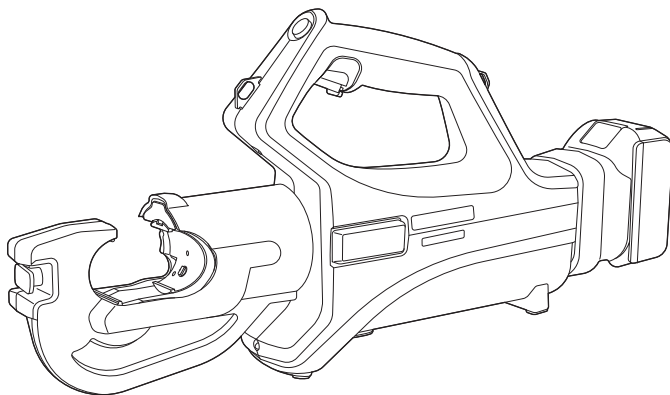


## OPERATING INSTRUCTIONS

# Hydraulic compression tool

## TBM14CR-LI

**T&B® Tools**


### Important

Read and understand all instructions and safety information in this manual before operating or servicing this tool. Be aware of proper usage and potential hazards.

#### Table of Contents:

<b>1. General Information .....</b>	<b>2-3</b>
– DANGER: Safety rules .....	2
– CAUTION: Personal Safety .....	2
– WARNING: Tool Use and Care .....	2
– CAUTION: Battery and Charger Use and Care .....	2
– Features .....	2
– Specifications .....	2
<b>2. Part &amp; Accessories .....</b>	<b>3</b>
– Hydraulic Compression Tool .....	3
– Battery (BAT-MK) .....	3
– Charger .....	3
– Tool Hand Bag .....	3
<b>3. Operating instructions .....</b>	<b>3</b>
– Charging the battery .....	3
– Attaching & Detaching the battery pack .....	3
– Compression cycles .....	4
– Switch operations .....	4
– Compression operation .....	4
<b>4. Troubleshooting guide .....</b>	<b>5</b>



#### CAUTION:

- Installations should be performed by a qualified electrician in accordance with national and local electrical codes.



#### WARNING:

- Risk of shock, disconnect power before installation.
- Never attempt to make a compression on a “HOT” Line.
- Never assume the power is OFF! Determine beforehand if any electrical hazards could exist when making a connection to line or wire.
- Tools are NOT insulated for use on or near conductors. Use of these tools near energized conductors may lead to electrical shock, causing severe injury or death. **DO NOT** use these tools near energized conductors.



#### CAUTION:

- Wear safety glasses and any other required PPE.



#### WARNING:

- Pinch points, keep hands and other body parts away from the crimping head when crimping. Compression dies at high force can cause severe personal injury. Failure to observe this warning could result in severe injury or death.

**General Information:****DANGER:****Safety rules:**

- Keep work area clean and well lighted. Poor lighting and cluttered areas invite accidents.
- Maintain tool with care. Keep tool in good condition at all times. Keep it clean to help ensure best and safest performance.
- Don't over-reach. Keep proper footing and balance at all times.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- Keep bystanders out of the work area while operating a power tool.

**CAUTION:****Personal Safety:**

- Do not use a tool while tired or under the influence of drugs, alcohol or medication.
- Use all required personal protection equipment.

**WARNING:****Tool Use and Care**

- Perform regular tool maintenance to help ensure trouble free service.
- Store tool in a cool dry area.
- After each use, wipe tool with clean cloth to remove any residue, especially close to the movable parts.
- Regularly lubricate moving parts.
- Clean plastic housing with a soft soaped cloth.
- Follow battery and charger use and care instructions.
- Do not force the tool.
- Discontinue use if on/off switch does not function properly. Contact tool services for repairs.
- Disconnect the battery pack from the tool before making any adjustments, changing accessories (including dies), or storing.
- When not in use, store tools out of the reach of children and unauthorized personnel.
- Regularly inspect tool for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool's operation. Repair any damaged tool before use.

**CAUTION:****Battery and Charger Use and Care**

- Read all instructions and cautionary markings on battery charger, battery pack, and product using battery pack.
- To reduce the risk of injury, charge only MAKITA LXT 18V battery packs.\*
- Do not expose charger and/or battery pack to precipitation, submerge in water.
- To reduce risk of damaging the electric plug and cord, Do not pull cord when disconnecting charger.

- Protect cord from being stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not disassemble charger or battery pack, contact Tool Service Center at 1-800-284-TOOL (8665) when service or repair is required.
- Do not store the tool and battery pack in damp or wet locations or where the temperature may reach or exceed 50°C (122°F) (such as a metal tool shed, or a car in the summer), which can lead to deterioration of battery's ability to hold a charge.
- Do not pierce or open battery casing.
- Do not charge battery pack when the temperature is below 0°C (32°F) or above 40°C (104°F).
- The charger is designed to operate on standard 120V AC electrical power only. Do not use it on any other voltage.
- Charge the battery pack in a well-ventilated location.
- Only use battery and charger with accessories designed for ABB Model TBM14CR-LI.
- Do not use recycled or secondary market accessories or batteries.

**CAUTION:****Battery and Charger Use and Care - continued**

- Do not short the battery pack or allow metal objects to touch the terminals.
- After removing the battery pack from the tool or the charger, always re-attach the pack cover.
- Replace damaged or deteriorated battery pack. Follow proper disposal of old battery pack.

**Features:**

- Fully automatic, self-contained power tool.
- Removable battery cartridge - simply change the cartridge for continuous use.
- One handed operation - control ram advancement and retraction with one hand.
- Protective rubber boot on "C" Head.

**Specifications:****Hydraulic Compression Tool - TBM14CR-LI:**

- Drive Unit: 18V DC motor
- Dimensions: 22"L x 3.5"W x 10.5"H
- Weight: 17.8 lbs.
- Capacities: 750 kcmil CU or Aluminum
- Jaw Opening: 1.65"

**Battery (BAT-MK):**

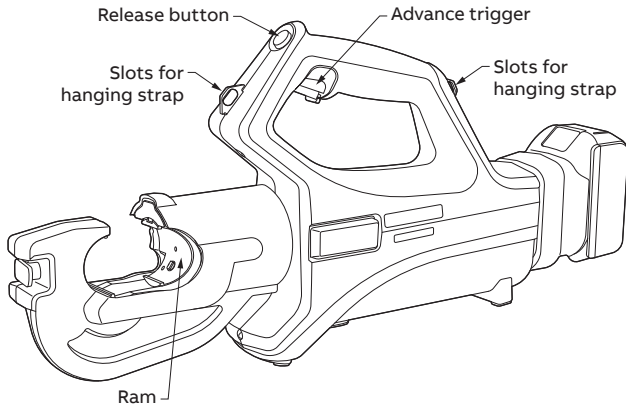
- Battery type: MAKITA LXT Lithium Ion\*
- Voltage: 18V DC
- Capacities: 5.0Ah
- Weight: 1.4 lbs.
- Charging time: 45 min. 100% Capacity

**Charger (CHR-MK):**

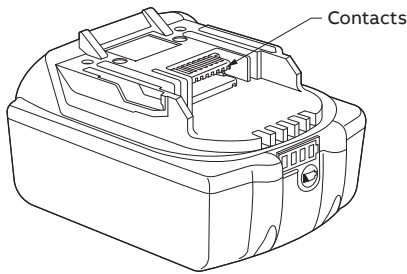
- Input voltage: 120V 50-60 HZ AC Single Phase
- Weight: 1.7 lbs.

**Parts and Accessories:**

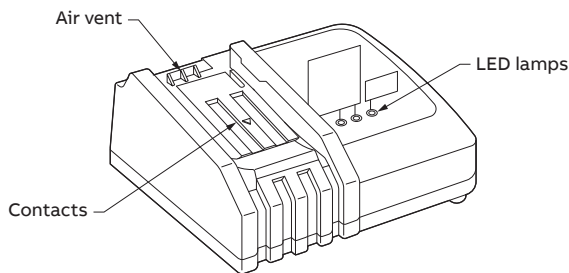
- Hydraulic Compression Tool (TBM14CR-LI)



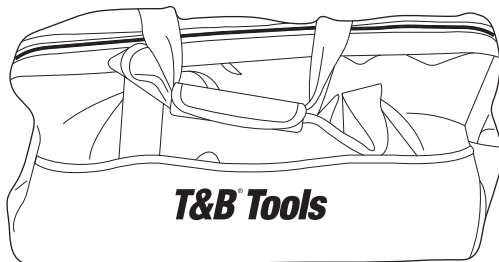
- Battery (BAT-MK)



- Charger (CHR-MK)



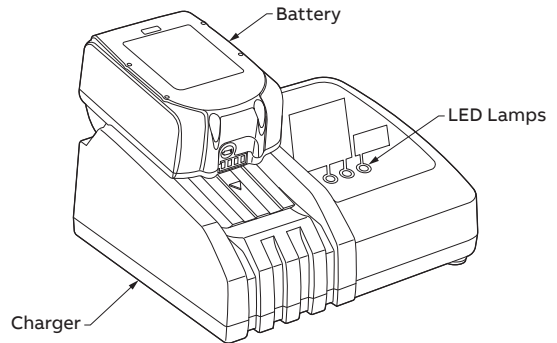
- Tool Hand Bag



**Operating Instructions:**

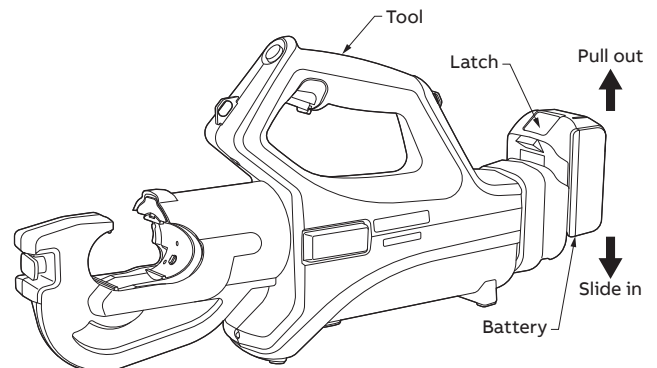
**Charging the battery**

1. Connect the battery charger BAT-MK to 120V AC. Charging light will repeatedly flash green.
2. Insert the Battery firmly into the charger. The LED Lamp lights in red [CHARGING] and a brief preset melody will play. **NOTE:** If one or more lights flash red [HIGH TEMPERATURE], allow battery to remain in charger until cool before charging can initiate. **NOTE:** Do not place any foreign objects in the Charger.
3. Full charge (100%) achieved in approximately 45 minutes. LED lamp lights green and melody or beep will indicate completion.
4. When the battery will no longer charge or hold a charge, the LED Lamp blinks alternately from green to red [IMPOSSIBLE TO CHARGE].
5. When the charger is out of order, the LED Lamp does not light up even if AC power is supplied. **NOTE:** Do not power the Charger with a portable generator or any other power source other than 120V AC.



**Attaching & Detaching the battery pack**

1. Slide Battery into the base of the Tool until it stops and the latches engage.
2. Gently pull Battery without pressing the latches.
3. To detach, pull out the Battery while pressing the latches.



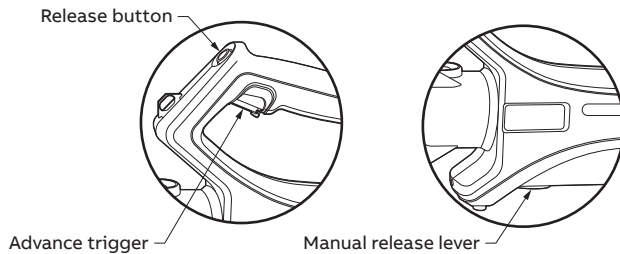
### Compression cycles

This guide indicates the number of compression cycles that the TBM14CR-LI can be expected to perform when the battery is fully charged. These figures are approximate and will vary according to the charging and other operating conditions, such as temperature, humidity, and battery condition.

Conductor	Average compressions per charge BAT-MK
4/0 Cu	120
500 kcmil	155
750 kcmil	145

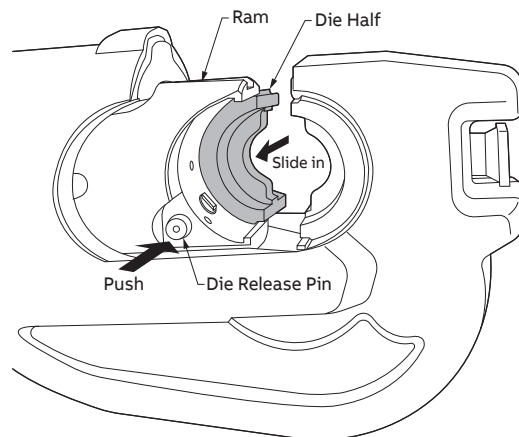
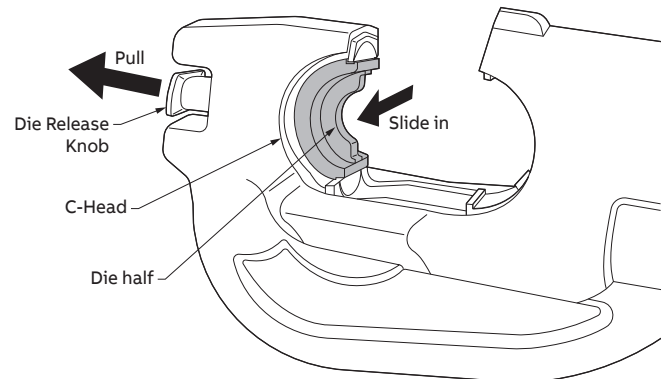
### Switch operation

1. The ram advances when the Trigger is depressed and stops when the Trigger is released.
2. To retract the ram, depress the Release button. The ram continues to retract while the Release button is depressed. If the auto-retract feature is activated, the ram will automatically retract after the crimp is completed. See "Compression operation" section, page 4 for instructions on enabling and disabling the auto-retract function.



### Compression operation

1. Select the appropriate size dies for the connector.
2. Insert one die half into the C-head by sliding it in while pulling the Die Release Knob.
3. Press the trigger (Switch Operation, page 4) to advance the Ram until the Die Release Pin is accessible. Insert the other half of the die into the Ram while pressing the Die Release Pin.
4. Press the trigger and advance the Ram so the connector is held lightly between the dies. Do not deform the connector.
5. Insert the conductor into the connector.
6. Press the trigger until the compression is complete. A series of clicks will be heard followed by a release in the pressure when compression is complete. Once the compression cycle is complete, the tool will shut off and retract the ram.
7. If the tool is stopped prior to the auto-retract feature being activated, press the release button (Switch Operation, page 4) to retract the ram. The ram continues to retract while the release button is pressed. The ram stops when it reaches the lower end.
8. Remove the compressed connector from the tool.



**Troubleshooting guide:**

**Before you begin**

1. Make sure that the battery is charged. Recheck the battery after several minutes to make sure the battery is holding its charge.
2. Use a nonflammable contact cleaner or pencil eraser to clean the electrical contacts on the battery and tool.
3. Reinstall the battery and check the tool again.

**Maintenance notes:**

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Motor runs but the tool jaws will not advance	Insufficient hydraulic oil	Contact Tool Service Center for repair service
	Air block in hydraulic system	Invert tool to allow air to rise towards the top of the oil bladder
	Defective hydraulic circuit	Contact Tool Service Center for repair service
Motor runs, tool jaws advance, but will not build pressure	Insufficient hydraulic oil	Contact Tool Service Center for repair service
	Defective suction valve or bypass cartridge	Contact Tool Service Center for repair service
Motor will not run at all	Defective battery	Charge or replace battery
	Bad contact or loose battery connections	Check all connections and wires
	Misaligned switch	Check to make sure that switch is properly aligned with trigger  Contact Tool Service Center for repair service
Tool jaws will not release	Tool did not complete a full cycle and bypass	Press trigger and allow tool to bypass, then release tool jaws
	Connector is jammed in tool jaws	Press and hold release trigger while prying tool jaws apart
	Release trigger is bent or misaligned	Contact Tool Service Center for repair service

For parts or service, contact Tool Service Center at 1-800-284-TOOL (8665)

tnb.abb.com (US/Latin America)  
 tnb.ca.abb.com (Canada)  
 abb.com  
 Warranty: www-public.tnb.com/warranty/ta04790-tb2.pdf  
 Registration: tnb.abb.com/toolregistration

For parts or service, contact Tool Service Center at 1-800-284-TOOL (8665)

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