



VARIABLE SPEED PILLAR DRILL

MODEL NO: **GDM200F/VS.V2**

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 ear
protection



Wear a mask



Indoor use
only

1. SAFETY

1.1. ELECTRICAL SAFETY

- ☐ **WARNING!** It is the user's responsibility to check the following:
- ✓ Check all electrical equipment and appliances to ensure that they are safe before using.
- ✓ Inspect power supply leads, plugs and all electrical connections for wear and damage.
- ✓ Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- ✗ **DO NOT** use worn or damaged cables, plugs or connectors.
- ✓ Ensure that any faulty item is repaired or replaced immediately by a Sealey qualified technician.
- ✓ If the cable or plug is damaged during use, switch off the electricity supply and remove from use.
- ✓ Sealey recommend that an RCD (Residual Current Device) is used with all electrical products.
- IMPORTANT:** Ensure that the voltage rating on the appliance suits the mains power supply.
- ✗ **DO NOT** pull or carry the appliance by the power cable.
- ✗ **DO NOT** pull the plug from the socket by the cable.
- ✗ Sealey recommend that repairs are carried out by a qualified electrician.

1.2. GENERAL SAFETY

- ☐ **WARNING!** Disconnect drill from mains power before changing accessories, servicing or performing any maintenance.
- ☐ **WARNING!** Keep all guards and holding screws in place, tight and in good working order. Check regularly for damaged parts.
- ☐ **WARNING!** Always wear approved eye or face protection when operating this drill. Use face or dust mask if dust is generated.
- ☐ **WARNING!** Risk of cutting/puncturing due to working with sharp tools. Follow all safety points to reduce risk of injury.
- ☐ **WARNING!** Risk of entanglement. Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain long hair.
- ☐ **WARNING!** Risk of kickback. Ensure the workpiece is securely clamped to reduce likelihood of kickback.
- ✓ Locate the drill in an adequate working area for its function, ensuring adequate space for operation and maintenance.
- ✓ A guard or any other part that is damaged should be replaced, before the tool is used, to ensure that it operates properly and perform its intended function. The safety guard is a mandatory fitting where drill is used in premises covered by the Health & Safety at Work Act.
- ✓ Check alignment of moving parts and check for possible broken parts.
- ✓ Use the pillar drill for its intended purpose only (precision drilling).
- ✓ Replace or repair damaged parts. Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Ensure the set screws of the head frame are screwed tight before using the drill.
- ✓ Secure the drill to the workbench or floor.
- ✓ Drill is designed for use with drill bits only.
- ✓ Ensure the chuck is securely fastened to the spindle.
- ✓ Remove adjusting keys, chuck key and wrenches from the machine and working area before switching on.
- ✓ Use clamps or a vice (not included; available from your Sealey stockist) to secure the workpiece.
- ✓ Refer to speed chart for recommended drilling speeds.
- ✓ Keep drill bits clean and sharp for best and safest performance. Follow the instructions for lubrication and changing accessories.
- ✓ Locate the drill in a suitable work area, keep area clean and tidy and free from unrelated materials. Ensure there is adequate lighting.
- ✓ Permissible environmental conditions include a dry, well-ventilated area with temperatures between -10°C and 40°C. Avoid high humidity, direct sunlight, and exposure to dust or corrosive substances.
- ✓ Exclude children and non-essential persons from the work area.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Avoid unintentional starting.
- ✓ The centre of gravity in a pillar drill is usually near the base or motor. Knowing its position helps ensure safe lifting and stable operation.
- ✗ **DO NOT** attempt to hold the workpiece by hand.
- ✗ **DO NOT** force the drill or use it for a task it is not designed to perform.
- ✗ **DO NOT** allow untrained persons to operate the drill.
- ✗ **DO NOT** get the drill wet or use in damp or wet locations or areas where there is condensation.
- ✗ **DO NOT** operate the drill if damaged or parts are missing.
- ✗ **DO NOT** use drill in an area where paint fumes, solvents or flammable liquids pose a potential hazard. Keep flammable material away from the drill when operating. Flammable waste, such as wiping or cleaning rags, must be placed in a closed metal container and disposed of correctly.
- ✗ **DO NOT** exceed the rated capacity of the drill.

- ✗ **DO NOT** leave the drill operating unattended.
- ✗ **DO NOT** operate the drill when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- ✓ When not in use switch off the drill, remove plug from the power supply and do not leave until the drill has come to a complete stop.
- ✓ Restrict availability of keys or tools to skilled or instructed persons only.

2. INTRODUCTION

All pillar drills other than model No. SDM30 have Morse taper spindle housings for taking taper shank drill bits. The belt transmission uses two spring tensioned cone pulleys, the diameter of which can be adjusted by moving a centre idle pulley with the speed adjustment control lever. Variable speed control model allows stepless control of drilling speed between minimum and maximum enabling finer control of finish and tolerance. Floor standing drill avoids taking valuable bench space. Mortise attachment available order model No. MA10. Capacity chuck 16mm (5/8"), MT2. Safety devices fitted include a no-voltage release switch, allowing insurance company approval for use in educational establishments.

3. SPECIFICATION

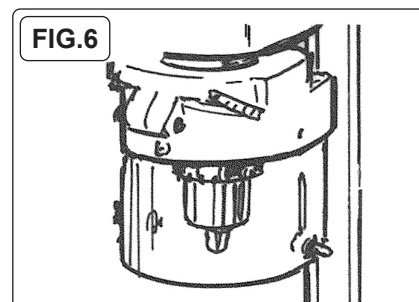
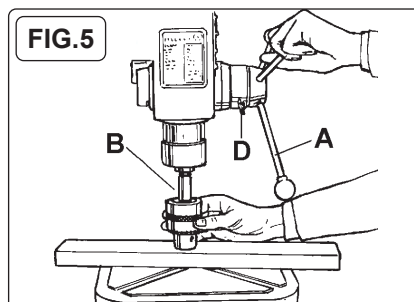
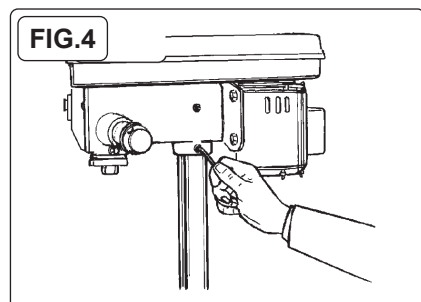
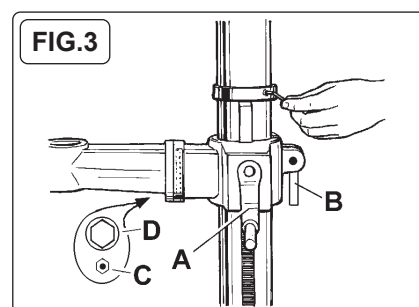
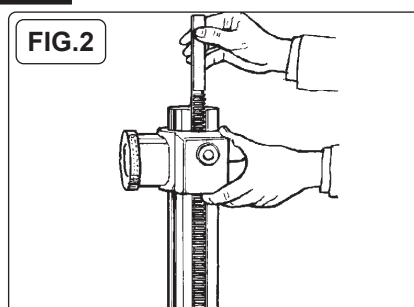
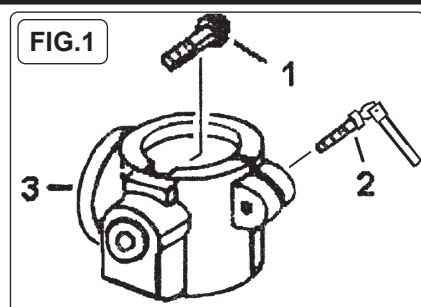
| MODEL NO: | GDM200F/VS.V2 | Overall Height: | 1630mm |
|------------------------------------|---------------|------------------------------------|-----------------|
| Base Size: | 460 x 275mm | Plug Type: | 3-Pin |
| Collar Diameter: | Ø60mm | Power Supply Cable Length: | 1.3m |
| Column Diameter: | Ø80mm | Sound Pressure (L _{WA}): | 88.9 dB(A) |
| Drilling Capacity (Chuck Size): | 16mm | Speed Range: | 150-2300rpm |
| Fuse Rating: | 13A | Spindle Centre to Column: | 178mm |
| Maximum Distance Spindle to Base: | 1170mm | Spindle Nose Taper: | MT2 |
| Maximum Distance Spindle to Table: | 730mm | Spindle Travel: | 80mm |
| Motor Power (Start): | 450W(650W) | Supply: | 230V, 50Hz, 1ph |
| Nett Weight: | 71kg | Swing: | 356mm |
| Number of Speeds: | Variable | Working Base Surface Size: | 200 x 220mm |
| Optional Keyless Chuck 16mm: | GDMX/KC | Working Table Surface Size: | Ø310mm |

4. CONTENTS

Unpack the parts listed below and check to ensure they are in good condition. Any queries must be reported to your stockist immediately.

- Head Assembly
- Column with Flange
- Base
- Table
- Table Arm
- Table Bracket & Worm
- Rack & Rack Ring
- Feed Handles & Knobs (3)
- Pivoted Lock Handle (2 - table arm & bracket)
- Adjusting Handle with Set Screw (table)
- Bolt & Washer (table arm)
- Bolts (4 - column)
- Chuck & Key
- Arbor
- Speed Control Handle
- Safety Guard
- Set Screws (2 - head)
- Screw & Washer (pulley cover)
- Wedge
- Hex Keys (2)

5. ASSEMBLY



5.1. MOUNTING TO THE FLOOR

For stability and safety it is imperative that the drill base is securely bolted to the floor. Ensure that the mounting surface is capable of supporting the drill together with the weight of the heaviest likely workpiece. Use the base plate as a guide to mark and drill holes. Secure the unit using appropriate fixings (not included).

5.2. ATTACH THE COLUMN

Place the column assembly on the base, align holes and secure with the four bolts provided.

5.3. ATTACH THE TABLE

Insert the worm gear (fig.1.1) into the table bracket crank handle hole, ensuring that the worm gear meshes with the rack gear in the bracket. Screw the lock handle (fig.1.2) into the lugs at the rear of the table bracket but **DO NOT** tighten. Install the table bracket onto the column together with the rack (fig.2), engaging gear in bracket with rack teeth. **NOTE:** the rack should be assembled with the longer tooth-free end uppermost. Install the rack collar and tighten grub screw firmly (fig.3). Ensure that rack is free to move around column. Install the table adjusting handle (fig.3.A) onto the worm gear shaft, tightening the grub screw onto the flat on the shaft. Tighten the table bracket lock handle (fig.3.B). Fit the table arm to the table bracket with the bolt and washer provided. Fit the table to the table arm and clamp in position with the smaller lock handle.

5.4. ATTACH THE HEAD ASSEMBLY

Carefully place the head assembly over the column and slide it into position. Align head with base. Fit the two set screws in the side of the head to lock it into position and tighten with hex key (fig.4). Screw the three feed handles and knobs to the hub of the pinion shaft (fig.5.A).

5.5. INSTALL THE SPEED CONTROL HANDLE

Open the pulley cover and then insert the speed control handle through the side of the pulley housing. Screw the handle into the central pulley carrier with the flats on the outer sleeve of the handle engaged in the guide slot.

5.6. INSTALL THE CHUCK & ARBOR

To install chuck open the chuck jaws completely by turning the chuck key counter-clockwise. Place a piece of wood on the drill table (to prevent the chuck from getting damaged). Insert larger tapered end of arbor (fig.5.B) into drill spindle - rotate slightly to engage fully, fit chuck to protruding end of arbor and hold in place. Turn feed handles to bring nose of chuck down onto wood (fig.5). Firmly pull on feed handle to seat arbor taper in spindle and chuck.

5.7. ATTACH THE GUARD

Loosen clamp screw on safety guard mounting collar, pass guard up over chuck and fit collar round flange of quill shaft. Ensure guard pivot is central and tighten clamp screw (fig.6).

5.8. CONNECTING TO POWER SUPPLY

Connect the unit to a suitable power supply as per the unit specifications. Ensure the cable is positioned away from the unit.

6. OPERATION

❑ **WARNING!** Ensure the drill is unplugged from the mains power supply before commencing.

6.1. INTENDED USE

A pillar drill (also called a drill press) is a fixed machine designed for precision drilling into materials such as wood, metal and plastic. They can be used to create accurate and consistent holes in a workpiece. Holes can be drilled at precise angles and depths. A pillar drill can also be used for sanding, polishing and mortising. **DO NOT** use the drill for a task it is not designed to perform.

6.2. METALWORKING FLUIDS

Correct selection of metalworking fluid can improve drilling performance, reduce heat, and improve the working life of tools and components in certain applications.

6.3. INSTALL DRILL BIT

Insert appropriate drill bit based on material, size and depth of hole to be drilled. Ensure the bit is 1" (25mm) into the chuck. Avoid inserting small bits too far. Ensure the bit is centred before tightening. **DO NOT** use a worn or damaged bit, or a bit that is not designed for the work material. Check the bit is square to the table using a level.

6.4. ADJUSTING THE TABLE

To adjust table up or down, loosen lock handle (fig.3.B), then turn bracket handle (fig.3.A). Once at correct height tighten lock handle. To adjust table tilt, remove the locating pin and nut (fig.3.C) - if pin is tight, turn nut clockwise to loosen. Loosen the table arm bolt (fig.3.D), adjust table to the desired angle using the angle scale, then retighten the table arm bolt. When the table is returned to the horizontal, replace the locating pin and nut. To turn the table around the column, loosen the lock handle. Turn the table to the desired position and then tighten the lock handle.

6.5. ADJUSTING THE SPEED

Determine the speed for the drilling operation (see drill speed chart) and, with the motor running, move the speed control handle (turn anticlockwise to loosen) to that speed as marked on the pulley housing. Lock the lever in position by turning it clockwise and turn off the motor.

6.6. POSITIONING THE WORKPIECE

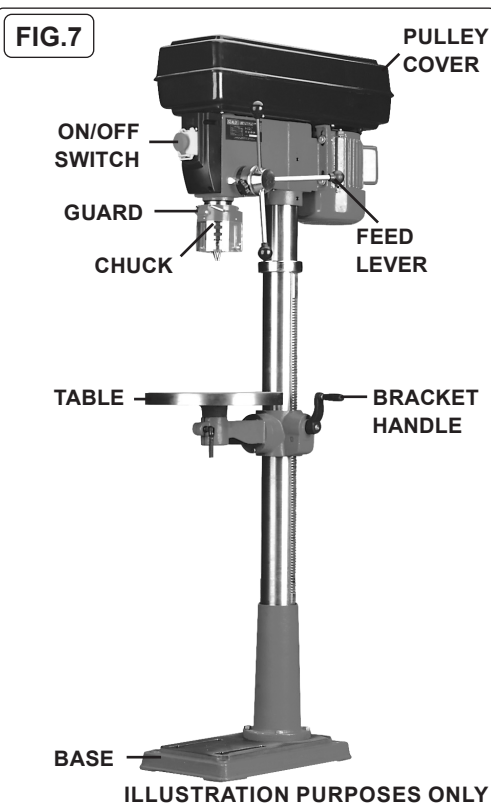
Rest the workpiece on a piece of wood to prevent the drill bit damaging the table when it breaks through. The wood should rest on the table so that one end of it is against the left side of the column. When the drill bit breaks through the workpiece, it will contact the wood and cause it to spin. Resting the wood against the column will help prevent this. For small workpieces that cannot be clamped to the table, use a drill vice (not included). Vices must be clamped or bolted to table.

6.7. SETTING THE DRILL DEPTH

Use the scale on the side of the drill head near the drill handle. Loosen locking screw (fig.5.D) and set the scale to the depth required. Tighten locking screw. When ready to drill, simply pull the feed handle. The drill will stop at the set depth.

6.8. OPERATING THE DRILL

Ensure hands, hair and clothing are clear, and the guard is in place before turning on the drill. Always clamp the workpiece to reduce likelihood of kickback. Use steady pressure on the feed lever when drilling through the workpiece. Use a centre punch to improve the accuracy of drilling. Clear chips regularly to prevent them from clogging the drill bit. **DO NOT** force the drill. Replace damaged/worn bits as required. Turn off after use. Always check that the drill is operating normally before use or after an intervention.



6.9. EMERGENCY STOP

The E-stop (Emergency Stop) is a safety switch that immediately cuts power to the pillar drill when pressed. It is used to quickly stop the machine in case of an emergency to prevent accidents or injuries. To reset the E-stop, twist or pull it back to its original position before restarting the drill.

6.10. IN CASE OF ACCIDENT / BREAKDOWN

In the case of an emergency involving the drill, stop all operations and ensure the area is clear to prevent further risk. Turn off power supply if safe to do so. Where applicable, notify your supervisor and follow your workplace's emergency procedures. If there are any injuries or serious hazards, contact emergency services without delay. Clearly tag the equipment as "Out of Order" and prevent further use until it has been inspected, repaired, and confirmed safe for operation.

7. DRILL SPEEDS

| DRILL DIAMETER (MM) | DRILL SPEED (RPM) | | | |
|------------------------|-------------------|-----------|------|----------------|
| | Steel | Cast Iron | Iron | Alum. & Copper |
| 3 | 1820 | 2580 | 2580 | 2580 |
| 4 | 1350 | 1820 | 1820 | 2580 |
| 5 | 1290 | 1350 | 1350 | 2580 |
| 6 | 970 | 1290 | 1290 | 2580 |
| 7 | 830 | 970 | 970 | 2580 |
| 8 | 830 | 970 | 970 | 2580 |
| 9 | 500 | 970 | 830 | 1820 |
| 10 | 500 | 830 | 830 | 1820 |
| 11 | 500 | 830 | 830 | 1820 |
| 12 | 420 | 830 | 500 | 1820 |
| 13 | 420 | 500 | 500 | 1350 |
| 14 | 420 | 500 | 500 | 1350 |
| 16 | 320 | 500 | 500 | 1290 |
| 18 | 320 | 420 | 420 | 1290 |
| 20 | 280 | 320 | 320 | 970 |
| 22 | 210 | 320 | 280 | 970 |
| 25 | 120 | 280 | 210 | 830 |

8. MAINTENANCE

IMPORTANT: maintenance is to be performed when necessary to maintain correct and safe performance. **WARNING!** Disconnect drill from mains power before changing accessories, servicing or performing any maintenance. All maintenance must be performed by an authorised service centre. **DO NOT** use a faulty unit. Contact an authorised service centre for repair.

8.1. BEFORE EACH USE

Before each use check for broken, cracked, bent, or loose parts, or any visible damage. Check the guard is in place and in good working condition. If any suspect item is found remove the drill from service and take necessary action to remedy the problem. **DO NOT** use the drill if believed to have been subjected to abnormal load or shock. Inspect and take appropriate action. Always check that the drill is operating normally before use, after an unexpected stop, or after an intervention.

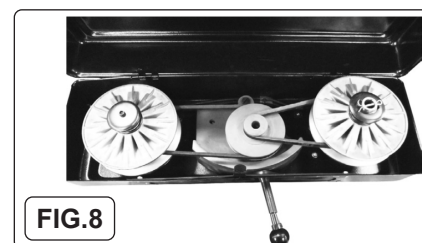
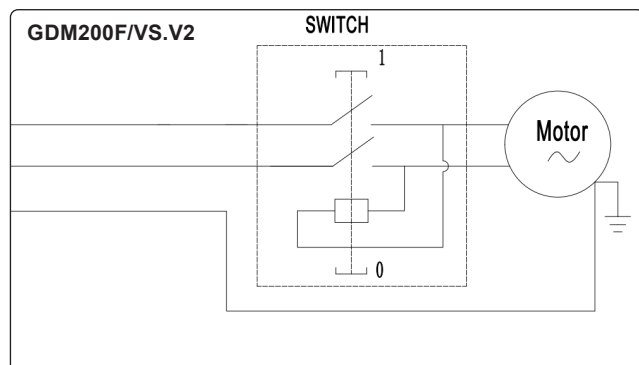
8.2. CLEANING / MAINTENANCE

Clean the tool after each use. A coat of maintenance spray applied to the table and column will help to keep the surfaces clean. Periodically lubricate table elevation rack/gear/worm mechanism and the spindle sleeve exterior. Blow out any dust that may have accumulated in the motor. Periodically check the unit for signs of corrosion. Check the drill functions as designed and that the motor, switches, cables, pulleys etc. are in good condition. Check your model parts information for spares. Replace damaged or worn parts as required for correct and safe performance. Always check that the drill is operating normally before use or after an intervention.

8.3. BELT CHANGING

Instructional video available on Sealey YouTube channel. Remove the securing screw and open the belt cover (fig.8). Move the speed change lever to the right to release the tension on the top belt. Remove the belt and, if necessary, move the speed change lever to the left in order to remove the lower belt. Fit replacement belts in the opposite manner. Close the lid and secure with the screw. Run the drill to re-tension the belts.

8.4. WIRING DIAGRAM



8.5. STORAGE / HANDLING

Store the unit in a cool, dry location. If the unit is to be transported, disassemble and place it in the original packaging. Use suitable mechanical assistance where required for lifting. Lift from the base only to avoid damage to the unit. Please note that the drill is top heavy and care must be taken to avoid tipping. Handle the item with care, using appropriate assistance if required.

8.6. DE-COMMISSIONING PRODUCT

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.

9. TROUBLESHOOTING

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|------------------------------------|--|---|
| Excessive noise. | 1. Incorrect belt tension. 2. Spindle is dry. 3. Pulley is loose. 4. Bearing damaged. | 1. Adjust tension. 2. Disassemble spindle/quill and lubricate. 3. Tighten pulley. 4. Replace the bearing. |
| Excessive drill wobble. | 1. Chuck is loose. 2. Bearing or spindle shaft is worn. 3. Chuck is worn. 4. Drill fitted incorrectly or faulty. | 1. Refit the chuck. 2. Replace worn part. 3. Replace the chuck. 4. Fit correctly or change drill. |
| Drill binds in the workpiece. | 1. Feed pressure is wrong. 2. Belt is loose. 3. Drill bit is loose. 4. Speed is too fast. | 1. Apply less pressure. 2. Adjust tension. 3. Tighten the chuck jaws with the key. 4. Reduce the speed. |
| Drill burns or smokes. | 1. Speed is too fast. 2. Chips are not discharging. 3. Drill bit is blunt. 4. Lubrication needed. 5. Feed pressure is wrong. | 1. Reduce the speed. 2. Clean the drill bit. 3. Use a new bit. 4. Lubricate while drilling. 5. Apply less pressure. |
| Table is difficult to raise/lower. | 1. Lubrication is needed. 2. Rack is bent. | 1. Lubricate with light oil. 2. Straighten the rack. |

If the above does not solve the problem contact your local Service Agent by checking www.sealey.co.uk.



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. 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.

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