

INSTRUCTION MANUAL

Battery-operated hydraulic Crimping Tool

PressMax-C6-4DO



Original instruction manual
Ident-No.: 76846300-BA

- ☐ PressMax-C6-4DO Ma (suitable for Makita batteries)
- ☐ PressMax-C6-4DO Bo (suitable for Bosch batteries)
- ☐ PressMax-C6-4DO Hi (suitable for Hilti batteries)

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Thank you for placing your trust in us by purchasing this tool.

1 General Information

We hereby confirm that the tool described in this instruction manual complies with the basic safety and health requirements pursuant to the EC Machinery Directive 2006/42/EC, the EMC Directive 2014/30/EU and the RoHS Directive 2011/65/EU relating to electromagnetic compatibility.

Keep this instruction manual in a place that all users of the tool are familiar with and can access easily. Read this manual carefully before using, maintaining, repairing or disposing of the tool. Make sure that you clearly understand the instructions and symbols explained in this manual or attached to any tools.

You can prevent accidents by adhering to the following basic safety advice pursuant to the EC Machinery Directive 2006/42/EC and the regulations for hand-operated tools. In any case inform yourself about and comply with the accident prevention regulations applicable in your country.

Do not remove existing labels and stickers, especially those containing legally required information.

Upon receiving the tool, make sure that the packaging is intact and the tool did not suffer any transportation damage. In case of damage, please contact HOLGER CLASEN's customer service at +49 40 511 28-0. Keep the packaging.

If operated correctly and if the required service intervals are adhered to, we grant a warranty of 24 months beginning as of the day of delivery unless legal regulations require other warranties.

Symbols used:



WARNING!



Danger of hand injuries



Please wear safety goggles



Please wear safety shoes



Please wear protective clothes



Don't dispose of in residual waste

Label:

Danger of hand injuries

Type label – Housing bottom

2 labels – Type, Comfort-Series

Serial No.: Battery shaft

2 General Safety Information

WARNING

Danger due to overheating, breakage or electric shock of the battery.

The tool, the battery and the charger are matched components.

- ▶ This tool may only be operated with a suitable rechargeable battery.
- ▶ Charge the battery with the appropriate charger.
- ▶ Only use the original battery and charger.

Charge the battery in accordance with the instructions.

- ▶ Connect the charger to a power source with suitable power specifications.
- ▶ Do not use a DC or motor-driven generator.
- ▶ Unplug the charger after charging is complete.
- ▶ Do not use the charger in the rain.

Pay attention to the temperature of the battery, the charger and the environment.

- ▶ Do not charge the battery at temperatures below 0° or above +40° C.

Ensure sufficient ventilation of the battery during the charging process.

- ▶ Do not cover the battery and charger during charging.

Do not short-circuit the contact surfaces of the battery.

Failure to do so may result in bursting of the battery and leakage of hazardous materials.

- ▶ Secure the contact surfaces of the battery with the cover provided for this purpose.
- ▶ Do not store the battery without the cover together with metal parts such as nails, screws, etc.

Do not place the battery in a fire.

Failure to do so may result in bursting of the battery and leakage of hazardous materials.

Hydraulic fluid under pressure.

Escaping fluid under pressure can cause severe injury or death.

- ▶ If injure, seek medical attention immediately.

Danger due to electric shock.

The tool is not insulated in contact with electrically charged parts.

- ▶ Never work live strands / cables!
- ▶ When using the device on or near live wires, wear suitable personal protective equipment
- ▶ Do not touch the power plug or the battery with wet hands.

Exposed Crimping Area.

Danger of crushing the hand.

- ▶ Never reach into the running tool.

Influence by electromagnetic waves.

The functionality of pacemakers can be influenced by electromagnetic waves emitted.

- ▶ Keep the tool at least 15 cm or more away from the pacemaker.

Risk of injury to the hand.

Prevent the tool from starting up unintentionally

- ▶ Always move the blade to the starting position after use or before changing parts and remove the battery.
- ▶ Keep your fingers away from the trigger when transporting the tool.
- ▶ Secure the trigger.

Danger due to inhalation of dust.

Depending on work environment dust hazardous to health may be generated during machining.

- ▶ Wear a protective mask during dusty operation.

Danger of eye injuries

Material can fly around.

- ▶ Wear protective goggles. Normal goggles do not provide sufficient protection.

Danger to persons in the vicinity due to breakage.

During operation, overload/material fatigue can cause damage to the head. Parts flying around can cause injuries.

- ▶ Do not point the head of the tool at persons in your environment during operation.

Failure to observe the following instructions may result in property damage or accidents:

Use the tool within the scope of its intended use.

Do not overload the tool. Overloading can lead to blocking, excessive heat generation and ignition.

Keep handles and contact surfaces dry, clean and oil-free. Slippery surfaces reduce tool control and can lead to accidents in unexpected situations.

Refrain from any working method that could endanger safety.

Only use attachments and accessories for the work intended for them.

Do not make any modifications to the tool. Ensure a fatigue-free working position.

Remain attentive when working with high concentration.

Do not operate the tool if you are in poor physical condition.

Do not operate the tool under the influence of alcohol.

When using the device on or near live wires, wear suitable personal protective equipment.

Do not touch the power plug or the battery with wet hands.

3 Product Description

- 1 Lash for Carrying Strap
- 2 Open Crimping head, rotatable 180°
- 3 Crimping Area, 4-arbor crimp without further crimping dies
- 4 Return Button
- 5 Release Button
- 6 LED
- 7 Locking Button Accumulator
- 8 Accumulator (not included)
- 9 Lash for Carrying Strap
- 10 Adjustment Reverse manual/ automatic
- 11 Type Label
- 12 Lash for Carrying Strap



3.1 Intended Use

This Battery-operated hydraulic tool has been designed for crimping connectors and cable lugs without further crimping dies according to the crimping range table (chapter 4.1). For other applications, please contact HOLGER CLASEN. The tool has been designed to be connected to an accumulator according to technical data.

Although this tool has been designed according to the state-of-the-art and recognized safety requirements, its use may constitute a potential threat to the life and limbs of its user or third parties or damage the tool or other material assets. Use or application for purposes other than those intended by the manufacturer will be considered improper. HOLGER CLASEN will not be liable for damage resulting from improper use. The operator works at his own risk.

3.2 Expected misuse

**Do not retract the tool without inserted connector material.
This will cause damage and possibly break the head.**

3.3 Qualification

This tool may only be used by qualified personnel who have read this safety advice and instruction manual.

3.4 Operator Protection



Danger due to chips flying around.

Wear protective goggles.

Standard glasses do not provide sufficient protection and are no proper substitution for safety eyewear.



Danger of drawing in of clothes and hair.

Wear protective clothes.

Loose or baggy clothes increase the risk of catching or winding on moving parts.

- Wear tight-fitting work clothing.
- Do not wear long hair open. Wear it well covered.
- Do not wear rings, chains or other jewellery.



Risk of crushing/sliding.

Wear protective shoes.

Make sure to stand firmly.

3.5 Workplace

Do not use the tool in environments where there is a risk of fire or explosion. Keep your workplace clean.

Keep children and unauthorized persons away from your work environment. Ensure that there is sufficient lighting at the workplace.

Before switching on the tool, make sure that no one is endangered by the starting tool.

Protect the tool from moisture, water, extreme heat / cold, chemical solutions and gases.

Do not use the tool, the battery and the charger in the rain or in a wet environment or a wet environment. Do not charge the battery there either.

Protect the battery tool from falls or impacts.

3.6 Temperature Range

The possible working range of the tool is in the temperature range from -20° C to +40° C.

The recommended working range is in the temperature range from -5°C to +40°C. Temperatures between -20° C and -5° C leads to changes in the flow properties of the hydraulic oil.

To ensure unrestricted use, we recommend storing the tool the tool for one hour in a room with a temperature of +10 to +25°C.

3.7 Transport and Storage

Ensure dry storage to protect the tool from rust.

Clean the tool before / after use and before storage.

Secure the contact surfaces of the battery with the cover provided.

If the tool is transported to another factory department or location, make sure that the tool and/or accessories are not damaged. Pack the tool accordingly.

Store the tool properly when not in use.

Store the tool in a place inaccessible to unauthorized persons.

Do not store the tool and battery in a place where the temperature may rise to +40°C or more (in a metal box, in a car in summer, etc.). Overheating may cause damage, smoke generation or ignition.

⚠ Due to the high energy density of rechargeable batteries, there is a higher risk potential, especially when shipping used rechargeable batteries.

One of the greatest risk factors when transporting rechargeable batteries or battery-powered devices is the danger of short circuits if the battery terminals come into contact with other rechargeable batteries, metal objects or other conductive material.

If the battery is inserted in the tool, the battery terminals are secured.

If they are stored separately or shipped individually, secure storage must be ensured. A possible short circuit and damage to the connection terminals must be prevented. For this purpose, the battery terminals must be secured with a non-conductive material (e.g. adhesive tape) or the contact protection cap. Batteries must be adequately protected against movement.

On the Makita website you will find recommendations for sending in lithium-ion batteries:

https://www.makita.uk.com/data/pam/public/content-pages/support/battery-transportation/mb_36_shipping_lithium_ion_batteries.pdf

Special protective measures must be taken when shipping in airplanes or batteries over 100 Wh.

Notice IATA Packing instruction 965 Part 2 for lithium-ion-batteries. If package/battery is damaged, batteries must be quarantined, inspected and repacked.

Attention: Following the IATA Packing instructions the batteries are delivered on 30 % charge level. Please completely charge the battery before usage with the recommended battery charger.

Follow the Makita charger operating instructions (DC18RC):

<https://www.makita.co.uk/user-manuals>

4 Technical Data

Item	PressMax-C6-4DO
Crimping Force	60 kN
Opening Width	32 mm
Crimping Contour	4-arbor
Battery Voltage	18 V
Weight*	5.0 kg
Dimensions* L x W x H	401 x 82 x 298 mm
Head	180° rotatable

* without battery

MasterBase technology offers the following battery options,
choose your tool here

Item	Item No.	Suitable for batteries
PressMax-C6-4DO Ma	76746300	Makita 18 V Li-Ion
PressMax-C6-4DO-Set Ma **	76846300	Makita 18 V Li-Ion
PressMax-C6-4DO Bo	76762100	Bosch 18 V Li-Ion
PressMax-C6-4DO Hi	76766300	Hilti 22 V Li-Ion (B22)

**Scope of Delivery Set:

Battery-operated hydraulic Crimping Tool
 PressMax-C6-4DO Ma (Item No. 76746300),
 Carrying Strap TR-25-2 (Item No. 07755001),
 Lithium-Ion Battery Makita BL1850B, 18 V / 5 Ah (Item No. 79300115),
 Battery Charger DC18RC (Item No. 79300120)
 Transportation Case KOFF-KI PM-C6-4D(O) (Item No. 79500131)

4.1 Crimping Ranges

Due to the large number of possible connectors/materials, we always recommend carrying out test crimping.

Tensile tests, conductivity tests or cross-section checks may also be useful in individual cases.

Please contact us, we can arrange a test for you.

Application			Crimping Range
Tubular cable lugs similar to DIN Cu, cable lugs for switch gear connectors	Conductors acc. to DIN 60228, class 2, 5 and 6, Connectors similar to DIN, Anderson according to ANSI C119.4		10 – 240 mm ²
Connectors similar to DIN Cu			10 – 120 mm ²
Tubular cable lugs Cu, for fine-stranded conductors			10 – 240 mm ²
Connectors Cu, for fine-stranded conductors			10 - 95 mm ²

5 Commissioning



The tool set comes with a Makita battery, 18 V, and a matching Makita charger. Fully charge the battery before using it for the first time.

Make sure that the accumulator is charged before each use.

The LEDs indicate the battery capacity.

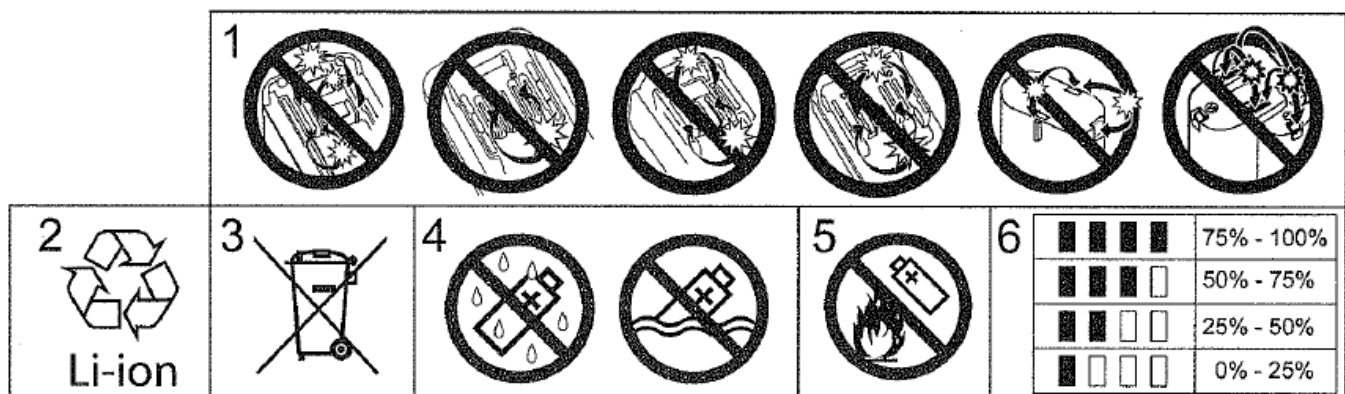
To do this, press the test button on the battery.

Reload if necessary.

Observe the operating instructions for the Makita charger (DC18RC):

<https://www.makita.de/bedienungsanleitungen.html>

The following information is placed on the battery:



1. Do not short-circuit the battery
2. Always recycle used batteries.
3. Do not dispose of used batteries in household waste.
4. Do not expose the battery to water or rain
5. Do not throw the battery into fire
6. Battery charge level indicator:

	75 % - 100 %
	50 % - 75 %
	25 % - 50 %
	0 % - 25 %

Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

For commissioning the tool with other battery systems, please observe the recommendations of this battery manufacturer.

6 Operation

WARNING

Exposed Crimping Area.

Danger of crushing the hand.

- ▶ Never reach into the running tool.

Overheating of the motor is possible after continuous operation.

Allow the tool to cool down in good time for a few minutes.

6.1 LED-Workplace Illumination

The LED for working field illumination switches on after the forward or reverse switch is actuated and remains lit until 10 seconds after the switch is released.

WARNING

Very bright light source.

Danger due to damage to the eyes during prolonged eye contact.

- ▶ Do not look directly into the LED.

6.2 Inserting / Removing the Battery

The LEDs indicate the battery capacity. To do this, press the test button on the battery.



Inserting:

Push the tool firmly onto the battery until the locking button engages. Check that the battery is firmly engaged.



Removing:

Press and hold the locking button. Pull the battery off the tool.

6.3 Adjustment manual / automatic Reverse

The tool is set to automatic retraction on delivery.

Open the rubber cover (10) with a screwdriver.



If the slot points to the **curved arrow**, the **automatic return** is activated.



If the slot points to the **straight arrow**, the **manual reverse** is set. The user controls the forward and backward movement using the buttons.



The setting is done by a quarter turn with a screwdriver.

Close the rubber cover.

Manual Reverse:

Press the forward button (5) to crimp the connection material.

Press and hold the forward button.

The tool stops after reaching the maximum force.

Retract the piston to its initial position/to the desired position by pressing the return button (4).

Automatic Reverse:

Press the forward button (5) to crimp the connection material.

The tool stops after reaching the maximum force and the piston automatically return to the starting position.

By **pressing** the forward button **again**, you can interrupt the reverse movement, the piston stops at the **desired position**.

6.4 Crimping

Check the head and the control buttons for function and damage.

If there is obvious damage, do not put it into operation.

Move the piston to its starting position by using the return button (4).

Insulate the conductor to the insertion length of the connector + 10 %.

Clean the ends of the conductors.

Insert the conductor end completely into the connection material.

Place the connection material to be pressed into the open crimping head.

NOTICE

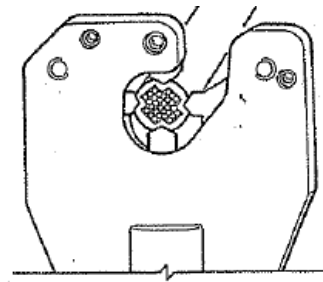
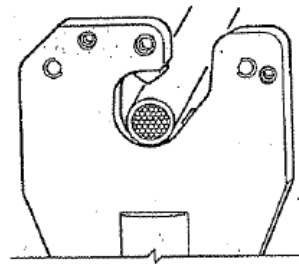
Non-observance of the following advice will lead to damage and even to breakage of the head.

Position the connector material centered.



Hold the press head at an angle of 90° to the material to be pressed.

Observe the recommendations of the connector manufacturer regarding the sequence and number of pressing operations.



Press the release lever (5) to crimp the connector material.

Keep the release lever pressed until the maximum pressure is reached. The pressure relief valve stops the pressure build-up when the maximum pressure is reached. Only then is the crimping process completely completed.

In the case of **manual return**, move the piston to its starting position by pressing the return button (4).

In the case of **automatic return**, this takes place automatically once the maximum force has been reached.

7 Troubleshooting

If the tool is colder than -5°C, store it in a room with a temperature of +10 to +25°C for at least one hour to allow the tool to warm up to room temperature again. At temperatures between -20°C and -5°C, the flow properties of the hydraulic oil change.

Error	Cause	Solution
The tool does not work.	The battery is not charged.	Recharge the battery.
	The battery is not inserted correctly.	Insert the battery correctly.
	The contacts between the battery and the tool are dirty.	Clean the contacts.
	Fault in the hydraulic system (e.g. air).	Have the manufacturer inspect the tool.
The crimping dies do not move to starting position	The head is dirty.	Remove chips and metal left on the blades.
	Wear of the return spring.	Have the manufacturer inspect the tool.
	Defect hydraulic system.	Have the manufacturer inspect the tool.
The piston moves too slowly/not at all together.	Fault in the valves.	Have the manufacturer inspect the tool.

8 Maintenance and Service

Task	Period	Maintenance by
Clean and grease all movable parts. Do not use chemicals, water or wet clothes.	Daily	User
Inspect the tool regularly for damage.	Daily	User
Maintenance of the tool. Checking the operating pressure. Change the hydraulic oil.	Every 12 months (approx. 10.000 work cycles)	HOLGER CLASEN

Disassembly or modification of the tool by unqualified persons could cause accidents. Always allow qualified technicians only or the HOLGER CLASEN Technical Service Center (TSC) to carry out maintenance work. Use original spare parts by HOLGER CLASEN.

Service address:

The TSC will do all required maintenance and repair work for you.



TSC Technik-Service-Center
Alsterdorfer Straße 228
22297 Hamburg, Germany
P. +49 40 511 28-200
service@holger-clasen.de
holger-clasen.de

9 Disposal



The tool must not be disposed of as residual waste because some parts of the tool may cause environmental damage! Improper disposal constitutes a punishable offence according to the Environmental Liability Act!

In accordance with §19 ElektroG, HOLGER CLASEN offers the following options for returning old appliances:

1. send in the old appliance with clear notification for disposal to the following drop-off address: **HOLGER CLASEN GmbH & Co. KG, Alsterdorfer Straße 228, 22297 Hamburg, Germany.**
2. personal delivery of the old appliance to the above address.
3. chargeable commissioning of HOLGER CLASEN GmbH & Co. KG to collect the old appliance. The end user is responsible for the proper packaging of the old appliance.

The owner of the waste equipment is responsible for the disposal of personal data in physical or digital form prior to handover.

The owner of the old appliance is responsible for the non-destructive separation or appropriate packaging of old batteries and accumulators in accordance with Section 10 (1) ElektroG, unless they are enclosed by the old appliance.

The battery, the circuit boards and other components must be disposed of separately in accordance with the environmental standards in force in the European Union or in your country. Send the tool to HOLGER CLASEN for disposal.

Do not dispose of battery pack together with household waste material! In observance of the European Directive 2006/66/EC, on batteries and accumulators and waste batteries and accumulators and the implementation in accordance with national laws, batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

10 Accessories

Type		Description	Item No.
Case PressMax-C6-4DO Ma / Bo	KOFF-KI PM-C6-4D(O)	Lightweight Plastic case with compartments for tool, batteries and battery charger	79500131
Carrying Strap for Battery Tools	TR-REC	Strap 25 mm wide, 1 snap hook	07542106
	TR-25-2	Strap 25 mm wide, 2 snap hooks	07755001
Battery Makita*	BL1850B	Type: Lithium-Ion (90 Wh) Battery Voltage: 18 V Capacity: 5.0 Ah Dimensions: 115 x 75 x 67 mm Weight: 0.64 kg Charging Time: 45 min Charger: DC18RC	79300115
Battery Charger Makita	DC18RC	Input Voltage: 220 – 240 V, 50/60 Hz Weight: 0.90 kg Dimensions: 156 x 190 x 84 mm Charging Time BL1850B (5.0 Ah): 45 min	79300120

* Optionally, other 18V Makita batteries can be used:
BL1815N, BL1820B, BL1830B, BL1840B, BL1860B

EC DECLARATION OF CONFORMITY

We: **HOLGER CLASEN GmbH & Co. KG**
 Alsterdorfer Straße 228
 22297 Hamburg, Germany

in accordance with the following Directive(s)

2006/42/EG – The Machinery Directive
 2014/30/EU – EMC Directive
 2011/65/EU – RoHS Directive

hereby declare that,

Equipment: **Battery-operated hydraulic Crimping Tool**

Type: **PressMax-C6-4DO**

Serial number: _____

is in conformity with the applicable requirements of the following documents:

Machinery Directive: EN 62841-1:2015; 62841-2-8: 2016

EMC Directive: EMI: EN 61000-6-4: 2007+A1:2011

EMS: EN 61600-6-2: 2005

I hereby confirm that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The unit complies with all applicable Essential Requirements of the Directive(s).

Hamburg, 11.10.2022

HOLGER CLASEN GmbH & Co. KG



Lennart Clasen (Managing Director)