

ORIGINAL INSTRUCTIONS

Form No.102481



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SHOP PRESS

Max Capacity: 25 or 55 Ton

Assembly and Operating Instructions for:

SPF25 and SPF55

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SAFETY DEFINITIONS

Safety symbols are used to identify any action or lack of action that can cause personal injury. Your reading and understanding of these safety symbols is very important.



Danger is used only when your action or lack of action will cause serious human injury or death.



Warning is used to describe any action or lack of action where a serious injury can occur.

IMPORTANT

IMPORTANT is used when action or lack of action can cause equipment failure, either immediate or over a long period of time.

SAFETY PRECAUTIONS

These instructions are intended for end-user application needs. Many problems with new equipment are caused by improper operation or installation. For a detailed parts list or to locate a Power Team Authorized Hydraulic Service Center contact your nearest Power Team facility. A list of all Power Team facilities is located at the end of this document.



It is the operator's responsibility to read and understand the following safety statements,

- Only qualified operators should install, operate, adjust, maintain, clean, repair, or transport this machinery.
- These components are designed for general use in normal environments. These components are not specifically designed for lifting and moving people, agri-food machinery, certain types of mobile machinery or special work environments such as: explosive, flammable or corrosive. Only the user can decide the suitability of this machinery in these conditions or extreme environments. Power Team will supply information necessary to help make these decisions.



To help prevent personal injury,

GENERAL



- **ALWAYS** read and carefully follow the operating instructions and safety precautions before assembling or using this press. Most problems with new equipment are caused by incorrect operation or assembly.
- Read and carefully follow the operating instructions and safety precautions for the pump and cylinder used with this press.

- Presses can exert extremely high forces at moderate hydraulic pump pressures. If you have any questions concerning how much force is exerted at a given pressure, contact your nearest Power Team facility (see listing at the end of this document).

SET-UP

- The owner/operator of this press must see that it is installed and operated according to federal (OSHA), state, local European (EU), and other safety standards where applicable.
- Install the press in an isolated area, or shield the press to minimize danger to others. Hydraulic pressure can cause materials to break, possibly resulting in personal injury due to flying objects, falling objects, shifting loads and other hazards.
- This press is designed for shop maintenance applications. Guards, enclosures, monitors, interlocks, controls, restraints, and other devices must be used by the owner/operator when this press is used for specific applications with hazards best known by the owner/operator. For information regarding other applications, contact your nearest Power Team facility (see listing at the end of this document).
- Additions of specific safety equipment, such as permanent enclosures, guards or shields, light curtains, etc., to the press must be on separate, free-standing structures, or clamped to the press frame without cutting, drilling, welding or otherwise modifying the press structure or affecting its function. Such modifications can cause equipment damage and/or personal injury.
- Modifications to the structure and function of this press are not permitted, voids the warranty, may cause personal injury, and voids the Declaration of Incorporation.
- Any press accessories, fixtures, plates, or special equipment used with the press must have a maximum tonnage rating equal to or higher than the maximum tonnage rating of the press, or breakage and possible injury can occur.
- The owner/operator of the press must ensure that all safety-related decals are installed, maintained, and replaced if they become hard to read.

OPERATION



- The press operator and anyone within sight of the press must wear protective eyewear that meets the requirements of OSHA, ANSI Z87.1-1968, or applicable EU standards.
- It is the owner/operator's responsibility to use appropriate guarding to contain any pieces that might break or fly apart when applying force. For added protection, always wrap the workpiece in a protective blanket before applying force. Contact your nearest Power Team facility (see listing at the end of this document) for more information about protective blankets.



- Keep hands out of the work area during a pressing operation.
- Workpieces must be well supported and aligned so that cylinder/ram force is straight, and parts being pressed cannot slip out or break.
- Use caution when loading and unloading the press.

BOLSTER ADJUSTMENT

A winch and cable assembly support the bolster when the bolster support pins are not in

place. The following warnings must be observed to prevent personal injury:

- **Keep hands, feet, legs, etc. out from under the bolster. Accidental slippage can result in personal injury.**
- **When raising or lowering the bolster, place a support pin all the way through the front and the back uprights in the highest hole under the bolster that will not interfere with the new bolster position. Remove your hands from the support pins after the pins are in place. Failure to do so can result in personal injury if the bolster falls.**
- **Bolster support pins must be securely in place and all cables slack before placing a workpiece on the press bed or starting a pressing operation. Stay out from underneath the bolster.**
- **Regularly inspect the entire length of the lifting cables, and replace any cable that appears frayed, worn, or crushed. The cables must run on the pulleys properly, and the pulleys must be free to turn. Proper cable maintenance will help prevent accidental cable breakage.**

SHOP PRESS

Max. Capacity: 25 or 55 Ton

NOTE

- For a detailed parts list or to locate a Power Team Authorized Hydraulic Service Center, contact your nearest Power Team facility. A list of all Power Team facilities is located at the end of this document.
- Carefully inspect the press upon arrival. The carrier, not the manufacturer, is responsible for any damage resulting from shipment.

ASSEMBLY

1. Assembly of the Shop Press

Remove banding from the press and shipping pallet, and remove all cartons. Stand the press upright. Refer to the parts list and follow these instructions during the assembly of hydraulic components and options.

- A. Remove the lock ring and spring from the winch handle. Turn the handle 180°. Assemble lock ring and spring again.
- B. Using the fasteners noted on the parts list, attach the pump to the pump mounting bracket. See Figures 1, 2, & 3.

NOTE

If your pump is a model PE172, remove the handle from the pump to allow clearance for the shop press winch handle.

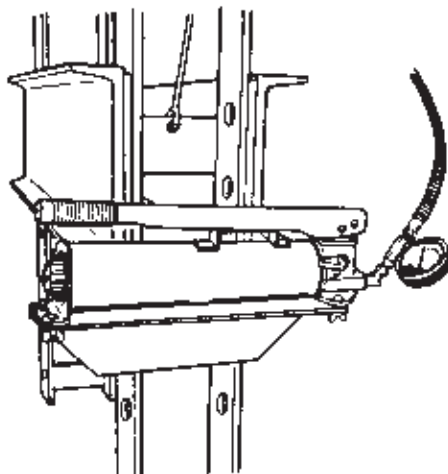


Figure 1

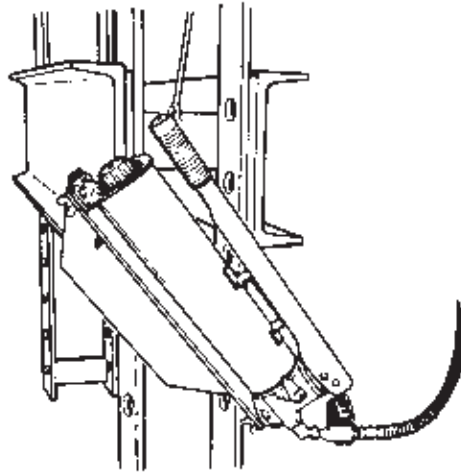


Figure 2

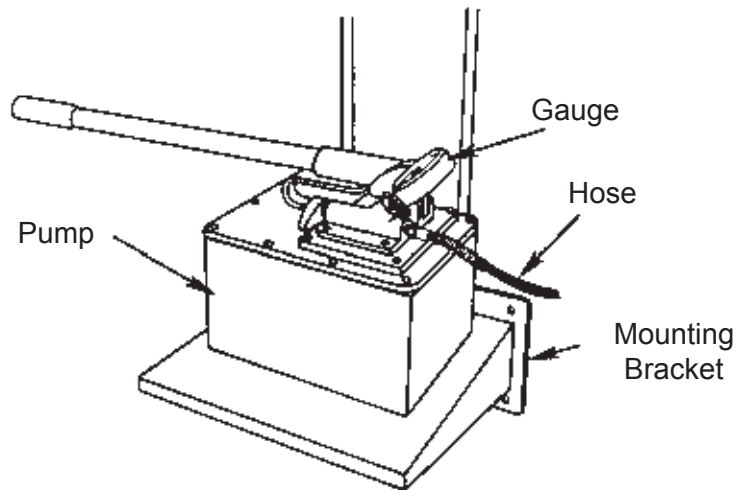


Figure 3

- C. Clean the threads on the fittings and on the hydraulic hose. Assemble the hose to the pump. Thread the other end of the hose into the cylinder.

IMPORTANT

Seal hydraulic connections with pipe sealant. PTFE tape can also be used to seal hydraulic connections if only one layer of tape is used. Apply the tape carefully, two threads back, to prevent it from being pinched by the fitting and broken off inside the pipe end. Loose pieces of tape could travel through the system, obstructing the flow of oil or jamming precision-fit parts.

- D. Air can accumulate in the hydraulic system during initial set-up or after prolonged use, causing the cylinder to respond slowly or in an unstable manner. Extend and retract the cylinder several times without putting a load on the system. Air will be released through the pump reservoir.
- E. Positioning the work bed:
- (1) Put a small amount of tension on the cable by cranking the winch up, taking weight off the pins. This frees the pins in the end of the bolster next to the winch (or right side of the press). Pull the loose pins out.
 - (2) Raise the other end of the bolster by pulling slightly on the handle until the other two pins are free.
 - (3) Crank the winch for either up or down movement of the work bed. Reassemble the pins.

IMPORTANT

The winch has a special friction brake for holding the bolster during positioning. The friction brake is NOT designed to hold during a pressing operation nor will it hold a work load during positioning.

2. CYLINDER ATTACHMENT

A. 25 TON PRESS

- (1) Remove the adjusting screw from the cylinder mounting plate. Slip the two pins on the mounting plate over the back lip on the bottom of the upper bolster.
- (2) Slide the mounting plate to the right side (winch side) of the press until the front roll pin lines up with the notch on the front of the upper bolster. Raise the plate until the roll pin clears the lip on the bolster and slide the mounting plate to the left.
- (3) Install the adjusting screw in the mounting plate again.
- (4) Disassemble the hose from the cylinder. Plug the cylinder and the end of the hose.
- (5) Thread the cylinder into the mounting plate. Position the cylinder so the hose fitting on the cylinder points to the side of the press where the pump is mounted.



WARNING

To help prevent personal injury, the cylinder and mounting plate MUST have maximum thread engagement to prevent the threads from stripping while the press is under full load.

(6) Thread the hose into the fitting on the cylinder again.

B. 55 TON PRESS

- (1) Remove the roller attachment plates from each end of the mounting plate.
- (2) Disassemble the hose from the cylinder. Plug the cylinder and the end of the hose.
- (3) Thread the cylinder into the mounting plate. Position the cylinder so the hose fitting on the cylinder points to the side of the press where the pump is mounted.

NOTE

The cylinder handle must not interfere with the winch cable after the cylinder is installed.



WARNING

To help prevent personal injury, the cylinder and mounting plate MUST have maximum thread engagement to prevent the threads from stripping while the press is under full load.

- (4) Due to the weight of the mounting plate and cylinder, the lower bolster can be used with cribbing to raise the mounting plate and cylinder to the top bolster.

IMPORTANT

The lower bolster should be used in this manner only during the assembly of the press because raising and lowering the bolster with a load can cause cable breakage.

- (5) Attach the cylinder/mounting plate assembly to the upper bolster by installing the roller attachment plates on the mounting plate again.
- (6) Lower the bolster assembly onto the bolster pins.
- (7) Thread the hose into the fitting on the cylinder again.

IMPORTANT

To help prevent equipment damage,

- **Retract the cylinder when not in use to protect the surface of the piston rod.**
- **When adding oil to the pump reservoir, use only high-grade hydraulic oil. Never use brake fluids or other substitutes.**

POWER TEAM FACILITIES



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DECLARATION OF CONFORMITY



EC DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

Serial # 10xx

Thierry Rouvelin
Vice President Engineering

We declare that our "-----" Models:

- 1.
- 2.

Description of the product:

To which this declaration relates are in conformity with the following:

<u>EN, EN-ISO, ISO standards</u>	<u>Title</u>
Per the provisions of the Machinery Safety Directive	2006/42 EC
EN_ISO 12100-1	Basic concepts, general principles for design - Part 1
EN_ISO 12100-2	Basic concepts, general principles for design - Part 2
EN 13478:2001+A1:2008	Fire prevention and protection
EN ISO 14121-1:2007	Risk assessment - Part 1
EN 982:1996	Safety requirements for fluid power systems & their components – Hydraulics
EN 983:1996	Safety requirements for fluid power systems & their components - Pneumatics
EN ISO 13849-1:2008	Safety-related parts of control systems - Part 1
EN ISO 13849-2:2008	Safety-related parts of control systems - Part 2
EN 61310-2:1995	Indication, marking and actuation
EN 61310-3:1999	Indication, marking and actuation

<u>EN, EN-ISO, ISO standards</u>	<u>Title</u>
Per the provisions of the Noise Emission in the Environment by Equipment for Use Outdoors Directive	2000/14 EC
EN_3200L0014	Noise emission in the environment for use outdoors
ISO 3744:1994	Sound Power Level Measurements

I, the undersigned, hereby declare that the equipment specified above conforms to the above European Communities Directive(s) and Standard(s). This product is not to be put into service until the final machine into which it is to be incorporated has been declared in conformity with the provisions of this Directives, where appropriate.

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