

# MODEL 5612M Battery Powered Compression Tool

# **INSTRUCTION NO. 5612M**



## THE NATIONAL TELEPHONE SUPPLY COMPANY

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#### I. SAFETY AND WARNING REMINDERS

NOTE: The Nicopress® battery operated compression tool is designed to be used with Nicopress® sleeves. Splicing any other items should not be attempted, as it may cause damage to equipment and/or injury to personnel.

- 1) Carefully read, understand and follow all instructions in this manual and on the tool before attempting to operate the equipment.
- 2) At all times wear safety eye protection.
- 3) Keep fingers out of pinch areas during operation.
- 4) Always point the tool away from other people.
- 5) If the tool is stored for an extended period at a temperature of less than 25°F (-5°C), the tool should be allowed to return to room temperature to ensure smooth operation. Use the tool only after it has been at room temperature for 1 hour.
- 6) Do not drop the tool. Dropping the tool may damage the hydraulic circuit and result in the tool not functioning correctly.
- 7) Keep the head and ram clean and free of debris. Solvents can be used to clean the head but should not be used on the plastic body. Use soap and water to clean the body.

#### PRECAUTIONS FOR THE BL1850B BATTERY

- 1) Do not short circuit the contacts or expose the cartridge to water, oil, or solvents.
- 2) Do not disassemble or attempt to repair the battery cartridge or dispose of in a fire.
- 3) Do not drop or otherwise abuse the battery cartridge.
- 4) Do not leave the cartridge in locations where it will be exposed to a temperature greater than 140°F (60°C) for an extended period.
- 5) For long term storage beyond 2 months, it is recommended the battery cartridge be stored without being recharged and should only be recharged closer to the time of use.

#### PRECAUTIONS FOR THE DC18RC CHARGER

- 1) This charger is for charging battery cartridge BL1850B only. Do not use the charger for any other devices.
- 2) Allow battery cartridges to cool before charging.
- 3) Charge batteries at an ambient temperature of 50° to 95°F (10° to 35° C). Charging time is approximately 50 to 60 minutes for the BL1850B.
- 4) Never short circuit the output terminals.
- 5) Do not expose the charger to water, oil, or solvents.
- 6) Do not disassemble, attempt to modify, drop, or otherwise abuse charger.

#### **SAFETY SYMBOLS**

You will see this symbol Exclamation Triangle throughout this manual. The purpose of this symbol is to call your attention to the hazards and/or unsafe practices that have the potential to cause injury or property damage. The severity of each hazard is further explained in detail below. Failure to follow all instructions may result in electric shock, fire and/or serious injury. The term "power tool" in all warnings refers to your battery operated (cordless) power tool.

# **A** DANGER

Immediate hazards are present which will result in severe injury or death if not avoided.

## CAUTION

Hazards or unsafe practices may result in injury or property damage if not avoided.

## **A**CAUTION

Hazards or unsafe practices may result in injury or property damage if not avoided.

## WARNING



Read all instructions and safety information detaile d in this operator manual prior to operating or servicing this tool. Failure to observe this warning could result in severe injury or death.

# **A**CAUTION



Wear Eye Protection:
Use safety glasses when
operating or servicing this
tool to prevent eye injury
from flying debris.

## **▲** DANGER



Electric Shock Hazard:
Use appropriate personal
protective equipment when
using this unit on or near
energized electrical lines.

## **A DANGER**



Pinch Point Hazard: Remove battery before servicing. Keep hands away from crimping head during cycle.

## **▲** DANGER



Cutting Hazard:
Remove battery before servicing.
Keep hands away from cutting head during cycle.



DO NOT DISCARD THIS PRODUCT OR THROW AWAY!

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## **A** DANGER

#### **WORK AREA SAFETY**

- Keep 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. Power tools create sparks which may ignite the dust or fumes.
- Keep bystanders away while operating a power tool. Distractions can cause you to lose control.

## **A**CAUTION

#### PERSONAL SAFETY

- 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 distraction while operating power tools may result in personal injury.
- Use personal protection equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Do not overreach. At all times keep proper footing and balance. This enables better control of the power tool in unexpected situations.

### **A**WARNING

#### TOOL USE AND CARE

- To prevent leakage, overheating, smoke generation, fire, and rupturing from occurring, follow these instructions when handling our rechargeable power tools (tool main body/battery pack/charger).
- Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it was designed.
- Do not use the tool if the switch does not turn it on and off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the battery pack from the tool before making any adjustments, changing accessories, or storing. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store idle tools out of the reach of children and do not allow persons unfamiliar with the tool or these instructions to operate it. These tools can be dangerous in the hands of untrained users.
- Maintain tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect its operation. If damaged, have the tool repaired before use.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- Under abusive conditions, liquid may be ejected from battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, seek medical help. Liquid ejected from the battery may cause irritation or burns.

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## II. SPECIFICATIONS

- 1) Output force 12 tons
- 2) Weight 15.5 lbs. (7kg) w/battery
- 3) Dimensions 16"L x 11.5"H x 3.6"W (406mm x 292mm x 91.44mm)
- 4) Wire rope sizes -3/64" to 1/2" (1mm to 13mm)
- 5) Approx. no. of crimps 110

#### **FEATURES**

- 1) One-hand operation
- 2) Optimized hydraulics offer 20% faster advance and 30% quicker retraction
- 3) Selectable auto-retract switch
- 4) 180-degree rotating head with forged jaws and protective brush guards
- 5) Fully enclosed weather resistant housing
- 6) Wrist strap
- 7) LED work lights
- 8) Ballistic nylon heavy duffle bag

## III. <u>ACCESSORIES</u>

BATTERY CARTRIDGE	Battery Cartridge (BL1850B)		
BL1850B	(two included with tool)		
makita Bone 18 Normanins	Battery type: Lithium Ion Voltage: 18V DC Rated current: 5.0 Ah Charge time: 50 to 60 mins.		
BATTERY CHARGER	Battery Charger (DC18RC)		
DC18RC	(one included with tool)		
	Input voltage:	120 VAC single phase	

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#### IV. OPERATING INSTRUCTIONS

#### PRE-USE CHECKLIST

1) Visually confirm there are no missing or broken components. If found, stop use and have the tool checked by a qualified technician.

- 2) Check and ensure triggers are moving freely with no binding.
- 3) Rotate head where applicable to ensure it rotates 180 degrees. If head rotates more than that, stop use and have tool checked by a qualified technician.
- 4) Please read instructions supplied with the battery and charger.

#### TRIGGER AND RELEASE BUTTON

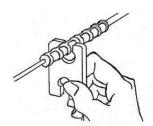
- 1) The compression jaws close when the trigger is pressed and stops when the trigger is released.
- 2) To open the tool's jaws, push the release button. The jaws continue to open while the release button is pressed.

#### V. PROPER CRIMPING

- 1) Select the appropriate compression die set for the connector and cable being used. All Nicopress<sup>®</sup> Series 6 Dies can be used with this tool.
- 2) Slide each die into place. Be sure both die halves are secure before operating the tool.
- 3) Place the connector between the die halves. Press the trigger and advance the ram so that the connector is held between the die halves and insert the cable into the sleeve.
- 4) Press the trigger until the compression is completed. The ram will advance and once the cycle is complete, the tool will automatically shut off. A green LED will appear on the display followed by an audible beep to alert the user the compression was completed. If the cycle was not completed, the LED will flash red and a series of audible beeps will sound, alerting the user the cycle was not completed. If the dies fail to close, it will be due to:
  - The tool being used for some application for which it was not designed
  - The pressure not building up because of a depleted battery
  - The dies being the incorrect size
- 5) Press the release button to retract the ram. The ram continues to retract while the release button is pressed and stops when it reaches the lower end. Check the compression with the gauge.

#### **USE OF CRIMP GAUGE**

When using the gauge, it should be held so that it contacts the compressed portion of the sleeve at right angles to the fins (flash). The compressed portion of the splice should enter the gauge easily.



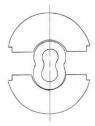
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#### WIRE ROPE SPLICING

Because of many variations in wire and fiber rope design and construction, it is recommended that all wire rope assemblies be pull tested prior to use.

It has been determined through pull testing that an eye splice using Nicopress<sup>®</sup> copper, copper plated and stainless steel oval sleeves will hold military specification aircraft cable to its breaking strength, when the cable is made to military specifications MIL-DTW-83420M,dated 12-06-2007 for cable constructions 3x7, 7x7, 7x19 and Federal Specification RR-W-410F dated Nicopress<sup>®</sup> sleeves crimped with Nicopress<sup>®</sup> tools.

Splices in wire rope are made by compressing two wires together inside a sleeve. To compress the sleeve properly, position the sleeve between the crimping dies with the long axis of the sleeve aligned with the crimping action of the dies.



#### LAP SPLICES

When the ends of two pieces of wire rope or both ends of the same rope are spliced together, this splice is called a lap splice. Usually two sleeves are needed to develop a splice equal to the breaking strength of the wire.

To make a proper lap splice, pull the ends of the rope trough both sleeves. Be sure to leave a space between the sleeves to allow for extrusion of the sleeves during crimping and approximately 1/16" to 1/8" space between sleeves after crimping. The sleeve length, after crimping, can be found in Nicopress® Catalog No. 4 for Oval Sleeves. The ends of the wire should extend approximately 1/16" beyond the edge of the crimped sleeves.



#### **EYE SPLICES**

Eye splices are formed by pulling one end of the wire or fiber rope through the oval sleeve and looping it back to form an eye (Figure 1). Line up the sleeve between the crimping dies with the long axis perpendicular to the crimping action of the dies. The splice is made by the two wires being compressed together inside the sleeve.



#### Figure 1

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Because of the many different types of wire rope, there can be no formula governing the exact size of loop to use. It is suggested that the length of the loop be approximately twice the width (Figure 2).

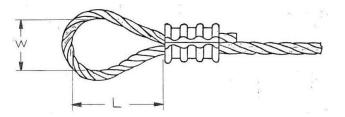


Figure 2
All wire rope assemblies should be pull tested prior to use to ensure proper tensile strength.

#### COMPRESSION DIE CHART FOR WIRE ROPE SPLICING

#### Oval sleeves

Cable Size	Oval Sleeve Stock #	Compression Die/ # of Presses Required	Cable Size	Oval Sleeve Stock #	Compression Die/ # of Presses Required
	18-11-B4	12-OVAL-B4 (1)		18-8-F2	12-OVAL-F2 (2)
	28-11-B4	12-OVAL-B4 (1)		28-8-F2	12-OVAL-F2 (2)
3/64	428-1.5-VB4	12-OVAL-B4 (1)	7/32	428-7-F2	12-OVAL-F2 (2)
	168-1.5-VB4	12-OVAL-B4 (1)			
	188-1.5-VB4	12-OVAL-B4 (1)			
	18-1-C	12-OVAL-C (1)		18-10-F6	12-OVAL-F6 (2)
	28-1-C	12-OVAL-C (1)		28-10-F6	12-OVAL-F6 (2)
1/16	428-2-VC	12-OVAL-C (1)	1/4	428-8-VF6	12-OVAL-F6 (2)
	168-2-VB4	12-OVAL-B4 (1)		168-8-VF2	12-OVAL-F2 (2 ovlp)
	188-2-VC	12-OVAL-C (1)		188-8-VF6	12-188-VF6 (2)
	18-2-G	12-OVAL-G (1)		10 12 C0	12 OVAL C0 (2)
	28-2-G	12-OVAL-G (1)		18-13-G9	12-OVAL-G9 (3)
3/32	428-3-VG	12-OVAL-G (1)	5/16	28-13-G9	12-OVAL-G9 (3)
	168-3-VC	12-OVAL-C (1)		428-10-VG9	12-OVAL-G9 (3)
	188-3-VG	12-188-VG (1)		188-10-VG92	12-VG92 (4)
	18-3-M	12-OVAL-M (1)	3/8	18-23-H5	12 OVAL H5 (4)
	28-3-M	12-OVAL-M (1)		28-23-H5	12-OVAL-H5 (4) 12-OVAL-H5 (4)
1/8	428-4-M	12-OVAL-M (1)		428-12-VH5	12-OVAL-H5 (4) 12-OVAL-H5 (4)
	168-4-VG	12-OVAL-G (1)		188-12-VH3	12-OVAL-H3 (4) 12-OVAL-J8 (5)
	188-4-VM	12-188-VM (1)		100-12-VJ0	12-OVAL-J8 (3)
	18-4-P	12-OVAL-P (2)	7/16	18-24-J8	12-OVAL-J8 (5)
	28-4-P	12-OVAL-P (2)		28-24-J8	12-OVAL-J8 (5)
5/32	428-5-VP	12-OVAL-P (2)		428-14-VJ8	12-OVAL-J8 (5)
	168-5-VM	12-OVAL-M (1)		188-14-VK8	12-OVAL-K8 (6)
	188-5-VP	12-188-VP (2)			
	18-6-X	12-OVAL-X (2)		18-25-K8	12-OVAL-K8 (6)
	28-6-X	12-OVAL-X (2)	1/2	28-25-K8	12-OVAL-K8 (6)
3/16	428-6-VX	12-OVAL-X (2)		428-16-VK8	12-OVAL-K8 (6)
	168-6-VP	12-OVAL-P (3)		188-16-VM1	12-188-VM1 (4)
	188-6-VX	12-188-VX (2)			, ,

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## **Stop sleeves**

Cable Size	Stop Sleeve Stock #	Compression Die/# of Presses Required
3/64	871-12-B4	12-OVAL-B4 (1)
1/16	871-1-C 878-2-VC 871-1-Q*	12-OVAL-C (1) 12-OVAL-C (1) 12-1-Q (1)
3/32	871-17-J 871-3-Q* 878-3-J	12-J (1) 12-1-Q (1) 12-J (1)
1/8	871-18-J 878-4-J	12-J (1) 12-J (1)
5/32	871-19-M 878-5-M	12-1M (1) 12-1M (1)
3/16	871-20-M 878-6-M	12-1M (1) 12-1M (1)
7/32	871-22-M	12-1M (1)
1/4	871-23-F6 878-8-VF6	12-OVAL-F6 (2) 12-OVAL-F6 (2)
5/16	871-26-F6 878-10-VF6	12-OVAL-F6 (2) 12-OVAL-F6 (2)
3/8	871-27-F6	12-OVAL-F6 (2)

## COMPRESSION DIE CHART FOR SYNTHETIC & FIBER ROPE SPLICING

## **Oval sleeves**

Cable Size	Oval Sleeve Stock #	Compression Die/ /# of Presses Required	Cable Size	Oval Sleeve Stock #	Compression Die/ # of Presses Required
1/16	1700-C	12-OVAL-C (1)	5/16	1700-G3	12-1700-G3 (4 ovlp)
1/8	1700-M	12-1700-M (1)	3/8	1700-H5	12-1700-H5 (4)
3/16	1582-P	12-1582-P (1)	1/2	1700-J8	12-1700-J8 (6)
1/4	1700-X	12-1700-X (2)			

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## TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION	
Motor runs, but the	Insufficient hydraulic oil	Consult factory for repair service	
tool jaws will not advance	Air block in hydraulic system	Invert tool to allow air to rise towards the top of the oil bladder	
	Defective hydraulic circuit	Consult factory for repair service	
Motor runs, tool	Insufficient hydraulic oil	Consult factory for repair service	
jaws advance but will not build pressure	Defective suction valve or bypass cartridge	Consult factory for repair service	
Motor will not run	Defective battery	Charge or replace battery	
at all	Bad contact or loose battery connections	Check all connections and wires	
	Misaligned switch	Check to make sure that switch is properly aligned with trigger	
		Consult factory for repair service	
Tool blades will not release	F	Press trigger and allow tool to bypass	
	Small wire stuck between blades	Gently utilize hammer and wood block	
	Release trigger is bent or misaligned	Consult factory for repair service	

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#### MODEL 5612M WARRANTY

The 5612M battery tool has a 1-year warranty and the BL1850B battery and charger has a 3-year warranty. The warranty does not cover any damages incurred from a Nicopress® tool including damages to property, bodily injury and lost wages resulting from such injuries. This warranty solely covers the repair or replacement of tools supplied by Nicopress®. These remedies are exclusive, and the total liability of Nicopress®, whether based on contract, warranty negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the tool. In no event shall Nicopress® be liable for consequential, incidental, or special damages.

Nicopress® makes no other warranties of any kind, expressed or implied, and all implied warranty, including warranties of merchantability and fitness for a particular purpose are disclaimed.

Nicopress® reserves the right to determine all warranty claims. Nicopress® will not warranty tools containing parts or batteries not originally supplied by Nicopress®. Failure due to misuse, improper maintenance, misapplication, not following instructions or warnings, abuse or repairs attempted by anyone other than Nicopress® render this warranty null and void.

# HOW TO GET SERVICE UNDER THE TERMS OF THE LIMITED WARRANTY Return your product directly to a Nicopress® Authorized Distributor

Call a Nicopress<sup>®</sup> Authorized Distributor stating the tool's purchase date and problem description. You will be given a Return Goods Authorization No. to assure that your merchandise will be handled properly upon receipt. Non-warranty repairs are handled using the same procedure. Repairs exceeding 50% of the cost of a new tool will be advised before repairs are made.

CAUTION: Make sure the product is packaged adequately to prevent damage or loss during transit. The shipment must be pre-paid and we recommend that it be insured. A cover letter indicating the reason for the return should be included to facilitate repairs.

#### FACTORY MAINTENANCE RECONDITIONING SERVICE

A factory maintenance reconditioning service is available beyond the warranty period to accommodate normal tool wear. Contact your Authorized Distributor for information and details.

#### PLEASE RETAIN FOR YOUR RECORDS

Purchaser's Name	,
Address	
City, State, Zip	
Tool Model Number	
Serial Number	
Seriai Number	
Date	
<b>Purchased From</b>	

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# SEND THIS PORTION WITH ANY TOOL WHEN REQUESTING REPAIRS, WARRANTY OR RECONDITIONING WORK

# PLEASE CALL, EMAIL OR FAX A NICOPRESS® AUTHORIZED DISTRIBUTOR

Nicopress RGA No			
Distributor			
Address			
City			
Tool Model			
Serial No			
Warranty Claim Repair Only	Estimate Requ	ired: Yes	No
Problem Description			
Customer Name			
Phone ()			
Address			
City	State	_ Zip	