

# AIR OPERATED JACKS TELESCOPIC

MODELS:

# YAJ301.V4, YAJ15-30LE.V3, YAJ20-60LR.V3, YAJ10-40LELR.V4

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.





instructions

Wear protective Wear safety gloves footwear

# 1. SAFETY

- ✓ Use jack only in accordance with this instruction manual.
- ✓ It is necessary that the operator can watch the lifting device and the load during all movements.
- The operator shall be provided with all the necessary information about training and about pumping and translating forces.
- Ensure the jack is in sound condition and good working order. Take action for immediate repair or replacement of damaged parts. Use genuine parts only. DO NOT modify the jack.
- The use of non-genuine parts may be dangerous and will invalidate the warranty.
- Locate the jack in a suitable, well lit working area.
- Keep working area clean and tidy and free from unrelated materials. Use jack on level and solid ground, preferably concrete. Avoid tarmacadam as jack may sink in.
- Chock wheels of vehicle.
- Ensure the vehicle handbrake is engaged, engine is switched off and transmission is in gear (or "PARK" if automatic).
- Ensure minimum distance of 0.5m between vehicle and static objects such as doors, walls, etc. to allow for vehicle tilting.
- Ensure all non-essential persons keep a safe distance whilst the jack is in use.
- Ensure there are no passengers in the vehicle.
- The operator of the jack must watch the jack and the load during all movements.
- ✓ Place jack under only those lifting points recommended by vehicle manufacturer (see vehicle handbook).
- Check that the lifting point is stable and centred on the jack saddle.
- Ensure the jack wheels are free to move and that there are no obstructions.
- DANGER: Use the jack for lifting only, NOT for supporting the lifted load.
- Ensure there are no persons or obstructions beneath the vehicle before lowering.
- ✓ Use suitable axle stands under the vehicle before proceeding with any task.
- $\checkmark$  Use a qualified person to lubricate and maintain the jack.
- Ensure that only hydraulic jack oil is used in the jack.
- DO NOT operate the jack if damaged.
- **× DO NOT** allow untrained persons to operate the jack.
- \* DO NOT operate the jack when tired or under the influence of drugs, alcohol or intoxicating medication.
- **x DO NOT** exceed the rated capacity of the jack.
- \* DO NOT allow the vehicle to move during lifting or lowering, or use the jack to move the vehicle.
- \* DO NOT jack vehicle if there is a risk of spillage of fuel, battery acid, or other dangerous substances.
- \* DO NOT work under the vehicle until appropriately rated axle stands have been correctly positioned.
- \* DO NOT use the jack for purposes other than that for which it is intended.
- \* DO NOT top up hydraulic system with brake fluid. Use hydraulic jack oil only. (Sealey Part No: HJO500MLS or HJO5LS)
- DO NOT adjust the safety overload valve.
- ✓ When not in use store jack, fully lowered, in a safe, dry, childproof area.
- \* DO NOT snatch the hose from the air supply, and DO NOT direct air from the air hose at yourself or others.
- WARNING! Turn off air supply and de-pressurise the control nozzle before removing the pump unit from any installation or mobile system.
- Failure to comply with this instruction may damage the unit and will invalidate your warranty.

## 2. INTRODUCTION

Ideal for workshop or roadside use, these jacks take the effort out of lifting heavy plant, tractors and commercial vehicles. For extra safety, features dead man's handle which also aids controlled lowering speed. Supplied with extensions that close the gap between the saddle of the jack and the jacking point.

# 3. SPECIFICATION

Model No	YAJ301	YAJ15-30LE	YAJ20-60LR	YAJ10-40LELR
Capacity	30tonne	30tonne	60tonnes	40tonne
Min. Saddle Height	210mm	150mm	175mm	125mm
Maximum Height (inc. Ex	tensions)/Capacity:	°.	<u>.</u>	<u>.</u>
Stage 1 (mm/tonne)	463/30	343/30	377/60	302/40
Stage 2 (mm/tonne)	-	409/15	458/40	347/20
Stage 3 (mm/tonne)	-	-	542/20	396/10
Piston Stroke	133mm	139mm	247mm	159mm
Extensions	45/75mm	45/75mm	45/75mm	45/75mm
Chassis Length	483mm	820mm	895mm	830mm
Max. Length	1778mm	2200mm	2265mm	2210mm
Width with out wheels	178mm	162mm	215mm	179mm
Overall Width	290mm	295mm	295mm	282mm
Air Consumption	10.5cfm	11.5cfm	11.5cfm	11.5cfm
Working Pressure	116-174psi	116-174psi	116-174psi	116-174psi
Applicable Standard	EN 1494			

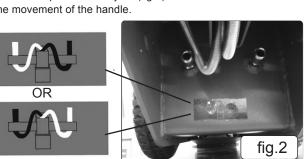
### 4. ASSEMBLY

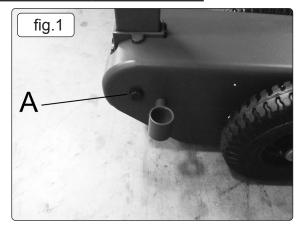
#### 4.1. Attaching the Handle

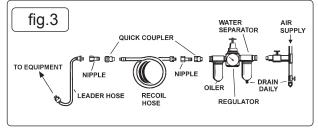
- 4.1.1. Remove a circlip from either side of the large pin (fig.1A).
- 4.1.2. Slide out the pin and place the handle into the opening. Slide the pin back through the jack, lining up the handle and through the other side. Secure with circlips.

#### 4.2. Air Hoses

4.2.1. Screw in the black and clear hoses from the handle into the jack ensuring the black and clear hoses are wrapped around the handle, inserting as shown by the label positioned beneath the connection points on the jack (fig.2). Position so as not to obstruct the movement of the handle.







# 5. AIR SUPPLY

- 5.1. Ensure that the jack pneumatic switch is in the "off" position before connecting to the air supply. fig.4.
- 5.2. You will require the air pressure detailed in the Specification section, to get the best performance from this jack.
- WARNING! Ensure the air supply does not exceed the stated maximum pressure while operating the jack. Too high an air pressure and unclean air will shorten the product's life due to excessive wear, and may be dangerous causing possible damage and personal injury.
- 5.3. Drain the air tank daily. Water in the air line will damage the jack.
- 5.4. Clean the air inlet filter screen weekly.
- 5.5. Keep the air hose between the compressor and the air jack as short as possible, and install an air filter and oiler (fig.3).
- 5.6. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The minimum hose diameter should be 3/8" I.D. and fittings must have the same inside dimensions.
- 5.7. Keep hose away from heat, oil and sharp edges. Check hoses for wear, and make certain that all connections are secure.

# 6. OPERATION

#### 6.1. **PREPARATION**

- 6.1.1. Check that the air supply meets the requirements set out in section 5.
- 6.1.2. Connect the air supply to the connector (fig.5.B).
- 6.1.3. Set the handle to the required angle using the handle release lever shown in (fig.5.A). Pull the lever upwards towards the main handle. Move the handle to the required position and release the lever to lock it into position.

# 6.2. **PURGING THE SYSTEM**

- Before using the jack, purge the hydraulic circuit in order to eliminate any possible air that may have entered the system during transit.
- 6.2.1. Push the control lever (fig.4) to the 'down' (fig.4.A) position and hold it there for several seconds.

Release the lever to the centre 'hold' position.

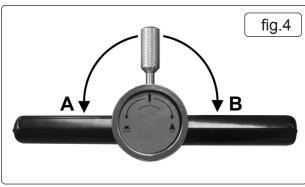
- 6.2.2. Now push the lever to the 'up' position (fig.4.B) and hold it there until the jack is fully extended. Push the lever to the 'down' (fig.4.A) position and watch the jack as it retracts. The lowering movement should be smooth and without irregular stops.
- 6.2.3. Repeat the raising and lowering cycle until the movement is smooth. Once this has been achieved this indicates that all air has been expelled.

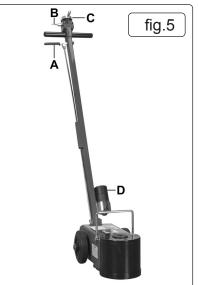
## 6.3. USING THE JACK

- **WARNING!** ensure you have read and understood the safety instructions in section 1 before commencing work.
- 6.3.1. It is necessary that the operator can watch the lifting device and the load during all movements.
- 6.3.2. Position the jack under the vehicle manufacturer's recommended jacking point (see vehicle handbook).
- Note: Use the extension pins (fig.5.D) to get the jack closer to the jacking point before engaging the jack. See specification for capacity when using the extension pins.
- 6.3.3. Whilst holding the main jack handle, lifting is achieved by pushing the control lever to the 'up' position (fig.4.B).
- 6.3.4. When the vehicle has reached the desired height release the control lever which will automatically return to the middle hold position stopping any further air flow, holding the jack at the height to which it has been raised.
- 6.3.5. Place axle stands correctly in position and ensure section 1 safety instructions are strictly applied before performing any task.

#### 6.4. LOWERING THE JACK

- 6.4.1. Ensure there are no persons or obstruction beneath the vehicle before lowering, and remove any axle stands.
- 6.4.2. Whilst holding the main jack handle lowering is achieved by pushing the control lever to down position (fig.4.A), the jack will lower in a controlled manner.
- 6.4.3. Once completely lowered releasing the control lever will return to the middle hold position. Remove the jack from under the vehicle. If you have finished using the jack, turn the air pressure supply off and disconnect from the air line and store the jack and air line accordingly.





# 7. MAINTENANCE

**IMPORTANT:** Jacks shall be maintained and repaired in accordance with the manufacturer's instructions. Such maintenance shall be carried out by qualified persons.

No modifications shall be carried out which adveresly affect the compliance of the jack with the standard.

- WARNING! Disconnect jack from air supply before changing parts, servicing or performing any maintenance.
- 7.1. Check the state of the markings, markings shall remain as they were when the product was new.
- 7.2. When the jack is not in use, the piston must be in the lowest position to minimise corrosion.
- 7.3. Keep the jack clean and lubricate all moving parts with air tool oil on a regular basis.
- 7.4. To check oil level, lower jack fully. Remove the filler plug (see fig.6 for YAJ301 or fig.7 for other models). The oil surface should be level with the indicator inside the filler hole, for YAJ301 it should be level with the bottom of the filler hole. Top up the oil level if necessary but do not overfill as the jack will become inoperative. If inadvertently overfilled the excess oil should be poured off. After topping up or pouring off excess oil it may become necessary to purge air from the unit. See section 6.2.
- WARNING! DO NOT use brake fluid, or any fluid other than hydraulic jack fluid as this may cause serious damage to the jack and will invalidate the warranty!
- 7.5. Ensure the air filter located in the air valve is clean.
- 7.6. Should the piston not rise and the oil level is correct, this may indicate a problem with air seeping into the hydraulic valve passage. Purge any air from the system. See 6.2
- 7.7. Confirm that the piston can rise to the highest position.
- 7.8. Before each use check for broken, cracked, bent, or loose parts; any visible damage to welds, piston, pump, saddle, air connector, levers, frame and all parts including nuts, bolts, pins and other fasteners. If any suspect item is found, remove jack from service and take necessary action to fix the problem. **DO NOT** use the jack if believed to have been subjected to abnormal load or shock. Inspect and take appropriate action.
- 7.9. After a year of extensive use, the oil should be replaced in order to extend the life of the jack. To drain the oil, remove the filler plug and valve. Make sure that no dirt is allowed to enter the hydraulic system. See 7.4. for refilling instructions.
- 7.10. Periodically check the pump piston and piston rod for signs of corrosion. Clean exposed areas with a clean oiled cloth.

#### 7.11. STORAGE

- 7.11.1. **DO NOT** store in a humid environment for long periods of time.
- 7.12. TRANSPORT
- 7.12.1. Protect from crushing or collision during transportation.



# 8. TROUBLESHOOTING

Problem	Possible Cause	Remedy
Jack does not lift but pump is working.	<ol> <li>Oil exhausted.</li> <li>Air in hydraulic system.</li> <li>Defective suction or delivery valves.</li> <li>Defective packaging or O-ring.</li> <li>Poor quality oil.</li> </ol>	<ol> <li>Supply oil.</li> <li>Drain air by opening cap plug or suction and delivery valves.</li> <li>Clean clogged valve.</li> <li>Replace.</li> <li>Replace oil.</li> </ol>
Air pump does not operate.	<ol> <li>Insufficient compressor power.</li> <li>Pump oil used up.</li> </ol>	<ol> <li>Use a larger compressor.</li> <li>Find leak and rectify,refill with oil. Rebuild and lubricate air valve.</li> </ol>
Jack stops before end of travel.	1. Hydraulic oil is insufficient.	1. Replenish oil.
Jack lowers or does not hold in the raised position.	<ol> <li>Defective suction delivery, release or safety valve.</li> <li>Defective piston packing.</li> </ol>	<ol> <li>Clean and adjust valve.</li> <li>Replace packing.</li> </ol>
Lifting is slow.	1. Air leakage due to worn servo-valve.	1. Replace servo-valve.
Pump continues to operate when the air valves are closed.	1. Air valve will not close.	1. Replace valve.

IMPORTANT: NO RESPONSIBILITY IS ACCEPTED FOR INCORRECT USE OF THE MACHINE.

Air / Hydraulic products are only repaired by local service agents. We have service/repair agents in all parts of the UK. **DO NOT** RETURN JACKS TO US.

Please telephone us on 01284 757500 to obtain the address and phone number of your local agent. If jack is under guarantee please contact your dealer.

De-commissioning the Jack

Should the jack become completely unserviceable and require disposal, draw off the oil into an approved container and dispose of the jack and the oil according to local regulations.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 36 months from purchase date, proof of which is required for any claim.

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