

Vetec CPN700

Instruction manual

*Compact hydraulic pump
with accumulator*



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**Please read this instruction manual carefully before using our product. In case of any open issues or questions, please contact our service center immediately.
(Find Information on the last cover page)**

Index

1.	Technical data	4
2.	Definition of components basic unit	4
3.	Accessories supplied with the basic unit	6
4.	Description of signs and symbols	6
5.	General information	7
6.	Guarantee	7
7.	Field of application and inappropriate application	7
8.	Safety instructions when using the equipment	8
9.	Storage and transportation	9
10.	Start-up of the equipment	10
11.	Information for the use of the power pack and battery charger	10
12.	Functions	12
12.1	<i>Remote control unit</i>	13
13.	Working cycles standard program	13
13.1	<i>„Compression“ working cycle</i>	13
14.	Tool variations	14
15.	Maintenance instructions	15
16.	Technical features and performance	15
17.	Rating plate	16
18.	Installation instructions of software	16
18.1	<i>System requirements</i>	16
18.2	<i>Software installation through apparatus / CD</i>	17
18.2	<i>Plug & Play</i>	17
19.	What to do in case of dysfunction	18
19.1	<i>Error codes</i>	18
19.2	<i>Oil filling</i>	20
19.3	<i>Changing the filter</i>	20
20.	Removal from service/disposal	21
21.	Guarantee/Repair	22

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1. Technical data

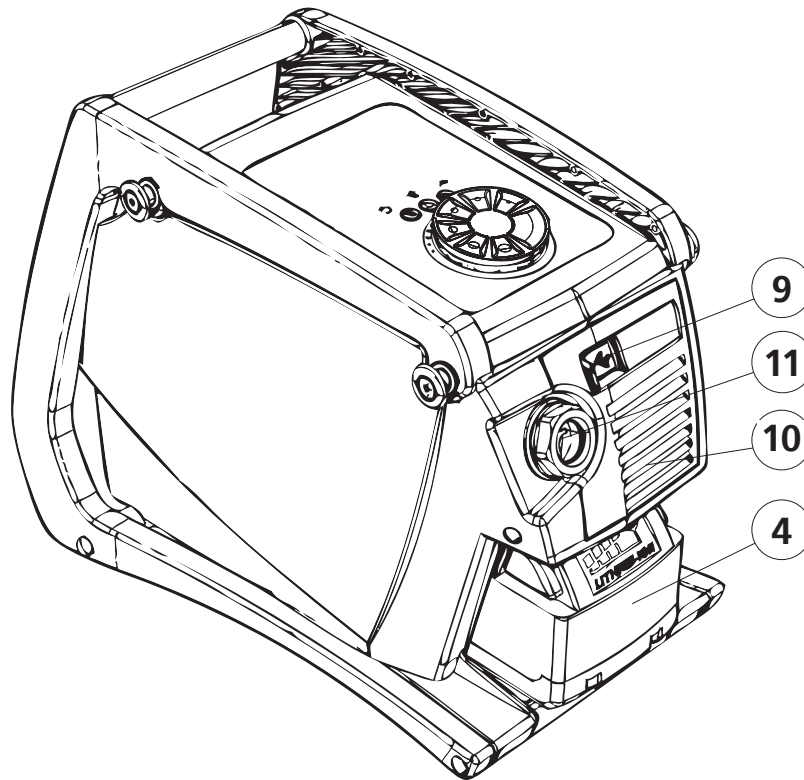
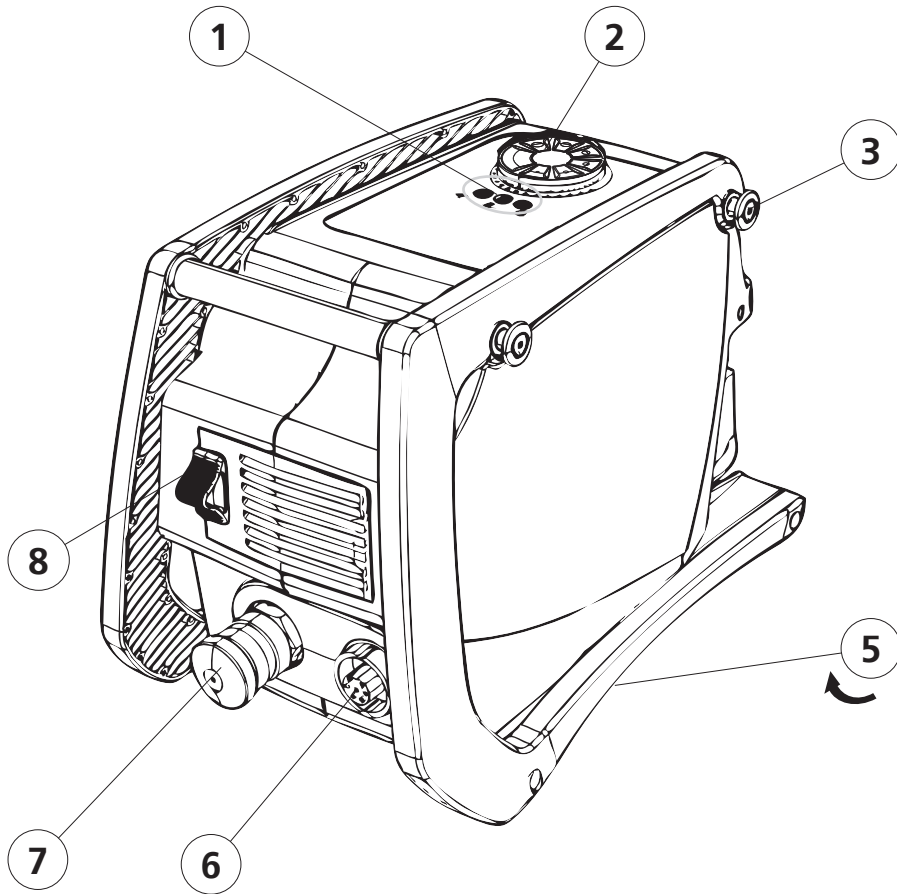
Operating pressure:	700 bar (70 MPa)
Max. Lift:	depending on the tool used
Battery voltage:	18 V DC
Drive motor:	DC permanent magnet motor
Battery capacity:	3,0 Ah
Time of pressing cycle	approx. 4-7 sec. (depending on ND)
Type of battery:	Li-Ion (without memory effect)
Charging time:	approx. 60 min.
Compression time	depending on the tool used
Noise level:	70 dB (A) at a distance of 1 m
Acceleration:	< 2,5 m/s ² (weighted root mean square acceleration)
Hydraulic oil:	750 ml usable type „Shell-Naturelle HF-E15“
Operating temperature:	from -20 °C to +50 °C
Dimensions basic unit:	approx. 300 x 195 x 210 mm (incl. power pack)
Mass basic unit:	approx. 4,7 kg (incl. power pack)
Class of protection:	IP 43

2. Definition of components basic unit

Item	Definition	Item	Definition
[1]	LED operating indicator lights	[7]	Hydraulic connection (max. 700 bar)
[2]	Return - Handwheel	[8]	Mechanical emergency return switch
[3]	Shoulder strap support	[9]	USB interface
[4]	Power Pack	[10]	Air filter
[5]	Name of model & technical data	[11]	Oil filling screw
[6]	Connection for remote control		

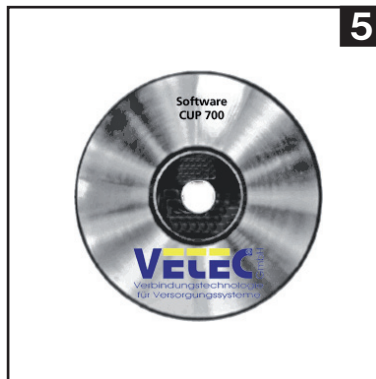
The name of the model, the manufacturer’s data, the serial number and technical data are located on the bottom of the CPN700 compact pump.

 **Caution:** The mechanical return switch allows the operator to restore the tool to the starting position in emergency cases and thus to remove the pressure from the tube and operating keys.



3. Accessories supplied with the basic unit

Item	Definition	Item	Definition
[1]	1.5m pressure hose	[4]	USB 2.0 cable with 5 pole mini type connectors: A plug and B socket
[2]	Remote control unit	[5]	CD-ROM
[3]	C 18 C type battery charger AEG 18 V CC/3Ah type battery	[6]	Shoulder strap



4. Description of signs and symbols

- Danger:** This indicates a warning; lack of observance may lead to injury or death.
- Paragraphs:** Product safety information.
- Caution/Important:** This indicates a warning; not following this warning may lead to damage of the equipment or materials.
- Operation and maintenance:** Advice and indications in order to maintain the product's value.
- Information:** Useful information for the proper application of this product.



Read the instruction manual before usage



Wear goggles



Caution!
Danger of squeezing

5. General information



The manufacturer shall not be liable for any damages or injury resulting from non-observance of the operating instructions.

This device must be used exclusively for its intended use. This product shall only be used by personnel who have received training whereas the instruction manual must be carried along with the device for its entire life period..

The user is required to:

- make the instruction manual available to operators
- ensure that the operator has read and understood the instructions



For all legal intents and purposes, the German versions of this instruction manual is legally binding.















6. Guarantee


The manufacturer must be notified in writing of any defects in the product latest and within 8 days after receipt of the same, enclosing the shipment documents and a detailed description of the defect(s). In case of hidden defects, the claim in this regard must be made within eight (8) days of its detection and not later than one year after receipt of the product. We shall not be held liable for any defects claimed after the above mentioned period. The guarantee does not cover any damage caused by improper handling, poor maintenance, by using other than original Vetec spare parts, by opening the devices by non-authorized staff. In case of repairs the warranty is extended on the replaced parts but not on the entire tool.


7. Field of application and inappropriate application

The CPN700 compact pump is suitable for the operation of hydraulic tools which are designed for an operating pressure of at least 700 bar. Only those cutting and compression tools shall be used that are suitable in terms of operating pressure and capacity. The pump cannot be connected with hydraulic equipment other than the tools foreseen. It is strictly prohibited to use the pump on lifting equipment, lifting cylinders and similar devices. The battery powered CPN700 pump may be used exclusively in environments with illumination of at least 400 lux, or in daylight. Please refer to the provided instruction manuals concerning the respective fields of application of hydraulic tools.

8. Safety instructions when using the equipment

-  **Caution:** In case of non-observance of the safety instructions there is danger to life and health or it can cause material damage to the machine and the surrounding environment!
-  **Caution:** Never place fingers or other parts of the body into the working area of the tool head!
-  **Caution:** Keep other people, particularly unauthorized people, away from the working area during the operation with the battery-powered tool!
-  **Caution:** Wear appropriate workwear, gloves and safety shoes!
-  **Caution:** Inspect the battery powered tool to make sure it has not been damaged. Only use the machine if it is free of defects and works failure-freely!
-  **Caution:** If situations of danger for persons or for the machine occur during operation, stop the CPN700 compact pump by pressing the return button on the remote control.
-  **Caution:** The pressure hose must be designed for a nominal pressure of 700bar (70MPa) and must not be damaged, bent or worn.
-  **Caution:** In the event of serial assembly, it is necessary to use the shoulder strap provided with the machine.
-  **Caution:** The operator must always have the battery pump at hand.
-  **Caution:** Accessing the danger zone of the pressing tool is only permissible when the tool is completely opened and the battery removed.
-  **Caution:** The battery may only be removed when the pump CPN700 has been shut down safely.
-  **Caution:** During work performed at heights the tool must be adequately protected from falling.
-  **Caution:** Before using the equipment, it is necessary to perform a visual inspection to ascertain the condition of the CPN700 Compact pump. In case of damage do not use the device.
-  **Caution:** Reverse movement is activated exclusively with the relative key (on the remote control unit). The mechanical release lever located on the equipment must be used in emergency situations.

 **Caution:** Do not open the machine! All terms of the warranty become invalid if the seal is damaged. The equipment must not be operated without protective cover.

 **Caution:** If the service warning light flashes up, the device must be sent to the manufacturer. The customer is not authorized to perform any maintenance as this would entail the loss of guarantee and can lead to situations of danger.

 **Caution:** The typical A-weighted noise level can exceed 70dB (A) during operation. - Wear ear protection!


 **Caution:** The equipment shall only be operated with the original power packs.

 **Caution:** The equipment must not be operated in explosive atmospheres.

 **Caution:** Complete shutdown of the equipment takes place exclusively upon removal of the battery.

 **Caution:** If oil leaks from the Compact pump, it must be sent to an authorized customer service department.

 **Caution:** The CPN700 compact pump must not be operated in case of heavy rain or underwater.

 **Caution:** Hydraulic oils pose a risk to the ground water. Uncontrolled discharge or disposal of hydraulic oils not in conformity with norms may be persecuted under environmental protection laws.

 **Caution:** The applied components must demonstrably withstand the occurring temperatures.

9. Storage and transportation

In order to protect the CPN700 compact pump from possible damage, it is necessary to clean it after every use and to protect it with the respective protection caps for the hydraulic connection and remote control connection. After cleaning stow away the tool in the provided cotton bag and make sure it is securely closed..




10. Start-up of the equipment

Remove the protection caps from remote control and hydraulic connection from the CPN700 compact pump. Next, connect the pressure tube and remote control unit as shown in the illustration.



Insert the battery on the rear of the unit (see illustration) and push until the safety switch clicks.

Attach the shoulder strap as shown in the illustration.

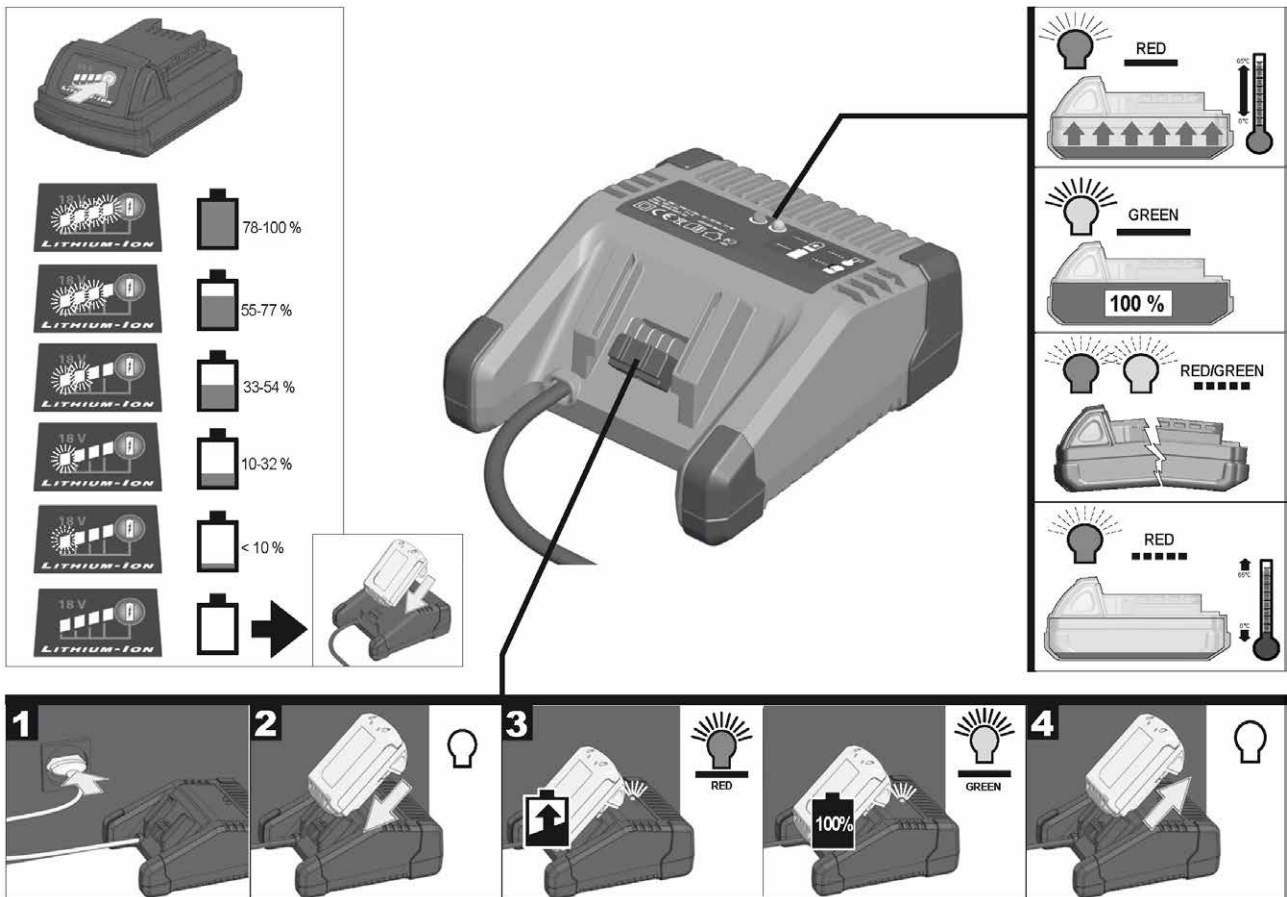
 **Caution:** The eyelet of the shoulder strap can only be hooked or unhooked in the position illustrated.



11. Information for the use of the power pack and battery charger

The battery charger is designed for 230 V CA 50-60 Hz. The new batteries are provided partially charged and must be charged before using the machine for the first time. In order to recharge the battery, the charger plug must be inserted into a wall socket and the power pack must be placed in the battery charger. A 3.0 Ah power pack can be recharged in approximately 60 minutes. The status of the charge for the power pack is indicated by the luminous diode on the battery charger.

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⚠ Caution: When the power pack is not being used keep it away from paper clips, coins, keys, nails, screws and other small metal objects which could act as contact bridges. A short circuit between the battery contacts could cause combustion or fires.

⚠ Caution: Do not charge the power pack in the presence of easily inflammable gas or materials. After charging, remove the battery charger plug from the wall socket. Do not disassemble the battery charger.

⚠ Caution: In case of longer storage periods the state of charge of the battery must be checked periodically. The optimum charge is between 50% and 80%. The power packs should be recharged every 12 months at most to avoid complete discharge which could cause damage.

⚠ Caution: Discharged power packs should not be stored for periods of more than one month to avoid depth discharge which could destroy the battery.

⚠ Caution: Only use battery chargers recommended by the manufacturer. There is a danger of fire when using a battery charger suitable for a specific type of battery for recharging other batteries.

⚠ Caution: Only use those batteries specified for the tools. The use of other batteries could cause injury and the danger of fire.

Caution: In case of improper use liquid could leak from the battery. Avoid contact with the liquid. Leaking battery liquid can cause skin irritations or burns. In case of contact with the skin, rinse with abundant water. Consult a physician if liquid contacts eyes.



The charge status can be read by pressing the relative button on the power pack. In doing so the battery may remain in the CPN700 compact pump which must be shut off beforehand, however, and remain

shut off for at least one minute (otherwise, the reading will be imprecise).

The number of flashing LEDs indicates the charge status. A flashing LED indicates a maximum power reserve of 10%. This indicator should only be used for assessing the power reserve. The real power consumption depends on the applied working parameters which are taken into account by the battery indicator on your compact CPN700 pump.

For further information please refer to the instructions for use provided with the battery charger.



ENGLISH

12. Functions

In order to turn on the CPN700 compact pump, briefly press the „+“ button on the remote control unit (the LED ON light will flash briefly). The machine also shuts down automatically after 3 minutes on standby with no activity.



1 LED on indicator light

2 Return - Handwheel



Automatic mode (flashes during any automatic movement)

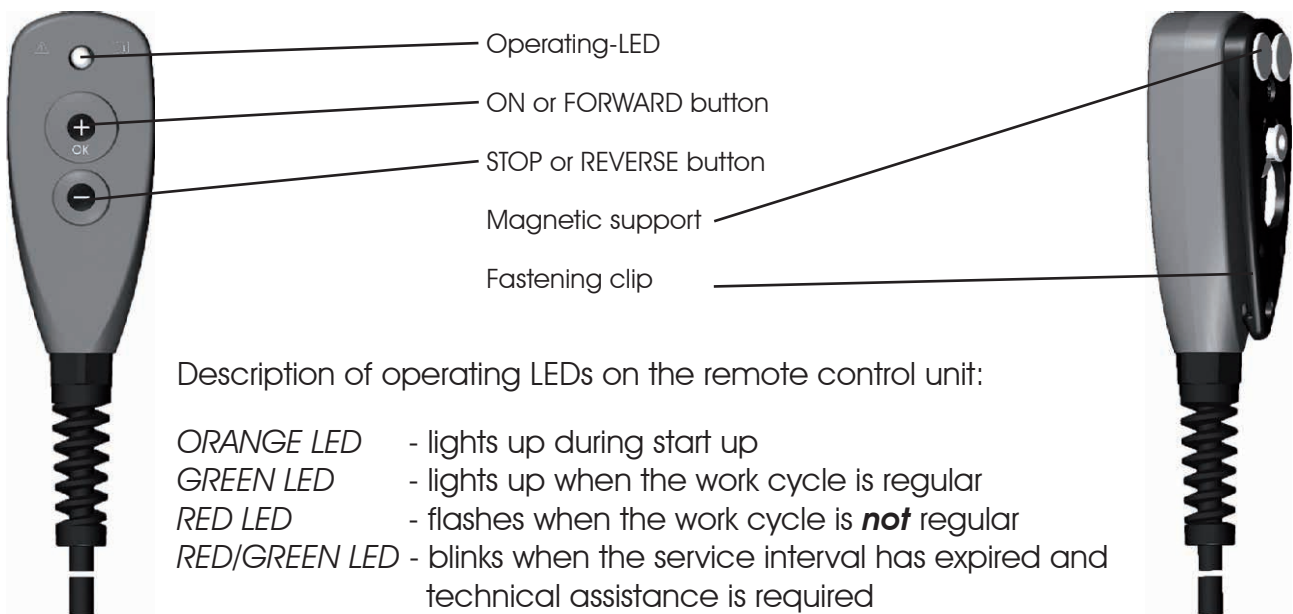


Battery charge indication



Information about failures (see chapter 19.1 for flashing codes. See paragraph „LED Technical Assistance“ for what to do in the event of failures).

12.1 Remote control unit

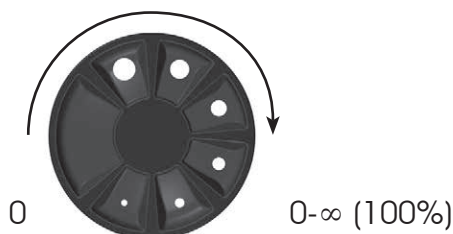
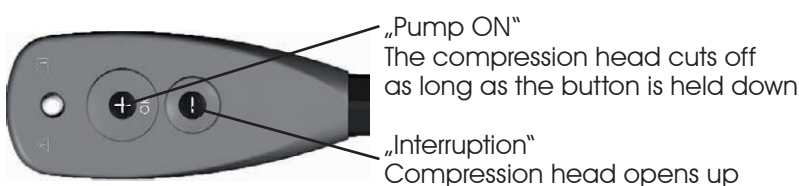


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13. Working cycles standard program

13.1 „Compression“ working cycle

In order to perform the working cycle, hold the „+“ button down until the green LED lights up on the remote control unit (at the same time the green info-service LED lights up as well), signalling that the working cycle has been successfully concluded. If the „+“ button is released during forward movement, the tool automatically stops. Thereupon the tool automatically reverses for the duration of the return time set. However, you can stop the reverse movement at any time by pressing the „+“ button. If the return time set is too short, you can reverse manually by holding the „+“ button down. During reverse movement, the LED indicating the automatic mode lights up.



14. Tool variations

14.1 Pressing tools

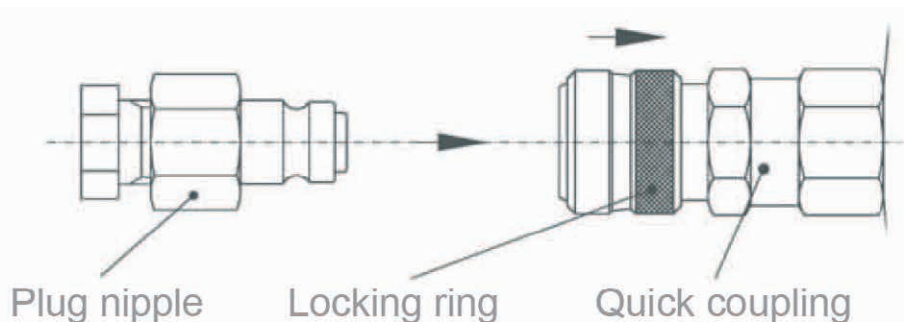


Press head 54-75



Press collar head

Remove the protection caps for the hydraulic connection and connect the high-pressure hose of your Compact pump CUP 700 with the tool heads by pulling back the locking snap ring of the quick connector type CEJN series 115, then by sliding the connection on the plug nipple, releasing the locking snap ring and checking the connection for tightness. Both the connectors must be totally clean. Disconnecting is performed in reverse order. Connecting and disconnecting is only possible in depressurized state. The pump must be turned off before connecting. The oil return flow must be initiated. Put the protection caps back on the connecting parts again after disconnecting for protecting them against dirt.



 **Caution:** The complete hydraulic connection must not be damaged, it may lead to oil leaking under pressure or the connection may break off.

Find more information on grouting with tool heads in their individual instruction manuals.

15. Maintenance instructions

The CPN700 compact pump must be cleaned after use and stored in a dry place. Both the power pack and the battery charger must be protected from humidity and foreign materials. Technically the equipment does not require maintenance. After completion of the previously set working cycles, it is necessary to take the CPN700 compact pump to the technical assistance service for inspection to guarantee perfect operation and to increase the long-life cycle of the machine. The customer is not authorized to perform any maintenance.



16. Technical features and performance

- The pump casing as well as all components are made of high resistance materials and are tested.
- The casing is entirely made of isolating, shock resistant polyamide, reinforced with fiber glass.
- The equipment has a light, compact and robust structure.
- The range of the operating temperature is between -20°C and $+50^{\circ}\text{C}$.
- The maximum operating pressure of the pump and power pack is 700 bar (70 MPa).
- The safety valve of the system is adjusted to 800 bar (80 MPa).
- The hydraulic coupling connection to the pump is in conformity with the CEJN S115 norm.
- The remote control unit has a start-up „ON“ and reverse button.
- The system is equipped with an extreme rapid advancement due to a special double piston technology, characterized by a low-pressure advancement and a slow high-pressure advancement.
- The capacity of the battery-powered press is 1.15 l/min under low pressure and 0.146 l/min under high pressure.
- Automatic conversion from low to high pressure takes place at approximately 90 bar (9 MPa).
- The machine has great reverse capacity for quicker working cycles.
- The equipment has a volume recognition system that permits precise work with or without the hydraulic hose (the machine may be connected directly to the pump).
- The return way of the working head is controlled by the software.
- The motor is activated by PWM (soft start to save the transmission, motor and battery).
- Control of the equipment is effected by a micro-controller.
- Pressure control is performed by an electronic pressure sensor.
- The charging state of the power pack is constantly monitored.

- Management of technical assistance is performed with an electronic system.
- The traceability of processes is ensured by automatic recording and saving in the machine memory.
- The data saved can be read and the software can be updated by a mini USB interface.
- Additional LED indicators provide rapid information on the status of the machine.
- The life cycle of the device is approximately 50,000 cycles.
- The first service assistance should be performed after 10,000 cycles, but can be freely programmed according to the conditions of use.
- Integrated and intelligent electronic module with a large LCD display.

17. Rating plate

Manufacturer:	Vetec
Item Nr.:	CPN700 compact pump
Serial Number:	CPN700
Year of construction:	20..
W:	200 W
V:	18 V d.c.
bar max.:	700 bar
IP Class:	43
Power pack:	18 V d.c./3 Ah

18. Installation instructions of software

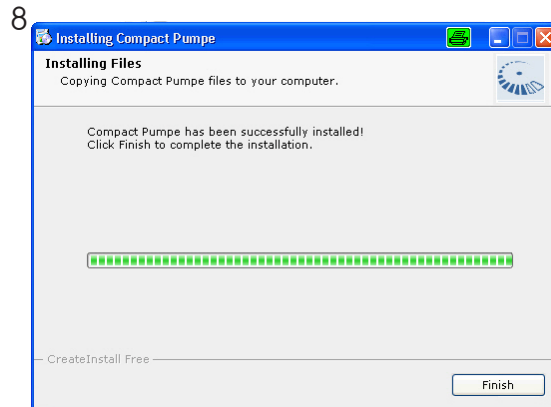
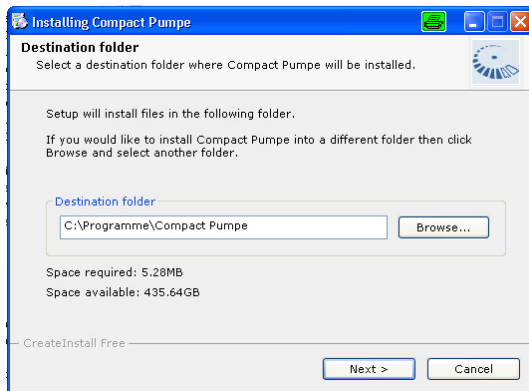
18.1 System requirements

The PC on which the software is installed must fulfill the following requirements:

Operating system:	Windows 2000, Windows XP, Windows Vista, Windows 7
CPU:	Pentium 4; 1,7 GHz at least
Random access memory:	512 MB or more (we advise at least 1 GB)
Hard disc:	200 MB (1 GB recommended)
Screen resolution:	1024 x 768 or higher, 65.535 colors or more
Miscellaneous:	CD-ROM-Reader, USB 2.0

18.2 Software installation through apparatus / CD

- 1 Remove battery
- 2 Hold down start stop button on the remote control at the same time while plugging in battery
- 3 Wait till both LEDs are flashing alternately
- 4 Push „+“ button on the remote control one time only. Automatically LED will light green
- 5 Compact pump is detected
- 6 run setup.exe
- 7 Installation of software by CD (point 6-10)



- 9 click „finish“
- 10 remove and plug in battery again

18.2 Plug & Play

After successful installation of the software provided the battery powered tool CPN700 is automatically recognized by the computer and the programs or data can thus be updated .

19. What to do in case of dysfunction

In case of dysfunction, the CPN700 compact pump is disused. The „service information LED“ signals the error code by the numbers of the flashing process.

The error code may be cancelled by removing and plugging in battery; this also resets the system. (The error codes shown below provide information to eliminate the problem). If the problem persists after resetting the CPN700 compact pump, contact an authorized customer service agent for assistance.

Error message - code 1: **Check the oil level**








Procedure: Unscrew the oil cap; if you cannot check the oil level, top up the oil to the brim with „Shell-Naturelle HF-E15 hydraulic oil“. (see 19.2)

Error message - code 7: **Check the air filter**









Procedure: Check the air filter, which is located above the power pack compartment and replace it if necessary. (see 19.3)





19.1 Error codes

Indications after inserting the power pack










Assistance LED 	Battery LED 	Error code	Description
 flashing red	 flashing red		Boot loader activated
 flashing orange			Error during initialization of the SD card
 lightning green			Regular initializations
	 lightning red	3	Battery tension low

Indications after inserting the power pack

Assistance LED 	Battery LED 	Error code	Description
 lightning red		1	Operating range not achieved at timeout
 lightning red		2	Operating value in red area
 lightning red			Operating value in yellow area
 lightning green			Operating value in green area
	 lightning red	3	Battery tension low
 flashing red/green			Assistance service interval expired

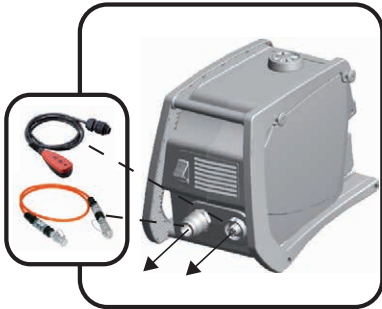
 flashing orange			SD card error
 lightning red		5	Overload
 lightning orange		6	Device too cold (continuous checking)
 lightning orange		7	Device too hot (continuous checking)

Other indications

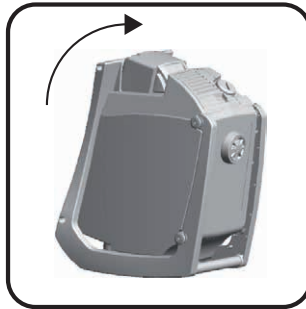
Assistance LED 	Battery LED 	Error code	Description
 lightning red		4	Error during initialization of sensor temperature
 lightning red		8	Drop in pressure during compression
 lightning red		9	Fan not working
 lightning red		10	Control of battery discharge (check battery)
	 lightning red	11	Low tension of 3.3V
 lightning red		12	Pressure sensor error; pressure below calibration value of 0 bar
 lightning red		13	I-Fuse error fuse/shunt burnt or motor operating without control

19.2 Oil filling

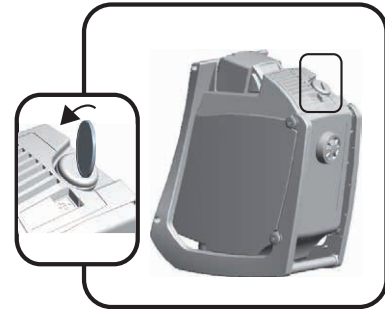
1 Disconnect coupling and remote control



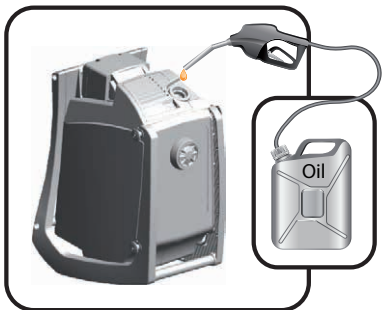
2 Position the device turning it by 90° (battery on top)



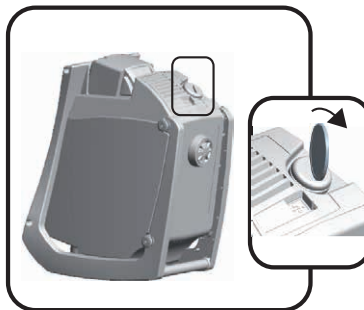
3 Unscrew with a coin



4 Fill to the brim with hydraulic oil „Shell-Naturelle HF-E15“

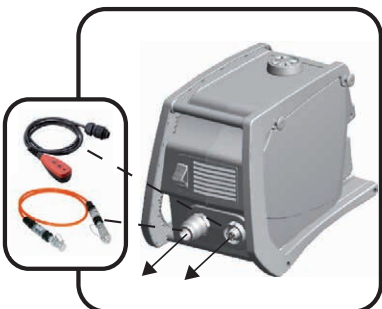


5 Tighten screw with a coin

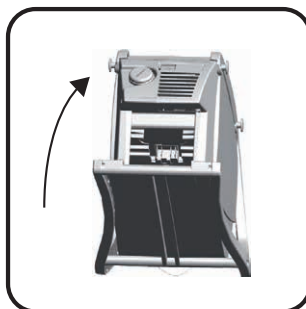


19.3 Changing the filter

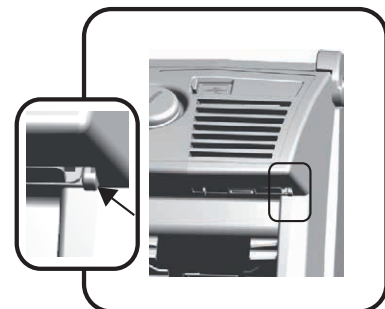
1 Disconnect coupling and remote control



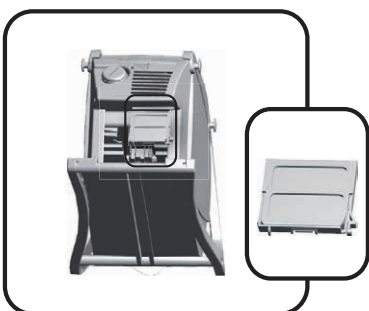
2 Lift the device



3 Press down lever



4 Remove filter



5 Insert new filter
Lever snaps into place

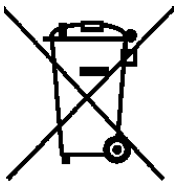


20. Removal from service/disposal

he individual components of the group must be disposed of separately. First of all it is necessary to drain the oil which must be taken to a special disposal centre.

Next it is necessary to dispose of the battery through a special procedure, taking into account the relative law. Concerning the disposal of the other group components observe European Environmental Norms, in respect of the regulations in effect in your country. In order to avoid possible environmental pollution it is advisable to have the disposal performed by specialized and authorized personnel.

If necessary contact our technical assistance service:



This product is in conformity with EU Directive 2002/96/EEC. The crossed out mobile dustbin shown on the device indicates that this product must be disposed of separately from domestic waste at the end of its lifetime. Therefore it must be taken to a collection centre of electric and electronic equipment or returned to the salesman when buying a new product. In each case the user is responsible for proper disposal of the equipment at the end of its lifetime according to the law. Only in case of taking the equipment to an authorized collection centre it is possible to process, recycle and dispose of the product in respect of the environment, so that on the one hand materials can be reused and on the other hand negative consequences for the environment and health can be excluded. More detailed information is available at the local waste disposal office or at the sales outlet where this equipment was purchased.

21. Guarantee/Repair

The manufacturer grants a warranty of 2 years or 20.000 cycles, if the tool is operated to its appropriate use from the beginning of the warranty period. The warranty period starts with the date of the 25th pressing cycle.

The warranty time extends to 36 month / max. 30.000 pressing cycles if a service/maintenance is carried out after 20.000 pressing cycles at an authorized service center – ASC.

After the 30.000 pressing cycle it is recommended to service the tool every year or after 10.000 cycles, whatever come first. This is in order to guarantee a proper function of the tool. A flashing Service LED on the tool refers the scheduled maintenance.

The unit should be cleaned after each use and stored at a dry place. Both battery and charger must be protected against moisture and foreign material. Check carefully the functionality and intactness of the unit and the moving parts.

The guarantee includes the removal of all occurring damages or defects of the unit which can be traced back to preexisting material and manufacturing defects at the time of the delivery.

The needed software to read out all data is in the scope of supply of the tool.

Not covered by the warranty:

- Damage/-s caused by improper use and/or inadequate maintenance.
- Damage/-s caused by pressing of unsuitable (not approved) connection materials and accessories.
- Battery, battery charger, switch-mode power supply.
- Parts subject to wear are not covered in the scope of the warranty.

Service and parts under warranty are free of charge. The user bears the outbound costs. Claims can only be accepted if the shipped tool arrives unopened (undamaged sealing) at an authorized service center (ASC)

The warranty becomes invalid in case of damaging.

**EG KONFORMITÄTSERKLÄRUNG
DICHIARAZIONE CE DI CONFORMITÀ
EC DECLARATION OF CONFORMITY
DECLARACIÓN CE DE CONFORMIDAD
DÉCLARATION CE DE CONFORMITÉ**

Wir
Noi
We
Nous
Nos

AusPress Systems Pty Ltd

(Name des Herstellers) (nome del fabbricante) (manufacturer's name) (nombre del fabricante) (nom du fabricant)

127 Corunna Avenue, Melrose Park SA 5039

(Anschrift) (indirizzo) (address) (dirección) (adresse)

erklären in alleiniger Verantwortung, dass das Produkt
dichiariamo sotto nostra unica responsabilità che il prodotto
declare under our sole responsibility that the product
declaramos bajo nuestra sola responsabilidad que el producto
déclarons sous notre seule responsabilité que le produit

Vetec CPN700

(Typ) (tipo) (type) (tipo) (type)

.....
(Seriennummer) (numero di serie) (serial number) (número de serie) (no de série)

folgenden europäischen Richtlinien entspricht
risulta in conformità alle seguenti direttive comunitarie
is in conformity with the following EC directives
es conforme con las siguientes directivas comunitarias
est conforme aux directives communautaires suivantes

2006/42/EG - 2006/95/EG – 2004/108/EG

und folgende Normen angewandt wurden
e che sono state applicate le seguenti norme
and that the following standards have been applied
y que se han aplicado las siguientes normas
et que les normes suivantes ont été appliquées

**EN ISO 12100; EN ISO 4413; EN 60745-1; EN 60529;
EN 61000-6-2; EN 61000-6-3**

Melrose Park SA, 27.09.2012

(Ort und Datum der Ausstellung)
(luogo e data di emissione)
(place and date of issue)
(lugar y fecha de emisión)
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