



LIFTING GEAR & SAFETY

SAFE USE OF HYDRAULIC FLOOR CRANES

Applies to: Probst, Sealey, Enerpac, Clarke, Draper, and all similar hydraulic workshop / engine floor cranes

✓ Purpose

Hydraulic floor cranes are mobile lifting devices used for raising engines, machinery, loads, and components in workshops, engineering environments, and maintenance tasks.

They provide controlled vertical lifting using a hydraulic ram and wheeled base.

This leaflet provides safe-use guidance to prevent overloading, tipping, hydraulic leaks, or crushed limbs.

⚙ Before Use

- Inspect the crane – Check frame, jib/boom, legs, wheels, castors, ram, release valve, and hook for cracks, deformation, corrosion, or leaks.
- Verify SWL – Ensure the crane's rated capacity matches or exceeds the load, especially when boom extension is adjusted.
- Check boom position – SWL decreases at extended boom lengths; always follow the load chart.
- Inspect hydraulic ram – Check for oil leaks, bent rods, or contaminated seals.
- Check hook & latch – Ensure hook swivels freely and safety latch closes fully.
- Inspect wheels – Ensure castors roll freely and locking mechanisms work.
- Check base stability – Legs must be fully deployed and locked before lifting.
- Inspect chains/slugs – Ensure lifting gear is certified and suitable for the load.
- Test the crane no-load – Pump and release to ensure smooth operation of ram and valve.
- Ensure operator competence – Only trained personnel should operate hydraulic floor cranes.

🚧 During Operation

- Position crane so the boom is centred directly over the load.
- Fully extend and lock the support legs before lifting.
- Attach slings or chains to the hook using proper rated lifting points.
- Lift slowly and steadily — avoid shock loading or fast pumping.
- Keep the load low during transport to maintain stability.
- Push, do not pull, the crane when moving with a load.
- Ensure clear floor conditions — remove debris and trip hazards.
- Keep hands and feet away from wheels, rams, and pivot areas.
- Maintain exclusion zones where others must not stand under the load.
- Stop immediately if the crane begins to tilt or wheels lift off the ground.
- Use tag lines to control suspended loads safely.

⊘ Do Not

- Exceed SWL at any boom extension position.
- Use crane with folded or partially deployed legs.
- Straddle loads or place legs on uneven/unlevel surfaces.
- Lift loads with unknown weight.
- Work beneath a suspended load.
- Use crane on soft ground, ramps, or slopes.

- Modify hook, ram, or structural components.
- Move the crane with the boom raised excessively high.
- Use damaged or uncertified slings, chains, or hooks.
- Use the crane to drag or pull items sideways.

After Use

- Lower load completely and disconnect lifting gear.
- Fully retract hydraulic ram by opening the release valve slowly.
- Fold and stow the legs (if folding type) safely.
- Clean crane surfaces and wipe hydraulic components.
- Inspect the frame, ram, and wheels for damage.
- Lubricate wheels and pivot points as required.
- Address any leaks or defects and tag out equipment if unsafe.
- Store crane on a level surface in a dry, protected area.
- Maintain LOLER and PUWER inspection records where applicable.

Safety Reminders

- Always consult the crane's load chart — capacity changes with boom extension.
- Maintain stable footing and clear floor conditions.
- Never exceed the crane's rated load or sling capacity.
- Keep loads as low as possible when manoeuvring.
- Always lift vertically from directly beneath the boom.
- Use appropriate PPE: gloves, safety boots, hi-vis, and helmet.
- Ensure regular maintenance and thorough examination by a competent person.

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