

Electric power pack

X / XB 1-Z

X / XB 2-Z

X / XB 3.5-Z



Operating manual





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1. Manufacturer

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2. Notes

2.1. 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.

2.2. Directives

The product meets the requirements of the EC Machinery Directive 2006/42/EC.

2.3. General information

- This page contains important instructions on how to operate, set up and connect the unit. Read these instructions carefully before putting the unit into operation.

Before using the hydraulic power pack, strictly follow the instructions provided in this manual. We are required by law to furnish you with importation information intended to ensure your safety and instruct you on how to avoid damage to the unit.

If you fail to observe this manual, Maschinenfabrik Wagner cannot be held responsible for damages resulting from any negligent or intentional violations of the instructions included in this manual.

- The operating manual is an integral part of the unit. It needs to be stored close to the unit at all times. Observing every detail of the manual is a requirement for using the unit correctly and as intended.
- The safety of the operator and the trouble-free operation of the unit are only guaranteed if you use original Plarad components. This applies to

both the parts of the unit and any spare parts

- If different components are used, Maschinenfabrik Wagner cannot guarantee the safe and reliable operation of the unit. Any claims based on damages resulting from the use of other components are excluded.
- Maschinenfabrik Wagner is only responsible for the safety, reliability and proper operation of the unit if installation, readjustments, modifications, expansions and repairs are performed by Maschinenfabrik Wagner or bodies authorised by Maschinenfabrik Wagner and if the power pack is used in accordance with the operating manual. This provision includes, in particular, the prohibition to modify the unit in order to use it for other applications.
- 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 without prior notice.

2.4. General safety information

- Operating the unit requires that you observe all laws and regulations applicable at the location where the unit is used. To ensure a safe workflow, the owner and the user are responsible to ensure compliance with all applicable regulations.
- The user is required to verify every time before using the unit that the unit operates in a reliable manner and is in proper condition.
- The user must be familiar with the operation of the unit.
- Unit and cables need to be checked for damages prior to start-up. Damaged cables and connectors need to be replaced immediately by qualified

experts who have been trained to replace these parts.

- When using an extension cord with a small cross-section and a great length, a voltage drop may occur which would affect the start-up performance of the motor. Any extension cords used must have a minimum cross-section of: 1.5mm² for a mains voltage of 230V 2.5mm² for a mains voltage of 100/110V.

When working outdoors, use only extension cords that are approved for this type of usage and labelled accordingly.

- Always unplug the power plug from the power outlet before performing any repairs or maintenance operations.
- The operator is only allowed to couple/uncouple the unit after it has been switched off as he may otherwise cause damage or allow hydraulic fluid to escape. This may result in eye injuries and burns. If contact with the eyes has occurred, follow the included MSDS (material safety data sheet of the operating material).

2.5. Attachment points

When transported by crane or other means of transportation, the unit must be fastened at the attachment points marked in image 1.

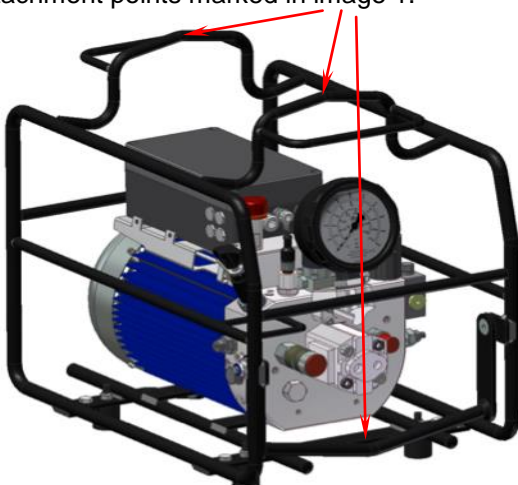


Image 1

2.6. Product identification

The unit is identified by its type plate. The type plate is found on the cover of the control enclosure – see image 2.

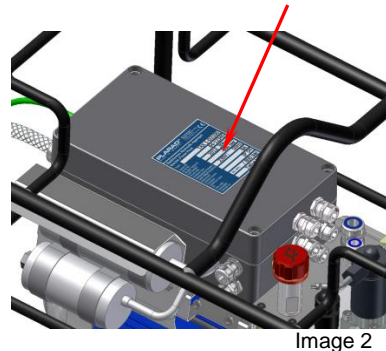


Image 2

2.7. Symbols and warnings



- CE mark



- Follow the instructions for installation and use



- Wear hearing protection



- Use protective eyewear



- Attention, special notice



- Warning of dangerous electrical voltage



- Warning of a hot surface



- Service seal specifying the date of the next inspection



- WEEE recycling/disposal instructions

3. Procedural description

The power pack and the connected torque wrenches can be used to perform bolting operations by means of the torque process. The power pack allows for the operation of one or two torque wrenches (tandem application). The use of two torque wrenches in tandem does not require any specific settings. The procedure used for operation with two torque wrenches corresponds to the one used for operation with one torque wrench.

4. Product information

4.1. Intended use

The power pack is intended to power Plarad torque wrenches used for tightening and loosening bolted connection by means of the torque process. Its use is limited to commercial applications.

4.2. Non-intended use

The power pack is designed for indoor and outdoor operation within an ambient temperature range of -10°C to +50°C. Do not operate the unit in other

environments until after you have consulted the manufacturer.

The power pack is suitable for use with Plarad torque wrenches provided the conditions described above have been met.

The units can be operated at the stationary mains supply and with portable power generators as long as the conditions laid out in chapter 6 "Technical specifications" are satisfied.

Any use deviating from or exceeding the scope of intended use is considered to be improper.

The manufacturer cannot be held liable for any damage resulting thereof. The risk lies solely with the owner / user.

4.3. Other applicable operating manuals

- BGR/GUV-R 194 Use of hearing protection
- BGR 237, Rules regarding the safe use of hydraulic hose lines
- Shell Tellus S2 VX 15, PD/MSDS

5. Scope of delivery

- Power pack, filled with oil and ready for use.
- BG rule 237: Hydraulic hose lines – Rules regarding safe use.

5.1. Consumables

The parts listed below are included in the scope of delivery.

Please order as necessary!

- Filter cartridge 10µm (if present)
- Hydraulic oil 1l Shell Tellus S2 VX 15
- Hydraulic oil 5l Shell Tellus S2 VX 15

6. Technical specifications

Maximum operating pressure 800bar

X1

L x W x H (mm) approx. 420 x 250 x 350 mm
 Volume flow 10 to 800 bar 0.7l/min
 Mains connection see type plate, image 2
 Weight 22 kg
 Sound pressure level (800bar) 79.5 dB(A)* 1m

X 2

L x W x H (mm) approx. 570 x 285 x 422 mm
 Volume flow 10 to 800 bar 1.2l/min
 Mains connection see type plate, image 2
 Weight 26 kg
 Sound pressure level (800bar) 84 dB(A)* 1m

X 3.5

L x W x H (mm) approx. 500 x 343 x 422 mm
 Volume flow 10 to 800 bar 3.0l/min
 Mains connection see type plate, image 2
 Weight 33.5 kg
 Sound pressure level (800bar) 88 dB(A)* 1m

XB 1

L x W x H (mm) approx. 420 x 250 x 350 mm
 Volume flow 10 to 800 bar 0.7l/min
 Mains connection see type plate, image 2
 Weight 22 kg
 Sound pressure level (800bar) 79.5 dB(A)* 1m

XB 2

L x W x H (mm) approx. 500 x 343 x 422 mm
 Volume flow 10 to 800 bar 1.2l/min
 Mains connection see type plate, image 2
 Weight 29 kg
 Sound pressure level (800bar) 89 dB(A)* 1m

XB 3.5

L x W x H (mm) approx. 500 x 343 x 422 mm
 Volume flow 10 to 800 bar 3.0l/min
 Mains connection see type plate, image 2
 Weight 33 kg
 Sound pressure level (800bar) 88 dB(A)* 1m

* when the unit is in operation, the sound pressure

level drops by 6 dB(A) with every meter of distance to the unit

Information about operating temperatures:

Operation in temperatures below -5°C may require that you start the unit several times until the motor starts running.

Minimum power input for mobile 4kVA power generators.

7. Description of operation

7.1. Start-up



Attention!

According to BGR/GUV-R 194, wearing hearing protection as specified in DIN EN 458 is required if the distance between the unit and the operator is less than 2 m during operation.



Attention!

The unit can reach surface temperatures of up to 80°C during extended operation and in high ambient temperatures.



Attention!

Assume a firm standing position.



Attention!

Regularly check the unit for leaks and any drops in pressure prior to start-up and throughout operation.

- Check the oil level.



Attention!

When checking the oil level, make sure the unit is the horizontal position.

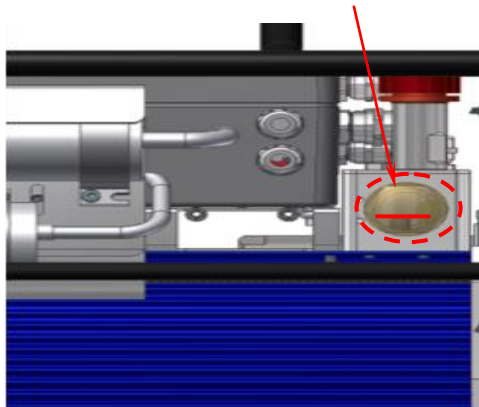


Image 3

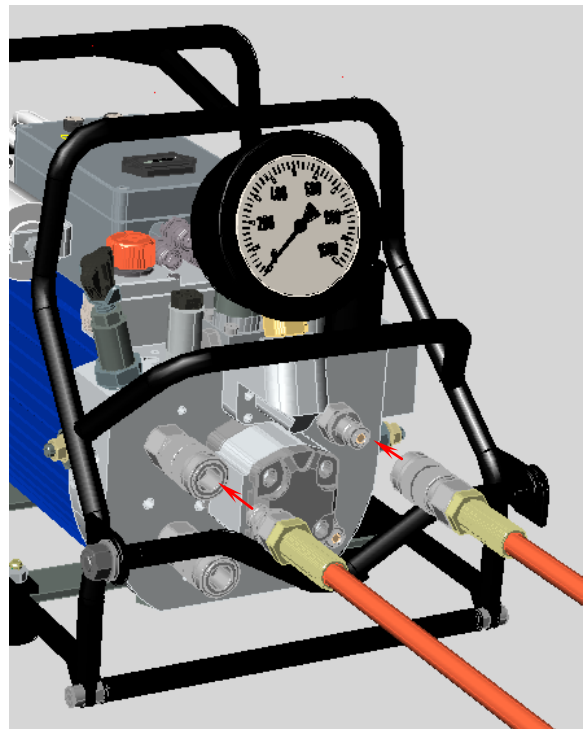


Image 4



Attention!

Check the mains connection lead for damage before connecting the unit.

- Connect the power pack to the mains voltage.



Attention!

The valves and the remote control are supplied with mains voltage.



Attention!

Observe the mains voltage specified on the type plate.

- Connect the hydraulic hoses with the unit.
- You connect the unit equipped with a coupling at the pressure port (applies only if you use CEJN series 115. The connection may be different for certain units).

- Connect the hydraulic hoses at the other end or connect both pairs of hoses if using torque wrenches in tandem.

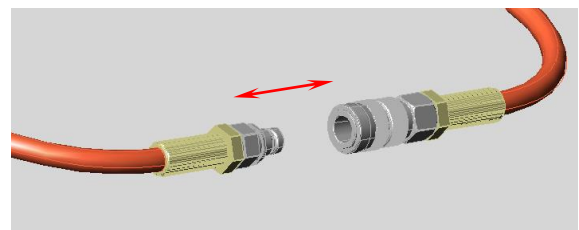


Image 5

- You start the unit by pressing the "ON" button.



Image 6

- Press and hold the "ON" button for approx. 30 seconds as this will also bleed the hydraulic hoses. The ongoing return stroke ensures that the hydraulic hoses will be flushed. This process will, if applicable, flush out any air trapped in the hoses.
- Switch off the unit by pressing the "OFF" button.

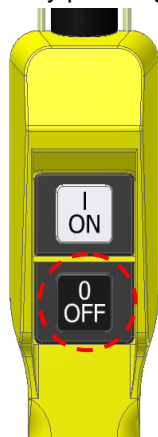


Image 7

- Next, disconnect the two hoses from one another by retracting the coupling.
- Connect the torque wrench. (see operating manual Hydraulic torque wrench)
- Connect the torque wrench.
- Now, switch on the unit by pressing the "ON" button.
- Press and hold the "ON" button on the remote control and set the required hydraulic pressure at the pressure adjusting valve.(see images 8 and 9)

Pressure adjusting valve

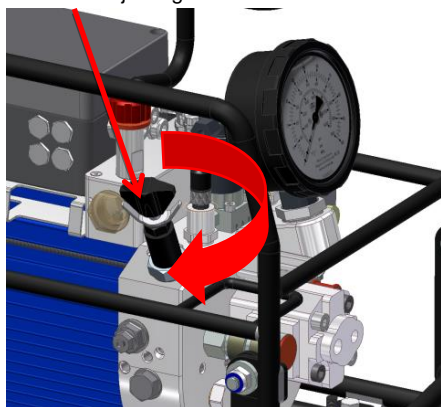
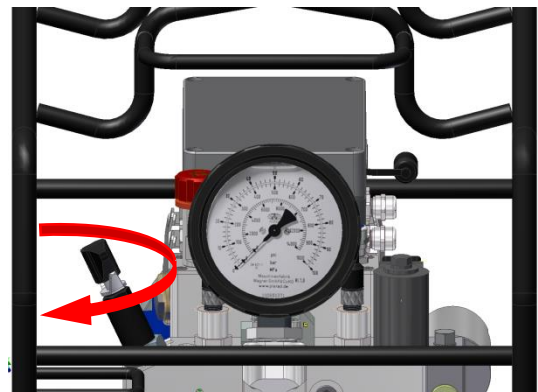


Image 8



Pressure adjusting valve

Image 9

Pressure gauge



Image 10

- For the pressure that needs to be set, refer to the torque table of the torque wrench.
- You can read the pressure at the pressure gauge of the unit. (image 10)

7.2. Operation

Button "ON" pressed > tool moves forward

Button "ON" not pressed > tool moves back

Button "OFF" pressed > unit powers off
After setting the pressure necessary to generate the required torque as listed in the torque table of the hydraulic tool, proceed as follows:

- Press the "ON" button until the tool stops rotating.
- Release the "ON" button until the tool has moved back.
- This process is repeated until the tool stops rotating after you press the "ON" button again and until the preset pressure has been reached.

- The bolting process is now complete.

The hoses remain pressurised after you switch off the unit by pressing the "OFF" button. Before you can uncouple the hoses from the unit, you need to depressurise them by pressing the black cap at the solenoid valve.



Image 11

- Afterwards, the hoses are depressurised and still filled with oil.

7.3. Maintenance instructions

- You need to check the oil level of the unit on a regular basis and, especially, prior to work.
- We recommend that you change the oil every 150 hours of operation, but no later than every 12 months. (see appendix Oil change)
- The couplings and nipples of the unit as well as the hoses and the torque wrenches need to be kept clean. Clean couplings and nipples with a cloth prior to connecting them.
- Seal the couplings and nipples with sealing caps prior to transport and storage.

7.4. Storage

- The unit must be stored upright in the horizontal position in a dry and frost-free environment.

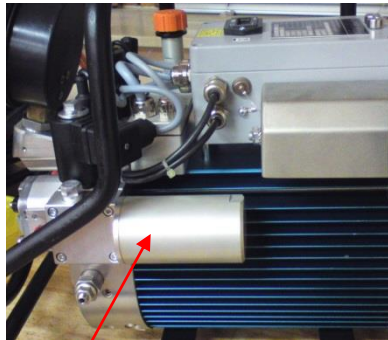
8. Instructions on disposal



This symbol points out that the product must not be disposed of with regular household waste as specified in the WEEE directive (Waste Electrical and Electronic Equipment Directive) (2002/96/EC) and national laws. Dispose of this product at an authorised waste collection facility. Return the product if, for instance, 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.

9. Instructions on how to change oil/filter



XB 2-Z

Filter

For the **IQ-VAX** version you need an AF 46mm open-ended spanner to open the filter housing. The filter unit must be replaced completely. (4 x M4 screws)

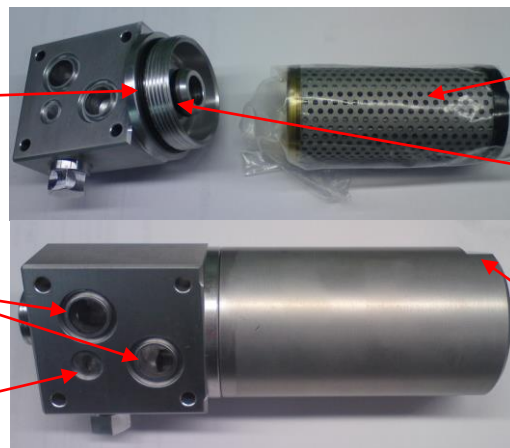


Oil drain screw (on the underside of the pump)

O-ring
42 x 1.5

O-ring
13 x 2
(2pcs)

O-ring
7 x 1.5



Filter
cartridge

O-ring
14 x 2

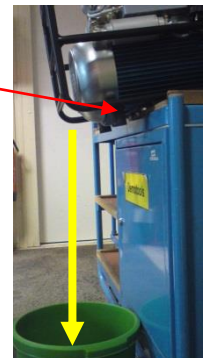
AF 42mm
Filter housing

Oil change (change interval 150 hours/ 1x year or if oil is contaminated e.g. colour of the oil)



Place a bucket under the pump and open the drain screw.

Open the orange bleed/venting screw.



Use a funnel to carefully pour in new oil and check the fill level at the sight glass. ⚠ Slowly and carefully fill in approx. 2.1 litres of Shell Tellus S2 VX15 oil. You should hold the funnel at a slight angle to allow air to escape.

Oil quantity 2.1L and oil grade Shell Tellus S2 VX 15



... a successful
connection!

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