

# Makita Rebar Tier - Battery

## REQUIRED SAFETY EQUIPMENT



## SAFETY FIRST

If you are collecting the equipment for someone else please make sure this sheet is given to the equipment user to read. This sheet should be given to the site supervisor if the equipment is being hired for commercial use so that the information is available to all users.

*Before starting any job, be sure to spend a few minutes planning and understanding the hazards and risks of the job. Do this by:*

- Thinking about and observing your surroundings
- Running through the steps of the job in your mind
- Identifying the hazards, how you can get hurt and how you'll prevent it
- Knowing what plant and equipment you need
- Only starting when you can do the job safely
- Ensuring you are trained or experienced for the task
- Communicating with everyone involved

*Points to consider when planning a task. Can you:*

- Come into contact with an energy source (e.g. heat, electricity, substance under pressure) or hazardous materials
- Be struck-by or against anything?
- Be caught-in, on or between anything?
- Slip, trip or fall on the same or too a lower level
- Strain or sprain a muscle?
- Cause damage to plant equipment or property?
- Spill or pollute something?



### 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.

### Starting Procedure

- Ensure wire reel is installed correctly
- Insert fully charged batteries - ensure they lock into place
- Operate machine on scrap rebar to test correct operation

### When Operating

- Refer to detailed instructions below

### Stopping and After Use

- Turn the machine off by releasing trigger
- Clean machine down with damp rag, do not rinse with water
- Recharge batteries for next use

### REBAR TYING TOOL SAFETY WARNINGS

1. Never point the tool toward a person. Never put your hands or feet close to the tool tip. If you accidentally operate the tool while it is touching someone, it will lead to an unexpected accident.
2. Do not load wire while the power to the tool is turned on. Otherwise, you may get caught in the wire and injured.
3. Do not use the tool without closing the reel cover. Otherwise, the wire reel may come off and cause an accident.
4. Be sure to check that the diameters of rebars to be tied are within the tool capacity before beginning work.
5. Wear clothes that have close-fitting hemlines and sleeves. Do not work with a towel or other object wrapped around your neck. Otherwise, they may get caught in the rotating part and cause an accident.
6. Be sure to inspect the following points before using the tool.
  - Check that no parts are damaged
  - Check that no bolts are loose
  - Check that safety devices operate normally
7. If any abnormalities are found, stop using the tool immediately. Do not repair the tool by yourself. Ask your local Makita Service Centre for repairs. If the tool is used in an incomplete state, an accident may occur.
8. When installing the battery cartridge, be sure to lock the trigger and do not place your finger on the trigger. Incorrect operation may cause an accident.
9. When tying rebars, exercise care not to move them. If rebars move due to tying, you may be injured.
10. Do not touch the wires during the wire tying process. Otherwise, you may get caught in the wire and injured.
11. Do not bring your hands close to the tying point during the wire tying process. Otherwise, you may get caught in the wire and injured.
12. Hold the grip of the tool firmly during the wire tying process. Otherwise, your wrist may be twisted or your body may be pulled, which may result in an injury.
13. Do not move to the next tying point until the current wire tying process is completed. Otherwise, you may be injured.

14. Pay attention to the end of the wire during the wire tying process. Otherwise, your hand may be caught by the end of the wire, and you may be injured.
15. Do not touch the contact plate during the wire tying process. If you need to touch the contact plate, be sure to lock the trigger, or turn the power switch off and remove the battery cartridge. Otherwise, you may be injured.
16. When you have completed the wire tying process, pull the tool up vertically. Otherwise, the arm may be caught on rebars, which may cause an accident.
17. Be careful not to drop, bump, or hit the tool. If a strong impact is applied prior to the tool being used, make sure that the tool is not damaged or cracked, and that the safety devices operate normally. Otherwise, an accident may occur.
18. If any of the following phenomena occur, lock the trigger, turn the power switch off, and remove the battery cartridge from the tool. If the tool operates incorrectly, an accident may occur.
  - If an operating sound is heard as soon as the battery cartridge is mounted.
  - If overheating or abnormal smells or noises are detected.
  - When you are taking measures in response to the error display. (Ask your local Makita Service Center for repairs.)
  - When loading or unloading a wire reel.
  - When you move while holding the tool during work.
  - When you do not use the tool.
  - When you inspect or adjust the tool.
  - When you remove a stranded wire.
19. When working on scaffolding, always stabilize it and work using a posture that will ensure you maintain your balance. If scaffolding is unstable, an accident may occur.
20. When working on a roof or similar locations, move in a forward direction while working so that you can see where you are going. If you move in a backward direction while working, you may lose your footing and cause an accident.
21. If you are working in a highly elevated location, ensure that no one is below you, and pay attention to ensure you do not drop any tools while working. Dropping the tool may cause an accident.
22. Do not use the tool for any work other than wire tying. Otherwise, an accident may occur.
23. Always use Makita's genuine wires. If wires are not used for a long period of time, they may rust. Do not use rusted wires. Otherwise, they may cause an accident.
24. After tying, check for wire breakage due to excessive twisting. If any wires are broken, tying strength will be lost. Adjust the tying strength, and tie the rebars again.
25. Securely place the arm against the rebars. If it is not securely positioned, a clearance will be created between the rebars, and tying strength will be compromised.

## MAIN POWER SWITCH

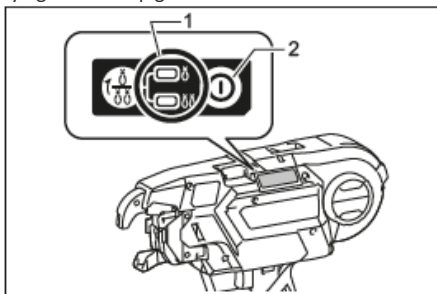
**CAUTION:** When you turn the power on, never bring your limbs or face close to the binding or rotating parts of the tool tip. Otherwise, you may be injured.

**CAUTION:** When the power is turned on, never touch the binding or rotating parts of the tool tip. Otherwise, you may be injured.

**CAUTION:** Before inserting the battery cartridge, be sure to release your fingers from the switch trigger and lock the trigger. If you insert the battery cartridge while the switch trigger is being pulled, it may cause an accident if the wire tying process is accidentally carried out



When you press the power button, the power turns on and the tying mode lamp lights up. In order for the tool to adjust its initial position, it operates temporarily. When adjustment has completed, the tool stops automatically. When you press the power button again, the power turns off and the tying mode lamp goes out.



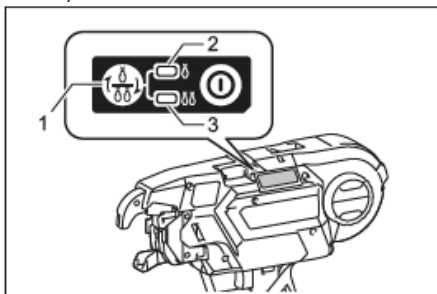
1. Tying mode lamp / 2. Power button

**NOTE:** The tool has an auto power-off function. If the switch trigger is not pulled for 10 minutes, the tool is automatically turned off to reduce battery power consumption.

**NOTE:** To restart the tool, turn the power on again

## MAIN SWITCHING BUTTON

When the power is turned on and the tying mode lamp is lit, you can select the single actuation mode or the continuous actuation mode via the mode switching button. When you turn the power on again, the tool starts in the mode that was most recently selected.

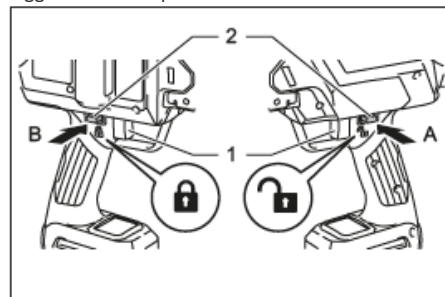


1. Mode switching button  
2. Single actuation mode  
3. Continuous actuation mode

## SWITCH ACTION

**WARNING:** Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

**CAUTION:** When not operating the tool, depress the trigger-lock button from side to lock the switch trigger in the OFF position.



1. Switch trigger / 2. Trigger-lock button

To prevent the switch trigger from accidentally pulled, the trigger-lock button is provided. To start the tool, depress the trigger-lock button from A side and pull the switch trigger. Release the switch trigger to stop. After use, press in the trigger-lock button from B side.

When you pull the switch trigger, the tool performs the next sequential operations as follows, and the tool stops automatically.

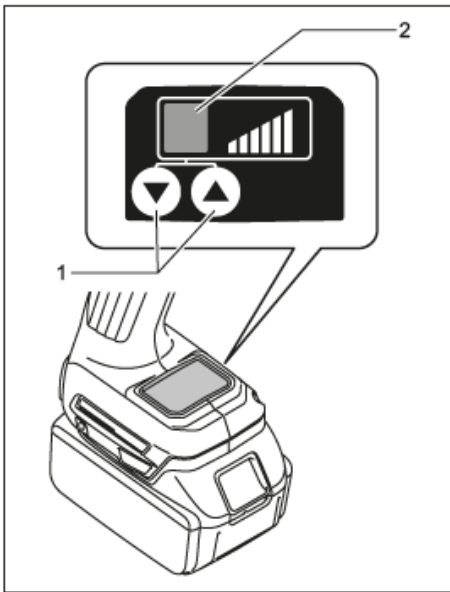
1. Feed the wire.
2. Cut the wire.
3. The hook holds and twists the wire.
4. The hook returns to the original position.

## TYING STRENGTH SETTING

**CAUTION:** Be sure to lock the trigger before starting the adjustment. When you turn the power on, never bring your limbs or face close to the binding or rotating parts of the tool tip. Otherwise, you may be injured.



You can set the tying strength by adjusting the tying strength adjusting button. Tying strength is shown on the display panel



1. Tying strength adjusting button
2. Display panel

If the wire is broken off, tying strength will be lost. After tying, check the twisted portion for breakage. If the wire is broken off, adjust the tying strength using the tying strength adjusting button, and tie the rebars again.

### REMAINING BATTERY NOTIFICATION

When the battery voltage drops below the required level, the tool will stop operating, an error tone will sound, and the number "4" will appear on the display panel. The error tone will continue to sound until the power is turned off.

**NOTE:** If the ambient temperature is extremely low, the error tone may sound even when the battery contains sufficient power.

### ASSEMBLY

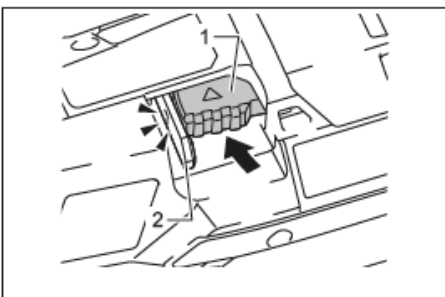
**CAUTION:** Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

### LOADING THE TIE WIRE (WIRE REEL)

**CAUTION:** Before mounting or dismounting tie wires and accessories, be sure to turn the power off, lock the trigger, and remove the battery cartridge. Failure to do so may cause an accident.

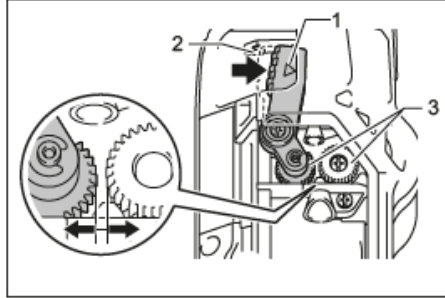
**NOTICE:** Using wires other than Makita's genuine tie wires may cause the tool to malfunction.

1. Push the release lever, and lock it with the lock lever.

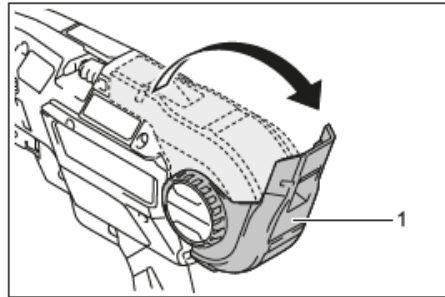


1. Release lever / 2. Lock lever

When you push the release lever, a gap is created between the left and right feed gears

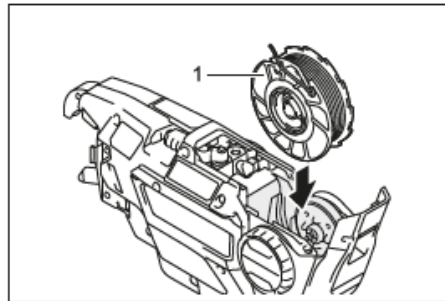


1. Release lever / 2. Lock lever / 3. Feed gears
2. Open the reel cover



1. Reel cover

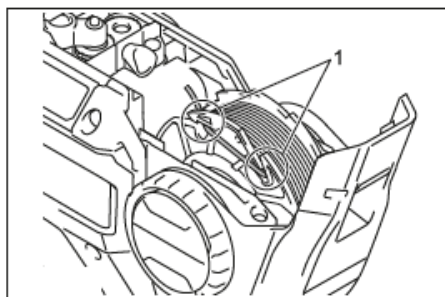
3. Mount the wire reel on the tool in the orientation shown in the figure



1. Wire reel

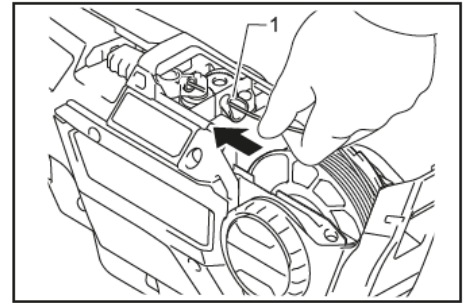
**NOTICE:** Be sure to mount the wire reel in the orientation shown in the figure. If it is mounted the other way around, the wire will be released and may be twisted.

4. Unhook the wire tip from the hook of reel



1. Hook

5. Make the tip of the wire straight, and pass the wire through the guide

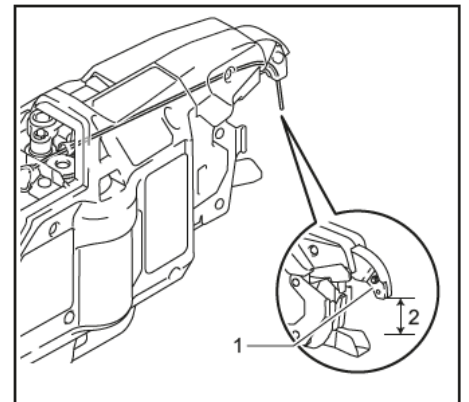


1. Guide

**NOTE:** If the tip of the wire is bent when it is passed through the guide, the wire may become jammed in the tool.

**NOTE:** If you force the wire when trying to pass it through the guide, the wire may become jammed.

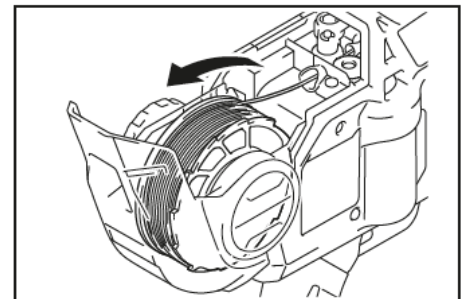
6. Pull the wire out approximately 10mm from the tip of the arm



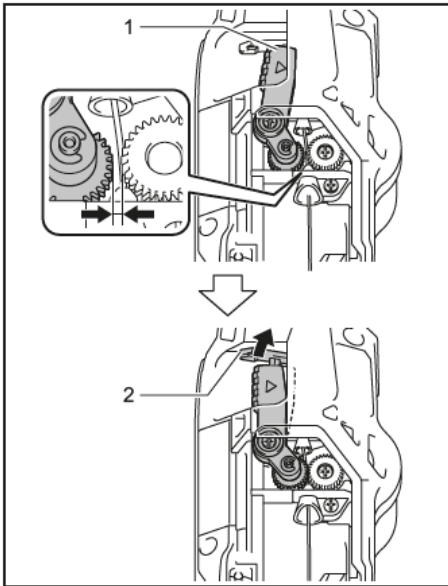
1. Arm / 2. Approximately 10mm

**NOTICE:** If the length of the pulled-out wire is insufficient, the wire may be broken off when tied, or tying strength may be compromised due to insufficient wraps.

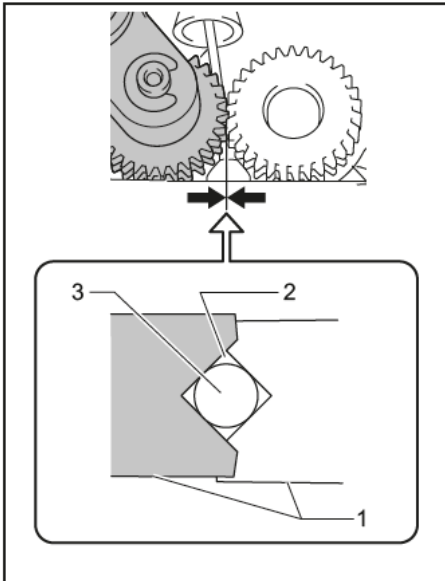
7. Rewind the wire to eliminate its slack



8. Release the lock lever. The release lever returns, and the wire is



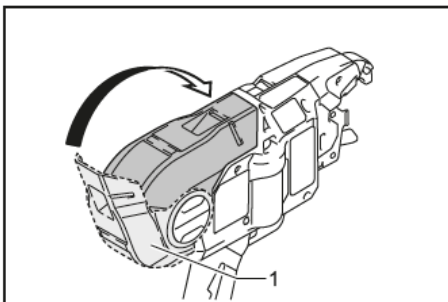
1. Release lever / 2. Lock Lever



1. Gear / 2. Path of the wire / 3. Wire

**NOTICE:** When the lock lever is released and when the left and right gears mesh with each other, the grooves in the gears form a space. This space becomes the path for the wire. Make sure that the wire is passed through this path.

9. Close the reel cover



1. Reel cover

**OPERATION - CHECKING BEFORE WORK**

**CAUTION:** If the tool has a safety mechanism- related problem, do not use it. If you continue to use it, an accident may occur.

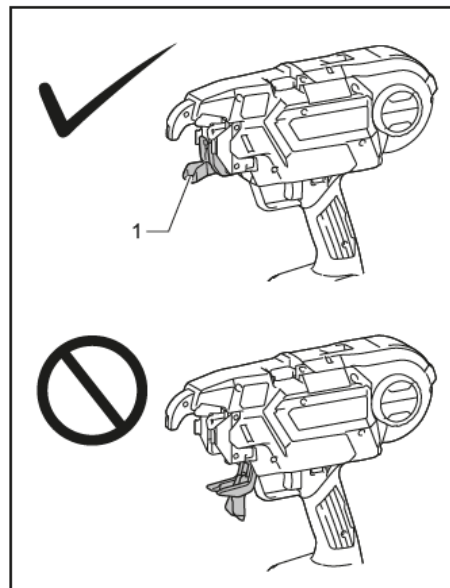
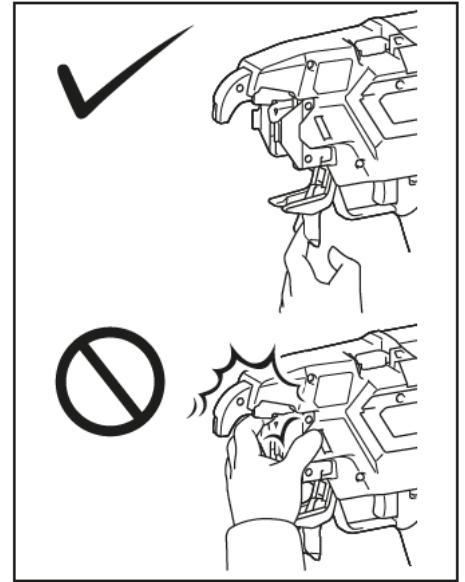
Before using the tool, make sure that the safety mechanism operates normally. If the tool operates without the safety mechanism operating, stop using the tool immediately. Ask your local Makita Service Center for repairs.

**Checking the trigger-lock**

The tool has the trigger-lock to prevent the tool from operating when you do not intend to use it. Lock the trigger and confirm that the switch trigger cannot be pulled.

**Checking the curl guide**

To prevent the operator from touching the binding or rotating parts of the tool tip by mistake, the tool will not operate even if the switch trigger is pulled while the curl guide is opened. When the operator releases their finger from the switch trigger and closes the curl guide, the tool can operate.



1. Curl guide

**Checkout for curl guide open/close detection**

Remove the tie wire, check the tool operation according to the following steps, and make sure that the tool does not start if the curl guide is open.

1. Turn the power off, and leave the curl guide open.
2. Turn the power on.

If the tool will not operate and if the value "2" is shown on the display panel, the state of the tool is normal. Turn the power off, and close the curl guide. If the tool operates and if no error is shown on the display panel, the state of the tool is abnormal. Stop using the tool immediately, and ask your local Makita Service Center for repairs.

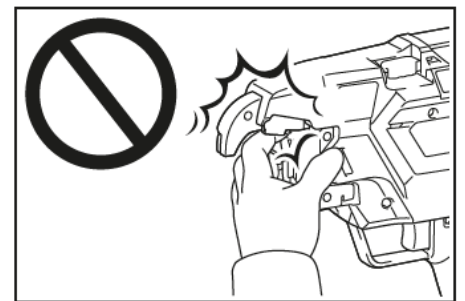
**CAUTION:** If you open the curl guide and turn the power on to check the interlock, hold the curl guide as shown in the figure. Never bring your limbs or face close to the binding or rotating parts of the tool tip. Otherwise, you may be injured.

**TYING WORK**

**CAUTION:** Before inserting the battery cartridge, be sure to release your fingers from the switch trigger and lock the trigger. If you insert the battery cartridge while the switch trigger is being pulled, it may cause an accident if the wire tying process is accidentally carried out.

**CAUTION:** When you turn the power on, never bring your limbs or face close to the binding or rotating parts of the tool tip. Otherwise, you may be injured.

**CAUTION:** When the power is turned on, never touch the binding or rotating parts of the tool tip. Otherwise, you may be injured.

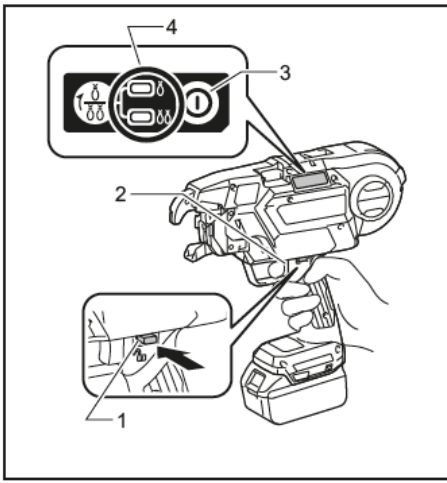


**Preparation before work**

1. Make sure that the battery cartridge is removed and the trigger is locked.
2. Insert the battery cartridge into the tool, and turn the power on. When you turn the power on, the wire is cut automatically.

**NOTICE:** Make sure that the tying mode lamp lights up when the power is turned on. If it does not light up, recharge the battery.

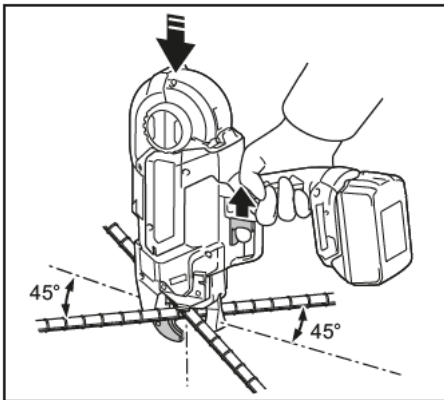
3. Release the trigger lock



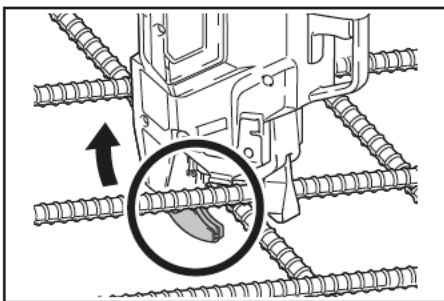
1. Trigger-lock button / 2. Switch trigger  
3. Power button / 4. Tying mode lamp

**Single actuation mode**

1. Push the arm securely against the tying point. Push the tool vertically against the rebars, and press the arm against the point where the rebars cross at a 45-degree angle.

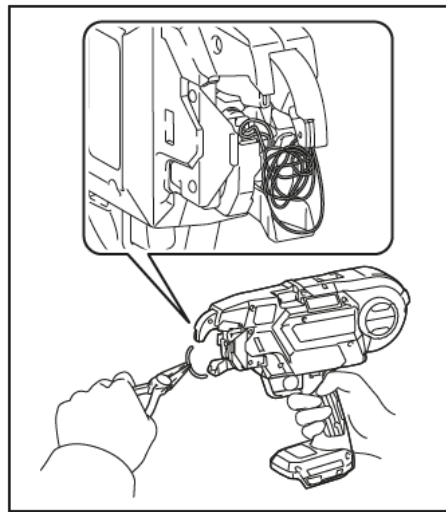


2. Pull the switch trigger once  
3. The wire is fed and cut automatically  
4. The hook holds and twists the wire, then returns to the original position after the wires have been tied



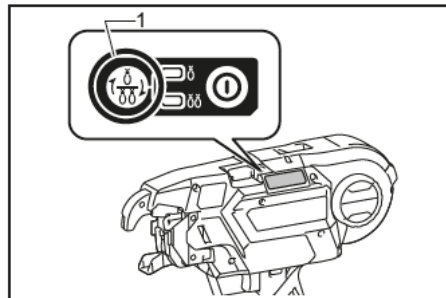
5. After tying, exercise care not to hook the arm on the rebars and pull the tool up.

**CAUTION:** If the wire has clung to the binding part of the tool tip, turn the power of the tool off. Lock the trigger, remove the battery cartridge, and remove the wire using tools such as nippers or pliers.

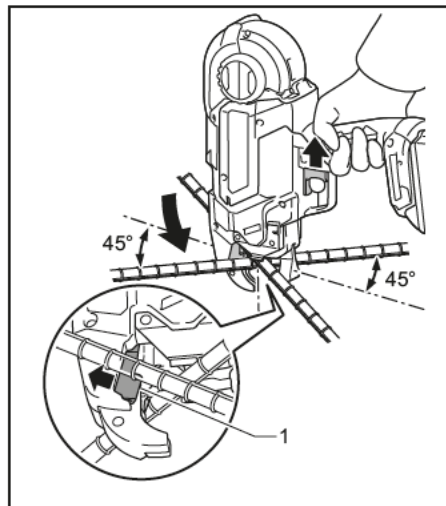


**Continuous actuation mode**

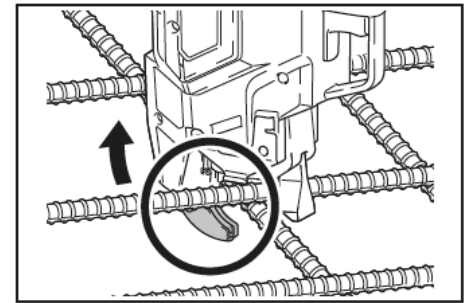
1. Switch the tool mode from the single actuation mode to the continuous actuation mode using the mode switching button



1. Mode switching button  
2. Release the trigger lock  
3. While pulling the switch trigger, push the tool vertically against the rebars, and press the arm against the point where the rebars cross at a 45-degree angle. Press the contact plate firmly against the tying point. The wire will be tied.



1. Contact plate  
4. After tying, exercise care not to hook the arm on the rebars and pull the tool up

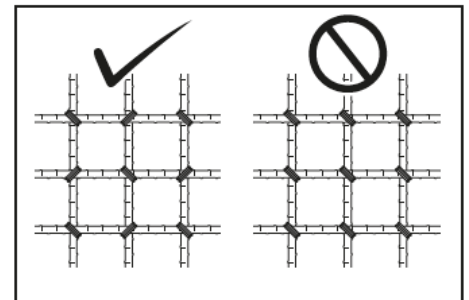


**Cautions on working**

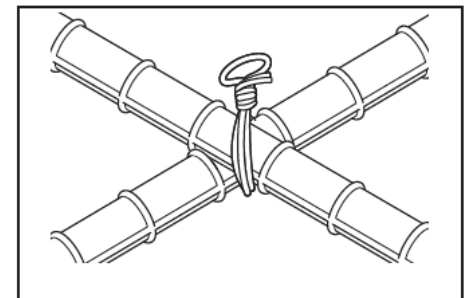
- If you move the arm from the tying position during the wire tying process, the wire will get stuck on the hook, which may lead to incorrect tying.
- Keep pressing the tool against the rebars until the wire tying process is completed.
- Do not move to the next tying point until the current wire tying process is completed.
- The tool tip rotating part (hook) twists the wire during the wire tying process. Hold the grip firmly so that your body is not pulled by the tool.
- Do not touch the wires during the wire tying process.
- If you are repeating the wire tying processes in the single actuation mode, fully release your finger from the switch trigger. Then, continue to operate the switch trigger.
- If you pull the switch trigger when there is no tie wire left, an error is displayed. Replace with a new tie wire and restart the tool.

**Tying tips**

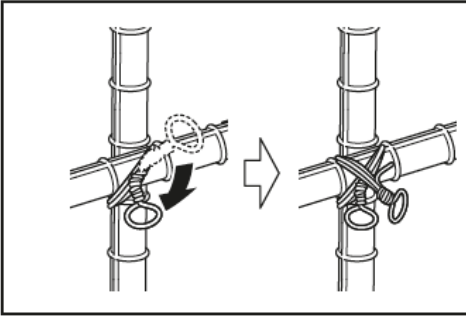
- Tilt the tool at a 45° angle to the crossed rebars, and tie alternately as shown in the figure.



- Avoid strumous sections of rebars



- If tying strength is insufficient, change the tying orientation and perform typing twice so that tying strength increase

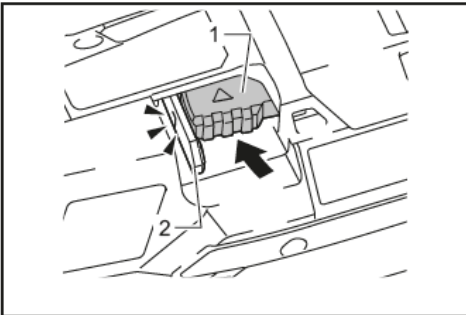


**NOTICE:** When you make the second tie, bend the tail of the first tie before making the second tie. Otherwise, the wire may be repelled a second time. It may cling to the tool tip, and the hook may be damaged.

### **REPLACE THE TIE WIRES**

**CAUTION:** When you replace the wire, be sure to turn the power off, lock the trigger, and remove the battery cartridge. Failure to do so may cause an accident.

1. When wire has been used up, an error tone will sound and error "1" will be displayed
2. Lock the trigger, turn the power off, and remove the battery cartridge
3. Push the release lever, and lock it with the lock lever



1. Release lever / 2. Lock lever

4. Remove the wire reel from the tool

**NOTE:** When wire has been used up normally, approximately 20 cm of the wire remains wound on the reel. In this state, replace the wire reel with a new one.

If it is difficult to remove the wire reel from the tool, follow the steps below.

1. Insert the battery cartridge into the tool, and turn the power on. The tool feeds the wire and cuts it automatically.
2. Lock the trigger, turn the power off, and remove the battery cartridge.
3. Remove the wire breaks using tools such as nippers or pliers