



# 20 TONNE FLOOR TYPE AIR/HYDRAULIC PRESS

MODEL NO: YK20FAH.V3

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear protective gloves



Wear safety footwear



Wear protective clothing



Wear face Shield



Warning:  
Crushing of  
Hands

## 1. SAFETY

- ✓ Familiarise yourself with the applications, limitations and hazards of the press.
- ✓ Maintain the press in good condition (use an authorised service agent).
- ✓ Replace or repair damaged parts. Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Keep the press clean for best and safest performance.
- ✓ Locate the press in an adequate working area for its function, keep area clean and tidy and free from unrelated materials and ensure there is adequate lighting.
- ✓ Ensure the workpiece is correctly secured before operating the press.
- ✓ Ensure that all fittings are tight before each use.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings, other loose jewellery and contain long hair.
- ✓ Keep hands and body clear of the table when operating the press.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Keep children and unauthorised persons away from the working area.
- ✓ Securely attach the press to a flat, firm, level surface capable of supporting the weight of press and any workpiece taking into account clearance for workpieces.
- ✓ When not in use, release pressure from the hydraulic unit and clean the press. Stand or store the V blocks in a safe location.
- ✗ **DO NOT** operate the press if any parts are missing as this may cause failure and/or possible personal injury.
- ✗ **DO NOT** use the press for a task it is not designed to perform.
- ✗ **DO NOT** make any modifications to the press.
- ✗ **DO NOT** exceed the rated capacity of the press.
- ✗ **DO NOT** apply off-centre loads.
- ✗ **DO NOT** allow the workpiece or the v blocks to fall from the table.
- ✗ **DO NOT** get the press wet or use in damp or wet locations or areas where there is condensation.
- ✗ **DO NOT** operate the press when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✗ **DO NOT** climb upon the press.
- ✗ **DO NOT** use the press to compress a spring or any other item that could disengage and cause a potential hazard including personal injury.
- ✗ **DO NOT** stand directly in front of a loaded press and never leave a loaded press unattended.
- ✗ **DO NOT** allow untrained persons to operate the press.
- **WARNING!** Always wear approved eye or face protection when operating the press. A full range of personal safety equipment is available from your Sealey stockist.
- **WARNING: DO NOT** top up hydraulic unit with brake fluid, or any other fluid other than a good quality hydraulic oil (Sealey Part Number: HJO500MLS/HJO5LS) as this may cause serious damage to the hydraulic unit and will invalidate the warranty.
- **WARNING!** Always position the press against a wall. If the press is situated in the open workshop, it is essential that a guard be placed at the rear of the unit. This will prevent injury to bystanders in the event of the work piece ejecting suddenly.
- **WARNING!** The warnings, cautions and instructions in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.
- ▲ **DANGER!** The press is top heavy. If it requires moving after assembly or for relocation, use suitable slings around the top crossbeam, or lift direct with a forklift with the forks located under the top crossbeam. **DO NOT** use a pallet truck.

## 2. INTRODUCTION

Steel frame construction with side mounted, air motor powering hydraulic pump unit. Sliding hydraulic ram assembly giving 403mm of lateral travel for off-centre pressing applications. Fitted with ram pressure gauge and supplied with flat pressing plate/V-blocks.

### 3. SPECIFICATION

Model No:.....	YK20FAH.V3
Air Consumption: .....	7.06cfm
Bench or Floor Mounting:.....	Floor
Capacity:.....	20tonne
Gauge Included:.....	Yes
Lateral Ram Travel:.....	403mm
Maximum Height - Ram to Table:.....	1018mm
Min./Max. Air supply pressure:.....	0.75/0.85MPa
Minimum Height - Ram to Table:.....	58mm
Optional Accessories: .....	YKPP8 - Press Pin Set
Overall Height: .....	1796mm
Overall Width:.....	975mm
Ram Diameter:.....	Ø48mm
Ram Stroke:.....	185mm
Table Aperture:.....	100mm
Type:.....	Air/Hydraulic
Working Pressure:.....	108-120psi
Working Table Depth:.....	206mm
Working Table Width:.....	542mm

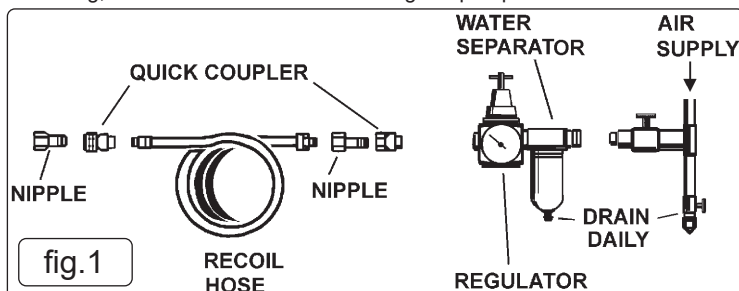
### 4. ASSEMBLY

#### NOTE: REFER TO PARTS LIST DIAGRAM

- 4.1. Unpack the product and check the contents. Should there be any damaged or missing parts, contact your supplier immediately. Take care to ensure safety when removing main frame from its packing, as the unit is very heavy.
- 4.2. Use the parts diagram as your guide to assembly. Lay all parts and assemblies out before beginning assembly. The following procedure is recommended.
- 4.3. Attach one base section (21) to left frame post (20) and lower cross member (26) using bolts (25), washers (22), lock washers (23) and nuts (24). Attach two diagonal supports (60) between the post and base section using bolts (25), washers (22), lock washers (23) and nuts (24).
- 4.4. Attach the other base section (21) and the right frame post (20) to the lower cross member (26). Attach two diagonal supports (60) between the right post and base section using bolts (25), washers (22), lock washers (23) and nuts (24).
- 4.5. Put the press frame in an upright position, attach one upper crossbeam (10) to left and right posts (20) using bolts (9), washers (13), lock washers (12) and nuts (11).
- 4.6. Hook the under plate (7) onto the first cross beam and slide the other cross beam sideways through the other hooks until it is in position in front of the posts. Attach to the posts with bolts (9), washers (13), lock washers (12) and nuts (11).
- 4.7. Screw the upper round nut (6) onto the ram (3), insert the ram into the hole in the under plate (7), then screw the lower round nut (8) onto the ram and attach the serrated saddle (5) to the ram.
- 4.8. Place the two halves of the press bed frame (18) back to back. Move them apart until the space between them is the same as the length of the four spacers (28). Align each spacer with the holes in the bed halves and insert a bolt (27) through both frames and the spacer. Secure the four bolts by using the washers (14), lock washers (15) and nuts (16).
- 4.9. Insert bed frame pins (19) into the holes in the posts at the same level. Hold the assembled bed frame diagonally between the posts. Turn it horizontal so that the ends are in contact with the posts and lower it onto the pins.
- 4.10. Attach the pump and air motor assemblies to the right post using bolts (29) and washers (14). Ensure that the air motor is below the pump. Insert the pumping handle (48) into the handle bracket (38).
- 4.11. Connect the hydraulic hose fitting (57) to the connection nut (58) and assemble the pressure gauge (1) to the pressure gauge connection nut and nylon ring (59) (2) which is on the top of the ram (3).
- 4.12. Tighten all nuts, bolts and screws.

### 5. INSTALLATION

- ▲ **DANGER!** The press is top heavy. If it requires moving after assembly or for relocation, use suitable slings around the top crossbeam, or lift direct with a forklift with the forks located under the top crossbeam. **DO NOT** use a pallet truck.
- 5.1. Securely attach the press to a flat, firm, level surface, taking into account any clearance required for workpieces.
  - 5.2. Connect to an air supply as recommended in fig.1. The air supply must be capable of 108 to 120psi and 4cfm.
  - 5.3. Purge hydraulic system. Before operating the press, the hydraulic system may require purging in order to eliminate any air that may have built up during transit.
  - 5.4. Manual operation: open the release valve by turning it counter-clockwise. Pump several full strokes to eliminate any air in the system.
  - 5.5. Air operating system: open the release valve by turning it counter-clockwise. Connect the air inlet fitting into the air supply hose lock fitting, then turn on the air valve letting the pump work for several times to eliminate any air in the system.



## 6. OPERATION

- ▲ **DANGER!** This model is purpose designed to withstand greater loads than the hydraulic units can develop. For safety reasons, always ensure the workpiece and press tools are secured on the table and will not flex or suddenly “give way” causing danger to operator or the component.
- 6.1. Place the arbor plate (17) on press bed frame/table (18), then place the workpiece onto the arbor plate and align beneath the ram as required.  
**NOTE:** care must be taken to ensure an arbor does not fall from the press work table. If necessary hold the configuration in position with clamps.
- 6.2. Close the release valve by turning it clockwise until it is firmly closed.
- 6.3. Connect the air inlet fitting into the workshop air supply hose lock fitting, turn on the air valve to let the pump work until serrated saddle (5) nears workpiece, then turn off the air valve. When air source is unavailable, pump the handle until serrated saddle nears workpiece.
- 6.4. Align workpiece and ram to ensure centre-loading. Before applying any pressure to the workpiece, recheck the alignment with the ram and ensure that the workpiece and press tools are supported in such a way that they cannot flex.
- **WARNING! DO NOT** apply off centre loads.
- 6.5. Turn on the air valve or pump the handle to apply load onto workpiece.
- 6.6. When work is done, turn off the air valve (or stop pumping handle), slowly and carefully remove load from workpiece by turning the release valve counter-clockwise in small increments.
- 6.7. Once ram has fully retracted, remove workpiece from the press bed frame.
- 6.8. Disconnect the air inlet fitting from the air source.  
**NOTE:** Always keep the piston retracted after use to avoid ram corrosion.

## 7. MAINTENANCE

- NOTE:** Maintenance and repair must only be carried out by qualified person. Contact your Sealey stockist for details.
- 7.1. When the press is not in use, the hydraulic unit ram must be fully retracted to minimise corrosion. Remove the handle to inactivate the press.
- 7.2. Lubricate all moving parts at regular intervals.
- 7.3. Always keep the press clean, dry, and protected from harsh conditions.
- 7.4. Should you need to replace the oil, ensure the hydraulic unit ram is fully retracted. An excess of oil will render the press inoperative.
- 7.5. Use only appropriate Sealey hydraulic jack oil (Sealey Part Number: HJO500MLS/HJO5LS). **DO NOT** use brake fluid.
- 7.6. Purge the system to remove any air (see 5.4).
- 7.7. If press efficiency begins to drop, purge the system to eliminate any air from the hydraulic system (see 5.4).
- 7.8. Check your model parts information for spares.



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



REGISTER YOUR PURCHASE HERE



### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

**NOTE:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

**IMPORTANT:** No Liability is accepted for incorrect use of this product.

**WARRANTY:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR



01284 757500



sales@sealey.co.uk



www.sealey.co.uk