



MODEL 78024 25 TON CAPACITY SHOP PRESS SETUP • OPERATING • MAINTENANCE INSTRUCTIONS

Note: Revision letters (A, B, C, D etc.) after model numbers have been omitted as they do not affect the setup, operating and maintenance instructions of a particular jack unless otherwise noted.

IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS PRESS, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS. FAILURE TO DO SO COULD CAUSE ACCIDENTS RESULTING IN SERIOUS OR FATAL PERSONAL INJURY AND/OR PROPERTY DAMAGE.

The use of hydraulic shop presses is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are part breakage resulting in flying parts, slipping and dropping of components to be pressed caused primarily by not using guards or protective blankets over

the components, improperly securing adjustments on the press, improperly securing components to be pressed, overloading and off-center loads.

It is the responsibility of the owner to make sure all personnel read this manual prior to using this device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual is lost or not legible, contact Norco Industries, Inc. for a free replacement. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/ owner or his designee, making sure that the operator comprehends its contents.

WARRANTY

This press is covered by a Limited Lifetime Warranty. For details see the back cover of Norco's product catalog.

WARNING

- **DO NOT operate the foot pump after the ram has reached its full extension! This may cause over-pressurization of the hose and fittings causing fluid leakage.**
- Always use a guard or protective blanket during pressing applications to avoid possible injury caused by flying parts. There are a multitude of possible press uses, therefore it is impossible to design a guard that will meet every application. The press owner must provide his own guarding or protective blanket.
- Inspect the press before each use. Do not use the press if it is damaged, altered, modified, in poor condition, leaking hydraulic fluid, or has loose or missing hardware or components. Take corrective action before using the press.
- Do not use press beyond its rated capacity. Standard presses are not equipped with pressure/force gages. If you are uncertain of forces being applied during any press operations, the owner/ user must purchase and install the appropriate Norco Gage with adapters.
- Wear protective eye wear during press operation. If possible position the press in an isolated area and shield it to prevent possible injury to others.
- Before operating this press make sure the threads on the push ram are fully engaged with the threads on Norco adapters or extension rams to prevent thread stripping under load.
- Use only Norco adapters and accessories.
- During the press operation, keep hands out of the area between the press head channel and press bed. Also keep body parts out from under the press bed.
- Do not alter or modify this press. This press is designed for shop maintenance applications.
- Make sure setup is stable. Components to be pressed shall be well supported and aligned to prevent slippage and breaking. Make sure press bed pins are inserted in the upright frame holes all the way and the pins are fully supporting the press bed channel flanges before pressing.
- Press owners are responsible for the placement, maintenance and safe operation of the press in accordance with federal (OSHA), state, and local safety standards.

SETUP

1. The air quick disconnect configuration of your choice can be installed in the threaded hole underneath the foot pedal labeled "pump". It will be necessary to remove the allen socket plug from the threaded hole first. Remove any remnants of teflon tape that may still be in the threaded hole. Use at least 1-1/2 wraps of teflon tape (or suitable sealant) around the threads of the air quick disconnect. Make sure the first complete thread is free from tape or sealant so they do not enter and contaminate the hydraulic system. Install the air quick disconnect by turning until snug in the threaded hole. Be careful not to strip threads by over tightening.

2. The foot pump includes an air vent next to the pressure gage. The air vent can be identified as a brass colored button stem. This button stem must be pulled up all the way in order for the pump to operate to maximum efficiency. Close the air vent when not using or transporting the pump.

3. An in-line filter/regulator/lubricator should be installed close to pump. Add a few drops of SAE 30 oil to the air intake weekly if no lubricator is used or when pump will be idle for a long time.

4. Sometimes air gets trapped in the air/hydraulic system during shipment. An air bound air/hydraulic system feels spongy when pumped and sometimes the ram will not extend smoothly.

PURGING AIR FROM THE AIR/HYDRAULIC SYSTEM

- a. Remove the pedal from the top of the foot pump by first removing one of the retaining rings on the end of the pivot shaft. Slide the pivot shaft out thus releasing the foot pedal. Depress both the release and pump buttons simultaneously for about 10 to 15 seconds and then release pressure off the buttons.
- b. Now depress the pump button to extend the ram. If the condition seems better repeat steps "a" and "b" until air is purged from the system.

OPERATING INSTRUCTIONS

1. Determine the required distance between the end of the ram plunger and the press bed based on the setup and required press stroke. Adjust the press bed height accordingly. Make sure the press bed pins that support the press bed are fully engaged with the holes in the flanges of the upright press frames and the pins are fully supporting the flanges of the bed plate channel.
2. The ram is bearing mounted for horizontal movement on the press head channel. Determine the desired location of the ram and unscrew the two knobs at the top of the ram mount and slide the ram into position. Tighten the two knobs to secure the ram in place on the press head channel.
3. Make the press work setup in accordance with all the warnings previously mentioned in the "WARNING" section of this manual including the guard or protective blanket required to prevent injury.
4. It is important to become familiar with the pedal operation of the air/hydraulic foot pump before using the press under load. Depressing the foot pedal end marked "Pump" extends the ram. To extend the ram a small distance it is necessary to

use incremental taps of your foot on the foot pedal until the ram reaches the desired position. Releasing the ram is accomplished by depressing the foot pedal end marked "Release". The pump is equipped with a two speed release mechanism. Gently depressing the foot pedal end marked "Release" releases the ram slower than if you depress the pedal all the way down. If you want to release the ram slower than the slow speed release, use gentle incremental taps of your foot on the "Release" pedal.

WARNING

Do not over extend the ram. There is a red limit line on the ram which becomes exposed when the ram is near its maximum extension. Stop pumping when you see the red limit line on the ram.

5. Make sure the parts or components to be pressed are properly setup on the press bed. Proper setup includes centering loads with ram, using setup components that can withstand more than the capacity rating of the press and providing a guard or protective blanket over the work before the work is started.

PREVENTATIVE MAINTENANCE

1. Always store the press in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements.
2. Lubricate moving parts once a month with a general purpose grease. Do not lubricate the bed plate bearing surface or ram plunger.
3. It should not be necessary to refill or top off the air/ hydraulic foot pump reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be performed in a dirt-free environment by qualified hydraulic repair personnel who are familiar with this equipment. Norco Authorized Service Centers are recommended. **IMPORTANT: In order to prevent seal damage never use alcohol, hydraulic brake fluid, or transmission oil in the air/hydraulic foot pump.**

4. Every press owner is responsible for keeping the label clean and readable. Use a mild soap solution to wash external surfaces of the press but not any moving hydraulic components. Contact Norco Industries for a replacement label if your press label is unreadable.
5. Inspect the press before each use. Do not use the press if any component is cracked, broken, bent, shows sign of damage, or leaks hydraulic fluid. Do not use the press if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the press again.
6. Do not attempt to make any hydraulic repairs unless you are a qualified hydraulic repair person that is familiar with this equipment.

REPAIR SERVICE

If your Norco product requires service or repair, contact the Norco Customer Service Department for the location of the nearest Norco Authorized Service Center.

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It will be necessary to provide the Norco Authorized Service Center with a copy of the bill of sale if requesting warranty repair. If the authorized service center determines your product is eligible for warranty repair, the repair will be made at no charge and returned freight prepaid. The cost of non-warrantable service, repair, and return freight is the customer's responsibility.