



**Important:** Please read all information carefully before use and keep these instructions in a safe place for future reference.



# EQUIPMENT OVERVIEW

Heavy duty welded bottle jacks fitted with overload valves and manufactured and tested to the latest CE standards.

- Heat-treated extension screw allows low pickup height adjustment
   and maximum height with slow release on load
- Serrated, heat-treated saddle provides a generous lifting area, secure grip easy lifting and lowering operation
- Wide, welded base and oil reservoir, reinforced stress points for increased strength, stability and a reduced chance of leakage
- Heavy-duty steel construction provides stability and safe
   operation
- High-quality, large diameter, hydraulic steel cylinder unit resulting in lower oil pressure needed to raise the load for reduced wear and tear
- Oil-powered hydraulics ensure corrosion resistance and high/low temperature flexibility

# SPECIFICATIONS

	2T	ЗТ	5T	10T	15T	20T	32T
Min Height: (mm)	168	188	207	222	227	235	260
Max Height: (mm)	316	363	402	447	457	445	420
Lifting Height: (mm)	100	115	125	145	150	150	160
Adjustable Height: (mm)	48	60	70	80	80	60	N/A
Maximum Load: Tonne / kg	2T / 2000kg	3T / 3000kg	5T / 5000kg	10T / 10000kg	15T / 15000kg	20T / 20000kg	32T / 32000kg



## SAFETY

Regularly inspect and lubricate the jack to ensure it is in good working order and condition. Do not use the jack if damaged or a fault is suspected or if believed to have been subjected to abnormal load or shock. If necessary, immediately repair or replace damaged parts.

Use recommended parts only, the use of unauthorised parts may be dangerous and will invalidate your warranty.

Ensure the work area is clean, tidy and free from unrelated materials and has adequate lighting.

Use the jack on level and solid ground, preferably concrete. Avoid soft tarmacadam to avoid the risk of sinking.

Park the vehicle and apply hand brake (if automatic, place in "Park" mode). Switch off the engine and place chocks under the wheels.

Ensure a minimum distance of 0.5m between vehicle and static objects such as doors, walls, etc. to allow for tilting during jacking.

Ensure all persons are out of the vehicle before jacking. Do not enter the vehicle whilst it is supported on the jack or axle stands.

Check vehicle weight and recommended lifting points by referring to the vehicle owner's manual. Ensure the lifting point is not corroded.

Check lifting point is centred and stable on jack saddle (off centre loads can slip). Position jack so as to avoid operating it from under vehicle.

Keep hands etc. clear of moving parts during raising and lowering of the vehicle.

Roadside wheel changing is hazardous. Be extra vigilant, you may not be able to avoid jacking on tarmacadam. Get everyone out of vehicle. Never go under the vehicle. Passing traffic may cause the vehicle to rock. Use hazard warning lights. If in doubt call professional help.

When changing a wheel, slightly loosen wheel nuts/bolts prior to jacking vehicle. Screw wheel nuts/bolts back before lowering vehicle. Finally tighten when vehicle is fully lowered.

Use a qualified person to lubricate and maintain the jack. Confirm that only recommended hydraulic jack oil is used during maintenance.

Never exceed the rated capacity of the jack and do not operate the jack beyond its maximum pump stroke.

Never allow the vehicle to move, or try to start the engine, when the vehicle is jacked up.

Ensure there are no persons or obstructions beneath the vehicle before lowering.

When not in use ensure that the jack is clean and store the jack with the ram in the down position. Do not leave the ram extended. Ensure stowage area is clean and dry and away from children.

Do not jack a vehicle if it may result in the spillage of fuel, battery acid, or other dangerous substances.

Do not place any part of your body under vehicle whilst it is supported by the jack. Wait until adequately rated axle stands have been correctly positioned.

Do not use jack to support extensions or cradles. Do not modify jack in any way. Do not use the jack for any other purpose.

Do not up the hydraulic oil reservoir with brake fluid. Use hydraulic oil only. Never adjust the safety overload valve.

Do not go under a vehicle unless it is supported by adequately rated axle stands. **Note:** Seek advice before jacking caravans or trailers.

**Warning:** Only use the jack for lifting, not for supporting the lifted load. Always use adequately rated axle stands. Remember, it is very dangerous to go under a vehicle supported by a jack even if additional supports are used.



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# OPERATION

## Before Use:

Before using the jack, purge the hydraulic system to eliminate any air that may have accumulated during transit, as follows:

1. Fit jack handle over release valve and turn anti-clockwise to open the valve.

2. Insert jack handle into the handle sleeve and pump several times to ensure full internal lubrication and to bleed the air from the system.

3. Fit the jack handle back over the release valve and turn clockwise to close.

## Lifting:

1. Ensure the vehicle has been prepared correctly and positioned safely in order to be lifted by the jack.

2. Ensure the ground is strong, level and stable to support the load safely.

**3.** Position the jack saddle under the vehicle according to the manufacturer's recommended lifting point (refer to the vehicle user manual if you are unsure).

**4.** Position jack so as to avoid having to operate it from under the vehicle and so that the handle can be moved up and down without hitting any part of the vehicle.

5. Using the screw extension as necessary, raise the saddle to the lifting point. Ensure that the saddle is correctly centred beneath the lifting point.

6. Pump the handle up and down using full stroke until the required lift is achieved.

7. Should the jack become overloaded, a safety overload valve will open, and stop the vehicle from lifting.

8. Lower the vehicle onto suitable axle stands before attempting any work.

## Lowering:

1. Ensure that any axle stands are removed and that there are no persons or obstacles beneath the vehicle, or in the path of its descent.

2. The lowering speed is controlled by the amount the release valve is opened.

3. Turn valve anti-clockwise and lower slowly and carefully.

# **MAINTENANCE & TROUBLESHOOTING**

**Important:** Only fully qualified personnel should attempt maintenance or repair. Never use brake fluid, or any fluid other than hydraulic jack fluid, as to do so may cause serious damage to the jack and will invalidate the warranty.

- When the jack is not in use, the ram and piston must be in their lowest positions to minimise corrosion.
- Remove the handle to inactivate the jack.
- Keep the jack clean and lubricate all moving parts with acid free oil on a regular basis.
- To check oil level, fully lower the jack. Remove filler plug. The correct oil level is to the bottom of the filler opening.
- After a year of extensive use, the oil should be replaced in order to extend the life of the jack. Drain the oil through the filler plug opening.
- Make sure that no dirt is allowed to enter the jack or the fresh oil.

• To replace the oil: Pump (the unloaded jack) 5 or 6 times to expel air. Pump the jack to full height and pour off excess oil before refitting plug. Ensure any waste oil is disposed of in accordance with local authority regulations.

- Before each use check for broken, cracked, bent, or loose parts. Also check for any visible damage to welds, ram, pump, body and base.
- If any suspect item is found remove jack from service and take the necessary action to remedy the problem.
- Periodically check the pump piston and piston rod for signs of corrosion. Clean exposed areas with a clean oiled cloth.

Symptom	Possible Cause	Corrective Action	
Jack will not lift the load	<ol> <li>Overloaded</li> <li>Oil level low</li> <li>Release valve not correctly closed</li> <li>Air in system</li> <li>Packing worn or defective</li> </ol>	<ol> <li>Be sure to use jack with adequate capacity</li> <li>Top up oil level</li> <li>Check and close release valve</li> <li>Open release valve and air vent (if fitted) and pump the handle a few times. Close valve and re-try</li> <li>Return jack to local service agent</li> </ol>	
Jack does not lift high enough or feels "spongy"	<ol> <li>Low oil level</li> <li>Worn seals</li> <li>Air in system</li> <li>Release valve not closed</li> </ol>	<ol> <li>Top up oil level</li> <li>Return jack to local service agent</li> <li>Open release valve and air vent (if fitted) and pump the handle a few times. Close valve and re-try</li> <li>Check and close release valve</li> </ol>	
Jack will not hold the load	<ol> <li>Release valve partially open</li> <li>Dirt on valve seals</li> <li>Air in system</li> <li>Faulty seals</li> </ol>	<ol> <li>Check and close release valve</li> <li>Lower jack, close release valve. Pull up lifting arm to full height by hand. Open the release valve to lower arm</li> <li>Open release valve and air vent (if fitted) and pump the handle a few times. Close valv and re-try</li> <li>Return jack to local service agent</li> </ol>	
Jack will not descend to minimum height, or will not remain in lowered position	1. Ram damaged 2. Air in system 3. Release valve partially open	<ol> <li>Contact local service agent</li> <li>Open release valve and air vent (if fitted) and pump the handle a few times. Close valve and re-try</li> <li>Check and fully open release valve</li> </ol>	
Jack will not function properly after trying solutions above	1. Internal malfunction or structural damage	1. Stop usage and contact an authorized repair centre	







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# EQUIPMENT PARTS AND DIAGRAMS



Ref.	Description	QTY
1	Roundwire snap ring	1
2	Rectangular ring	2
3	0-Ring	1
4	Ram assembly	1
5	Bowl washer	1
6	0-Ring	1
7	Roundwire snap ring	1
8	Base welding parts	1
9	Oil plug	1
10	Steel ball bearing Ø6mm	1
11	Release valve assembly	1
12	Plastic plug	1
13	Safety valve	1
14	Spring	1
15	Spring holder	1
16	Steel ball bearing Ø3mm	1
17	Steel ball bearing Ø5mm	2
18	Bowl washer	1
19	Pump plunger assembly	1
20	Reusable cotter pin Ø1.2x18mm	2
21	Pin	2
22	Handle socket assembly	1
23	Handle assembly	1
24	Spring	1
25	Seal kit	1

Ref.	Description	QTY	
1	Roundwire snap ring	1	
2	Rectangular ring	2	
3	0-Ring	1	
4	Piston rod assembly	1	
5	Bowl washer	1	
6	0-Ring	1	
7	Roundwire snap ring	1	
8	Base welding parts	1	
9	Steel ball 6mm	3	
10	Release value assembly	1	
11	Plastic plug	1	
12	Adjusting screw	1	
13	Spring	1	
14	Spring holder	1	
15	Steel ball 3mm	1	
16	Ball retaining washer	1	
17	Pump plunger assembly	1	
18	Oil plug	1	
19	Cutter pin	3	
20	Pin	3	
21	Handle socket	1	
22	Handle assembly	1	
23	Seal kit	1	



# LIMITED WARRANTY STATEMENT

Jefferson Professional Tools & Equipment ®, or hereafter "Jefferson" warrants its customers that its products will be free of defects in workmanship or material. Jefferson shall, upon suitable notification, correct any defects, by repair or replacement, of any parts or components of this product that are determined by Jefferson to be faulty or defective. This warranty is void if the equipment has been subjected to improper installation, storage, alteration, abnormal operations, improper care, service or repair.

#### Warranty Period

Jefferson will assume both the parts and labour expense of correcting defects during the stated warranty periods below. All warranty periods start from the date of purchase from an authorised Jefferson dealer. If proof of purchase is unavailable from the end user, then the date of purchase will be deemed to be 3 months after the initial sale to the distributor.

#### 1 Year

· Welded Bottle Jacks

## 90 Days

· All replacement parts purchased outside of the warranty period

**Important:** All parts used in the repair or replacement of warranty covered equipment will be subject to a minimum of 90 days cover or the remaining duration of the warranty period from the original date of purchase.

#### Warranty Registration / Activation

You can register and activate your warranty by visiting the Jefferson Tools website using the following address: www.jeffersontools.com/warranty and completing the online form. Online warranty registration is recommended as it eliminates the need to provide proof of purchase should a warranty claim be necessary.

#### Warranty Repair

Should Jefferson confirm the existence of any defect covered by this warranty the defect will be corrected by repair or replacement at an authorized Jefferson dealer or repair centre.

#### Packaging & Freight Costs

The customer is responsible for the packaging of the equipment and making it ready for collection. Jefferson will arrange collection and transportation of any equipment returned under warranty. Upon inspection of the equipment, if no defect can be found or the equipment is not covered under the terms of the Jefferson warranty, the customer will be liable for any labour and return transportation costs incurred. These costs will be agreed with the customer before the machine is returned.

 $\ensuremath{\text{NOTE:}}\xspace^*$  deferson reserve the right to void any warranty for damages identified as being caused through misuse \*

#### Warranty Limitations

Jefferson will not accept responsibility or liability for repairs made by unauthorised technicians or engineers. Jefferson's liability under this warranty will not exceed the cost of correcting the defect of the Jefferson products. Jefferson will not be liable for incidental or consequential damages (such as loss of business or hire of substitute equipment etc.) caused by the defect or the time involved to correct the defect. This written warranty is the only express warranty provided by Jefferson with respect to its products. Any warranties of merchantability are limited to the duration of this limited warranty for the equipment involved.

#### **Claiming Warranty Coverage**

The end user must contact Jefferson Professional Tools & Equipment: Tel: +44 (0)1244 646 048 (UK) or +353 (0)1473 0300 (ROI) or their nearest authorised Jefferson dealer where final determination of the warranty coverage can be ascertained.

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#### Step 1 - Reporting the Defect

#### **Online Method:**

Visit our website www.jeffersontools.com/warranty and complete the Warranty Returns form. You can complete the form online and submit it to us directly or download the form to print out and return by post.

#### **Telephone Method:**

Contact your Jefferson dealer or sales representative with the following information:

- Model number
- Serial number (usually located on the specification plate)
- Date of purchase

A Warranty Returns form will be sent to you for completion and return by post or fax, together with details of your nearest authorised Jefferson repair centre. On receipt of this form Jefferson will arrange to collect the equipment from you at the earliest convenience.

#### Step 2 - Returning the Equipment

It is the customer's responsibility to ensure that the equipment is appropriately and securely packaged for collection, together with a copy of the original proof of purchase. Please note that Jefferson cannot assume any responsibility for any damage incurred to equipment during transit. Any claims against a third party courier will be dealt with under the terms & conditions of their road haulage association directives.

**NOTE:** Jefferson will be unable to collect or process any warranty requests without a copy of the original proof of purchase.

#### Step 3 - Assessment and Repair

On receipt, the equipment will be assessed by an authorised Jefferson engineer and it will be determined if the equipment is defective and in need of repair and any repairs needed are covered by the warranty policy. In order to qualify for warranty cover all equipment presented must have been used, serviced and maintained as instructed in the user manual. Where repair is not covered by the warranty a quotation for repair, labour costs and return delivery will be sent to the customer (normally within 7 working days).

Note: If the repair quotation is not accepted Jefferson Professional Tools & Equipment will invoice 1 hour labour time at £30 per hour plus return carriage costs (plus VAT). In cases where no fault can be found with the equipment, or, if incorrect operation of the equipment is identified as the cause of the problem, a minimum of 1 hour labour at £30 per hour plus carriage costs will be required before the equipment will be despatched back to the customer

Any equipment repaired or replaced under warranty will normally be ready for shipment back to the customer within 7 working days upon receipt of the equipment at an authorised Jefferson Repair centre (subject to part availability). Where parts are not immediately available Jefferson will contact you with a revised date for completion of the repair.

#### **General Warranty Enquiries**

For any further information relating to Jefferson warranty cover please call: +44 (0)1244 646 048 (UK) or +353 (0)1473 0300 (ROI) or send your enquiry via email to warranty@jeffersontools.com

#### Disclaimer:

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## EU Declaration of Conformity

We, Jefferson Professional Tools & Equipment, as the authorised European Community representative of the manufacturer, declare that this equipment conforms to the requirements of the following:

2006/42/EC (as amended) - Machinery Directive

EN 1494:2000/A1:2008 (as amended) - Mobile or movable jacks and associated lifting equipment

Signed By:

Date: 04.12.20

Name and address of manufacturer or authorised representative:

Jefferson Professional Tools & Equipment, 24 Lisgorgan Lane, Upperlands, BT46 5TE

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