



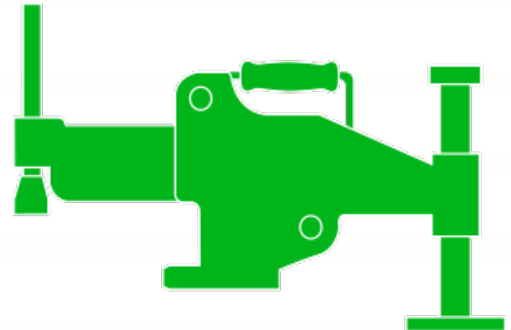
# RenQuip

## OPERATION MANUAL

WJ19K

WJ19P

Hydraulic Vertical  
Lifting Wedge Jack



Engineered Energy Equipment

[www.renquip.com](http://www.renquip.com)



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## 1.0 Introduction

The RenQuip WJ19 range of Lifting Wedge Jacks are designed to lift or push Loads that have limited access. The WJ19 range can enter a minimum access gap of 9.5mm.

The WJ19 operate in a parallel motion to give a stable lifting platform.

Multiple WJ19 tools can be used together to give greater lifting capacity or to maintain a stable base for lifting / pushing.

The WJ19 can also be used in spreading applications.

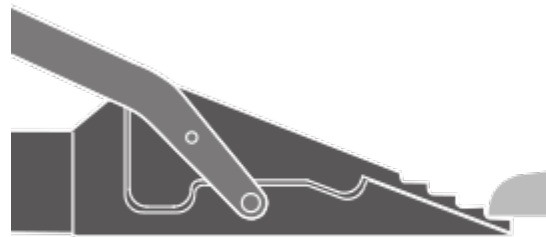
## 2.0 Safety Information

### User Safety



1. The User must be competent in Operating High Pressure Hydraulic Equipment.
2. The User must read and understand the relevant Instruction Manual for the Equipment.
3. The User must wear the correct Personal Protective Equipment .
4. Do not lift or hold pressurised equipment

### Equipment Safety



1. Inspect all equipment prior to use for any signs of damage or wear.
2. Ensure all components have a safe working pressure of 10,000psi (700Bar).
3. Do not pressurise equipment over its safe working pressure.
4. Never insert fingers or hands under a lifted object.
5. Ensure all couplers are fully connected before pressurising the system.
6. Ensure system is fully depressurised before disconnecting couplers.
7. Ensure the working area is free from hazards to the equipment such as sharp objects, heat sources , moving machinery or vehicles.
8. Carry / transport equipment by the handles / cases provided.
9. Store Equipment in a cool dry environment .
10. Ensure the correct oil is used in the hydraulic system and maintenance procedures are followed.

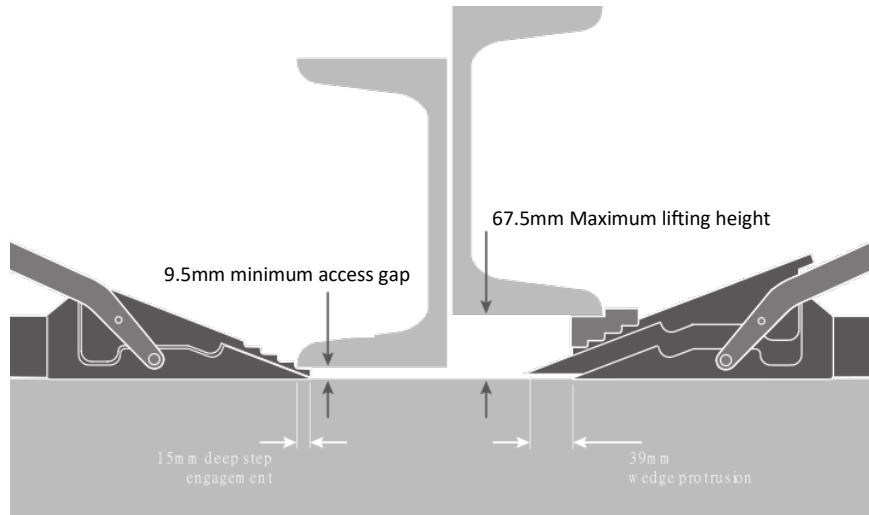
### 3.0 Technical Specification

#### Application Diagram

**Max Lifting Force: 183Kn**

**Max working Pressure :  
10,000psi / 700 Bar**

**Max Lifting Height: 67.5mm**



#### Model : WJ19P

**Kit weight: 14Kg**

**Kit Dims.: 580mm x 340mm x 180mm**

**Tool Weight: 9.5Kg**

**Tool Dims.: 105mm x 135mm x 450mm**

**Product ordering code: WJ19P**

#### Kit Content

- 1 x WJ19K Tool with combined hydraulic cylinder and pump unit
- 1 x Pump Actuating Handle
- 1 x Safety Block
- 1 x Safety Lanyard
- 1 x Stepped Block with securing screw and allen key
- 1 x Instruction Manual
- 1 x Robust moulded carry case



#### Model : WJ19K

**Kit weight: 13Kg**

**Kit Dims.: 580mm x 340mm x 180mm**

**Tool Weight: 8.5Kg**

**Tool Dims.: 105mm x 135mm x 410mm**

**Product ordering code: WJ19K**

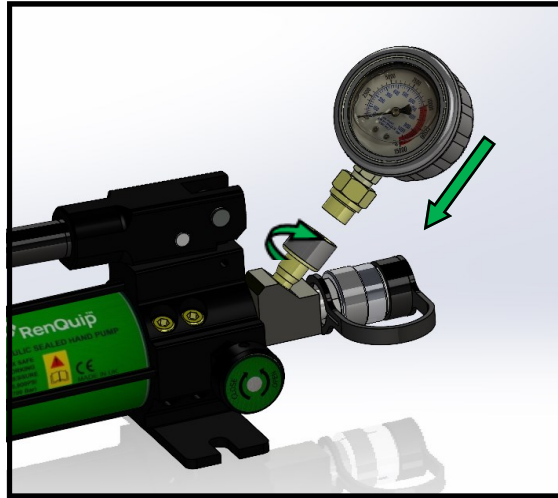
#### Kit Content

- 1 x WJ19K Tool
- 1 x Safety Block
- 1 x Safety Lanyard
- 1 x Stepped Blocks with securing screw and allen key
- 1 x Instruction Manual
- 1 x Robust moulded carry case

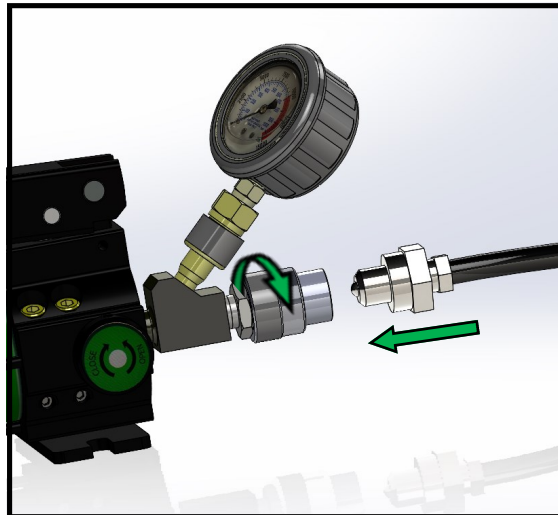


## 4.0 Operation of the WJ19K

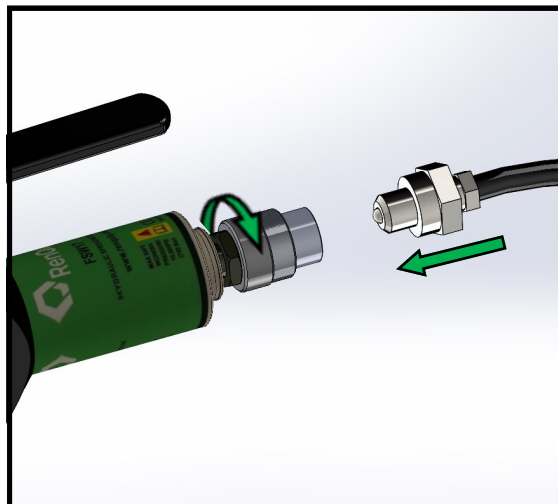
1. Connect the Gauge to the Pump.



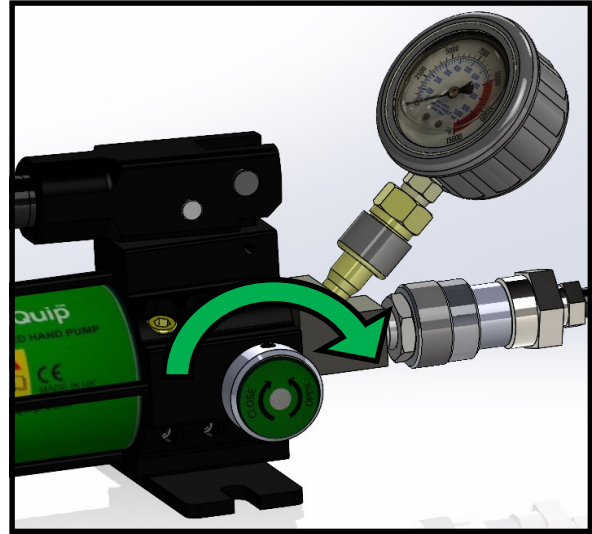
2. Connect the Hose to the Pump.



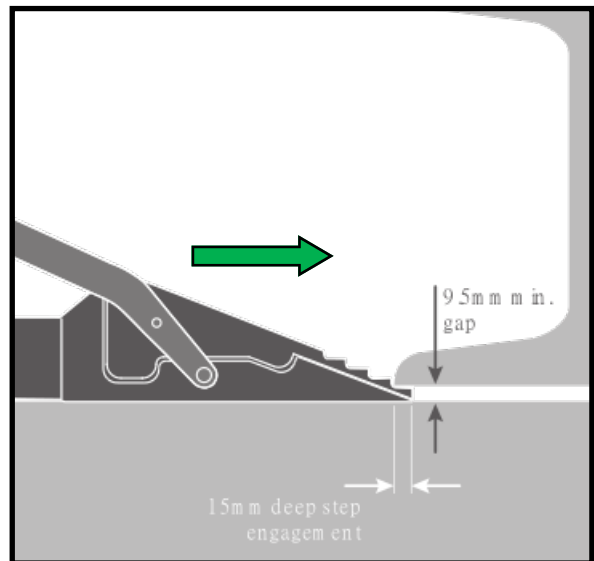
3. Connect the Hose to the Tool.



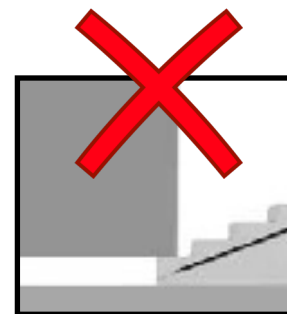
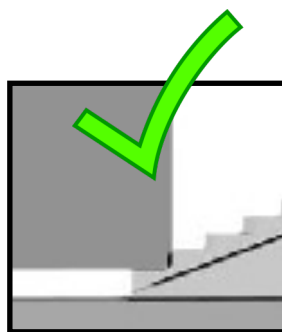
4. Close the Pressure Release Valve.



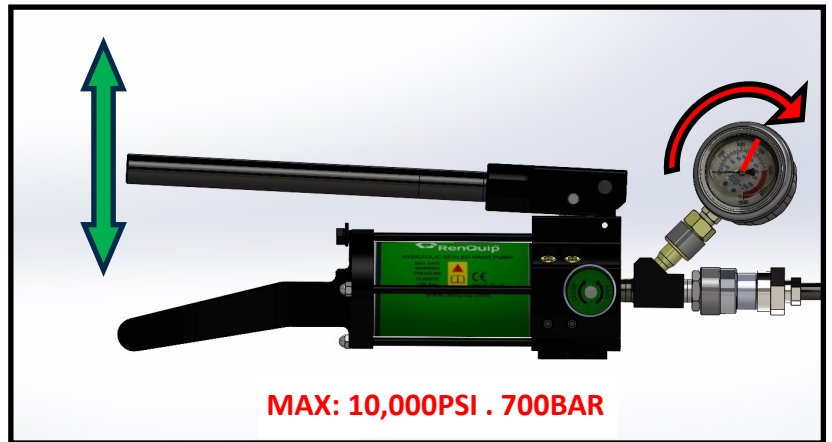
5. Insert the WJ19 in to the access gap—Minimum access 9.5mm (0.37") x 15mm (0.59") deep



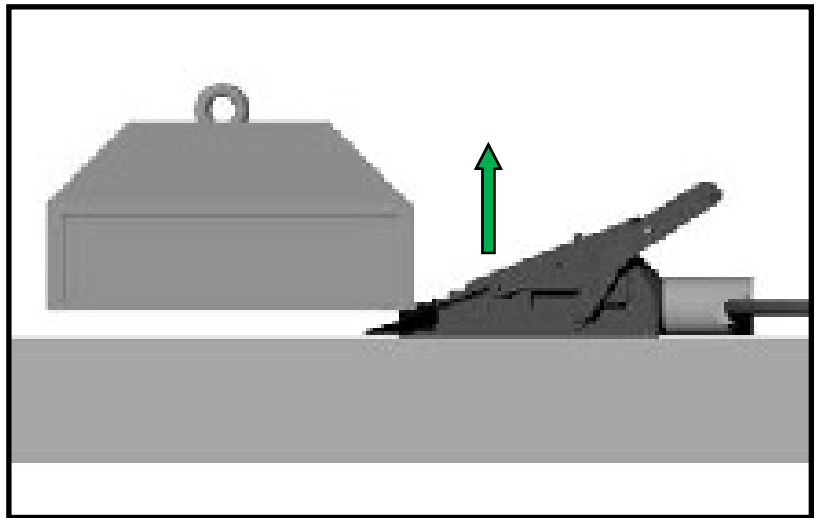
6. Check the tool is pushed in so the full step will engage with the load



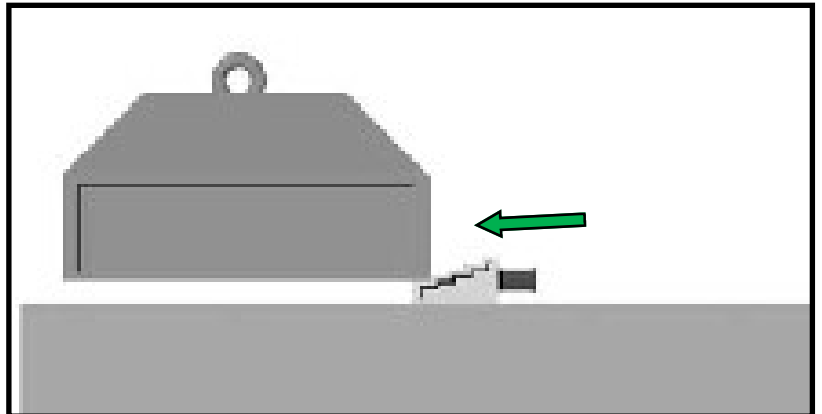
7. Operate the Pump handle to pressurise system.



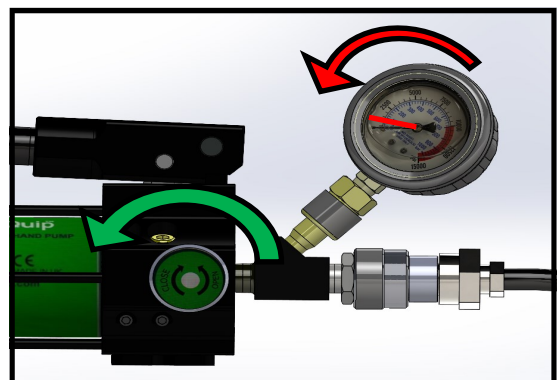
8. As the pressure increases the load will be lifted.



9. When the tool has reached its full stroke or the required height is reached insert the safety block.

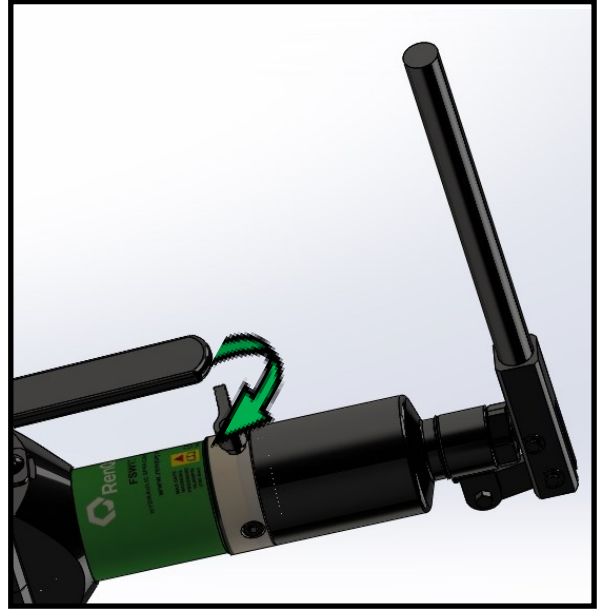


10. Release the pressure to lower the load onto the safety block.

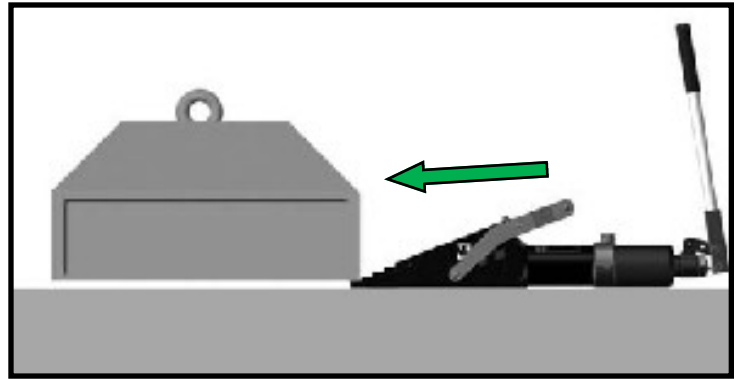


## 5.0 Operation of the WJ19P

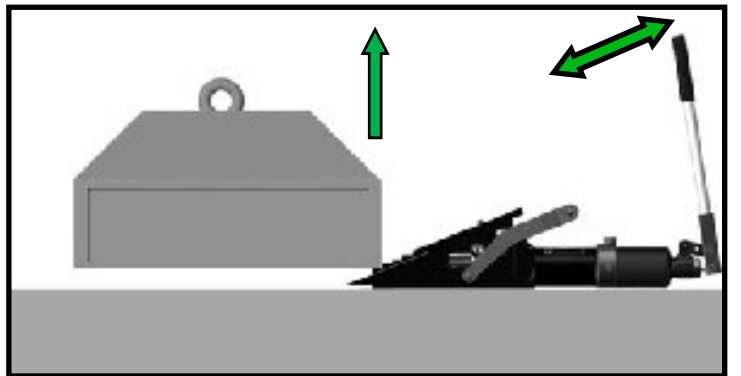
1. Close the release valve on the side of the WJ19P



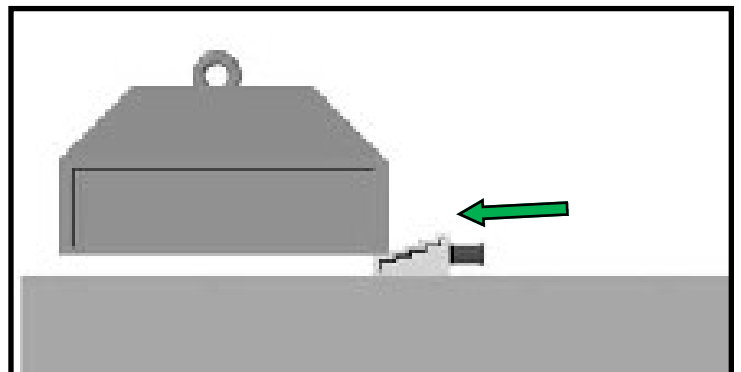
2. Insert the tool under the load.



3. Operate the pump handle to increase the system pressure and raise the load.

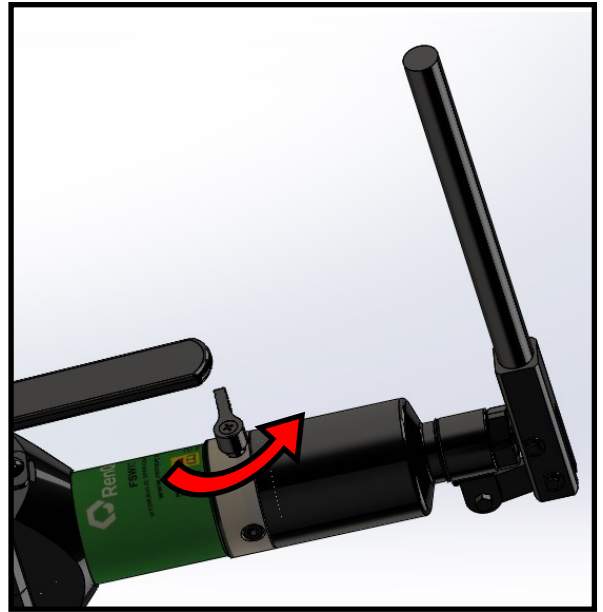


4. When the required height is achieved, fully insert the safety block.

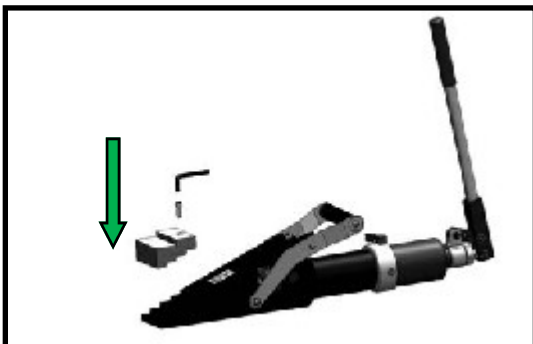




5. Slowly open the release valve to lower the load and remove the tool.

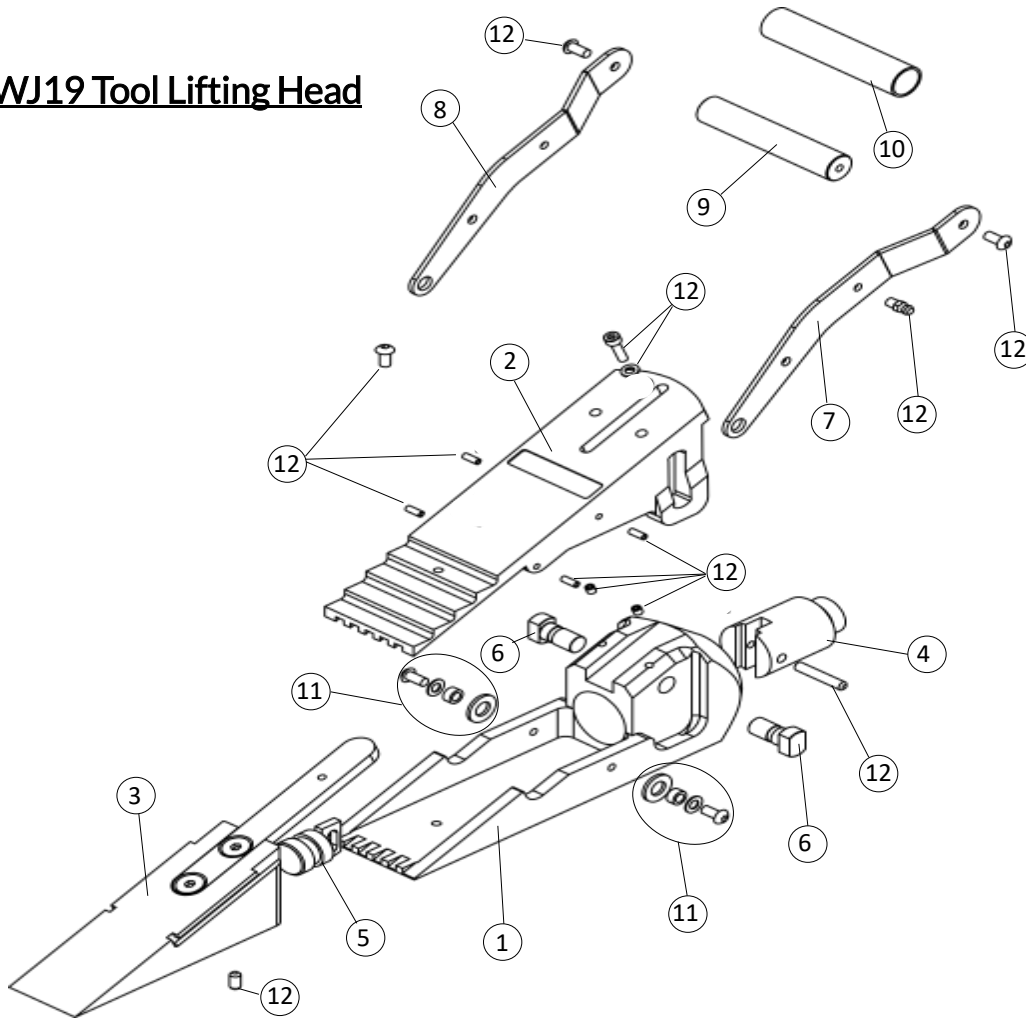


To raise loads to a greater height the stepped block can be fitted using the retaining screw and hex key provided.



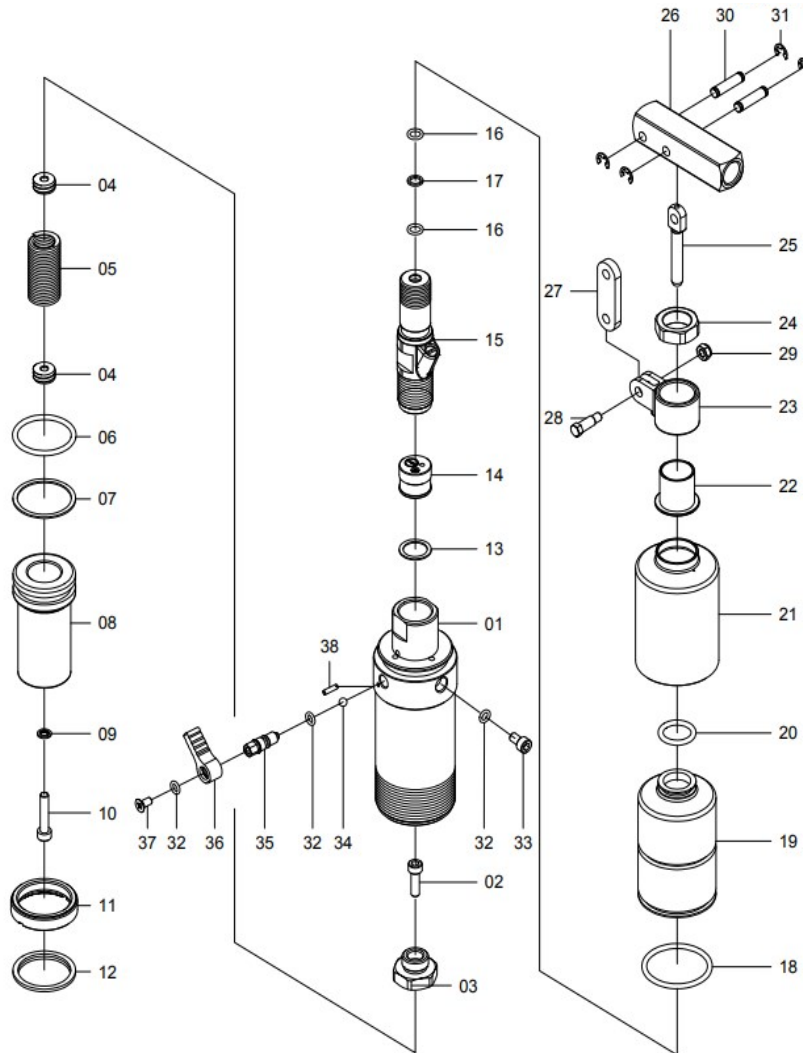
## 6.0 WJ19 Parts List

### WJ19 Tool Lifting Head



Item No	Part No	Description	Qty in Assembly
1	NA	WJ19 Body (not available as spare part)	1
2	160110031	WJ19 Top Plate with roll pins	1
3	160110091	WJ19 Wedge Assembly	1
4	160110041	WJ19 Push Pin	1
5	160110051	WJ19 Slot Plug Assembly	1
6	160110011	WJ19 Slide Pin	2
7	160110081	WJ19 Handle Right	1
8	160110071	WJ19 Handle Left	1
9	160110061	WJ19 Handle Bar	1
10	100500011	Moulded Foam Handle Grip	1
11	Kit 160120001	WJ19 Handle Fixing Kit	1
12	Kit 160120002	WJ19 Fastner Kit	1

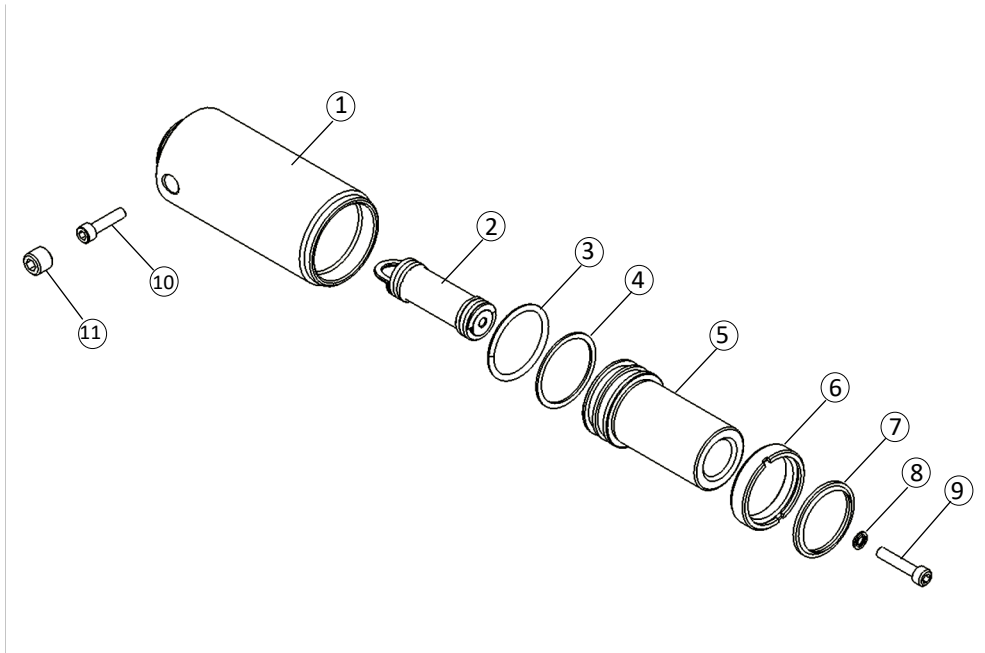
**WJ19P Integral Cylinder Pt No: 150410011**



**Integral Cylinder Seal Repair Kit—pt no : 150411001**

Item No	Part No	Description	Qty in Kit
06	Kit: 150411001	Piston Seal Ring	1
07	Kit: 150411001	Piston Back-Up Ring	1
09	Kit: 150411001	Spring Retaining Seal	1
12	Kit: 150411001	Wiper Seal	1
16	Kit: 150411001	Piston Rod Seal	2
17	Kit: 150411001	Piston Rod Back-Up Ring	1
18	Kit: 150411001	Reservoir Retaining Ring Large	1
19	Kit: 150411001	Reservoir	1
20	Kit: 150411001	Reservoir Retaining Ring Small	1
32	Kit: 150411001	Release Valve Seal	3

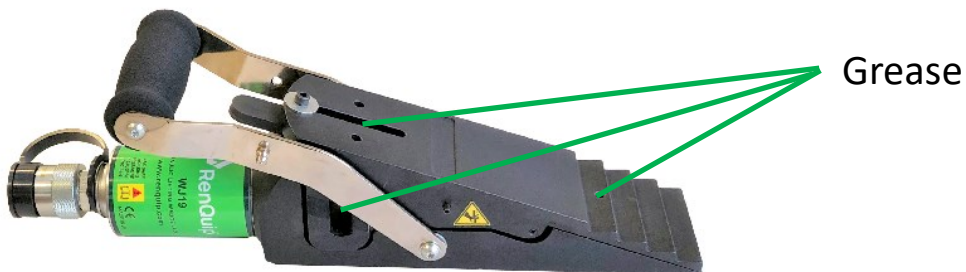
**WJ19 Hydraulic Cylinder Pt No: 150112001**



Item No	Part No	Description	Qty in Assembly
1	N/A	Cylinder Body (not available as a spare part)	1
2	150112011	Return Spring Assembly	1
3	Kit: 150113001	Piston Seal (supplied in service kit)	1
4	Kit: 150113001	Piston Back up ring (supplied in service kit )	1
5	150112021	Hydraulic Piston	1
6	150112031	Stop Ring	1
7	Kit: 150113001	Wiper Seal ( supplied in service kit )	1
8	Kit: 150113001	Return screw Seal ( supplied in service kit )	1
9	Kit: 150114001	Return screw (supplied in repair kt )	1
10	Kit: 150114001	Spring retaining screw ( supplied in repair kit )	1
11	Kit: 150114001	Cover screw ( supplied in repair kit )	1

## 6.0 Maintenance

- Visually Inspect the Tool, Pump, Gauges and couplers for any damage.
- Replace any worn or damaged parts.
- Clean and degrease surfaces , couplers and Gauges.
- Ensure protective caps are fitted to cleaned couplers.
- Grease tools with a quality High load bearing grease as indicated below.



- Top up hydraulic oil as required with a high quality 32cSt hydraulic oil.
- Store pumps in a cool, dry, and low humidity location.

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