



AIR/HYDRAULIC PRESS 50-TONNE FLOOR TYPE

MODEL NO: YK509FAH.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 eye protection



Wear protective gloves



Wear safety footwear



Wear protective clothing



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 footwear.
- ✓ 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** 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.
- ☐ **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.
- ✗ **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.
- ▲ **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.

1.2. ENVIRONMENTAL CONDITIONS

- The machine should be operated in a well-ventilated, dry environment with stable temperatures and low humidity to prevent corrosion and ensure optimal performance. It should be kept away from direct exposure to rain, excessive dust, and corrosive substances. Maintaining clean and controlled environmental conditions helps extend the machine's lifespan and ensures safe operation.
- ☐ **WARNING!** To prevent serious injury **DO NOT** use damaged equipment. If abnormal noise or vibration occurs have the problem corrected.

2. INTRODUCTION

Steel frame construction with side mounted air motor powering hydraulic pump unit. 2-speed manual operation and sliding hydraulic ram assembly giving 245mm of lateral travel for off-centre pressing applications. Fitted with ram pressure gauge and supplied with table winch and flat pressing plate/V-blocks.

3. SPECIFICATION

Model No:	YK509FAH.V3
Capacity:	50 Tonne
Gauge Included:	Yes
Lateral Ram Travel:	245mm
Maximum Height - Ram to Table:	1047mm
Min./Max. Air Supply Pressure:	0.75/0.85MPA
Minimum Height - Ram to Table:	67mm
Nett Weight:	300kg
Operating Table Width:	730mm

Optional Accessories:	YKSG50 - Safety Guard, YKPP8 - Press Pin Set
Overall Height:	1877mm
Ram Diameter:	75mm
Ram Stroke:	200mm
Table Aperture:	235mm
Type:	Air/Hydraulic
Working Air Pressure:	108-123psi
Working Table Depth:	259mm
Working Table Width:	910mm

4. CONTENTS

YK50FAH.V3 (numbers in brackets refer to Contents photo on right)	
1	Frame
2	Pressure Gauge
3	Ram
4	Pump
5	Pump handle
6	V-Block
7	Bed Frame
8	Retaining Clip for Table Support Pin
9	Table Support Pin
10	Base Foot

5. 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 very heavy.

Numbers below refer to attached parts list.

Seek assistance from another person with assembly of heavy parts.

Assemble press, if possible, in close proximity to where the press will be located.

5.1. FRAME ASSEMBLY

5.1.1. Attach load slings around the top cross member of the Frame. Using a suitable hoist or gantry, slowly, and carefully lift the frame out of the transportation crate into an upright position.

5.1.2. Keep the frame assembly in an upright position, held safely by the load slings.

▲ **DANGER! DO NOT** allow the frame to fall over.

5.2. ATTACH BASE SECTION

NOTE: The base section (#66), supports (#65), hex head screw M12*35 (#24), flat washer M12 (#35), spring washer M12 (#36) and nut M12 (#37) are supplied pre-assembled.

5.2.1. Remove the central fixings only, hex head screw M12*35 (#24) flat washer M12 (#35), spring washer M12 (#36) and nut M12 (#37) from the support leg (#66)

5.2.2. Position the base section (#66) onto the frame (#67) and secure with hex head screw M12*35 (#24), flat washer M12 (#35), spring washer M12 (#36) and nut M12 (#37) loosely.

5.2.3. Remove the top fixings only, hex head screw M12*35 (#24), flat washer M12 (#35), spring washer M12 (#36) and nut M12 (#37) from one of the support brace (#65).

5.2.4. Position the supports (#65) onto the frame (#67) and secure with hex head screw M12*35 (#24), flat washer M12 (#35) spring washer M12 (#36) and nut M12 (#37) loosely.

5.2.5. Follow section 5.2.4 to attach the other supports (#65).

5.2.6. Repeat sections 5.2.1 to 5.2.5 to attach the other base assembly.

5.2.7. On a flat level floor, level the frame using a good quality spirit level. Fully tighten all fixings.

5.2.8. Remove the load slings and store them in a safe and secure location.

□ **WARNING!** Take care and seek assistance from another person when lowering and levelling the frame assembly onto the floor.

5.3. ATTACH THE WINCH ASSEMBLY

□ **WARNING!** Seek assistance from another person with this task as the hand winch assembly is heavy.

5.3.1. Transfer the hand winch assembly (#21) from its transport location by firstly removing the fixings M12 x 35 hex head screw (#24), M12 flat washer (#35), M12 spring washer (#36) and M12 nut (#37) from hand winch plate (#6). Retain the fixings.

5.3.2. Move the hand winch assembly (#21) to the outside of the left hand post (position A on the parts diagram) and secure with the retained fixings, loosely.

5.3.3. Ensure that the cables are located correctly in the rollers prior to fully tightening fixings.

fig.1



5.4. ATTACH THE PUMP ASSEMBLY

❑ **WARNING!** Seek assistance from another person for this task, as the Pump Assembly (#39) is heavy.

5.4.1. Transfer the Pump Assembly (#39) from its transport location.

5.4.2. Attach the Pump Assembly (#39) to the right-hand side of Frame secure using the retained fixings supplied.

5.4.3. Attach Oil Hose (B) (#60) to the Pump Assembly (#39), applying PTFE tape to the hose thread before fitting.

NOTE: For assembly refer to parts diagram for full assembly instructions.

❑ **WARNING!** Seek assistance from another person with this task as the pump assembly is heavy.

5.5. ATTACH BED FRAME

❑ **WARNING!** Seek assistance from another person with this task as the Bed Frame (#28) is heavy.

5.5.1. Pass the Table Support Pins (#27) through the holes in Frame (#67) at the desired height.

5.5.2. Fit the Retaining Clips (#26) to the Table Support Pins (#27).

NOTE: The circlips should be spaced equidistant from the press frame sides to allow for ease of bed frame assembly (#28).

5.5.3. Carefully tip the Bed Frame (#28) into a diagonal position and insert it between the mainframe uprights. Carefully lower it gently to rest horizontally on the lower Table Support Pins (#27), positioned between the Retaining Clips (#26).

❑ **WARNING!** Take care not to let the bed frame drop onto the table support pins. Keep hands and fingers clear of the bed frame when lowering.

5.5.4. Insert rollers (#5) to the V-Blocks (#4) using supplied fixings. See parts diagram for reference.

5.5.5. Place the V-Blocks (#4), in the required orientation, onto the Bed Frame (#28).

5.6. ATTACH HANDLE

5.6.1. Fit the Pump Handle into the recess on the Pump Assembly (#64), and secure with the bolt provided on the end of the Pump Handle.

5.7. PRESSURE GAUGE

5.7.1. Screw the Pressure Gauge (#58), Nylon Ring (#56), Gauge Fitting (#57), O-Ring (#51), Banjo Fitting (#55), Deep Nut (#54), Connector (#53), Flat Washer M12 Zinc (#35), Spring Washer M12 Zinc (#36), Steel Nut M12 Zinc (#37), Pressure Gauge (#58) into Frame (#67) until tight.

5.7.2. Fit connector (#59) into Connector (#53).

* **DO NOT** over-tighten.

5.8. CONNECT OIL HOSE (1)

5.8.1. Remove the blanking plug from Oil Hose (#60). **DO NOT** discard.

5.8.2. Connect one end of Oil Hose (#60) to the Pump Assembly (#64) and the other end to the Connector (#59). Use O-ring (#51) in between Oil Hose (#60) and Connector (#59). Ensure PTFE tape is applied to both threaded connections.

5.9. RAM ASSEMBLY

5.9.1. The Ram Assembly (#39) comes pre-installed in Frame (#67).

5.10. CONNECT OIL HOSE (2)

5.10.1. Remove the blanking plug from Oil Hose (#52). **DO NOT** discard.

5.10.2. Remove the blanking plug from Connector (#53). **DO NOT** discard.

5.10.3. Connect Oil Hose (#52) to the Connector (#53) and the other end to the Ram Assembly (#39). use O-ring (#51) In between the Ram Assembly (#39) And the Oil Hose (#52). Ensure PTFE tape is applied to both threaded connections.

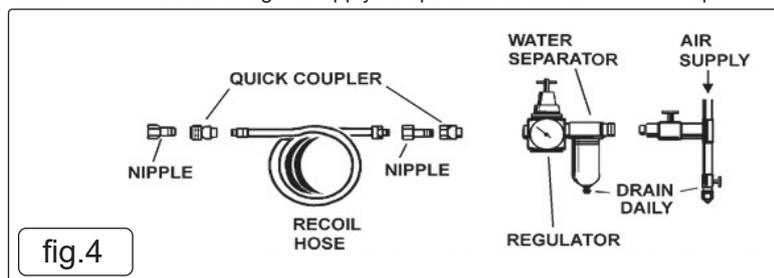
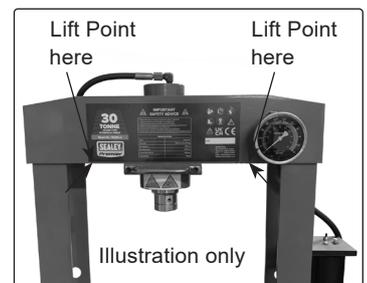
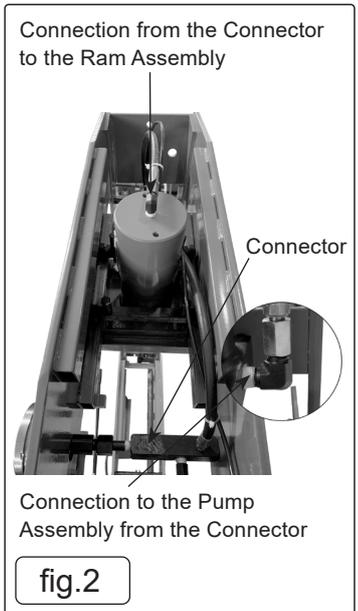
5.11. ATTACH HANDLES

5.11.1. Fit handle (#7) into Ram Plate (#41) using Carry Handle Screws M8x20 (#8).

5.12. AIR SUPPLY

5.12.1. Connect a compressed air supply hose (fig 4) to the Manual/Pneumatic Pump Assembly (#64).

5.12.2. The recommended working air supply is a pressure is between 108-123psi.



6. INSTALLATION

▲ **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.

6.1. POSITION OF CENTRE OF GRAVITY

The centre of gravity is typically central across the width, slightly toward the pressing side front-to-back, and around mid-height. Exact positioning should be confirmed with the manufacturer for safe handling.

6.2. INDICATIONS FOR HANDLING

❑ **WARNING!** When installing, lifting or moving the press, attach lifting means to areas as shown in fig.3.

6.3. SECURE PRESS TO THE FLOOR

* **DO NOT** attempt to move assembled press manually. When moving the press follow the instructions as detailed in Section 1.

6.3.1. Move the press to the mounting location, and spot mark through fixing holes in base section onto the floor.

6.3.2. Check for any hidden wiring or cables, if needed change the location for the holes.

6.3.3. Temporarily move the press to the side.

- 6.3.4. Use a drill bit to drill the four holes (75 to 100mm) deep into the concrete or wood, as necessary.
- 6.3.5. Clean out the drilled holes.
- 6.3.6. Position the press and align the holes in the base section with the holes in the floor.
- 6.3.7. Use four concrete anchor bolts or lag bolts for wooden floors, (not included), to secure to the floor.

6.4. BEFORE FIRST USE

- 6.4.1. 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.

6.5. SPACE NECESSARY FOR USE

Sufficient space is necessary around the equipment to ensure safe and efficient operation, including room for loading and unloading materials, access to controls, and safe movement of personnel. Inadequate space can lead to operational delays, safety hazards, and difficulty in maintenance or adjustments.

7. OPERATION

▲ **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.

- 7.5.1. Connect the air supply to the foot pedal (64).

7.1. MANUAL CONTROLS

- 7.2. Check that the release valve on the hydraulic unit is fully closed and ready for operation. Position the bed frame at the desired operating height by using the hand winch handle to raise or lower it as required. Insert the table support pins into the appropriate frame holes and secure them with the retaining clips. Slacken the hand winch so the pins take the full weight of the bed frame. Place the V-block plates or press tools onto the bed frame and align them beneath the ram. Position the workpiece on the bed frame or V-blocks and ensure it is correctly aligned under the ram as required.

NOTE: Care must be taken to ensure a V-block does not fall from the press bed frame. If necessary hold the configuration in position with clamps (not supplied).

- **WARNING! DO NOT** apply off centre loads.

- 7.3. Use either handle or the foot pedal to lower the ram to the workpiece.

- 7.4. **WARNING!** Monitor the pressure gauge during operation to ensure that the rated capacity of the press is not exceeded.

When the operation is complete turn the release valve anti-clockwise to release the pressure. The piston and the ram head will retract automatically.

- 7.5. Disconnect the air supply.

NOTE: Always keep the piston retracted after use to avoid corrosion.

- **WARNING!** Manual loading and unloading can present several restrictions, including increased risk of injury from heavy lifting, reduced efficiency due to slower handling times, and limitations on the size and weight of materials that can be safely managed by a single person. It can also lead to inconsistent placement or alignment, affecting workflow and productivity.

7.6. RECOMMENDED SAFEGUARD MEASURES

Include installing fixed guards around moving parts, using safety signage to warn of potential hazards, and ensuring operators wear appropriate personal protective equipment (PPE) such as gloves and safety glasses. Regular training and maintenance also help maintain a safe working environment.

8. MAINTENANCE

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

- 8.1. Check all fittings are tight before each use.
- 8.2. Lubricate all moving parts at regular intervals.
- 8.3. Always keep the press clean, dry, and protect from harsh conditions.
- 8.4. 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.

8.5. SAFETY CHECKS

1. Inspect for leaks – Check hydraulic lines and fittings.
2. Check ram alignment – Ensure it moves smoothly and remains centered during operation.
3. Examine frame and bed – Look for cracks, distortion, or damage.
4. Test pressure release – Confirm the valve functions correctly.
5. Clean work area – Keep the area around the press free from obstructions.

8.6. PREVENTATIVE MAINTENANCE MEASURES TO BE OBSERVED

Preventative maintenance measures include regularly inspecting the press for signs of wear or damage, checking and topping up hydraulic fluid levels, cleaning moving parts to prevent buildup of debris, and ensuring all bolts and fasteners are secure. Scheduled maintenance should also include lubrication of components, and prompt replacement of worn or damaged parts to ensure safe and efficient operation.

- 8.7. Check your model parts information for spares.

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. If the product is under guarantee please contact your stockist.

8.8. STORAGE CONDITIONS OF THE MACHINE

The machine should be stored in a clean, dry, and well-ventilated area to prevent rust and corrosion. It should be kept away from moisture, dust, and extreme temperatures. Ensure the hydraulic system is depressurised, and all moving parts are secured before storage. Covering the machine with a protective sheet can also help protect it from dirt and environmental damage.

8.9. DISMANTLING, DISABLING, AND DECOMMISSIONING

When de-commissioning or disposing, ensure all stored hydraulic energy is safely released and the press is left in a fully lowered, stable position. As the unit is not powered, ensure all levers and controls are clearly marked or removed to prevent unintended use.

Take care to drain any residual hydraulic fluid in accordance with environmental regulations. Since the press does not have a lock, precautions must be taken to restrict access, particularly by children or untrained individuals. The equipment should be clearly marked as decommissioned and stored securely until it can be safely removed or disposed of following relevant safety and environmental guidelines. If the unit is to be dismantled or scrapped, disconnect all components carefully, separating hazardous materials such as hydraulic fluid, seals, and rubber parts for appropriate disposal. Metal components should be recycled where possible, and any sharp or heavy parts handled with suitable lifting tools and personal protective equipment to avoid injury during dismantling.

8.10. ANY TESTS OR EXAMINATIONS NECESSARY AFTER REPAIR OF THE PRESS WHICH CAN EFFECT THE SAFETY FUNCTIONS

After any repair that could affect the safety functions of the press, a thorough inspection and testing must be carried out before returning the machine to service. This should include checking the integrity and alignment of structural components, verifying proper function of the hydraulic system (including seals, hoses, and fluid levels), and ensuring all guards and safety features are correctly reinstalled and operational. Load testing may also be necessary to confirm the press can safely handle its rated capacity. Only qualified personnel should perform these tests, and all results should be documented in accordance with maintenance and safety procedures.

8.11. MAINTENANCE OF ANY HOSES

Maintenance of hydraulic hoses involves regular inspection for signs of wear, cracks, leaks, or abrasions. Hoses should be checked for proper fittings and secure connections to prevent leaks or bursts. It's important to clean hoses to remove dirt and debris that could cause damage and to replace any damaged or aged hoses promptly. Avoid bending hoses sharply or exposing them to extreme temperatures to extend their lifespan and maintain safe operation.

8.12. FAULT IDENTIFICATION AND LOCATION OF REPAIR

Fault identification involves quickly spotting signs like leaks, unusual noises, or loss of pressure to diagnose issues early and prevent damage.

8.13. CLEANING PROCEDURE AND SCHEDULE

Clean the press regularly, wiping away dust, dirt, and hydraulic residue to keep it running smoothly. Schedule thorough cleaning weekly and after heavy use to maintain safety and performance.

9. TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
Press does not build pressure.	<ol style="list-style-type: none"> 1. Low or no hydraulic fluid. 2. Air in the system. 3. Faulty pump. 4. Pressure relief valve stuck open. 	<ol style="list-style-type: none"> 1. Refill hydraulic fluid. 2. Bleed the system. 3. Check/replace pump. 4. Inspect & clean valve.
Press operates slowly.	<ol style="list-style-type: none"> 1. Low hydraulic fluid. 2. Dirty or clogged filter. 3. Worn pump. 4. Internal leakage. 	<ol style="list-style-type: none"> 1. Top up fluid. 2. Replace/clean filter. 3. Inspect pump. 4. Check for internal seal failure.
Ram does not move.	<ol style="list-style-type: none"> 1. Air lock. 2. Blocked hydraulic line. 3. Valve not opening. 4. Broken piston seal. 	<ol style="list-style-type: none"> 1. Bleed system. 2. Inspect & clear line. 3. Test valve. 4. Replace piston seal.
Ram moves unevenly or jerks.	<ol style="list-style-type: none"> 1. Air in hydraulic lines. 2. Contaminated fluid. 3. Sticky or damaged cylinder. 4. Bent ram. 	<ol style="list-style-type: none"> 1. Bleed lines. 2. Flush & replace fluid. 3. Inspect cylinder. 4. Replace or straighten ram.
Oil leaks.	<ol style="list-style-type: none"> 1. Damaged seal or gasket. 2. Loose fittings. 3. Cracked hose. 	<ol style="list-style-type: none"> 1. Replace seals/gaskets. 2. Tighten or replace fittings. 3. Replace cracked hose.
Excessive noise (e.g., whining).	<ol style="list-style-type: none"> 1. Low fluid level. 2. Air in pump. 3. Cavitation. 4. Worn pump bearings. 	<ol style="list-style-type: none"> 1. Refill fluid. 2. Bleed system. 3. Check pump suction line. 4. Replace bearings.
Inaccurate pressure readings.	<ol style="list-style-type: none"> 1. Faulty pressure gauge. 2. Blocked gauge line. 3. Calibration drift. 	<ol style="list-style-type: none"> 1. Replace gauge. 2. Clean gauge line. 3. Recalibrate or replace gauge.
Ram retracts slowly or not fully.	<ol style="list-style-type: none"> 1. Return spring damaged or weak. 2. Obstruction in return path.. 3. Air lock. 	<ol style="list-style-type: none"> 1. Replace spring. 2. Clear obstruction. 3. Bleed air from system.



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 60 months from purchase date, proof of which is required for any claim.

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