

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/slings – 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