Hydro Bard

OPERATING AND MAINTENANCE MANUAL

HYDRAULIC NUTS

HHN



Read this manual and the safety instructions before use.

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01 GENERAL SAFETY RULES

- Read this entire manual before using the product. The product must only be used by trained and authorised persons.
- Never exceed the maximum working pressure shown on the rating plate or label. Always monitor the system with a pressure gauge.
- All components in the system (pump, hose, coupler, valve, tool) must be rated for the same or higher pressure.
- Never disconnect, tighten or loosen fittings, couplers or hoses while they are under pressure.
- Pressurised hydraulic oil can penetrate the skin and cause serious injury. Never check for leaks by hand; seek medical help immediately after any oil injection.
- Wear safety glasses, work gloves and safety shoes. Do not stand in the line of movement of pressurised equipment.
- Do not use equipment that is damaged, leaking, deformed or has illegible labels; send it for service.
- Do not use the equipment for any other purpose or modify it. Use genuine spare parts only.

PRODUCT-SPECIFIC WARNINGS

- Do not exceed the calculated pressure or the maximum piston stroke.
- Do not release pressure before the lock ring is seated, or the preload will be lost.
- Do not use the nut on studs with a different thread size or pitch.

Warning signs

DANGER	A situation that will result in death or serious injury if not avoided.
WARNING	A situation that could result in injury if not avoided.
CAUTION	A situation that could damage the product or give a wrong result.

02 PRODUCT DESCRIPTION

The HHN hydraulic nut replaces a standard nut. When pressurised the piston pulls the stud axially; at the target preload the mechanical lock ring is seated and the load is carried permanently after pressure is released.

03 TECHNICAL DATA

Max. working pressure	1500 bar (21,750 psi)
Bolt range	M24–M200
Load range	27.0–797.6 ton
Lock	Mechanical lock ring
Detailed dimensions	Model table on the product page

04 PREPARATION AND CONNECTION

1. Clean and lubricate the stud threads. Check the nut internal thread.
2. Screw the hydraulic nut onto the stud by hand until it bears fully on the joint face.
3. Check that the piston is fully retracted and the lock ring turns freely.
4. Connect the hose to the nut coupler; use a 1500 bar pump and gauge.

05 OPERATION

1. Raise the pressure slowly to the calculated value.
2. At pressure, turn the lock ring down firmly onto the body using the tommy bar.
3. Release the pressure slowly; the load transfers to the lock ring.
4. To remove: re-apply pressure, back off the lock ring a few turns, release pressure and unscrew the nut.

06 MAINTENANCE AND PERIODIC CHECKS

Check	Interval
Lock ring thread and piston surface	Before each use
Coupler and dust cap	Before each use
Seal check and pressure test	Yearly
Visual corrosion check on permanent installations	Every 6 months

07 TROUBLESHOOTING

Symptom	Possible cause	Remedy
Pressure does not rise	Coupler or pump problem	Check connections and pump oil
Lock ring will not turn	Insufficient pressure; dirt in the thread	Check pressure; clean the threads
Pressure drops	Seal leak	Stop using; send for service

08 STORAGE, TRANSPORT AND DISPOSAL

- Store the equipment clean, dry and depressurised, with dust caps fitted to the couplers.
- Do not lift or carry the equipment by its hoses or couplers; use suitable lifting gear for heavy parts.
- Dispose of used hydraulic oil and oily materials in line with local environmental regulations.

09 SERVICE AND CONTACT

Contact Hydro Bard for maintenance, repair, pressure testing and spare parts. Quote the model code and serial number of any product sent for service.

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PRODUCT PAGE
hydrobard.com/en/hydraulic-nut.html

Keep this manual with the product and accessible to the user. For technical values see the product datasheet and the rating plate. · Rev. 1.0 · October 2026