

# DELMER



BV20MT-11

## CORDLESS MULTI-PURPOSE TOOL KIT



**IMPORTANT:**

Read this instruction manual before operating this product.  
Keep the instruction manual for future reference.

## INTRODUCTION

The operating instructions constitute part of this product. They contain important information on safety, use and disposal.

Before using the product, familiarise yourself with all of the operating and safety instructions. Use the product only as described and for the applications specified. Keep this manual safely and in the event that the product is passed on, hand over all documents to the third party.

## INTENDED USE

The device is intended for

- 1) Screwing and tightening screws in and out and for drilling holes in wood, metal, plastic, concrete or bricks. (drill, impact drill, screw driver and wrench)
- 2) Sawing/cutting wood, metal and plastics. (reciprocating saw, jig saw, circular saw, chainsaw)
- 3) Sanding, scraping, Dry sanding of wood, plastic, putty and painting surfaces or varnished. (oscillating tool, sander)

The device is not suitable for commercial use. Any other use that is not explicitly approved in these instructions may result in damage to the equipment and represent a serious danger to the user. The equipment is designed for use by adults. Adolescents under the age of 16 may use the device only under supervision. The manufacturer is not liable for damages caused by unspecified use or incorrect operation.

## SCOPE OF DELIVERY

- \* Main tool Body with Brushless or Brushed motor
- \* Router
- \* Impact screwdriver
- \* Reciprocating saw
- \* Chainsaw
- \* Sander
- \* Impact drill attachment
- \* Impact wrench
- \* Circular saw
- \* Oscillating tool
- \* Garden Shear & Trimmer

### Please note:

- 1) If your order include the battery and charger, please pay attention to the safety Use Standards
- 2) We are developing more attachments. The new attachments will be added to the symbol list of this manual.

## GENERAL SAFETY DIRECTIONS FOR POWER TOOLS

### **WARNING!**

Read all safety notices, instructions, illustrations and technical data that have been provided with this power tool. Omissions in the compliance with safety directions and instructions can cause electrical shock, fire and/or severe injuries.

Retain all safety directions and instructions for future use.

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


## 1. WORK AREA SAFETY

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquid, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and by-standers away while operating a power tool. Distractions can cause you to lose control.

## 2. ELECTRICAL SAFETY

- a) 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.
- b) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- c) 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.
- d) 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.  
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.

## 3. PERSONAL SAFETY

 **CAUTION!** The following states how to avoid accidents and injuries:

- a) 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.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.  
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.
- c) 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.
- d) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- e) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- f) If dust extraction and collection devices can be installed, make sure that these are connected and used correctly. Use of dust collection can reduce dust related hazards.  
Do not allow yourself to be lulled into a false sense of security and do not disregard the safety rules for power tools, even if you are familiar with the power tool after using it many times. Careless action can lead to serious injuries within a fraction of a second.

#### **4. POWER TOOL USE AND CARE**

- a) 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.
- b) 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.
- c) Remove the plug from the wall socket and/or remove the rechargeable battery before you change the device's settings, change accessory parts or put away the power tool. Such preventive safety measures reduce the risk of starting the power tool accidentally.  
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.
- d) Look after the power tool and application tool carefully. 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.
- e) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- f) 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.  
Keep handles and grip surfaces dry, clean and free from oil and grease. Slippery handles and grip surfaces do not permit safe operation and control over the power tool in unexpected situations.

#### **5. SPECIAL SAFETY INFORMATION FOR THE CORDLESS COMBINATION TOOL**

- a) Use the additional handles delivered with the appliance. The loss of control can result in injuries. Hold the electric tool by the insulated handle surfaces when performing work where the cutting tool or screw may come into contact with hidden wiring. Contact with a live wire can also cause a charge in metal parts of the appliance and result in an electric shock.
- b) Use suitable detectors in order to find hidden sup- ply lines or ask the local utility company. Contact with electrical cables can lead to electric shock and fire, contact with a gas pipe can result in an explosion. Damage to a water pipe can lead to property damaged and electric shock.
- c) Secure the workpiece. A workpiece that is retained with clamping appliances or a vice is held more securely than with your hand.
- d) Be very careful when handling tools such as saws, scraper blades and drills. These are sharp and present an injury hazard.
- e) Wear safety gloves when changing attachments. This enables you to avoid injuries if the appliance attachment has heated up after use.

#### **6. SPECIFIC SAFETY INSTRUCTIONS WHEN SAWING**

- a) Keep hands away from the sawing area. Do not reach underneath the work piece. Always stand to the side of the saw when working. Upon contact with the blade there is a risk of injury.
- b) Only when the electric tool is turned on should the sawing blade be moved against the work piece. There is a risk of kickback if the tool insert jams in the work piece.
- c) Make sure that the footplate is securely placed against the work piece during sawing. The saw blade can tilt and lead to loss of control over the power tool.
- d) After you have finished work, turn the power tool off and do not pull the saw blade out of the cut until it has come to a stand still. In this way you will avoid any kick back and can safely put down the power tool.

- e) Use only undamaged saw blades in perfect condition. Bent or blunt blades can break, adversely affect the cut or cause kickback.
- f) Do not brake the saw blade after switching the appliance off by applying side pressure. The saw blade may be damaged, break or cause a kickback.
- G) Tighten the material firmly. Do not support the work piece by hand or foot. Do not touch any objects or the ground with the saw running. There is a risk of kick-back.
- H) Hold the power tool tightly with both hands while working and ensure a secure footing. The power tool is guided more securely with both hands.
- I) Wait until the power tool has stopped before placing it down. The tool insert can tilt and lead to loss of control over the power tool.
- J) Switch the appliance off immediately if the sawing blade jams. Spread the saw cut out and pull the blade out carefully. Otherwise this can lead to loss of control over the power tool.

## **7.SPECIAL SAFETY INFORMATION DURING SANDING AND SCRAPING**

- a) Only use the power tool for dry sanding. Do not scrape moist materials. Penetration of water into the power tool increases the risk of electric shock. Avoid over heating the sanded object and the sander itself. Possible fire hazard.
- b) The work piece gets hot during grinding. Do not touch the machined area, allow it to cool down. There is a risk of burning. Do not use coolants or the like.
- c) Always empty the dust container before work breaks. Sanding dust in the dust sack, micro filter, paper sack (or in the filter sack or extraction system filter) can self ignite under unfavourable conditions such as flying sparks caused by grinding metals.
- d) Particular hazards are caused if the sanding dust is mixed with paint, polyurethane residues or other chemical substances.
- e) If the sanded object is hot after long working periods.

## **8.RESIDUAL RISKS**

Even if properly operating and handling this electric tool, some residual risks will remain. Due to its construction and build, this electric tool may present the following hazards:

- a) Lung damage, if suitable respiratory protection is not worn; residual risks will remain. Due to its construction and build, this electric tool may present the following hazards:
- b) Lung damage, if suitable respiratory protection is not worn;
- c) Ear damage if working without ear protection.
- d) Eye damage if suitable eye protection is not worn.
- e) Damage to your health caused by swinging your hands and arms when operating the appliance for longer periods of time or if the unit is not held or maintained properly.

### **WARNING!**

During operation, this electric tool generates an electromagnetic field which, under certain circumstances, may impair the functionality of active or passive medical implants. To reduce the risk of serious or lethal injuries, we recommend that persons with medical implants consult their doctor and the manufacturer of their medical implant before operating the machine.

### MAIN TOOL BODY

1. Lock/unlock sliding groove
2. Brushless/Brushed motor
3. Direction Switch
4. On/Off Switch
5. Handle
6. Unlock Button For Battery
7. Rechargeable Battery

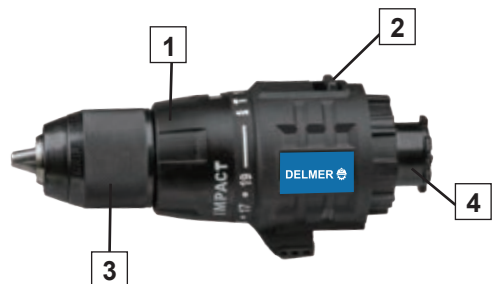


### SPECIFICATION

Model: BV20MT-11 (Brushless motor)
No-load speed: 0-21000rpm

### HAMMER DRILL ATTACHMENT

1. Torque ring
2. Low/High speed controller
3. Chuck
4. Fitting joint



### SPECIFICATION

Hammer drill	Chuck size: 13mm
No-load speed: 0-350/0-1400rpm	Torque setting: 19+2 drill
Impact rate: 0-4550/0-18200bpm	Torque: 50N.m

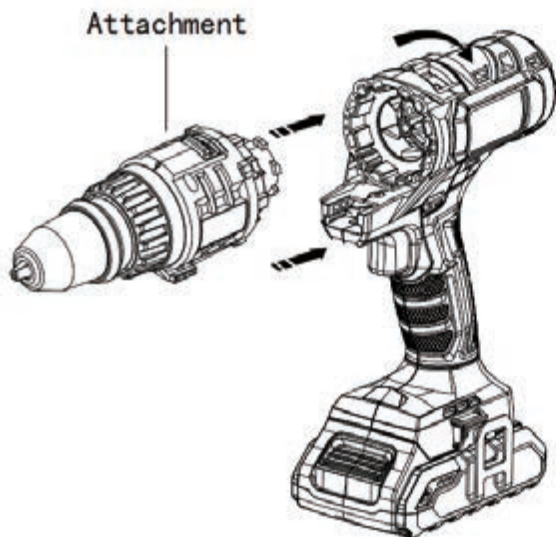
**HOW TO REPLACE THE IMPACT DRILL ATTACHMENT:**

Figure 1

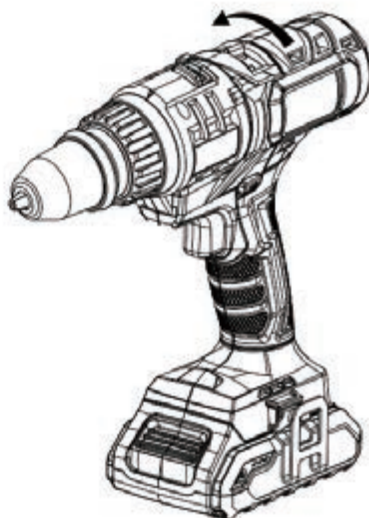


Figure 2

Fix on the impact drill attachment: (Figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the impact drill attachment into the main tool body until you hear the “click” sound.
- 3) Slide the lever of the sliding groove to the direction of “lock” to make sure the impact drill attachment be fixed tightly.

Remove the impact drill attachment: (Figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the impact drill attachment.
- 5) Don't turn it down when you remove the impact drill attachment to avoid it to falling and breaking.

**WORKING INSTRUCTION**

- 1) Rotate the keyless chuck counter- clockwise, until the drill chuck aperture is large enough to accommodate the drill or screw bit.
- 2) Insert the tool as far as possible into the keyless chuck .
- 3) Rotate the keyless chuck clockwise in order to clamp the tool.
- 4) To remove the tool again, rotate the keyless chuck and pull out the tool.

**CHOICE OF GEAR**

 **CAUTION! Stop appliance before changing gear.**

- 1) Wait for the appliance to come to a standstill.
- 2) Slide the gear selector into the required position:  
L= low speed preselection.  
H= high speed preselection.

## SET THE DIRECTION OF ROTATION

The appliance's direction of rotation can be changed with the rotational direction switch.

- 1) Wait for the appliance to come to a standstill.
- 2) Push the rotational direction speed into the desired position:


**Clockwise rotation:** → to drill and screw in screws.

**Anticlockwise rotation:** ← to unscrew screws.

If you place the direction switch in the middle position, the device is secured against being switched on. The direction change may only be actuated when at a standstill!


## TORQUE ADJUSTMENT

You can preselect the maximum torque.

The torque settings are labeled 1 - 19 + 

- 1) Wait for the appliance to come to a standstill.
- 2) Turn the torque adjusting ring to select the desired torque:

**Screws:** Steps 1 - 19

**Drilling:** Step 

- 3) Start with a lower torque step and increase as required.


The direction change may only be actuated when the appliance is at a standstill!

**NOTE:** The necessary torque is dependent on:

\* the type and hardness of the material to be treated;

\* the type and length of the screws used.

## HAMMER SETTING

- 1) For maximum performance, use a good quality masonry bit for hammer drill, turn the function mode selector on the impact mode position 
- 2) Only use this setting to bore or drill into stone/concrete. The hammer setting works well when drilling/chipping into materials.
- 3) The tip of tool **MUST** be firmly depressed for the hammer action to engage.
- 4) Note: Only use a masonry bit when drilling into masonry materials.

## IMPACT SCREW DRIVER ATTACHMENT

1. Chuck
2. Fitting joint





## SPECIFICATION

<b>Cordless Impact Driver</b>	No-load speed: 0-2700bpm
Impact rate: 0-3400bpm	Chuck size: 6.35mm/ 1/4"
Torque: 200N.m	

## HOW TO REPLACE THE IMPACT SCREW DRIVER ATTACHMENT:

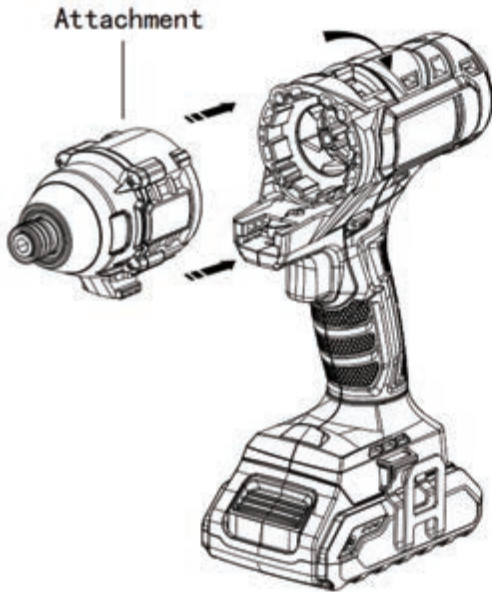


Figure 1

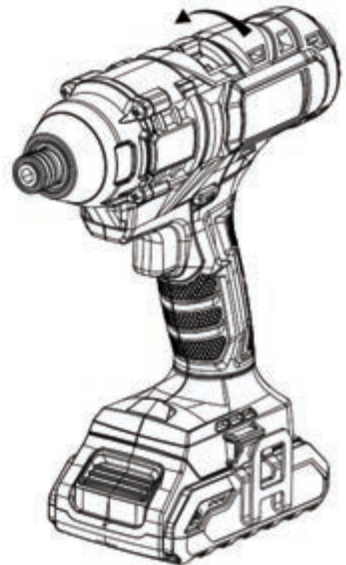


Figure 2

Fix on the impact screw driver attachment: (Figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the impact screw driver attachment into the main tool body until you hear the "click" sound.
- 3) Slide the lever of the groove to the direction of "lock" to make sure the impact screw driver attachment be fixed tightly.

Remove the impact screw driver attachment: (Figure 2)

- 4) Slide the lever of the groove to the direction of "unlock", at the same time, take out the impact screw driver attachment.
- 5) Don't turn it down when you remove the impact screw driver attachment to avoid it to falling and breaking.

### WORKING INSTRUCTION

Fitting a driver bit or long bit holder

- 1) Pull the chuck of the impact screw driver forward.
- 2) Insert the driver bit or long bit holder
- 3) Release the chuck of the impact screw driver, it will return to its normal position.
- 4) Select the direction of rotation.
- 5) Turn on the impact screw driver by depressing the switch trigger of the main tool body.
- 6) Increase pressure on the trigger will increase the speed of the impact driver.

### IMPACT WRENCH ATTACHMENT

1. Chuck
2. Fitting joint



### SPECIFICATION

<b>Cordless Impact Wrench</b>	No-load speed: 0-2700rpm
Impact rate: 0-3400bpm	Chuck size: 12.7mm/ 1/2"
Torque: 320N·m	

### HOW TO REPLACE THE IMPACT WRENCH ATTACHMENT:

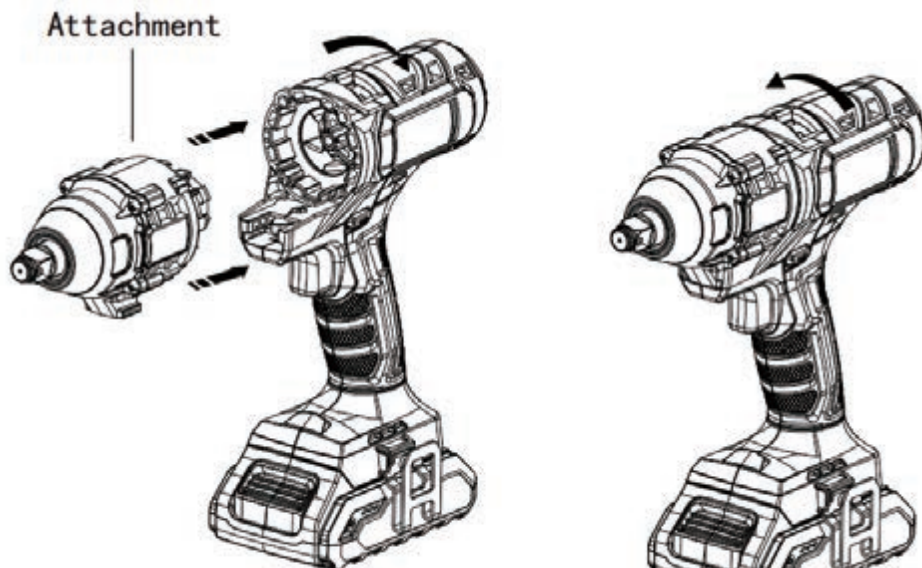


Figure 1

Figure 2

Fix on the impact wrench attachment: (Figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the impact wrench attachment into the main tool body until you hear the “click” sound.
- 3) Slide the lever of the groove to the direction of “lock” to make sure the impact wrench attachment be fixed tightly.

Remove the impact wrench attachment: (Figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the impact wrench attachment.
- 5) Don't turn it down when you remove the impact wrench attachment to avoid it to falling and breaking.

## WORKING INSTRUCTION

### 1.Set the rotational direction

- 1) The rotational direction switch is used to change the rotational direction of the wrench. However, this is not possible while the on/off switch is being pressed.
- 2) Right rotation: To driver in screws and tighten nuts, press the rotational direction switch through to the left stop.
- 3) Left rotation: To loosen and unscrew screws and nuts, press the rotational direction switch through to the right stop.

### 2.Adjusting the speed

- 1) You can adjust the speed of the power tool when it is no by pressing in the on/off switch to varying extents.
- 2) A light pressure on the on/off switch results in a low rotational speed. Increased pressure on the switch caused an increase in speed.
- 3) The tool will be stop when you release the switch trigger.
- 4) The torque depends on the impact duration. The maximum achieved torque results from the sum of all individual torques achieved through impact. Maximum torque is achieved after an impact duration of 6–10 seconds. After this duration, the tightening torque increases only minimally. The impact duration is to be determined for each required tightening torque. The tightening torque actually achieved should always be checked with a torque wrench.

## RECIPROCATING SAW ATTACHMENT

1. Soleplate
2. Lever for unlocking sawblade
3. Fitting joint



## SPECIFICATION

<b>Cordless Saber Saw</b>	No-load speed: 0-3500rpm
Stroke length: 15mm	Cutting capacity: Wood:100mm
	Steel&Pipe:8mm

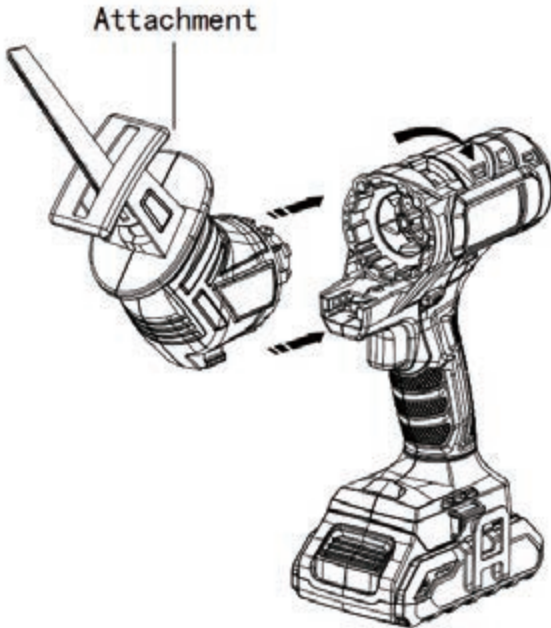
**HOW TO REPLACE THE RECIPROCATING SAW ATTACHMENT:**

Figure 1

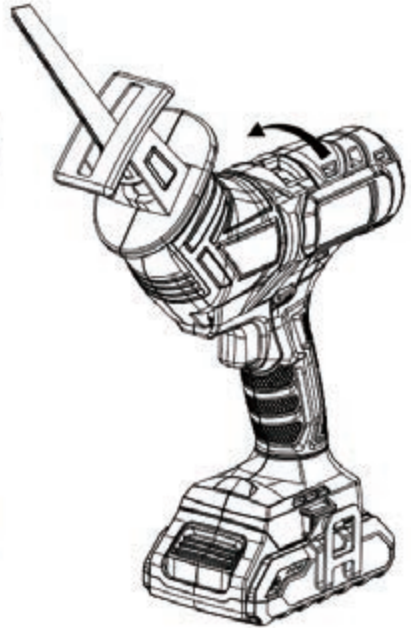


Figure 2

Fix on the reciprocating saw attachment: (Figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the reciprocating saw attachment into the main tool body until you hear the "click" sound.
- 3) Slide the lever of the groove to the direction of "lock" to make sure the reciprocating saw attachment be fixed tightly.

Remove the reciprocating saw attachment: (Figure 2)

- 4) Slide the lever of the groove to the direction of "unlock", at the same time, take out the reciprocating saw attachment.
- 5) Don't turn it down when you remove the reciprocating saw attachment to avoid it to falling and breaking.

**WORKING INSTRUCTION**

Installing/changing the blade

** WARNING!**

Secure the tool against switching on. If the application is switched on accidentally, there is a danger of injury!

Do not use any blunt or bent blades or blades which are damaged in any other way.

Always insert a suitable saw blade.

### 1.Installing the blade:

- 1) Push the lever for saw blade unlocking upwards as far as the stop.
- 2) Push the saw blade shaft into the saw blade mounting slot.
- 3) To unlock, release the lever, it will return to the initial position.
- 4) Check that the saw blade is secure by pulling on it.

### 2.Removing the saw blade:

- 1) Press the lever for saw blade unlocking upwards as far as the stop.
- 2) then pull the saw blade out of the saw blade mounting.

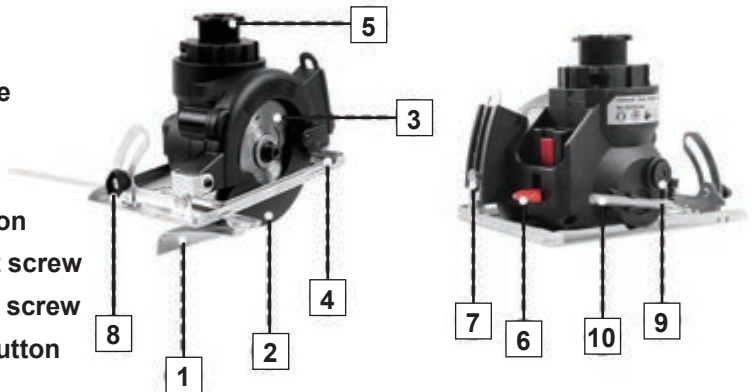
## OPERATION THE RECIPROCATING SAW

- 1.Before switching the application on, ensure it is not in contact with the workpiece.
- 2.Turn the tool on. By using the on/off switch you can progressively control the stroke rate:

- 1) Gentle pressure: low stroke rate.
- 2) Greater pressure:higher stroke rate.
- 3) The direction switch cannot be locked or change direction. It has no function.
- 4) Cut with a uniform forward motion.
- 5) After completion of the work, first turn off the tool, then remove the blade from the reciprocating saw attachment, finally you can remove the reciprocating saw attachment from the main tool body.

## CIRCULAR SAW ATTACHMENT

1. Guide ruler
2. Protective cover
3. Circular saw blade
4. Sole plate
5. Fitting joint
6. Lock/release button
7. Depth adjustment screw
8. Angle adjustment screw
9. Spindle release button
10. Allen wrench



## SPECIFICATION

<b>Cordless Circular Saw</b>	Max.diameter of the blade:85mm
No-load speed: 0-4500rpm	Center hole distance: 10mm
Cutting depth: 90°: 21mm; 45°: 15mm	

## HOW TO REPLACE THE CIRCULAR SAW ATTACHMENT:

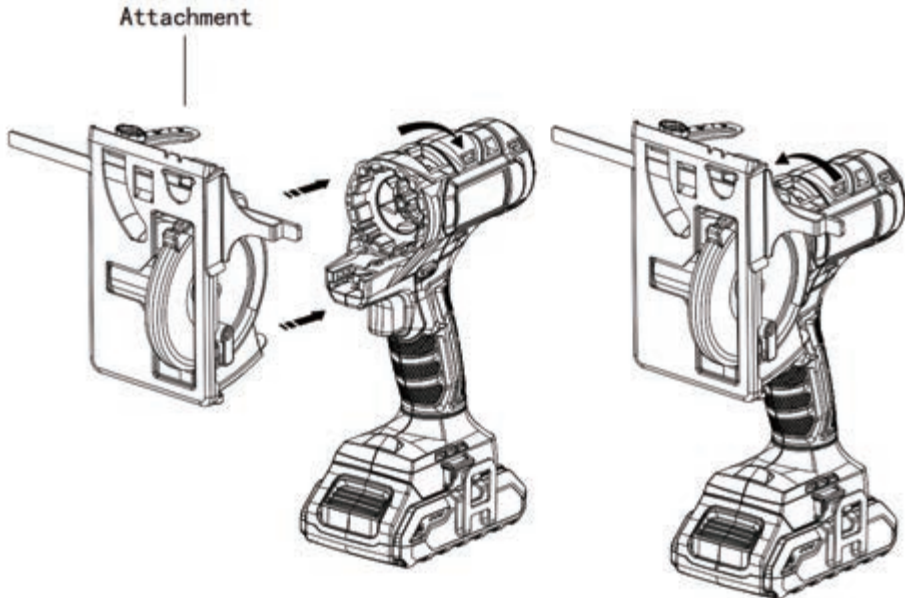


Figure 1

Figure 2

Fix on the circular saw attachment: (figure 1.)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the circular saw attachment into the tool body till you hear the “click” sound.
- 3) Slide the lever of the groove to the direction of “lock” to make sure the circular saw attachment be fixed tightly.

Remove the circular saw attachment: (figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the circular saw attachment
- 5) Don't turn it down when you remove the circular saw attachment to avoid it to falling and breaking.

## WORKING INSTRUCTION

Installing/changing the blade

### **WARNING!**

The chain has many sharp cutters. If they contact your flesh, they will cut you, even if the chain is not moving. Always wear heavy-duty work gloves when handling the saw blade.

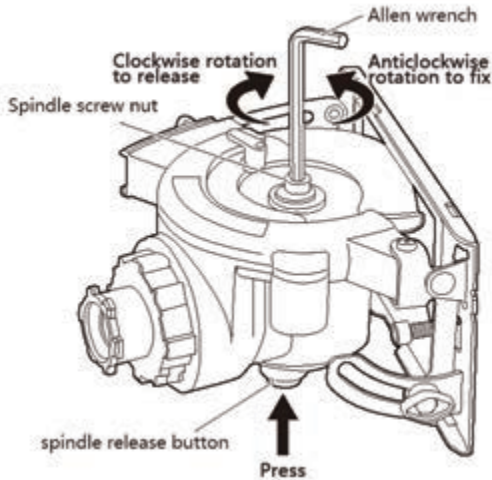


Figure 3

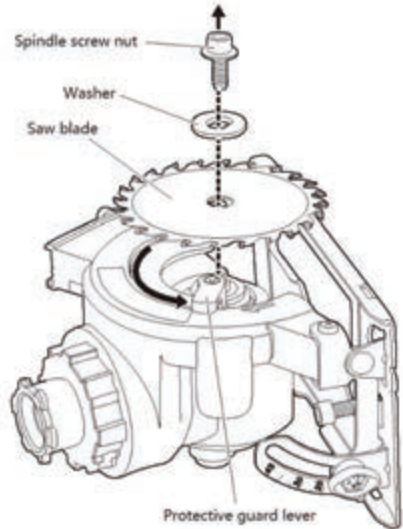


Figure 4

- 1) Take out the allen wrench from the back of the circular saw attachment.
- 2) Insert the allen wrench into the screw nut of the spindle.
- 3) Press the spindle release button at the same time rotate the allen wrench clockwise.(Figure 3)
- 4) Take out the screw nut and the washer, the blade could be removed/changed.(Figure 4)
- 5) After replacing the suitable saw blade, install the washer and the spindle screw nut, then press the spindle release button again while rotate the allen wrench anticlockwise until the screw nut is tightened.

\* It is necessary to ensure that the saw blade is installed firmly to avoid injury due to loose saw blade during operation.

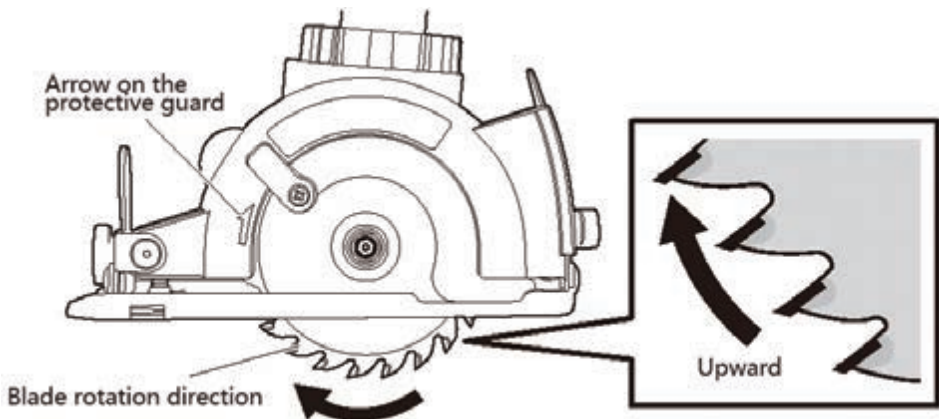


Figure 5

**Note:** Pay attention to the rotary direction of the blade. The tip of the blade should be upward and consistent with the arrow direction on the protective guard. (Figure5)

### CUTTING WORK


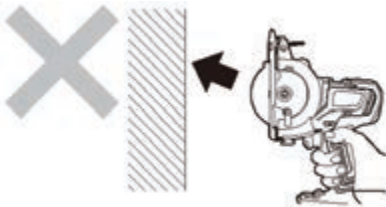


<p>Don't put the tool body upside down</p> 	<p>The base does not adhere to the work piece, do not use it in this application</p> 
<p>The saw blade is exposed. Don't use it, it will cause injury</p> 	<p>Don't cut the thick work piece by the tip of blade</p> 



Figure 6

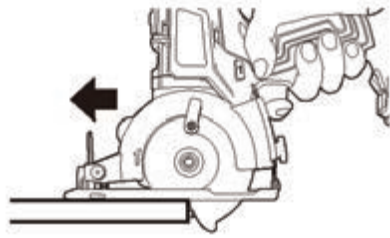


Figure 7

- 1) Put the work piece on a stable table and fix it securely.  
To hold the tool body firmly and prevent the saw blade from touching the work piece.  
Please check if the protective guard has been lifted.
  - 2) Press the lock/release button first then press the switch trigger, the tool could be started. You can loose the lock/release button during operation.
  - 3) Cut the work piece slowly. Try to keep the speed constant and the cut surface clean.  
The cutting resistance will force the protective guard opens naturally. Don't use if the protective guard fixed, it's very dangerous.
  - 4) Keep this condition until the end of the cutting.
- See Figure 6 and 7.

Note:

- \* If you want to cut again, you need to re-press the lock/release button to start the tool.
- \* The direction switch cannot be locked or change direction. It has no function.



### ADJUST THE DEPTH OF CUTTING

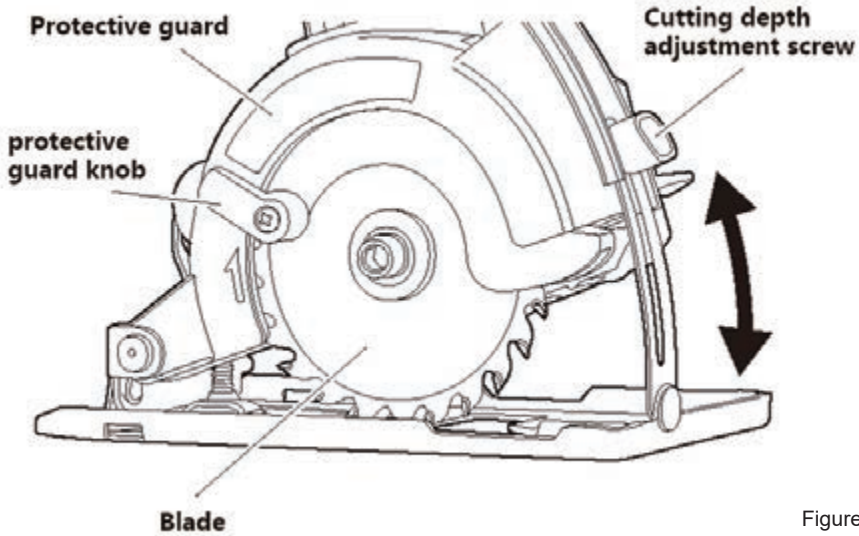


Figure 8

Cutting depth adjustment by loosening the screw---to adjust the height of the blade. (Figure 8)

### ADJUST THE ANGLE OF INCLINATION

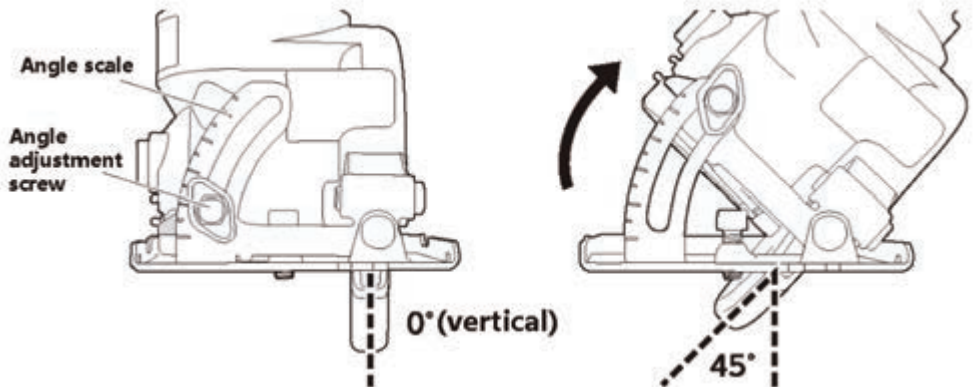


Figure 9

The angle adjustment screw can be loosened to adjust the screw blade from 0 (vertical) to a maximum of 45 relative to the blade. (Figure 9)

Please note: The angle scale on the tool is only a guide, please use your personal device to make sure to get the accurate angle.

### CHAINSAW ATTACHMENT

1. Chain
2. Guide bar
3. Handle of the nut,
4. Guard
5. Fitting joint,
6. Sprocket cover
7. Lock/release button



### SPECIFICATION

<b>Cordless Chainsaw</b>	Length of the guide bar: 127mm
Chain speed: 5m/s	Max. cutting depth:102mm
No-load speed: 3500rpm	

### HOW TO REPLACE THE CHAINSAW ATTACHMENT:

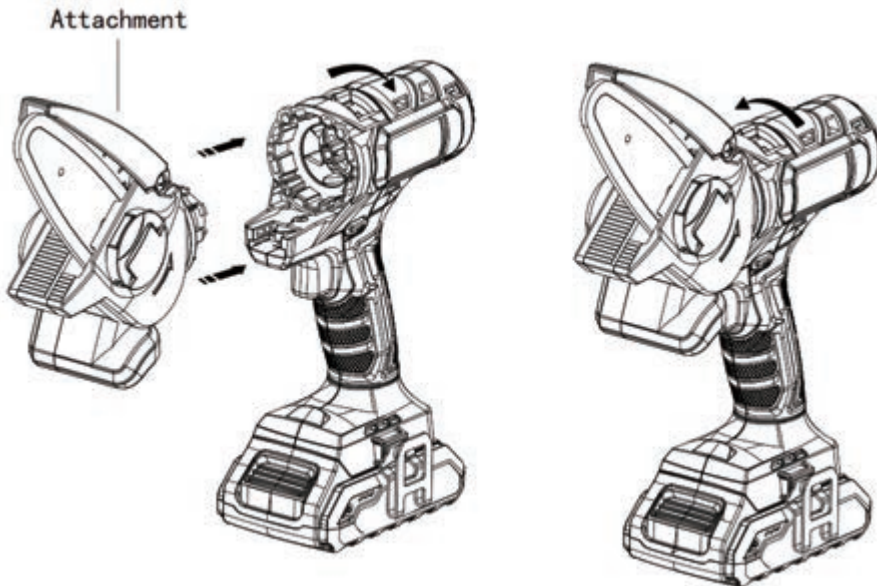


Figure 1

Figure 2

Fix on the chainsaw attachment: (figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the chainsaw attachment into the tool body till you hear the “click” sound.
- 3) Slide the lever of the groove to the direction of “lock” to make sure the chainsaw attachment be fixed tightly.

Remove the chainsaw attachment: (figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the chainsaw attachment.
- 5) Don't turn it down when you remove the chainsaw attachment to avoid it to falling and breaking.

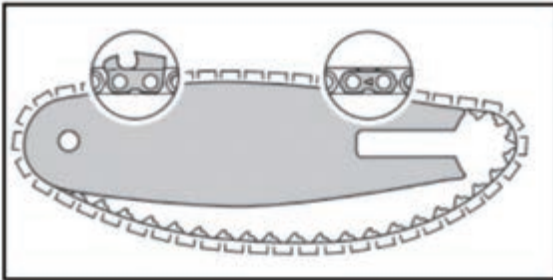
### MOUNTING THE GUIDE BAR AND CHAIN.

#### WARNING!

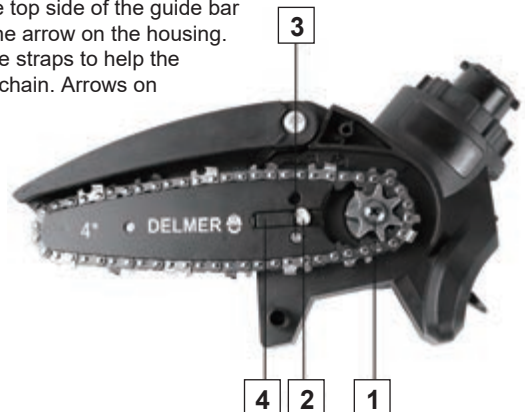
The chain has many sharp cutters. If they contact your flesh, they will cut you, even if the chain is not moving.

Always wear heavy-duty work gloves when handling the chain.

- a) Switch off the Chainsaw
- b) Remove the battery.
- c) Remove the chain sprocket cover by turning the nut anticlockwise.



- d) Position the chain in the groove of the guide bar, starting at the tip.
- e) Make sure that the cutters in the groove on the top side of the guide bar face the tip of the bar and be consistent with the arrow on the housing. Chains are manufactured with arrows on the tie straps to help the operator determine the proper direction of the chain. Arrows on the tie straps on the top of the bar must point toward the bar tip.



- f) Point the guide bar tip away from the chain sprocket.
- g) Place the chain around the chain sprocket(1).
- h) Slide the guide bar over the collar screw(3) and pin(2).
- i) Direct the drive links into the groove of the guide bar(4). The guide bar and the chain must be firmly and securely mounted on the chainsaw.
- j) Tension the saw chain.
- k) Fit the sprocket cover on the chainsaw so that it is flush with the housing.
- l) Turn the nut clockwise until the chain sprocket cover is firmly attached to the chainsaw.
- m) Close the handle of the nut.

## REMOVEAL THE GUIDE BAR AND SAW CHAIN

Use the above mounting instruction a) to c) to open the sprocket cover and then take out the guide bar and saw chain.

## CHECK THE TENSION OF THE CHAIN ON GUIDE BAR

### **WARNING!**

To reduce the risk of severe personal injury from chain derailment, check chain tension frequently, At operating temperatures, then chain stretches and sags. New chain tends to stretch more than used chain. Tension the chain so that the drive links can not come completely out of the groove on the underside of the guide bar.

Pull the Chain up with your finger in the center of the teeth. The distance between the Chain and the guide bar should be about 2-4mm.

## SAFETY OPERATION:

### **WARNING!**

To reduce the risk of serious or fatal injuries to the operator or bystanders, keep hands, feet and other parts of the body away from the saw chain. Do not touch the saw chain while the battery is inserted into the garden pruner. Never touch the rotating saw chain with your hand or any part of your body.

### **WARNING!**

Never hold the material to be cut or attempt to remove cut material without first releasing the trigger switch and removing the battery. Release the trigger switch and remove the battery before clearing jammed material.

### **WARNING!**

To reduce the risk of personal injury, never work with the garden pruner in the rain or in wet or damp conditions. Always wear proper clothing and protective apparel, including proper eye protection. Work carefully and maintain proper control of the garden pruner. The garden pruner is designed for two-handed operation.

## Precautions for cutting

In some specific cases, the operator may not focus on the work, the operator may trip, fall and cause serious injury.

- a) Keep calm and work in a planned way.

- b) Do not use chain saw in dim and low visibility environment.
- c) Please operate your own chain saw.
- d) Do not operate the chain saw higher than your shoulder.
- e) Watch out for obstacles.
- f) When operating the chain saw, please stand in a safe position and keep balance. If you
- g) need to work at height, use a lift or a safe scaffold.

The running saw chain may hurt the user. Please do not touch the moving saw chain. Otherwise, the user may be seriously injured.

If the saw chain cannot effectively cool down and re tension, the saw chain may jump out of the guide plate and lead to breakage. These can lead to serious injury and property damage.

### OPERATION

#### WARNING!

If the chain saw rebounds, the chain saw will spring to the operator. Can cause serious or fatal injury.

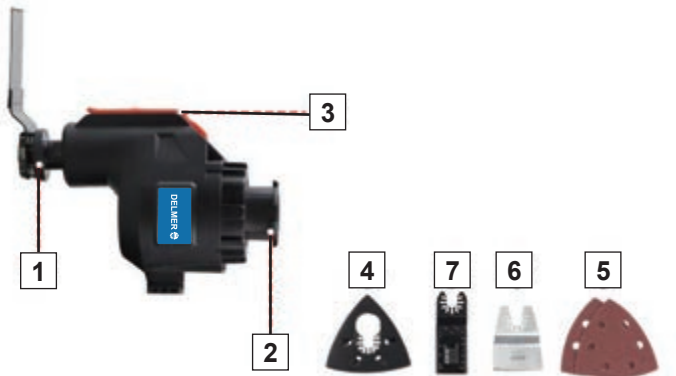
- a) Press the lock/release button first then press the switch trigger, the tool could be started. You can loose the lock/release button during operation.
- b) When cutting, it is necessary to cut at full speed and keep the guide plate vertical.

#### Note:

- c) If you wan to cut again, you need to re-press the lock/release button to start the tool.
- d) The direction switch cannot be locked or change direction. It has no function.

### OSCILLATING TOOL ATTACHMENT

1. Spindle
2. Fitting joint
3. quick release lever
4. sanding pad
5. sanding paper
6. scraper
7. blade



### SPECIFICATION

Oscillating tool	No-load speed: 0-21000opm
Oscillating angle: 3°	

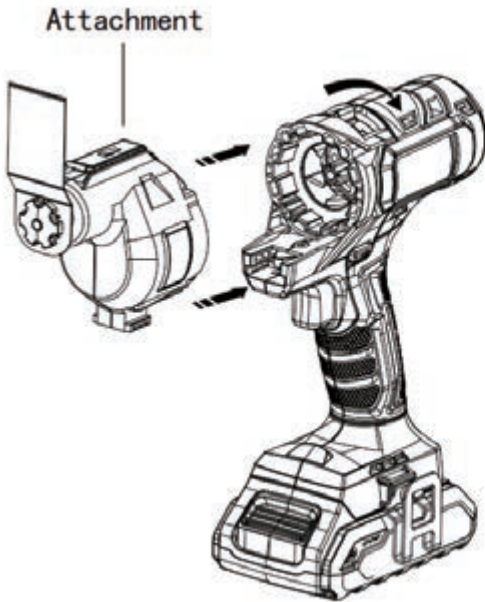
**HOW TO REPLACE THE OSCILLATING TOOL ATTACHMENT:**

Figure 1

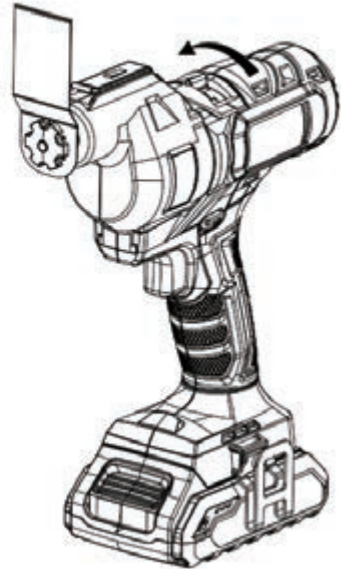


Figure 2

Fix on the oscillating tool attachment: (figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the oscillating tool attachment into the tool body till you hear the “click” sound.
- 3) Slide the lever of the groove to the direction of “lock” to make sure the oscillating tool attachment be fixed tightly.

Remove the oscillating tool attachment: (figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the oscillating tool attachment.
- 5) Don't turn it down when you remove the oscillating tool attachment to avoid it to falling and breaking.

**WORKING INSTRUCTION**

Changing the blade

- 1) Push the lever (2) for tool unlocking upwards as far as the stop.
- 2) Pull the unlocked tool holder off forwards.
- 3) Place the required tool on the arbor different positions are possible.
- 4) Press the tool holder back into the central mounting.
- 5) Push the lever (2) for tool unlocking forwards again., the tool holder is fixed to the tool.

## Attaching/ removing sanding sheet

The delta sanding plate is fitted with Velcro for rapid attachment of the sanding sheet.

- 1) Attaching sanding sheet
  - Press the sanding sheet evenly onto the delta sanding plate. Ensure that the holes in the sanding sheet are placed above the openings in the sanding plate.
- 2) Removing sanding sheet
  - Simply pull the sanding sheet off the delta sanding plate.

### Practical tips

When working with the appliance, always wear suitable clothing and appropriate protective equipment. Prior to each use it must be ensured that the appliance is working correctly.

Personal protective equipment and a fully functional appliance reduce the risk of injuries and accidents.

\* The oscillating tool could be started directly when you press the switch trigger.

\* The direction switch on the main tool body could lock the tool but can't change the direction.

\* It will stop when you release the switch trigger.

- 1) Sawing
  - Use only undamaged saw blades in perfect condition. Only use metal sawblades for metalworking.
  - Ensure your stance is stable and hold the appliance tightly with both hands and away from your body.
  - Before sawing the workpiece, check for hidden foreign objects such as nails, screws. These must be removed.

#### Selection of saw blade

Wood saw blade for wood, plastic, plasterboard

Metal saw blade for metal sheets, profiles and tubes

- 2) Sanding
  - Use a dust extraction system when sanding with the multi-sander attachment.
  - Move the appliance against the workpiece once it is switched on.
  - Clean the sanding plate before you attach a sanding sheet.
  - Only work with sanding sheets in perfect condition to achieve good sanding results.
  - Work using low and even pressure. This protects the appliance and the sanding sheet.
  - Do not use the same sanding sheet to sand different materials (e.g. metal and then wood).
- 3) Scraping
  - Use a high oscillation rate when scraping.
  - Work using low pressure and at a low angle in order not to damage the substrate material.

## SANDER ATTACHMENT

1. Fitting joint
2. Sander pad



## SPECIFICATION

Mouse sender	No-load speed: 0-10000rpm
Orbit diameter: 2mm	Sanding paper size: 140 x 140 X 90mm

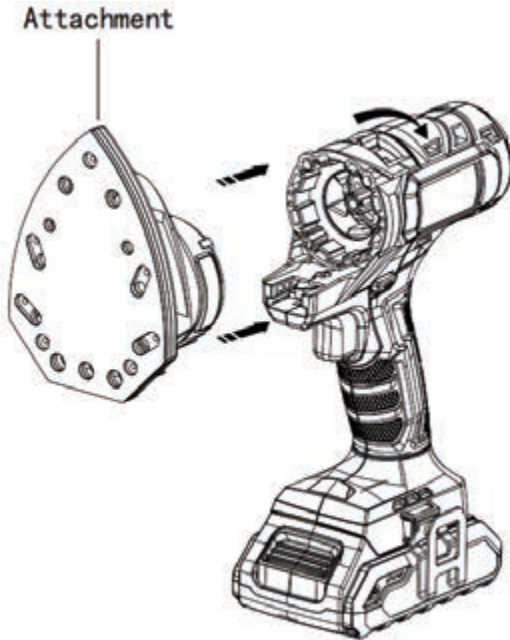
**HOW TO REPLACE THE SANDER ATTACHMENT:**

Figure 1

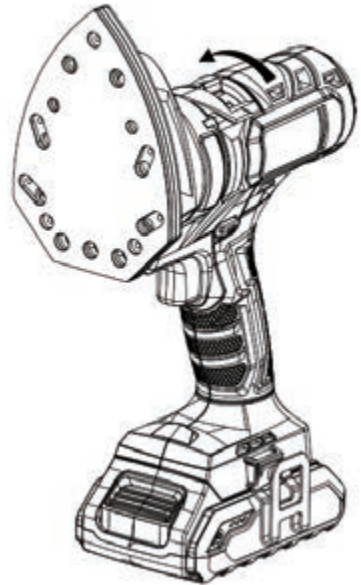


Figure 2

Fix on the sander attachment: (figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the sander attachment into the tool body till you hear the “click” sound.
- 3) Slide the lever of the groove to the direction of “lock” to make sure the sander attachment be fixed tightly.

Remove the sander attachment: (figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the sander attachment.
- 5) Don't turn it down when you remove the sander attachment to avoid it to falling and breaking.

**WORKING INSTRUCTION**

Attaching/removing sanding paper

** WARNING!**

**Secure the tool against switching on. If the appliance is switched on accidentally, there is a danger of injury!**

The sanding pad is fitted with Velcro for rapid attachment of the sanding paper.

- 1) Attaching sanding paper
  - Press the sanding sheet evenly onto the sander pad.



- Ensure that the holes in the sanding paper are placed above the openings in the sander pad
- 2) Removing sanding paper
    - Simply pull the sanding paper off the sanding plate.

### Connecting dust extraction

You can reduce dust production during sanding by attaching a dust extraction system.

- 1) Push the adaptor into the opening on the sander attachment as far as the stop.
- 2) Connect a dust extractor suction hose to the adaptor.

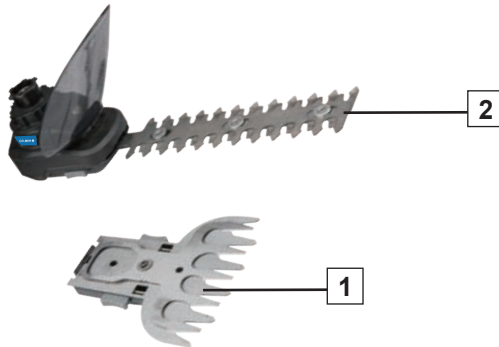
**Note:** If necessary, you can connect the suction hose of a vacuum cleaner without reducer to the adapter.

### Working:

- \* The sander could be started directly when you press the switch trigger.
- \* The direction switch on the main tool body could lock the tool but can't change the direction.
- \* It will stop when you release the switch trigger.

## GRASS SHEAR AND HEDGE TRIMMER

1. Grass shear
2. Trimmer



### SPECIFICATION

Grass Shear and Trimmer	No-load speed: 0-1300/min
Grass shear - cutting width: 12cm	Trimmer cutting width: 20cm

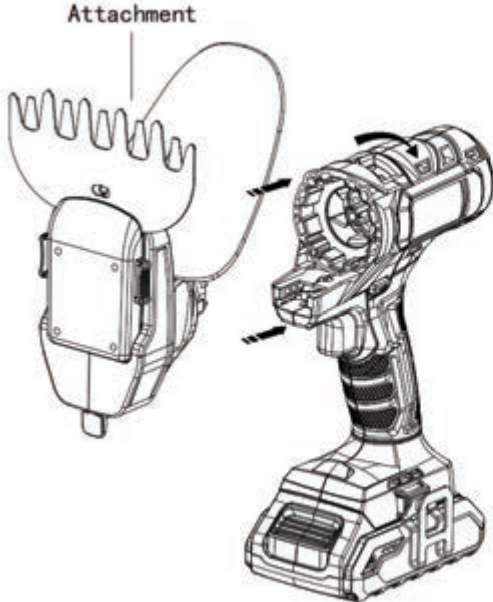
**HOW TO REPLACE THE ATTACHMENTS:**

Figure 1

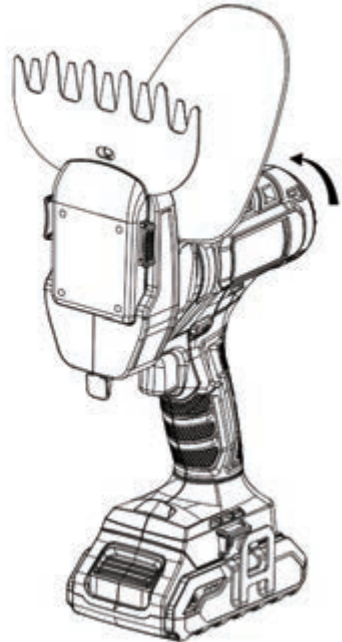


Figure 2

Fix on the grass shear/hedge trimmer attachment: (figure 1,)

- 1) Keep the lever of the sliding groove in the middle position,
- 2) Push the grass shear/hedge trimmer attachment into the tool body till you hear the “click” sound.
- 3) Slide the lever of the groove to the direction of “lock” to make sure the grass shear/hedge trimmer attachment be fixed tightly.

Remove the grass shear/hedge trimmer attachment: (figure 2)

- 4) Slide the lever of the groove to the direction of “unlock”, at the same time, take out the grass shear/hedge trimmer attachment.
- 5) Don't turn it down when you remove the grass shear/hedge trimmer attachment to avoid it to falling and breaking.

**INSTRUCTIONS FOR GRASS SHEARS**

This device is only intended for cutting and trimming thin shoots on hedges, bushes and ornamental shrubs, as well as for cutting small sections of lawns, including lawn edges, in residential applications. Do not use the grass shears in bad weather, especially if there is a danger of a storm. This reduces the risk of being struck by lightning.

## FUNCTION DESCRIPTION

The grass and shrub shears feature two exchangeable cutting units.

For use as a shrub trimmer, a double-sided blade block is used as the cutting head. The catching blades are round off at the side to prevent accidents, and positioned in an offset arrangement to reduce the risk of injury.

## GENERAL WORKING INSTRUCTIONS

- Check the device before each use for obvious defects such as loose, worn or damaged parts.
- Comply with the device's maintenance and cleaning instructions.

## USING THE DEVICE AS GRASS SHEARS/SHRUB SHEARS

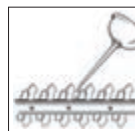
- Ensure objects such as wire, metallic parts, stones etc. do not enter the blades while trimming. This can cause damage to the cutting unit.
- If the blades become jammed with solid objects, turn the device off immediately.
- Ensure that the screws in the blade bar are firmly in place.
- Only use sharp blades to ensure good trimming performance and to protect the device and rechargeable battery.
- Do not overload the device while working to such an extent that it comes to a standstill.

## WORKING USING THE GRASS SHEARS

Grass is best cut when it is dry and not too high.

## WORKING USING THE SHRUB SHEARS

- Move the device in a steady forward motion, or up and down in an archshaped motion.
- The double-sided blade bar enables trimming in both directions, or via pendulum Movements from one side to the other.
- Clean and service the unit regularly as follows. This guarantees a long life for your unit:
- Check the covers and guards for damage and correct position. If necessary, replace.
- Never operate the machine with defective guards or covers or without protection or with damaged or worn cables.
- Always keep the blade clean.
- After using the equipment, it is imperative to:
  - Clean the blade (with an oily cloth);
  - Oil the blade shaft with an oil can or spray.
- Slight notches on the blades can be evened out. For this, sand down the blades with an oil stone.
- Only sharp blades can cut properly.
- Blunt, bent or damaged blades must be changed.



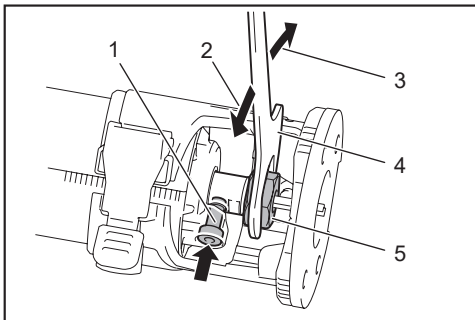
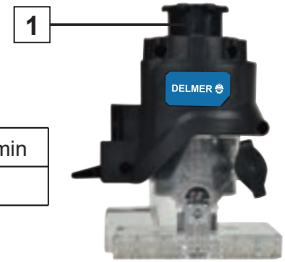
We are not liable for damage caused by the use of the unit if the original cause was improper repair or the use of non-original parts or through use other than that designated in this manual.

### ROUTER ATTACHMENT

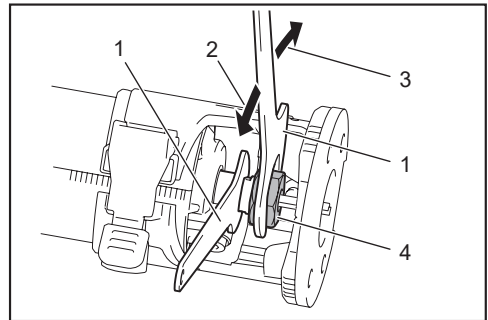
#### 1. Fitting joint

#### SPECIFICATION

Router	No-load speed: 0-20,000/min
Collet chuck capacity: 6.3mm(1/4")	Plunge depth: 25mm

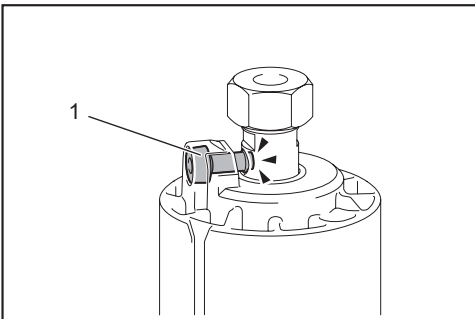


► 1. Shaft lock 2. Loosen 3. Tighten 4. Wrench 5. Collet nut



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

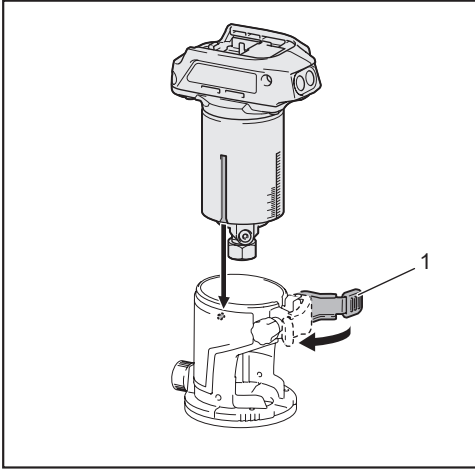
**Note:** The shaft lock may not return to the original position when you tighten the collet nut at the installation of the trimmer bit. The shaft lock returns to the original position when you start the tool.



► 1. Shaft lock

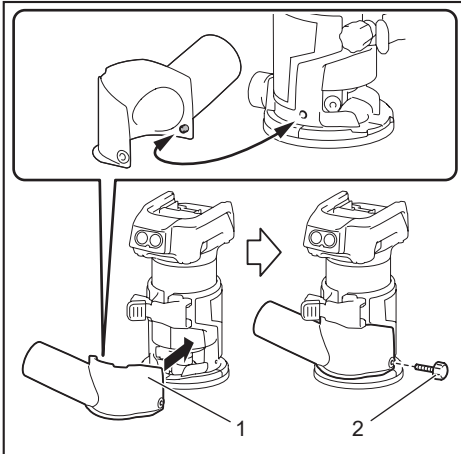
#### INSTALLING OR REMOVING THE TRIMMER BASE

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.

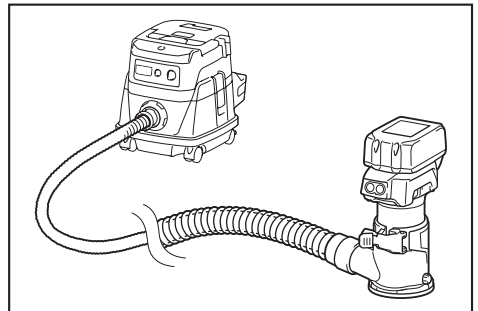


► 1. Lock lever

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



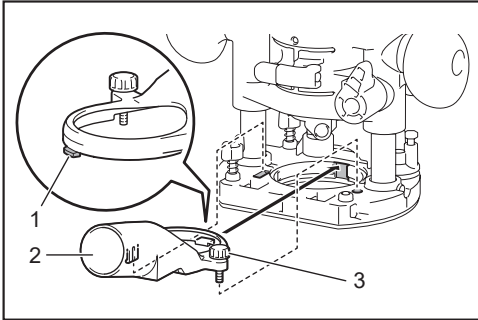
► 1. Dust nozzle 2. Thumb screw



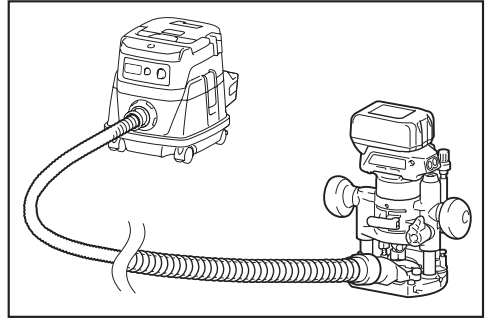
To remove the base, follow the installation procedure in reverse.

## INSTALLING OR REMOVING THE DUST NOZZLE ON THE PLUNGE BASE

1. 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. To remove the nozzle, follow the installation procedure in reverse.



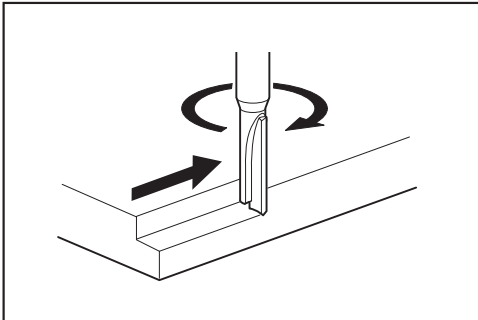
► 1.Protrusion 2.Dust nozzle 3.Thumb screw



## OPERATION

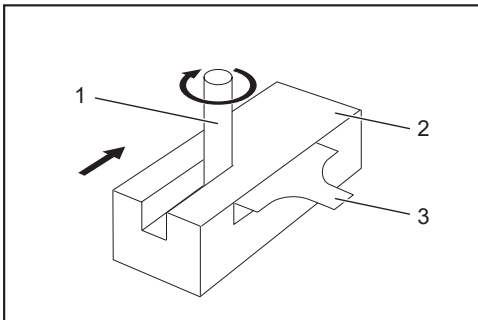
### Using the tool with the trimmer base

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 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.



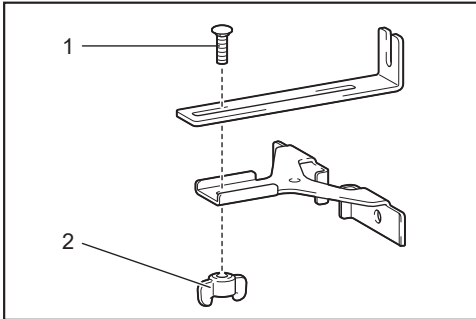
► 1.Trimmer bit 2. Workpiece 3. Straight guide

**Note:** 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 3mm(1/8") deep, make several passes with progressively deeper bit settings.

### Using the straight guide

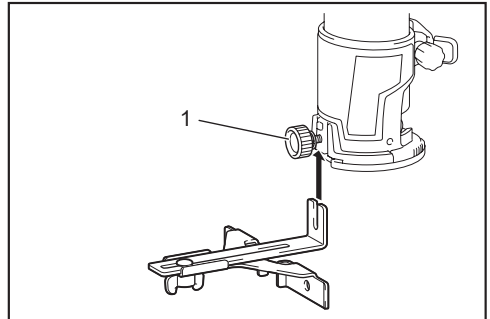
Optional accessor

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



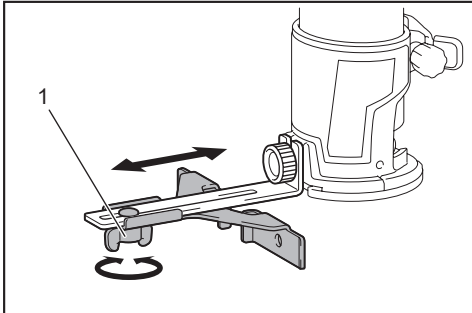
► 1. Bolt 2. Wing nut

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



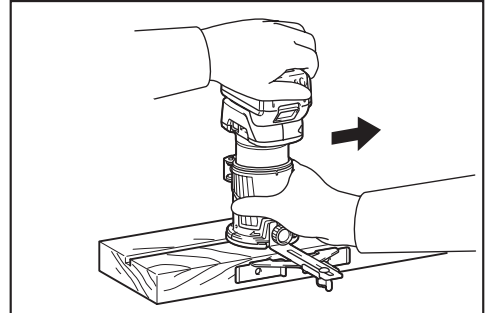
► 1. Clamp screw

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.



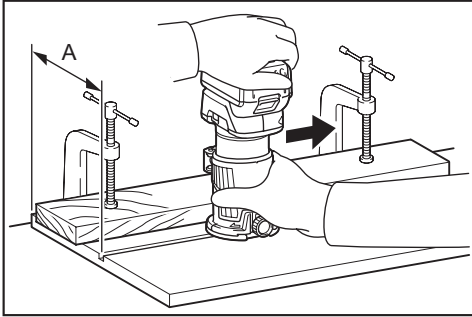
► 1. Wing nut

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.

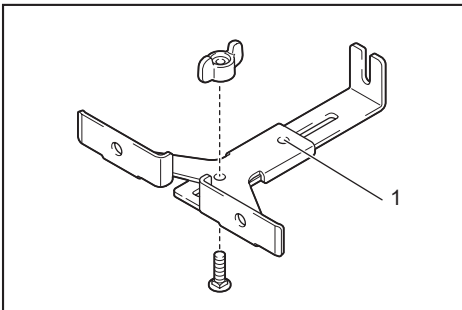


### Using the straight guide for circular work

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:

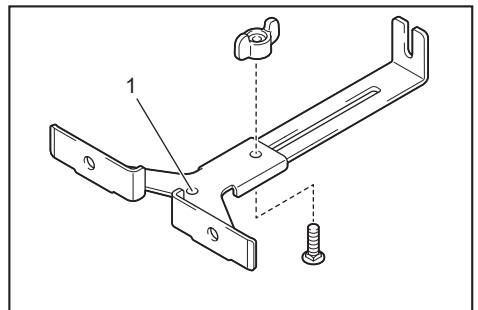
- Minimum: 70 mm (2-3/4")
- Maximum: 221 mm (8-11/16")

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



► 1.Center hole

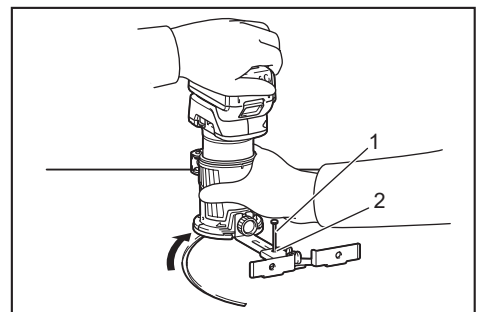
For cutting circles between 121mm (4-3/4") and 221mm (8-11/16") in radius.



► 1.Center hole

**Note:** Circles between 172mm (6-3/4") and 186mm (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 6mm (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