

## Makita DTR180ZJ

# Makita DTR180ZJ Cordless Rebar Tying Tool Instruction Manual

Model: DTR180ZJ

## 1. INTRODUCTION AND OVERVIEW

The Makita DTR180ZJ is a high-performance cordless rebar tying tool designed for efficient and rapid tying of rebar in various construction applications. This tool is part of the Makita 18V LXT Lithium-Ion battery system, offering portability and power for professional use. It is specifically engineered to wrap tying wire and securely tie sequential rebar connections with ease and speed, significantly improving productivity on job sites.

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your Makita DTR180ZJ rebar tying tool. Please read it thoroughly before first use and keep it for future reference.

## 2. SAFETY INFORMATION

Always observe basic safety precautions to reduce the risk of fire, electric shock, and personal injury when operating power tools. Keep this manual handy for quick reference.

- **Work Area Safety:** Keep your work area clean and well-lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Electrical Safety:** 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.
- **Personal Safety:** Always wear eye protection. Use appropriate safety equipment such as dust masks, non-skid safety shoes, hard hats, or hearing protection when necessary. Stay alert, watch what you are doing, and use common sense when operating a power tool.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. It will do the job better and safer at the rate for which it was designed. Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.
- **Battery Tool Use and Care:** Recharge only with the charger specified by the manufacturer. Use power

tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

### 3. PRODUCT COMPONENTS



Figure 3.1: The Makita DTR180ZJ Cordless Rebar Tying Tool in operation, demonstrating its use for tying rebar.



Figure 3.2: The Makita DTR180ZJ Cordless Rebar Tying Tool shown with its dedicated carrying case for transport and storage.

**AMARRADORA DE VERGALHÃO A BATERIA DTR180ZJ** 

**Modo contínuo**

Segure o gatilho e puxe a placa de contato contra os vergalhões



**2 modos selecionáveis**

 **Modo simples**  
⇕  
**Modo contínuo**

**Ajuste da força de amarração**

Conforme a condição do material, a força de amarração pode ser ajustada em 6 níveis.



**Figure 3.3:** A detailed diagram showing the automatic tying function, wire spool loading steps, approximate tying speed (0.95 seconds), and compact design features of the tool.

**AMARRADORA DE VERGALHÃO A BATERIA** **Makita**  
**DTR180ZJ**

**Vergalhões aplicáveis:**  
D10 x D10 - (D13 x 2) x (D13 x 2)  
D10 = 10mm / D13 = 13mm / D16 = 16mm

Capacidade de amarração (2 vergalhões)				Capacidade de amarração (3 vergalhões)				Capacidade de amarração (4 vergalhões)			
	D10 (#3)	D13 (#4)	D16 (#5)	D10 (#3)	D10 (#3) x D13 (#4)	D13 (#4) x D13 (#4)	D13 (#4) x D16 (#5)	D10 (#3)	D10 (#3) x D13 (#4)	D13 (#4) x D13 (#4)	D13 (#4) x D16 (#5)
D10 (#3)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D13 (#4)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D16 (#5)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

**Figure 3.4:** Illustration of the continuous tying mode, showing how to hold the trigger and press the contact plate. Also depicts the two selectable modes and the 6-level tying force adjustment.

**AMARRADORA DE VERGALHÃO A BATERIA** **Makita**  
**DTR180ZJ**

**Amarração automática**

Arame recoberto de 0,8mm para DTR180

Velocidade de amarração: **0.95 segundos**

Fácil de recarregar com bobinas de arame amarração

Design compacto e fino

5.300 RPM

18V LITHIUM-ION BATTERY

120mm

**Figure 3.5:** A chart indicating the applicable rebar diameters (D10, D13, D16) and the tool's tying capacity for combinations of 2, 3, and 4 rebars.

**AMARRADORA DE VERGALHÃO A BATERIA** **Makita**  
**DTR180ZJ**

**Amarradora de Vergalhão a Bateria**  
**DTR180Z**

Ajuste de Torque

Espessura do Arame	0,8mm
Vergalhões Aplicáveis	10mm / 13mm / 16mm
Dimensões (CxLxA)	304x93x301mm
Peso	2,6KG

Accessórios Padrão:  
2: Mak-pao

**Figure 3.6:** Visual representation of the tool's compact dimensions and optimized center of gravity, highlighting its suitability for use in narrow spaces.

## 4. SETUP

### 4.1 Battery Installation

The Makita DTR180ZJ operates on an 18V Lithium-Ion battery (battery and charger are not included with the tool). Ensure the battery is fully charged before use.

1. Align the battery pack with the tool's battery receptacle.
2. Slide the battery into the receptacle until it clicks securely into place. Ensure it is fully seated and locked.
3. To remove the battery, press the release button on the battery pack and slide it out.

## 4.2 Wire Spool Loading

The DTR180ZJ uses 0.8mm annealed tying wire. Refer to **Figure 3.3** for visual guidance.

1. Press the wire spool release lever to open the wire compartment cover.
2. Insert a new spool of 0.8mm tying wire into the compartment, ensuring it is correctly oriented.
3. Feed the end of the wire through the designated guide opening.
4. Close the wire compartment cover until it locks securely.

## 5. OPERATING INSTRUCTIONS

---

### 5.1 Tying Process

To tie rebar, position the tool's tying mechanism over the intersection of the rebars you wish to tie. Ensure the rebars are properly aligned and seated within the tool's jaws.

- Once positioned, pull the trigger to initiate the automatic tying cycle. The tool will wrap the wire around the rebar intersection and twist it securely.
- The approximate tying speed is 0.95 seconds per tie.

### 5.2 Operating Modes

The DTR180ZJ offers two selectable operating modes for versatility (refer to **Figure 3.4**):

- **Single Mode:** For individual ties. Pull the trigger for each tie.
- **Continuous Mode:** For sequential tying. Hold the trigger down and press the tool's contact plate against successive rebar intersections to perform multiple ties without releasing the trigger.

### 5.3 Tying Force Adjustment

The tying force can be adjusted in 6 levels to suit different material conditions and desired tie tightness (refer to **Figure 3.4**). Use the adjustment buttons on the tool to select the appropriate force level. A higher level indicates a stronger tie.

### 5.4 Applicable Rebar Sizes

The tool is compatible with various rebar diameters and combinations (refer to **Figure 3.5**):

- **Individual Rebar Sizes:** D10 (10mm), D13 (13mm), D16 (16mm).
- **Tying Capacity:** The tool can tie combinations of 2, 3, or 4 rebars, depending on their diameters. Consult the capacity chart in **Figure 3.5** for specific compatible combinations.

## 6. MAINTENANCE

---

Regular maintenance ensures optimal performance and extends the lifespan of your tool.

- **Cleaning:** Regularly clean the tool, especially the tying mechanism, to remove dust, debris, and wire fragments. Use a soft cloth and avoid harsh chemicals.
- **Inspection:** Periodically inspect the tying mechanism, wire guides, and cutting blades for wear or damage. Replace worn parts as necessary.
- **Wire Spool Compartment:** Keep the wire spool compartment clean and free of obstructions to ensure

smooth wire feeding.

- **Battery Care:** Store batteries in a cool, dry place. Do not expose them to extreme temperatures or moisture.

## 7. TROUBLESHOOTING

---

If you encounter issues with your DTR180ZJ, refer to the following common problems and solutions:

- **Tool Not Operating:**
  - Check if the battery is fully charged and properly installed.
  - Ensure the tool's safety switch (if present) is disengaged.
- **Poor Tying Quality:**
  - Verify that the correct wire thickness (0.8mm) is being used.
  - Adjust the tying force setting to a higher level.
  - Inspect the tying mechanism for debris or wear.
- **Wire Jamming:**
  - Ensure the wire spool is correctly loaded and the wire is fed smoothly through the guides.
  - Clean any debris from the wire path and tying mechanism.

If problems persist, contact Makita authorized service personnel.

## 8. SPECIFICATIONS

---

Feature	Specification
Brand	Makita
Model Number	DTR180ZJ
Item Weight	2.6 Kilograms
Product Dimensions	30.4 x 9.3 x 31.8 cm
Material	Metal
Power Source	Battery Powered
Voltage	18 Volts
Battery Cell Type	Lithium-Ion
Batteries Included	No (Requires 18V LXT Lithium-Ion battery)
Wire Thickness	0.8mm
Applicable Rebar Sizes	D10 (10mm), D13 (13mm), D16 (16mm)
Tying Force Adjustment	6 Levels
Approx. Tying Speed	0.95 seconds

Included Components	Makita DTR180ZJ LXT Cordless Rebar Tying Tool, 18V (Tool Only)
---------------------	--

## 9. WARRANTY AND SUPPORT

---

Makita power tools are manufactured under strict quality control standards. For information regarding warranty coverage, please refer to the warranty card included with your purchase or visit the official Makita website for your region.

For technical support, service, or to purchase genuine Makita replacement parts, please contact your authorized Makita dealer or service center. Always use genuine Makita parts and accessories to ensure compatibility and maintain tool performance and safety.