

# 20 TONNE PROFESSIONAL FLOOR TYPE HYDRAULIC PRESS

MODEL NO: YK20F.V6

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 instruction manual

Wear protective gloves

Wear face mask

Wear protective clothing

Wear safet footwear

Warning: crushing of hands

#### 1. SAFETY

## 1.1. GENERAL SAFETY

- ✓ Familiarise yourself with the applications, limitations, and hazards peculiar to 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, loose jewellery and contain long hair.
- ✓ Keep hands and body clear of the work table when operating the press.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip footware.
- ✓ Keep children and unauthorised persons away from the working area.
- ✓ Securely attach the press to a flat, firm, dry 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 arbor plates in a safe location.
- Check the press for loose or damaged parts before each operation. Replace damaged parts and tighten all bolts.
- 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** adjust or tamper with the safety valve.
- **DO NOT** exceed the rated capacity of the press.
- **DO NOT** apply off-centre loads.
- **DO NOT** allow the workpiece or the press plates to fall from the work 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 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 the loaded press and never leave a loaded press unattended.
- **DO NOT** allow untrained persons to operate the press.
- **DO NOT** use it for any other purpose it is not designed to perform.
- DO NOT use the press to compress springs or any other item that could disengage and cause a potential hazard.
- DO NOT exceed the ram stroke, so as not to damage the press.
- DO NOT expose the press to rain or any other kind of moisture.
- WARNING! Never stand in front of loaded press and never leave loaded press unattended.
- □ **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!** Keep hands and feet away from working table area at all times.
- 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 workpiece 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. Ensure a safe working space of at least a metre exists around the installed unit.
- **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

Suitable for use by the serious enthusiast and professional alike. Made from a high quality steel with a powder coated paint finish to help corrosion resistance. Supplied in KD form. Detachable pump and ram allowing hydraulics to be used for other purposes when press is not in use. Supplied with gauge.

## 3. SPECIFICATION

Model:	YK20F.V6
Capacity:	20 Tonne
Gauge included:	Yes
Lateral Ram Travel:	320mm
Maximum Height Ram to Table:	980mm
Minimum Height Ram to Table:	105mm
Nett Weight:	90.5kg
Gross Weight:	103kg
Optional Accessories:	YKPP8 - Press Pin Set
Overall Height:	1740mm
Operating Table Width:	530mm

Ram Diameter	Ø48mm	
Ram Stroke:	150mm	
Table Aperture:	105mm	
Working Table Width:	650mm	
Working Table Depth:	225mm	
Туре:	Hydraulic	

# 4. ASSEMBLY

- ✓ Unpack the product and check contents. Should there be any damaged or missing parts contact your supplier immediately. Take care to ensure safety when moving main frame from packing as the unit is heavy.
- ✓ Refer to attached parts list.
- WARNING! Seek assistance on assembly of heavy parts.

#### 4.1. ATTACH BASE SECTION

4.1.1. In the upright position, on a flat level floor, attach base support (#15) to upright (#6) and lower support (#19), securing with hex head set screw M10 x 30 zinc (#14), flat washer M10 zinc (#16), nyloc nut M10 zinc (#17) and steel nut M10 zinc (#18) loosely. Repeat on other side.

## 4.2. ATTACH SUPPORT BRACE

4.2.1. Position support brace (#12) and secure with hex head set screw M10 x 30 zinc (#14), flat washer M10 zinc (#16), nyloc nut M10 zinc (#17) and steel nut M10 zinc (#18) loosely. Repeat on other side.

# 4.3. ATTACH UPPER BEAM

- WARNING! Seek assistance to complete this task.
- 4.3.1. Prior to attachment of upper crossbeams (#1), place upper beams apart, fit ram support plate slide (#27), using hex head set screw M8 x 15 zinc (#28), flat washer M8 zinc (#29) either side of ram support plate (#26), slide support plate (#26) onto lower edges of upper crossbeams
- 4.3.2. Taking care, position at the same time, upper crossbeams (#1) and ram support plate (#26) to left and right uprights (#6 & #33) secure with hex head set screw M16 x 40 (#2), flat washer M16 zinc (#3), nyloc nut M16 zink (#4) and steel nut M16 zinc (#5) loosely.
- 4.3.3. Level the frame using a good quality spirit level. Fully tighten all fixings.

#### 4.4. ATTACH THE HYDRAULIC CYLINDER

- 4.4.1. On the hydraulic ram (#30) unscrew and remove upper ring nut (#31).
- 4.4.2. Centrally locate hydraulic ram (#30) through hole in ram support plate (#26) lock into place with upper ring nut (#31) and lower ring nut (#35).

#### 4.5. PRESSURE GAUGE

- 4.5.1. Remove the dust cap hex bolt from the gauge connection nut positioned at the top of the hydraulic ram assembly (#30). DO NOT discard.
- 4.5.2. Screw the pressure gauge (#32) in until tight.
- DO NOT over-tighten.

#### 4.6. ATTACH WORKING TABLE

- 4.6.1. Pass the table support pins (#10) through the holes on the bed frame (#8) at the desired height.
- 4.6.2. Use hex head bolts M12 X 140 (#9), push bolts through one side of bed frame (#8), and through left and right uprights (#6 and #33), add bushing (#7) in between. Place the rear working bed frame side (#8) into place and push the bolts through. Add flat washers M12 zinc (#39), nyloc nut M12 zinc (#38), and steel nut M12 zinc (#37). Tighten all four bolts.
- 4.6.3. Attach retaining clips for support pin (#11) to the ends of both table support pins (#10) ready.
- 4.6.4. Taking firm hold of the working table assembly, tip it into a diagonal position so that it can be introduced between the main frame uprights, and carefully lower it back to a horizontal position to rest on the table support pins (#10).
- □ **WARNING!** Take care not to allow the working table assembly to drop onto the table support pins and ensure your hands and fingers are clear of the working table assembly when lowering.
- 4.6.5. Place the v-blocks (#21), in the required position onto the working table.

#### 4.7. ATTACH PUMP ASSEMBLY

- 4.7.1. Attach the pump assembly (#23) to the upright side post (#33), using hex head set screw M10 x 15 zinc (#36), flat washer M10 zinc (#34).
- 4.7.2. Remove the plastic safety bung from the end of the oil hose (#25) connect the oil hose to the hydraulic ram (#30) and inlet valve on pump assembly (#23).

# 5. INSTALLATION

# 5.1. SECURE PRESS TO THE FLOOR

- **WARNING!** Always use another person when moving the press. Attach lifting means to areas shown in fig.1.
- 5.1.1. Move the press to the mounting location and drill four mounting holes in the feet of the press.
- 5.1.2. Make a template to mark the spots where the four holes will be drilled in the floor.
- 5.1.3. Check for any hidden wiring or cables, if needed change the location for the holes.
- 5.1.4. Temporarily move the press to the side.
- 5.1.5. Use a masonry drill bit to drill the four holes about 75mm to 100mm deep into the concrete or wood, as necessary.
- 5.1.6. Clean out the drilled holes.
- 5.1.7. Position the press and align the holes in the feet with the holes in the floor.
- 5.1.8. Use four concrete anchor bolts or lag bolts for wooden floors (not included) to secure to the

**NOTE:** This press needs to be mounted to the floor of either concrete or wood, capable of supporting the weight of the press and any workpiece.

□ **WARNING!** To prevent serious injury **DO NOT** use damaged equipment. If abnormal noise or vibration occurs have the problem corrected before further use.

#### 5.2. BEFORE FIRST USE

- 5.2.1. Before operating the press, purge the hydraulic system in order to eliminate any air that may have built up during transit. Open the release valve and pump the handle several times and close the release valve. Should the system malfunction at any time, repeating this process may resolve the problem.
- 5.2.2. Check all parts for condition, if there is any parts broken, stop using it straight away and contact your Sealey stockist, or place of purchase for details.
- ▲ DANGER! Models are 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. Also ensure you have read and understood section 1 Safety Instructions.
- 5.3. The transit valve on the bottom of the pump (opposite end to the handle) needs to be open during operation.

# 6. OPERATION

- 6.1. Check that the release valve is fully closed by turning clockwise ready for operating.
- 6.2. Position the table at the required operating height by inserting the pins into the appropriate holes in the frame.
- 6.3. Position the V-block plates or press tools to be used onto the table and align beneath the cylinder. Place workpiece onto the table or V-blocks and align beneath the cylinder as required. **Note:** Care must be taken to ensure a V-block does not fall from the press table. If necessary hold the configuration in position with clamps (not supplied).
- 6.4. Operate the pump slowly until the cylinder is close or just touching the workpiece. Before applying real pressure to the workpiece recheck the alignment with the cylinder and ensure that the workpiece and press tools are supported in such a way that they cannot flex to breaking point. **DO NOT** exceed the stroke indicated on the label or the red mark on the piston and **DO NOT** apply off centre loads.
- **6.5. NOTE:** If a trapping should occur, open the release valve (#22) on the pump assembly (#23).
- 6.6. When work is completed release the pressure using the knob with four lugs and the piston and the cylinder will retract automatically. **Note:** Always keep the piston retracted after use to avoid corrosion.

# 7. MAINTENANCE

Note: Maintenance and repair must be carried out by qualified person. Contact your Sealey stockist for details.

- 7.1. Check all fittings are tight before each use.
- 7.2. Periodically lubricate all moving parts including the pump piston and hydraulic ram at regular intervals.
- 7.3. Always keep the press clean, dry, and protect from harsh conditions.
- 7.4. Ensure that there is adequate lighting.
- 7.5. When in not in use, store the press in a dry location with the ram and piston fully retracted.
- 7.6. Check hydraulic oil level and ensure all connections and hoses are good before use.
- 7.7. Should you need to replace the oil ensure the piston is fully retracted. An excess of oil will render the press inoperative.
- ✓ Use only appropriate Sealey hydraulic jack oil. DO NOT use brake fluid. Contact your local Sealey stockist for details. Purge the system to remove any air.
- 7.8. Check your model parts information for spares. Repair kits are available.

## **▲** IMPORTANT: NO RESPONSIBILITY IS ACCEPTED FOR INCORRECT USE OF THE MACHINE.

- √ Hydraulic products are only repaired by local service agents. We have service/repair agents in all parts of the UK.
- ✓ **DO NOT RETURN PRODUCT TO US.** Please telephone us on 01284 757500 to obtain the address and phone number of your local agent.
- $\checkmark$  If the product is under guarantee please contact your stockist.

## 7.9. DE-COMMISSIONING PRODUCT

Should the product become completely unserviceable and require disposal, draw off the oil into an approved container and dispose of the product and the oil according to local regulations.



# 8. TROUBLE SHOOTING

NO.	DESCRIPTION	CAUSE	REMEDY
1	The pump is working, but the cylinder ram is not.	The oil hose is loose.     The ram is leaking.     Release valve has not completely closed.     Air in hydraulic system.	<ol> <li>Make sure oil hose connectors is tight at both ends of hose.</li> <li>Replace the oil seals.</li> <li>Check the release valve.</li> <li>Purge air away. See 5.2.1</li> </ol>
2	The cylinder ram not fully working.	1. Not enough oil in pump.	1. Add oil to pump.
3	Oil leaking.	Oil seal is broken.     Screws loose on pump.	Replace the oil seals.     Tighten screws up on pump.



# **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.



**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. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

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.