

Operating Manual
Electric nut runner:
DE1 - 20 -SO
“Bolt Snapper”



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1 Manufacturer

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2 User instructions

2.1 Purpose of the document

This operating manual is intended to familiarise the owner/operator with the machine and provide information about its possible applications and intended use. The operating manual contains important information that allows the owner/operator to use the machine safely, correctly and efficiently. Observing this information helps avoid hazards, minimise repair costs and downtimes and increase the reliability and service life of the machine.

Information about precautions to be taken by the owner:

- Only entrust personnel who have the necessary qualification for the respective work with tasks on the machine.
- Clearly define the responsibilities and accountabilities of the operating and maintenance personnel.
- Supplement the operating manual by rules arising from national regulations regarding occupational

health and safety and the environment (e.g. work organisation).

- Order and occasionally verify compliance with the operating manual and its supplements. Keep a copy of the operating manual at the place where the machine is used at all times!
- Only operate the machine when it is in technically faultless condition and maintain this.

In addition to the operating manual, the mandatory accident prevention regulations applicable in the country and the place where the machine is used must be observed. In addition, all recognised technical rules devised to ensure safe and correct working must be observed.

2.2 Target groups

- a) The **owner** as the superior legal person is responsible for the intended use of the machine and the training and deployment of authorised persons. He defines the mandatory competences and authorisations of the authorised personnel for his company.
- b) A **specialist** is defined as a person who is capable of assessing the tasks assigned to him and recognising possible hazards due to his professional training, knowledge and experience. This person is also familiar with all applicable regulations. Only trained specialist personnel or such personnel who have been selected and found capable by the owner are qualified to work with the machine.
- c) A **trained/instructed person** is a person who has been instructed and, if necessary, trained in the assigned tasks and the possible risks for incorrect behaviour. This person has also been informed about the necessary safety devices and protective measures.
Personnel to be qualified, trained, instructed or undergoing general job training may only act under the constant supervision of an experienced person.

2.3 Liability and warranty

All tasks and instructions provided in this operating manual are based on our previous experience and findings and given to the best of our knowledge. The original version of this operating manual was prepared in German and reviewed by us for technical accuracy. The translation into the respective national/contractual language has been prepared by a certified translation agency.

This operating manual has been compiled with the greatest level of care. However, if you discover any parts that are incomplete and/or incorrect, please notify us in writing. Your suggested improvements help us create an operating manual that is more user-friendly.

3 Product safety

The prerequisite for the safety-compliant handling and trouble-free operation of this machine is knowledge of the basic safety instructions.

3.1 CE mark

The products are labelled with the CE mark. The Declaration of Conformity verifies that the products are in compliance with the safety directives of the European Union.

3.2 Directives

The product meets the requirements of the EC Machinery Directive 2006/42/EC. EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC according to:
EN 60745-1 and EN 60745-2-2
EN 55014-1 (2006) Emission
EN 55014-2 (1997) A1 Interference Resistance, Cat. II
EN 61000-3-2 (2006) Current Harmonics
EN 61000-3-3 (1995) + A1, A2 Flicker

3.3 Information about this manual

This manual contains important instructions on how to operate, set up and connect the machine. Read these instructions carefully before putting the machine into operation. This is for your own protection and will provide you with important information for connection, use and safety of the machine. The operating

manual is an integral part of the machine. Keep it ready to hand near the machine. Observing every detail of the operating manual is a requirement for using the tool correctly and as intended. For this reason, pass this operating manual on to the next owner when selling the machine. Please note that details of the illustrations and technical specifications contained in this operating manual may deviate from the product you purchased. The information provided in this operating manual is current as of the time it was printed. We reserve the right to make changes at any time without prior notice.

3.4 Information about the workplace

The safety of the operator and the trouble-free operation of the machine are only guaranteed if original Plarad components are used. This applies both to device components and spare parts.

If different components are used, Maschinenfabrik Wagner cannot guarantee the safe and reliable operation of the tool.

3.5 General safety information for power tools



Warning!

Read all safety information and instructions. Failure to observe the safety information and instructions can result in electric shock, fire and/or serious injuries.

Store all safety information and instructions for future reference.

The term "power tool" used throughout the safety information refers both to mains-operated power tools (with mains cable) and battery-powered electric tools (without mains cable).

1. Safety at the workplace

- a) **Keep your work area clean and sufficiently illuminated.**
Working in untidy or unlit work areas can result in accidents.
- b) **Do not use your power tool to work in explosive atmospheres that contain inflammable liquids, gases or dust.** Power tools generate sparks that can ignite dust or vapours.
- c) **Keep children and other persons away from the power tool while using it.** Any distractions can cause you to lose control of your machine.

2. Electrical safety

- a) **The connection plug of the charger must fit in the power outlet. The plug must not be modified in any way.**
Unaltered plugs and matching

power outlets reduce the risk of electric shock.

- b) **Avoid body contact with grounded surfaces such as pipes, heaters, stoves and refrigerators.** There is an increased risk of sustaining electric shock when your body is grounded.
 - c) **Do not expose the power tool to rain or moisture.** Water penetrating a power tool increases the risk of electric shock.
 - d) **Do not divert the cable from its intended use and refrain from using it to carry or hang up the power tool or pull the plug out of the power outlet. Keep the cable away from heat, oil, sharp edges or moving machine parts.** Damaged or entangled cables increase the risk of electric shock.
 - e) **When using a charger for outdoor work, only use extension cables that are also suitable for outdoor use.** Using an extension cable that is suitable for outdoor use reduces the risk of electric shock.
 - f) **If operating the charger in wet environments cannot be avoided, use a residual current circuit breaker.** Using a residual current circuit breaker reduces the risk of electric shock.
- #### 3. Safety of persons
- a) **When working with a power tool, stay alert, pay attention to what**

you are doing and apply common sense. Never operate a power tool when you are tired or under the influence of drugs, alcohol or medication. Even a brief moment of carelessness during the use of a power tool can result in serious injuries.

- b) Always wear personal protective equipment and safety goggles.** Wearing personal protective equipment such as a dust mask, non-slip safety shoes, hard hat or hearing protection (depending on the type and use of the power tool) reduces the risk of injury.
- c) Avoid any inadvertent start-up of the machine. Ensure that the power tool is switched off before connecting it to the power supply and/or the battery and before picking it up or carrying it.** Carrying the power tool with your finger on the switch or connecting it to the power supply while the device is switched on can result in accidents.
- d) Remove all adjusting tools or spanners before switching on the power tool.** Any tool or spanner located in a rotating machine part can result in injuries.
- e) Refrain from assuming an abnormal body posture. Assume a firm stand and keep your balance at all times.** This will help you retain better control over the power tool if faced with unexpected situations.
- f) Wear suitable clothing. Do not wear any loose-fitting clothes or jewellery. Keep hair, clothing and gloves out of reach of**

moving parts. Loose-fitting clothes, jewellery or long hair may become caught in moving components.

- g) If an option to fit dust extraction and collecting equipment is available, ensure that this is connected and used correctly.** The use of a dust extraction system can reduce the risks caused by dust.
- 4. Using and handling the power tool**
- a) Do not overload the machine. Use the power tool that is designed for the work you wish to complete.** Using the appropriate power tool will help you work more efficiently and safely within the specified range of capacity.
 - b) Do not use any power tools that have a defective switch.** A power tool that can no longer be switched on or off is dangerous and must be repaired.
 - c) Pull the plug from the power outlet and/or remove the battery before making any adjustments to the device, changing accessories or putting the device away.** This precaution prevents the power tool from starting up inadvertently.
 - d) Store power tools that are not in use out of reach of children. Never allow persons to use the machine who are not familiar with its operation or who have not read the instructions.** Power tools are dangerous if used by inexperienced persons.
 - e) Maintain the power tool with care. Check if moving parts**

function properly and without sticking and whether parts are broken or damaged so that the power tool's function is impaired. Have damaged parts repaired before using the machine. Many accidents can be attributed to poorly maintained power tools.

- f) **Keep cutting tools sharp and clean.** Carefully looked-after cutting tools with sharp cutting edges have a lower tendency to become jammed and are easier to operate.
- g) **Use power tools, accessories, insertion tools, etc. in accordance with these instructions. During use, take into consideration the operating conditions and the task to be completed.** The use of power tools for applications other than the ones specified can result in dangerous situations.

5. Service

- a) **Have your power tool repaired only be qualified experts using original spare parts.** This ensures that the safety of your power tool will be maintained.

3.6 Organisational measures

- a) The operating manual must always be kept in legible condition and readily available at the place where the machine is used!
- b) The operating manual also needs to be supplemented by mandatory local regulations regarding accident prevention and environmental protection (e.g. handling hazardous materials, disposal of auxiliary and/or operating materials, and the

provision/requirement to wear personal protective equipment)!

- c) Personnel must be instructed to observe the operating manual!

Personnel are required to notify the owner or his agent of any defects or hazards they have discovered.

3.7 Technically faultless condition

- a) All safety instructions and warnings at / on the machine must be maintained in complete and legible condition!
- b) Do not make any modifications, attachments and conversions to the machine that could impair safety without consultation/agreement with the manufacturer/supplier!

Substantial changes to the machine can also invalidate the EC Declaration of Conformity!

- c) Comply with the deadlines stated in the operating manual for recurring tests / inspections!
- d) All spare parts used must comply with the technical requirements specified by the manufacturer. This requirement is always satisfied by the use of original spare parts.
- e) When performing maintenance work independently, make sure the appropriate workshop equipment necessary to complete the work is provided.

3.8 Training of personnel

- a) Only reliable personnel are permitted to work on/with the

machine. Observe the minimum age requirements stipulated by law!

- b) Only use trained or at least instructed personnel! Instruct and occasionally verify that only authorised personnel are used to work on/with the machine!
- c) Clearly define the responsibilities and accountabilities of the personnel with regard to operation, set-up, maintenance and repair!
- d) Only let personnel undergoing training, instruction or in the context of general training work on the machine while under constant supervision by an experienced person!
- e) Work on electrical equipment of the machine must only be performed by qualified electricians or instructed persons under the management and supervision of a qualified electrician. The electrical engineering regulations must be complied with for safety reasons.

3.9 Presentation of safety instructions



CE mark



Read all safety information and instructions. Failure to observe the safety information and instructions can result in electric shock, fire and/or serious injuries.



Particular tasks and/or requirements and prohibitions regarding the correct and efficient use of the machine



Wear hearing protection



Use protective eye wear



Use protective footwear



Wear protective headgear



Crushing hazard warning



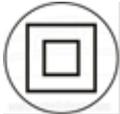
Warning about hot surface



Warning about dangerous electrical voltage



Hazard warning. The type of hazard is specified in the text found next to the respective warning.



Class 2 protective insulation



WEEE recycling/disposal instructions



Service seal specifying the date of the next inspection.

4 Description of the machine

4.1 Illustration and identification

The electric nut runner is identified by its type plate.



4.2 Technical specifications

Range of capacity:

1000Nm (level 99)

Accuracy of specified torque:

±5% of nominal value (max. torque)

Weight:

5.7kg

Motor idle speed:

8,500 to 14,000 rpm

Emission values according to EN

60745:

Sound pressure level: 79 dB(A)

Sound power level: 90 dB (A)

Uncertainty factor: 3 dB(A)

Vibration emission value:

< 2.5 m/s²

Uncertainty factor: 1.5 m/s²

The noise and vibration emission values have been measured in accordance with EN 60745. The stated emission values are used for machine comparison, are suitable

for an estimate of the vibration and noise load during use and represent the main application of the tool.

For the nut runner dimensions, refer to the technical data sheets which are available at www.plarad.de.

4.3 Electrical power supply

Mains voltage:

220 -240 V/50-60 Hz

or 230 V/50-60 Hz

110 V/50-60 Hz

120 V/50-60 Hz

Power consumption: 1.4 kW

Insulation class: E

Protective insulation: Protection rating IP 20

Minimum power input for mobile power generators: 4 kVA

4.4 Scope of delivery

- Electric nut runner, ready for operation
- Operating manual with EC Declaration of Conformity

4.5 Intended use

The electric nut runner is a hand-held tool that is designed exclusively for tightening and loosening bolted connections. It may only be used for commercial purposes. Each bolting application requires the use of suitable impact sockets/tools. The suitability for use of tools other than power sockets must be tested and approved by the manufacturer. Make sure there is a proper positive connection between the impact socket and the bolt. Make sure there is a proper positive connection between the square drive of the tool and the square retainer of the impact socket. The tool is designed for indoor and outdoor operation within an ambient temperature range of -20 °C to +70 °C. If intending to deviate from these conditions, consult the manufacturer first.

The electric nut runner is not suitable for continuous operation as a drive unit!

4.6 Non-intended use

Any use deviating from or exceeding the scope of intended use is considered to be improper. The risk is borne solely by the owner / user.

4.7 Electrical energy



Warning!

Contact with live components can result in serious injuries and death from electric shock.

Observe the following safety information when operating electric nut runners.

When operating the tool, observe all applicable laws and regulations at the operating site. Verify every time before using the tool that it operates in a reliable manner and is in proper condition. The user must be familiar with the operation of the tool. Before putting the tool into operation, check the tool and the mains power cable for damage. Never continue using a defective tool or a tool with defective cables or connectors! Have damaged cables or connectors replaced by authorised qualified electricians before resuming operation. When using an extension cable with small cross section and large length, a voltage drop can occur which adversely affects the start-up and function of the nut runner. Use only

extension cords that meet the following requirements:

Mains voltage	Minimum cross-section
230 V / 220 – 240 V	1.5 mm ²
110/120 V	2.5 mm ²

When working outdoors, only use extension cables that are approved for this purpose and labelled accordingly.

Do not expose electric tools to rain. Do not use power tools in a moist or wet environment.

Keep your tools in a safe place. Store unused power tools in a dry room.

Disconnect the tool from the mains power supply before all repair and maintenance work.

4.8 Other applicable operating manual

EU safety data sheet for Klübersynth GE-151

5 Description of operation

5.1 Start-up



Attention!

Only components and accessories that do not impair the function and safety of the tool are permitted to be used.

- **If in doubt, contact the manufacturer.**



Warning!

Contact with live components can result in serious injuries and death from electric shock.

- **Check the mains connection cable for damage before putting the nut runner into operation.**
- **Do not use the nut runner if the mains power cable or the plug connection is damaged.**

**Attention!**

Note the mains voltage and frequency stated on the rating plate.

5.2 Preparing the tool

5.2.1 Power-on/test of residual current circuit breaker

Before you can work with the nut runner, you need to check the proper operation of the residual current circuit breaker (Inline RCCB) as follows:

1. Switching on the RCCB

- Insert power cable
- Press ON button.

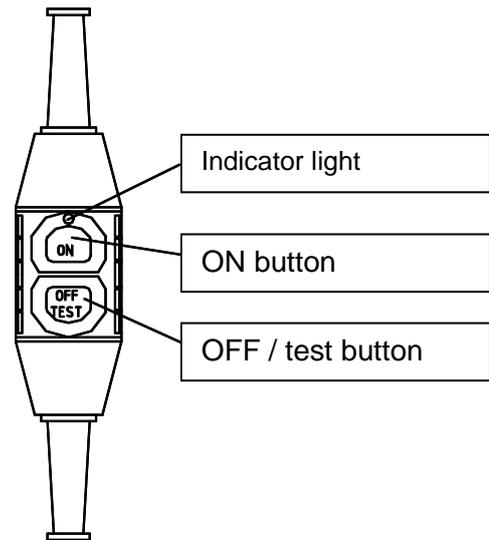
The yellow indicator light comes on, signalling that the device is ready for operation.

2. RCCB function test

- a. Press OFF/TEST button

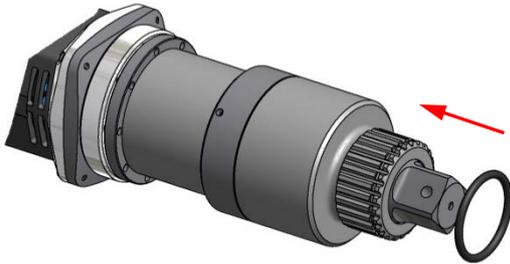
The yellow indicator light goes out, signalling that the RCCB functions properly.

Another press on the ON button turns the yellow indicator light on, indicating that the device is ready for operation.

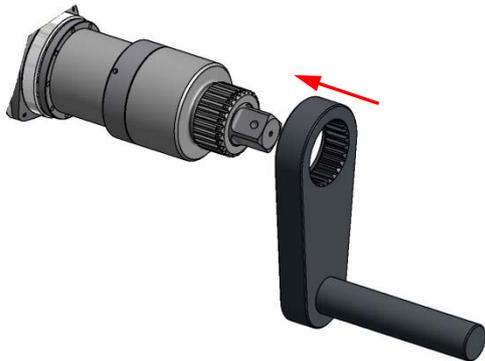


5.2.2 Fitting reaction arm and socket

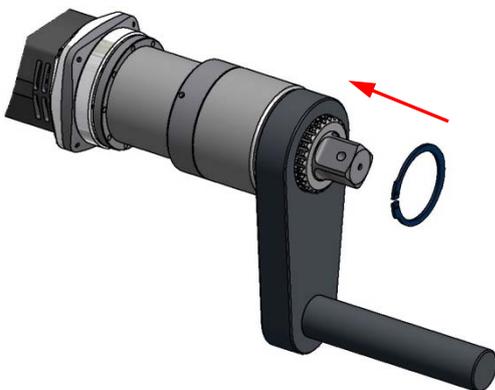
1. Attach O-ring to tothing



2. Attach the reaction arm to the toothed holder on the nut runner.



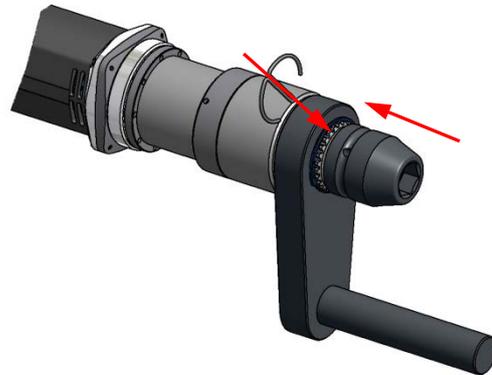
3. Secure the reaction arm using retaining ring.



4. Put the socket on the square drive on the nut runner and secure it.

Use only power sockets.

5. Secure the impact socket.



6. Nut runner with secured reaction arm and secured impact socket.



Warning!

Unsecured components or tools can be flung out. **Secure reaction arm and impact socket before start-up! Follow the instructions and warnings provided on the tool and the accessories.**

6 Operation

6.1 Controls and display elements

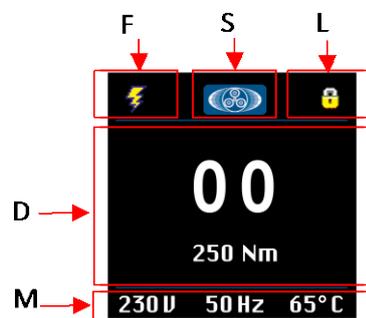
The following illustrations show the positions of the various controls on the machine.



Controls and display elements DE1XX

- A) Gun button
- B) Rotation direction switch
- C) Display & buttons

6.1.1 Screen display area



Picture 6.1.1

- D) The specified torque level (see below) or the symbol for the Undo mode is displayed in this area. The associated torques are optionally displayed under the torque level. These have been determined on a dynamometer and correspond to a medium hard test setup according to ISO 5393. This display is hidden during the start of any bolting and displayed again by pressing any button.

- M) Currently measured values are displayed in this area:

- Mains voltage [V]
- Mains frequency [Hz]
- Motor temperature [°C]

- F) Further information about the cause is displayed in this area in the event of an error:



Mains voltage not sufficient



Motor temperature too high



Motor does not reach the minimum speed

- F) The state of the machine is indicated in this area using various icons



Static state or animated during any bolting



Bolting OK



Bolting NOK

- L) The padlock symbol is displayed in this area when button lockout is active. 



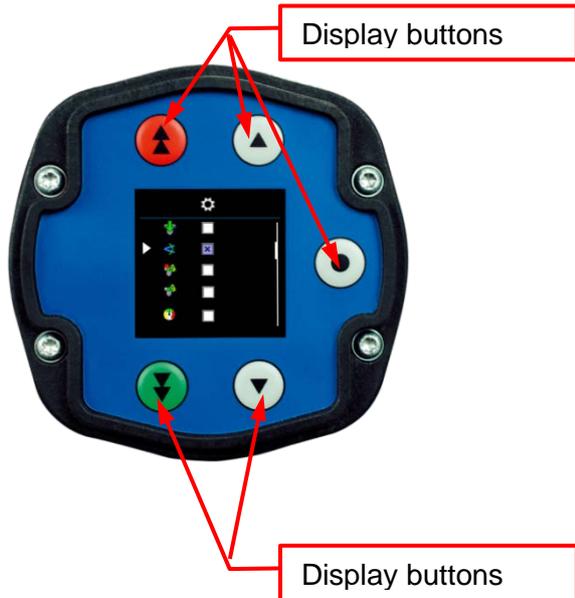
Attention!

The Nm information in the display of the tool corresponds to the values achieved for the respective settings on the reference bolting application for the respective tool type. These values can be exceeded or undercut depending on the bolting application!

6.1.2 Display controls

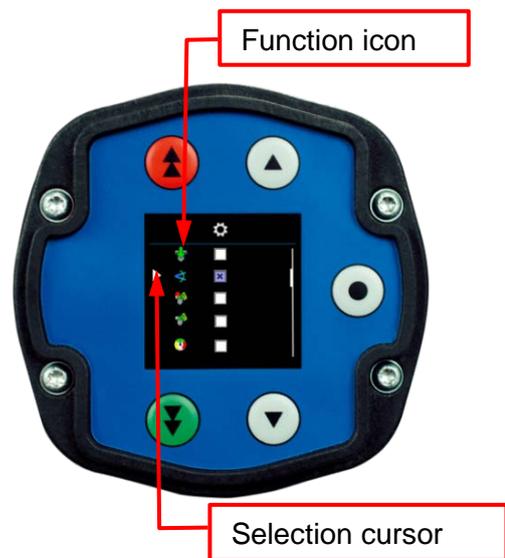
The buttons on the display are used to make the following settings:

- Select the function (tensioning process)
- Set the parameters (torque level/tightening angle)



6.2 Function selection menu

Depiction on the display



a) Call up the function menu



b) Mark the function



c) Select the function



d) Confirm the selected function



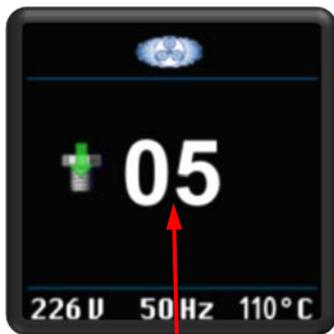


Once a function has been selected and confirmed, the corresponding settings will be saved.

You need to set the desired torque before starting the bolting process. Making adjustments while the bolting process is underway is not possible!

6.2.1 Function of torque mode

Depiction on the display



Torque level

a) Setting - torque level

Setting - ones digit



Setting - tens digit



Torque level 99 is used to assign / set the maximum torque.

The other levels 01 to 98 have not been assigned.

The tool will not work when set to any of these levels!

6.2.2 Function of button lockout

Depiction on the display



The keyboard on the display is locked, preventing the buttons from being pressed inadvertently

Button lockout



Set and reset the button lockout



6.2.3 Function of undo mode

Depiction on the display



Select the undo mode function

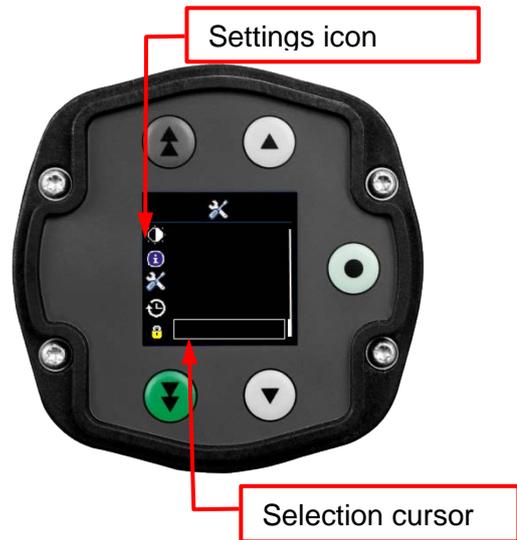


Attention!

Undo mode can result in an overload of the tool / the accessories!

6.3 Settings menu

While the menu is active, the following symbol is shown in the area F of picture 6.1.1:



a) Call up the function menu



b) Mark the menu item



c) Select the marked menu item



d) Exit the menu



6.3.1 Menu item Contrast

Depiction on the display



Set the contrast



The set value is depicted by a bar and settings of the contrast.

6.3.2 Menu item Info

Depiction on the display



The following information is displayed:

- SW no.: xx xx firmware version
Display
- CU.SW no. x xx firmware version
Control
- Device type: DE1-XX / xxxV
- DE1 SN: 82-xxxxx
- Motor no.
- Gearbox no.
- Operating hours:

6.3.3 Menu item Service counter

Depiction on the display



The counter records the number of bolting applications XX since the last service.

The torque levels below are counted up at the following increments:

Level 00-32	XX
Level 33-65	XX
Level 66-99	XX
Level 00-99	XX
Undo mode	XX



This makes it possible to define the required maintenance intervals according to the loads. (see also "Service intervals" chapter).

The button  calls another submenu for Service. If this has been called accidentally, it can be exited by pressing the  button.

6.3.4 Menu item Total counter

Depiction on the display



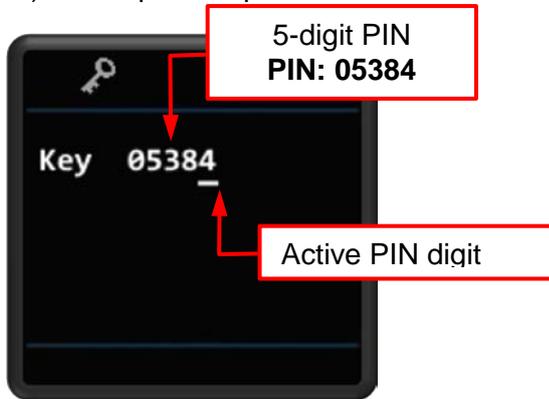
The total counter is used to record the following error messages in addition to the number of bolting applications:

- Voltage too low
- "Timeout" (unable to start bolting process)
- Excess temperature

6.3.5 Menu item Lock setting steps

Depiction on the display 

a) Call up PIN input 



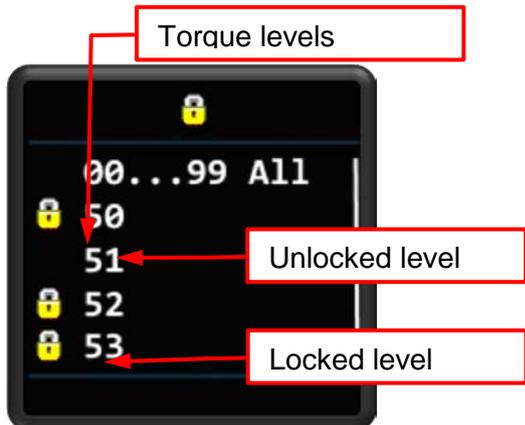
b) Select digit 

a) Select next digit 

b) Confirm the set PIN
PIN 05384 

a. Select the torque level/ level digit 

c) Lock/unlock the selected level 

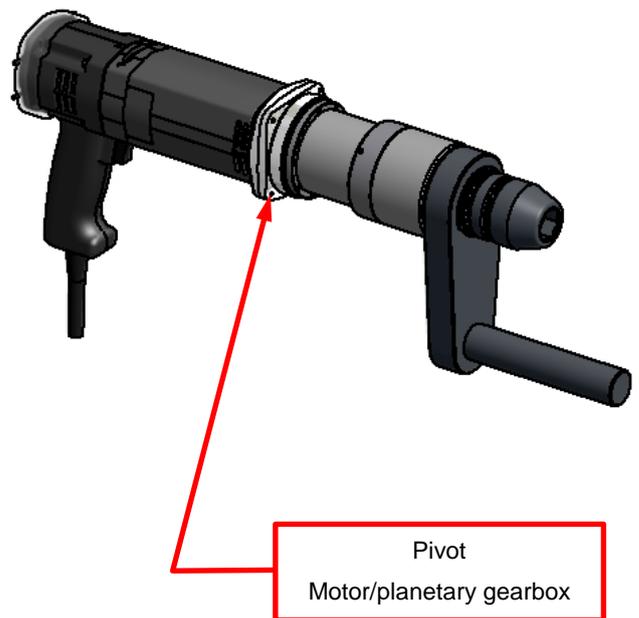


d) Save the settings 

Cancel without saving 

6.4 Safety pivot

The safety pivot situated between drive motor and gearbox makes it possible to rotate the grab handle into any desired position - even under load. The reaction force will not affect your hand during this process.



6.5 Supporting the reaction arm

Torques cannot be generated without an absorption of the reaction forces. This function is provided by the nut runner's reaction arm. A reaction arm is included in the scope of delivery of the tool. The tool is only permitted to be used with the included reaction arm.

Only use reaction arms or extensions that have been approved by Plarad. Suitable reaction arms - including custom models - are available on request. Reaction arms must never be modified. Modifications to the reaction arm can invalidate the included original performance table.

Warning!



There is a crushing hazard between the reaction arm and the contact surface. The reaction arm attached to the tool can cause serious crushing injuries

- **Do not reach between the reaction arm and the contact surface**
- **Do not place hands/feet close to the contact surface.**



Substantial changes to the machine can also invalidate the EU Declaration of Conformity.

Warning!



Shearing of the mains power cable!
Contact with live components can result in serious injuries and death from electric shock.

- **The mains power cable must never be situated between reaction arm and contact surface while you are working with the tool.**
- **Only use the insulated handles to guide the tool during work.**

Warning!



If supported insufficiently, the tool can slip off and be flung out.

- **The thrust bearing at the bolting position must prevent the reaction arm from slipping off the contact surface!**

6.5.1 Optimum support scenario

Make sure the reaction arm rests fully against the surface!

6.5.2 Impermissible support scenario



Warning!

If the reaction arm rests only partially against the surface, considerable forces can impact the tool. The device accessories can break, and the tool may be flung out.

7 Operation



Warning!

Danger from a falling tool!

Only use suitable aids to lift larger tools.

When working overhead, secure the tool and wear protective headgear and safety footwear.



Warning!

Hearing damage from noise!

Depending on your nut runner setting and the noise level to which the user is exposed, wear well-fitting personal hearing protection during operation. It is the owner's responsibility to select and provide the correct kind of equipment.



Caution!

Risk of burns!

When used in high ambient temperatures, the nut runner can reach surface temperatures of up to 80 °C.

Wear protective gloves.

7.1 Bolting process

1. Place the nut runner on top of the bolting so that the bolt head/nut is captured in its entirety by the socket. Bring the nut runner with the reaction arm into contact with the thrust bearing against the rotational direction of the tool. Make sure it rests against the entire surface!



Warning!

Components or the bolted connections may tear during work. The tool can be flung out of the bolting position.

- **Do not subject tool and accessories to more than the permissible torque.**

7.2 Tightening



Warning!

If supported insufficiently, the tool can slip off and be flung out.

- **The thrust bearing at the bolting position must prevent the reaction arm from slipping off the contact surface!**

1. Connect the tool to the mains power supply.
2. Place the nut runner with the socket wrench insert on top of the bolt head you wish to turn.
3. Attach the reaction arm against the desired rotation direction of the tool.
4. Press down and hold the power button until the nut runner switches off.

The result is shown on the display until any button is pressed:

- Specified torque has been reached



- Specified torque has **not** been reached



The respective display is maintained until any button on the display or the power button is pressed.

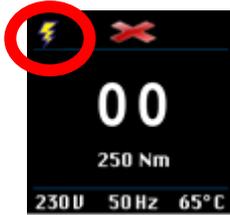
If a bolting is interrupted (power button is released before switching off) or not even started due to any fault, bolting can be restarted immediately afterwards (by pressing the power button again).

If bolting is aborted due to any of the errors listed below, the power button is blocked until "confirmation" of the error. This ensures that the user registers and error and not (because, for example, he cannot view the display due to the application situation) simply starts the next bolting and thus does not notice any incorrect bolting.

- Flashing of the symbol indicates that a confirmation is required
- The conformation is made by pressing any button on the display.
- The symbol no longer flashes after the confirmation.

If the specified torque is not reached, a display of the error cause is also shown.

The following error causes are displayed:



- a)  Mains voltage not sufficient (tool does not start) or power failure.
- b)  Timeout. The tool cannot reach its minimum speed (start angle too small, see 7.1). The torque has already been reached in the starting phase! **Bolting result is not OK!**
- c)  Motor temperature is too high. (Shut-off temperature 110°)

8 Maintenance/Service

8.1 General

- a) **Only let your power tool be repaired by specialist personnel and only using original spare parts.** This ensures that the safety of your power tool will be maintained.
- b) The tool needs to be serviced in order to maintain its functionality and safety.



Attention!

Service work may only be performed by the manufacturer. Only allow Maschinenfabrik Wagner or bodies authorised by Maschinenfabrik Wagner to install, readjust, modify, expand and repair the tool.

The safety for the operator and the trouble-free operation of the tool are only guaranteed if original Plarad components are used. This applies both to all tool components and spare parts.

If different components are used, Maschinenfabrik Wagner cannot guarantee the safe and reliable operation.

Contact:

**Maschinenfabrik Wagner GmbH & Co. KG, Technical Support Department
Birrenbachshöhe
D-53804 Much**

Service hotline +49 (0) 172 461 42 79

Switchboard: +49 (0) 2245 62-0

Email: Technical.Support@plarad.de

8.2 Service intervals

The nut runner needs to be serviced on a regular basis depending on the frequency with which it is used. The service intervals specified merely represent recommendations. You can determine the service interval that fits your individual conditions of use by consulting one of our field representatives or service technicians.

You can arrange for the service to be performed by our service/repairs department on our premises by consulting our field representatives.

If replacement of the connection cable is required, this must be performed by the manufacturer or his representative to prevent safety hazards.

Every 3 months:

- in extreme usage conditions
- if application frequency is high
- if used during multi-shift operation
- if used continuously for work in the upper torque range
- if used for soft bolting applications

Every 6 months:

- in normal usage conditions
 - if application frequency is medium
- if used for work in the medium torque range

Every 12 months:

- if application frequency is low

Cleaning:

- Clean the surface of the tool
- Remove flash rust as necessary

Visual inspection:

- Damage
- Leaks
- Mains connection cable

Function check:

- All moving parts OK
- Output drive and reaction arm without damage
- Mains connection cable

9 Instructions on disposal

Dispose of the tool in accordance with the applicable local regulations.



Attention!

This symbol indicates that the product must not be disposed of with regular household waste as specified in the WEEE directive (Waste Electrical and Electronic Equipment Directive, 2002/97/EC) and national laws.

- **Dispose of this product at an authorised waste collection facility. Return the product if, for example, purchasing a similar product or take it to a waste collection facility that is authorised to recycle waste electrical and electronic equipment.**
- **Turn to your local administration office, your public waste disposal authority, a facility that is authorised to dispose of waste electrical and electronic equipment or your waste management company.**



... eine erfolgreiche
Verbindung!

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EG-Konformitätserklärung

im Sinne der EG-Maschinenrichtlinie 2006/42/EG

Declaration of EC Conformity
within the meaning of the Directive on Machinery 2006/42/EG

Attestation de Conformite Communautaire
au sens de la Directive C.E. en matière de machines 2006/42/EG

Gerätetyp Model / Type:	DE1-20-SO
Bezeichnung der Maschine: Designation of the machine / Désignation de la machine:	Elektrischer-Drehschrauber Electric Nutrunner Visseuse dynamométrique électrique



Hiermit erklären wir, PLARAD
Verschraubungstechnologie:
**9.1 Maschinenfabrik Wagner
GmbH & Co.KG**

dass die oben bezeichnete
Maschine aufgrund ihrer
Konzipierung und Bauart sowie
in der von uns in Verkehr
gebrachten Ausführung den
einschlägigen grundlegenden
Sicherheits- und
Gesundheitsanforderungen der
EG-Richtlinien entspricht. Bei
einer nicht mit uns
abgestimmten Änderung der
Maschine verliert diese
Erklärung ihre Gültigkeit.

Der Bevollmächtigte für die
Zusammenstellung der
Unterlagen nach der
Maschinenrichtlinie 2006/42/EG
Anhang VII ist die
**Maschinenfabrik Wagner
GmbH & Co.KG**



We, PLARAD Bolting
technology:
**9.2 Maschinenfabrik
Wagner GmbH & Co.KG**
herewith declare that the
piece of machinery identified
herein below fully complies
with the pertinent fundamental
safety and health
requirements as defined in the
EC Directives in terms of
concept and design as well as
the implemented form as
marked. Any modification of
the machine without our
previous approval will result in
invalidity of the present
declaration.

The authorized representative
for the compilation of the
documents according to
Maschinenrichtlinie
2006/42/EG appendix VII is
**Maschinenfabrik Wagner
GmbH & Co.KG**



Nous, PLARAD La technique
du boulonnage industriel :
**9.3 Maschinenfabrik
Wagner GmbH & Co.KG**
clarons par la présente que
la machine identifiée dans
ce qui suit, en raison de sa
conception et sa
construction ainsi que sa
réalisation sous forme du
modèle mis en circulation,
est conforme et répond
aux exigences
fondamentales relatives de
sécurité et de santé selon
les Directives
Communautaires. Toute
modification de la machine
sans notre consentement
préalable aboutit à
l'invalidité de la présente
déclaration.

Le mandataire ou chargé de
la compilation des
documents selon
Maschinenrichtlinie
2006/42/EG annexe VII est la
**Maschinenfabrik Wagner
GmbH & Co.KG**

Much, 25 August 2017

Herr Rüssmann, Lt. Konstruktion
(Engineering Manager, Responsable de la construction)