



# Safe Operation & Maintenance Instructions

## Battery - Operated Crimper

NMBT IC



Version: 2019/10

**Battery – Operated Crimpers** are inspected for quality and tested for safety.  
We follow ISO 9001: 2000/ ISO 14001: 2004/ IECQ QC 080001/ OHSAS 18001: 2007

### **ATTENTION!**

*Safe Operation & Maintenance Instructions must be followed.*

**\*\*Recommend for indoor use\*\***

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Thank you for using our products. This manual must be read carefully prior to operating this product. Special attention should be paid to the section "Safety Instructions". Damages and injuries caused by improper use of this product are **NOT** included in our warranty. We would like to remind you to work safely and to keep this manual on hand.

## Safety Instructions

- Follow ALL instructions to ensure safety.

| <b>WARNING</b>  |   |
|---|---|
|    | This product is NOT an insulator and cannot be used near energized conductors.  |
|  | Remove the battery pack when the tool is not in use. The piston advances rapidly and can injure severely.                           |
| <b>ATTENTION</b>  |   |
|  | Do not use this tool on glass, plastic, wood or any other materials which could shatter.<br><b>Do not exceed equipment ratings.</b> |
|  | Always wear safety goggles when operating this product. Projectiles or hydraulic fluid can cause serious injuries.                  |

# Safety Instructions Cont.

## Work Area Safety

1. Keep the area around the tool clean and free of obstructions.
2. Keep the area free of flammables which could ignite while using this tool.
3. Children and bystanders should stay clear of the work area to ensure their safety

## Electrical Safety

1. Use only the specified battery charger for the battery.
2. Use only the designated battery pack with this tool.
3. Do not modify the charger in any way. Ensure the charger matches the electrical outlet.
4. Avoid electrical shock by not touching any grounded metal conductors when operating this tool.
5. Do not use this tool in wet conditions. Store this tool in a dry place.

## Personal Safety

1. Stay alert while using this tool to prevent serious injury. Do not use under the influence of drugs, alcohol or medicine.
2. Do not wear loose hair or clothes that can get caught in the tool while operating.
3. To reduce the risk of injury, wear non-conductive gloves and non-skid safety-shoes. Always wear protective eyewear.
4. Make sure the tool switch is OFF or the tool locked before inserting the battery pack.
5. Work safely. Maintain your balance and do not reach while operating the tool.
6. This tool is heavy and the cylinder piston advances quickly. Keep your fingers away from the trigger and tool head when adjusting your position or the position of the fitting.

# Safety Instructions Cont.

## Tool Use and Care

1. This tool is designed for one- handed use. Use assistance if the cable and fitting are hard to manage, or anything distracts you from the use of this tool.
2. Ensure the fitting is not over-specification. You may damage the tool if you do not follow the operating instructions.
3. Do not use the tool if there are any abnormalities or damage to any of its components.
4. Remove the battery pack before changing the dies, servicing, or storing the tool.
5. Keep out of the reach of children. All users should be familiar with its use before operating.
6. Store the battery away from materials which may short the battery and cause a hazard.
7. Inspect the tool before and after every use. Do not use this tool if it is damaged in any way.
8. Personal injury can be caused by operating poorly maintained tools. Check for loose parts before using.

9. Use only manufacturer recommended accessories with this power tool.

## Service

1. This tool must be repaired by qualified technicians with original spare parts. Please contact your manufacturer.
2. Do not attempt to repair or disassemble this tool yourself.
3. When having the tool serviced, always use identical manufacturer replacement parts.

# Product Description: NMBT IC

## ■ Specifications:

|                     |                       |
|---------------------|-----------------------|
| Dimensions:         | 356mm                 |
| Weight:             | 2.3 kg (with battery) |
| Drive unit:         | 18V DC Motor          |
| Input voltage:      | 110V Single Phase AC  |
| Input voltage:      | 230V Single Phase AC  |
| Input frequency:    | 50-60 Hz              |
| Input current:      | 21.75 VA              |
| Reservoir capacity: | 40cc                  |
| Max. Pressure:      | 600 bar               |
| Max. Output:        | 2.3 tons / 22.5 kN    |

## ■ Battery Specifications:

|                           |                             |
|---------------------------|-----------------------------|
| Brand:                    | BOSCH                       |
| Type:                     | <b>lithium-ion</b> (Li-ion) |
| Capacity:                 | 2.0 Ah                      |
| Output Voltage:           | 18Vd.c.                     |
| Input Frequency:          | 50-60 Hz                    |
| No. of crimps per charge: | approx. 200 crimps          |

## ■ Charger Specifications:

|                            |               |
|----------------------------|---------------|
| Model No.:                 | AL 1860 CV    |
| Input Voltage:             | 230Va.c.      |
| Charging time per battery: | 30min <2.0Ah> |

## ■ Features:

- 180 Degrees Swivel Head
- 2-Stage Action for a Fast Advancing Speed
- LED Light Support
- Battery Light Display Indicates Battery Power Condition and Abnormal Signal for Protection
- Non-Slip Handle Design / Durable Housing & Light Weight Design


## ■ Accessories:

- 230V Charger, 18 V Battery, Plastic Carrying Case



# Maintenance

- Hydraulic fluid must be replaced every 24 months.
- Keep the tool head free of dirt and metal chips. Use a lubricant to clean the tool when necessary.
- Keep the handle dry and free of grease at all times. The plastic housing can be kept clean with a soft soap cloth.
- Do **NOT** let the tool drop to the ground or into the carrying case to avoid damage to internal parts or to the plastic housing.
- Do **NOT** keep this product in places with high temperatures, high humidity, or direct sunlight.
- Suggested working temperatures : -10°C ~ 40°C. Check hydraulic fluid specifications.
- Hydraulic fluid temperatures over 65°C might soften packings and seals and cause fluid leaks.
- Inform our authorized distributors in case of any abnormalities or malfunctions of the product.
- **DO NOT DISASSEMBLE OR ATTEMPT TO REPAIR THIS TOOL.**

| <b>ATTENTION</b>  |   |
|---|---|
|  | <ul style="list-style-type: none"><li>• <b>Never operate the tool without the dies or a connector in place.</b></li><li>• <b>To avoid injury keep hands away from the tool head and workpiece during operation.</b></li></ul> |

## Maintenance Cont.

- Replace any worn or damaged parts immediately. Do not use parts not supplied by manufacturer.
- Contact our service representatives to request parts or for problems not shown above.
- Do NOT attempt to disassemble or repair the product.
- Our hydraulic tools must be serviced by a qualified technician. Contact our representative for more information.



### **ATTENTION!**

*Do not dispose of electrical appliances as unsorted municipal waste. Use separate collection facilities\*. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater, damaging the public's health and well-being.*

*\*Contact your local government for information regarding the collection systems available.*



# Operating Instructions – LED Light & Battery Light

- The LED is located on the top of the housing and will be on when you press the trigger. The light will be off after 10 seconds once the tool is not in operation mode.
- The battery light indicate the battery level / voltage or abnormal problem with the tool.
  1. Once the red light is flashing, it indicates there is a problem with the tool.
  2. Once the red light is on, it indicates no battery and can't be operate.
  3. The battery level can also be check at the back of the battery.



# Operating Instructions Cont.

## ■ Battery Charging

1. Plug the AC charger plug into the wall socket. Ensure the electrical outlet meets the charger's specifications.
2. Position the battery cartridge into the battery charger. The LED indicator light will go out when the battery is fully charged.
3. Charging time for the 2.0 Ah battery cartridge is approx. 35 minutes. When stored in the charger, the battery will stay fully charged.



## ■ Battery Cartridge

1. To release the battery, press on the battery latch and pull the battery out.
2. To install the battery, slide the battery into the base of the tool handle until it clicks into place. The battery should be secured and unmoveable.



| <b>ATTENTION</b>  |  |
|---|--|
|  | <ul style="list-style-type: none"><li>• <b>Remove the battery cartridge before exchanging the tool dies or cleaning the tool head.</b></li><li>• <b>Do not disassemble or attempt to repair the battery cartridge. Follow battery disposal guidelines.</b></li></ul> |

## Operating Instructions Cont.

1. Slide the charged battery into the handle of the powertool and press until you hear a click. The battery should be secured and unmoveable.



2. Press the release button to release the hydraulic pressure in the tool. The tool is ready to use when the piston returns to the starting position.



3. Hold the cable/lug and crimper head in position. Press the trigger to advance the piston. Ensure the cable/lug is at **center** of crimper head.

4. The operation completes when the hydraulic pressure reaches 600 bar and the safety relief valve is activated.



5. Press the release button to retract the piston

## Operating Instructions Cont.

6. Repeat steps 5-7 to perform the remaining according to your requirement.
7. Clean the tool before storing into the case. Always store the tool in its case with the cylinder piston fully retracted
8. Carbon Brush Motor life-cycle limitation @12,000 times under 600 bar continue operation.

### **ATTENTION!**

**Do not put your fingers through the crimping area of the crimper to remove the cable when the battery pack is in place and you are holding the tool with you other hand. Pay attention! The piston and indenters advance quickly. If the trigger is accidentally pressed, it can result in severe damage to your hand. For your safety, remove the battery pack whenever the tool is sitting idly. Do not use this tool when you are tired or distracted. Keep away from children.**

# Trouble – Shooting

## ■ **Compression of lugs cannot be completed:**

- A. Applied cables or terminals are over-specification.
- B. Operation instructions were not followed. The product or dies have been already damaged.
- C. Internal leakage: Contact our service representatives.

## ■ **The piston is stuck or is unable to retract after operation:**

The piston may have been deformed by uneven stress distribution when the product was operated with off-centered fittings. Contact our service representatives.

## ■ **Piston action is slow or “spongy”:**

- A. There is air in the hydraulic system. Follow steps on page 14 to expel any air in the system.
- B. Insufficient hydraulic fluid. Follow steps on page 14 to add fluid.
- C. The battery power level is running low. Charge the battery cartridge.

## ■ **Charging Lamp does not light up:**

- A. Dust, etc. is obstructing the battery terminals. Clean the battery.
- B. Battery cartridge is overheated or too cold (below 0°C). Allow the cartridge to cool before charging.

## ■ **Even fully charged, the cutting capacity is reduced:**

- A. Life of the battery has expired. Replace the battery cartridge with a new cartridge.

## **Trouble – Shooting Cont.**

- **Replace any worn or damaged parts immediately. Do not use parts not supplied by manufacturer.**
- **Contact our service representatives to request parts or for problems not shown above.**
- **Do NOT attempt to disassemble or repair the product.**
- **This hydraulic tools must be serviced by a qualified technician. Contact your supplier's representative for more information.**

# Oil Refilling Instructions

- **'Spongy' piston action indicates there is air in the hydraulic system. This is often because there is not enough oil in the tool oil reservoir. Follow the steps below to add oil.**

1. Remove the reservoir cover of the tool casing to access the oil reservoir cap.
2. Position the tool so the tool head is facing down and the nozzle of the oil reservoir is facing upwards.
3. Remove the cap. To replace the oil completely, pour out all the oil from the reservoir. Be careful not to pour oil on the plastic tool casing.
4. Add oil. The reservoir capacity is approximately 48 cc. Keep the oil free of dirt and air bubbles when refilling the reservoir.
5. To expel air from the system, advance the piston completely and then retract. The oil level will be significantly lower. Add more oil to fill it up.
6. Advance and retract the piston 2-3 times to ensure all air is removed from the system. Replace the cap on the oil reservoir. Replace the reservoir cover.

- **Use only Shell Telus T32 or an equivalent hydraulic fluid when changing or adding oil.**

# Limited Lifetime Warranty

- This electronic products are warrantied against defects in materials and workmanship for one year.
- This warranty is subject to the following exclusions and limitations:
  1. This warranty does not cover damages to products which are not installed, operated, used and maintained in accordance with written instructions.
  2. This warranty does not cover products that have been worn out, damaged by improper storage, damaged or otherwise altered, or from disassembly or attempted disassembly by parties other than ours or its authorized service representatives.
  3. This warranty does not cover damages caused by the use of components not manufactured or authorized by us, acts of God, accidents, or use in a manner for which they are not intended.
- Supplier's liability in all cases is limited to, and shall not exceed, the purchase price paid. The manufacturer shall not be liable to any buyer for consequential or incidental damages of any kind.
- Batteries, chargers, electric motors, gas engines and cutting blades sold with our products are not covered by this warranty. All electric motors and gas engines are seperately warrantied by the manufacturer.
- Receipt and warranty card are required for warranty services.
- If the tool is found to be defective, in our sole judgement, we will either repair or replace the defective product or part.
- All revisions in warranty policy and product informations will be included in future versions of our manuals. Copies of this warranty are available from the factory upon request.





# Table of Components

| No. | Parts              | Q'ty | No. | Parts                       | Q'ty |
|-----|--------------------|------|-----|-----------------------------|------|
| 1   | RELIEF VALVE SET   | 1    | 32  | MOTOR & GEAR SET            | 1    |
| 2   | O-RING             | 1    | 33  | BLOCKER                     | 2    |
| 3   | SCREW              | 2    | 34  | SCREW                       | 2    |
| 4   | CYLINDER           | 1    | 35  | PIN                         | 1    |
| 5   | COMPRESSION SPRING | 2    | 36  | TORSIONAL SPRING            | 1    |
| 6   | BALL               | 3    | 37  | RELEASE LEVER               | 1    |
| 7   | O-RING             | 2    | 38  | RELEASE TRIGGER             | 1    |
| 8   | VALVE SCREW        | 2    | 39  | ADVANCED TRIGGER            | 1    |
| 9   | OIL SCREEN         | 2    | 40  | COMPRESSION SPRING          | 1    |
| 10  | PISH-IN-FASTNER    | 2    | 41  | SCREW                       | 5    |
| 11  | BALL               | 2    | 42  | COMPRESSION SPRING          | 1    |
| 12  | COMPRESSION SPRING | 2    | 43  | HOUSING                     | 1    |
| 13  | VALVE SCREW        | 2    | 44  | SPRING WASHER               | 2    |
| 14  | DUST SEAL          | 2    | 45  | SCREW                       | 2    |
| 15  | BACK-UP RING       | 2    | 46  | SCREW                       | 1    |
| 16  | VALVE SCREW        | 2    | 47  | BACK-UP RING                | 1    |
| 17  | COMPRESSION SPRING | 2    | 48  | O-RING                      | 1    |
| 18  | PLUNGER            | 2    | 49  | CYLINDER                    | 1    |
| 19  | COMPRESSION SPRING | 1    | 50  | O-RING                      | 1    |
| 20  | O-RING             | 2    | 51  | BACK-UP RING                | 1    |
| 21  | BACK-UP RING       | 1    | 52  | PISTON                      | 1    |
| 22  | VALVE SCREW        | 1    | 53  | SPRING                      | 1    |
| 23  | RELEASE VALVE STEM | 1    | 54  | STOP COLLAR                 | 1    |
| 24  | BALL               | 1    | 55  | C-HEAD                      | 1    |
| 25  | SCREW              | 1    | 56  | DIES                        | 1    |
| 26  | O-RING             | 1    | 57  | O-RING                      | 1    |
| 27  | SCREW              | 1    | 58  | LOCATING SCREW              | 1    |
| 28  | OIL RESERVOIR      | 1    | 59  | PRINTED CIRCUIT BOARD (PCB) | 1    |
| 29  | O-RING             | 1    | 60  | PIN                         | 1    |
| 30  | O-RING             | 1    | 61  | RING                        | 1    |
| 31  | BUSHING            | 1    | 62  | SCREW                       | 1    |

# Manufacture & Quality Certificate

We hereby certify that the following product was manufactured in accordance with our specifications and has passed our quality inspection.

Item: Battery – Operated Crimper

Model No. NMBT IC

Serial No. \_\_\_\_\_

Date of Inspection: \_\_\_\_\_

Q.C. Supervisor: \_\_\_\_\_

**For Authorized  
Distributor Use Only:**

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date of Purchase (dd/mm/yy)

**For Industry or Individual  
Buyer Use Only:**

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date of Purchase (dd/mm/yy)