Hydraulic Pressure Check

Serialnummer
AHP 700LUIS
Battery-hydraulic Pump

Nominal voltage: 18V
Operating pressure: 700 bar (max.)

made by UIS - Tooling & Technologies
AHP 700LUIS
Battery-hydraulic Pump

Nominal voltage: 18V
Operating pressure: 700 bar (max.)
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TOTAL
\[ t = 0.34 \text{ h} \]
\[ Q = 0.49 \text{ Ah} \]
n = 43

Auf dem Knapp 46
\dagger
D-42855
Remscheid

Batch code e.g. 304711
Date code e.g. K = 2016, S = May
Consecutive tool e.g. ’142’ = tool # 142

Year Code Month Code Month Code
2016 K Jan. N July V
2020 P May S Nov. Z
2021 Q June T Dec. I
Use tool only with 18 V Makita battery

- BL1860(B) 55 min. RAL6UK
- BL1850(B) 45 min. RAL4
- BL1840(B) 36 min. RAL40
- BL1830 22 min. RAL2

10 - 40°C
**Scope of delivery**
Please check whether you received all parts mentioned in the scope of supply:

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Qty.</th>
<th>Description</th>
<th>Art.#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Battery hydraulic pump</td>
<td>AHP700LUIS</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Battery 18 V DC / 6 Ah / Li-Ion</td>
<td>RAL6UK</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>High-pressure hoses 3m incl. oil</td>
<td>HSOEL3</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Quick-charger</td>
<td>LGL1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Shoulder strap</td>
<td>TG3</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Instruction manual</td>
<td>HE.17532</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Hand switch</td>
<td>HTA4</td>
</tr>
</tbody>
</table>

**Accessories**
The following accessories can be ordered:

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
<th>Art.#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mains adapter 18 V for 230 V voltage</td>
<td>NG2230</td>
</tr>
<tr>
<td>2</td>
<td>Foot switch</td>
<td>FTA4</td>
</tr>
<tr>
<td>3</td>
<td>High-pressure hoses 2m incl. oil</td>
<td>HSOEL2</td>
</tr>
<tr>
<td></td>
<td>High-pressure hoses 4m incl. oil</td>
<td>HSOEL4</td>
</tr>
<tr>
<td></td>
<td>High-pressure hoses 6m incl. oil</td>
<td>HSOEL6</td>
</tr>
</tbody>
</table>

**Technical data**
- **Nennspannung (Nominal voltage):**
- **Betriebsdruck (Operating pressure):** 700 bar (max.)

**Accessories**
- **1** Mains adapter 18 V for 230 V voltage
- **2** Foot switch
- **3** High-pressure hoses 2m incl. oil
- **3** High-pressure hoses 4m incl. oil
- **3** High-pressure hoses 6m incl. oil
- **Ø 140 mm min.**

**Dimensions:**
- **pic. similar**

**Notes:**
- **pic. 20**
- **pic. similar**
### Tab. 1

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Lightning bolt]</td>
<td>20 sec after working cycle</td>
<td></td>
</tr>
<tr>
<td>![Alert icon] ![Alert icon]</td>
<td>2 x after inserting the battery</td>
<td>Self check</td>
</tr>
<tr>
<td>![Lightning bolt] ![Lightning bolt]</td>
<td>20 sec/2Hz after working cycle</td>
<td></td>
</tr>
<tr>
<td>![Alert icon] ![Alert icon] ![Alert icon] ![Alert icon] ![Alert icon] ![Alert icon]</td>
<td>20 sec/5Hz while exceeding the temp. limit</td>
<td>Unit too hot</td>
</tr>
<tr>
<td>![Lightning bolt] ![Alert icon] ![Alert icon] ![Lightning bolt] ![Lightning bolt] ![Lightning bolt]</td>
<td>20 sec 20 sec/2Hz after working cycle</td>
<td></td>
</tr>
</tbody>
</table>
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2. Warranty
3. Description of the electro-hydraulic pumping unit
   3.1 Description of components
   3.2 Brief description of the important features of the unit
   3.3 Description of the tool indication
   3.4 Description of crimping cycles
3. Remarks in respect of the determined use
   4.1 Operation of the unit
   4.2 Explanation of the application range
   4.3 Oil changing and maintenance cycles
   4.4 Reference, as to which (spare-) parts can be exchanged by the customer
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General Safety Rules

Use safety gear and always wear eye protection.

Avoid unintended starts, e.g. remove battery.
Keep proper footing and balance at all times.
Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.
Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.
Store unused power tools out of the reach of children. Do not allow persons unfamiliar with the power tool or these instructions to operate the power tool (NG2230).
Maintain power tools thoroughly. Check for functionality or jamming of moving parts, breakage of parts and any other condition that may affect the power tools operation.
Have the power tool repaired by a qualified expert or by a Klauke ASC before use.
When connecting/disconnecting the hydraulic hose the pump must be depressurized, respectively the piston must be fully retracted.
Symbols

Safety Warnings
Please do not disregard to avoid injuries and environmental damage

Application Warnings
Please do not disregard to avoid damaging the tool.

1. Introduction

Before starting to use the tool please read the instruction manual carefully.

Use this tool exclusively for its determined use and follow all applicable safety instructions.

Mounting and assembly of connecting material with the help of this tool must only be performed by specially trained personnel. The minimum age is 16 years.

This instruction manual has to be carried along during the entire life span of that tool.

The operator has
• to guarantee the availability of the instruction manual for the user and
• to make sure, that the user has read and understood the instruction manual.

2. Warranty

If the tool is operated according to its intended use and the regular maintenance services are observed our warranty is 24 months from the time of delivery. Worn-out parts resulting from its intended use are excluded. We reserve the right to rework the tool in case of a justified warranty claim.
3. Description of the electro-hydraulic pumping unit

3.1 Description of the components

The electro-hydraulic pumping unit consists of the following components:

Table 2 (see pic.1)

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Battery (RAL6UK/BL1860)</td>
<td>rechargeable 6 Ah Li-Ion battery (RAL6UK/BL1860)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Optional:</em> mains adapter NG2230</td>
</tr>
<tr>
<td>2</td>
<td>Battery lock</td>
<td>Slide to unlock the battery</td>
</tr>
<tr>
<td>3</td>
<td>Emergency stop button</td>
<td>To reset the crimping tool into the starting position in case of an error</td>
</tr>
<tr>
<td>4</td>
<td>Compartment</td>
<td>~ e.g. for remote control and/or carrying belt</td>
</tr>
<tr>
<td>5</td>
<td>Male plug</td>
<td>Male plug to connect to a female plug on the hose</td>
</tr>
<tr>
<td>6</td>
<td>Socket</td>
<td>for remote control, safety foot switch and other controls</td>
</tr>
<tr>
<td>7</td>
<td>Oil plug</td>
<td>Oil plug with inspection glass for the hydraulic oil</td>
</tr>
<tr>
<td>8</td>
<td>Program selection switch</td>
<td>Turning knob for the selection of special programs for crimping as well as a position to read out data.</td>
</tr>
<tr>
<td>9</td>
<td>OLED Display</td>
<td>High tech organic display to indicate tool and crimping/cutting data</td>
</tr>
<tr>
<td>10</td>
<td>LED (red)</td>
<td>Indicator for Battery charge, Service Intervals and faults</td>
</tr>
<tr>
<td>11</td>
<td>Forward and return keys</td>
<td>To start/stop the working cycle</td>
</tr>
</tbody>
</table>
3.2 Brief description of the important features of the unit

The unit is equipped with a special brake which stops the forward motion of the piston/dies when the trigger is released.

The unit is equipped with a double piston pump which is characterised by a rapid approach of the dies towards the connector and a slow crimping motion.

All tool functions can be controlled by one rocker trigger (pic. 1.11). This results in an easy handling.

The tool is equipped with a microprocessor which indicates service intervals and low battery charges and performs internal checks sending out acoustical and optical warning signals in case of a detected fault.

Li-Ion batteries do neither have a memory effect nor self discharge. Even after long periods of non operation the tool is always ready to operate. In addition we see a lower power weight ratio with 50% more capacity and shorter charging cycles compared to NiMH batteries.

The oil used in our tool is particularly environmentally friendly and and has been rewarded „The Blue Angel“. The oil is also suitable for low temperatures and has excellent lubrication characteristics.

Hydraulic Pressure Check, HPC for short, monitors the oil pressure in the tool’s oil circuit, hence ensuring a continuous, consistent press quality.

During each pressing cycle, the achieved pressing pressure is determined by a pressure sensor and compared to the required minimum value. An audible warning signal sounds if the achieved pressure differs from the specified working pressure. The user will know immediately that the fitting must be checked and repressed or replaced as required. The pump can be operated and transported in all positions without any oil leakages.

3.3 Description of the tool indication

This tool is equipped with a special circuit board incorporating several important features to inform the user about the current status of the unit. Please see Table 2 for more details.

Prior to operating the unit the charging level of the battery (pic. 1.1) should have been tested. A low charging level can be detected by the LCD display (pic. 1.9).
3.4 Description of crimping cycles

A pressing procedure will be initiated by actuating the trigger. The pressing process is defined by the closing motion of the pressing jaws. The rollers on top of the ram close the pressing jaws scissors like.

**Attention**

*For information concerning the suitability of the tool with regard to dimension and field of application (gas/water/heating etc.), please refer to the documentation of your system manufacturer.*

**Attention**

*The user has to check by optical means whether the pressing jaws are completely closed.*

**Attention**

*If a pressing cycle has been interrupted the fitting has to be either dismantled or pressed a second time.*

**Attention**

*Do not operate the tool without jaws.*

4. Remarks in respect of the determined use

The pump can be transported and operated in any position.

4.1 Operation of the unit

1. The female coupling of the hydraulic hose HSOEL2 (pic. 25.4) must be connected to the male coupling (pic. 1.5) of the pump (pic. 16).
2. Select the right working unit for the intended application.
3. The selected working unit will be connected via the hydraulic hose HSOEL2 (pic. 25.4) with the pump (pic. 16)

**Attention**

*Do not operate the pump without a working unit.*

**Attention**

*Before starting to operate the pump the oil level must be checked and possibly adjusted. (pic. 13 - 15).*
4. Besides the built-in trigger (pic. 1.11) the following accessories can be connected:
   • Remote control HTA4 (pic. 25.8)
   • Safety foot switch incl. 4m cable FTA4 (pic. 26.2)
   The pump recognises the various accessories through a special coding; the forward key (pic. 1.11) will be deactivated accordingly.

5. The battery and possibly the spare battery will be plugged into the sockets (see pic. 12).
6. The pump is now ready to operate. The LCD display (pic. 1.9) is activated.
7. Select the program for the intended application by turning the selection knob (pic. 1.8) or the data function.
8. The working cycle is initiated by activating the advance function of the forward and return keys (pic. 1.11)

**Attention**

*The crimping cycle can be stopped at any time by releasing or stepping down the actuator of the safety foot switch (pic. 26.2).*

Once the three step safety foot switch has been stepped down, it can only be reactivated by pushing the reset button of the foot switch. This reset button is located on the top of the foot switch.

**Attention**

*After having terminated the working cycle and prior to changing the dies remove battery to avoid unintended use. Avoid unintended starts. Make sure the switch is in the off position before plugging in.*

For transport turn the program selection switch (pic. 1.8) to position 7 to avoid unintended starts.
4.2 Explanation of the application range
The battery hydraulic pump can be operated with all of the cutting-/crimping- and punching heads in our catalogue.

**Attention**
*Do not crimp on live cables or conductors.*
Before starting to work make sure there are no live lines in the working area.
The tool is not designed for continued operations. After a sequence of approximately 100 completed cycles you have to make a break of 15 min. to give the tool time to cool down.

**Attention**
*Too intensive use can cause heat damages for the tool*

**Attention**
*During the operation of electric engines sparks can occur which might ignite highly inflammable or explosive liquids and materials*

**Attention**
*Electric-hydraulic tools should not be operated in pouring rain or under water.*
The tool can be operated in a temperature range of -12°C bis +40°C inside as well as outside.

4.3 Oil changing and maintenance cycles
For every day service the tool has to be cleaned and dried after each use. The battery cartridge and the charging unit have to be protected against humidity and dust.
The pump has an oil plug with inspection glass (pic. 1.7) which can be used to determine the proper oil level. If the oil level should be too low the reservoir must be refilled (pic. 13 - 15).
The following hydraulic oils are suitable for a temperature range -12°C to +40°C:

*Hydraulic oils based on Ester:* Rivolta S.B.H. 11, Shell Naturell HF-E 15


Other equivalent hydraulic oils can also be used.
The hydraulic hose and the armature must be checked for damage and leakage.
Attention

Maintain power tools thoroughly. Check for functionality or jamming of moving parts, breakage of parts and any other condition that may affect the power tools operation.

The battery-hydraulic pump is equipped with a controller enabling the user to see when the next service is due by flashing for 20 sec. at the end of a working cycle. When the next service is due after 10,000 cycles the unit must be returned to an authorised service center (ASC). Failure to observe this request results in loosing the Warranty. Preventive maintenance serves your safety. Within the determined use of the tool only the batteries are permitted to be changed by the customers.

Attention

Do not damage the seals of the tool

Attention

Have the power tool repaired by a qualified expert or by a Klauke ASC before use.

It is advisable to have the pump serviced by a specialist during regular intervals to safeguard a technically proper state before use.

Table 3 - Service schedule

<table>
<thead>
<tr>
<th>What?</th>
<th>When?</th>
<th>Who?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning</td>
<td>after each use</td>
<td>Service personnel</td>
</tr>
<tr>
<td>Check oil level</td>
<td>weekly</td>
<td>Service personnel</td>
</tr>
<tr>
<td>Check high pressure hose</td>
<td>weekly</td>
<td>Specialist</td>
</tr>
<tr>
<td>Proper state</td>
<td>quarterly</td>
<td>Electric specialist</td>
</tr>
<tr>
<td>Change hydraulic oil</td>
<td>annually</td>
<td>Manufacturer/Specialist</td>
</tr>
</tbody>
</table>

The hydraulic oil has to be completely changed annually or after 10,000 working cycles.

We recommend to have the service done in specialised companies where the safe disposal of the oil is guaranteed for environmental protection.

Attention

Please use only clean, proper hydraulic oil. (Rivolta S.B.H. 11 and other hydraulic oils of similar quality)
Attention

Hydraulic oils can cause cutaneous eruption (eczema) or other health hazards. Avoid longer skin contact. Wash your hands carefully after each contact.

Attention

Spilled hydraulic oil has to be absorbed immediately.

4.4 Reference as to which spare parts can be exchanged by the customers

Within the determined use of the tool the customers may only change the oil.

Attention

Do not damage the seals of the pump.

Do not attempt to repair the tool yourself, and do not remove any parts such as screws and other components.

5. Troubleshooting

a.) Constant flashing/indicating of the red LED (pic 1.10) or the occurrence of an acoustical warning signal.
   ⇒ see tab. 2. If the failure cannot be resolved through the action recommended in tab. 2 return the unit to the nearest service center (ASC).

b.) The tool or the crimping head loses oil.
   ⇒ Return the unit or the accessories to the manufacturer. Do not open it and damage the seal of the tool.

c.) The red LED flashes 3x and simultaneously 3 acoustic warning signals occur (see tab. 1).
   ⇒ Serious fault! If this fault occurs repeatedly return the unit to an Authorized Service Center (ASC). Do not open it and damage the seal of the tool.

   In case of a one time occurrence the connector has to be pressed a second time.
6. Technical Data

<table>
<thead>
<tr>
<th>Spec</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>max. operation pressure:</td>
<td>172 bar / 700 bar</td>
</tr>
<tr>
<td>Hydraulic oil:</td>
<td>Rivolta S.B.H. 11</td>
</tr>
<tr>
<td>Reservoir capacity:</td>
<td>approx. 760 ml</td>
</tr>
<tr>
<td>Useable oil capacity:</td>
<td>approx. 740 ml</td>
</tr>
<tr>
<td>Environmental temperature:</td>
<td>-12°C bis +40°C</td>
</tr>
<tr>
<td>Control voltage:</td>
<td>18 V DC</td>
</tr>
<tr>
<td>Driving motor:</td>
<td>direct-current permanent</td>
</tr>
<tr>
<td>Weight of the unit:</td>
<td>approx. 4,9 kg</td>
</tr>
<tr>
<td>Battery voltage:</td>
<td>18 V</td>
</tr>
<tr>
<td>Battery capacity:</td>
<td>6 Ah (RAL6UK/BL1860)</td>
</tr>
<tr>
<td>Charging time:</td>
<td>55 min. (RAL6UK/BL1860)</td>
</tr>
<tr>
<td>Sound level:</td>
<td>&lt; 70 dB (A) in 1m distance</td>
</tr>
<tr>
<td>Vibrations:</td>
<td>&lt; 2,5 m/s²</td>
</tr>
</tbody>
</table>

7. Putting out of action/waste disposal

This unit is subjected to the scope of the European WEEE (2012/19/EU) and RoHS (2011/65/EU) directives. Information about this can be found in our home page www.Klauke.com under ‘WEEE & RoHS’. Battery cartridges must be specially disposed of according to the EEC Battery Guideline.

Attention

Do not dispose of the unit in your residential waste. Klauke has no legal obligation to take care of their WEEE outside Germany unless the product has been shipped and invoiced from inside your country by Klauke. Please contact your distributor to find out more how to get your tool recycled environmental friendly.

Address:
klauke-weee-abholung@emerson.com

Remark

Additional instruction manuals are available free of charge. The part # is HE.17532. The Instruction Manual can also be downloaded from our Homepage www.klauke.textron.com.
Battery-hydraulic Pump  Type AHP700LUIS

(D) CE - Konformitätserklärung. Wir erklären in alleiniger Verantwortlichkeit, daß dieses Produkt mit den folgenden Normen oder normativen Dokumenten übereinstimmt:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 gemäß den Bestimmungen der Richtlinien 2004/108/EU, 2011/65/EU

(GB) CE - Declaration of conformity. We declare under our sole responsibility that this product is in conformity with the following standards or normative documents:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 in accordance with the regulations of directives 2004/108/EC, 2011/65/EC

(F) CE - Déclaration de conformité. Nous déclenons sous notre seule responsabilité que ce produit est en conformité avec les normes ou documents normatifs suivants:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 conformément aux réglementations des directives 2004/108/EC, 2011/65/EC

(NL) CE - Konformiteitsverklaring. Wij verklaren en wij stellen ons er alleen voor verantwoordelijk dat dit produkt voldoet aan de volgende normen of normatieve documenten:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 overeenkomstig de bepalingen van de richtlijnen 2004/108/EC, 2011/65/EC

(P) CE - Declaração de conformidade. Declaramos sob nossa exclusiva responsabilidade que este producto cumpre as seguintes normas ou documentos normativos:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 conforme as disposições das directivas 2004/108/EC, 2011/65/EC

(CZ) CE - Konformitetsprohlášení. Prohlašujeme na vlastní zodpovědnost, že tyto produkty splnují následující normy nebo normativní dokumenty:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 eu ve shode se smernicemi 2004/108/EC, 2011/65/EC

(RO) CE - Declarația de conformitate. Noi declarăm pe propria răspundere că acest produs este în conformitate cu următoarele norme și documente normative:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 în conformitatea directivelor 2004/108/EC, 2011/65/EC

(S) CE - Konformitetsdeklaration. Vi förklarar på eget ansvar att denna produkt överensstämmer med följande normer eller normativa dokument:
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 enligt bestämmelserna i direktiven 2004/108/EC, 2011/65/EC

(HR) CE - Izjava o sukladnosti. Pod punom odgovornošću izjavljujemo da je proizvod naveden u naslovu
EN ISO 12100, EN 60204-1, EN 55014-1, EN 55014-2, EN 60529, EN 982, EN 1037, EN 61000-3-2, EN 61000-3-3 u skladu sa odredbama preporuka 2004/108/ES, 2011/65/ES

(Dipl.-Ing. Joh.-Christoph Schütz, CE-Beauftragter)
Remscheid, den 01.07.2016

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