



LIFTING GEAR & SAFETY

SAFE USE OF MUBA MECHANICAL LIFTING JACKS

Applies to: MUBA Mechanical Lifting Jack, MUBA Mechanical Construction Jack, and all *MUBA-branded mechanical jacks* (no hydraulics)

✓ Purpose

MUBA mechanical lifting jacks are used for vertically raising beams, machinery, frames, and structural components where controlled mechanical screw action is required.

They provide stable, incremental lifting without hydraulic components, making them ideal for construction and temporary works support.

This leaflet covers safe operation to prevent overloading, instability, mechanical failure, and crushing hazards.

⚙ Before Use

- Inspect the mechanical jack – Check body, base plate, lifting toe, head, threaded spindle, gears, handle, and safety locks for cracks, deformation, or corrosion.
- Verify SWL – Ensure the jack's rated capacity exceeds the full weight of the load.
- Check lifting toe – Ensure the toe is straight, fully seated, and undamaged.
- Inspect threads – Confirm spindle and thread surfaces are clean, lubricated, and free from burrs or wear.
- Assess ground conditions – Base must rest on firm, level ground; use steel plates or cribbing if required.
- Check lifting height – Ensure the mechanical lift stroke and thread engagement are sufficient.
- Confirm load path – The jack must lift vertically; **no angled loading**.
- Test jack – Operate the mechanical handle with no load to check smooth operation.
- Ensure operator competence – Only trained personnel should use mechanical MUBA jacks.

🏗 During Operation

- Position jack directly under a strong lifting point or beam flange.
- Ensure lifting toe or head plate is fully engaged and centred.
- Use steel packing/cribbing for stable contact and height adjustment.
- Lift slowly, using controlled mechanical handle rotation — avoid sudden, jerky movements.
- Raise in small increments and insert cribbing after each stage if lifting to height.
- Maintain a vertical load — stop immediately if load shifts or jack leans.
- Keep hands, feet, and legs away from pinch points and underload areas.
- For multiple jacks, lift evenly and communicate clearly between operators.
- Never force the handle — excessive resistance may indicate overload or misalignment.

⊘ Do Not

- Exceed the rated SWL.
- Use on uneven, soft, or sloped surfaces without proper spreaders.
- Lift at an angle or place side loads on the toe.
- Use damaged, bent, seized, or poorly lubricated jacks.
- Use split, rotten, or unstable cribbing materials.
- Use jack as a permanent support.

- Allow any part of the body beneath a supported load.
- Leave a load supported only by the jack — always insert cribbing or blocks.

After Use

- Lower the load fully and remove cribbing safely.
- Return the spindle fully to its lowest safe position.
- Clean threads, gears, and toe/head plate to remove debris and dirt.
- Lubricate threads and mechanical components as recommended by MUBA.
- Inspect for cracks, distortion, or thread damage.
- Store upright in a dry, protected area.
- Tag and remove any damaged jacks from service.
- Maintain PUWER inspection records.

Safety Reminders

- Always keep the load vertical and centred.
- Never exceed SWL or use damaged mechanical components.
- Use proper cribbing when raising loads.
- Maintain exclusion zones around lifting operations.
- Wear correct PPE: gloves, boots, helmet, and hi-vis.
- Only trained personnel should operate mechanical jacks.
- Perform full pre-use checks every time.

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