OPERATING MANUAL
Please read before commissioning

Hydraulic jacks, JH – P series

<table>
<thead>
<tr>
<th>Model</th>
<th>L x B x H (mm)</th>
<th>Weight (kg)</th>
<th>Load (kg)</th>
<th>Lifting Height (mm)</th>
<th>Working Pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JH 13 P</td>
<td>206x303</td>
<td>15</td>
<td>13,000</td>
<td>160</td>
<td>520</td>
</tr>
<tr>
<td>JH 30 P</td>
<td>305x290x455</td>
<td>51</td>
<td>30,000</td>
<td>200</td>
<td>520</td>
</tr>
<tr>
<td>JH 50 P</td>
<td>380x354x542</td>
<td>105</td>
<td>50,000</td>
<td>250</td>
<td>520</td>
</tr>
</tbody>
</table>

PROPER USE

These jacks are exclusively designed for gradually lifting and lowering heavy cargo vertically.

- They may only be used on clean, level ground with sufficient load capacity and without slope. The object to be lifted must have a suitable holding surface on which the lifting toes can be safely and firmly placed.
- The centre of gravity must not be in the upper half of the object to be lifted and the weight must not exceed the permissible load of the jack.
- Jacks must always be lowered slowly and in a controlled manner. Failure to observe this can impair your safety and/or damage or destroy the jacks.

Any other use of these devices is regarded as improper use. The manufacturer / supplier is not liable for damage resulting from any other use. The user alone shall bear the risk for such a use.

These jacks are not intended

- for lifting or transporting persons, animals, agricultural and food processing machines, certain types of mobile devices, cars, trucks, all kinds of trailers or
- for use in special areas of work (e.g. in an explosive, highly inflammable or corrosive environment).

Proper use also means that this manual, particularly the safety notes, must be read and observed.

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Safely lifting and moving heavy loads
Thank you for buying a quality product manufactured by JUNG. Please read this operating manual carefully and follow the instructions. This ensures reliable operation and a long service life of your jack.

Explanation of symbols:

⚠️ Caution Could cause injuries to persons or damage to property.
⚠️ Warning A risk which may lead to a serious injury
⚠️ Danger Imminent danger which will result in serious injuries.

Warranty

We give a warranty of 24 months for all devices. If the device(s) is (are) modified within the warranty period, the warranty will become void unless the modification was carried out with our written approval.

COMMISSIONING

Connecting the jack to a hand or an electric pump

<table>
<thead>
<tr>
<th>Jack type</th>
<th>Suitable pump</th>
<th>Working pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>JH 13 P</td>
<td>JP 16 hand pump</td>
<td>520 bar</td>
</tr>
<tr>
<td></td>
<td>JPE 30 NVR electric pump</td>
<td>520 bar</td>
</tr>
<tr>
<td>JH 30 P</td>
<td>JPE 30 NVR electric pump</td>
<td>520 bar</td>
</tr>
<tr>
<td>JH 50 P</td>
<td>JPE 55 NVR electric pump</td>
<td>520 bar</td>
</tr>
</tbody>
</table>

Connect the jack only to a Jung hand or electric pump. To do this, use only the hydraulic hoses provided by Jung. Proceed as shown in the following figures. 

The jack and the hand or electric pump must be depressurized if you want to connect/disconnect a hydraulic hose!

Disconnect the hydraulic hose.

1. Retract the grooved sleeve
2. and pull off the hose.
3. Mount the caps again.

⚠️ Caution Check if the hydraulic connection is correctly assembled!

Connect the hydraulic hose.

1. Remove the caps.
2. While retracting the grooved sleeve,
3. press the hose onto the connecting branch.
4. Then release the grooved sleeve.

1. Rotating supporting feet
2. Lifting bridge with lifting toes
3. Connecting nipple can be rotated only in JH30P and JH50P and is fixed in JH13P
4. Carrying handle
**OPERATING MANUAL**

### JP 16 hand pump

<table>
<thead>
<tr>
<th>Type</th>
<th>JP 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working pressure</td>
<td>520 bar</td>
</tr>
<tr>
<td>Connections</td>
<td>Piece 2</td>
</tr>
<tr>
<td>Dimensions LxBxH</td>
<td>mm 780x230x150</td>
</tr>
<tr>
<td>Weight</td>
<td>kg 7</td>
</tr>
<tr>
<td>Tank volume/usable</td>
<td>Litres 1.1/1.0</td>
</tr>
<tr>
<td>Devices that can be used</td>
<td>JH 13 P</td>
</tr>
</tbody>
</table>

1. Pump lever
2. Lowering screw
3. Oil filling plug, operation is described below
4. Connecting branch for 2 hydraulic hoses
5. Tank

Before you begin working, pull the pin on the oil filling plug upwards in order to allow the tank to be aired and vented. After finishing work, press the pin down in order to close it again. Slight oil leakage at the pin is **not** a reason for complaint!

**Attention:** If the jacks are lowered too quickly, oil may escape through the oil filling plug.

⚠️ Caution **Danger of injury.** Therefore, follow the rule that lifting speed = lowering speed.

### JPE 30 NVR and JPE 55 NVR electro hydraulic pumps

<table>
<thead>
<tr>
<th>Type</th>
<th>JPE 30 NVR</th>
<th>JPE 55 NVR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working pressure</td>
<td>bar 520</td>
<td>bar 520</td>
</tr>
<tr>
<td>Connections</td>
<td>Piece 2</td>
<td>Piece 2</td>
</tr>
<tr>
<td>Dimensions LxBxH</td>
<td>mm 290x235x470</td>
<td>391x241x520</td>
</tr>
<tr>
<td>Weight</td>
<td>kg 25</td>
<td>30</td>
</tr>
<tr>
<td>Tank volume/usable</td>
<td>Litres 7.6/4.8</td>
<td>9.5/8.4</td>
</tr>
<tr>
<td>Current consumption</td>
<td>A 5</td>
<td>13</td>
</tr>
<tr>
<td>Devices that can be used</td>
<td>JH 13 P</td>
<td>JH 50 P</td>
</tr>
</tbody>
</table>

1. Carrying handle
2. Remote control (24V) with ON / OFF switch
3. Electric cable (230 V / 50 Hz)
4. Lowering lever/lowering valve
5. Pressure control valve
6. Manometer
7. Connecting branch for 2 hydraulic hoses
8. Tank
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LIFTING AND LOWERING A LOAD

JP 16 hand pump

Lifting the jack
Close the lowering screw on the hand pump. (In clockwise direction)
To lift the load, move the pump lever up and down

Lowering the jack
Slowly open the lowering screw in the counter-clockwise direction.

JPE 30 NVR and JPE 55 NVR electrohydraulic pumps

Caution
Insert the mains plug in a socket provided for this purpose.
Make sure that the voltage and the Hertz value are correct!

Lifting the load with the jack
Close the lowering valve on the electro hydraulic pump (in clockwise direction).

Press the rocker button on the remote control:
  a) When you tap the button, the load is lifted slightly
  b) When you keep the button pressed, the load is lifted continuously
  c) When you release the button, lifting is stopped

Lowering the load with the jack
Slowly open the lowering valve (in counter-clockwise direction) until it is safely placed on the floor.

Danger
Electrical systems may only be repaired by trained electricians.
MAINTENANCE AND CARE

According to BGV D8, you, as the owner of this jack, are responsible for the annual maintenance and inspection (see appendix).

Please contact us for more information. We will be pleased to send you an offer - free of charge - for maintenance and repair of your devices.

You have purchased a very sturdy jack. If you observe the care and maintenance notes, it will serve you for a long time.

Guides MUST be greased at regular intervals since strong frictional forces act on them.

Use standard high-quality grease and a manual grease gun. Insert grease using the two lubricating nipples located at the guides.

WHAT TO DO IF?

<table>
<thead>
<tr>
<th>FAULT IN THE ELECTRIC PUMP</th>
<th>CAUSE</th>
<th>ELIMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump motor is not running.</td>
<td>1 No mains connection.</td>
<td>Insert the mains plug in a socket provided for this purpose.</td>
</tr>
<tr>
<td>Load is not completely lifted</td>
<td>2 Oil shortage</td>
<td>Refill oil.</td>
</tr>
<tr>
<td>Load is not lifted at all</td>
<td>3 Lowering screw is not closed</td>
<td>Close the lowering screw.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAULT HAND PUMP</th>
<th>CAUSE</th>
<th>ELIMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load is not completely lifted</td>
<td>1 Oil shortage</td>
<td>Refill oil. First lower the jack completely. Observe the filling level, approx. 1.5 cm under the upper edge of the tank.</td>
</tr>
<tr>
<td>Load is not lifted at all</td>
<td>1 Permissible lifting force exceeded</td>
<td>Use an additional or a larger jack</td>
</tr>
<tr>
<td></td>
<td>2 Lowering screw is not closed</td>
<td>Close the lowering screw.</td>
</tr>
<tr>
<td></td>
<td>3 Oil filling plug is defective, vacuum in the tank</td>
<td>Open or replace the pin on the oil filling plug.</td>
</tr>
</tbody>
</table>
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TRANSPORTING A LOAD

1-2-3 Gradually lift the object (in steps of max. 30 mm) alternately on both sides and secure it with suitable bases. Continue lifting the object in this "oscillation mode" until it reaches the necessary under clearance of the transport trolleys. Then move the adjustable transport trolley under the object.

4-5 Slightly lift the load with the jack, remove the bases and slowly lower the load onto the transport trolley. Then remove the jack.

**Danger**
Never lift the object on one side up to the under clearance since there is a big risk of tilting and slipping if this is done!
6-7-8 Slightly lift the opposite side of the object to be transported, move the steerable transport trolley to the centre under the object and remove the bases.

9-10 Lower the jack slowly and carefully and then remove it.

The transport devices are dismantled in the opposite order.

Transport only on clean, level ground with sufficient load capacity. Do not transport on slopes! If you use a drawing vehicle, do not exceed the permissible trailing load and observe the maximum braking force of the drawing vehicle. Do not exceed the transport speed of 1 km/h.
SPECIAL NOTES, SAFETY NOTES

REPAIR
If repairs become necessary after years of extreme use, we give you a cost estimate and perform repairs at short notice and for a reasonable price.

SAFE WORKING TECHNIQUE

SPECIAL NOTES

1. Read the operation manual
Before operating the jacks, the operating staff (i.e. all persons who are responsible for performing lifting and transport work) must read this entire manual. All instructions related to lifting also apply analogously to lowering of a load.

2. Communication
Communication must be ensured between all persons involved in the lifting and transport procedure, particularly if eye contact between these persons is interrupted.

3. Danger area
The operating staff must make sure that other uninvolved persons keep a safe distance of at least 1.5 times the height of the object to be lifted on all sides of this object. If there is a risk that uninvolved persons could suddenly enter the danger area, the danger area must be closed off appropriately.

4. Load and location of the centre of gravity
The total weight of the load to be lifted and the location of the centre of gravity must be known or determined before beginning with the lifting operation. Use of jacks without the exact knowledge of the above mentioned factors may cause significant damage to the jacks and/or the load to be lifted or significant hazards to the health of the operating staff. A suitable jack with sufficient load-carrying capacity can be selected using the following formula:

\[
\text{Minimum load of the jack} = \left(\text{the load to be lifted in kg}\times\text{a safety factor of 1.25}\right)
\]

Example: Weight of the load 4000 kg \( \times \) 1.25 = 5000 kg, i.e., the jack that is used must have a load-carrying capacity of at least 5000 kg.

If several jacks are used and all of them have the same load-carrying capacity, they must be placed under the load to be lifted so that each of them bears the same amount of the load. In order to do this, it is necessary to know or to determine the location of the centre of gravity.

When lowering, take care that only one side of the machine is slowly lowered at a time (max. 30 mm/step). It should preferably be lowered on hardwood, beams or steel plates. Once one side of the machine is securely placed, the opposite side can be lowered in the same way. This "oscillation mode" must be used as otherwise it may become impossible to control the situation.

For safety reasons, it is not allowed to use several devices with different load capacities.

5. Conditions of use
JUNG jacks are designed to lift loads vertically.

- The floor space of the jack must be level, clean, horizontal, slip-proof and have sufficient load-bearing capacity.
- The load to be lifted must be statically rigid and tilt-proof. The area where the jack holds the load must be suitable for this purpose - in particular, it must be sufficiently large, stable and slip-proof. The area should be sufficiently large means that it is not allowed to exert load only at certain points of the area on the jack used for lifting (i.e., lifting claw and head plate). It is forbidden to lift with only one cylinder!

Simultaneous use of 2 or more jacks is permitted only if one common central pump is used. Important note: If a central hand or electric pump is used, there is only one oil circulation for both jacks. As mentioned above, in this case, too, you must know the location of the centre of gravity and position the jacks accordingly. Important note: If the height of the load exceeds the length of the side to be lifted, appropriate safety precautions must be taken in order to prevent the load from toppling over. This also applies to machines in which the centre of gravity is located in the upper half of the load.

Lifting height: With large lifting heights, take care to work in steps. Avoid one-sided lifting or lowering steps of more than 30 mm. To secure the load during stepwise changeover, suitable bases preferably made of steel or hardwood must be used for the weight of the load. This applies particularly to loads with a high centre of gravity or small floor space.

Lifting or lowering: If you have performed all the above mentioned steps, first lift or lower the load only a few millimetres in order to check if there are any unintentional load displacements or deformations at the support points. Continue with the next operation only after you have done this.

Protective equipment
All persons who operate the device must wear safety boots with steel tips and safety glasses.

NOTES ON RISKS

As the safety device mentioned above is effective only when the load is lifted, work involving the simultaneous use of 2 or more jacks may only be performed if the above mentioned procedure for determining the load capacity and the centre of gravity and the other instructions are followed. The working pressure of the central pump used must not exceed 520 bar. We recommend using a genuine central pump manufactured by JUNG. This pump is available as a manually or electrically operated model.

If you work with 2 or more jacks and/or a central pump, there is a risk of overloading and damaging the individual jacks if the load is lowered unevenly. As a result, the lifted object may be lowered suddenly or may tip over, causing significant hazards to the health of the operating staff as well as damage to the lifted object or to devices within the safety distance.

When working with a jack, it must always be ensured that the operator does not touch the jack when it is lowered. Neither the operator nor other persons may stand under the lifted joint or handle the lifting claw of the jack, and none of their body parts may be in this area. It is not allowed to touch the housing, the lifting bridge or the lifting claw when the jack is being lowered. This may be hazardous to the operator’s health because when the jack is lowered, the lifting bridge and the lifting claw move against the fixed supporting feet and the base, which may cause the clothes or the body parts of the operator or the operating staff to be caught, crushed or cut off.

Safety instructions
Knowledge of the accident prevention regulation (UVV) is mandatory for safe operation. Furthermore, the regulations applicable to the respective industrial sector or the respective place of use and the intended use must be observed. These also include the regulations related to substances which are harmful to the environment. Jung jacks are designed for use under ordinary atmospheric conditions and temperatures between –5° to 45°.

The staff who are in charge of transporting loads and who use our devices for this purpose must be regularly - at least once a year - instructed by the safety officer or an expert. It is not sufficient to merely hand out or hang up regulations, operation manuals or warning signs.

When the jack is under load in the lifted state:
- no persons may work under the lifted object,
- the jack must not be left unattended,
- use of the jack by unauthorized persons must be prevented,
- there must not be any objects under the lifted object.

TEST RELATED TO THE ACCIDENT PREVENTION REGULATIONS AND MAINTENANCE

According to the BGV D8 regulation of the Employer’s Liability Insurance Association, hydraulic jacks must be tested once a year by an expert. Each time before you use the jack, check whether it is functional and whether it bears a valid test badge. If this is not the case and/or the device has obvious defects, such as deformation, worn moving parts or oil leakage, it may only be used after these defects have been removed and a valid test badge has been attached to the device.

We would be pleased to perform these regular tests for you. You can send the request to us in writing or give us a call.

If you need quick information, have any queries or would like to place quick orders, please give us a call:

We would be glad to help you!

We reserve the right to make technical modifications in order to improve the function and quality.