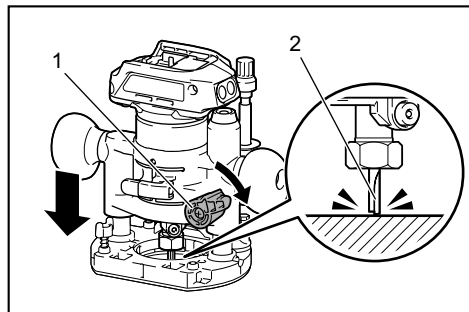
► 1. Stopper screw 2. Stopper base

3. Loosen the stopper pole fixing nut, then pull up the stopper pole while pressing the feed button.



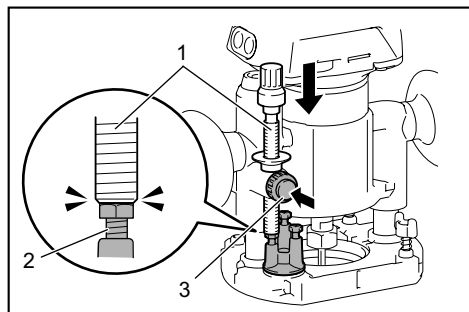
► 1. Stopper pole 2. Fixing nut 3. Feed button

4. Push down the tool until the tip of the trimmer bit touches the flat surface, and then turn the fixing lever to secure the tool.



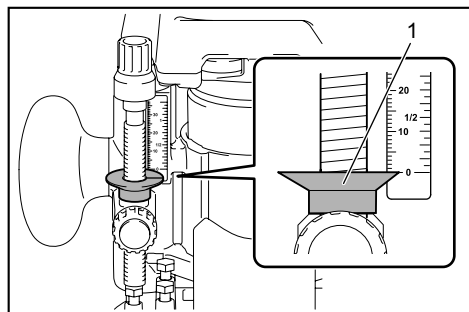
► 1. Fixing lever 2. Trimmer bit

5. Press down the stopper pole while pressing the feed button until it contacts the stopper screw.



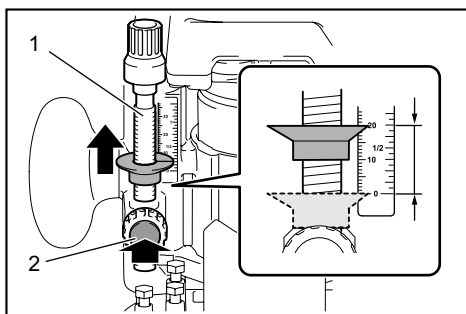
► 1. Stopper pole 2. Stopper screw 3. Feed button

6. Slide the depth pointer so that the pointer indicates "0" on the scale.



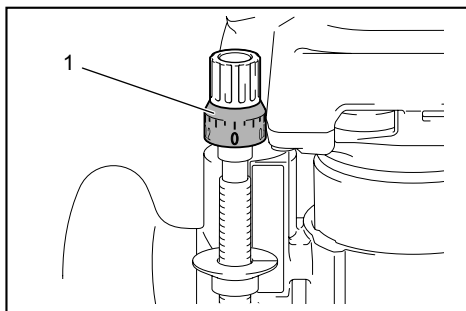
► 1. Depth pointer

7. Adjust the cutting depth by pulling up the stopper pole while pressing the feed button.



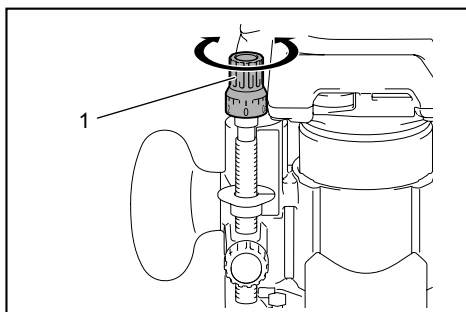
► 1. Stopper pole 2. Feed button

8. To perform fine adjustment of the cutting depth, turn the dial on the stopper pole so that it indicates "0".



► 1. Dial

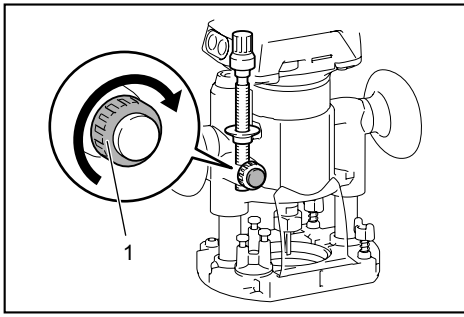
9. Turn the head of the stopper pole to obtain the desired depth. To increase the depth, turn the head counterclockwise. To decrease the depth, turn the head clockwise.



► 1. Head of the stopper pole

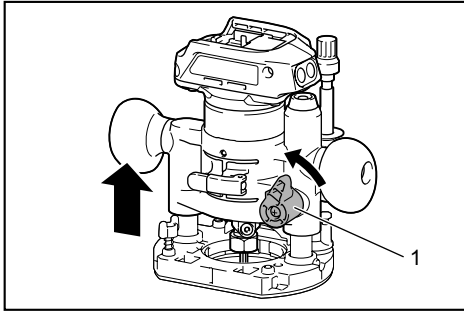
10. Tighten the stopper pole fixing nut.



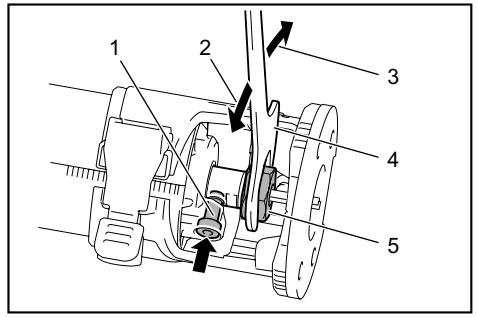


► 1. Fixing nut

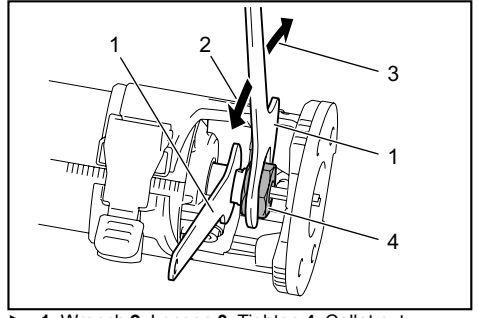
11. Release the fixing lever.



► 1. Fixing lever

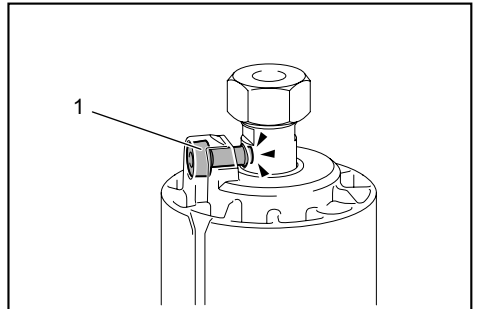


► 1. Shaft lock 2. Loosen 3. Tighten 4. Wrench 5. Collet nut



► 1. Wrench 2. Loosen 3. Tighten 4. Collet nut

**NOTE:** The shaft lock may not return to the original position when you tighten the collet nut at the installation of the trimmer bit. The shaft lock returns to the original position when you start the tool.



► 1. Shaft lock

## ASSEMBLY

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

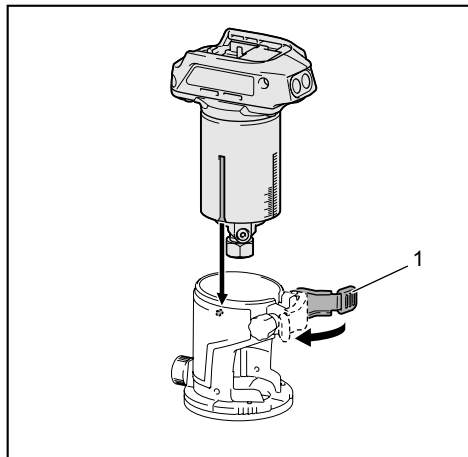
### Installing or removing trimmer bit

**NOTICE:** Do not tighten the collet nut without inserting the bit. The collet cone may break.

Insert the trimmer bit all the way into the collet cone. Press the shaft lock and tighten the collet nut with the wrench or tighten the collet nut securely with the two wrenches. To remove the bit, follow the installation procedure in reverse.

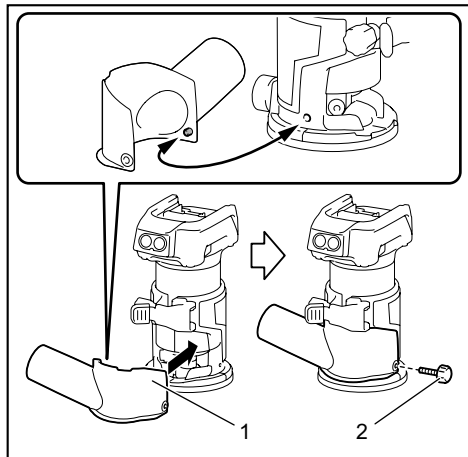
## Installing or removing the trimmer base

1. Open the lock lever of the trimmer base, then insert the tool into the trimmer base aligning the groove on the tool with the protrusion on the trimmer base.

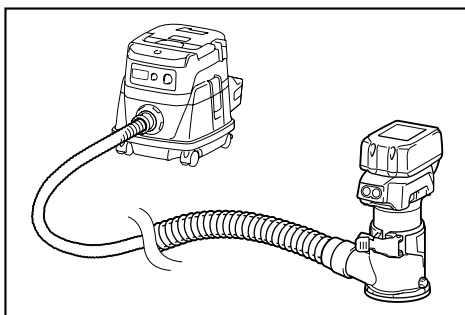


- 1. Lock lever

2. Close the lock lever.
3. Attach the dust nozzle to the trimmer base, and then tighten the thumb screw.



- 1. Dust nozzle 2. Thumb screw



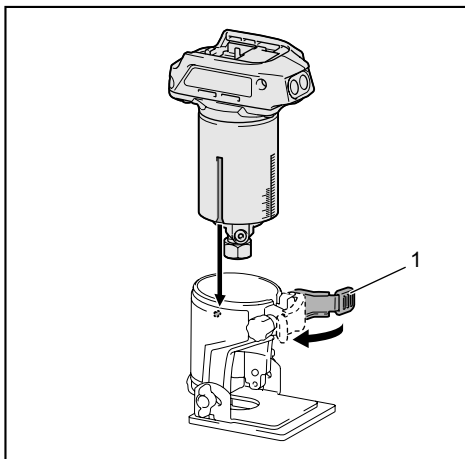
To remove the base, follow the installation procedure in reverse.

**CAUTION:** When using the tool with the trimmer base, be sure to install the dust nozzle on the trimmer base.

## Installing or removing the tilt base

### Optional accessory

1. Open the lock lever of the tilt base, then insert the tool into the tilt base aligning the groove on the tool with the protrusion on the tilt base.



- 1. Lock lever

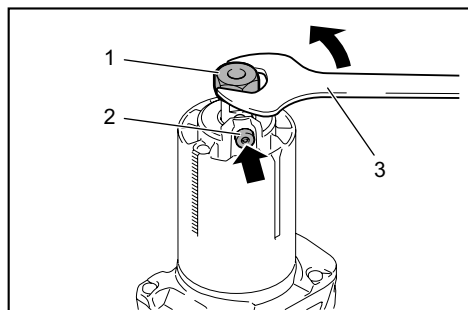
2. Close the lock lever.

To remove the base, follow the installation procedure in reverse.

## Installing or removing the offset base

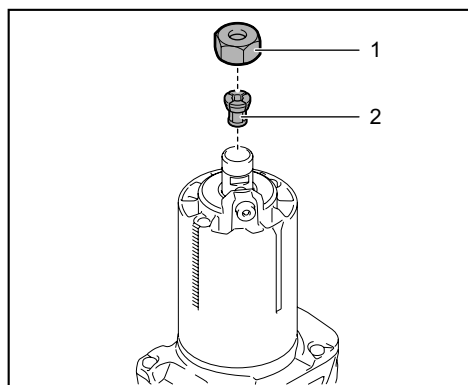
### Optional accessory

1. Press the shaft lock, then loosen the collet nut.



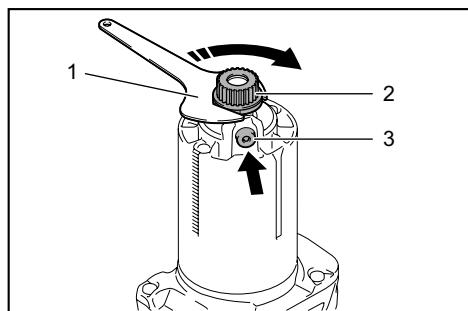
- 1. Collet nut 2. Shaft lock 3. Wrench

2. Remove the collet nut and the collet cone.



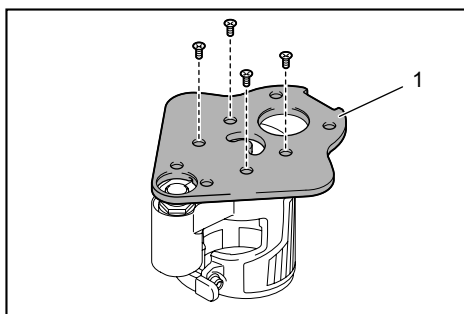
- 1. Collet nut 2. Collet cone

3. Install the pulley on the tool by pressing the shaft lock and tightening the pulley with the wrench.



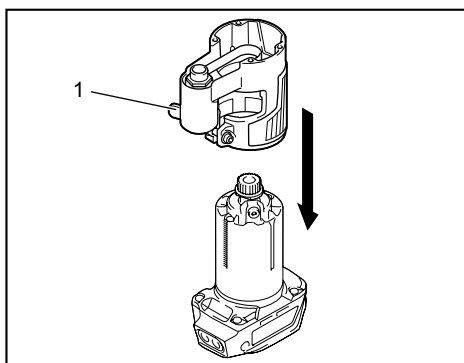
- 1. Wrench 2. Pulley 3. Shaft lock

4. Loosen the screws on the base plate, and then remove the base plate.



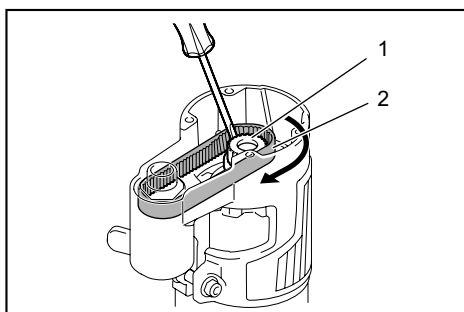
- 1. Base plate

5. Open the lock lever of the offset base, then insert the tool into the offset base.



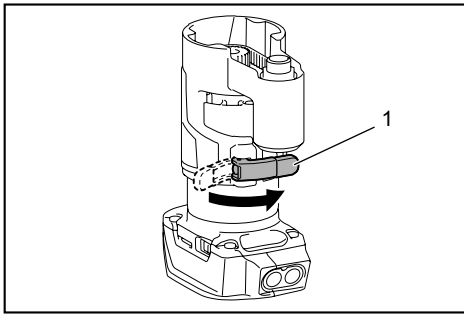
- 1. Lock lever

6. Mount the belt to the pulley by rotating the belt manually.



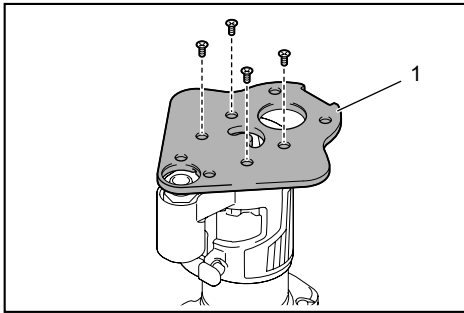
- 1. Pulley 2. Belt

7. Close the lock lever.



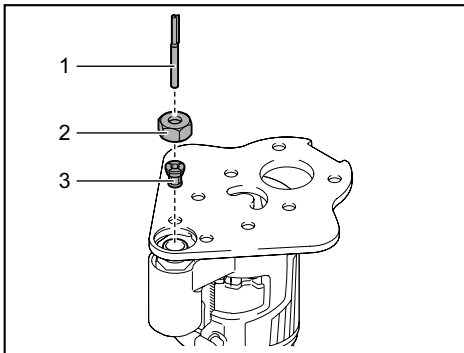
► 1. Lock lever

8. Attach the base plate by tightening the screws.



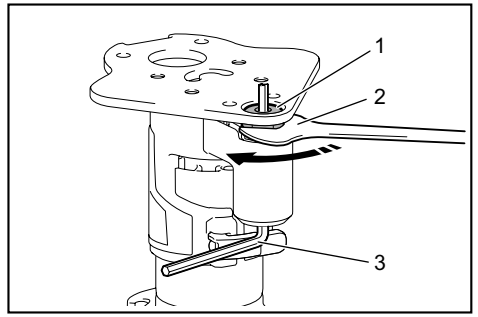
► 1. Base plate

9. Insert the collet cone and the trimmer bit into the offset base, and then tighten the collet nut.



► 1. Trimmer bit 2. Collet nut 3. Collet cone

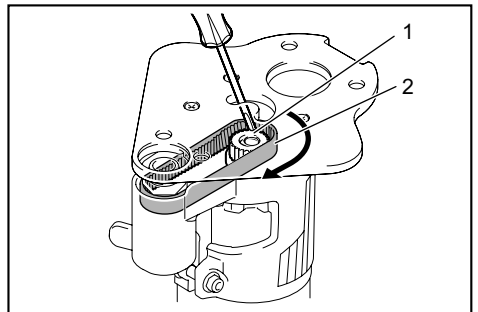
10. Insert the hex wrench into the hole of the offset base, and then tighten the collet nut with the wrench.



► 1. Collet nut 2. Wrench 3. Hex wrench

To remove the base, follow the installation procedure in reverse.

**NOTE:** You can also mount the belt to the pulley without removing the base plate as shown in the figure.

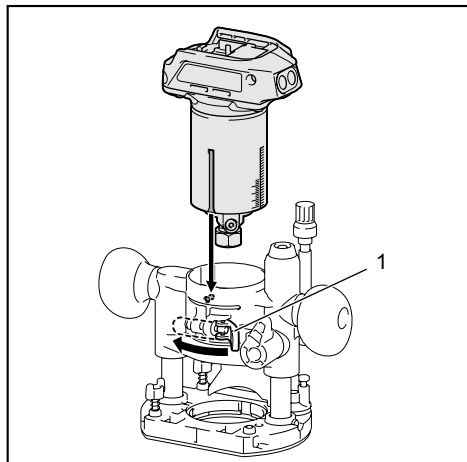


► 1. Pulley 2. Belt

## Installing or removing the plunge base

### Optional accessory

1. Open the lock lever of the plunge base, then insert the tool into the plunge base all the way aligning the groove on the tool with the protrusion on the plunge base.



► 1. Lock lever

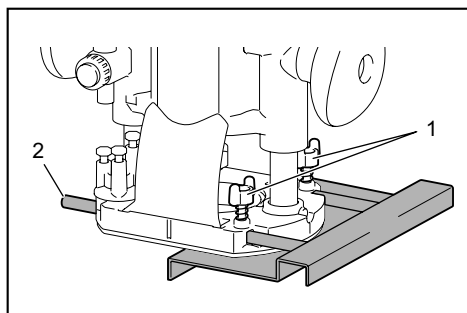
2. Close the lock lever.

To remove the base, follow the installation procedure in reverse.

## Installing or removing the parallel ruler on the plunge base

### Optional accessory

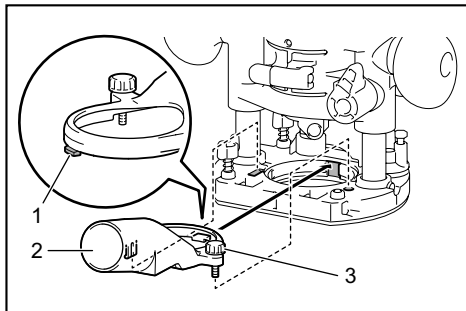
Insert the guide bars into the holes in the plunge base, and then tighten the wing bolts. To remove the ruler, follow the installation procedure in reverse.



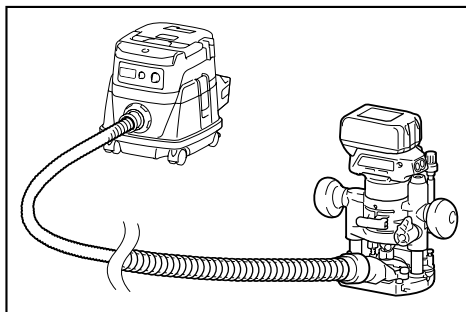
► 1. Wing bolt 2. Guide bar

## Installing or removing the dust nozzle on the plunge base

Insert the dust nozzle into the plunge base so that the protrusion on the dust nozzle fits in the notch in the plunge base, and then tighten the thumb screw on the dust nozzle. To remove the nozzle, follow the installation procedure in reverse.



► 1. Protrusion 2. Dust nozzle 3. Thumb screw

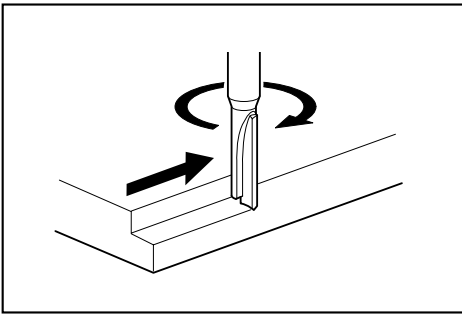


## OPERATION

### Using the tool with the trimmer base

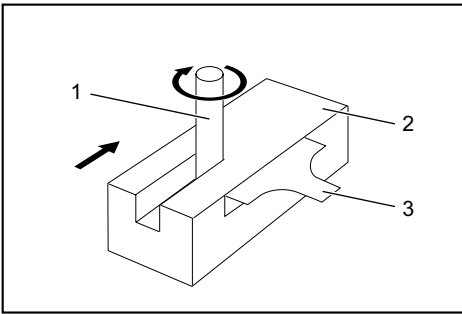
Set the tool base on the workpiece without the trimmer bit making any contact. Turn the tool on and wait until the bit attains full speed. Move the tool forward over the workpiece surface. Keep the tool base flush while moving the tool.

When cutting the edge, be sure to keep the workpiece surface on the left side of the trimmer bit in the feed direction.



**NOTE:** Before cutting on the actual workpiece, it is recommended to make a sample cut. The proper feed speed depends on the trimmer bit size, the kind of workpiece, and depth of cut. Moving the tool forward too fast may cause a poor quality of cut, or damage to the bit or motor. Moving the tool forward too slowly may burn and mar the cutting surface.

When using the trimmer shoe, the straight guide, or the trimmer guide, be sure to keep it on the right side in the feed direction. This will help to keep it flush with the side of the workpiece.



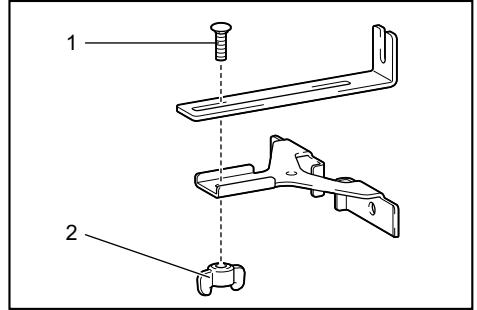
► 1. Trimmer bit 2. Workpiece 3. Straight guide

**NOTICE:** Since excessive cutting may cause overload of the motor or difficulty in controlling the tool, the depth of cut should not be more than 3 mm at a pass when cutting grooves. When you wish to cut grooves more than 3 mm deep, make several passes with progressively deeper bit settings.

## Using the straight guide

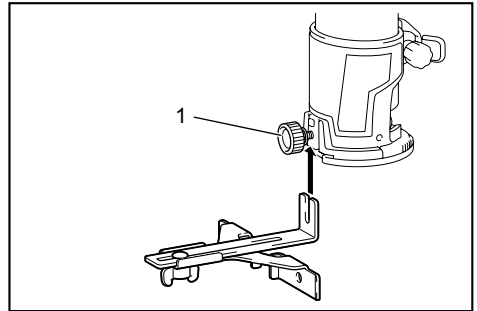
### Optional accessory

1. Assemble the straight guide with the bolt and the wing nut.



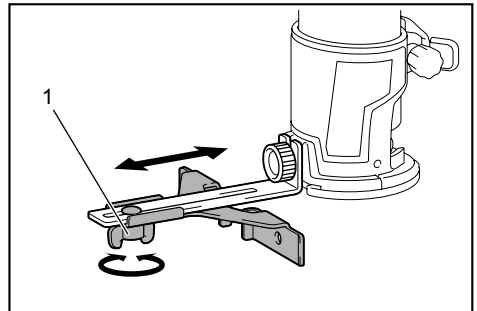
► 1. Bolt 2. Wing nut

2. Attach the straight guide to the trimmer base with the clamp screw.



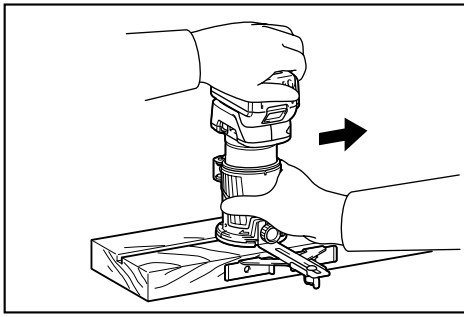
► 1. Clamp screw

3. Loosen the wing nut on the straight guide and adjust the distance between the bit and the straight guide. At the desired distance, tighten the wing nut.

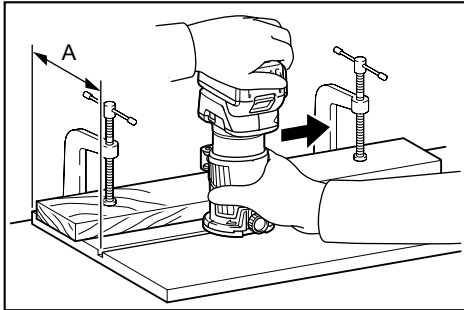


► 1. Wing nut

4. Move the tool with the straight guide flush with the side of the workpiece.



If the distance (A) between the side of the workpiece and the cutting position is too wide for the straight guide, or if the side of the workpiece is not straight, the straight guide cannot be used. In this case, firmly clamp a straight board to the workpiece and use it as a guide against the trimmer base. Feed the tool in the direction of the arrow.

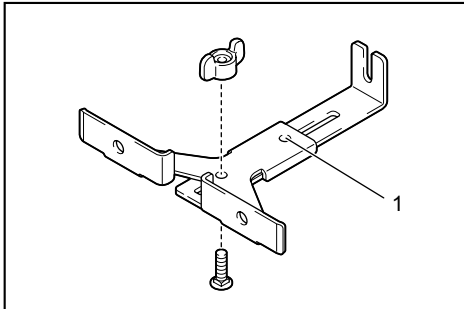


### Using the straight guide for circular work

For circular work, assemble the straight guide as shown in the figures. The minimum and maximum radius of circles to be cut (distance between the center of circle and the center of bit) are as follows:

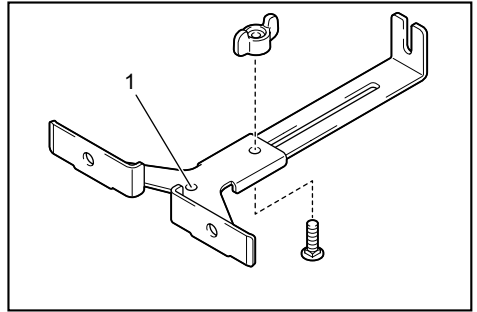
- Minimum: 70 mm
- Maximum: 221 mm

**For cutting circles between 70 mm and 121 mm in radius.**



► 1. Center hole

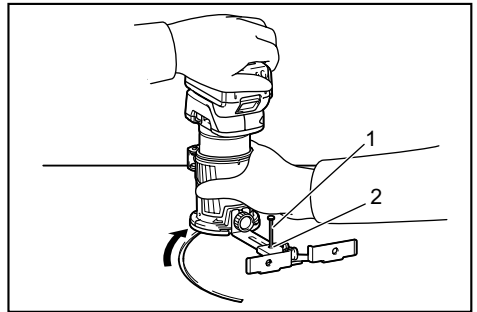
**For cutting circles between 121 mm and 221 mm in radius.**



► 1. Center hole

**NOTE:** Circles between 172 mm and 186 mm in radius cannot be cut using this guide.

Align the center hole in the straight guide with the center of the circle to be cut. Drive a nail less than 6 mm in diameter into the center hole to secure the straight guide. Pivot the tool around the nail in the clockwise direction.



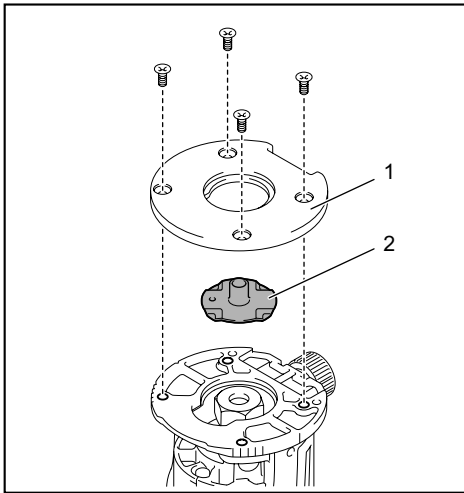
► 1. Nail 2. Center hole

### Using the templet guide

#### Optional accessory

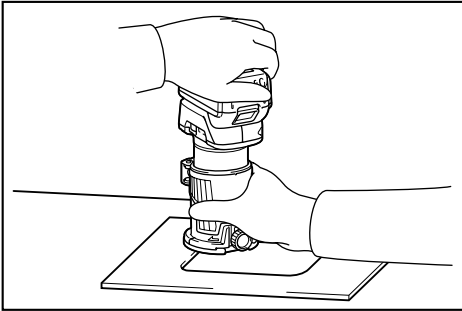
The templet guide allows for repetitive cut with templet patterns by using a templet.

1. Loosen the screws on the base plate, and then remove the base plate from the trimmer base.
2. Place the templet guide on the base, and then attach the base plate by tightening the screws.



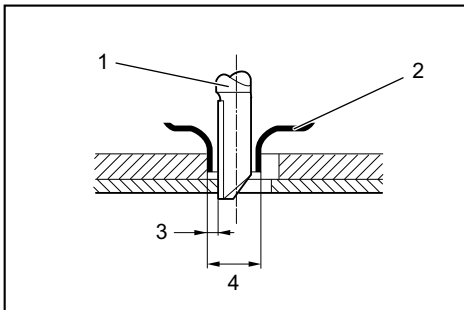
► 1. Base plate 2. Templet guide

3. Place the tool on the templet and move the tool with the templet guide sliding along the side of the templet.



**NOTE:** The actual cut size on the workpiece is slightly different from the templet. The difference is the distance (X) between the trimmer bit and the outside of the templet guide. The distance (X) can be calculated by using the following equation:

$$\text{Distance (X)} = (\text{outside diameter of templet guide} - \text{trimmer bit diameter}) / 2$$

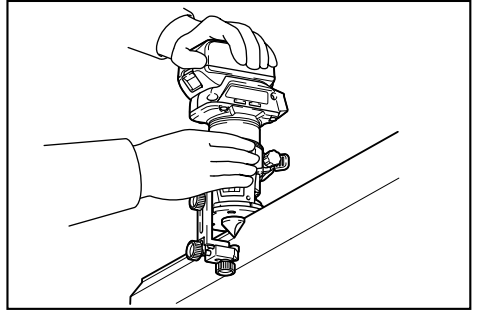


► 1. Trimmer bit 2. Templet guide 3. Distance (X) 4. Outside diameter of templet guide

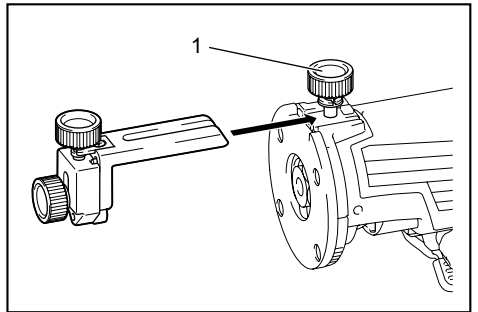
## Using the trimmer guide

### Optional accessory

The trimmer guide allows for trimming the curved side like veneers for furniture by moving the guide roller along the side of the workpiece.

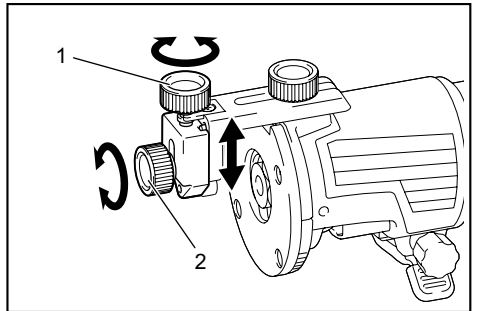


1. Loosen the clamp screw, then install the trimmer guide on the trimmer base, and then tighten the clamp screw.



► 1. Clamp screw

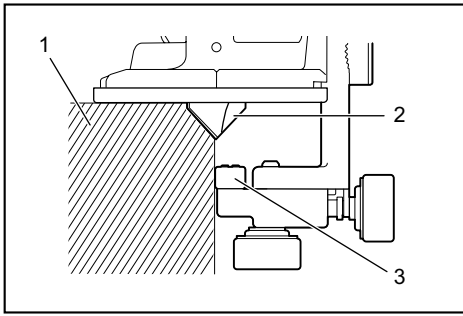
2. Loosen the clamp screw and adjust the distance between the trimmer bit and the trimmer guide by turning the adjusting screw (1 mm per turn). At the desired distance, tighten the clamp screw to secure the trimmer guide.



► 1. Adjusting screw 2. Clamp screw

3. Move the tool with the guide roller riding the side of the workpiece.



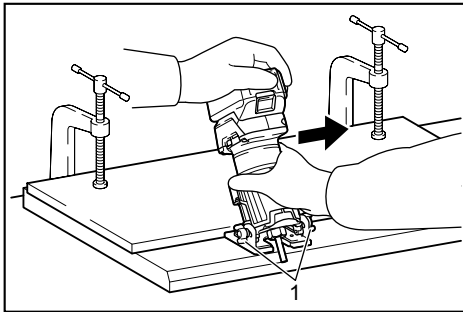


► 1. Workpiece 2. Bit 3. Guide roller

### Using the tool with the tilt base

The tilt base is convenient for chamfering. Loosen the wing screws, then tilt the tool at the desired angle, and then tighten the wing screws.

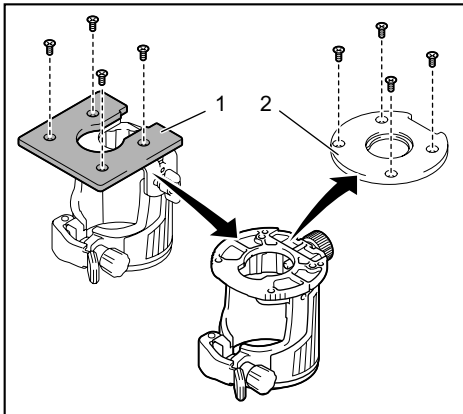
Firmly clamp a straight board to the workpiece and use it as a guide against the tilt base. Feed the tool in the direction of the arrow.



► 1. Wing screw

### Using the tilt base plate with the trimmer base

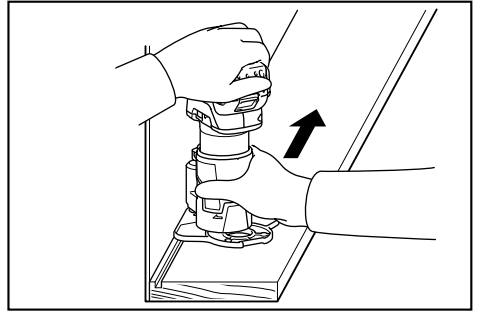
To use the trimmer base with a square base plate, remove the base plate from the tilt base, and then attach it to the trimmer base.



► 1. Tilt base plate 2. Trimmer base plate

### Using the tool with the offset base

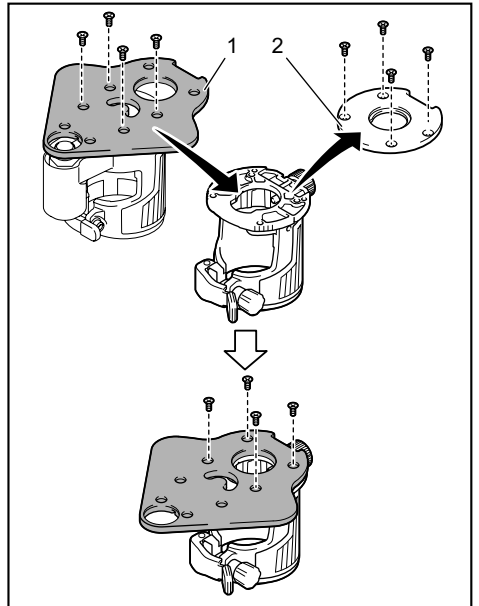
The offset base is convenient for work in a tight area such as a corner.



### Using the trimmer base with the offset base plate and grip

The offset base plate can also be used with a trimmer base and a grip attachment (optional accessory) for more stability.

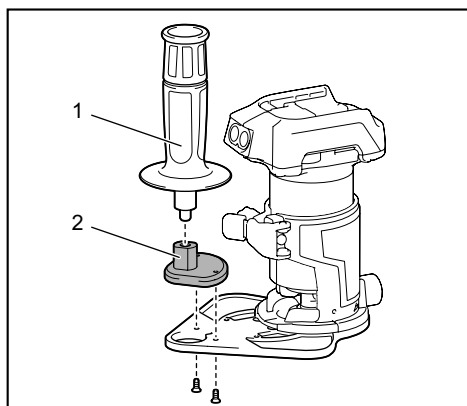
1. Loosen the screws on the base plate, then remove the base plate from the offset base.



► 1. Offset base plate 2. Trimmer base plate

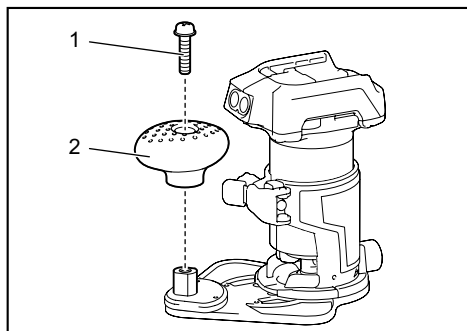
2. Attach the offset base plate to the trimmer base by tightening the screws.

3. Attach the grip attachment and the bar type grip to the offset base plate by tightening the screws.



► 1. Bar type grip 2. Grip attachment

The knob type grip removed from the plunge base can be installed on the offset base instead of the bar type grip.



► 1. Screw 2. Knob type grip

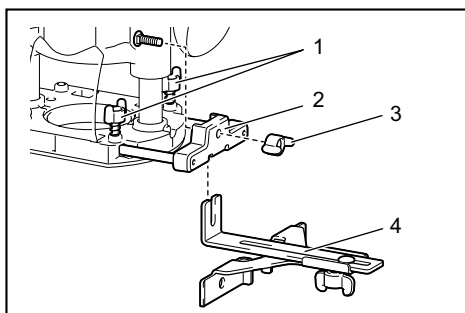
## Using the tool with the plunge base

Always hold the grips firmly with both hands during operation. Operate the tool in the same way as the trimmer base.

## Using the straight guide

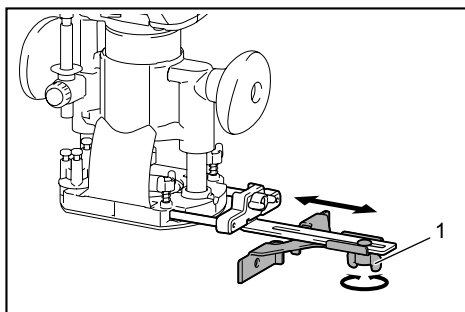
### Optional accessory

1. Install the straight guide to the guide holder by tightening the wing nut. Insert the guide holder into the holes in the plunge base, and then tighten the wing bolts.



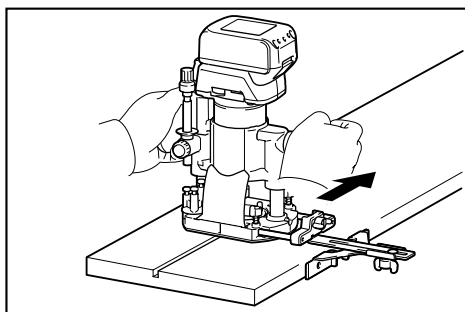
► 1. Wing bolt 2. Guide holder 3. Wing nut 4. Straight guide

2. Loosen the wing nut on the straight guide and adjust the distance between the bit and the straight guide. At the desired distance, tighten the wing nut.



► 1. Wing nut

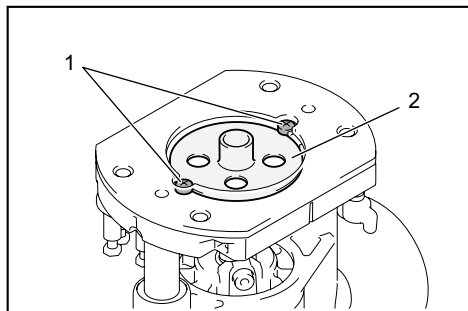
3. Operate the tool in the same way as the straight guide for the trimmer base.



## Using the templet guide

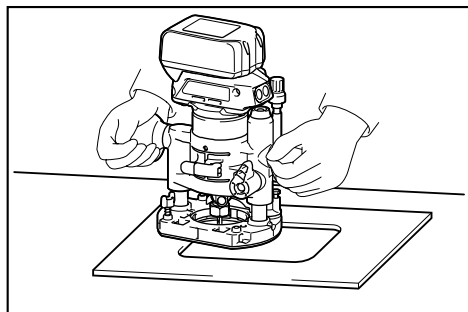
### Optional accessory

1. Loosen the screws on the base and remove them. Place the templet guide on the base, and then tighten the screws.



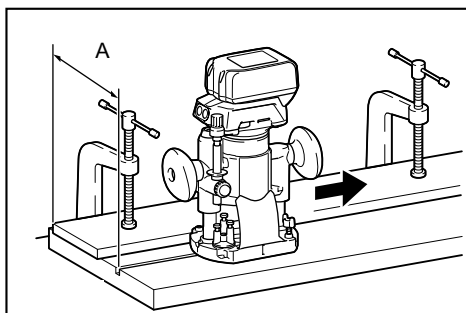
- 1. Screw 2. Templet guide

2. Operate the tool in the same way as the templet guide for the trimmer base.



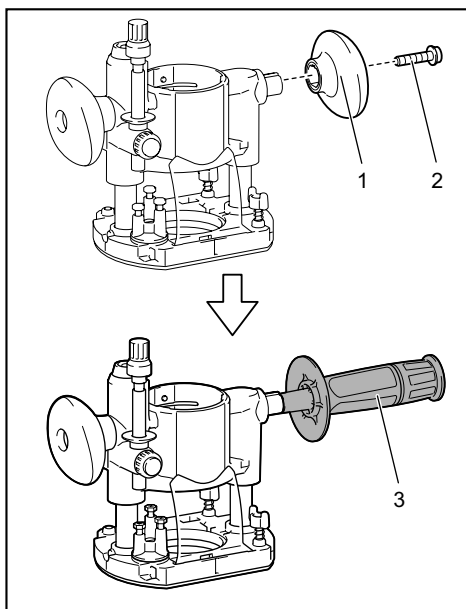
If the distance (A) between the side of the workpiece and the cutting position is too wide for the parallel ruler, or if the side of the workpiece is not straight, the parallel ruler cannot be used.

In this case, firmly clamp a straight board to the workpiece and use it as a guide against the plunge base. Feed the tool in the direction of the arrow.



## Changing knob type grip to bar type grip

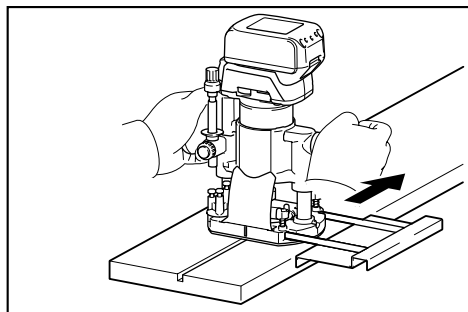
To install the bar type grip on the plunge base, loosen the screw of the knob type grip, then remove the knob type grip, and then install the bar type grip by tightening it.



- 1. Knob type grip 2. Screw 3. Bar type grip

## Using the parallel ruler

The parallel ruler is effectively used for straight cuts when chamfering or grooving. Adjust the distance between the bit and the parallel ruler. At the desired distance, tighten the wing bolts to secure the parallel ruler. When cutting, move the tool with the parallel ruler flush with the side of the workpiece.



# MAINTENANCE

**CAUTION:** 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.

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

**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.

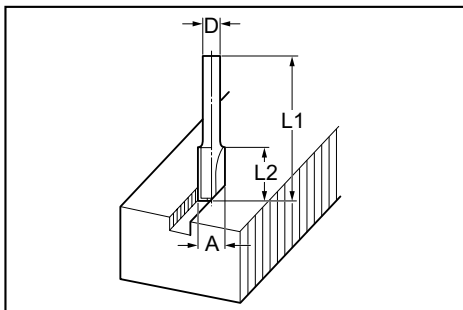
If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Straight and groove forming bits
- Edge forming bits
- Laminate trimming bits
- Straight guide assembly
- Trimmer guide assembly
- Trimmer base assembly
- Tilt base assembly
- Plunge base assembly
- Offset base assembly
- Grip attachment
- Templet guide
- Collet cone 6 mm
- Collet cone 6.35 mm (1/4")
- Collet cone 8 mm
- Collet cone 9.53 mm (3/8")
- Wrench 13
- Wrench 22
- 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.

# Trimmer bits

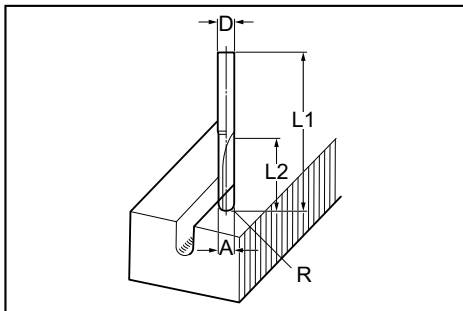
## Straight bit



	D	A	L1	L2
20	6	20	50	15
20E	1/4"			
8	8	8	60	25
8	6			
8E	1/4"			
6	6	6	50	18
6E	1/4"			

Unit: mm

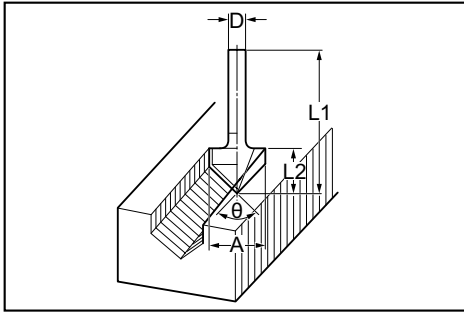
## "U" Grooving bit



	D	A	L1	L2	R
6	6	6	50	18	3
6E	1/4"				

Unit: mm

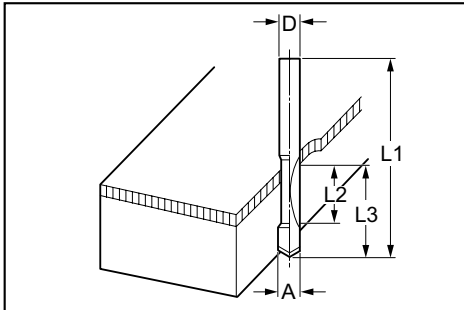
### "V" Grooving bit



D	A	L1	L2	$\theta$
1/4"	20	50	15	90°

Unit: mm

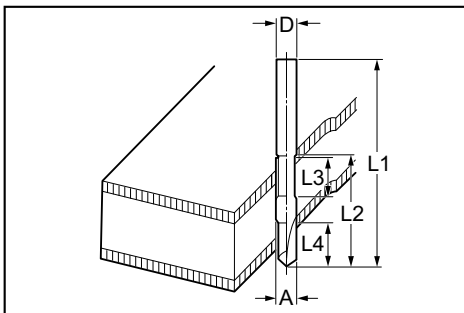
### Drill point flush trimming bit



	D	A	L1	L2	L3
8	8	8	60	20	35
6	6	6		18	28
6E	1/4"				

Unit: mm

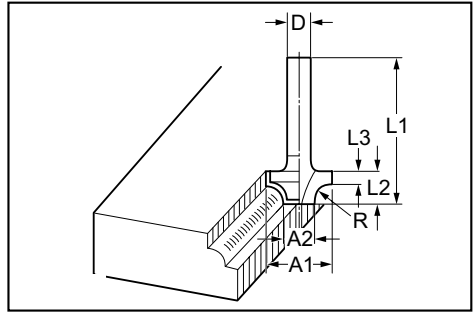
### Drill point double flush trimming bit



	D	A	L1	L2	L3	L4
8	8	8	80	95	20	25
6	6	6	70	40	12	14
6E	1/4"					

Unit: mm

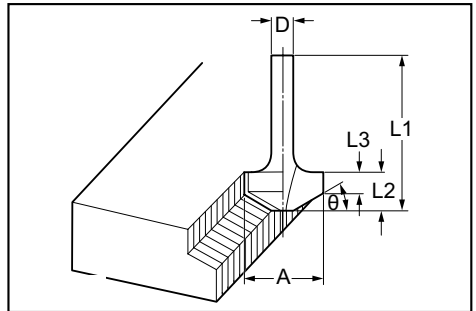
### Corner rounding bit



	D	A1	A2	L1	L2	L3	R
8R	6	25	9	48	13	5	8
8RE	1/4"						
4R	6	20	8	45	10	4	4
4RE	1/4"						

Unit: mm

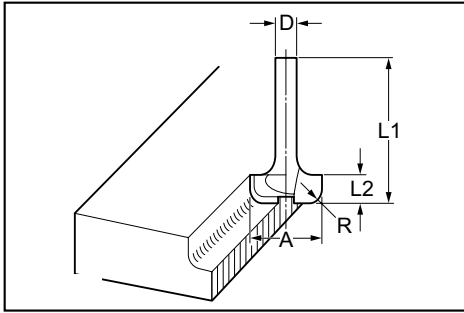
### Chamfering bit



D	A	L1	L2	L3	$\theta$
6	23	46	11	6	30°
6	20	50	13	5	45°
6	20	49	14	2	60°

Unit: mm

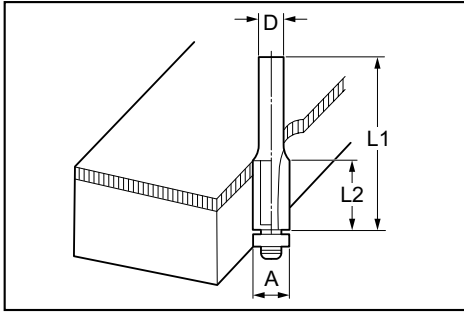
**Cove beading bit**



D	A	L1	L2	R
6	20	43	8	4
6	25	48	13	8

Unit: mm

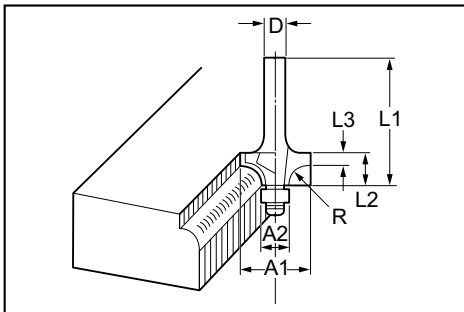
**Ball bearing flush trimming bit**



D	A	L1	L2
6	10	50	20
1/4"			

Unit: mm

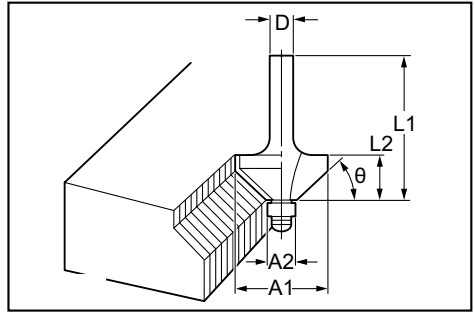
**Ball bearing corner rounding bit**



D	A1	A2	L1	L2	L3	R
6	15	8	37	7	3.5	3
6	21		40	10		6
1/4"						

Unit: mm

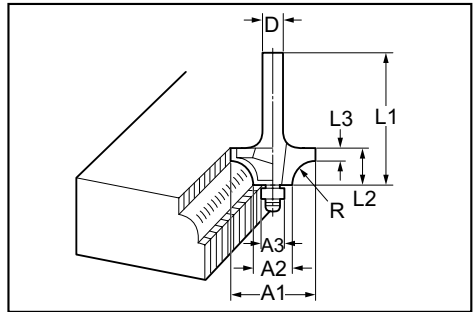
**Ball bearing chamfering bit**



D	A1	A2	L1	L2	$\theta$
6	26	8	42	12	45°
1/4"					
6	20		41	11	60°

Unit: mm

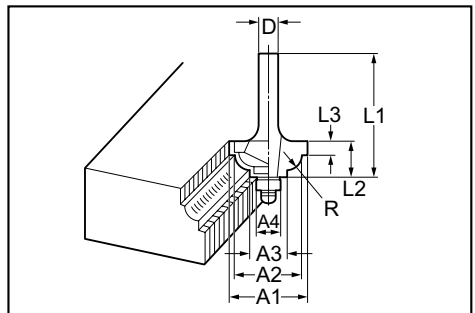
**Ball bearing beading bit**



D	A1	A2	A3	L1	L2	L3	R
6	20	12	8	40	10	5.5	4
6	26			42	12	4.5	7

Unit: mm

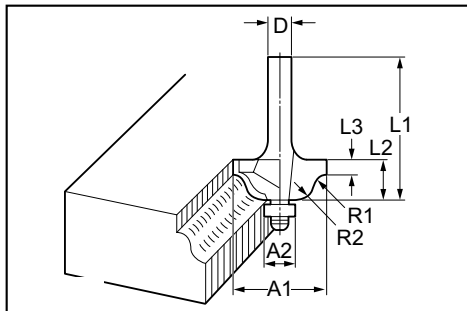
**Ball bearing cove beading bit**



D	A1	A2	A3	A4	L1	L2	L3	R
6	20	18	12	8	40	10	5.5	3
6	26	22			42	12	5	5

Unit: mm

**Ball bearing roman ogee bit**



D	A1	A2	L1	L2	L3	R1	R2
6	20	8	40	10	4.5	2.5	4.5
6	26		42	12		3	6

Unit: mm

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