

SAFE USE OF HYDRAULIC MANHOLE COVER LIFTERS

Applies to: Probst, Ox, Ritelift, Hydrajaws, Magnum, and similar hydraulic manhole cover lifting systems

Purpose

Hydraulic manhole cover lifters are designed to lift, break loose, and remove stuck or heavy manhole covers safely, reducing the risk of manual handling injuries.

They use hydraulic force and mechanical lifting arms to raise the cover vertically and in a controlled manner.

This leaflet provides safe-use guidance to prevent overloading, equipment ejection, slips, crushing hazards, and cover damage.

Before Use

- Inspect the lifter – Check frame, lifting arms, wheels, hydraulic pump, hoses, rams, and couplings for cracks, wear, or leaks.
- Verify SWL – Ensure the lifting system's capacity exceeds the expected lifting force of the manhole cover.
- Check certification – Ensure hydraulic components have valid inspection and test records.
- Inspect lifting keys – Check hooks, T-keys, spreader bars, and adaptors for wear or distortion.
- Verify correct adaptors – Use the correct key(s) for the specific manhole cover slots or keyholes.
- Inspect surface – Remove debris, dirt, or rust from around the cover to allow proper seating of lifting keys.
- Check hydraulic pump – Confirm oil level, valve operation, and that hoses are securely coupled.
- Check ground conditions – Ensure stable, level ground for wheeled or frame-mounted lifters.
- Test operation – Pump lightly with no load to check ram travel and valve function.
- Ensure operator competence – Only trained personnel should operate hydraulic lifters.

During Operation

- Position lifter centrally above the cover to ensure an even, vertical lift.
- Insert lifting keys fully into cover slots and check they are secure before applying pressure.
- Take up slack gently before applying full hydraulic force.
- Pump slowly to break the seal—covers can release suddenly.
- Stay clear of the lifting path and keep feet clear of the edges.
- Maintain stable footing and good posture—covers can shift unexpectedly.
- Once lifted, secure the cover using support props or wedges before attempting to slide or pivot it.
- Keep hands away from pinch points between cover and frame.
- Maintain exclusion zones around the lifting area to prevent others entering the hazard zone.
- If using a wheeled lifter, ensure brakes or stabilisers are engaged.
- Stop immediately if excessive resistance, cracking, or instability occurs.

Do Not

- Exceed the lifter's rated capacity.
- Use incorrect or damaged lifting keys.
- Stand directly over the manhole cover during hydraulic lifting.
- Use makeshift tools in place of certified lifting adaptors.

- Lift at an angle or pull sideways against the cover frame.
- Leave hydraulic pressure applied without supervision.
- Place fingers between lifted cover and frame.
- Use the lifter on steep, loose, or unstable surfaces.
- Attempt to lift covers that are seized due to structural failure—assess first.

After Use

- Lower the cover carefully and release hydraulic pressure.
- Remove lifting keys and inspect for cracks, bends, or wear.
- Clean hydraulic ram and hoses to remove grit and debris.
- Check for leaks, bent frames, or damaged connectors.
- Replace dust caps on couplers.
- Store the lifter in a dry, clean, secure location.
- Maintain LOLER/PUWER inspection records where applicable.
- Tag out and report defective equipment immediately.

Safety Reminders

- Always use the correct key for the manhole cover type.
- Keep lifting paths clear and maintain exclusion zones.
- Never lift people or stand beneath suspended covers.
- Use appropriate PPE: gloves, eye protection, safety boots, high-visibility clothing.
- Keep hands clear of cover edges and moving hydraulic parts.
- Perform pre-use checks at the start of each shift.
- Only competent persons should operate hydraulic lifting equipment.

Support and Maintenance

For service, inspection, and spare parts, contact your local Lifting Gear and Safety Depot

Depot List

Bristol: 0117 9714883
Avonmouth: 0117 9550456
Newport: 01633 334450
Port Talbot: 01639 540007
Pembroke: 01646 574000
Plymouth: 01752 474488
Fareham: 01329 550988
Redruth: 01209 703990