

## RIVKLE® NEO B

Electro-hydraulic setting tool for **RIVKLE®** blind rivet nuts

### Instruction manual (Translation)

Technical documentation

Item No. **RIVKLE® NEO B107** 18 kN: 23617301000/00

Item No. **RIVKLE® NEO B109** 18 kN: 23617401000/00

Item No. **RIVKLE® NEO B107** 21 kN: 23617701000/00

Item No. **RIVKLE® NEO B109** 21 kN: 23617801000/00

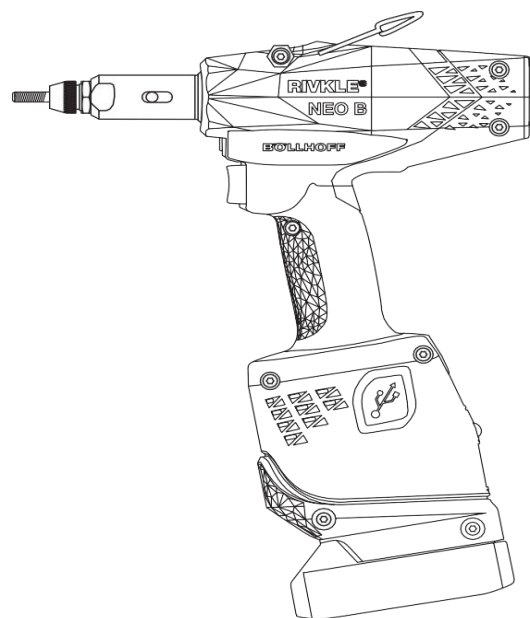
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# 1. Validity of the instruction manual

This instruction manual applies to the installation tool described below, which is operated manually and is portable.

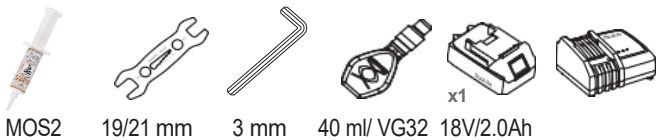


RIVKLE® NEO B setting tool

## 1.1 Scope of delivery

The scope of delivery includes the following components:

- A setting tool **RIVKLE® NEO B**.
- Documentation: Quickstart / Compliance statement CE / Safety and Warranty.



|                     |                  |                |   |   |   |   |   |   |
|---------------------|------------------|----------------|---|---|---|---|---|---|
| RIVKLE®<br>NEO B107 | Cardboard<br>box | 23617301000/01 |   |   |   |   |   |   |
|                     |                  | 23617701000/01 |   |   |   |   |   |   |
| RIVKLE®<br>NEO B109 | Plastic<br>Case  | 23617301000/02 | ■ | ■ | ■ | ■ |   |   |
|                     |                  | 23617701000/02 | ■ | ■ | ■ | ■ |   |   |
|                     |                  | 23617301000/00 | ■ | ■ | ■ | ■ | ■ | ■ |
|                     |                  | 23617701000/00 | ■ | ■ | ■ | ■ | ■ | ■ |
|                     |                  | 23617401000/02 | ■ | ■ | ■ | ■ |   |   |
|                     |                  | 23617801000/02 | ■ | ■ | ■ | ■ |   |   |
|                     |                  | 23617401000/00 | ■ | ■ | ■ | ■ | ■ | ■ |
|                     |                  | 23617801000/00 | ■ | ■ | ■ | ■ | ■ | ■ |

## 2. Symbols used in the instruction manual

Particularly important sections of the instruction manual are highlighted using the warning terms and symbols explained below.

### 2.1 Warning terms

#### **DANGER**

Indicates a potential hazard which, if not avoided, will result in death or serious injury.

#### **WARNING**

Indicates a potential hazard which, if not avoided, could result in death or serious injury.

#### **CAUTION**

Indicates a potential hazard which, if not avoided, could cause minor or moderate injury.

### 2.2 Hazard symbols

#### **Crushing**



This symbol indicates that, when operating the system, there is a risk to life or health due to crushing.

#### **Cut risk**



This symbol indicates that, when handling the system, there are fatal health & safety risks of cuts.

#### **Hazardous voltage**



This symbol indicates a risk of death or injury due from hazardous voltage when handling the system.

#### **Risk from flying parts**



This symbol indicates that, when the machine is in use, objects and tools may be thrown by rotating parts, causing serious injury.

#### **Chemical hazard**



This symbol indicates a risk of skin burns or serious eye damage due to the electrolyte contained in the appliance battery in the event of incorrect use or maintenance.

#### **Risk of fire and explosion**



This symbol indicates a risk of fire or explosion due to the use of the tool's battery in the event of incorrect or incorrect maintenance.

### 2.3 Symbols for personal protective equipment

#### **Use hand protection**



Activities marked with this symbol require the use of hand protection.

#### **Use eye protection**



Activities marked with this symbol require the mandatory use of eye protection.

#### **Use hearing protection**



Activities marked with this symbol require the use of hearing protection.

#### **Wear protective clothing**



Activities marked with this symbol require the wearing of protective clothing.

#### **Wear safety footwear**



Activities marked with this symbol require the mandatory wearing of safety footwear.

### 2.4 Information symbol

#### **Info**



Instructions preceded by this symbol help you carry out your activities quickly and safely.

#### **Read the instruction manual**



Indications preceded by this symbol invite you to refer to the instruction manual

#### **WEEE**



This symbol indicates that the product, once used must not be disposed of with ordinary waste and must be collected separately to ensure that it is decontaminated and recycled in accordance with current regulations.

## **2.5 Names, illustrations, indices**

**RIVKLE® NEO B** riveting tools are referred to hereinafter as 'the tool'.

The images are intended to aid understanding of situations and sequences. The illustrations may differ slightly from the actual appearance of your system.

❶ The numbers in the text shown in speech bubbles are references to the figure on the same page.

## 3. Use and operation

### 3.1 Intended use

- Do not use this tool for applications other than the installation of **RIVKLE®** Böllhoff blind rivet nuts and studs. It is strongly recommended that you use **RIVKLE®** Böllhoff blind rivet nuts and studs.
- Use only fasteners, spare parts, accessories and consumables recommended by Böllhoff.

#### ⚠ CAUTION

- The tool is not designed for use in explosive environments.
- The tool must be operated within its technical capabilities and limits.
- This tool must be used in accordance with the occupational health and safety regulations of the country of use and in accordance with the principles defined by the International Labour Organisation (United Nations).
- Do not use blunt tools on the keypad.
- Any structural modification, alteration or unauthorised addition to the tool is strictly prohibited.
- Any other use is considered non-compliant and may be dangerous. It is also essential to follow the instructions contained in this user manual.
- Böllhoff accepts no liability for damage resulting from the improper use of the tool.

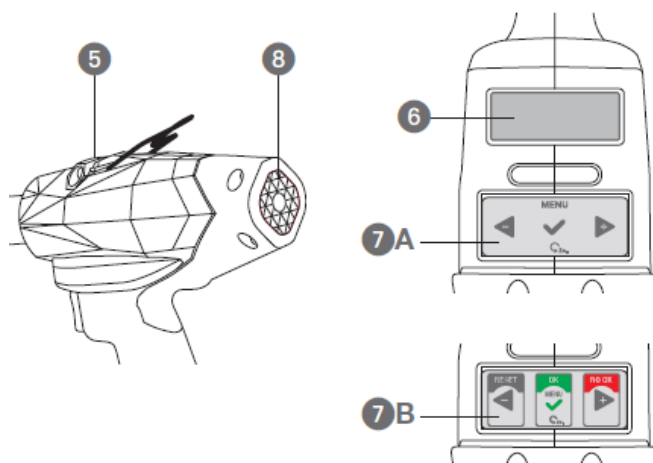
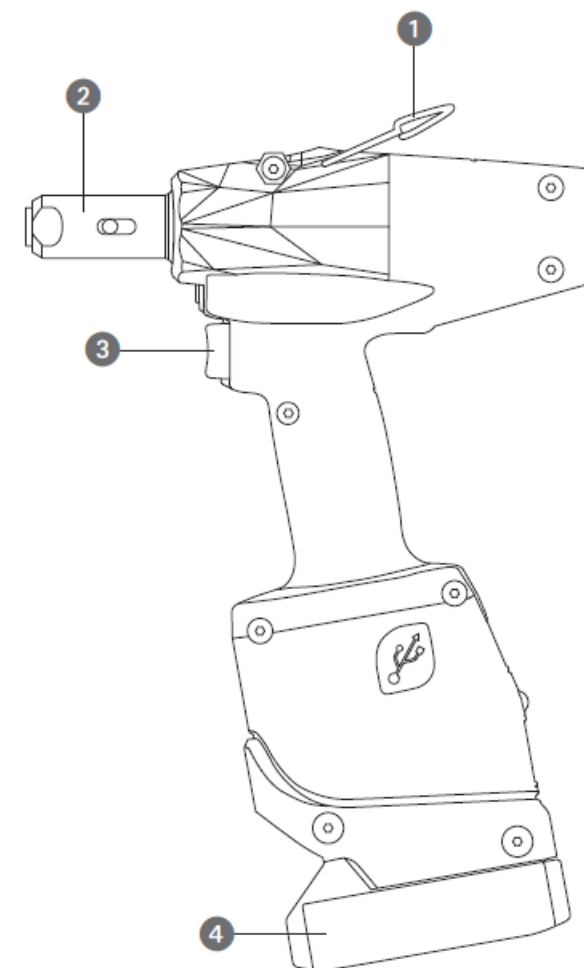
### 3.2 Tool structure

The main components of the tool are:

- Suspension hook (1)

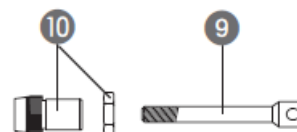
We recommend the 2–3 kg cable balancer – Part number: **28259010820**

- Nose (2)
- Cycle start trigger (3)
- 18V 2.0Ah battery (depending on version) (4)
- 18V 3.0Ah battery (optional)
- Bleed screw (5)
- Screen (6)
- RIVKLE® NEO B107** keypad (7A)
- RIVKLE® NEO B109** (7B) keypad
- Backlight (8)
- (only on **RIVKLE® NEO B109**)



Not included in this delivery:

- Mandrel (9)
- Anvil and its locknut (10)



### 3.3 Operation

#### DANGER



##### **Risk of crushing and cutting!**

Ensure that the battery of the tool is disconnected. Unexpected triggering of the crimping cycle could cause injury.

#### WARNING



##### **Risk of injury!**

Working with the tool involves potential risks. Always wear safety goggles or a face shield, protective gloves, close-fitting work clothes and safety footwear.

#### **Aim and utility of the tool**

The **RIVKLE® NEO B** tool is designed to install **RIVKLE®** blind rivet nuts or studs into pre-drilled substrates.

It is designed for all types of industries and applications where the creation of a threaded insert in thin sheet metal is required.

This tool features force-based installation technology, which ensures a secure crimp and enhances repeatability.

It features a tool-free tension rod replacement mechanism and is simple to use, requiring no specific skills.

#### **Advantages**

- Consistent setting force even for materials with varying thicknesses.
- Does not damage the **RIVKLE®** in the event of double setting.
- Allows for quality control (Optional **RIVKLE®** FC340 force indicator).
- Optimizes the life span of the mandrel.

Unlike the “stroke-based” crimping principle, which involves manually adjusting the travel distance of the mandrel (stroke) using a mechanical stop, the “force-based” crimping principle involves setting the setting force (F) of the tool based on the technical specifications of the blind rivet nut.

The setting force is specified in the **RIVKLE®** catalogues; please do not hesitate to contact your local Böllhoff representative with any questions regarding the setting force to be applied to products in the **RIVKLE®** range.

When the pre-set setting force is reached, the tool automatically stops the crimping process and switches to the unscrewing phase.

The setting force generated by the **RIVKLE® NEO B** ranges from 3 to 21 kN.

#### CAUTION

**Above 18 kN, the tool's cycle time is reduced to ensure installation quality.**

Implementing a blind rivet nut with the **RIVKLE® NEO B** tool:

A - Please refer to the Böllhoff blind rivet nut catalogue or contact an official Böllhoff representative to determine the setting force required for your blind rivet nut.

B - Adjust the setting force on the screen using the **RIVKLE® NEO B** unit's keypad (Section 6.3.3).

C - Set your blind rivet nut in position; the **RIVKLE® NEO B** tool applies the previously set setting force.

#### **Principle of force setting:**

#### CAUTION

Adjustment of the setting force must be carried out by qualified and trained personnel. Incorrect adjustment may impair the mechanical performance of the blind rivet nut after installation, damage the tool and potentially the application.

## Additional functions of the RIVKLE® NEO B109

The **RIVKLE® NEO B109** unit features several additional functions that can only be activated using the **NEOSOFT** software available on a PC:

- Stroke monitoring
- Counter
- Part contact control
- Display of remaining **RIVKLE®** count
- Backlight

The **NEOSOFT** software allows you to configure specific programmes according to the application, with programme selection directly from the tool.

The "stroke control" function allows you to check the setting stroke "S" achieved after the **RIVKLE®** has been forced fitted. (Available "S" value indicated in the **RIVKLE®** catalogue or on the product drawing) This function checks the quality of the **RIVKLE®** installation; in the event of a quality issue, an alert message is sent to the operator (indicator light and on-screen message).

The "counter" function counts the number of **RIVKLE®** rivets crimped on the application. The total number of **RIVKLE®** rivets to be crimped must be entered in advance via the **NEOSOFT** software. This function helps to ensure that no **RIVKLE®** are omitted from the application. Once this number is reached, the tool alerts the operator with a message on the screen, which must be acknowledged to start a new batch.

The "Contact control" function allows crimping only when the **RIVKLE®** is in contact with the application. Once screwing is complete, pressure must be applied to the tool to press the **RIVKLE®** against the workpiece; otherwise, crimping is not permitted. This function ensures that the **RIVKLE®** bead forms on the correct side of the application.

In addition to the battery charge percentage, the "**RIVKLE®** autonomy" function estimates the number of **RIVKLE®** remaining to be installed based on the battery charge level and the installation force.

The backlight on the rear of the tool provides information on the following elements or events:

- quality control of the stroke
- part contact detection
- in the event of an error

The lighting duration and intensity can be configured via the **NEOSOFT** software.

The operation of the screens and the light bar is described in section 6.3.

## 3.4 Technical specifications

### Main technical specifications of the tool

|                                       |                                                                         |                  |
|---------------------------------------|-------------------------------------------------------------------------|------------------|
| Installation force                    | 3.0 kN – 18.0 kN                                                        | 3.0 kN – 21.0 kN |
| Max. stroke                           | 7.0 mm                                                                  |                  |
| Weight without tools                  | 2.27 kg                                                                 |                  |
| Operating ambient temperature         | 0°C to +40°C                                                            |                  |
| Ambient temperature for storage       | –20°C to +50°C                                                          |                  |
| Relative humidity (storage)           | 5% to 80%                                                               |                  |
| MAKITA® Compatible batteries          | BL1815N (18V – 1.5Ah)<br>BL1820B (18V – 2.0Ah)<br>BL1830B (18V – 3.0Ah) |                  |
| MAKITA® charger Compatible            | DC18RC                                                                  |                  |
| Article reference<br>RIVKLE® NEO B107 | 236 173 01000                                                           | 236 177 01000    |
| Article reference<br>RIVKLE® NEO B109 | 236 174 01000                                                           | 236 178 01000    |

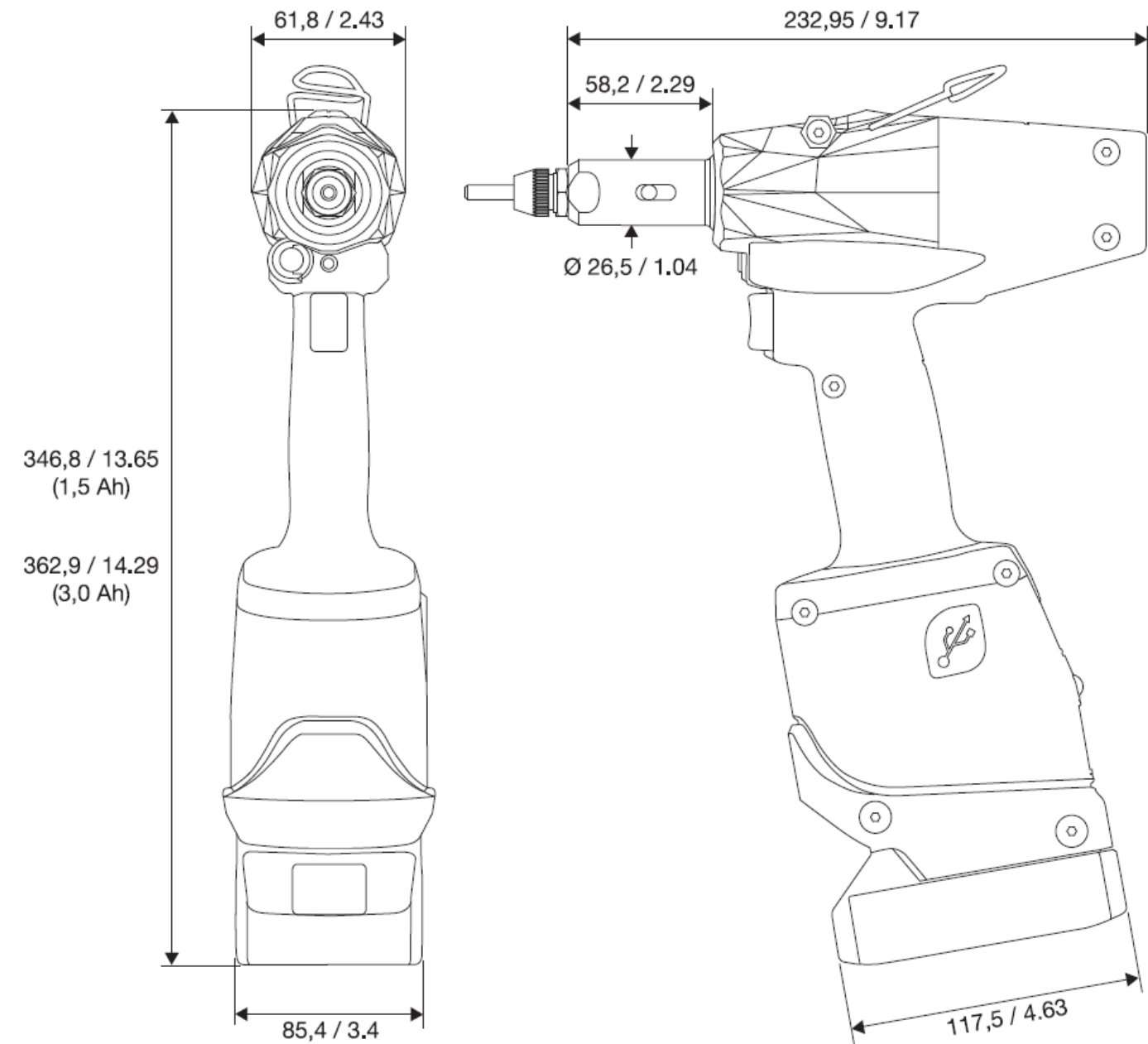
**Declared sound emission values (in accordance with ISO 4871) based on actual sound level**

|                                                                                                   |                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Portable machine tested:</b>                                                                   |                                                                                                                                                                    |
| Manufacturer:                                                                                     | Böllhoff Otal S.A.S                                                                                                                                                |
| Model No.                                                                                         | RIVKLE® NEO B                                                                                                                                                      |
| Type:                                                                                             | Electro-hydraulic setting tool for blind rivet nut                                                                                                                 |
| Serial number:                                                                                    | AO00001 => AP99999                                                                                                                                                 |
| Year of manufacture:                                                                              | From 2024                                                                                                                                                          |
| Operating conditions in accordance with ISO 15744                                                 | « In air »                                                                                                                                                         |
| A-weighted sound power level, $L_{WA}$ :<br>Uncertainty, $K_{WA}$ :                               | 69.1 dB (Reference 1 pW)<br>3 dB                                                                                                                                   |
| A-weighted emission sound pressure level at the workstation, $L_{pA}$ :<br>Uncertainty $K_{pA}$ : | 58.1 dB (Reference 20 µPa)<br>3 dB                                                                                                                                 |
| C-weighted peak emission sound pressure level, $L_{pC}$ , peak:<br>Uncertainty $K_{pC}$ , peak:   | 83 dB (Reference 20 µPa)<br>3 dB                                                                                                                                   |
| Note 1:                                                                                           | Values determined in compliance with the acoustic testing code ISO 15744, using ISO 3744 and ISO 11203 as baseline standards.                                      |
| Note 2:                                                                                           | The total of a sound emission value measured and its associated uncertainty represents an upper limit for the value range that can be reached during measurements. |

**Vibration emission values, declaration in the absence of a vibration test code**

|                                                                                                                           |                                                  |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Model No.                                                                                                                 | RIVKLE® NEO B                                    |
| Declared vibration emission value in accordance with EN 12096<br>Measured vibration emission value, a:<br>Uncertainty, K: | 0.51 m/s <sup>2</sup><br>0.03 m/s <sup>2</sup>   |
| Operating conditions:                                                                                                     | "In air" setting of an M8 steel blind rivet nut. |

Tool dimensions (mm / Inch)



Setting capacity of the tool

|           | M3 | M4 | M5 | M6 | M8 | M10* |
|-----------|----|----|----|----|----|------|
| Aluminium | -  | ■  | ■  | ■  | ■  | ■    |
| Steel     | ■  | ■  | ■  | ■  | ■  | ■    |
| Stainless | ■  | ■  | ■  | ■  | ■* | -    |

\*For the 21kN version only.

## 4. Safety instructions

### 4.1 Working conditions

The operating instructions must always be kept at the site where the equipment is in use and be easily accessible to operators.

Staff tasked with operating the setting system must have read and understood the instruction manual, the illustrations and the specifications provided with this tool and in particular the chapter "Safety guidelines", before starting any work with the machine.

Failure to follow the instructions listed below may result in property damage and/or personal injury.

#### **WARNING**



#### **Risk of injury!**

Working with the tool involves potential risks. Always wear safety goggles, protective gloves, ear protection and close-fitting work clothing.

Spare parts must meet the technical requirements set by Böllhoff.

This is always the case when original spare parts are used.

The inspection intervals specified in the operating instructions must be observed.

Keep the working area and the tool clean and ensure the area is properly lit. Move away from messy areas, dark areas, electrical cables, gas channels, explosive atmosphere zones, and any other phenomenon or machinery which may damage the tool, or which may cause safety accidents. Any restriction on the freedom of movement of operating personnel may lead to malfunctions and accidents.

The tool must be protected from external influences that may cause corrosion, attack and/or damage the components in any way and thus disturb their functioning and alter their resistance.

Keep children and other people away from the tool when it is in use. Distraction may cause the user to lose control of the tool.

### 4.2 Personnel Qualifications

Only trained, qualified and experienced operators, who have read and understood the user manual and the risks undertaken, may install, adjust or use this tool. The operator must stay vigilant and be physically capable of handling, using and transporting the tool, whilst also complying with the basic safety principles.

The operator must clearly define everyone's responsibilities regarding use, adjustment, maintenance and repair.

Interns or individuals in training are not authorised to work on the tool without the permanent supervision of an experienced individual. Keep this tool out of the reach of individuals who are not familiar with it or with its operating instructions. Tools can be dangerous in the hands of novice users.

The various tasks to be carried out with the machine require different qualifications, as listed in the table on the following page. The different qualifications are characterized by the following skills and knowledge:

- Operators must be able to fit the tool or modify its fittings, as well as operate the machine. They must be able to detect any damage to the tool and identify associated hazards.
- Regulators, besides the capacities specific to operators, must be able to adjust the setting force and the anvil. They must also be able to check the setting force and the pulling stroke at regular intervals.

Read the table on page 12 in the following way, e.g.: "The assembly of the mandrel requires operator qualifications."

"The resolution of defects, repairs and maintenance work must be carried out by a product maintenance technician certified by Böllhoff".

|                                          | Operator | Regulator | Böllhoff maintenance technician |
|------------------------------------------|----------|-----------|---------------------------------|
| Use                                      | ■        | ■         | ■                               |
| Cleaning                                 | ■        | ■         | ■                               |
| Assembly / replacement of the mandrel    | ■        | ■         | ■                               |
| Assembly / replacing the anvil           |          | ■         | ■                               |
| Resistance settings                      |          | ■         | ■                               |
| Load control / pull stroke               |          | ■         | ■                               |
| Configuring NEOSOFT programmes           |          | ■         | ■                               |
| Fault rectification                      |          | ■         | ■                               |
| Troubleshooting, repairs and maintenance |          |           | ■                               |

### 4.3 General safety instructions for electro-hydraulic tools

#### WARNING



Read all safety warnings, instructions, illustrations and technical specifications supplied with this electro-hydraulic tool. Failure to comply with the following instructions may result in serious injury. Keep all safety instructions and guidelines for future reference.

The term 'electro-hydraulic tool' used in the safety instructions refers to tools powered by electricity, but whose driving force is hydraulic. The tools may be dangerous in the hands of inexperienced users who are unfamiliar with them or do not know the operating instructions.

#### Individual safety

- **Take care and pay attention to what you are doing. Work as carefully as possible with an electro-hydraulic tool. Do not use the electro-hydraulic tool if you are tired or under the influence of drugs, alcohol or medication.** A moment of distraction during use of the machine may cause serious injuries.
- **Wear personal protective equipment and always wear safety goggles.** Wearing personal protective equipment such as a dust mask, non-slip safety footwear, a helmet or ear protection, depending on the type and use of the electro-hydraulic tool, reduces the risk of injury.

- **Avoid any false triggering. Make sure that the electro-hydraulic tool's cycle start trigger, "push-pull" screwing system or manual unscrewing system have not been activated before connecting it to a battery, picking it up or carrying it.** An accident may occur if the cycle start trigger, the "push-pull" tightening system or the manual loosening system of the electro-hydraulic tool are activated whilst you are carrying it if a battery is connected.
- **Avoid any abnormal posture. Make sure that your position is stable and that you always keep your balance.** This will give you better control of the electro-hydraulic tool in the event of an unexpected situation.
- **Wear appropriate clothing. Do not wear loose-fitting clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothing, jewellery or long hair can become caught in moving parts.
- **Do not fall into a false sense of security and continue to remain actively aware of the safety rules, even if repeated use means that you are familiar with the electro-hydraulic tool.** Any negligence in handling can, in a fraction of a second, result in serious injury.

#### DANGER



**Be aware that the breakage of a part, an accessory or the machine itself can cause high-speed projectiles or sudden impacts on the machine's handle.**

## Preliminary checks

### WARNING

**Before use, carry out all the necessary checks set out in this instruction manual.**

- Check for the absence of:
  - Misalignment or jamming of moving parts.
  - Broken parts, damage, visible signs of impact or cracks.
  - Abnormal behaviour or parts moving relative to one another.
  - Oil leaks or traces of oil.
- **Ensure that the various parts and guards of the machine are securely fastened.** If a problem arises, stop using the machine and have it repaired by a Böllhoff-qualified maintenance service.
- **Check the oil level and wear on the mandrel at the frequency specified in the maintenance section.** An insufficient oil level may affect the quality of the fastening and damage the tool.
- **Do not use the tool if the trigger, unscrewing button or screwing system (push-pull) are blocked or not working properly. Any tool that cannot be properly checked may be dangerous and must be repaired by a workshop that has been qualified by Böllhoff.** Any tool that cannot be properly checked may be dangerous and must be repaired by a workshop that has been qualified by Böllhoff.
- **Remove any Allen keys or spanners before use.**
- **If the tool is fixed by its suspension hook, make sure that it is hanging securely.**

## Instructions for use

- **Do not use the tool in the direction of a person.**
- **Ensure that no objects can become trapped in the tool's mechanism.** Immediately stop using the tool if an object accidentally becomes trapped or if the tool is blocked. Remove the battery, identify the source of the issue and carefully remove it.
- **Do not use the tool if the nose piece or protective elements have been removed.**
- **Stop using the tool if you experience any discomfort, pain, foggy vision or spinal inflammation which is recurrent or persistent.** Inform your employer and consult an occupational health doctor.
- **Keep the handle, nose and surface of the tool clean, dry and free from oil or grease.** Do not expose the tool to rain, splashing liquids or dust. In unexpected situations, slippery handles and grip surfaces make it impossible to handle and control the tool safely.
- **Keep fingers and hands away from the pinch zone of the RIVKLE®.** If the RIVKLE® is fitted onto the mandrel by hand, fingers must be placed at the end of the RIVKLE® body. They must not touch the head of the RIVKLE® to avoid pinching.

- **Do not force the tool or mishandle it by letting it fall, using it as a hammer or applying abnormal push or pull forces to it.** Correct use of the tool allows you to work more efficiently and safely at the rate and for the purpose for which it was designed.

## Maintenance and repair

- Given its nature, an electro-hydraulic tool may cause serious injury in the event of maintenance that does not comply with trade practices. In any case, never open up your Böllhoff tool. If the tool needs to be opened up, please return it to a Böllhoff repair centre, as only Böllhoff staff have the experience required to open up a tool.
- Have the tool repaired in a Böllhoff-certified repair centre which only uses original spare parts. This guarantees that the tool is maintained in a safe condition.
- Disconnect the battery from the tool before replacing the mandrel, changing accessories, adjusting the anvil, carrying out maintenance, or assembling or removing the nose piece.
- Do not modify the tool under any circumstances. Unauthorized modifications may reduce the effectiveness of the safety systems and increase the risks to the operator.
- The tool must be always kept in good working order and safe. It must be inspected regularly by qualified personnel to detect any damage or operational faults. Maintenance must be carried out at the intervals specified in this user manual. Do not dismantle this tool yourself; have it repaired at a qualified Böllhoff repair centre. Many accidents are caused by poorly maintained equipment.
- Use only the lubricants and oils recommended in this instruction manual.

## 4.4 General safety instructions for power tools

### WARNING

Please read the safety instructions, operating instructions, illustrations and specifications supplied with this power tool. Failure to follow all the instructions set out below may result in electric shock, fire and/or serious injury.



### Save all warnings and instructions for future reference

The term "power tool" in the warnings refers to the mains-powered (corded) power tool or the battery-powered (cordless) power tool.

### Safety regarding electromagnetic fields

- Power tools may generate electromagnetic fields (EMF) that are not harmful to the user. However, users of pacemakers or similar medical tools should seek advice from the manufacturer and/or their doctor before using this power tool.

### Important safety instructions for the battery

- Before using the battery cartridge, read all instructions and precautions relating to the battery charger, the battery, and the product using the battery cartridge.
  - Do not dismantle the battery cartridge.
  - Stop using the product immediately if the operating time becomes excessively short. There is a risk of overheating, burns or even explosion.
  - If the electrolyte gets into your eyes, rinse them with clean water and seek medical attention immediately. It may result in loss of your eye sight.
  - Do not short-circuit the battery cartridge:
    - Do not touch the terminals with any conductive material.
    - Avoid storing the battery cartridge in a container with other metal objects, such as nails, coins, etc.
    - Do not expose the battery cartridge to water or rain. A short circuit in the battery can cause high current, overheating, and in some cases burns and even failure.
  - Do not store the tool and battery cartridge in a place where the temperature may reach or exceed 50 °C (122°F).
  - Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
  - Avoid dropping or knocking the battery.
  - Do not use the battery if it is damaged.
  - Use batteries only with products specified by Böllhoff.
- Inserting batteries into non-compliant products may

cause a fire, excessive heat, an explosion or leakage of the electrolyte.

- If you are not using the tool for an extended period, the battery must be removed from the tool.

### Save these instructions

### CAUTION

**Use only batteries and chargers recommended by Böllhoff.** The use of other or modified batteries may cause the batteries to explode, posing a risk of fire, property damage and personal injury. This will also void the Böllhoff warranty for the tool and the battery charger.

## 4.5 Risks associated with using the tool

The tool must only be used:

- for the purpose for which it was designed,
- in perfect working order,
- with full knowledge of the safety instructions and the risks involved.

Do not use the tool if you notice any malfunctions that could compromise safety.

### DANGER



### Risk of flying parts!

The breakage of a part, an accessory or the appliance itself may cause high-speed projectiles or sudden impacts on the appliance handle.

Before use, carry out all the necessary checks set out in this instruction manual.

Check for the absence of:

- Misalignment or entrapment of moving parts.
- Broken parts, damage, visible signs of impact or cracks.
- Abnormal behaviour or parts moving relative to one another.
- Leaks, marks or oil seepage.

### DANGER



### Risk of crushing!

Never remove the nose when a battery is connected to the tool. Maintenance or replacement operations for the mandrel and anvil adjustment operations must be done when the battery is removed from the tool.

When screwing the RIVKLE® onto the mandrel (Push-Pull system), it is essential to hold the RIVKLE® at its end with your fingertips; do not place your fingers between the head of the RIVKLE® and the anvil. The use of suitable gloves is essential.

### **DANGER**



#### **Cut risk!**

Never activate the "Push-Pull" screwing system without a **RIVKLE®** assembled on the mandrel with your fingers, even if wearing gloves. Always be careful to avoid inadvertently activating the "Push-Pull" screwing system.

### **WARNING**

#### **Drop risk!**

An incorrect posture poses a tripping risk.

- Make sure that the environment in which the tool is used is kept clean and tidy.
- Make sure that you are stable and well-balanced when using the tool.
- Be prepared to counter the weight of any movements of the tool or of the part you are going to set the **RIVKLE®** into.

### **DANGER**

#### **Risk of injury!**

Fatigue or overexertion caused by repetitive movements in an ergonomically unfavourable posture can lead to injury.

- Make sure you maintain a comfortable and stable position when using the tool.
- Make sure to change position when working for long periods.

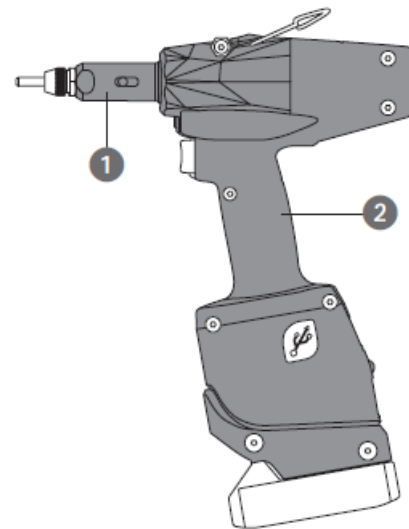
## 4.6 Protective elements

### **WARNING**

Safety elements are designed to ensure the safety of personnel working with the tool and to protect their health; they also serve to protect the tool from potential damage. If you notice that any safety elements are damaged, do not use the tool.

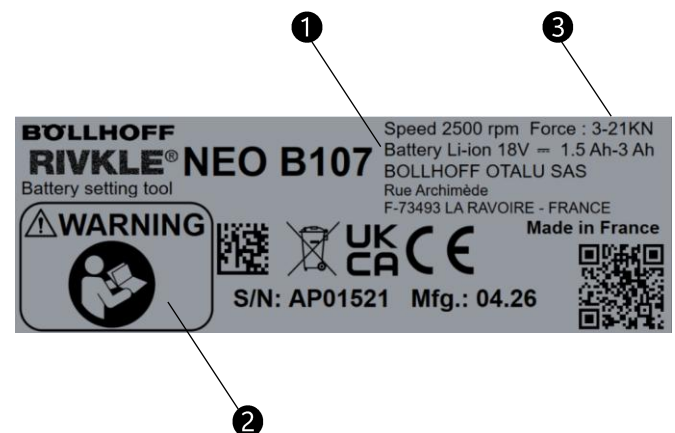
The tool is equipped with the following protective elements:

- Nose ①
- Tool shells ②



## 4.7 Safety signs on the tool

- ① This value indicates the battery voltage, its manufacturer and the recommended part numbers.
- ② This symbol indicates that you must read and follow the instruction manual.
- ③ This symbol indicates your product's range (3–18 kN or 3–21 kN).



## 5. Preparation for commissioning

### 5.1 Safety instructions regarding preparation for commissioning

#### DANGER



##### Risk of crushing and cutting!

Check that the battery is removed from the tool. An untimely triggering of the setting or screwing cycle (Push-Pull system) may cause injuries.

#### WARNING



##### Risk of injury!

Working with the tool involves potential risks. Always wear safety goggles, protective gloves, close-fitting work clothes and safety footwear.

#### DANGER



##### Risk of flying parts!

##### Risk of oil ejection under pressure!

#### CAUTION

Always ensure that the battery is removed before adjusting the tool or checking its operation.

#### NOTE

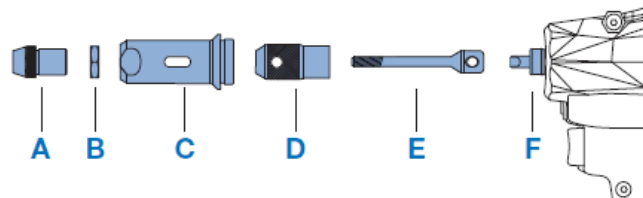
When the blind rivet nut is screwed too often offset, or if the thread of the mandrel or the standard screw (E or E2) is very worn, it is recommended that you replace it. As the mandrel and the standard screw (E or E2) are the main wear parts, it is recommended that you implement frequent replacements. Greasing the mandrel or the standard screw (E or E2) prolongs its life span, as well as extending that of the anvil, and also reduces the noise generated by the tool.

### 5.2 Assembly of the mandrel

#### >>> Quickstart §. 1

#### Böllhoff mandrel (not included with the tool)

##### Instructions for use



#### CAUTION

Always be sure that the battery is removed before adjusting the tool or checking its operation.

- 1- Grease the mandrel (E) on its tapered section and along its entire smooth surface; do not apply grease to the thread. (Böllhoff recommends using MOS2 grease – 20 ml syringe, Ref. M1000060).
- 2- Insert the mandrel (E) into the traction bush (D).
- 3- Screw the traction bush (D) + mandrel (E) assembly onto the tool's piston (F), tightening by hand until it stops.
- 4- Screw the nose (C) onto the body of the tool using a 21 mm spanner, applying a torque of 10 Nm. Screw the anvil (A) and locknut (B) assembly onto the nose (C).



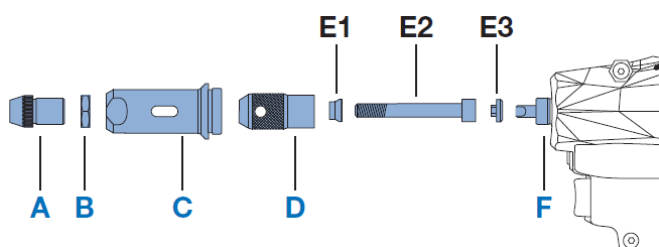
Connect a battery to the tool; the drive shaft will pair up with the mandrel (E) automatically.

| Blind rivet nut |                 |  | M3          | M4          | M5          | M6          | M8          | M10         |
|-----------------|-----------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| E               | Mandrel         |  | 23611303020 | 23611304020 | 23611305020 | 23611306020 | 23611308020 | 23611310020 |
| A+B             | Anvil + locknut |  | 23611303030 | 23611304030 | 23611305030 | 23611306030 | 23611308030 | 23611310030 |

Other mandrels are available (imperial pitch, left-hand pitch, special metric pitches, etc.). Please consult a Böllhoff representative for further information

| Blind rivet stud |                 |  |   |             |             |             |             |   |
|------------------|-----------------|--|---|-------------|-------------|-------------|-------------|---|
| E                | Mandrel         |  | — | 37611304020 | 37611305020 | 37611306020 | 37611308020 | — |
| A+B              | Anvil + locknut |  | — | 37611304030 | 37611305030 | 37611306030 | 37611308030 | — |

## Standard CHC screw (not included with the tool)


**⚠ CAUTION**

Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

- 1- Greasing the standard screw (E2) along its smooth part up to the underside of the head, do not apply grease to the thread (Böhlhoff recommends using MOS2 grease – 20 ml syringe, Ref. M1000060).
- 2- Assemble the adapter (E1) onto the standard screw (E2), and the widest side of the adapter must be placed underneath the screw head. Grease the external surface of the adapter.

- 3- Grease the hexagonal end piece of the hexagonal drive shaft (E3) and apply it up over the head of the standard screw (E2).
- 4- Insert the standard screw (E2) + adapter (E1) + hexagonal drive shaft (E3) into the traction bush (D), check that the elements are securely in place.
- 5- While holding the elements securely in place, tighten by hand on the tool's piston (F) until it reaches a stop.
- 6- Screw the nose (C) onto the body of the tool using a 21 mm spanner, applying a 10 Nm torque. Screw the anvil (A) + locknut (B) assembly onto the nose (C).



Connect a battery to the tool, the drive shaft will pair up with the mandrel (E) automatically.

## Blind rivet nut



|                     | M3          | M4          | M5          | M6          | M8          |
|---------------------|-------------|-------------|-------------|-------------|-------------|
| <b>FULL CHC KIT</b> | 23650000001 | 23650000002 | 23650000003 | 23650000004 | 23650000005 |

## Spare parts for the CHC Kit

|           |                                |  | M3                     | M4                     | M5                     | M6                     | M8                     |
|-----------|--------------------------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>E1</b> | Adapter                        |  | 23659900009            | 23659900008            | 23659900007            | 23659900006            | 23659900005            |
| <b>E2</b> | Set of 10 standard CHC screws* |  | M3x60MM<br>23680303020 | M4x60mm<br>23680304020 | M5x65mm<br>23680305020 | M6x65mm<br>23680306020 | M8x70mm<br>23680308020 |
| <b>E3</b> | Hexagonal drive shaft          |  | 23659900013            | 23659900012            | 23659900011            | 23659900010            | 23659900002            |

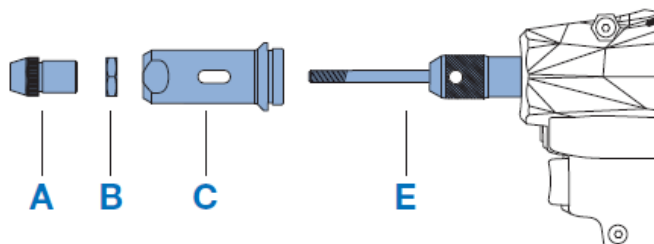
\*ISO 4762 DIN 912

### 5.3 Anvil adjustment

>>> Quickstart § 3 and 4 for M10.

#### NOTE

Adjustment of the anvil is an operation that must be carried out by qualified and trained personnel. Incorrect adjustment may damage the anvil, the blind rivet nut and potentially the application.



#### CAUTION

Always ensure that the battery is removed before adjusting the tool or checking its operation.

**1-** Release the locknut (B) using a 19 mm spanner (supplied) and unscrew it until it comes into contact with the anvil.

**2 & 3-** Screw the anvil (A) + the locknut (B) until they are in contact with the nose (C).

**4- Pull & maintain the nose (C) in rear position.**

**5A-** For "open" blind rivet nuts: screw the blind rivet nut until the end of its barrel is practically touching the mandrel (E).

**or**

**5A & B-** For Closed blind rivet nuts: once screwed to a stop on the mandrel (E), unscrew the closed blind rivet nut by approximately 1 turn.

**6-** Unscrew the anvil (A) until it comes into contact with the head of the blind rivet nut.

**7- Stop to pull the nose in rear position.**

**8-** Screw the locknut (B) to 10 Nm in contact with the nose (C) to lock the anvil position (A).

### 5.4 Setting force adjustment

>>> Quickstart §. 6

#### NOTE

The adjustment of the setting force is an operation that must be carried out by qualified and trained personnel. Inappropriate adjustments risk downgrading the mechanical performances of the blind rivet nut after setting, or may damage the tool and potentially the application.

Setting force by diameter and by material

|                              | M3     | M4     | M5      | M6      | M8      | M10     |
|------------------------------|--------|--------|---------|---------|---------|---------|
| Aluminium (+/- 10%)          | —      | 3.0 kN | 3.8 kN  | 5.5 kN  | 10.0 kN | 12.0 kN |
| Steel (+/- 10%)              | 3.5 kN | 5.5 kN | 8.0 kN  | 12.0 kN | 18.0 kN | 21.0 kN |
| Stainless steel (+/- 10%)    | 3.5 kN | 5.5 kN | 8.0 kN  | 13.0 kN | 20 kN   | —       |
| A4 stainless steel (+/- 10%) | —      | 9.5 kN | 12.0 kN | 15.0 kN | 20 kN   | —       |

Valid for Böllhoff standard catalogue fasteners, for further information, please contact a certified Böllhoff retailer.

### Adjust the setting force on the RIVKLE® NEO B107 tool

Check that the battery charge level is at its maximum (100%).

- 1- Push on the keyboard middle button to activate the Menus banner.
- 2- Push again on the middle button to select the "Force setting menu".
- 3- The setting force value flashes, adjust the setting force with the keyboard right button "+" or left "-".
- 4- Once the value of the desired setting force is set, press the middle button to validate it.
- 5- Press the left button to return to the main menu or wait 6 seconds.
- 6- In the main menu, it is recommended to check that the setting force previously set is correct.
- 7- **The value shown on the screen is for guidance only, within the tolerance of the on-board sensor (+/- 0.4 kN). Checking using a RIVKLE® FC340 force gauge allows the tool's force to be adjusted more precisely to within the gauge's accuracy (+/- 3%).**  
**However, these variations are compatible with the setting force recommendations for the RIVKLE® ranges from Böllhoff.**
- 8- It is recommended to check the force exerted by the tool at regular intervals using the **RIVKLE® FC340** force gauge (not supplied with the tool) for two reasons:
  - To check that the **RIVKLE® NEO B107** setting tool is working correctly.
  - To maintain the quality of the setting of your Böllhoff fastener.

### Adjusting the setting force of the RIVKLE® NEO B109

Check that the battery charge level is at its maximum (100%).

The setting force can be adjusted on the tool or directly in the **NEOSOFT** software; see the **NEOSOFT** user manual.

If no program is running, the force can be adjusted on the tool; see the previous section: Adjusting the setting force on the **RIVKLE® NEO B107** tool.

If a program is running, the force is locked.

It is recommended to check the force applied by the tool at regular intervals using the **RIVKLE® FC340** force indicator (not supplied with the tool) for two reasons:

- To check that the **RIVKLE® NEO B** setting tool is working correctly.
- To maintain the quality of the setting of your Böllhoff fastener.

#### ! NOTE

Upon delivery, the tool is deliberately set to the minimum force. It is therefore essential to adjust the tool when using it for the first time. Excessive setting force may damage the threads of the blind rivet nut or the mandrel or prevent it from being unscrewed.

## 5.5 Installing the NEOSOFT software

The NEOSOFT software and associated drivers can be downloaded from the Böllhoff website.

Scan the following QR code:

<https://www.boellhoff.com/de-en/services/technical-forum/>



This QR code is also printed on the tool label.

## 6. Use

### 6.1 Safety guidelines regarding preparation for commissioning

#### DANGER



##### **Risk of crushing and cutting!**

During the screwing operations (push-pull system), screwing the RIVKLE® onto the mandrel, be extremely vigilant as an untimely triggering of the setting cycle could cause injury.

Place your fingers at the end of the RIVKLE® during the screwing operation (push-pull system) and remain vigilant throughout the operation.

#### WARNING



##### **Risk of injury!**

Working with the tool involves potential risks. Always wear safety goggles, protective gloves, close-fitting work clothes and safety footwear.

#### WARNING

Only trained, qualified and experienced operators who have understood the instruction manual and the risks involved should install, adjust or use this tool. The operator must remain alert and be physically capable of handling, using and transporting the machine whilst observing basic safety principles.

#### CAUTION

Always install the battery cartridge fully until it locks in place with a little click. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

#### CAUTION

Do not force the battery in. If it does not slide in easily, you are not inserting it correctly.

#### **Tips for maintaining maximum battery life**

- 1- Charge the battery before it is completely discharged. Always switch off the tool and recharge the battery when you notice the tool's power is decreasing.
- 2- Never recharge a fully charged battery. Overcharging reduces the battery's service life.
- 3- Charge the battery at an ambient temperature between 10 °C and 40 °C (50°F – 104° F). Before charging a hot battery, allow it to cool down.
- 4- Recharge the battery if it has been left unused for a prolonged period (more than six months).

#### CAUTION

##### **Lighting up the front face.**

Avoid looking directly at the light beam or its source. The front light comes on when the tool is switched on and remains on until the tool is put into standby mode.

### 6.2 Inserting or removing the battery cartridge

#### CAUTION

Before inserting the battery into the tool, always check that the trigger actuates properly and returns to the off position when released.

#### CAUTION

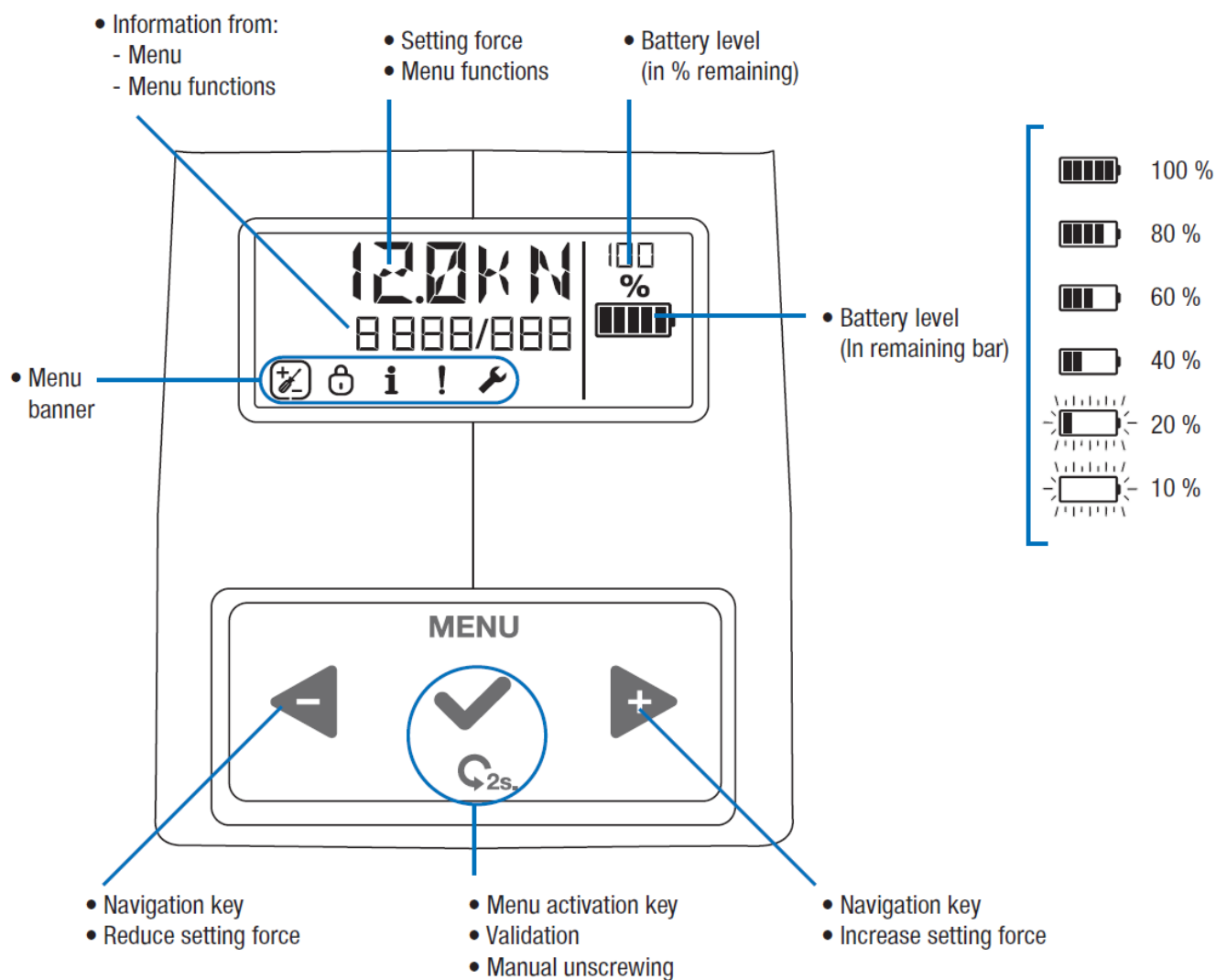
**Hold the tool and battery cartridge firmly when inserting or removing the battery. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.**

To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge. To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click.

## 6.3 Navigation & on-screen instructions

### 6.3.1 Descriptions of on-screen displays and keyboards

STANDARD screen and keyboard / RIVKLE® NEO B107



#### Menu banner

The pictogram surrounded by a square: indicates that the menu is selected



SETTING FORCE  
ADJUSTMENT MENU



SETTING FORCE  
LOCKING MENU



INFORMATION  
MENU



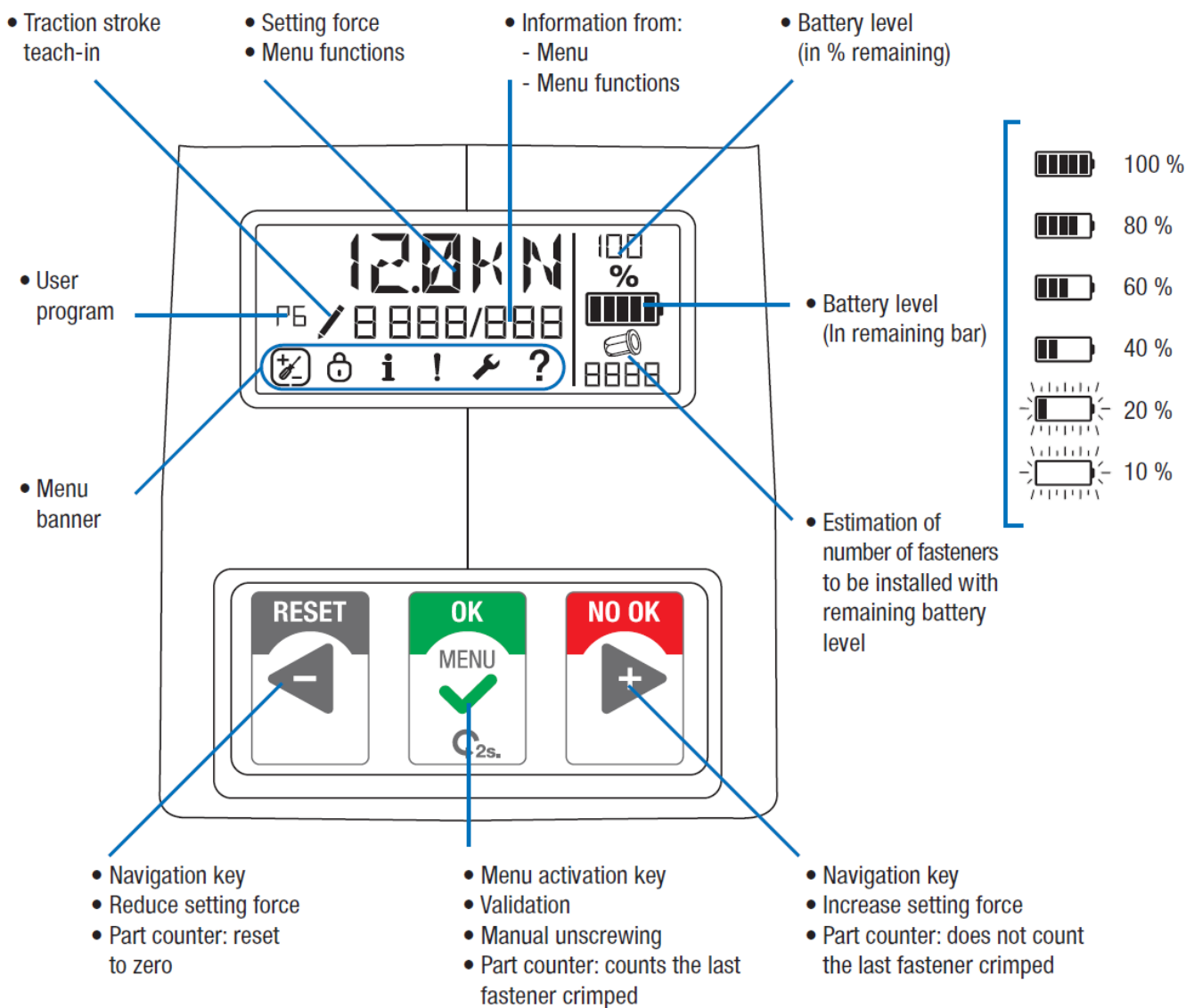
DEFAULT  
MENU



MAINTENANCE /  
CONFIGURATION  
MENU

## PREMIUM screen and keyboard / RIVKLE® NEO B109

Available only on the premium version (RIVKLE® NEO B109)



### Menu banner

The pictogram surrounded by a square: indicates that the menu is selected



SETTING FORCE  
ADJUSTMENT MENU



SETTING FORCE  
LOCKING MENU



INFORMATION  
MENU



DEFAULT  
MENU

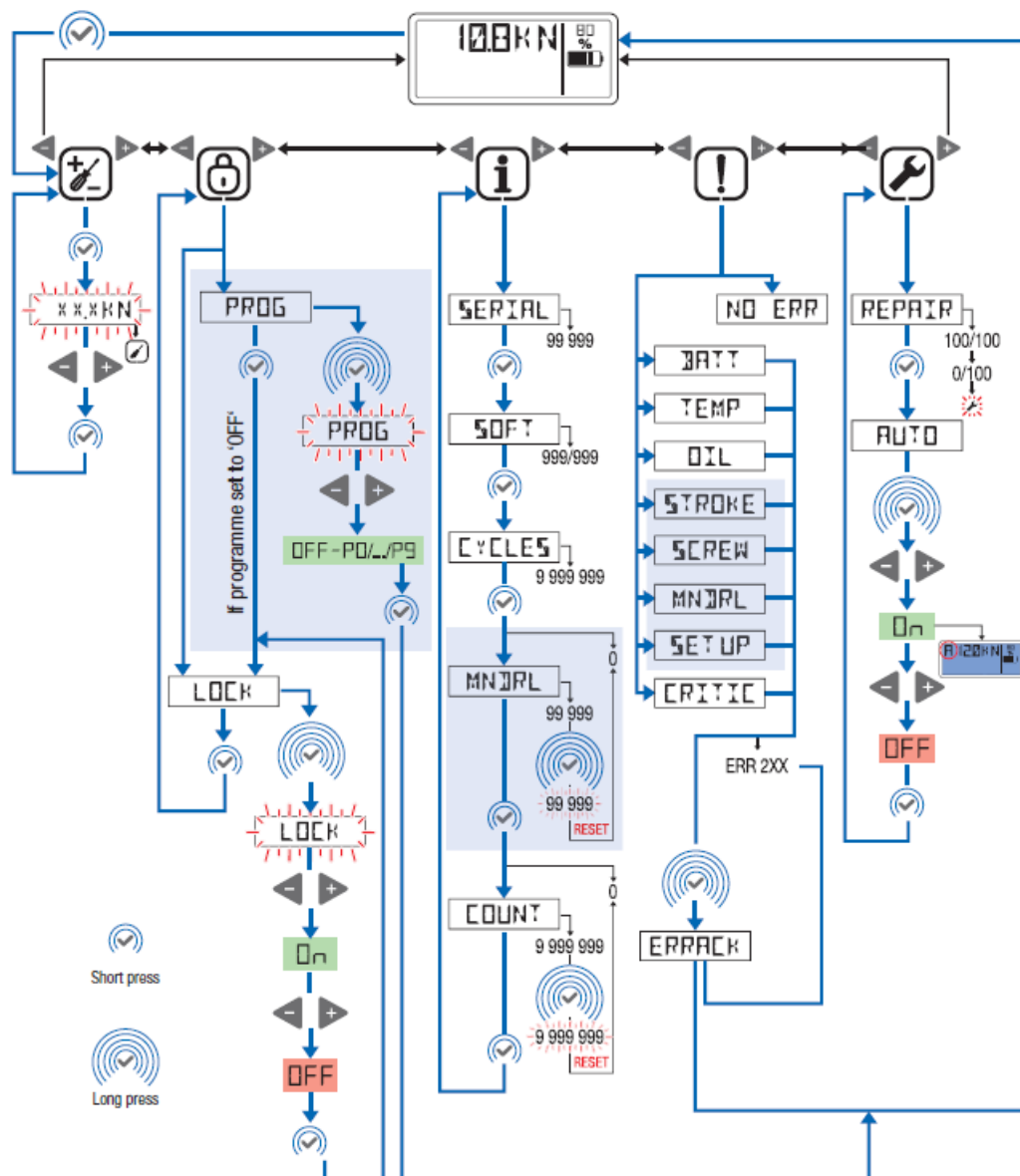


MAINTENANCE /  
CONFIGURATION  
MENU



AWAITING DECISION  
PIECE COUNTER

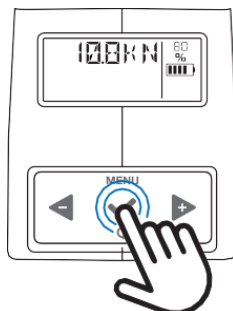
## 6.3.2 General navigation flowchart



Available only on the premium version (RIVKLE® NEO B109)

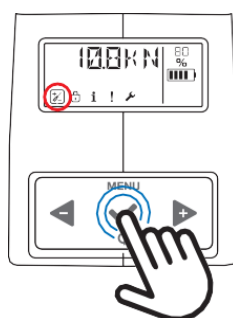
### 6.3.3 'Setting force adjustment' menu

1



Press the central button to bring up the menu banner.

2

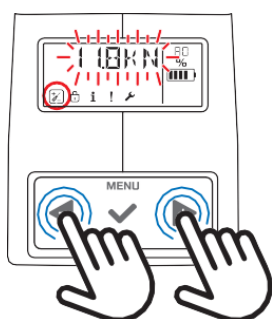


The menu banner appears.

Press the middle button to enter the “**SETTINGS**” menu.



3



The setting force value flashes; adjust to the desired value using the ‘+’ and ‘-’ buttons.



This symbol appears when you are in setting force adjustment mode.

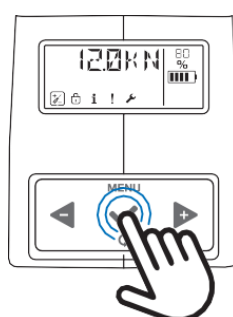


▶ This symbol appears when you increase the force.



◀ This symbol appears when you decrease the force.

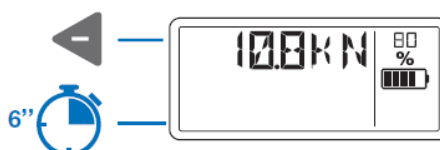
4



Once the desired setting force value has been set, **press the centre button to confirm**.



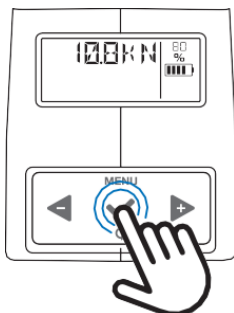
To return to the main menu, press the left button. If no action is taken, the return to the main menu takes effect after 6 seconds.



### 6.3.4 'Setting force locking & program' menu

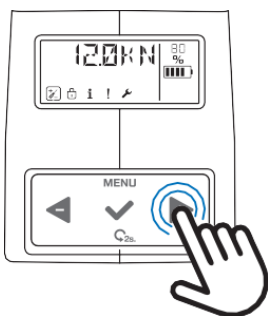
#### "Setting force locking" function

1



Press the centre button to display the menu banner.

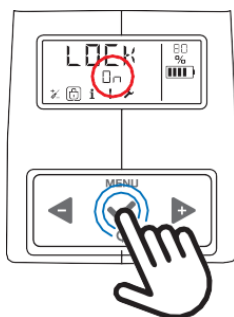
2



The menu banner appears.  
Press the right-hand button to select the "**LOCK**" menu.



3

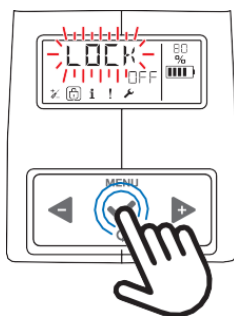


\* In the "**LOCK**" menu,  
quickly press the central button  
to scroll through the two functions:



- For the B107 model, only the "**LOCK**" function is available.
- For the B109 model, the "**LOCK**" function only appears when no program is active.

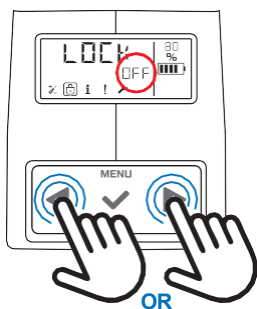
4



In "**LOCK**" mode, press and hold the central button; the display will start flashing.

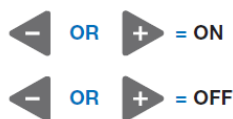
\* Available only on the premium version (RIVKLE® NEO B109)

5

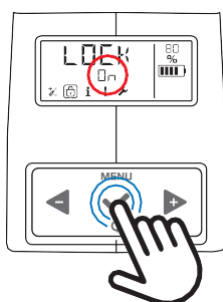


Press the left or right button to:

- Activate the locking: “ON”
- Deactivate the locking: “OFF”



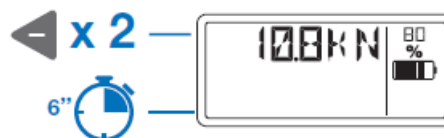
6



Set the locking to “ON” and confirm by pressing the middle button.



To return to the main menu, press the left button twice. If no action is taken, the system will return to the main menu after 6 seconds.



When the lock is activated, changing setting force is no longer possible; the  lock symbol flashes if you try to change the force.



On the main menu, the locking symbol  is displayed permanently when the locking is activated.

### ‘Program Selection’ function

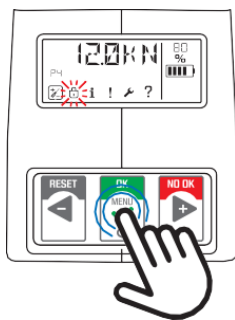
Available only on the premium version (RIVKLE® NEO B109)

1



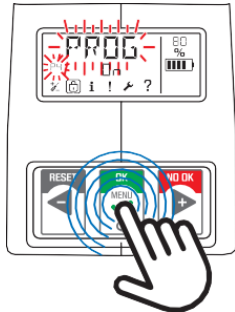
For the “**PROG**” function to be displayed on the tool, it is necessary to first create programs on the **NEOSOFT** PC application.

2



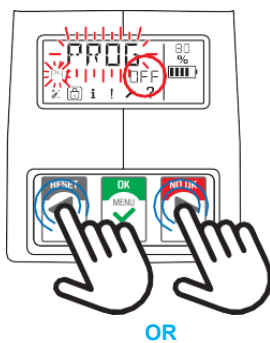
When the “**PROG**” function is activated, it is not possible to change the setting force; the  lock symbol flashes if an attempt is made to change it.

3



In “**PROG**” mode, press and hold the central button; the display and the programme number will start to flash

4



Press the left or right button to:

- Select the PROGRAMME from **P0 to P9**
- Deactivate the PROGRAMME “**OFF**”

 **OR**  = P0/.../P9/OFF



When the “**PROG**” function is deactivated and when you return to the “**Setting force Lock** setting force / Program” menu, the “**LOCK**” and “**PROG**” functions are available.



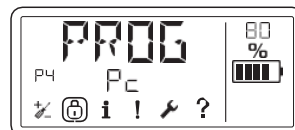
Available only on the premium version (RIVKLE® NEO B109)



It is possible to lock the **“PROGRAM”** function via the **NEOSOFT** PC application.

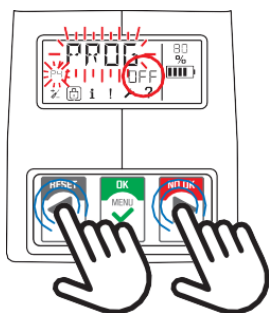
When the **“PROGRAMME”** function is locked, and the **“OFF”** deactivation are no longer available on the tool.

The tool displays:



**“P4”** indicates the programme number; in the example, the tool is using program 4.

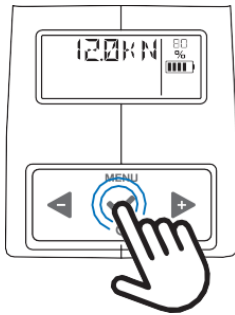
**“PC”** indicates that the lock has been activated via the PC application and can only be unlocked via that same application.



The symbols  and **«PC»** flash if you try to access the setting force/Program lock menu.

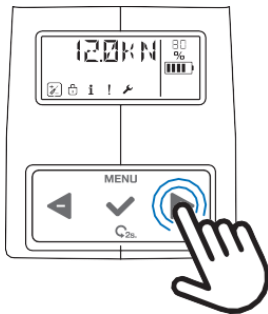
### 6.3.5 “Info” menu

1



Press the middle button to display the menu banner.

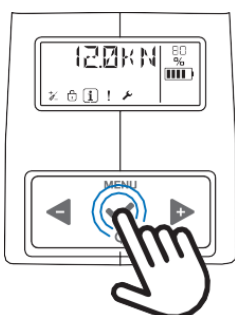
2



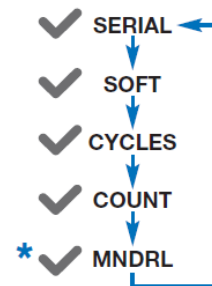
The menu banner appears.  
Press the right-hand button to select the “INFO” menu.



3



In the “INFO” menu, scroll through the functions by pressing the middle button.



**SERIAL:** Displays the tool’s serial number.

**SOFT:** Displays the version of the 2 firmwares installed on the tool as 2 3-digit numbers: **999/999**.

**CYCLES:** Totalizer counter displays the number of cycles performed since the tool was manufactured as a number of up to 7 digits: **9 999 999**.

>This counter cannot be reset.

\* **MNDRL:** Counter for the number of settings performed by a mandrel, shown as a number of maximum 7 digits: **9 999 999**.

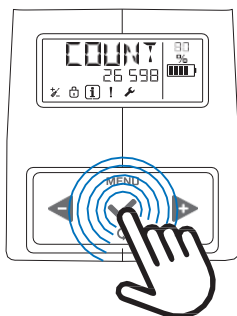
>This counter can be reset to zero; see below.

**COUNT:** User setting counter, displayed as a number with a maximum of 7 digits: **9 999 999**.

>This counter can be reset to zero; see below.

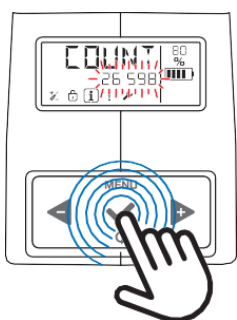
## Resetting the mandrel counter “\*MNDRL” and user counter “COUNT”

4



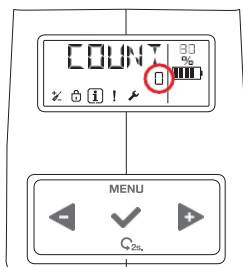
Press and **hold** the central button when the user setting counter “COUNT” is selected.

5



The number displayed on the counter will start to flash.  
**Keep the middle button pressed.**

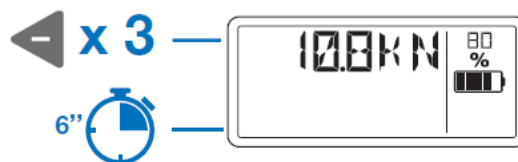
6



The counter displays “0”; it is now reset.



From any functions in the “INFO” menu, **press the left button 3 times** to return to the main menu.  
If no action is taken, the tool will return to the main menu after 6 seconds.

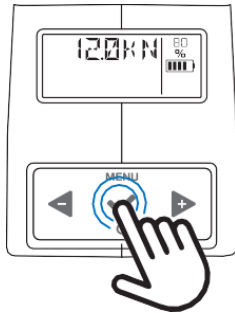


\* Available only on the premium version (RIVKLE® NEO B109)

### 6.3.6 “Alarms” menu

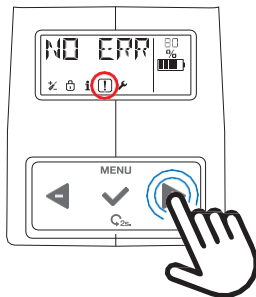
In the absence of a fault

1



Press the central button to display the menu banner.

2



The menu banner appears.

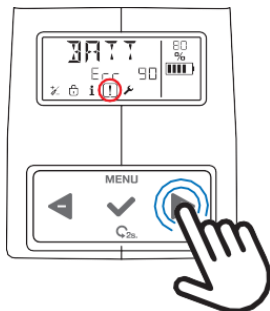
Press the right-hand button to enter the “**ALARMS**” menu.



If the tool does not detect any faults, no alarm is displayed; in this case, the screen displays “**NO ERR**”.

#### Alarm notification

3



When the “**ALARMS**” menu is selected and if the tool has detected a fault, the type of alarm and its code are displayed.

**BATT:** Indicates a fault relating to the battery.

**TEMP:** Indicates a fault relating to the temperature.

**OIL:** Indicates a fault relating to the oil supply.

\* **MNDRL:** Indicates a fault relating to the mandrel.

\* **STROKE:** Indicates a fault relating to the setting stroke.

\* **SCREW:** Indicates a fault relating to screwing (push-pull system) in control process mode.

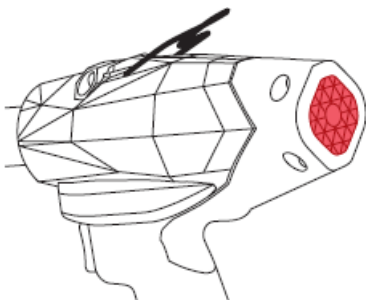
\* **SET UP:** Indicates a fault relating to the automatic learning of the setting stroke in control process mode.

**CRITIC:** Indicates a critical fault.

• **Non-acknowledgable alarm:** during the tool initialization procedure, contact an authorised Böllhoff repair centre.

• **Acknowledgable alarm:** after the tool initialization procedure has been successfully completed.

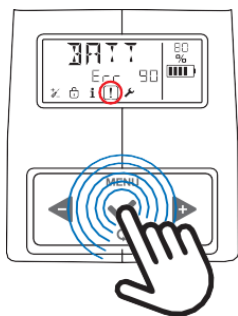
In the event of an error with the premium version, the indicator light turns red.



\* Available only on the premium version (RIVKLE® NEO B109)

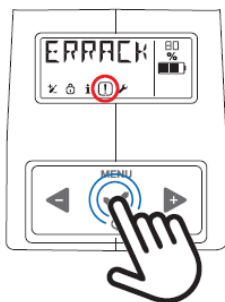
## Acknowledging an alarm

4

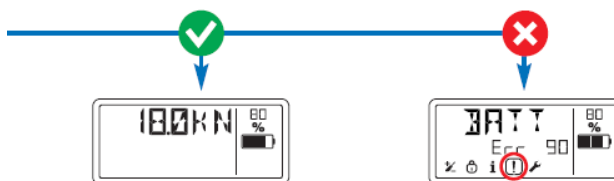


**Press and hold** the central button to acknowledge the alarm.

5



The fault acknowledgement process is initiated; “**ERRACK**” is displayed.

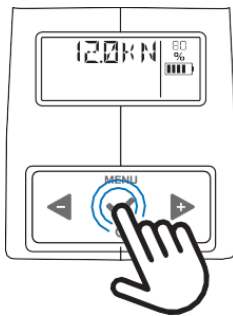


The fault is acknowledged; the system automatically returns to the Main Menu.

The fault has not been acknowledged; see section 7.3.

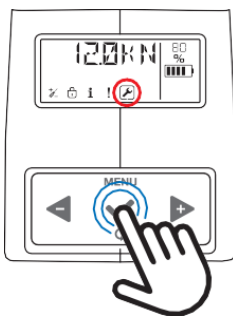
### 6.3.7 “Maintenance / Configuration” menu

1



Press the middle button to display the menu banner.

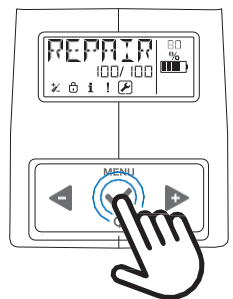
2



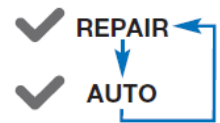
The menu banner appears.  
Press the right-hand button to enter the menu  
“**MAINTENANCE / CONFIGURATION**”.



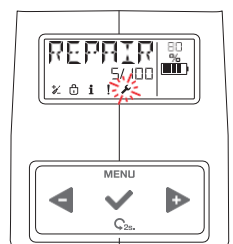
3



In the “**MAINTENANCE / CONFIGURATION**” menu, press the central button briefly to scroll through the 2 functions:



4

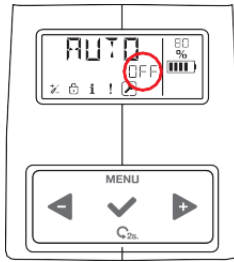


The “**REPAIR**” function displays a wear indicator for the tool in the form of a decremental percentage counter that starts at “100/100” and ends at “0/100”.

This allows you to monitor the tool’s wear and tear before the next overhaul.

- When the counter reaches “**5/100**”, the menu symbol “**MAINTENANCE / CONFIGURATION**”  starts, and a service is due.
- When the counter reaches “**0/100**”, the “**MAINTENANCE / CONFIGURATION**” menu icon  is displayed continuously; the service is due.

5



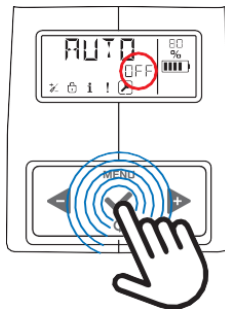
The **“AUTO”** function allows to perform a setting without releasing the trigger between each cycle. When the tool detects that the screw has been tightened, it triggers the setting cycle automatically.

This function is particularly useful when many fasteners, positioned close together, need to be installed in succession at a high rate.



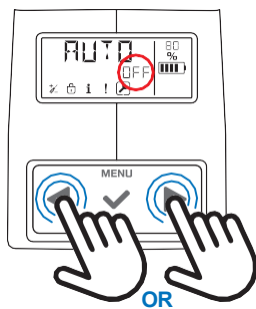
The fasteners must be pre-positioned on the workpiece.

6



Press **and hold** the central button to enable or disable the **“AUTO”** function.

7



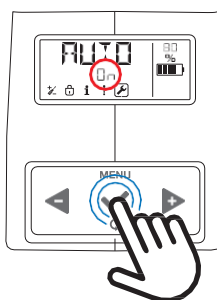
Use the right and left arrows to switch between **“ON”** and **“OFF”**.

- Activate the AUTO function: **“ON”**.
- Deactivate the AUTO function: **“OFF”**.

← OR → = ON

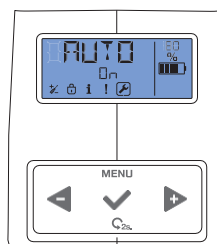
← OR → = OFF

8



Confirm your choice to enable **“ON”** or disable **“OFF”** by pressing the middle button.

9



When the **“AUTO”** function is enabled (**“ON”**), the background changes colour and turns blue.

When the **“AUTO”** function is enabled (**“ON”**), the main menu background is blue and an **‘A’** is displayed to the left of the setting force.



### 6.3.8 “Stroke Control” function

Available only on the premium version (RIVKLE® NEO B109)

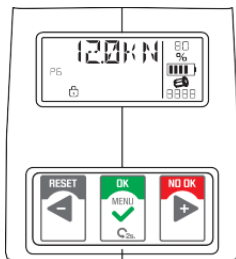
1



The “**Stroke Control**” function can be enabled in the **NEOSOFT** PC application.

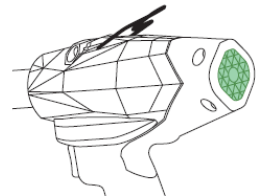
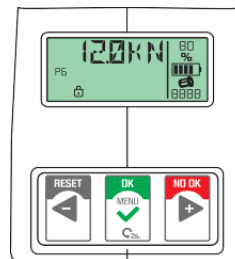
Please refer to the manual for **NEOSOFT**.

2

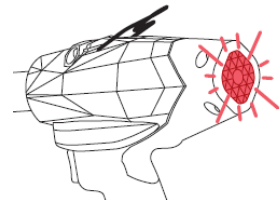
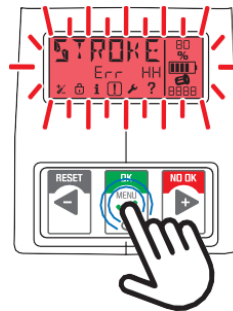


Depending on the stroke set in the program, the tool monitors the setting stroke and sends the information back to the tool.

If the check is **OK**:



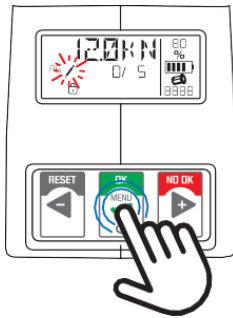
If the check is **NOT OK**:



Acknowledge the error by pressing the central button.

Please note: if the “**Counter**” function is enabled, see the following chapter.

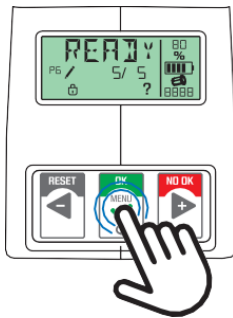
3



If automatic learning has been set in the programme, the pen icon  flashes.

The first **RIVKLE®** will be used to teach the setting stroke.  
In this case, 5 **RIVKLE®** are required for the learning process.

4



Once the learning process is complete, confirm it by pressing the central button; the message “OK” will appear.



## 6.3.9 “Counter” function

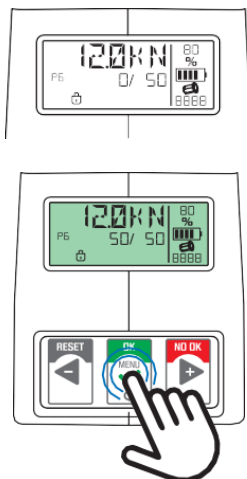
Available only on the premium version (**RIVKLE® NEO B109**)

1



The “**Counter**” function can be enabled on the PC application **NEOSOFT**.  
Please refer to the manual for **NEOSOFT**.

2



Depending on the number of **RIVKLE®** set in the program, the tool counts the number of **RIVKLE®** set.

Once the counter has reached its limit, in this case 50/50, the tool will not allow setting.

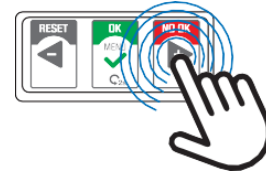
To reset the counter to zero, briefly press the central button.  
The message “OK” appears and the counter is reset to 0.

- 3 In the event of a non-compliant set, e.g. NO OK stroke control, several options are available:

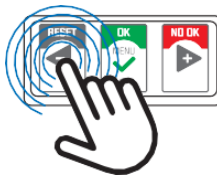
Declare the **RIVKLE®** compliant and increment the counter by pressing the 'OK' button.



Declare the **RIVKLE®** non-compliant and do not increment the counter by pressing the 'NO OK' button.



- 4 The counter can be reset to zero at any time by pressing the "RESET" button.



## 6.3.10 "Contact control" function

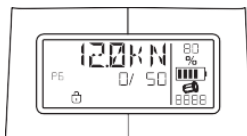
Available only on the premium version (RIVKLE® NEO B109)

1



The "Contact control" function can be enabled in the PC application **NEOSOFT**. Please refer to the manual for **NEOSOFT**.

2



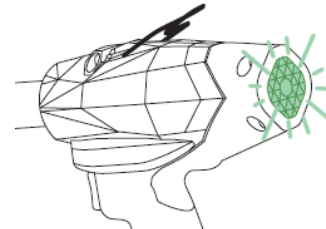
The "Contact control" function is not visible on the interface, but is indicated by a colour code on the backlight.

- 3 Once the screwing is complete, the tool only allows setting if the **RIVKLE®** is pressed against the application.

If the **RIVKLE®** is not pressed against the workpiece when the trigger is pressed, the light flashes yellow and setting is not permitted.



If the **RIVKLE®** is pressed against the application, the light housing flashes green and setting is permitted.



## 6.4 Operating procedure

>>> Quickstart §. 5

### Screwing on the blind rivet nut (push-pull system)

- 1- Place the blind rivet nut with the head facing the mandrel. Push the blind rivet nut down, keeping it firmly aligned.
- 2- Guide the blind rivet nut until it comes into contact with the anvil and the nose retracts backwards; the crimping mechanism engages and then stops automatically.

#### ! NOTE

During all subsequent operations, ensure that the nose of the tool remains perpendicular to the workpiece.

### Setting

- 3- Insert the blind rivet nut screwed on the tool into the application.
- 4- Press the trigger and hold it down until the end of the cycle.

### Unscrewing

- 5- When the set force is reached, the tool automatically starts unscrewing. Ensure that the weight of the tool is relieved during the unscrewing phase.

#### ! NOTE

Do not pull on the tool during the unscrewing phase. The trigger must be held down for the entire duration of the cycle. Releasing it would result in a non-compliant set.

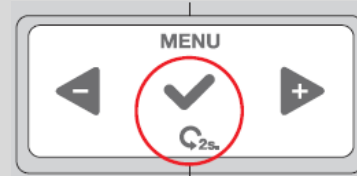
- 6- Release the trigger; the tool is ready for a new setting cycle.

## 6.5 Manual unscrewing procedure

#### ! NOTE

Occasionally, the tool may become jammed and the automatic unscrewing function may fail.

- 1- Locate the manual release button.

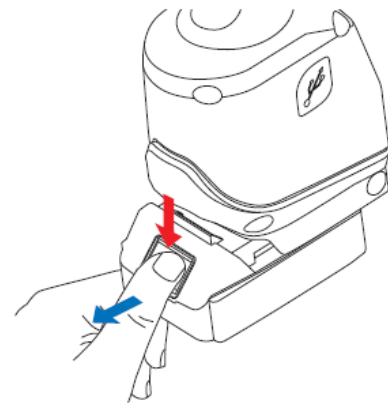


- 2- Press and hold the manual unscrewing button to start unscrewing.
- 3- The tool begins unscrewing. Release the tool and keep it aligned with the unscrewing axis.
- 4- Once the tool is fully released, release the manual release button.

## 6.6 Forced unscrewing procedure

#### ! WARNING

Before carrying out any work, please remove the battery from your tool.



#### ! WARNING



Working with the tool involves potential risks. Always wear safety goggles, protective gloves, close-fitting work clothes, ear protection and safety footwear.

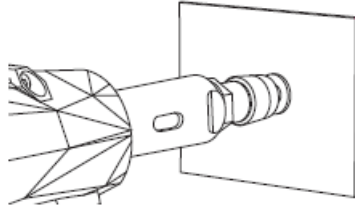
#### ! NOTE

In very rare cases, neither automatic nor manual unscrewing may be sufficient to disengage the tool from the blind rivet nut.

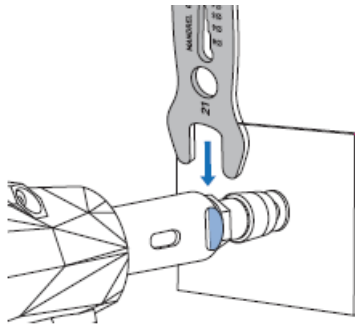
## Description of operations

### 1 Tools: 21 mm spanner

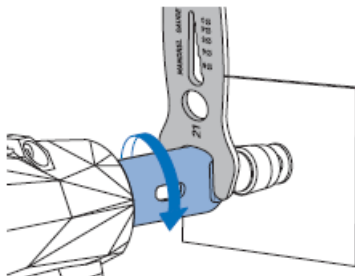
**1-A** The tool is unable to unscrew automatically or using the manual release button.



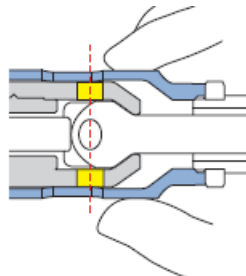
**1-B** Place a 21 mm spanner on the two flat surfaces of the nose.



**1-C** Unscrew the nose as far as possible, then remove the 21 mm spanner.

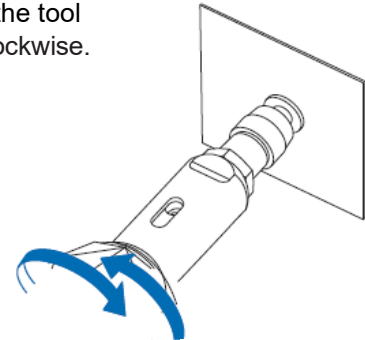


**1-D** By hand, align the oblong hole in the nose with the hole in the traction bush (shown in yellow in the image).

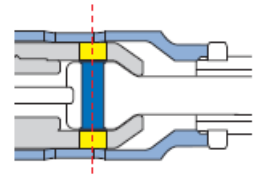


### 2 Tools: 5 mm pin punch

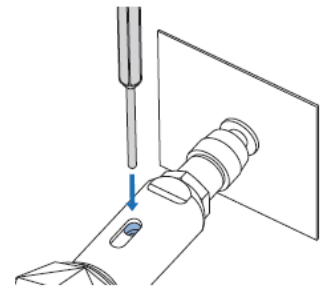
**2-A** By hand, turn the tool clockwise or anticlockwise.



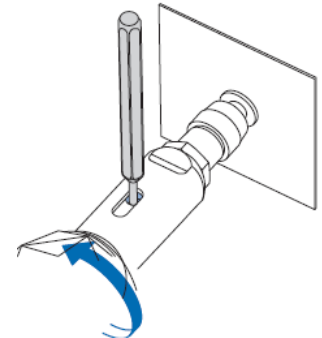
**2-B** Align the hole in the pull sleeve (yellow) with the hole in the mandrel (shown in dark blue in the image).



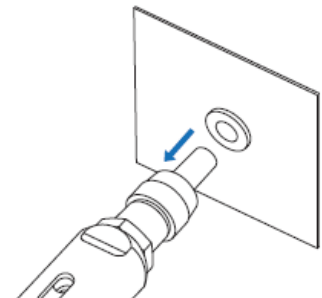
**2-C** Insert a 5 mm pin punch.



**2-D** Unscrew the tool until the mandrel is completely clear of the blind rivet nut, then remove the pin punch.



**2-E** The mandrel is unscrewed from the blind rivet nut.



## 7. Faults, causes and remedies

### 7.1 Safety instructions in the event of a failure

#### WARNING

Only suitably qualified personnel are authorized to carry out repairs. In the event of a fault, switch off the tool immediately. Have the fault rectified without delay.

If, during maintenance work, you have had to loosen a screw, ensure that you retighten it correctly to the specified torque if specified.

#### WARNING



Working with the appliance involves potential risks. Always wear safety goggles, protective gloves, close-fitting work clothes, ear protection and safety boots.

#### CAUTION

Always ensure that the battery is removed before carrying out any inspection or maintenance work on the tool.

### 7.2 Troubleshooting

| Problem                                                                                                                    | Possible causes                                                                                                                                                                                                 | Solutions                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SCREWING</b>                                                                                                            |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                   |
| Starting                                                                                                                   | 1- The tool is not switched on.<br>2- The tool is not connected to a battery / The battery level is too low / The battery is faulty / The battery used is not compatible with the tool.<br>3- Internal failure. | 1- Press the trigger or one of the buttons on the keypad to start the tool.<br>2- Check that the tool is connected to the battery / Check that the battery is fully charged / Check the battery status by connecting it to the charger / Check that the battery type is compatible with the tool.<br>3- Contact an authorized Böllhoff repair center.             |
| No screwing                                                                                                                | 1- Traction bush unscrewed, worn and/or damaged.<br>2- Incorrect anvil setting.<br>3- Driveshaft damaged.<br>4- Internal failure.                                                                               | 1- Check the traction bush, ensure it is fully tightened to the mechanical stop, and check for wear and/or damage to the traction bush.<br>2- Check that the anvil has been adjusted with the nose retracted and the mandrel flush with the RIVKLE®, see Quick Start – § 3 & 4.<br>3 & 4 – Contact an authorized Böllhoff repair center.                          |
| The blind rivet nut is not in contact with the anvil after the screwing phase / difficulty in screwing the blind rivet nut | 1- Mandrel thread damaged or worn.<br>2- Anvil incorrectly adjusted.<br>3- Blind rivet nut isn't held in the setting axis during the screwing.<br>4- Internal failure.                                          | 1- Replace the mandrel (Section 5.2). Increase the replacement frequency.<br>2- Check/adjust the position of the anvil (Section 5.3).<br>3- Keep the blind rivet nut in the setting axis during screwing. If necessary, to assist you, engage the first thread of the blind rivet nut on the mandrel by hand.<br>4- Contact an authorized Böllhoff repair center. |

| Problem                                                                                                        | Probable causes                                                                                                                                                                                                                                                                                                                                  | Solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TRACTION</b>                                                                                                |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| No setting stroke                                                                                              | <ol style="list-style-type: none"> <li>1- Lack of oil in the machine.</li> <li>2- Insufficient setting force.</li> <li>3- <b>RIVKLE®</b> not adapted to the application.</li> <li>4- Internal failure.</li> </ol>                                                                                                                                | <ol style="list-style-type: none"> <li>1- Top up the oil using the supplied filling bottle (⚠ Section 8.4).</li> <li>2- Check the setting force in the <b>RIVKLE®</b> catalogue / Check the setting force set on the tool (Section 5.4) / Check the tool's tensile force using the <b>RIVKLE®</b> FC340 force gauge / Increase the frequency of this check.</li> <li>3- Check that the <b>RIVKLE®</b> used is suitable for your application. If necessary, contact an authorized Böllhoff representative.</li> <li>4- Contact an authorized Böllhoff repair center.</li> </ol>                                                                                                                                                                        |
| Several cycles are required to achieve a compliant setting                                                     | <ol style="list-style-type: none"> <li>1- Lack of oil in the tool.</li> <li>2- The blind rivet nut is not suitable for the tool's maximum stroke.</li> </ol>                                                                                                                                                                                     | <ol style="list-style-type: none"> <li>1- Top up the oil using the supplied filling bottle (⚠ Section 8.4).</li> <li>2- Check that your <b>RIVKLE® NEO B107</b> tool is suitable for the blind rivet nut; refer to the Böllhoff recommendations (Section 3.4).</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>UNSCREWING</b>                                                                                              |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| The tool does not unscrew at the end of the setting stroke. (Use the manual unscrewing procedure, Section 6.5) | <ol style="list-style-type: none"> <li>1- Trigger released before the setting cycle is complete.</li> <li>2- Lack of oil.</li> <li>3- Setting force too high.</li> <li>4- The tool isn't held in place in the setting axis during unscrewing.</li> <li>5- <b>RIVKLE®</b> unsuitable for the application</li> <li>6- Internal failure.</li> </ol> | <ol style="list-style-type: none"> <li>1- Keep the trigger pressed until the tool has fully retracted after the unscrewing phase.</li> <li>2- Top up the oil using the provided filling bottle (⚠ Section 8.4).</li> <li>3- Check the setting force in the <b>RIVKLE®</b> catalogue / Check the setting force set on the tool (Section 5.4) / Check the tool's tensile force using the <b>RIVKLE®</b> FC340 force gauge / Increase the frequency of this check.</li> <li>4- Hold the tool in the setting axis during unscrewing.</li> <li>5- Check that the <b>RIVKLE®</b> used is suitable for your application. (If necessary, contact an authorised Böllhoff representative).</li> <li>6- Contact an authorised Böllhoff repair center.</li> </ol> |
| <b>CRIMPING COMPLETED</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| After setting, the blind rivet nut get loose in the application                                                | <ol style="list-style-type: none"> <li>1- Setting force too low.</li> <li>2- The blind rivet nut isn't in contact with the anvil.</li> <li>3- <b>RIVKLE®</b> unsuitable for the application.</li> <li>4- Internal failure.</li> <li>5- Lack of oil.</li> </ol>                                                                                   | <ol style="list-style-type: none"> <li>1- Check the setting force in the <b>RIVKLE®</b> catalogue / Check the setting force set on the tool (Section 5.4) / Check the tool's tensile force using the <b>RIVKLE®</b> FC340 force gauge. Increase the frequency of this check.</li> <li>2- Adjust the anvil position (Section 5.3).</li> <li>3- Check that the <b>RIVKLE®</b> used is suitable for your application. (If necessary, contact an authorised Böllhoff representative).</li> <li>4- Contact an authorised Böllhoff repair center.</li> <li>5- Top up the oil using the supplied filling bottle (⚠ Section 8.4).</li> </ol>                                                                                                                  |

| Problem                                                | Probable causes                                         | Solutions                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CRIMPING COMPLETED</b>                              |                                                         |                                                                                                                                                                                                                                                                                     |
| Threads on the crimping nut damaged after installation | 1- Mandrel thread damaged, worn.                        | 1- Replace the mandrel. Increase the replacement frequency (Paragraph 5.2).                                                                                                                                                                                                         |
|                                                        | 2- The blind rivet nut isn't in contact with the anvil. | 2- Adjust the anvil position in accordance with the instructions (Section 5.3).                                                                                                                                                                                                     |
|                                                        | 3- Excessive setting force.                             | 3- Check the setting force required for installing your blind rivet nut in the <b>RIVKLE®</b> catalogue / Check the setting force set on the tool (Section 5.4) / Check the tool's tensile force using the <b>RIVKLE®</b> FC340 force gauge / Increase the frequency of this check. |
|                                                        | 4- Perpendicularity with the application not respected. | 4- Throughout the blind rivet nut installation phase, ensure that the tool remains perpendicular to the application (Quick start §7).                                                                                                                                               |
|                                                        | 5- <b>RIVKLE®</b> unsuitable for the application.       | 5- Check that the <b>RIVKLE®</b> used is suitable for your application. If necessary, contact an official Böllhoff representative.                                                                                                                                                  |
|                                                        | 6- Internal failure.                                    | 6- Contact an authorised Böllhoff repair centre.                                                                                                                                                                                                                                    |

#### MANUAL UNSCREWING

|                                                                                                                               |                                                                            |                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manual unscrewing doesn't work (the tool is stuck in the application)<br>(Use the forced unscrewing procedure in section 6.6) | 1- Setting force too high.                                                 | 1- Check the setting force in the <b>RIVKLE®</b> catalogue / Check the setting force set on the tool (see section 5.4) / Check the tool's tensile force using the <b>RIVKLE®</b> FC340 force gauge / Increase the frequency of this check (section 5.4). |
|                                                                                                                               | 2- Damaged thread on the blind rivet nut or damaged thread on the mandrel. | 2- Refer to the "Setting" section of this document.                                                                                                                                                                                                      |
|                                                                                                                               | 3- Internal failure.                                                       | 3- Contact an authorised Böllhoff repair center.                                                                                                                                                                                                         |

#### ! NOTE

If the function could not be restored, please contact an authorized Böllhoff repair center or your maintenance department if they have received Böllhoff-approved training.

## 7.3 Error codes

| No. | DISPLAY                  | SOLUTIONS                                                                                                                                      |
|-----|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 4   | <b>BATT<br/>ERR 04!</b>  | <b>Incompatible battery:</b><br>Use a fully charged MAKITA® 18V battery.<br>If the problem persists, contact technical support.                |
| 12  | <b>BATT<br/>ERR 12 !</b> | <b>Low battery:</b><br>Use a fully charged MAKITA® 18V battery.<br>If the problem persists, contact technical support                          |
| 13  | <b>TEMP<br/>ERR 13!</b>  | <b>Electronic overheating:</b><br>Wait a few minutes before using the appliance again,<br>If the problem persists, contact technical support.  |
| 14  | <b>TEMP<br/>ERR 14!</b>  | <b>Crimping motor overheating:</b><br>Wait a few minutes before using the machine again,<br>If the problem persists, contact technical support |
| 15  | <b>TEMP<br/>ERR 15!</b>  | <b>Motor overheating:</b><br>Wait a few minutes before using the appliance again,<br>If the problem persists, contact technical support.       |

| No.                       | SCREEN DISPLAY     | SOLUTIONS                                                                                                                                                                                                                                                                                                                              |
|---------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16                        | OIL<br>ERR 16!     | <b>Abnormal hydraulic pressure:</b><br>Check the oil level and top up (⚠ Section 8.4).<br>If the problem persists, contact technical support.                                                                                                                                                                                          |
| 38                        | OIL<br>ERR 38 !    | <b>Abnormal idle position:</b><br>Check the oil level and top up (⚠ Section 8.4).<br>If the problem persists, contact technical support.                                                                                                                                                                                               |
| 57<br>Specific<br>B109    | STROKE<br>ERR 57!  | <b>Force not reached: Insufficient stroke:</b><br>Ensure that the RIVKLE® is in contact with the anvil before proceeding with setting.<br>Adjust the anvil setting if necessary.<br>Check that the RIVKLE® is suitable for the width of the application.<br>Change the mandrel.<br>If the problem persists, contact technical support. |
| 58<br>Specific<br>B109    | STROKE<br>ERR 58 ! | <b>Force not reached: Crimping cancelled:</b><br>Press the trigger until the screw is fully unscrewed.<br>If the problem persists, contact technical support.                                                                                                                                                                          |
| 59<br>Specific<br>to B109 | STROKE<br>ERR 59 ! | <b>Force not reached: Not enough oil:</b><br>Check the oil level and top up (⚠ Section 8.4).<br>If the problem persists, contact technical support.                                                                                                                                                                                    |
| 60<br>Specific<br>B109    | MNDRL<br>ERR 60!   | <b>Force not reached: the rod is broken or the RIVKLE® thread is broken:</b><br>Replace the mandrel. RIVKLE® thread broken : reduce the setting force.<br>If the problem persists, contact technical support.                                                                                                                          |
| 68<br>Specific<br>B109    | OIL<br>ERR 68 !    | <b>Contact control function: abnormal rest position:</b><br>Check the oil level and top up (⚠ Section 8.4).<br>If the problem persists, contact technical support.                                                                                                                                                                     |
| 77<br>Specific<br>B109    | STROKE<br>ERR 77!  | <b>Setting stroke less than target:</b><br>Increase the tolerance of the stroke control function. Perform a new automatic learning sequence or use more RIVKLE®.                                                                                                                                                                       |
| 78<br>Specific<br>to B109 | STROKE<br>ERR 78 ! | <b>Crimping stroke greater than target:</b><br>Increase the tolerance of the stroke control function. Perform a new automatic learning sequence or use more RIVKLE®.                                                                                                                                                                   |
| 79<br>Specific<br>B109    | SCREW<br>ERR 79 !  | <b>Incorrect screwing: RIVKLE® not in contact with the anvil:</b><br>Ensure that the RIVKLE® is in contact with the anvil before crimping.                                                                                                                                                                                             |
| 80<br>Specific<br>B109    | SET UP<br>ERR 80!  | <b>The stroke has not been taught:</b><br>Ensure that the width remains constant during the automatic learning sequence.                                                                                                                                                                                                               |
| OTHERS                    | CRITIC<br>ERR XX!  | <b>Critical Error:</b><br>1- Acknowledge the error.<br>2- If the problem persists, remove and reinsert the battery.<br>3- If the problem persists, contact technical support.                                                                                                                                                          |

## 7.4 Batteries and charger

Refer to the manufacturer's manual.

## 8. Maintenance

### ! NOTE

The various maintenance operations depend on how the tool is used. Contact a Böllhoff authorized representative to assess the frequency of maintenance operations required.

### 8.1 Safety instructions regarding maintenance and servicing

#### ! WARNING

Maintenance of the equipment must be carried out by persons who have received appropriate training from an authorized Böllhoff technician.

Given the hydraulic pressure generated by the tool, there is a risk of injury if maintenance is carried out incorrectly by unqualified personnel.

Any maintenance work not authorized by Böllhoff during the warranty period will automatically void the warranty.

**Failure to comply with the maintenance operations specified by the device will lead to the cancellation of the warranty.**

#### ! CAUTION

Always ensure that the battery is removed before carrying out any inspection or maintenance work on the tool.

#### ! WARNING



#### Risk of injury!

Working with the tool involves potential risks. Always wear safety goggles, protective gloves, close-fitting work clothes, ear protection and safety footwear.

### 8.2 Daily / weekly maintenance

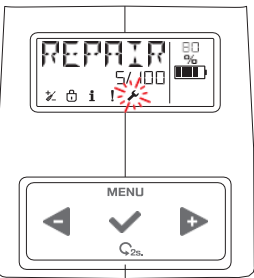
| OPERATION                                                                                                                                                                                                                                                                                                                                                                                                                                      | FREQUENCY                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grease the mandrel (excluding the threaded section – Quickstart §2).                                                                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>Once a day</li> <li>For each job start</li> </ul>                                                                                                                                  |
| Check that there are no hydraulic leaks on the surface of the tool.                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>Once a day</li> <li>For each job start</li> <li>After maintenance</li> <li>After the tool has been dropped</li> <li>After operating at an unauthorized working pressure</li> </ul> |
| <p>Check that there is no unusual movement between its various mechanical and structural components whilst the tool is in use (for example, between the body and the tank).</p> <p>Check, whilst the appliance is in operation, that it does not emit any unusual noises other than those inherent to its use (e.g. no creaking or grinding noises).</p> <p><b>! If you detect a hydraulic leak, stop using the appliance immediately.</b></p> | <ul style="list-style-type: none"> <li>Once a day</li> <li>For each job start</li> <li>After maintenance</li> <li>After the tool has been dropped</li> <li>After using an unauthorized operating pressure</li> </ul>      |
| Check that the tool has not been dropped by visually inspecting its surface for marks or dents, and the casings for cracks.                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Once a day</li> <li>For each job start</li> <li>After maintenance</li> </ul>                                                                                                       |
| Check that the nose and anvil (and any adapters) fitted to the tool are suitable for your blind rivet nut and that they are correctly adjusted.                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>At the start of each shift</li> <li>After maintenance</li> <li>Every time the mandrel and anvil are replaced</li> <li>After each lubrication of the mandrel and anvil.</li> </ul>  |

| OPERATION                                                                                                                                                | FREQUENCY                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Check that the setting force set on the tool is suitable for the blind rivet nut you wish to install.<br>We recommend using a RIVKLE® FC340 force gauge. | <ul style="list-style-type: none"><li>Whenever you change the type of blind rivet nut</li><li>After topping up or refilling the oil</li><li>Once a day</li></ul>                                                                                                                                                                                                                              |
| Check the condition of the mandrel and anvil and replace them if necessary.                                                                              | <ul style="list-style-type: none"><li>Once a day</li><li>At the start of each shift</li><li>After using the manual release button or after carrying out the forced release procedure</li><li>After the tool has fallen</li></ul>                                                                                                                                                              |
| Check that the "Screwing > Setting > Unscrewing" operations work perfectly "in air" (without blind rivet nut).                                           | <ul style="list-style-type: none"><li>Once a day</li><li>At the start of each shift</li><li>Each time the type of blind rivet nut is changed</li><li>After using the manual release button or after carrying out the forced unscrewing procedure</li><li>Each time the mandrel and anvil are changed</li><li>After servicing or maintenance</li><li>After the tool has been dropped</li></ul> |
| Check that the manual unscrewing control button is working.                                                                                              | <ul style="list-style-type: none"><li>Once a day</li><li>At the start of each shift</li><li>Each time the mandrel and anvil are changed</li></ul>                                                                                                                                                                                                                                             |
| Check that the blind rivet nut screws all the way down against the anvil.                                                                                | <ul style="list-style-type: none"><li>At the start of each shift</li><li>Each time the tension rod and anvil are changed</li><li>Once a day</li></ul>                                                                                                                                                                                                                                         |
| Check that the blind rivet nut is secure on the anvil, you'll need to gently force to unscrew the blind rivet nut manually.                              | <ul style="list-style-type: none"><li>Once a week</li><li>After servicing or maintenance</li><li>Each time the mandrel and anvil are changed</li></ul>                                                                                                                                                                                                                                        |
| Check the oil level in the unit (see section 8.4).                                                                                                       | <ul style="list-style-type: none"><li>Once a week</li></ul>                                                                                                                                                                                                                                                                                                                                   |

 **WARNING**

If you detect a hydraulic leak, stop using the machine immediately.

8.3 Maintenance



The “REPAIR” function displays a wear indicator for the machine in the form of a decrementing percentage counter that starts at ‘100/100’ and ends at ‘0/100’.

This allows you to monitor the wear and tear of the tool before the next service.

- When the counter reaches ‘5/100’, the “CONFIGURATION” menu symbol  begins to flash; a service is due.
- When the counter reaches ‘0/100’, the “CONFIGURATION” menu symbol  is displayed continuously; maintenance is required.

 **NOTE**

The maintenance interval is automatically adjusted according to the stresses placed on the equipment. The maintenance interval may be reduced to 50 000 cycles in the event of prolonged use at loads exceeding 18 kN. It is recommended that this device should not be used at rates exceeding 20 000 cycles per year at loads exceeding 18 kN.

All internal maintenance operations must be carried out by an authorized Böllhoff repair centre or your maintenance department if it has received training approved by Böllhoff. It is recommended that all dismantling and reassembly be carried out in a clean environment.

## 8.4 Oil check and top-up

### **⚠ DANGER**

#### **Risk of pressurised oil projection!**

**Before carrying out any work on the oil circuit of your NEO B109, deactivate 'process control' mode** by connecting the tool to the **NEOSOFT** software (see 'NEOSOFT V2 Instruction Manual', section 3.1.2).

Failure to follow this instruction could cause oil to spray under pressure and result in serious injury whilst checking and topping up the oil in your tool.

### **⚠ DANGER**

#### **Risk of pressurised oil projection!**

Ensure the battery is disconnected from the tool before unscrewing the bleed screw. Unexpected activation of the setting cycle could cause oil to spray under pressure and result in serious injury. Even without a battery, residual pressure may remain and cause oil to spray.

### **⚠ CAUTION**

**An oil level that is too low can cause malfunctions: it is important to follow these instructions.**

#### **CHECK OIL information**

When using the appliance, a low oil level is indicated by a flashing symbol:



If the oil is not topped up, after the machine has been put on standby, the messages **"CHECK"** and then **"OIL"** will appear when it is restarted. It is then necessary to top up the oil, otherwise you may not be able to unscrew the fasteners during the next **RIVKLE®** installation (see section 7.2 Troubleshooting).

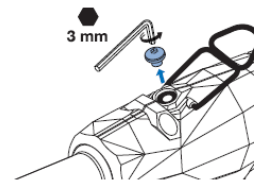
#### **Oil check and top-up procedure**

### **⚠ NOTE**

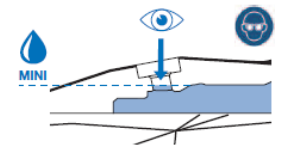
We recommend checking your machine's oil level once a week, following the procedure described below.

**Please use only mineral oil with a viscosity grade of 32. The oil must be clean, free from particles and must not contain silicone.**

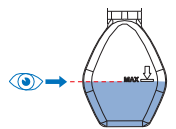
- 1 Unscrew the bleed screw using the 3 mm hexagonal key provided.



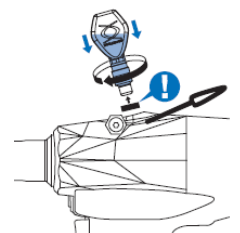
- 2 The minimum oil level is **just above the bottom of the hole**.



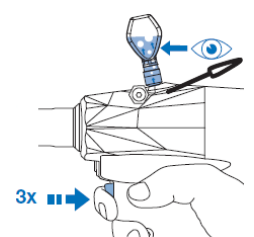
- 3 **⚠ It is essential to check that the oil level in the filling bottle does not exceed the maximum level indicated.**  
Oil reservoir: **2365000006**.



- 4 Screw in the provided oil filling bottle, which must contain mineral oil with a viscosity grade of 32. **Check that the sealing washer is fitted to the filling bottle.**



- 5 Press the trigger and watch the air bubbles rise in the oil fitting bottle. **Repeat this procedure 3 times.**



- 6 Screw the bleed screw and its washer back on. run 3 "in air" cycles to get the oil moving through the hydraulic circuit. Unscrew the bleed screw again & check the oil level. If the oil level had decreased, restart the procedure from step 3. If after three attempts of topping up the oil, the level is still incorrect, please contact a Böllhoff-certified repair center.

## 8.5 Software update

To benefit from the latest features and/or fixes, updates will be made available on the Böllhoff website.

Scan the following QR code:

<https://www.boellhoff.com/de-en/services/technical-forum/>



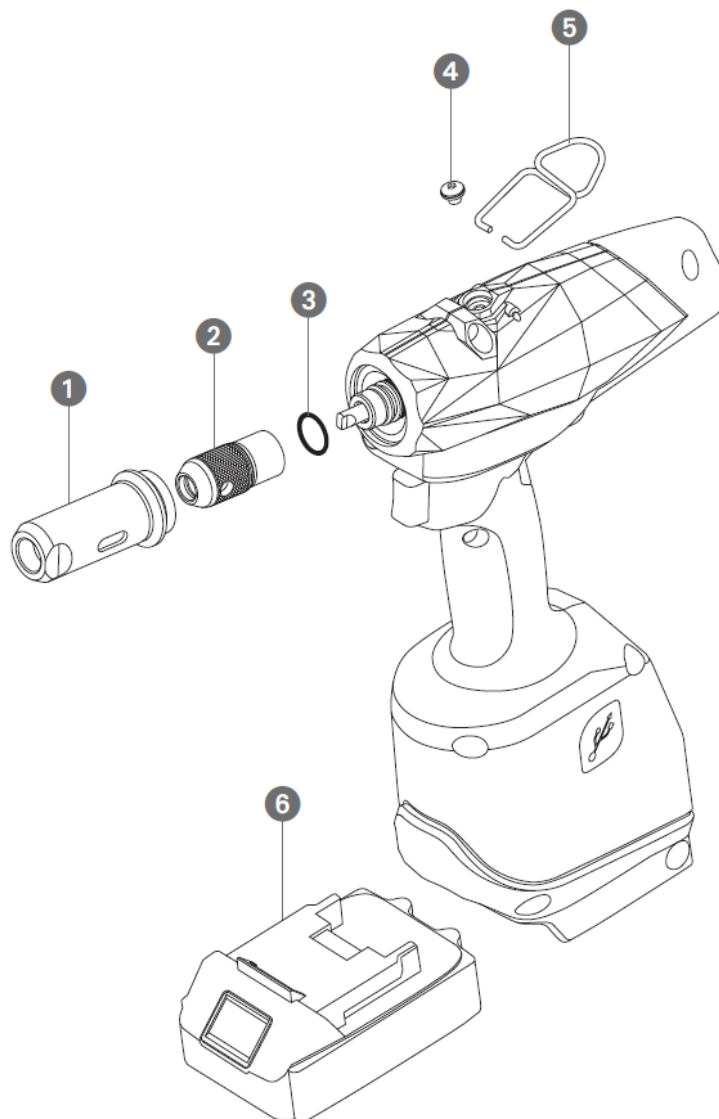
This QR code is also printed on the tool's label.

By following this link, you will find the latest version of NEOSOFT, which will offer to automatically update your tool to the latest version.

### ! NOTE

- **RIVKLE® NEO B107** firmware updates can be performed via the **NEOSOFT** software.
- The latest versions of the user manual will also be available on the Böllhoff website.

## 9. Exploded views and parts lists



|   |                      | Part number          | Qty |
|---|----------------------|----------------------|-----|
| 1 | Nose                 | 236 999 00 028       | 1   |
| 2 | Traction bush        | 236 999 00 150       | 1   |
| 3 | O-ring               | C1000102             | 1   |
| 4 | Bleed screw assembly | 236 173 80 005       | 1   |
| 5 | Hook                 | 236 999 00 010       | 1   |
| 6 | Battery*             | 1.5Ah 236 999 00 170 | 1   |
|   |                      | 2.0Ah 236 999 00 223 | 1   |
|   |                      | 3.0Ah 236 599 00 042 | 1   |

\* Whether a battery is included in the delivery depends on the configuration chosen; please refer to Section 1 of this manual.

## 10. Packaging and transport

### ! NOTE

The tool is supplied in packaging suitable for transport. Keep this packaging for any future transport.

### ⚠ CAUTION

When transporting the tool, ensure it is protected against shocks and vibrations. Use suitable packaging.

#### Packaging dimensions and weight

- Length: 500 mm
- Width: 400 mm
- Height: 160 mm
- Gross weight: 4.5 kg

#### Packaging material

- Polypropylene



All packaging materials are recyclable and must be disposed of in accordance with local regulations.

#### Storage conditions

- Temperature: -20°C to +50°C.
- Relative humidity: 5% to 80% non-condensing.
- Store in a dry, clean place away from direct sunlight.

The tool, whether in its packaging or not, must not be exposed to aggressive or corrosive atmospheres.

When out of its packaging, the tool must be used under the following conditions:

- Temperature: 0 to +40°C
- Relative humidity of 5% to 80%.

#### Battery

The lithium-ion batteries contained within are subject to the requirements of dangerous goods legislation. When transported commercially by third parties or freight forwarders, for example, specific labelling and packaging requirements must be observed. When preparing the item for shipment, it is necessary to consult an expert in hazardous materials. Please also comply with national regulations, which may be more detailed. Cover exposed contacts with adhesive tape or masking tape and pack the battery so that it cannot move within the packaging.

## 11. End-of-life management

### ! NOTE

Environmental protection is a priority for Böllhoff. We are committed to minimising the environmental impact of our products throughout their life cycle.

#### Decommissioning the tool

When the tool reaches the end of its life and can no longer be repaired or reconditioned, it must be decommissioned in an appropriate manner.

### ⚠ CAUTION

Before disposing of the unit, completely drain the hydraulic oil. Used oil must be collected and disposed of in accordance with applicable local regulations.

#### WEEE Directive (Waste Electrical and Electronic Equipment)

This tool is electrical and electronic equipment within the meaning of European Directive 2012/19/EU on waste electrical and electronic equipment (**WEEE**). As such, it must not be disposed of with ordinary household waste. **The tool must be disposed of via a WEEE electronic product recycling scheme.**

Wear parts or parts replaced during maintenance or repair must be placed in the appropriate recycling containers (in accordance with local regulations in force).

### Dismantling and sorting of components

The appliance is made up of various materials which must be sorted for optimal recycling.

The recyclable materials in the appliance are mainly:

- Ferrous metals (steel, cast iron)
- Non-ferrous metals (aluminium)
- Elastomers and seals:
- Plastics (such as PA6 / TPU / POM)
- Fluids (hydraulic oil (to be completely drained))

### Recycling and disposal



The various materials must be disposed of in accordance with applicable local and national regulations:

- Ferrous and non-ferrous metals can be recycled at specialist recycling centres.
- Elastomers and seals must be disposed of in accordance with industrial waste regulations.
- Plastics can be recycled if they are properly sorted.
- Used hydraulic oil must be collected and treated by authorised companies.

### ! NOTE



Due to the presence of hazardous components in the equipment, waste electrical and electronic equipment, accumulators and batteries can have a negative impact on the environment and

human health. Do not dispose of electrical and electronic equipment or batteries with household waste!

In accordance with the European Directive on waste electrical and electronic equipment and waste accumulators and batteries, as well as its transposition into national law, waste electrical equipment, batteries and accumulators must be collected separately and deposited at a designated collection point for municipal waste, in accordance with environmental protection regulations. This is indicated by the crossed-out wheeled bin symbol on the equipment.

### Böllhoff's commitment to the environment

Böllhoff is committed to designing sustainable products and promoting the circular economy. We encourage the repair and refurbishment of our tools to extend their service life.

If you have any questions regarding the end-of-life management of your **RIVKLE®** tool, please contact your local Böllhoff representative.



## NOTES

[illegible]



Passion for successful joining.

#### **Böllhoff Group**

An innovative partner in the field of fastening technology, assembly solutions and logistics.  
You can find the contact details for our sites worldwide at [www.bollhoff.fr](http://www.bollhoff.fr).

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