

SAFE USE OF SHEAR LEGS

Applies to: All shear-leg lifting frames, alloy tripod lifting sets, portable 3-leg shear legs, and shear legs fitted with manual chain blocks

Purpose

Shear legs (tripod lifting frames) provide a temporary lifting point for hoisting loads vertically using a chain block, lever hoist, or winch.

They are commonly used for lifting pumps, equipment, machinery, and materials into confined spaces, shafts, manholes, and trenches.

This leaflet provides safe-use guidance to prevent collapse, leg movement, overloading, or tipping.

Before Use

- Inspect all legs – Check tubes, joints, welds, hinges, chains, feet, and pulleys (if fitted) for damage or corrosion.
- Verify SWL – Ensure shear legs' rated capacity matches or exceeds the lifting load.
- Check the head / apex – Ensure bolts, pins, and plates securing the legs are tight and undamaged.
- Inspect the spread chain – Ensure the chain linking the legs is in good condition and properly attached.
- Inspect feet – Check rubber pads, steel shoes, or spikes for wear and secure fixing.
- Ensure correct height – Confirm the shear legs can be safely erected with enough working clearance.
- Verify ground condition – Must be level, firm, and able to support the point loads from each leg.
- Check chain block or hoist – Inspect and ensure it is correctly rated and compatible with the lifting point.
- Confirm guy lines (if required) – Some shear-leg systems require additional stabilising ropes.
- Test the setup – Fully assemble and check stability before attaching any load.
- Ensure operator competence – Only trained personnel should erect and use shear-leg lifting frames.

During Operation

- Ensure legs are fully spread and the spread chain is tight before lifting.
- Position the load directly beneath the apex lifting point.
- Keep legs equally loaded — avoid side loading or angled lifting.
- Lift slowly, maintaining vertical alignment of the load.
- Keep all personnel clear of legs, feet, and the area beneath the load.
- Use tag lines to steady the load if needed.
- Continuously check that legs remain stable on the ground.
- Avoid sudden movements that may cause leg shift or sinking.
- Monitor ground settlement — stop immediately if any leg begins to sink or move.
- Ensure chain block hook remains central and not rubbing the structure.
- Maintain clear, constant communication between the operator and signaller.

Do Not

- Exceed SWL under any circumstances.
- Erect shear legs on soft, sloping, or unstable ground without suitable spreaders.
- Use shear legs with missing or damaged spread chains.

- Lift loads at an angle or drag sideways.
- Use damaged, bent, or twisted legs.
- Use in high winds unless secured with guy lines.
- Leave a suspended load unattended.
- Stand beneath the load or inside the footprint of the legs during lifting.
- Replace manufacturer fittings with improvised pins, bolts, or chains.

After Use

- Lower the load fully and detach hoist.
- Collapse shear legs carefully, avoiding trapping fingers or hands.
- Clean leg joints and apex head of dirt and debris.
- Inspect all components for damage, wear, or bending.
- Lubricate hinges and pivot points where recommended by the manufacturer.
- Store shear legs in a clean, dry, secure area.
- Tag out damaged items and remove from service.
- Maintain LOLER inspection records for lifting appliances and accessories.

Safety Reminders

- Always erect shear legs fully before attaching a hoist.
- Keep lifts vertical to avoid overturning.
- Ensure spread chain is engaged and legs cannot move during the lift.
- Never exceed SWL or modify equipment.
- Maintain safe working zones and communication.
- Use correct PPE: gloves, safety boots, hi-vis, helmet.
- Only trained and competent persons should erect and operate shear legs.

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