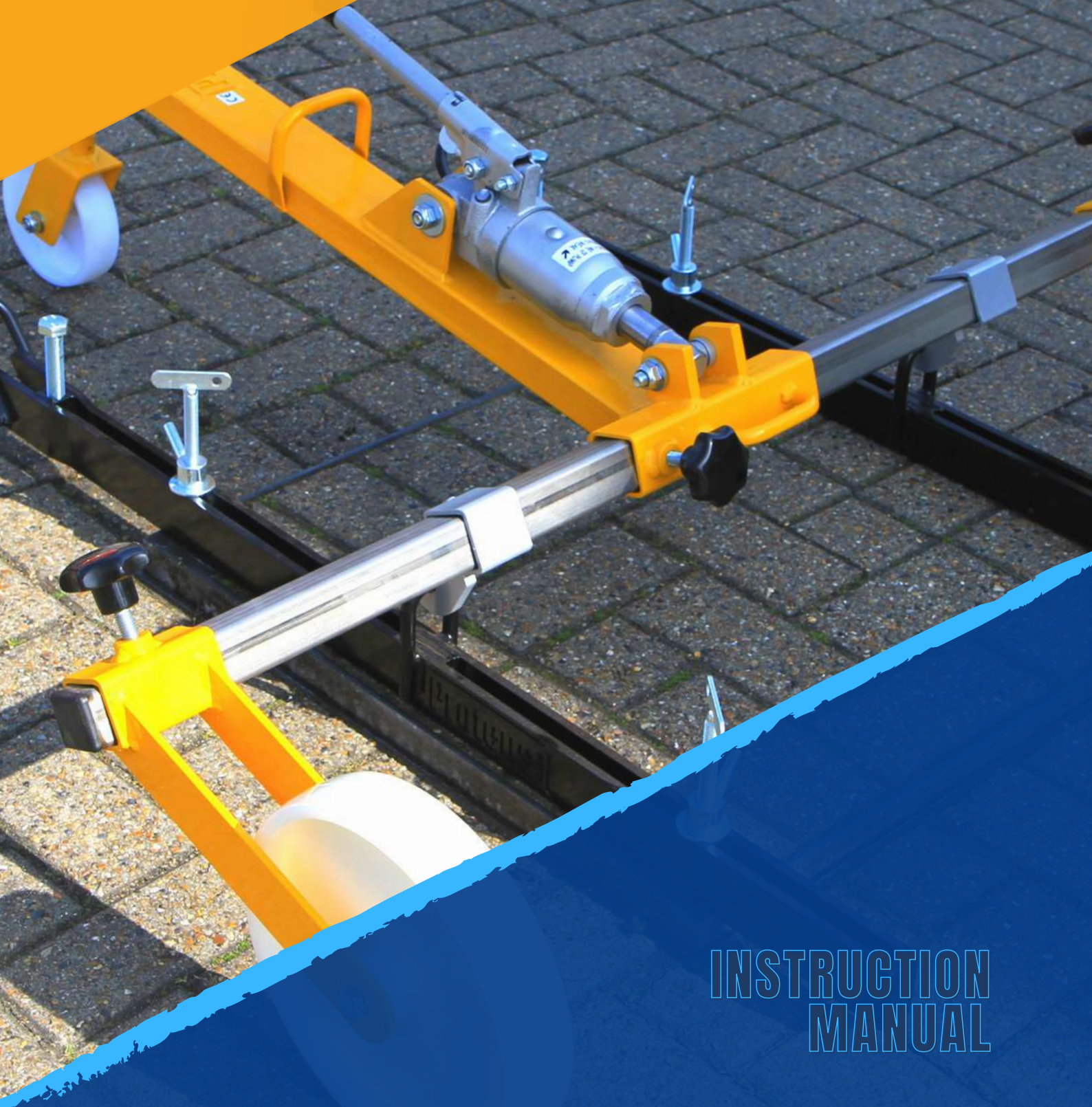


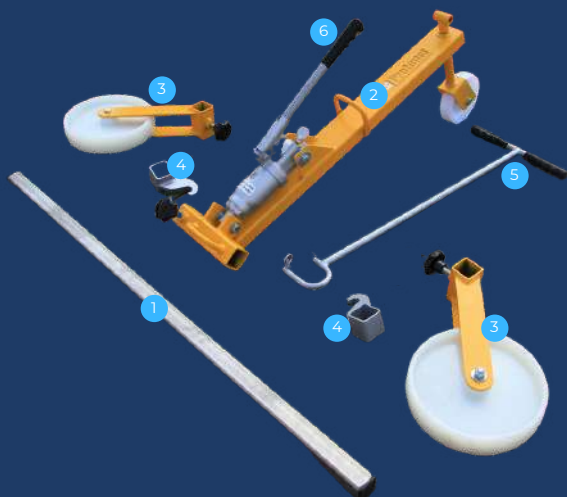
HANDYLIFT HYDRAULIC



INSTRUCTION MANUAL



Proteus Equipment
Dependable products for demanding environments



Parts list

- 1 Brushed stainless steel beam
- 2 Body/yoke with hydraulic pump, jockey wheel, and pivoting centre box with steel locking screw
- 3 Wheel assemblies with locking screws
- 4 Hook boxes
- 5 Towing handle
- 6 Pump handle

Maintenance procedures

To be carried out by persons suitably qualified. It is recommended to always wear appropriate PPE during the lifting operation, ie. eye protection, safety footwear and protective gloves.

Handylift Hydraulic models do not fall under LOLER regulations, and can therefore be inspected in line with your own internal requirements.

Lubricate the threads on the locking screws, wheel spindles and centre box hinges as necessary. Inspect the lifter for signs of damage periodically, and report any mechanical failure immediately.

It may become necessary after prolonged use to check that the oil level in the pump reservoir is correct. To do this, secure the pump in a horizontally level position as viewed from the side. It may be necessary to unbolt the pump from the lifter yoke to achieve this. Placing the pump lightly in a soft-jawed vice is an ideal way to secure it.

Ensure that the ram is fully retracted, and that the release screw used to control the lowering action of the lifter is closed again. Carefully remove the bung from the top of the reservoir to expose the filler hole. **DO NOT ADD HYDRAULIC OIL TO THE LEVEL OF THE HOLE.** The correct fill level is when the oil just covers the inner cylinder sleeve of the ram as viewed inside the reservoir. This should be roughly 10mm below the hole. **DO NOT OVERFILL.** If you do accidentally overfill, turn the pump to drain a little oil out again through the filler hole, and re-check.

Shell Tellus S2 M32 is ideal, or any other good quality hydraulic oil.

Fault advice

If you experience any problems with the hydraulic pump not pumping properly or maintaining pressure, remove the bung on top of the oil reservoir while the pump is horizontally level to allow any cavitations within the pump to be released. If this does not solve the problem, check for leaks, then contact Proteus.

Storage advice

Always retract the pump ram (ie. lower the lifter) during storage, and ensure that the pump handle is in the 'down' position. This will protect the ram from excess moisture exposure.

If prolonged storage without use is unavoidable, take the additional precaution of lubricating the lifter with a suitable moisture repellent. The product should be stored indoors in the interests of longevity.

Transporting the lifter

Handylift Hydraulic models are quickly and easily separated into two sections. First, release one front wheel locking screw and remove the wheel assembly from the beam, followed by the hook box. Repeat on the opposite side.

Next, release the locking screw on the pivoting centre box and slide the main beam out of the centre box whilst supporting the yoke section.

A range of storage accessories for your lifter and keys are available - contact Proteus for details and prices.



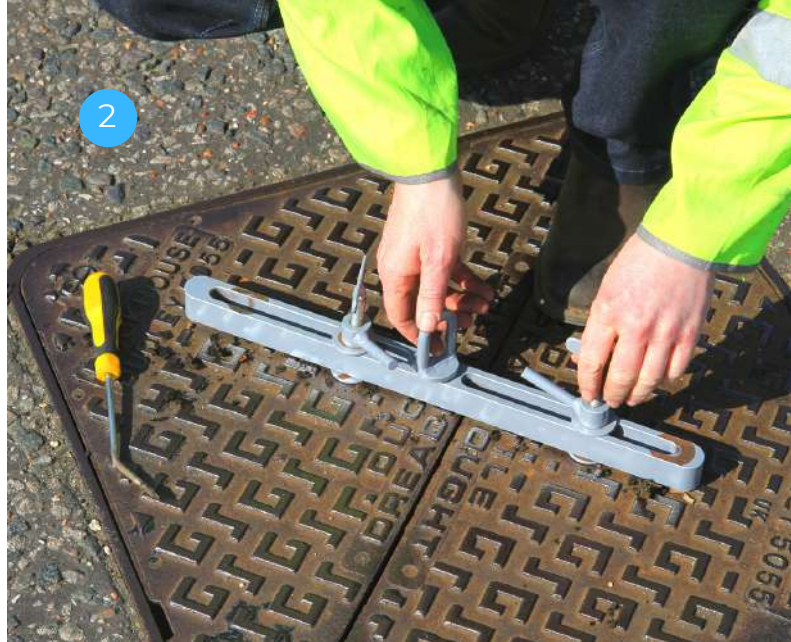
UNPACKING & ASSEMBLY

- 1 Insert the main beam into the centre box and, if needed, secure in place by tightening the steel locking screws temporarily.
- 2 Slide the hook boxes onto the main beam. It is essential that the hooks face inward, **TOWARDS** the jockey wheel.
- 3 Slide the wheel assemblies onto the beam. Ensure that the wheel forks are angled **AWAY** from the jockey wheel. All locking screws should only be tightened while transporting the lifter. **THEY MUST BE LOOSENED OR REMOVED BEFORE LIFTING.**
- 4 Finally, install the towing and pump handles. **ASSEMBLY IS NOW COMPLETE.**



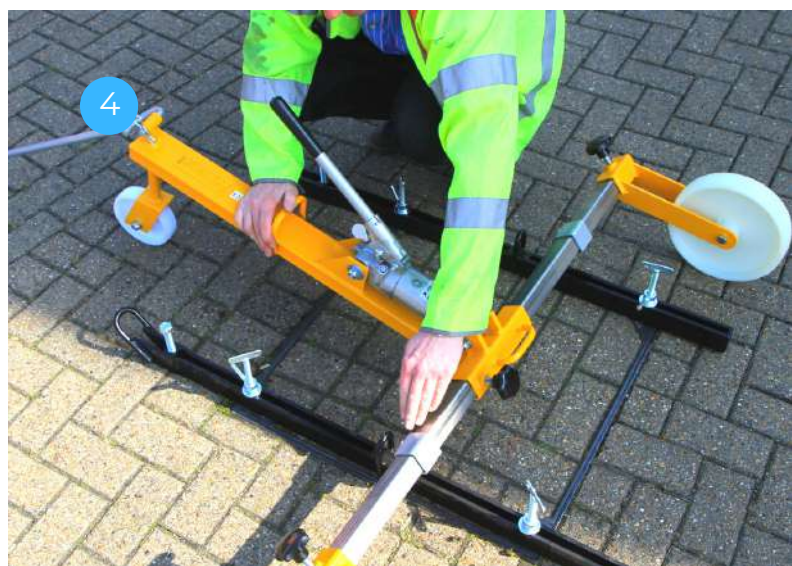
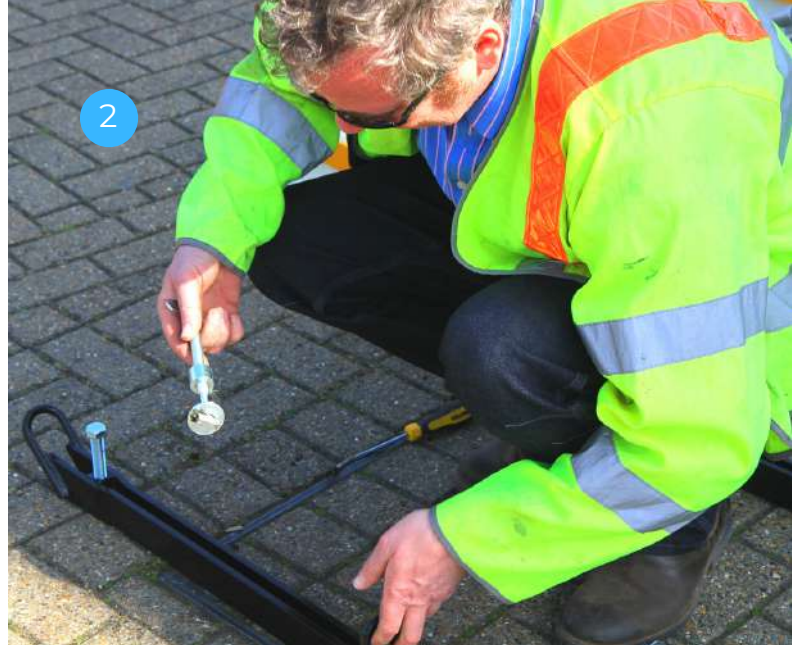
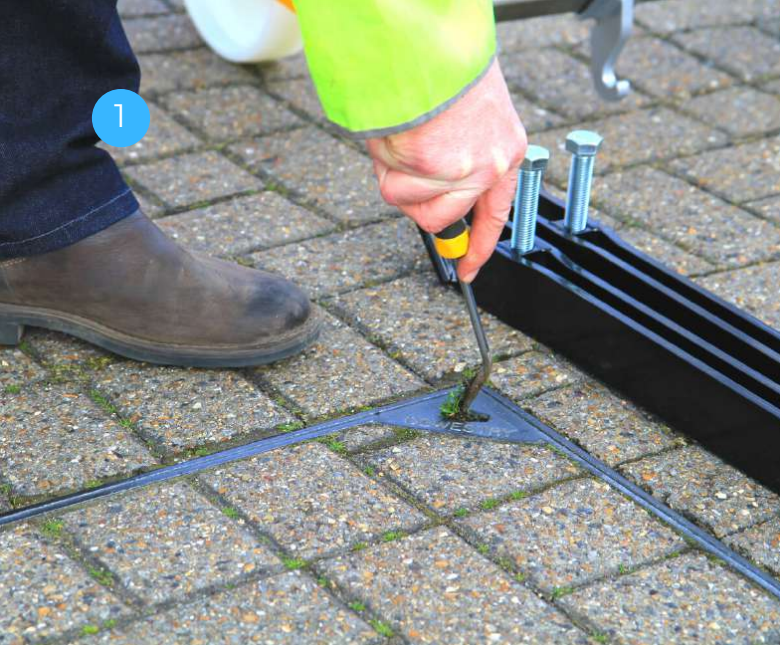
PREPARATION - COVERS WITH TWO KEYHOLES

- 1 Clean any debris from the cover's keyholes. A Proteus **KEYHOLE GOUGER** is ideal for this purpose.
- 2 Select the correct size and orientation of key for the cover (*note: this photo is just a sample of some of the available keys; you may not have all these in your kit*)
- 3 Ensure the keys are installed correctly in the cover. For single-piece covers with two keyholes, use an appropriate pair of **RINGTOP KEYS**.
- 4 Wheel the lifter over the cover. Ensure the wheels are positioned as close to the frame of the cover as possible. Slide the hook boxes into line with the keys, and hook through the loops. Also shown here are a set of **U-CHANNEL** wheel runners, for covers surrounded by soft or uneven ground.



PREPARATION - SPLIT COVERS

- 1 Clean any debris from the cover's keyholes. A Proteus **KEYHOLE GOUGER** is ideal for this purpose.
- 2 For split covers with one keyhole in each half, use a **SWIVEL-RING** locker spreader.
- 3 Place the keys in the keyholes, rotate the lugs 90 degrees, then lock the wingnuts down tight.
- 4 Position the lifter body slightly off-centre along the beam, with one of the hook boxes as close to dead centre as possible. Wheel the lifter over the cover. Ensure the wheels are positioned as close to the frame of the cover as possible. Engage the central hook box with the Swivel-ring's loop.



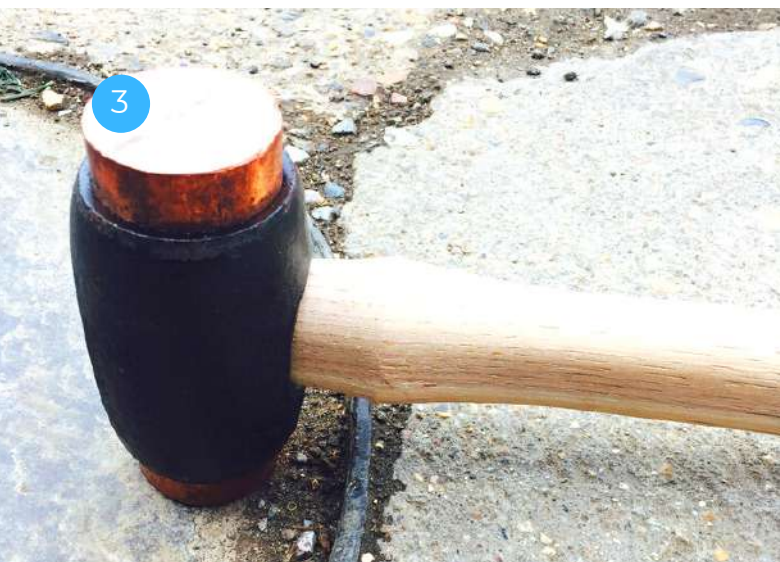
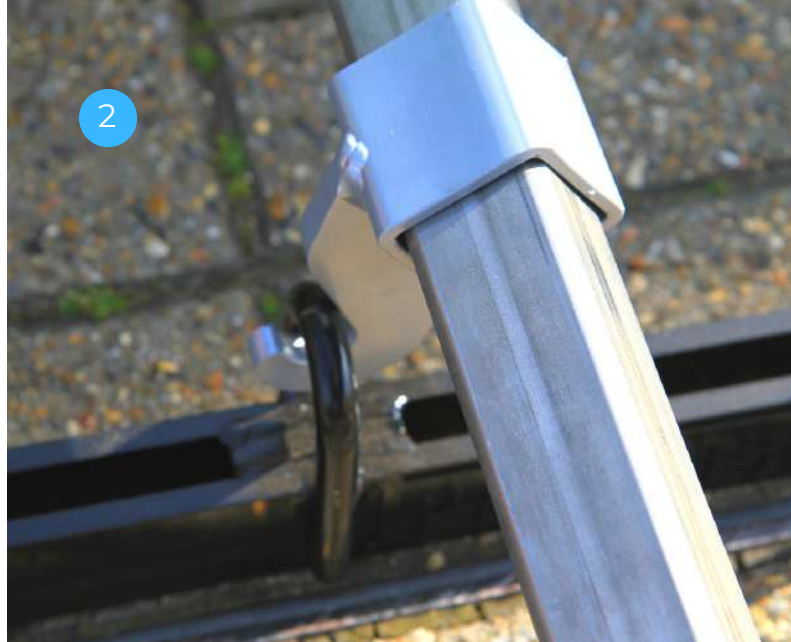
PREPARATION - COVERS WITH FOUR KEYHOLES

- 1 Clean any debris from the cover's keyholes. A Proteus **KEYHOLE GOUGER** is ideal for this purpose.
- 2 For covers with four keyholes, use **SPREADER BARS** or **UNIVERSAL BARS**. Place the bars over the cover so all four keyholes are visible through the channel in the centre of each bar. Slot the keys into this channel.
- 3 Slide the keys into the keyholes, rotate the lugs 90 degrees, then lock the wingnuts down tight on top of the bars.
- 4 Wheel the lifter over the cover. Ensure the wheels are positioned as close to the frame of the cover as possible. Slide the hook boxes into line with the bars, and hook through the loops in the centre of each bar.



PREPARATION - GATIC COVERS

- 1 Clean any debris from the cover's keyholes. A Proteus **KEYHOLE GOUGER** is ideal for this purpose. The cover may have an arrow indicating the angle of removal.
- 2 For Elkington Gatic-type covers, use **UNIVERSAL BARS**. The 'front' edge of the cover should have two keyholes along it; position the bars so that the end loops are at this end of the cover (large Gatic covers may have four keyholes on the front edge; if so, the inner two can be ignored). Ensure the central lifting loops are halfway along the cover. The keyhole layout on a Gatic cover normally means the bars will be at a slight angle when covering all four lifting holes.
- 3 Slot the keys into the channel on each bar, slide them into the keyholes, rotate the lugs 90 degrees, then lock the wingnuts down tight.
- 4 Wheel the lifter over the cover. Ensure the wheels are positioned as close to the frame of the cover as possible. Slide the hook boxes into line with the loops on the **END** of each bar, **NOT** the loops in the middle. Engage the hook boxes with the end loops.



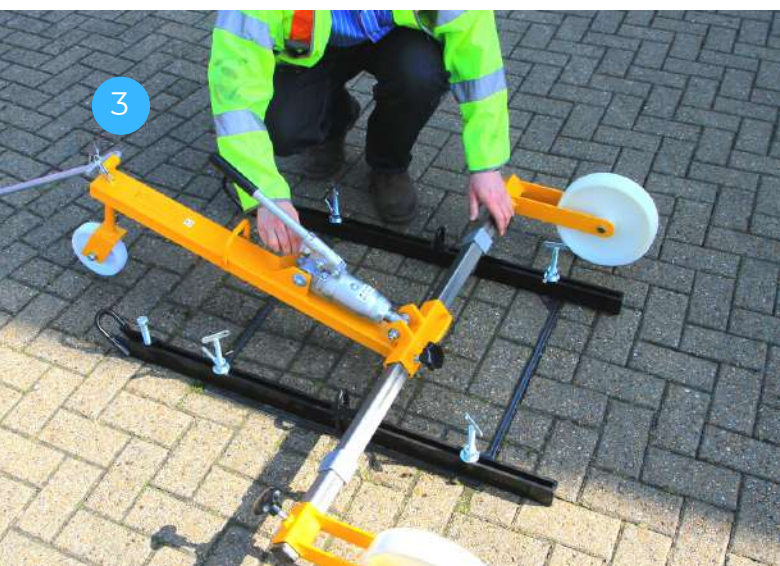
LIFTING

- 1 Ensure that the pressure release screw on the pump is closed, and all locking screws have been loosened or removed. Repeatedly operate the pump handle.
- 2 Whilst pumping, ensure that the keys are pulling square to the cover. If they are not, stop and re-position the keys and hooks to ensure even lift.
- 3 The cover should start to lift as soon as the keys are under tension. If it appears reluctant to move, **DO NOT** apply more and more force, as this can damage the keys. Instead, tap around the edges with a Proteus **COPPER HAMMER** to break the seal.
- 4 Continue pumping until the cover is clear of the aperture. Wheel the cover aside, then lower onto a firm surface by opening the pump's pressure release screw. Close the screw when the cover is parked.



LIFTING - GATIC COVERS

- 1 Ensure that the pressure release screw on the pump is closed, and all locking screws have been loosened or removed. Repeatedly operate the pump handle. This will break the seal and tilt the cover.
- 2 The cover should start to lift as soon as the keys are under tension. If it appears reluctant to move, **DO NOT** apply more and more force, as this can damage the keys. Instead, tap around the edges with a Proteus **COPPER HAMMER** to break the seal. If this still doesn't work, wind down the jack bolts located at the end of the bars for additional leverage, ensuring the bolts are pushing down onto the frame or surrounding ground, not the cover itself.
- 3 Disengage the hook boxes from the end loops, and reposition the lifter so it can be hooked onto the central loops. Try not to let the cover slide fully back into its frame as you switch; ideally it will sit slightly ajar. Continue pumping the handle.
- 4 When the cover is clear of the aperture, move it aside, then lower the cover onto a firm surface by opening the pump's pressure release screw. Close the screw when the cover is parked.



REPLACING THE COVER

- 1 Ensure that the pressure release screw on the pump is closed, then raise the cover by repeatedly operating the pump handle.
- 2 Wheel the cover back to its frame using the towing handle. Lower slowly, using the release screw to control the drop rate.
- 3 Continue lowering until the hook boxes can be disconnected from the bars/keys.
- 4 Tap around the edges of the cover with a Proteus **COPPER HAMMER** if needed, to fully re-seal

Contact Proteus for info and pricing on replacement parts for your hydraulic lifter, as well as a huge range of additional keys and accessories.

ALSO AVAILABLE FROM PROTEUS:



**HANDYLIFT
SWINGER**

- 1.0 tonne Safe Working Load
- Designed for 2-key covers including split ones
- Built to last - Heavy duty construction with durable hi-tensile steel screwjacks & bearings



**HANDYLIFT
WHEELER**

- 1.0 tonne Safe Working Load
- Designed for 2-key covers
- Features powerful screwjacks to break the seal on stuck covers



PRISTINE KEY

- Two-person lifting kit designed for the water industry by health & safety specialists Pristine Condition International
- Comes with height-adjustable handles, keyhole protectors, locking plates, three pairs of interchangeable heavy-duty key ends, and optional storage

SAFE WORKING LOAD: 1,500kg