

FREEDOM

INDUSTRIAL HYDRAULICS

MODELS HPA506 / HPA5013 / HPE506 / HPE5013 / HPH506 50 TON & HPE10010 100 TON CAPACITY SHOP PRESSES SETUP • OPERATING • MAINTENANCE INSTRUCTIONS

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 Freedom Industrial Hydraulics 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

These presses are covered by a Limited Lifetime Warranty. For details see the back cover of Freedom's product catalog.

⚠ WARNING

- 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.
- 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 make sure the threads on the threaded adapter are fully engaged with the threads on Freedom adapters or extension rams to prevent thread stripping under load.
- Use only Freedom 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 bed channel holes and upright frame holes all the way and the pins are fully supporting the press bed 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. 50 and 100 ton capacity presses require very little setup. Connect an air line to the air/hydraulic foot operated press or plug the electrohydraulic pumps into a 110/115 VAC outlet in accordance with the instructions in the pump manuals.
2. Air/hydraulic and electrohydraulic pumps have vent plugs that must be opened in accordance with the instructions given in the pump manuals before operating the presses.
3. Sometimes air gets trapped in the hydraulic system during shipment. An air bound hydraulic system feels spongy when pumped and sometimes the ram will not advance and retract without hesitation.

PURGING AIR FROM THE AIR/HYDRAULIC SYSTEM

- a. Press down on the pump end of the pedal on the air/hydraulic foot pump with one hand while simultaneously depressing the button located under the "release" end of the pedal with a finger of the other hand. Hold this position for 10 to 15 seconds and then release both hand and finger.

- b. Now depress the "pump" end of the pedal with your foot and raise the jack to maximum height. If the condition remains, repeat steps "a" and "b" until air is purged from the system.

PURGING AIR FROM THE ELECTROHYDRAULIC SYSTEM

- a. Run the system through several complete cycles without a load on the ram. When the ram advances and retracts without hesitation, the air is purged from the system.

PURGING AIR FROM THE MANUAL PUMP SYSTEM

- a. Open the release valve by turning the knob in a counterclockwise direction two full turns.
- b. Pump the handle ten full strokes.
- c. Close the release valve by turning the knob in a clockwise direction until tight.
- d. Pump the handle until the ram is fully extended. If the ram remains, repeat steps "a" through "d" until air is purged from the system.

OPERATING INSTRUCTIONS

Become familiar with the pump and load release components of the pump by reading the pump manual.

Determine the required distance between the end of the ram plunger and the press bed based on the setup and required press stroke. Become familiar with the operation of the winch that raises and lowers the press bed. Consult the enclosed winch owner's manual for proper operation and warnings. 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 press bed channels and upright press frames.

The hydraulic ram is bearing mounted for horizontal movement on the press head channels. Determine the desired location of the ram and using an open end or adjustable wrench, unscrew the two hexagonal nuts at the bottom of the press plate. Slide the ram mounted press plate in to position and tighten the hexagonal nuts to secure the ram in place on the press head channels.

Make the press work setup in accordance with all the instructions and warnings previously mentioned in the "WARNING" section of this manual, and the pump and winch manuals enclosed.

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 any of the pump reservoirs 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 and pump failure, never use alcohol, hydraulic brake fluid, or transmission oil in the hydraulic system.**

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 Freedom Industrial Hydraulics 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 Freedom product requires service or repair, contact Freedom Industrial Hydraulics for the location of the nearest Freedom authorized service center.

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It will be necessary to provide the service center with a copy of the bill of sale if requesting a 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.