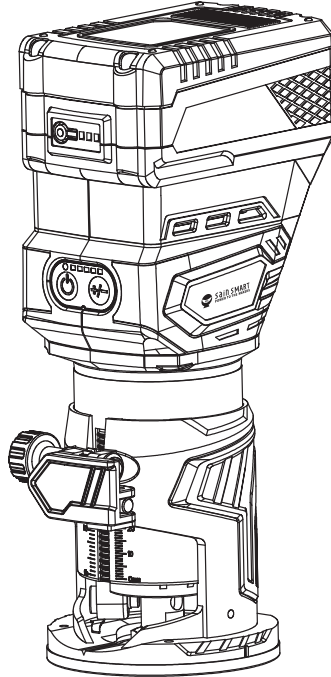




Sain SMART
POWER TO THE MAKERS



Cordless Wood Trimmer

USER MANUAL V 1.0

Please read carefully before use. Please keep it for future reference.

FOREWORD

Thank you for choosing the SainSmart Cordless Wood Trimmer. Please read this user manual thoroughly before use. Any questions and concerns, please simply drop a message to the SainSmart support team <support@sainsmart.com>. Most issues can be resolved quickly.

SAFETY WARNINGS

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.
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.
10. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate improperly installed bit.
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 handheld.
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.

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.

SYMBOLS

The followings show the symbols used for tool.

V	Volts
≡	Direct current
n _o	No load speed
.../min r/min	Revolutions or reciprocation per minute

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 lithiumion 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: Recommended to use original battery. Use batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the SainSmart warranty for the 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).

OVERVIEW



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

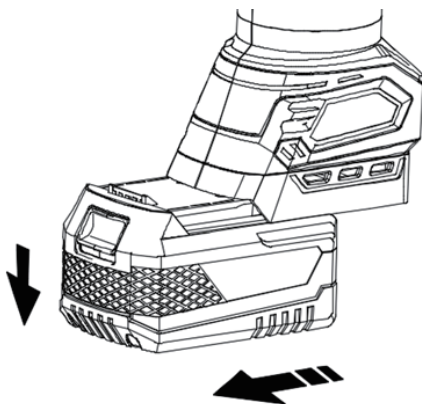
INSTALLING OR REMOVING BATTERY CARTRIDGE



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.



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.



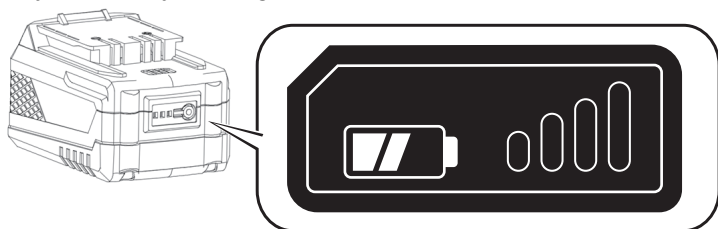
CAUTION: Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.



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



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

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

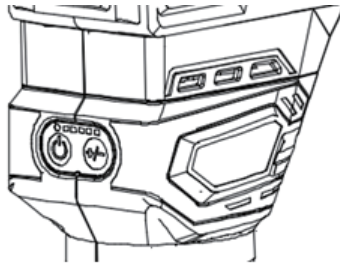
When the tool or battery is overheated, the tool stops automatically and the lamp blinks. In this case, let the tool and battery cool before turning the tool on again.

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 start the tool, press the power button in the standby mode. To stop the tool, press the power button again. The tool turns into the standby mode.



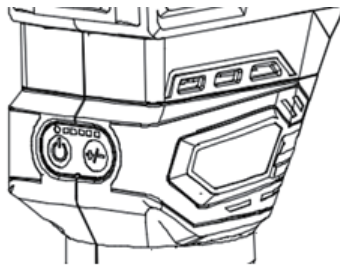
LIGHTING UP THE LAMP

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

To turn on the lamp, press the power button. To turn off the lamp, press the power button 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 BUTTON



The rotation speed of the tool can be changed by press the speed adjusting button. The table below shows the number of LEDs and the corresponding rotation speed

► 1. Speed adjusting button

Number of LED	Speed
1	12,000 RPM
2	16,000 RPM
3	20,000 RPM
4	24,000 RPM
5	28,000 RPM

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

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

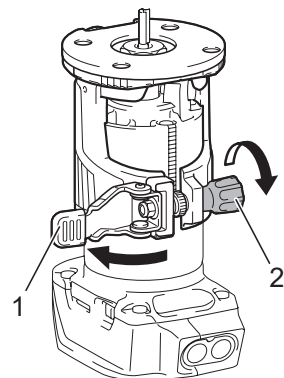
The softstart function minimizes startup shock, and makes the tool start smoothly

ADJUSTING CUTTING DEPTH

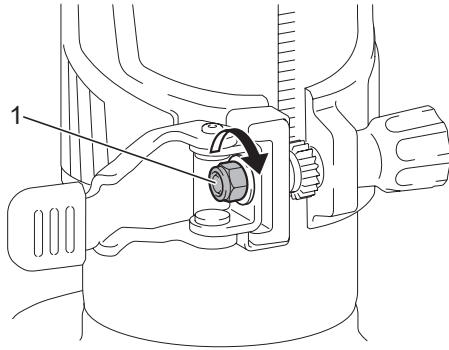
To adjust the cutting depth, open the lock lever, then move the tool base up or down by turning the adjusting screw. After the adjustment, close the lock lever firmly.

► 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



SPECIFICATIONS

Collet Chuck Capacity	1/4" (6.35mm)
Noload Speed	12,000 - 28,000 RPM
Rated voltage	DC 18-21V
Adjustable Height Stroke	0-22mm
Compatible Batteries	BL1815N / BL1820B / BL1830 / BL1830B / BL1840B / BL1850B / BL1860B

Packaging Accessories



x1



x1



x1



x2



x1

ASSEMBLY

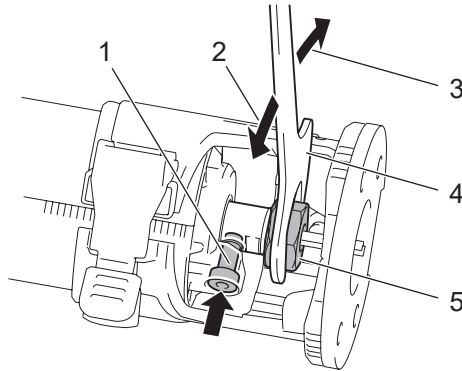
INSTALLING OR REMOVING TRIMMER BIT



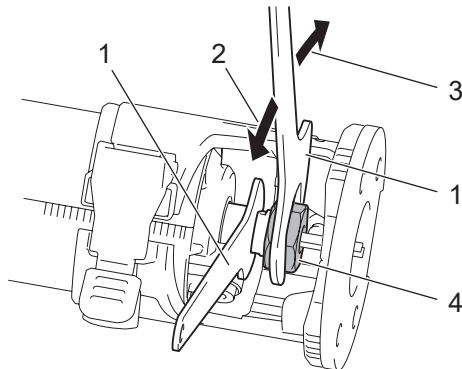
CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

NOTE: 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.

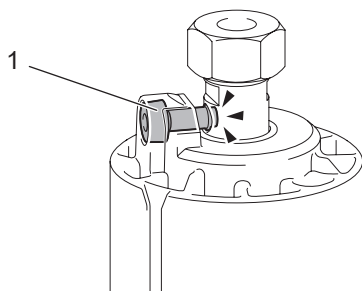


- 1. Shaft lock 2. Loosen 3. Tighten 4. Wrench 5. Collet nut



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

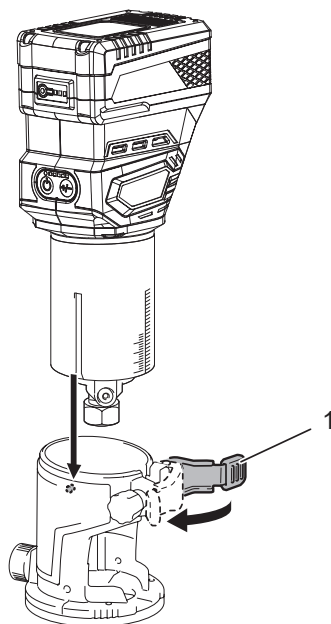
NOTE: The shaft lock may not return to the original position when you tighten the collet nut at the installation of the trimmer bit. The shaft lock returns to the original position when you start the tool.



► 1. Shaft lock

INSTALLING OR REMOVING THE TRIMMER BASE

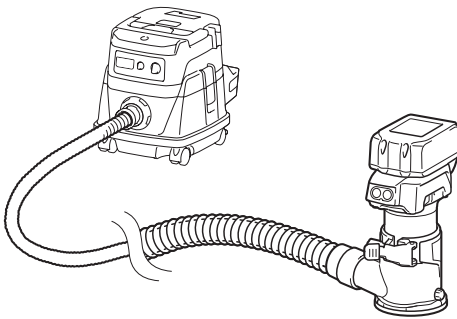
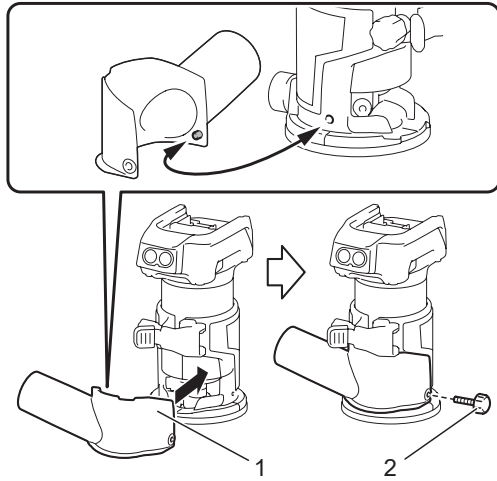
1. Open the lock lever of the trimmer base, then insert the tool into the trimmer base aligning the groove on the tool with the protrusion on the trimmer base.



► 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



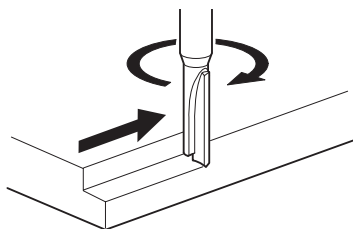
To remove the base, follow the installation procedure in reverse.

OPERATION

USING THE TOOL WITH THE TRIMMER BASE

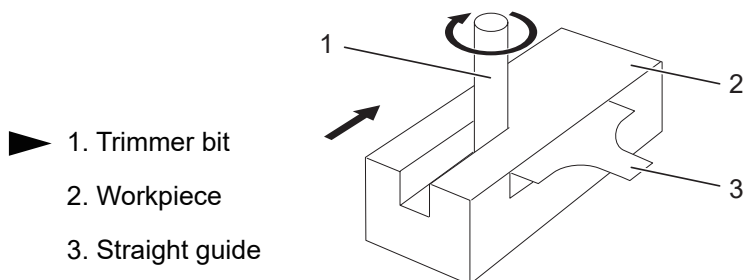
Set the tool base on the workpiece without the trimmer bit making any contact. Turn the tool on and wait until the bit attains full speed. Move the tool forward over the workpiece surface. Keep the tool base flush while moving the tool.

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 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 cut.

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.

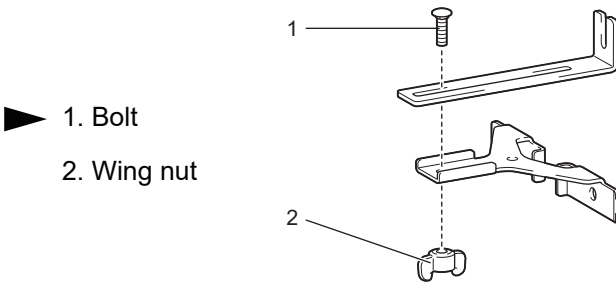


NOTICE: Since excessive cutting may cause overload of the motor or difficulty in controlling the tool, the depth of cut should not be more than 3 mm (1/8") at a pass when cutting grooves. When you wish to cut grooves more than 3 mm (1/8") deep, make several passes with progressively deeper bit settings.

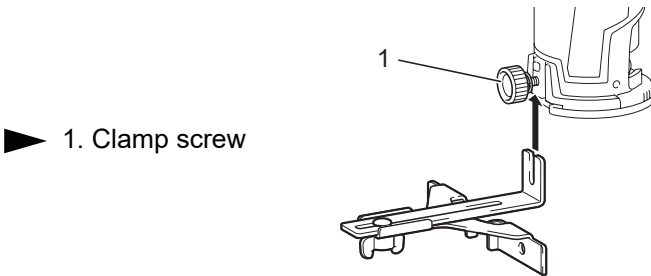
USING THE STRAIGHT GUIDE

Optional accessory

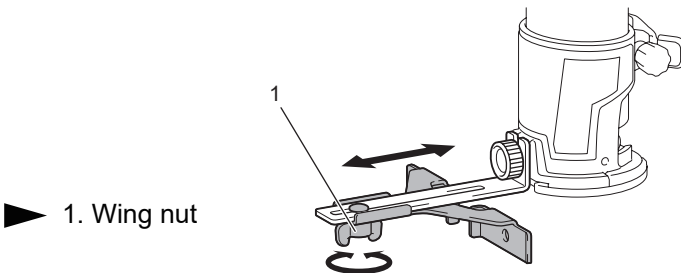
1. Assemble the straight guide with the bolt and the wing nut.



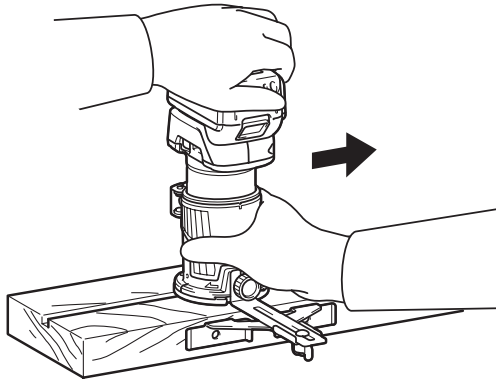
2. Attach the straight guide to the trimmer base with the clamp screw.



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.

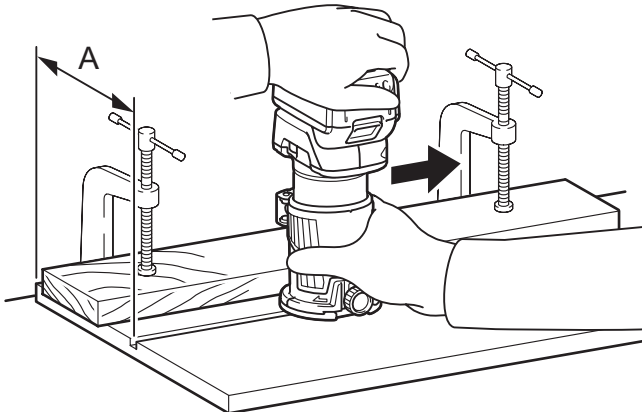


4. Move the tool with the straight guide flush with the side of the workpiece.



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.

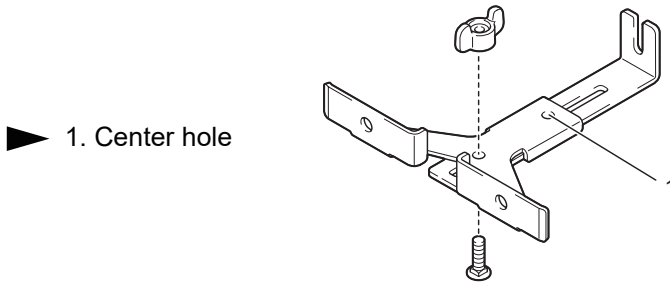


USING THE STRAIGHT GUIDE FOR CIRCULAR

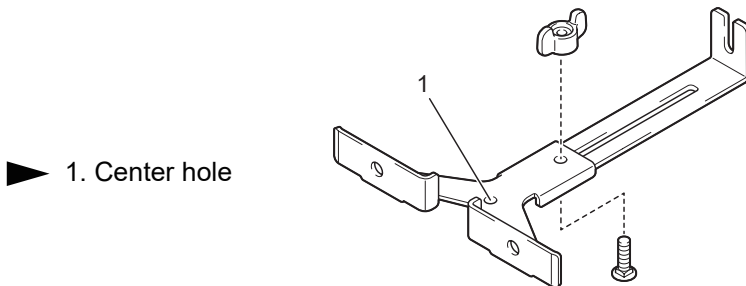
For circular work, assemble the straight guide as shown in the figures. The minimum and maximum radius of circles to be cut (distance between the center of circle and the center of bit) are as follows:

- Minimum: 70 mm (2-3/4")
- Maximum: 221 mm (8-11/16")

For cutting circles between 70 mm (2-3/4") and 121 mm (4-3/4") in radius.



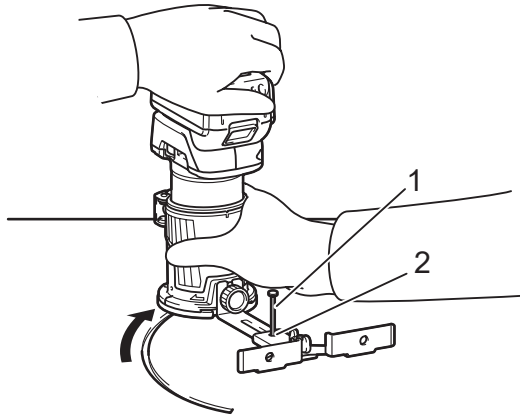
For cutting circles between 121 mm (4-3/4") and 221 mm (8-11/16") in radius.



NOTE: Circles between 172 mm (6-3/4") and 186 mm (7-5/16") 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 (1/4") 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



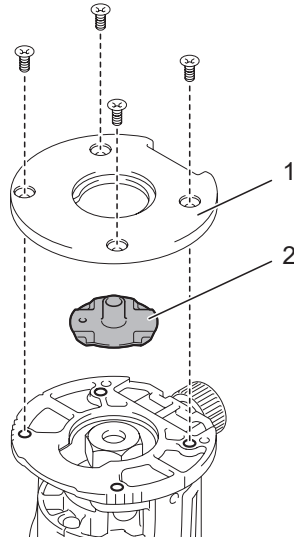
USING THE TEMPLAT GUIDE

Optional accessory

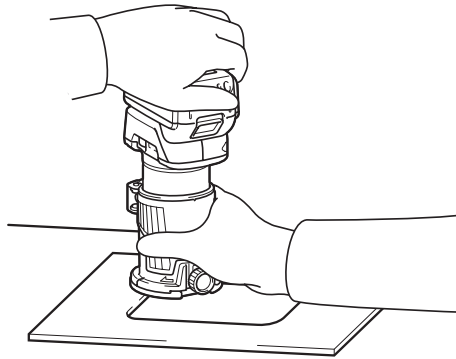
The templet guide allows for repetitive cut with templet patterns by using a templet.

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

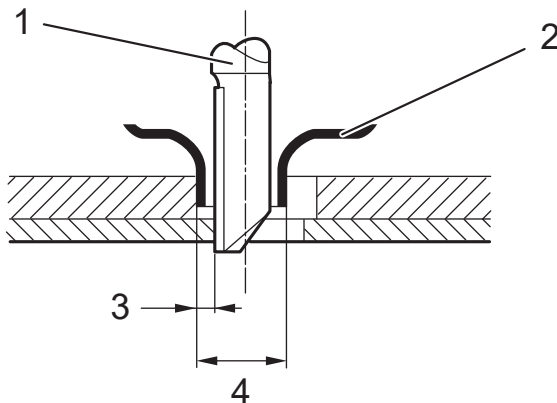


3. Place the tool on the templet and move the tool with the templet guide sliding along the side of the templet.



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:

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

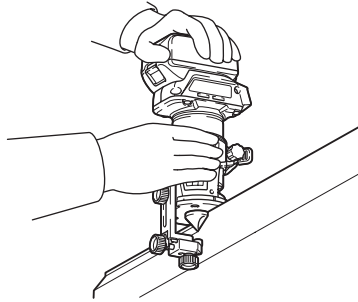


- 1. Trimmer bit 2. Templet guide 3. Distance (X)
4. Outside diameter of templet guide

USING THE TRIMMER GUIDE

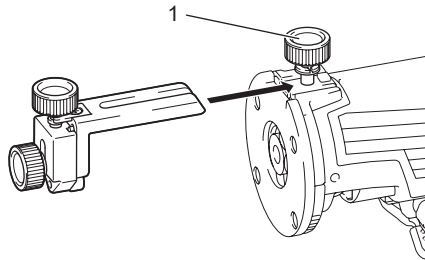
Optional accessory

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



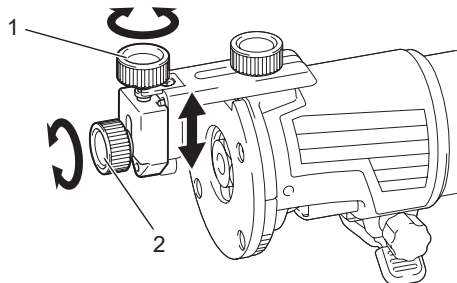
1. Loosen the clamp screw, then install the trimmer guide on the trimmer base, and then tighten the clamp screw.

► 1. Clamp screw

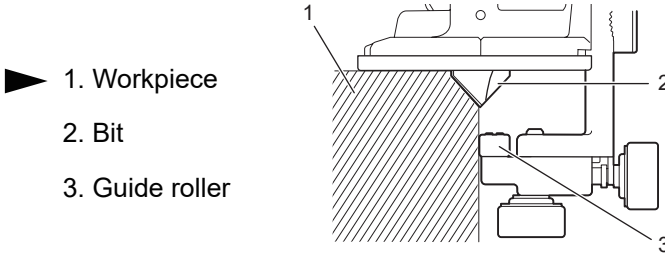


2. Loosen the clamp screw and adjust the distance between the trimmer bit and the trimmer guide by turning the adjusting screw (1 mm (3/64") per turn). At the desired distance, tighten the clamp screw to secure the trimmer guide.

► 1. Adjusting screw
2. Clamp screw



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



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.

WARRANTY

SainSmart provide a 1-year warranty and provide lifetime technical support. For any questions or suggestions, please email the SainSmart team at: support@sainsmart.com or visit the support page of www.sainsmart.com



If you need any assistance, please contact us via:

✉ Email: support@sainSMART.com

📘 Facebook messenger: <https://m.me/SainSmart>



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